

Monday, February 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

These Samples are on:
LANL Request Number: 10-1510
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010
TURNAROUND/REPORT DUE: 3/3/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8082		1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
		1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
SW-846:8260B		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	

Monday, February 01, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:82608						
1		1	RE15-10-7316	R	1/28/2010	
1		1	RE15-10-7317	R	1/28/2010	
1		1	RE15-10-7318	R	1/28/2010	
1		1	RE15-10-7319	R	1/28/2010	
1		1	RE15-10-7324	R	1/28/2010	
1		1	RE15-10-7329	S	1/28/2010	
2		2	RE15-10-7329	S	1/28/2010	
SW-846:8270C						
1		1	RE15-10-7308	R	1/28/2010	
1		1	RE15-10-7309	R	1/28/2010	
1		1	RE15-10-7312	R	1/28/2010	
1		1	RE15-10-7313	R	1/28/2010	
1		1	RE15-10-7314	R	1/28/2010	
1		1	RE15-10-7315	R	1/28/2010	
1		1	RE15-10-7316	R	1/28/2010	
1		1	RE15-10-7317	R	1/28/2010	
1		1	RE15-10-7318	R	1/28/2010	
1		1	RE15-10-7319	R	1/28/2010	
1		1	RE15-10-7324	R	1/28/2010	
SW-846:8321A_MOD						
1		1	RE15-10-7308	R	1/28/2010	
1		1	RE15-10-7309	R	1/28/2010	
1		1	RE15-10-7312	R	1/28/2010	
1		1	RE15-10-7313	R	1/28/2010	
1		1	RE15-10-7314	R	1/28/2010	
1		1	RE15-10-7315	R	1/28/2010	
1		1	RE15-10-7316	R	1/28/2010	
1		1	RE15-10-7317	R	1/28/2010	
1		1	RE15-10-7318	R	1/28/2010	
1		1	RE15-10-7319	R	1/28/2010	
1		1	RE15-10-7319	R	1/28/2010	

Monday, February 01, 2010

Page 3 of 3
REQUEST NUMBER: 10-1510

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7324	R	1/28/2010	

Final Page of REQUEST NUMBER 10-1510

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1510C

LOS ALAMOS

REQUEST NUMBER: 10-1510

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

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
RE15-10-7309	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7309	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7308	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7308	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7317	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7317	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7319	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7319	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7316	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7316	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7318	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7318	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7329	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7329	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7324	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7324	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

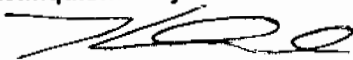
Date

Time

Received By:

Date

Time



2/1/10

5:00

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7329

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:		NA	
TIME COLLECTED (HH:MM)		0846		SUB-MEDIA:		OTHER	
PRS ID: 15-005(c)		ok		SAMPLE TECH CODE:		DC	
LOCATION ID: UNK		15-610559		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
13m 1/28/10						
1-2	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE15-10-7308

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7314

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/28/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		0906	SUB-MEDIA:		TUFF 1
PRS ID:	15-005(c)	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610562	↓	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	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	↓	Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 RC	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Frozen brown silty sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-2

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 11$ dpm
 $\beta \leq 1734$ dpm

PID ambient reading $\frac{0.1}{0.1}$ ppm
 HE negative

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7308

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		0855		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610559	↓		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	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 &c	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: brown silty sand, numerous rocks, some roots

FTB RE15-10-7329

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-3

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 11$ dpm
 $\text{BX} \leq 1976$ dpm

 PID ambient reading 0.0 ppm
 HE neg

HE NEG

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarlane

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7318

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		0943		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610564			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	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAT POLY liter 1/11/10 re	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand, numerous rocks, grass roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-5

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 5$ dpm
 $\text{BY} \leq 2080$ dpm

HE negative

PID ambient reading $\frac{0.1}{0.4}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7309

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		AHH
TIME COLLECTED(HH:MM)		0900		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610559	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.3		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAE POLY liter 1/11/10 LC	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown sandy silt

FD: RE15-10-7324

SAMPLE COMMENTS:

NA

LOCATION DESC: 5C-3

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpmPID ambient 0.0 ppm
reading 0.0BX ≤ 1824 dpm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7317

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		0934		SUB-MEDIA:		TUFF 1	
PRS ID: 15-005(c)		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610563		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		2.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		3.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 LC	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown sandy silt, white tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-6

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \pm 22$ dpm
 $\beta \pm 1935$ dpm

 $\frac{\text{ambient}}{\text{reading}} = \frac{0.0}{0.3}$ ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7315

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		Auh
TIME COLLECTED (HH:MM)		0920		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610562		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		✓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.0	SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R		5	EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 LC	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown sandy silt, white tuff fragments
 Filled sample collected with this sample RE15-10-7326

SAMPLE COMMENTS:

NA

FR: RE15-10-7326

LOCATION DESC: 5C-2

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 27 dpm

PID

BY ≤ 1637 dpm

ambient 0.0 ppm
 reading 0.0

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7324

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	OBT3		Alh
TIME COLLECTED(HH:MM)		0900		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	15-610559		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	3.3		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 Re	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7309

Light brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-3

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm
 $\beta \leq 1824$ dpm

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

COLLECTED BY (PRINT)

T. L. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) <i>R. Saunders</i>	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) <i>J. Saunders</i>	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7316

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/28/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	0930	SUB-MEDIA:	TUFF 1
PRS ID: 15-005(c)	OK	SAMPLE TECH CODE:	HA
LOCATION ID: 15-610563	↓	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	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	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+ClO4+C N	1 LITER POLY 1 liter 1/11/10 LC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown frozen silty sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-6

FIELD SCREENING/MEASUREMENT RESULTS: PID

α ≤ 0 dpm

BX ≤ 1513 dpm

ambient 0.0
reading 0.5

HE negative

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) J. J. J.	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7313

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		0918		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610561	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	2.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC: NA			
FIELD MATRIX:	R	S		EXCAVATED: YES/NO NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO NA			
BOREHOLE: YES/NO NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAE POLY liter 11/10 Re	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown sandy silt, white tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC: 5C-1

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 5$ dpm

PID

ambient 0.0 ppm
reading 0.0 $\text{BY} \leq 1790$ dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7319

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		0945		SUB-MEDIA:	TUFF1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610564			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 RC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt, white tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

5c-6 5c-5
73m 1/28/10

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \pm 5$ dpmBX ± 1686 dpmPID ambient reading $\frac{0.0}{0.2}$ ppm

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R Saunders (Signature) <i>R Saunders</i>	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i>	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7312

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		0900		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-005(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610561	↓		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	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY liter 1/11/10 LC	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: brown silty sand, some pebbles

SAMPLE COMMENTS:

NA

LOCATION DESC: 5C-1

FIELD SCREENING/MEASUREMENT RESULTS:

L ≤ 5 dpm

PID

HE NEG

BX ≤ 1845 dpm

ambient reading 0.0 ppm
0.1

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2482

EVENT NAME: 4th Qtr. FY09 - AOC 15-005(c) - Threemile Canyon

SAMPLE ID: RE15-10-7326

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	NA		
TIME COLLECTED (HH:MM)		0933		SUB-MEDIA:	OTHER		OK
PRS ID:	15-005(c)	OK	15-005(c)	SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	OK	15-010562	FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	OK	73m 1/28/10	FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:	N/A		
FIELD MATRIX:	W			EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	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 RE15-10-7326

SAMPLE COMMENTS:

Field Rinseate

LOCATION DESC:

SC-2

FIELD SCREENING/MEASUREMENT RESULTS:

~~25 NA~~
~~B/VS NA 12m 1/28/10~~

NA

COLLECTED BY (PRINT)

Larry A. Lopez

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
R Saunders	01/28/2010		1/28/10
(Printed Name) Larry A. Lopez	1/28/10	(Printed Name)	1350
(Signature) R Saunders	1350	(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Rad Screening Data Release Form

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

RE15-10-7308
↓
7309
7312
7313
7314
7315
7316
7317
7318
7319
7324

RE15-10-8112
↓
8113
8114
8115
8116
8117
8118
8119
8122

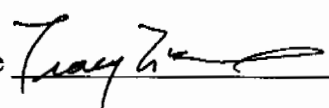
These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

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

RE15-10-7329 FTB
RE15-10-8124
RE15-10-7326 ☒ Rinse

Reason:

.....
Print Last Name McFarland

Signature 

Date 1/28/10

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1510 VALIDATION DATE: 3/9/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. The ICV/CCV %Ds for chloromethane and acetone were >20%. The acetone result for sample RE15-10-7312 was a detect and, thus, was qualified J,V7c. All other associated sample results were NDs and, thus, were qualified UJ,V7c.
2. The MS/MSD %Rs for four target analytes and the MS/MSD RPDs for sec-butylbenzene; 4-isopropyltoluene; and n-butylbenzene were outside the laboratory acceptance limits. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN. MS/MSD analyses are not required for VOCs, thus, no sample results were qualified.

Reviewed by: Mary Donovan


Level: I

Date: 03/11/10


VALIDATOR'S SIGNATURE:

Allison Felix

DATE: 3/9/10

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

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

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

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

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST


5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 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: RE15-10-7309
 Batch ID: 951185
 Run Date: 02/09/2010 22:11
 Prep Date: 02/09/2010 18:06
 Data File: 020910\AX213.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07 UJ,V7c
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

**Volatile
Certificate of Analysis
Sample Summary**

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SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.2 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: RE15-10-7309
Batch ID: 951185
Run Date: 02/09/2010 22:11
Prep Date: 02/09/2010 18:06
Data File: 020910\AX213.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.33	ug/kg	1.71	5.33
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.3
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7308
Batch ID: 951185
Run Date: 02/09/2010 22:38
Prep Date: 02/09/2010 18:07
Data File: 020910\AX214.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.438	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.386	1.29 UJ,V7c
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.386	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.386	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.386	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.386	1.29
67-64-1	Acetone	U	6.44	ug/kg	2.14	6.44 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
74-88-4	Iodomethane	U	6.44	ug/kg	2.06	6.44
75-09-2	Methylene chloride	U	6.44	ug/kg	2.57	6.44
75-15-0	Carbon disulfide	U	6.44	ug/kg	1.61	6.44
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.386	1.29
78-93-3	2-Butanone	U	6.44	ug/kg	1.93	6.44
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.386	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.425	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.386	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.386	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.386	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.386	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.386	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.425	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.386	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.386	1.29
108-10-1	4-Methyl-2-pentanone	U	6.44	ug/kg	1.61	6.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.386	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.386	1.29
591-78-6	2-Hexanone	U	6.44	ug/kg	1.93	6.44
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.386	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.386	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.386	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.386	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.386	1.29

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959002	Date Received: 02/02/2010 09:10	%Moisture: 22.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7308	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/09/2010 22:38	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:07	Allquot: 5 g	Final Volume: 5 mL
Data File: 020910\AX214.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.386	1.29
179601-23-1	m,p-Xylenes	U	2.57	ug/kg	0.386	2.57
95-47-6	o-Xylene	U	1.29	ug/kg	0.386	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.386	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.386	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.386	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.386	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.386	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.386	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.386	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.386	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.386	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.386	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.386	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.44	ug/kg	2.06	6.44
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 8.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7315
 Batch ID: 951185
 Run Date: 02/09/2010 23:04
 Prep Date: 02/09/2010 18:08
 Data File: 020910\AX215.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04 UJ,V7c
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	U	5.18	ug/kg	1.72	5.18 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.29	5.18
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.29	5.18
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Allquot: 5.3 g
Column: DB-624

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7315
Batch ID: 951185
Run Date: 02/09/2010 23:04
Prep Date: 02/09/2010 18:08
Data File: 020910\AX215.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.18	ug/kg	1.66	5.18
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 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: RE15-10-7317
 Batch ID: 951185
 Run Date: 02/09/2010 23:30
 Prep Date: 02/09/2010 18:09
 Data File: 020910\AX216.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10 UJ,V7c
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1510
 Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 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: RE15-10-7317
 Batch ID: 951185
 Run Date: 02/09/2010 23:30
 Prep Date: 02/09/2010 18:09
 Data File: 020910\AX216.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Allquot: 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: RE15-10-7319
 Batch ID: 951185
 Run Date: 02/09/2010 23:57
 Prep Date: 02/09/2010 18:10
 Data File: 020910\AX217.D

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 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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959005	Date Received: 02/02/2010 09:10	%Moisture: 10.8
Client ID: RE15-10-7319	Client: LANL010	Project: LANL01004
Batch ID: 951185	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/09/2010 23:57	Inst: VOAA.I	Dilution: 1
Prep Date: 02/09/2010 18:10	Analyst: JEB	Purge Vol: 5 mL
Data File: 020910\AX217.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	1.12	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
	Trichlorotrifluoroethane					
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
No Tentatively Identified Compounds Found				ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 00:23	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:11	Aliquot: 5.4 g	Final Volume: 5 mL
Data File: 020910\AX218.D	Column: DB-624	

CAS No.	Parmaame	Qualflier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.446	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31 UJ,V7c
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone		18.8	ug/kg	2.18	6.55 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.433	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.433	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959006
 Client ID: RE15-10-7312
 Batch ID: 951185
 Run Date: 02/10/2010 00:23
 Prep Date: 02/09/2010 18:11
 Data File: 020910\AX218.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.4 g
 Column: DB-624

Matrix: R
 %Moisture: 29.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene		1.51	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.36	8.26	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 00:50	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:12	Aliquot: 5.4 g	Final Volume: 5 mL
Data File: 020910\AX219.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03 UJ,V7c
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.13	ug/kg	1.70	5.13 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.338	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.338	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.4 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: RE15-10-7313
Batch ID: 951185
Run Date: 02/10/2010 00:50
Prep Date: 02/09/2010 18:12
Data File: 020910\AX219.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.13	ug/kg	1.64	5.13
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7314
 Batch ID: 951185
 Run Date: 02/10/2010 01:16
 Prep Date: 02/09/2010 18:13
 Data File: 020910\AX220.D

CAS No.	Parma name	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.505	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.445	1.48 UJ,V7c
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.445	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.445	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.445	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.445	1.48
67-64-1	Acetone	U	7.42	ug/kg	2.46	7.42 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
74-88-4	Iodomethane	U	7.42	ug/kg	2.37	7.42
75-09-2	Methylene chloride	U	7.42	ug/kg	2.97	7.42
75-15-0	Carbon disulfide	U	7.42	ug/kg	1.85	7.42
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.445	1.48
78-93-3	2-Butanone	U	7.42	ug/kg	2.23	7.42
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.445	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.490	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.445	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.445	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.445	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.445	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.445	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.490	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.445	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.445	1.48
108-10-1	4-Methyl-2-pentanone	U	7.42	ug/kg	1.85	7.42
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
108-88-3	Toluene	U	1.48	ug/kg	0.445	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.445	1.48
591-78-6	2-Hexanone	U	7.42	ug/kg	2.23	7.42
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.445	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.445	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.445	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.445	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.445	1.48

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959008	Date Received: 02/02/2010 09:10	%Moisture: 32.6
Client ID: RE15-10-7314	Client: LANL010	Project: LANL01004
Batch ID: 951185	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/10/2010 01:16	Inst: VOAA.I	Dilution: 1
Prep Date: 02/09/2010 18:13	Analyst: JEB	Purge Vol: 5 mL
Data File: 020910\AX220.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.445	1.48
179601-23-1	m,p-Xylenes	U	2.97	ug/kg	0.445	2.97
95-47-6	o-Xylene	U	1.48	ug/kg	0.445	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.445	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.445	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.445	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.445	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.445	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.445	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.445	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.445	1.48
99-87-6	4-Isopropyltoluene	U	1.48	ug/kg	0.445	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.445	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.445	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.42	ug/kg	2.37	7.42
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Allquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 35.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7316
 Batch ID: 951185
 Run Date: 02/10/2010 01:42
 Prep Date: 02/09/2010 18:14
 Data File: 020910\AX221.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.508	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.448	1.49 UJ,V7c
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.448	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.448	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.448	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.448	1.49
67-64-1	Acetone	U	7.47	ug/kg	2.48	7.47 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
74-88-4	Iodomethane	U	7.47	ug/kg	2.39	7.47
75-09-2	Methylene chloride	U	7.47	ug/kg	2.99	7.47
75-15-0	Carbon disulfide	U	7.47	ug/kg	1.87	7.47
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.448	1.49
78-93-3	2-Butanone	U	7.47	ug/kg	2.24	7.47
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.448	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.493	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.448	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.448	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.448	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.448	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.448	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.493	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.448	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.448	1.49
108-10-1	4-Methyl-2-pentanone	U	7.47	ug/kg	1.87	7.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
108-88-3	Toluene	J	0.538	ug/kg	0.448	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.448	1.49
591-78-6	2-Hexanone	U	7.47	ug/kg	2.24	7.47
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.448	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.448	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.448	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.448	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.448	1.49

AMF
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Allquot: 5.2 g
Column: DB-624

Matrix: R
%Moisture: 35.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7316
Batch ID: 951185
Run Date: 02/10/2010 01:42
Prep Date: 02/09/2010 18:14
Data File: 020910\AX221.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.448	1.49
179601-23-1	m,p-Xylenes	U	2.99	ug/kg	0.448	2.99
95-47-6	o-Xylene	U	1.49	ug/kg	0.448	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.448	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.448	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.448	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.448	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.448	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.448	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.448	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.448	1.49
99-87-6	4-Isopropyltoluene	U	1.49	ug/kg	0.448	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.448	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.448	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.47	ug/kg	2.39	7.47
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown	3.33	7.84	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 14.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7318
 Batch ID: 951185
 Run Date: 02/10/2010 02:08
 Prep Date: 02/09/2010 18:15
 Data File: 020910\AX222.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13 UJ,V7c
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Allquot: 5.2 g
Column: DB-624

Matrix: R
%Moisture: 14.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7318
Batch ID: 951185
Run Date: 02/10/2010 02:08
Prep Date: 02/09/2010 18:15
Data File: 020910\AX222.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.64	ug/kg	1.81	5.64
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1510
Lab Sample ID: 245959011

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10

Matrix: R

Client ID: RE15-10-7329
Batch ID: 951185
Run Date: 02/10/2010 02:35
Prep Date: 02/09/2010 18:16
Data File: 020910\AX223.D

Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.1 g
Column: DB-624

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
75-71-8	Dichlorodifluoromethane	U	0.980	ug/kg	0.333	0.980
74-87-3	Chloromethane	U	0.980	ug/kg	0.294	0.980 UJ,V7c
75-01-4	Vinyl chloride	U	0.980	ug/kg	0.294	0.980
74-83-9	Bromomethane	U	0.980	ug/kg	0.294	0.980
75-00-3	Chloroethane	U	0.980	ug/kg	0.294	0.980
75-69-4	Trichlorofluoromethane	U	0.980	ug/kg	0.294	0.980
67-64-1	Acetone	U	4.90	ug/kg	1.63	4.90 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
74-88-4	Iodomethane	U	4.90	ug/kg	1.57	4.90
75-09-2	Methylene chloride	U	4.90	ug/kg	1.96	4.90
75-15-0	Carbon disulfide	U	4.90	ug/kg	1.23	4.90
156-60-5	trans-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
75-34-3	1,1-Dichloroethane	U	0.980	ug/kg	0.294	0.980
78-93-3	2-Butanone	U	4.90	ug/kg	1.47	4.90
156-59-2	cis-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
594-20-7	2,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
67-66-3	Chloroform	U	0.980	ug/kg	0.294	0.980
74-97-5	Bromochloromethane	U	0.980	ug/kg	0.324	0.980
71-55-6	1,1,1-Trichloroethane	U	0.980	ug/kg	0.294	0.980
563-58-6	1,1-Dichloropropene	U	0.980	ug/kg	0.294	0.980
56-23-5	Carbon tetrachloride	U	0.980	ug/kg	0.294	0.980
107-06-2	1,2-Dichloroethane	U	0.980	ug/kg	0.294	0.980
71-43-2	Benzene	U	0.980	ug/kg	0.294	0.980
79-01-6	Trichloroethylene	U	0.980	ug/kg	0.324	0.980
78-87-5	1,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
75-27-4	Bromodichloromethane	U	0.980	ug/kg	0.294	0.980
74-95-3	Dibromomethane	U	0.980	ug/kg	0.294	0.980
108-10-1	4-Methyl-2-pentanone	U	4.90	ug/kg	1.23	4.90
10061-01-5	cis-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
108-88-3	Toluene	U	0.980	ug/kg	0.294	0.980
10061-02-6	trans-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
79-00-5	1,1,2-Trichloroethane	U	0.980	ug/kg	0.294	0.980
591-78-6	2-Hexanone	U	4.90	ug/kg	1.47	4.90
142-28-9	1,3-Dichloropropane	U	0.980	ug/kg	0.294	0.980
127-18-4	Tetrachloroethylene	U	0.980	ug/kg	0.294	0.980
124-48-1	Dibromochloromethane	U	0.980	ug/kg	0.294	0.980
106-93-4	1,2-Dibromoethane	U	0.980	ug/kg	0.294	0.980
108-90-7	Chlorobenzene	U	0.980	ug/kg	0.294	0.980

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959011

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Allquot: 5.1 g
 Column: DB-624

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

Client ID: RE15-10-7329
 Batch ID: 951185
 Run Date: 02/10/2010 02:35
 Prep Date: 02/09/2010 18:16
 Data File: 020910\AX223.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	0.980	ug/kg	0.294	0.980
179601-23-1	m,p-Xylenes	U	1.96	ug/kg	0.294	1.96
95-47-6	o-Xylene	U	0.980	ug/kg	0.294	0.980
100-42-5	Styrene	U	0.980	ug/kg	0.294	0.980
75-25-2	Bromoform	U	0.980	ug/kg	0.294	0.980
79-34-5	1,1,2,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
96-18-4	1,2,3-Trichloropropane	U	0.980	ug/kg	0.294	0.980
108-86-1	Bromobenzene	U	0.980	ug/kg	0.294	0.980
103-65-1	n-Propylbenzene	U	0.980	ug/kg	0.294	0.980
95-49-8	2-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-82-8	Isopropylbenzene	U	0.980	ug/kg	0.294	0.980
108-67-8	1,3,5-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
106-43-4	4-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-06-6	tert-Butylbenzene	U	0.980	ug/kg	0.294	0.980
95-63-6	1,2,4-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
135-98-8	sec-Butylbenzene	U	0.980	ug/kg	0.294	0.980
99-87-6	4-Isopropyltoluene	U	0.980	ug/kg	0.294	0.980
541-73-1	1,3-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
106-46-7	1,4-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
104-51-8	n-Butylbenzene	U	0.980	ug/kg	0.294	0.980
96-12-8	1,2-Dibromo-3-chloropropane	U	0.980	ug/kg	0.294	0.980
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	4.90	ug/kg	1.57	4.90
630-20-6	1,1,1,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
95-50-1	1,2-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1510
Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Allquot: 5.3 g
Column: DB-624

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7324
Batch ID: 951185
Run Date: 02/10/2010 03:01
Prep Date: 02/09/2010 18:17
Data File: 020910\AX224.D

CAS No.	Parmname	Qualifler	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05 UJ,V7c
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.75	5.26 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1510
 Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 10.3
 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	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.26	ug/kg	1.68	5.26
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

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

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1510 VALIDATION DATE: 3/10/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

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

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

1. The ICV %D for hexachlorocyclopentadiene was >20%. In the CCV associated with sample RE15-10-7318, the %Ds for pyridine; benzoic acid; 3-nitroaniline; 2-methyl-4,6-dinitrophenol; and 4-nitroaniline were >20%. In the CCV associated with all other samples, the %Ds for pyridine; benzyl alcohol; 2-nitroaniline; and 2-methyl-4,6-dinitrophenol were >20%. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The LCS %R for benzyl alcohol was < the laboratory LAL but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,SV12a.
3. The MS/MSD RPDs for bis(2-chloroethoxy)methane and benzoic acid were > the laboratory acceptance limits. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN and that the raw data for the parent sample was not included in the data package. MS/MSD analyses are not required for SVOCs, thus, no sample results were qualified.

Reviewed by: Mary Donovan


Level: I


Date: 03/11/10

VALIDATOR'S SIGNATURE:


Allison Felix

DATE: 3/10/10


DATA VALIDATION COVER SHEET	
5115-1 Data Validation Cover Sheet	Records Use only  <small>EST. 1945</small>
Form 5115-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

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

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

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

Yes No N/A (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 ≥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

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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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

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

SDG Number: 10-1510
Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	427	ug/kg	85.5	427
108-95-2	Phenol	U	427	ug/kg	85.5	427
95-57-8	2-Chlorophenol	U	427	ug/kg	85.5	427
106-46-7	1,4-Dichlorobenzene	U	427	ug/kg	85.5	427
621-64-7	N-Nitrosodipropylamine	U	427	ug/kg	85.5	427
59-50-7	4-Chloro-3-methylphenol	U	427	ug/kg	85.5	427
83-32-9	Acenaphthene	U	42.7	ug/kg	14.1	42.7
121-14-2	2,4-Dinitrotoluene	U	427	ug/kg	42.7	427
100-02-7	4-Nitrophenol	U	427	ug/kg	141	427
87-86-5	Pentachlorophenol	U	427	ug/kg	107	427
129-00-0	Pyrene	U	42.7	ug/kg	12.8	42.7
110-86-1	Pyridine	U	427	ug/kg	85.5	427 UJ,SV7c
62-53-3	Aniline	U	427	ug/kg	128	427
111-44-4	bis(2-Chloroethyl) ether	U	427	ug/kg	85.5	427
541-73-1	1,3-Dichlorobenzene	U	427	ug/kg	85.5	427
100-51-6	Benzyl alcohol	U	427	ug/kg	128	427 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	427	ug/kg	85.5	427
108-60-1	bis(2-Chloroisopropyl)ether	U	427	ug/kg	85.5	427
95-48-7	o-Cresol	U	427	ug/kg	85.5	427
65794-96-9	m,p-Cresols	U	427	ug/kg	128	427
67-72-1	Hexachloroethane	U	427	ug/kg	85.5	427
98-95-3	Nitrobenzene	U	427	ug/kg	85.5	427
78-59-1	Isophorone	U	427	ug/kg	85.5	427
88-75-5	2-Nitrophenol	U	427	ug/kg	85.5	427
105-67-9	2,4-Dimethylphenol	U	427	ug/kg	150	427
111-91-1	bis(2-Chloroethoxy)methane	U	427	ug/kg	85.5	427
120-83-2	2,4-Dichlorophenol	U	427	ug/kg	85.5	427
65-85-0	Benzoic acid	U	855	ug/kg	214	855
91-20-3	Naphthalene	U	42.7	ug/kg	12.8	42.7
106-47-8	4-Chloroaniline	U	427	ug/kg	85.5	427
87-68-3	Hexachlorobutadiene	U	427	ug/kg	85.5	427
91-57-6	2-Methylnaphthalene	U	42.7	ug/kg	8.55	42.7
77-47-4	Hexachlorocyclopentadiene	U	427	ug/kg	85.5	427 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	427	ug/kg	85.5	427
95-95-4	2,4,5-Trichlorophenol	U	427	ug/kg	85.5	427
91-58-7	2-Chloronaphthalene	U	42.7	ug/kg	14.1	42.7
88-74-4	2-Nitroaniline	U	427	ug/kg	85.5	427 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	427	ug/kg	85.5	427

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959002	Date Received: 02/02/2010 09:10	%Moisture: 22.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7308	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 15:37	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Allquot: 30.11 g	Final Volume: 1 mL
Data File: s6b0708.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	427	ug/kg	85.5	427
606-20-2	2,6-Dinitrotoluene	U	427	ug/kg	42.7	427
208-96-8	Acenaphthylene	U	42.7	ug/kg	12.8	42.7
51-28-5	2,4-Dinitrophenol	U	855	ug/kg	162	855
132-64-9	Dibenzofuran	U	427	ug/kg	85.5	427
84-66-2	Diethylphthalate	U	427	ug/kg	85.5	427
86-73-7	Fluorene	U	42.7	ug/kg	12.8	42.7
7005-72-3	4-Chlorophenylphenylether	U	427	ug/kg	85.5	427
534-52-1	2-Methyl-4,6-dinitrophenol	U	427	ug/kg	85.5	427 UJ,SV7c
100-01-6	4-Nitroaniline	U	427	ug/kg	128	427
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	427	ug/kg	85.5	427
122-66-7	Azobenzene	U	427	ug/kg	85.5	427
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	427	ug/kg	85.5	427
118-74-1	Hexachlorobenzene	U	427	ug/kg	85.5	427
85-01-8	Phenanthrene	U	42.7	ug/kg	12.8	42.7
120-12-7	Anthracene	U	42.7	ug/kg	8.55	42.7
84-74-2	Di-n-butylphthalate	U	427	ug/kg	85.5	427
206-44-0	Fluoranthene	U	42.7	ug/kg	12.8	42.7
85-68-7	Butylbenzylphthalate	U	427	ug/kg	85.5	427
56-55-3	Benzo(a)anthracene	U	42.7	ug/kg	12.8	42.7
91-94-1	3,3'-Dichlorobenzidine	U	427	ug/kg	128	427
218-01-9	Chrysene	U	42.7	ug/kg	12.8	42.7
117-81-7	bis(2-Ethylhexyl)phthalate	J	99.5	ug/kg	85.5	427
117-84-0	Di-n-octylphthalate	U	427	ug/kg	85.5	427
205-99-2	Benzo(b)fluoranthene	U	42.7	ug/kg	12.8	42.7
207-08-9	Benzo(k)fluoranthene	U	42.7	ug/kg	12.8	42.7
50-32-8	Benzo(a)pyrene	U	42.7	ug/kg	12.8	42.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.7	ug/kg	12.8	42.7
53-70-3	Dibenzo(a,h)anthracene	U	42.7	ug/kg	12.8	42.7
191-24-2	Benzo(ghi)perylene	U	42.7	ug/kg	12.8	42.7
120-82-1	1,2,4-Trichlorobenzene	U	427	ug/kg	85.5	427

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	485	ug/kg		JA
112-95-8	Eicosane	15.75	172	ug/kg	97	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.07 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	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	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.8	369 UJ,SV7c
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 UJ,SV7c
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 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 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.07 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.	Parmsname	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 UJ,SV7c
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.8	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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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 Aldol Condensate	3.48	538	ug/kg		JA

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

SDG Number: 10-1510
Lab Sample ID: 245959006

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 29.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7312
Batch ID: 949132
Run Date: 02/07/2010 17:28
Prep Date: 02/04/2010 20:55
Data File: s6b0712.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	U	46.9	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469 UJ,SV7c
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	235	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	469	ug/kg	93.8	469

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959006

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 29.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline	U	469	ug/kg	93.8	469
606-20-2	Dimethylphthalate	U	469	ug/kg	46.9	469
208-96-8	2,6-Dinitrotoluene	U	46.9	ug/kg	14.1	46.9
51-28-5	Acenaphthylene	U	46.9	ug/kg	178	938
132-64-9	2,4-Dinitrophenol	U	469	ug/kg	93.8	469
84-66-2	Dibenzofuran	U	469	ug/kg	93.8	469
86-73-7	Diethylphthalate	U	46.9	ug/kg	14.1	46.9
7005-72-3	Fluorene	U	469	ug/kg	93.8	469
534-52-1	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
100-01-6	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469 UJ,SV7c
122-39-4	4-Nitroaniline	U	469	ug/kg	141	469
122-66-7	<i>p</i> -Nitroaniline	U	469	ug/kg	93.8	469
101-55-3	Diphenylamine	U	469	ug/kg	93.8	469
118-74-1	Azobenzene	U	469	ug/kg	93.8	469
85-01-8	<i>1,2</i> -Diphenylhydrazine	U	469	ug/kg	93.8	469
120-12-7	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
84-74-2	Hexachlorobenzene	U	46.9	ug/kg	14.1	46.9
206-44-0	Phenanthrene	U	46.9	ug/kg	9.38	46.9
85-68-7	Anthracene	U	469	ug/kg	93.8	469
56-55-3	Di-n-butylphthalate	U	46.9	ug/kg	14.1	46.9
91-94-1	Fluoranthene	U	469	ug/kg	93.8	469
218-01-9	Butylbenzylphthalate	U	46.9	ug/kg	14.1	46.9
117-81-7	Benzo(a)anthracene	U	469	ug/kg	141	469
117-84-0	3,3'-Dichlorobenzidine	U	46.9	ug/kg	14.1	46.9
205-99-2	Chrysene	U	469	ug/kg	93.8	469
207-08-9	bis(2-Ethylhexyl)phthalate	U	46.9	ug/kg	14.1	46.9
50-32-8	Di-n-octylphthalate	U	46.9	ug/kg	14.1	46.9
193-39-5	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
53-70-3	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
120-82-1	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.26	417	ug/kg		J
	Unknown Aldol Condensate	3.47	637	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
630-02-4	Octacosane	14.46	388	ug/kg	87	NJ
112-95-8	Eicosane	15.75	222	ug/kg	98	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959007

Client ID: RE15-10-7313
Batch ID: 949132
Run Date: 02/07/2010 17:55
Prep Date: 02/04/2010 20:55
Data File: s6b0713.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
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
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	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.8	369 UJ,SV7c
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 UJ,SV7c
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 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 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0713.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	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 UJ,SV7c
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.8	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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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	Flt	Qual
	Unknown	2.27	215	ug/kg		J
	Unknown Aldol Condensate	3.48	669	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
Client ID: RE15-10-7313	Client: LANL010	Project: LANL01004
Batch ID: 949132	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/07/2010 17:55	Inst: MSD6.I	Dilution: 1
Prep Date: 02/04/2010 20:55	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0713.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	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
79-63-0	Unknown		13.85	272	ug/kg		J
	Unknown		13.87	467	ug/kg		J
	Lanosterol		17.17	267	ug/kg	83	J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1510
Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.6
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	494	ug/kg	98.8	494
108-95-2	Phenol	U	494	ug/kg	98.8	494
95-57-8	2-Chlorophenol	U	494	ug/kg	98.8	494
106-46-7	1,4-Dichlorobenzene	U	494	ug/kg	98.8	494
621-64-7	N-Nitrosodipropylamine	U	494	ug/kg	98.8	494
59-50-7	4-Chloro-3-methylphenol	U	494	ug/kg	98.8	494
83-32-9	Acenaphthene	U	49.4	ug/kg	16.3	49.4
121-14-2	2,4-Dinitrotoluene	U	494	ug/kg	49.4	494
100-02-7	4-Nitrophenol	U	494	ug/kg	163	494
87-86-5	Pentachlorophenol	U	494	ug/kg	124	494
129-00-0	Pyrene		205	ug/kg	14.8	49.4
110-86-1	Pyridine	U	494	ug/kg	98.8	494 UJ,SV7c
62-53-3	Aniline	U	494	ug/kg	148	494
111-44-4	bis(2-Chloroethyl) ether	U	494	ug/kg	98.8	494
541-73-1	1,3-Dichlorobenzene	U	494	ug/kg	98.8	494
100-51-6	Benzyl alcohol	U	494	ug/kg	148	494 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	494	ug/kg	98.8	494
108-60-1	bis(2-Chloroisopropyl)ether	U	494	ug/kg	98.8	494
95-48-7	o-Cresol	U	494	ug/kg	98.8	494
65794-96-9	m,p-Cresols	U	494	ug/kg	148	494
67-72-1	Hexachloroethane	U	494	ug/kg	98.8	494
98-95-3	Nitrobenzene	U	494	ug/kg	98.8	494
78-59-1	Isophorone	U	494	ug/kg	98.8	494
88-75-5	2-Nitrophenol	U	494	ug/kg	98.8	494
105-67-9	2,4-Dimethylphenol	U	494	ug/kg	173	494
111-91-1	bis(2-Chloroethoxy)methane	U	494	ug/kg	98.8	494
120-83-2	2,4-Dichlorophenol	U	494	ug/kg	98.8	494
65-85-0	Benzoic acid	U	988	ug/kg	247	988
91-20-3	Naphthalene	J	20.8	ug/kg	14.8	49.4
106-47-8	4-Chloroaniline	U	494	ug/kg	98.8	494
87-68-3	Hexachlorobutadiene	U	494	ug/kg	98.8	494
91-57-6	2-Methylnaphthalene	J	12.3	ug/kg	9.88	49.4
77-47-4	Hexachlorocyclopentadiene	U	494	ug/kg	98.8	494 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	494	ug/kg	98.8	494
95-95-4	2,4,5-Trichlorophenol	U	494	ug/kg	98.8	494
91-58-7	2-Chloronaphthalene	U	49.4	ug/kg	16.3	49.4
88-74-4	2-Nitroaniline	U	494	ug/kg	98.8	494 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	494	ug/kg	98.8	494

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959008	Date Received: 02/02/2010 09:10	%Moisture: 32.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:23	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Allquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0714.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	494	ug/kg	98.8	494
606-20-2	2,6-Dinitrotoluene	U	494	ug/kg	49.4	494
208-96-8	Acenaphthylene	U	49.4	ug/kg	14.8	49.4
51-28-5	2,4-Dinitrophenol	U	988	ug/kg	188	988
132-64-9	Dibenzofuran	U	494	ug/kg	98.8	494
84-66-2	Diethylphthalate	U	494	ug/kg	98.8	494
86-73-7	Fluorene	U	49.4	ug/kg	14.8	49.4
7005-72-3	4-Chlorophenylphenylether	U	494	ug/kg	98.8	494
534-52-1	2-Methyl-4,6-dinitrophenol	U	494	ug/kg	98.8	494 UJ,SV7c
100-01-6	4-Nitroaniline	U	494	ug/kg	148	494
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	494	ug/kg	98.8	494
122-66-7	Azobenzene	U	494	ug/kg	98.8	494
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	494	ug/kg	98.8	494
118-74-1	Hexachlorobenzene	U	494	ug/kg	98.8	494
85-01-8	Phenanthrene		235	ug/kg	14.8	49.4
120-12-7	Anthracene	U	49.4	ug/kg	9.88	49.4
84-74-2	Di-n-butylphthalate	U	494	ug/kg	98.8	494
206-44-0	Fluoranthene		311	ug/kg	14.8	49.4
85-68-7	Butylbenzylphthalate	U	494	ug/kg	98.8	494
56-55-3	Benzo(a)anthracene	U	49.4	ug/kg	14.8	49.4
91-94-1	3,3'-Dichlorobenzidine	U	494	ug/kg	148	494
218-01-9	Chrysene		91.9	ug/kg	14.8	49.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	494	ug/kg	98.8	494
117-84-0	Di-n-octylphthalate	U	494	ug/kg	98.8	494
205-99-2	Benzo(b)fluoranthene		120	ug/kg	14.8	49.4
207-08-9	Benzo(k)fluoranthene	J	46.3	ug/kg	14.8	49.4
50-32-8	Benzo(a)pyrene	U	49.4	ug/kg	14.8	49.4
193-39-5	Indeno(1,2,3-cd)pyrene		173	ug/kg	14.8	49.4
53-70-3	Dibenzo(a,h)anthracene	U	49.4	ug/kg	14.8	49.4
191-24-2	Benzo(ghi)perylene	J	25.4	ug/kg	14.8	49.4
120-82-1	1,2,4-Trichlorobenzene	U	494	ug/kg	98.8	494

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	833	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.6	306	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.11 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7315
Batch ID: 949132
Run Date: 02/07/2010 16:05
Prep Date: 02/04/2010 20:55
Data File: s6b0709.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365
108-95-2	Phenol	U	365	ug/kg	72.9	365
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5
110-86-1	Pyridine	U	365	ug/kg	72.9	365 UJ,SV7c
62-53-3	Aniline	U	365	ug/kg	109	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365
108-60-1	bis(2-Chloroisopropyl) ether	U	365	ug/kg	72.9	365
95-48-7	o-Cresol	U	365	ug/kg	72.9	365
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365
78-59-1	Isophorone	U	365	ug/kg	72.9	365
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	72.9	365 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	365	ug/kg	72.9	365

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	365	ug/kg	72.9	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365 UJ,SV7c
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365
122-39-4	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	72.9	365
122-66-7	Azobenzene	U	365	ug/kg	72.9	365
101-55-3	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	72.9	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365
206-44-0	Fluoranthene	J	12.3	ug/kg	10.9	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	532	ug/kg		JA
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.56	197	ug/kg	89	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.11 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.61	1490	ug/kg	99	NJ
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene	7.88	154	ug/kg	86	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.83	1770	ug/kg	97	NJ
	Unknown	11.91	151	ug/kg		J
	Unknown	11.95	162	ug/kg		J
	Unknown	13.33	258	ug/kg		J
	Unknown	17.17	244	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510

Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00

Date Received: 02/02/2010 09:10

Matrix: R

%Moisture: 35.6

Client ID: RE15-10-7316

Batch ID: 949132

Run Date: 02/07/2010 18:50

Prep Date: 02/04/2010 20:55

Data File: s6b0715.d

Client: LANL010

Method: SW846 8270C

Inst: MSD6.I

Analyst: NAG1

Aliquot: 30.19 g

Column: J&W DB-5MS

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
62-75-9	N-Methyl-N-nitrosomethylamine	U	514	ug/kg	103	514
108-95-2	Phenol	U	514	ug/kg	103	514
95-57-8	2-Chlorophenol	U	514	ug/kg	103	514
106-46-7	1,4-Dichlorobenzene	U	514	ug/kg	103	514
621-64-7	N-Nitrosodipropylamine	U	514	ug/kg	103	514
59-50-7	4-Chloro-3-methylphenol	U	514	ug/kg	103	514
83-32-9	Acenaphthene	U	51.4	ug/kg	17.0	51.4
121-14-2	2,4-Dinitrotoluene	U	514	ug/kg	51.4	514
100-02-7	4-Nitrophenol	U	514	ug/kg	170	514
87-86-5	Pentachlorophenol	U	514	ug/kg	129	514
129-00-0	Pyrene	U	51.4	ug/kg	15.4	51.4
110-86-1	Pyridine	U	514	ug/kg	103	514 UJ,SV7c
62-53-3	Aniline	U	514	ug/kg	154	514
111-44-4	bis(2-Chloroethyl) ether	U	514	ug/kg	103	514
541-73-1	1,3-Dichlorobenzene	U	514	ug/kg	103	514
100-51-6	Benzyl alcohol	U	514	ug/kg	154	514 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	514	ug/kg	103	514
108-60-1	bis(2-Chloroisopropyl)ether	U	514	ug/kg	103	514
95-48-7	o-Cresol	U	514	ug/kg	103	514
65794-96-9	m,p-Cresols	U	514	ug/kg	154	514
67-72-1	Hexachloroethane	U	514	ug/kg	103	514
98-95-3	Nitrobenzene	U	514	ug/kg	103	514
78-59-1	Isophorone	U	514	ug/kg	103	514
88-75-5	2-Nitrophenol	U	514	ug/kg	103	514
105-67-9	2,4-Dimethylphenol	U	514	ug/kg	180	514
111-91-1	bis(2-Chloroethoxy)methane	U	514	ug/kg	103	514
120-83-2	2,4-Dichlorophenol	U	514	ug/kg	103	514
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.4	ug/kg	15.4	51.4
106-47-8	4-Chloroaniline	U	514	ug/kg	103	514
87-68-3	Hexachlorobutadiene	U	514	ug/kg	103	514
91-57-6	2-Methylnaphthalene	U	51.4	ug/kg	10.3	51.4
77-47-4	Hexachlorocyclopentadiene	U	514	ug/kg	103	514 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	514	ug/kg	103	514
95-95-4	2,4,5-Trichlorophenol	U	514	ug/kg	103	514
91-58-7	2-Chloronaphthalene	U	51.4	ug/kg	17.0	51.4
88-74-4	2-Nitroaniline	U	514	ug/kg	103	514 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	514	ug/kg	103	514

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959009	Date Received: 02/02/2010 09:10	%Moisture: 35.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7316	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0715.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	514	ug/kg	103	514
606-20-2	2,6-Dinitrotoluene	U	514	ug/kg	51.4	514
208-96-8	Acenaphthylene	U	51.4	ug/kg	15.4	51.4
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	514	ug/kg	103	514
84-66-2	Diethylphthalate	U	514	ug/kg	103	514
86-73-7	Fluorene	U	51.4	ug/kg	15.4	51.4
7005-72-3	4-Chlorophenylphenylether	U	514	ug/kg	103	514
534-52-1	2-Methyl-4,6-dinitrophenol	U	514	ug/kg	103	514 UJ,SV7c
100-01-6	4-Nitroaniline	U	514	ug/kg	154	514
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	514	ug/kg	103	514
122-66-7	Azobenzene	U	514	ug/kg	103	514
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	514	ug/kg	103	514
118-74-1	Hexachlorobenzene	U	514	ug/kg	103	514
85-01-8	Phenanthrene	U	51.4	ug/kg	15.4	51.4
120-12-7	Anthracene	U	51.4	ug/kg	10.3	51.4
84-74-2	Di-n-butylphthalate	U	514	ug/kg	103	514
206-44-0	Fluoranthene	U	51.4	ug/kg	15.4	51.4
85-68-7	Butylbenzylphthalate	U	514	ug/kg	103	514
56-55-3	Benzo(a)anthracene	U	51.4	ug/kg	15.4	51.4
91-94-1	3,3'-Dichlorobenzidine	U	514	ug/kg	154	514
218-01-9	Chrysene	U	51.4	ug/kg	15.4	51.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	514	ug/kg	103	514
117-84-0	Di-n-octylphthalate	U	514	ug/kg	103	514
205-99-2	Benzo(b)fluoranthene	U	51.4	ug/kg	15.4	51.4
207-08-9	Benzo(k)fluoranthene	U	51.4	ug/kg	15.4	51.4
50-32-8	Benzo(a)pyrene	U	51.4	ug/kg	15.4	51.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.4	ug/kg	15.4	51.4
53-70-3	Dibenzo(a,h)anthracene	U	51.4	ug/kg	15.4	51.4
191-24-2	Benzo(ghi)perylene	U	51.4	ug/kg	15.4	51.4
120-82-1	1,2,4-Trichlorobenzene	U	514	ug/kg	103	514

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	244	ug/kg		J
	Unknown Aldol Condensate	3.47	820	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959009	Date Received: 02/02/2010 09:10	%Moisture: 35.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7316	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Allquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0715.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
2416-20-8	Hexadecenoic acid, Z-11-	10.13	356	ug/kg	96	NJ
57-10-3	n-Hexadecanoic acid	10.16	290	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-	10.93	267	ug/kg	99	NJ
55282-15-0	Docosane, 7-butyl-	14.46	213	ug/kg	83	NJ
112-95-8	Eicosane	15.75	253	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.08 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.5	373
108-95-2	Phenol	U	373	ug/kg	74.5	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.5	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.5	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.5	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.5	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	93.2	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.5	373 UJ,SV7c
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.5	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.5	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.5	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.5	373
95-48-7	o-Cresol	U	373	ug/kg	74.5	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.5	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.5	373
78-59-1	Isophorone	U	373	ug/kg	74.5	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.5	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	130	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.5	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.5	373
65-85-0	Benzoic acid	U	745	ug/kg	186	745
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.5	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.5	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.45	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.5	373 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.5	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.5	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.5	373 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	373	ug/kg	74.5	373

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959004	Date Received: 02/02/2010 09:10	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7317	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 16:32	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Allquot: 30.08 g	Final Volume: 1 mL
Data File: s6b0710.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	373	ug/kg	74.5	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	745	ug/kg	142	745
132-64-9	Dibenzofuran	U	373	ug/kg	74.5	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.5	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.5	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.5	373 UJ,SV7c
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.5	373
122-66-7	Azobenzene	U	373	ug/kg	74.5	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.5	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.5	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.45	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.5	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.5	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	74.5	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.5	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	74.5	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	230	ug/kg		J
	Unknown Aldol Condensate	3.47	336	ug/kg		JA

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

SDG Number: 10-1510
Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7318
Batch ID: 949132
Run Date: 02/08/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6b0808.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390 UJ,SV7c
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780 UJ,SV7c
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390 UJ,SV7c

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7318	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/08/2010 17:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0808.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	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390 UJ,SV7c
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.42	485	ug/kg		JA
21112-37-8	Benzene, 2-(1,1-dimethylethyl)-1,4-dimet	7.38	157	ug/kg	90	NJ

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7318	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/08/2010 17:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0808.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
295-17-0	Cyclotetradecane	9.85	237	ug/kg	96	NJ
	Unknown	9.93	216	ug/kg		J
629-73-2	1-Hexadecene	10.32	244	ug/kg	96	NJ
	Unknown	10.42	746	ug/kg		J
112-95-8	Eicosane	15.67	164	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.18 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.3	371
108-95-2	Phenol	U	371	ug/kg	74.3	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.3	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.3	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.3	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.3	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.3	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	123	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.3	371 UJ,SV7c
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.3	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.3	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.3	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.3	371
95-48-7	o-Cresol	U	371	ug/kg	74.3	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.3	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.3	371
78-59-1	Isophorone	U	371	ug/kg	74.3	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.3	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.3	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.3	371
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.3	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.3	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.43	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.3	371 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.3	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.3	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.3	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.3	371 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	371	ug/kg	74.3	371

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959005	Date Received: 02/02/2010 09:10	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7319	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0711.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	371	ug/kg	74.3	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	371	ug/kg	74.3	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.3	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.3	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.3	371 UJ,SV7c
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.3	371
122-66-7	Azobenzene	U	371	ug/kg	74.3	371
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.3	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.3	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.43	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.3	371
206-44-0	Fluoranthene	U	37.1	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.3	371
56-55-3	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.3	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.3	371
205-99-2	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.3	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.48	589	ug/kg		JA
	Unknown	17.17	179	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1510
Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371
108-95-2	Phenol	U	371	ug/kg	74.2	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.7	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.2	371 UJ,SV7c
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371
95-48-7	o-Cresol	U	371	ug/kg	74.2	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371
78-59-1	Isophorone	U	371	ug/kg	74.2	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371
65-85-0	Benzoic acid	U	742	ug/kg	185	742
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.2	371 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	371	ug/kg	74.2	371

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

SDG Number: 10-1510
Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	371	ug/kg	74.2	371
208-96-8	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
51-28-5	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
132-64-9	2,4-Dinitrophenol	U	742	ug/kg	141	742
84-66-2	Dibenzofuran	U	371	ug/kg	74.2	371
86-73-7	Diethylphthalate	U	371	ug/kg	74.2	371
7005-72-3	Fluorene	U	37.1	ug/kg	11.1	37.1
534-52-1	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371
100-01-6	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371 UJ,SV7c
122-39-4	4-Nitroaniline	U	371	ug/kg	111	371
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	371	ug/kg	74.2	371
118-74-1	Azobenzene	U	371	ug/kg	74.2	371
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	371	ug/kg	74.2	371
84-74-2	Hexachlorobenzene	U	371	ug/kg	74.2	371
206-44-0	Phenanthrene	U	37.1	ug/kg	11.1	37.1
85-68-7	Anthracene	U	37.1	ug/kg	7.42	37.1
56-55-3	Di-n-butylphthalate	U	371	ug/kg	74.2	371
91-94-1	Fluoranthene	U	37.1	ug/kg	11.1	37.1
218-01-9	Butylbenzylphthalate	U	371	ug/kg	74.2	371
117-81-7	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
117-84-0	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
205-99-2	Chrysene	U	37.1	ug/kg	11.1	37.1
207-08-9	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371
50-32-8	Di-n-octylphthalate	U	371	ug/kg	74.2	371
193-39-5	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
53-70-3	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
120-82-1	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	434	ug/kg		JA
	Unknown	14.46	171	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959012

Client ID: RE15-10-7324
Batch ID: 949132
Run Date: 02/07/2010 19:44
Prep Date: 02/04/2010 20:55
Data File: s6b0717.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit Qual
	Unknown		17.17	166	ug/kg	J

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1510 VALIDATION DATE: 3/10/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. The ICV/CCV %D for 2,4-diamino-6-nitrotoluene was >20% but ≤40% with negative bias. The associated sample results were NDs and, thus, were qualified UJ,HE7c. The ICV/CCV %Ds for PETN and RDX were >20% with positive bias. The associated sample results were NDs and, thus, were not qualified.
2. The MS/MSD RPD for RDX was > the laboratory acceptance limit. The associated sample results were NDs and, thus, were qualified UJ,HE12g.
3. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: Mary Donovan


Level: I

Date: 03/11/10


VALIDATOR'S SIGNATURE:

Allison Felix


DATE: 3/10/10

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

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

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

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

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

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

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

Records Use only



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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 2.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216085a

Date Analyzed: 18-FEB-10 10:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140124.wiff

Date Analyzed: 15-FEB-10 22:30

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 UJ,HE7c	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216088a

Date Analyzed: 18-FEB-10 12:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140127.wiff

Date Analyzed: 15-FEB-10 23:17

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 UJ,HE7c	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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216092a

Date Analyzed: 18-FEB-10 14:04

Units: ug/kg

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

*Concentration =

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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140128.wiff

Date Analyzed: 15-FEB-10 23:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216093a

Date Analyzed: 18-FEB-10 14:34

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140129.wiff

Date Analyzed: 15-FEB-10 23:48

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216094a

Date Analyzed: 18-FEB-10 15:03

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140133.wiff

Date Analyzed: 16-FEB-10 00:51

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 UJ,HE7c	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216095a

Date Analyzed: 18-FEB-10 15:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140134.wiff

Date Analyzed: 16-FEB-10 01:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216096a

Date Analyzed: 18-FEB-10 16:03

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140135.wiff

Date Analyzed: 16-FEB-10 01:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216097a

Date Analyzed: 18-FEB-10 16:32

Units: ug/kg

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

*Concentration =

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

AMF
3/10/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140136.wiff

Date Analyzed: 16-FEB-10 01:38

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 UJ,HE7c	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216098a

Date Analyzed: 18-FEB-10 17:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140137.wiff

Date Analyzed: 16-FEB-10 01:54

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216099a

Date Analyzed: 18-FEB-10 17:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX UJ,HE12g	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

AMF
3/10/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140138.wiff

Date Analyzed: 16-FEB-10 02:09

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 UJ,HE7c	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: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216100a

Date Analyzed: 18-FEB-10 18:01

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 UJ,HE12g	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: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140139.wiff

Date Analyzed: 16-FEB-10 02:25

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument X Concentrated Extract Volume X Dilution
Value Sample Amount Factor

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1510 VALIDATION DATE: 3/10/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ 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):

None.


Reviewed by: Mary DonovanLevel: IDate: 03/11/10VALIDATOR'S SIGNATURE: Allison FelixDATE: 3/10/10

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


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

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only  Los Alamos NATIONAL LABORATORY EST 1952

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

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

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

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

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

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959002

Client ID: RE15-10-7308
Batch ID: 949033
Run Date: 02/05/2010 12:15
Prep Date: 02/04/2010 20:32
Data File: 029f2901.d
029b2901.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1AJ
Analyst: YS1
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 22.3
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	4.29	ug/kg	1.43	4.29	1
11104-28-2	Aroclor-1221	U	4.29	ug/kg	1.43	4.29	1
11141-16-5	Aroclor-1232	U	4.29	ug/kg	1.43	4.29	1
53469-21-9	Aroclor-1242	U	4.29	ug/kg	1.43	4.29	1
12672-29-6	Aroclor-1248	U	4.29	ug/kg	1.43	4.29	1
11097-69-1	Aroclor-1254	U	4.29	ug/kg	1.43	4.29	1
11096-82-5	Aroclor-1260	U	4.29	ug/kg	1.43	4.29	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Allquot: 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: RE15-10-7309
Batch ID: 949033
Run Date: 02/05/2010 12:03
Prep Date: 02/04/2010 20:32
Data File: 028f2801.d
028b2801.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

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1510
Lab Sample ID: 245959012Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECDIAJ
Analyst: YS1
Aliquot: 30.03 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 10.3
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	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1510C

LOS ALAMOS

REQUEST NUMBER: 10-1510

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245959

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7309	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7309	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7308	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7308	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7317	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7317	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7319	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7319	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7316	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7316	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7318	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7318	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7329	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7329	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7324	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7324	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

2/1/10

5:00

Dionne Francis

2/2/10

0910

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:

Page 6 of 1179

REQUEST NUMBER: 10-1510

Monday, February 01, 2010

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1510

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010

TURNAROUND/REPORT DUE: 3/3/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.8082	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
	SW-846.82608	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	

Monday, February 01, 2010

REQUEST NUMBER: 10-1510

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
		1	RE15-10-7329	S	1/28/2010	
		2	RE15-10-7329	S	1/28/2010	
	SW-846:8270C	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	
		1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
	SW-846:8321A_MOD	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	
		1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	

REQUEST NUMBER: 10-1510

Monday, February 01, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7324	R	1/28/2010	

Final Page of REQUEST NUMBER 10-1510



February 04, 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: 245959
SDG: 10-1510

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 02, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1510
Enclosures

Los Alamos National Laboratory (72733-001-09)

LANL ER Project

Work Order #: 245959

SDG: 10-1510

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245959
SDG # : 10-1510**

February 04, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 02, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The lab received (1)40ml vial 8260B container for sample RE15-10-7329 instead of (2), as indicated on the COC. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

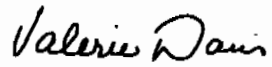
<u>Laboratory ID</u>	<u>Client ID</u>
245959001	RE15-10-7309
245959002	RE15-10-7308
245959003	RE15-10-7315
245959004	RE15-10-7317
245959005	RE15-10-7319
245959006	RE15-10-7312
245959007	RE15-10-7313
245959008	RE15-10-7314
245959009	RE15-10-7316
245959010	RE15-10-7318
245959011	RE15-10-7329
245959012	RE15-10-7324

Case Narrative

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

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

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



Valerie Davis

Project Manager

List of current GEL Certifications as of 04 February 2010

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

Chain of Custody and Supporting Documentation

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1510C

LOS ALAMOS

REQUEST NUMBER: 10-1510

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245959

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7309	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7309	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7308	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7308	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7317	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7317	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7319	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7319	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7316	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7316	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7318	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7318	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7329	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7329	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7324	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7324	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Page 6 of 1179

Monday, February 01, 2010

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1510

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010

TURNAROUND/REPORT DUE: 3/3/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
	SW-846:8260B	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	

Monday, February 01, 2010

Page 2 of 3

REQUEST NUMBER: 10-1510

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
		1	RE15-10-7329	S	1/28/2010	
		2	RE15-10-7329	S	1/28/2010	
	SW-846:8270C	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	
		1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	
		1	RE15-10-7324	R	1/28/2010	
	SW-846:8321A_MOD	1	RE15-10-7308	R	1/28/2010	
		1	RE15-10-7309	R	1/28/2010	
		1	RE15-10-7312	R	1/28/2010	
		1	RE15-10-7313	R	1/28/2010	
		1	RE15-10-7314	R	1/28/2010	
		1	RE15-10-7315	R	1/28/2010	
		1	RE15-10-7316	R	1/28/2010	
		1	RE15-10-7317	R	1/28/2010	
		1	RE15-10-7318	R	1/28/2010	
		1	RE15-10-7319	R	1/28/2010	

Monday, February 01, 2010

REQUEST NUMBER: 10-1510

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7324	R	1/28/2010	

Final Page of REQUEST NUMBER 10-1510



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1510		
Received By: Dionne Francis			Date Received: February 2, 2010		
Suspected Hazard Information		Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.	
COC/Samples marked as radioactive?			X	Maximum Counts Observed*: 80 CPM	
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) 0-5C 13-15,19C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?			X	Sample ID's affected: RE15-10-7329 the lab rec'd (1) 40ml vial 8260B instead of (2) as indicated on the COC
12 COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7849 7978 0C 7209 7849 7886 2C 7209 7849 7967 3C 7209 7849 7739 19C

7209 7849 7772 1C 7209 7849 7901 2C 7209 7849 7945 4C

7209 7849 7934 1C 7209 7849 7853 2C 7209 7849 7810 5C

7209 7849 7831 1C 7209 7849 7875 2C 7209 7849 7897 5C

7209 7849 7783 1C 7209 7849 7956 2C 7209 7849 7728 13C

7209 7849 7864 1C 7209 7849 7794 2C 7209 7849 7706 13C

7209 7849 7923 1C 7209 7849 7820 2C 7209 7849 7717 14C

7209 7849 7761 1C 7209 7849 7809 2C 7209 7849 7750 15C

7209 7849 7842 1C 7209 7849 7912 3C 7209 7849 7740 15C

Subject: Sample Receipt for 2/2/10

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

Date: Wed, 03 Feb 2010 11:38:13 -0500

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

Keith,

RN 10-1508: the lab rec'd (2) 40ml vials 8260B containers for sample RE16-10-12078 which is not listed on the COC. Would you like us to add the analysis?

RN10-1510: the lab rec'd (1) 40ml vial 8260B containers for sample RE15-10-7329 instead of (2) as indicated on the COC.

RN10-1509: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-1498 instead of (2) as indicated on the COC.

RN10-1507: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-12079 instead of (2) as indicated on the COC.

RN10-1520: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-2898 instead of (2) as indicated on the COC.

RN10-1488: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-1468 instead of (2) as indicated on the COC.

RN10-1486: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-1403 instead of (2) as indicated on the COC.

RN10-1492: the lab rec'd (1) 40ml vial 8260B containers for sample RE16-10-1308 instead of (2) as indicated on the COC.

RN10-1501: the lab rec'd (1) 40ml vial 8260B container each for samples CASA-10-9413 and 9460 instead of (2) as indicated on the COC. Also, one of the 1L amber glass PEST containers for sample CASA-10-9459 was rec'd broken. There is sufficient volume to complete the analysis.

RN10-1505: the lab rec'd (1) 40ml vial 8260B containers for sample RE46-10-11974 instead of (2) as indicated on the COC.

RN10-1495: the lab rec'd (1) 40ml vial 8260B container each for samples CAMO-10-9276, 9290, 9295, 9362, 9380, 9368, 9382. We did not receive any 40ml vial containers for samples CAMO-10-9284, 9288, 9286, 9285. All samples requesting PEST, PCB, SVOA,HEXP we rec'd (2) 1L amber glass containers each instead of (3) as indicated on the COC.

RN10-1497: the Gross A/B containers were preserved prior to analysis.

Thanks,
Dionne

--

Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

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

TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAO: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGML0

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Express

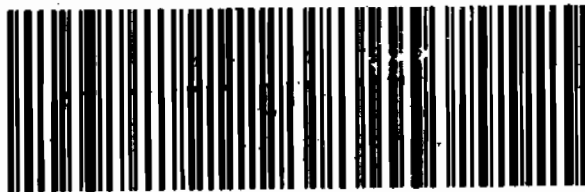


TRKH 7209 7849 7978
0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



Per # 156148-04 NRT V3 09-09

ORIGIN ID: SAFA (505) 665-9908
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGML0

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TRKH 7209 7849 7934
0201

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TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Page 12 of 1170

JOYLENE VALDEZ (505) 665-9908

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

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MPSH 7209 7849 7772
0263

Matr# 7209 7849 7761 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9908
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

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Express



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0201

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TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 48.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR1A052VROO

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 52.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR1A015AGHKO

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Express



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Express



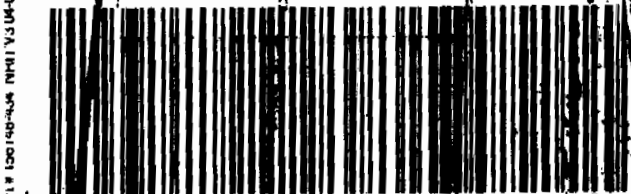
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TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 61.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR1A015AGHKO

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Express



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2 of 2
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TUE - 02FEB A1
PRIORITY OVERNIGHT

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2 of 2
MPSH 7209 7849 7864
0201

MatrN 7209 7849 7853 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 53.0 LB MAN
CAO: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR1A052VROO

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Express



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Express



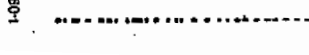
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TRKH 7209 7849 7761
0201

NN MASTER NN

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 555-9958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWT: 57.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNKO

UNIT ID: 158148-434 NRT V3 04-00



FedEx
Express



J0520081130223

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNKO

UNIT ID: 158148-434 NRT V3 04-00



FedEx
Express

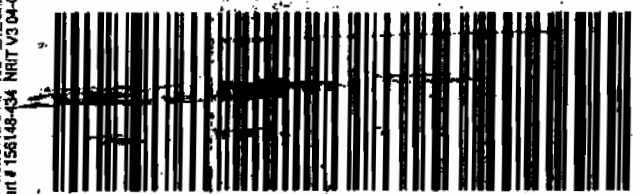


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2 of 2 TUE - 02FEB A1
MPSH 0263 7209 7849 7842
MatrN 7209 7849 7831 0201

XX CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (505) 555-9958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 48.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNKO

UNIT ID: 158148-434 NRT V3 04-00



FedEx
Express



J0520081130223

2 of 2 TUE - 02FEB A1
MPSH 0263 7209 7849 7801
MatrN 7209 7849 7807 0201

XX CHSA

29407
SC-US
CHS

UNIT ID: 158148-434 NRT V3 04-00

ORIGIN ID: SAFA (505) 555-9958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 58.0 LB MAN
CAD: 0014176/CAFE2449

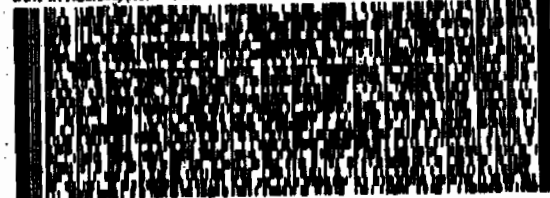
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNKO

UNIT ID: 158148-434 NRT V3 04-00



FedEx
Express



J0520081130223

1 of 2 TRKH 0201 7209 7849 7853
NN MASTER NN

XX CHSA

29407
SC-US
CHS

UNIT ID: 158148-434 NRT V3 04-00

TUE - 02FEB A1
PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 48.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

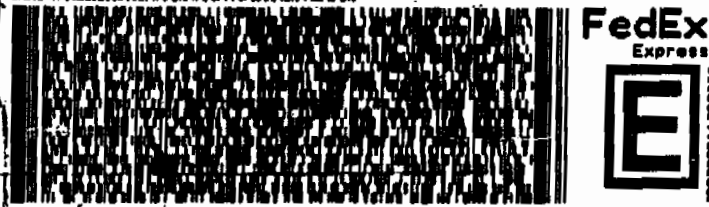
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

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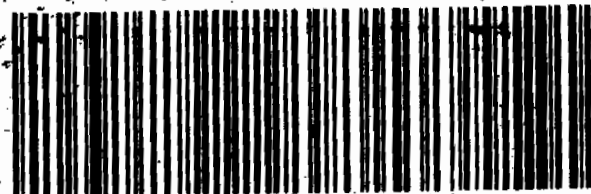


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NM MASTER NM

TUE - 02FEB A1
PRIORITY OVERNIGHT

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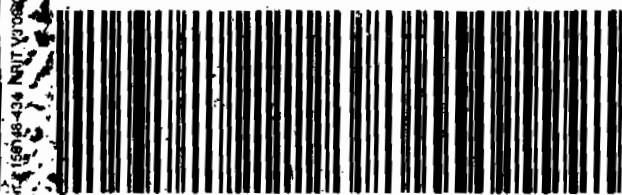


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TUE - 02FEB A1
PRIORITY OVERNIGHT

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SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 52.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 48.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00



2 of 2
NPSH
0203 7209 7849 7794
Matr 7209 7849 7783 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

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3 of 3
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Matr 7209 7849 7809 0201

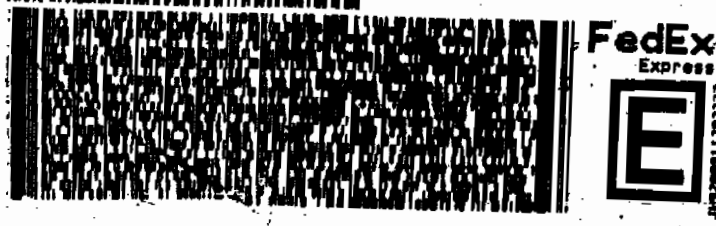
TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

1400 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
BILL SENDER
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
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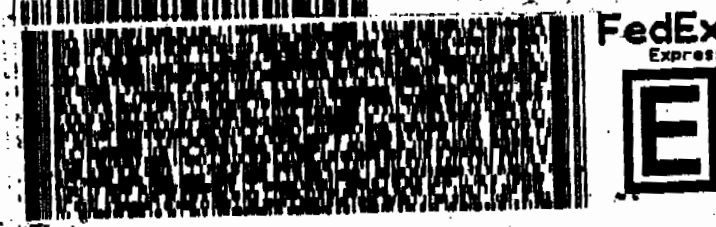
2C



1 of 3
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TUE - 02FEB A1
TUE - 02 FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA
Emp# 133998 01FEB10 SAFA

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR1A015AGML0

3C



2 of 2
MPS# 7209 7849 7809
Matr# 7209 7849 7809
TUE - 02FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR1A015AGML0

3C



1 of 2
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NN MASTER NN
TUE - 02FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA
Part 1 156148-434 NRT V3 09-08

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR1A015AGML0

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2 of 2
MPS# 7209 7849 7945
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TUE - 02FEB A1
PRIORITY OVERNIGHT
29407
SC-US
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X CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

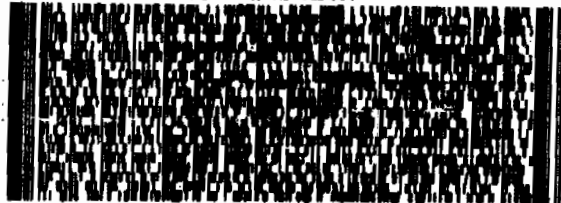
CHARLESTON SC 29407

(843) 556-8171

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5c

NOTE: THIS PARCEL IS BEING SHIPPED BY AIR TO THE DESTINATION.



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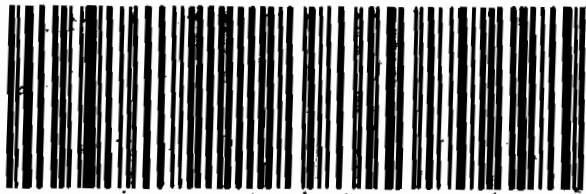
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Matr# 7209 7849 7800 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYDO

13c

NOTE: THIS PARCEL IS BEING SHIPPED BY AIR TO THE DESTINATION.



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1 of 2
MPSH 7209 7849 7728
0201

Matr# 7209 7849 7801

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
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XX CHSA 1179

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
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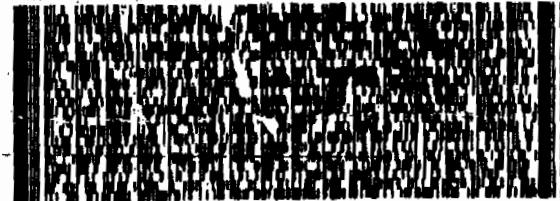
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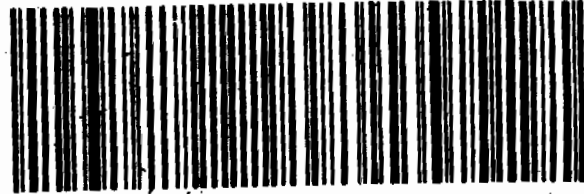
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TUE - 02FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 71.0 LB MAN
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BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYDO

13c

NOTE: THIS PARCEL IS BEING SHIPPED BY AIR TO THE DESTINATION.



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2 of 3
MPSH 7209 7849 7706
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Matr# 7209 7849 7801 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

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NOTE: THIS PARCEL IS BEING SHIPPED BY AIR TO THE DESTINATION.

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 64.0 LB MAN
CRD: 0014176/CAFE2449

BILL SENDER

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

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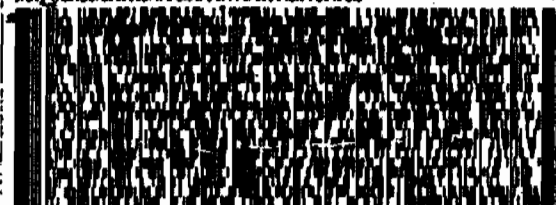
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TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
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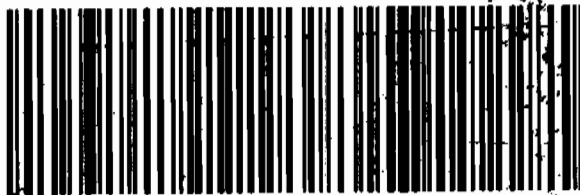
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TUE - 02FEB A1
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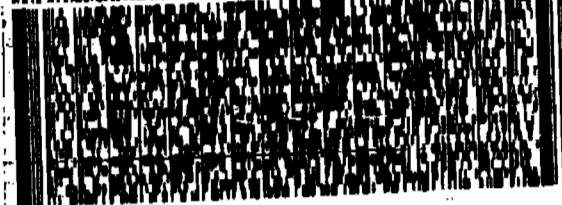
Part # 156143-434 NRTV3 04-05

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

15c



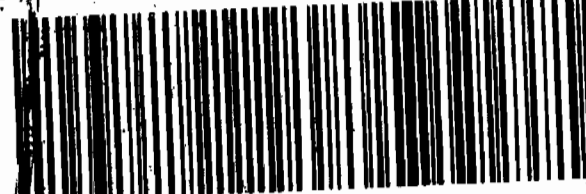
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TUE - 02FEB A1
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29407
SC-US
CHS

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Part # 156143-434 NRTV3 04-05

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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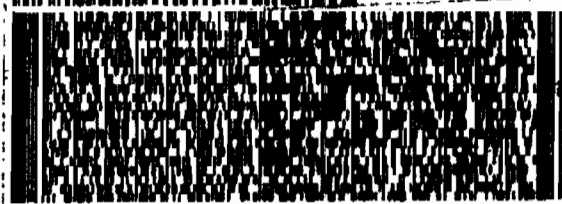
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CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

15c



1 of 2
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TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
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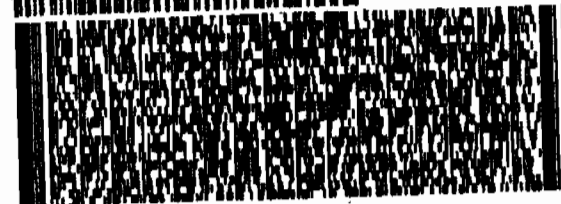
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

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2 of 2
MPS# 0263 7209 7849 7739

Matrn 7209 7849 7728 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
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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 10-1510**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 951185
Prep Batch Number: 951184

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
245959001	RE15-10-7309
245959002	RE15-10-7308
245959003	RE15-10-7315
245959004	RE15-10-7317
245959005	RE15-10-7319
245959006	RE15-10-7312
245959007	RE15-10-7313
245959008	RE15-10-7314
245959009	RE15-10-7316
245959010	RE15-10-7318
245959011	RE15-10-7329
245959012	RE15-10-7324
1202038395	Method Blank (MB)
1202038398	Laboratory Control Sample (LCS)
1202038399	Laboratory Control Sample (LCS)
1202038396	245955001(RE16-10-1474) Post Spike (PS)
1202038397	245955001(RE16-10-1474) 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 245959 001, 002, 003, 004, 005, 006, 007, 008, 009, 010 and 012 in this SDG were analyzed on an "dry weight" basis. Samples 245959 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# 14.

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

Calibration Information

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245955001 (RE16-10-1474) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries were not all within the acceptance limits. See DER# 791111.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries were within the acceptance limits.

Relative Percent Difference (RPD) Statement

The RPD between the matrix spike pair were not all within the acceptance limits. See DER# 791111.

Internal Standard (ISTD) Acceptance

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

Technical Information**Holding Time Specifications**

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

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Electronic 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: 791111

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
VOAA.I	Agilent 7890/5975C GC/MS system	HP7890A/HP5975C	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: 10-1510 GEL Work Order: 245959

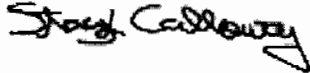
The Qualifiers in this report are defined as follows:

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

Review/Validation

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

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

Signature: 

Name: Stacy Calloway

Date: 25 FEB 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959001

Client ID: RE15-10-7309
Batch ID: 951185
Run Date: 02/09/2010 22:11
Prep Date: 02/09/2010 18:06
Data File: 020910\AX213.D

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.2 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.2 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: RE15-10-7309
Batch ID: 951185
Run Date: 02/09/2010 22:11
Prep Date: 02/09/2010 18:06
Data File: 020910\AX213.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959002

Client ID: RE15-10-7308
 Batch ID: 951185
 Run Date: 02/09/2010 22:38
 Prep Date: 02/09/2010 18:07
 Data File: 020910\AX214.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAAJ
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.3
 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	1.29	ug/kg	0.438	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.386	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.386	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.386	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.386	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.386	1.29
67-64-1	Acetone	U	6.44	ug/kg	2.14	6.44
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
74-88-4	Iodomethane	U	6.44	ug/kg	2.06	6.44
75-09-2	Methylene chloride	U	6.44	ug/kg	2.57	6.44
75-15-0	Carbon disulfide	U	6.44	ug/kg	1.61	6.44
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.386	1.29
78-93-3	2-Butanone	U	6.44	ug/kg	1.93	6.44
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.386	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.425	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.386	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.386	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.386	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.386	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.386	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.425	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.386	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.386	1.29
108-10-1	4-Methyl-2-pentanone	U	6.44	ug/kg	1.61	6.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.386	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.386	1.29
591-78-6	2-Hexanone	U	6.44	ug/kg	1.93	6.44
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.386	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.386	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.386	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.386	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.386	1.29

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959002	Date Received: 02/02/2010 09:10	%Moisture: 22.3
Client ID: RE15-10-7308	Client: LANL010	Project: LANL01004
Batch ID: 951185	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/09/2010 22:38	Inst: VOAA.I	Dilution: 1
Prep Date: 02/09/2010 18:07	Analyst: JEB	Purge Vol: 5 mL
Data File: 020910\AX214.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.386	1.29
179601-23-1	m,p-Xylenes	U	2.57	ug/kg	0.386	2.57
95-47-6	o-Xylene	U	1.29	ug/kg	0.386	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.386	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.386	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.386	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.386	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.386	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.386	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.386	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.386	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.386	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.386	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.386	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.44	ug/kg	2.06	6.44
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 8.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7315
 Batch ID: 951185
 Run Date: 02/09/2010 23:04
 Prep Date: 02/09/2010 18:08
 Data File: 020910\AX215.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	U	5.18	ug/kg	1.72	5.18
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.29	5.18
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.29	5.18
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 8.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7315
 Batch ID: 951185
 Run Date: 02/09/2010 23:04
 Prep Date: 02/09/2010 18:08
 Data File: 020910\AX215.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.18	ug/kg	1.66	5.18
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.1 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: RE15-10-7317
Batch ID: 951185
Run Date: 02/09/2010 23:30
Prep Date: 02/09/2010 18:09
Data File: 020910\AX216.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959004

Client ID: RE15-10-7317
 Batch ID: 951185
 Run Date: 02/09/2010 23:30
 Prep Date: 02/09/2010 18:09
 Data File: 020910\AX216.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 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
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 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: RE15-10-7319
 Batch ID: 951185
 Run Date: 02/09/2010 23:57
 Prep Date: 02/09/2010 18:10
 Data File: 020910\AX217.D

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: 10-1510
 Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 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: RE15-10-7319
 Batch ID: 951185
 Run Date: 02/09/2010 23:57
 Prep Date: 02/09/2010 18:10
 Data File: 020910\AX217.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
No Tentatively Identified Compounds Found				ug/kg		

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959006

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAAJ
Analyst: JEB
Aliquot: 5.4 g
Column: DB-624

Matrix: R
%Moisture: 29.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7312
Batch ID: 951185
Run Date: 02/10/2010 00:23
Prep Date: 02/09/2010 18:11
Data File: 020910\AX218.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.446	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone		18.8	ug/kg	2.18	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.433	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.433	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	% Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 00:23	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:11	Aliquot: 5.4 g	Final Volume: 5 mL
Data File: 020910\AX218.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene		1.51	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.36	8.26	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 00:50	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:12	Aliquot: 5.4 g	Final Volume: 5 mL
Data File: 020910\AX219.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.13	ug/kg	1.70	5.13
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.338	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.338	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.4 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: RE15-10-7313
 Batch ID: 951185
 Run Date: 02/10/2010 00:50
 Prep Date: 02/09/2010 18:12
 Data File: 020910\AX219.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.13	ug/kg	1.64	5.13
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7314
 Batch ID: 951185
 Run Date: 02/10/2010 01:16
 Prep Date: 02/09/2010 18:13
 Data File: 020910\AX220.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.505	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.445	1.48
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.445	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.445	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.445	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.445	1.48
67-64-1	Acetone	U	7.42	ug/kg	2.46	7.42
75-35-4	1,1-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
74-88-4	Iodomethane	U	7.42	ug/kg	2.37	7.42
75-09-2	Methylene chloride	U	7.42	ug/kg	2.97	7.42
75-15-0	Carbon disulfide	U	7.42	ug/kg	1.85	7.42
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.445	1.48
78-93-3	2-Butanone	U	7.42	ug/kg	2.23	7.42
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.445	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.490	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.445	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.445	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.445	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.445	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.445	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.490	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.445	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.445	1.48
108-10-1	4-Methyl-2-pentanone	U	7.42	ug/kg	1.85	7.42
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
108-88-3	Toluene	U	1.48	ug/kg	0.445	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.445	1.48
591-78-6	2-Hexanone	U	7.42	ug/kg	2.23	7.42
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.445	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.445	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.445	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.445	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.445	1.48

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959008	Date Received: 02/02/2010 09:10	%Moisture: 32.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7314	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 01:16	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:13	Aliquot: 5 g	Final Volume: 5 mL
Data File: 020910\AX220.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.445	1.48
179601-23-1	m,p-Xylenes	U	2.97	ug/kg	0.445	2.97
95-47-6	o-Xylene	U	1.48	ug/kg	0.445	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.445	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.445	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.445	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.445	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.445	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.445	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.445	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.445	1.48
99-87-6	4-Isopropyltoluene	U	1.48	ug/kg	0.445	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.445	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.445	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.42	ug/kg	2.37	7.42
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 % Moisture: 35.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7316
 Batch ID: 951185
 Run Date: 02/10/2010 01:42
 Prep Date: 02/09/2010 18:14
 Data File: 020910\AX221.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.508	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.448	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.448	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.448	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.448	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.448	1.49
67-64-1	Acetone	U	7.47	ug/kg	2.48	7.47
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
74-88-4	Iodomethane	U	7.47	ug/kg	2.39	7.47
75-09-2	Methylene chloride	U	7.47	ug/kg	2.99	7.47
75-15-0	Carbon disulfide	U	7.47	ug/kg	1.87	7.47
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.448	1.49
78-93-3	2-Butanone	U	7.47	ug/kg	2.24	7.47
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.448	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.493	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.448	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.448	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.448	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.448	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.448	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.493	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.448	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.448	1.49
108-10-1	4-Methyl-2-pentanone	U	7.47	ug/kg	1.87	7.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
108-88-3	Toluene	J	0.538	ug/kg	0.448	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.448	1.49
591-78-6	2-Hexanone	U	7.47	ug/kg	2.24	7.47
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.448	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.448	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.448	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.448	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.448	1.49

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959009
 Client ID: RE15-10-7316
 Batch ID: 951185
 Run Date: 02/10/2010 01:42
 Prep Date: 02/09/2010 18:14
 Data File: 020910\AX221.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 35.6
 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	1.49	ug/kg	0.448	1.49
179601-23-1	m,p-Xylenes	U	2.99	ug/kg	0.448	2.99
95-47-6	o-Xylene	U	1.49	ug/kg	0.448	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.448	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.448	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.448	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.448	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.448	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.448	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.448	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.448	1.49
99-87-6	4-Isopropyltoluene	U	1.49	ug/kg	0.448	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.448	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.448	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.47	ug/kg	2.39	7.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.33	7.84	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959010

Client ID: RE15-10-7318
Batch ID: 951185
Run Date: 02/10/2010 02:08
Prep Date: 02/09/2010 18:15
Data File: 020910\AX222.D

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.2 g
Column: DB-624

Matrix: R
%Moisture: 14.8
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	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959010

Client ID: RE15-10-7318
 Batch ID: 951185
 Run Date: 02/10/2010 02:08
 Prep Date: 02/09/2010 18:15
 Data File: 020910\AX222.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 14.8
 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	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.64	ug/kg	1.81	5.64
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959011

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 g
 Column: DB-624

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

Client ID: RE15-10-7329
 Batch ID: 951185
 Run Date: 02/10/2010 02:35
 Prep Date: 02/09/2010 18:16
 Data File: 020910\AX223.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.980	ug/kg	0.333	0.980
74-87-3	Chloromethane	U	0.980	ug/kg	0.294	0.980
75-01-4	Vinyl chloride	U	0.980	ug/kg	0.294	0.980
74-83-9	Bromomethane	U	0.980	ug/kg	0.294	0.980
75-00-3	Chloroethane	U	0.980	ug/kg	0.294	0.980
75-69-4	Trichlorofluoromethane	U	0.980	ug/kg	0.294	0.980
67-64-1	Acetone	U	4.90	ug/kg	1.63	4.90
75-35-4	1,1-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
74-88-4	Iodomethane	U	4.90	ug/kg	1.57	4.90
75-09-2	Methylene chloride	U	4.90	ug/kg	1.96	4.90
75-15-0	Carbon disulfide	U	4.90	ug/kg	1.23	4.90
156-60-5	trans-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
75-34-3	1,1-Dichloroethane	U	0.980	ug/kg	0.294	0.980
78-93-3	2-Butanone	U	4.90	ug/kg	1.47	4.90
156-59-2	cis-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
594-20-7	2,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
67-66-3	Chloroform	U	0.980	ug/kg	0.294	0.980
74-97-5	Bromochloromethane	U	0.980	ug/kg	0.324	0.980
71-55-6	1,1,1-Trichloroethane	U	0.980	ug/kg	0.294	0.980
563-58-6	1,1-Dichloropropene	U	0.980	ug/kg	0.294	0.980
56-23-5	Carbon tetrachloride	U	0.980	ug/kg	0.294	0.980
107-06-2	1,2-Dichloroethane	U	0.980	ug/kg	0.294	0.980
71-43-2	Benzene	U	0.980	ug/kg	0.294	0.980
79-01-6	Trichloroethylene	U	0.980	ug/kg	0.324	0.980
78-87-5	1,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
75-27-4	Bromodichloromethane	U	0.980	ug/kg	0.294	0.980
74-95-3	Dibromomethane	U	0.980	ug/kg	0.294	0.980
108-10-1	4-Methyl-2-pentanone	U	4.90	ug/kg	1.23	4.90
10061-01-5	cis-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
108-88-3	Toluene	U	0.980	ug/kg	0.294	0.980
10061-02-6	trans-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
79-00-5	1,1,2-Trichloroethane	U	0.980	ug/kg	0.294	0.980
591-78-6	2-Hexanone	U	4.90	ug/kg	1.47	4.90
142-28-9	1,3-Dichloropropane	U	0.980	ug/kg	0.294	0.980
127-18-4	Tetrachloroethylene	U	0.980	ug/kg	0.294	0.980
124-48-1	Dibromochloromethane	U	0.980	ug/kg	0.294	0.980
106-93-4	1,2-Dibromoethane	U	0.980	ug/kg	0.294	0.980
108-90-7	Chlorobenzene	U	0.980	ug/kg	0.294	0.980

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959011	Date Received: 02/02/2010 09:10	
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7329	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 02:35	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:16	Aliquot: 5.1 g	Final Volume: 5 mL
Data File: 020910\AX223.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	0.980	ug/kg	0.294	0.980
179601-23-1	m,p-Xylenes	U	1.96	ug/kg	0.294	1.96
95-47-6	o-Xylene	U	0.980	ug/kg	0.294	0.980
100-42-5	Styrene	U	0.980	ug/kg	0.294	0.980
75-25-2	Bromoform	U	0.980	ug/kg	0.294	0.980
79-34-5	1,1,2,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
96-18-4	1,2,3-Trichloropropane	U	0.980	ug/kg	0.294	0.980
108-86-1	Bromobenzene	U	0.980	ug/kg	0.294	0.980
103-65-1	n-Propylbenzene	U	0.980	ug/kg	0.294	0.980
95-49-8	2-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-82-8	Isopropylbenzene	U	0.980	ug/kg	0.294	0.980
108-67-8	1,3,5-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
106-43-4	4-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-06-6	tert-Butylbenzene	U	0.980	ug/kg	0.294	0.980
95-63-6	1,2,4-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
135-98-8	sec-Butylbenzene	U	0.980	ug/kg	0.294	0.980
99-87-6	4-Isopropyltoluene	U	0.980	ug/kg	0.294	0.980
541-73-1	1,3-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
106-46-7	1,4-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
104-51-8	n-Butylbenzene	U	0.980	ug/kg	0.294	0.980
96-12-8	1,2-Dibromo-3-chloropropane	U	0.980	ug/kg	0.294	0.980
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	4.90	ug/kg	1.57	4.90
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
95-50-1	1,2-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959012	Date Received: 02/02/2010 09:10	%Moisture: 10.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7324	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 03:01	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:17	Aliquot: 5.3 g	Final Volume: 5 mL
Data File: 020910\AX224.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.75	5.26
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959012

Client ID: RE15-10-7324
Batch ID: 951185
Run Date: 02/10/2010 03:01
Prep Date: 02/09/2010 18:17
Data File: 020910\AX224.D

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
Aliquot: 5.3 g
Column: DB-624

Matrix: R
%Moisture: 10.3
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	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.26	ug/kg	1.68	5.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

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: 10-1510

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202038398	LCS for batch 951184	86	100	95
1202038399	LCS for batch 951184	84	100	96
1202038395	MB for batch 951184	79	99	93
245959001	RE15-10-7309	95	98	96
245959002	RE15-10-7308	93	99	96
245959003	RE15-10-7315	98	98	97
245959004	RE15-10-7317	98	98	96
245959005	RE15-10-7319	98	98	96
245959006	RE15-10-7312	94	99	97
245959007	RE15-10-7313	100	98	98
245959008	RE15-10-7314	97	99	97
245959009	RE15-10-7316	97	98	98
245959010	RE15-10-7318	99	99	98
245959011	RE15-10-7329	101	100	98
245959012	RE15-10-7324	103	99	99

Surrogate

DCED4 = 1,2-Dichloroethane-d4

TOL = Toluene-d8

BFB = Bromofluorobenzene

Acceptance Limits

(66%-134%)

(71%-128%)

(65%-130%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 6

SDG Number: 10-1510

Sample Type: Post Spike

Client ID: RE16-10-1474PS

Matrix: S

Lab Sample ID: 1202038396

%Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:27

Dilution: 1

Analyst: JEB

Pre Batch ID: 951184

Purge Vol: 5 mL

Batch ID: 951185

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	37.7	75	39-148
74-87-3	PS Chloromethane	50.0	0.00 U	30.0	60	42-131
75-01-4	PS Vinyl chloride	50.0	0.00 U	38.0	76	50-127
74-83-9	PS Bromomethane	50.0	0.00 U	41.5	83	26-135
75-00-3	PS Chloroethane	50.0	0.00 U	43.7	87	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00 U	40.6	81	55-138
67-64-1	PS Acetone	250	2.45 J	146	57	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00 U	35.5	71	55-128
74-88-4	PS Iodomethane	250	0.00 U	190	76	47-132
75-09-2	PS Methylene chloride	50.0	0.00 U	40.3	81	56-123
75-15-0	PS Carbon disulfide	250	0.00 U	195	78	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00 U	36.1	72	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00 U	36.8	74	62-125
78-93-3	PS 2-Butanone	250	0.00 U	155	62	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00 U	36.2	72	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00 U	35.6	71	56-129
67-66-3	PS Chloroform	50.0	0.00 U	38.9	78	62-120
74-97-5	PS Bromochloromethane	50.0	0.00 U	39.1	78	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00 U	37.4	75	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00 U	36.1	72	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00 U	36.2	72	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00 U	36.7	73	54-121

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 6

SDG Number: 10-1510

Sample Type: Post Spike

Client ID: RE16-10-1474PS

Matrix: S

Lab Sample ID: 1202038396

%Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:27

Dilution: 1

Analyst: JEB

Pre Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

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	37.2	74	58-120
79-01-6	PS Trichloroethylene	50.0	0.00 U	42.9	86	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00 U	35.8	72	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00 U	37.1	74	57-130
74-95-3	PS Dibromomethane	50.0	0.00 U	37.8	76	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00 U	182	73	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00 U	34.0	68	50-131
108-88-3	PS Toluene	50.0	0.00 U	34.8	70	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00 U	34.4	69	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00 U	37.5	75	60-130
591-78-6	PS 2-Hexanone	250	0.00 U	160	64	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00 U	36.9	74	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00 U	32.6	65	50-126
124-48-1	PS Dibromochloromethane	50.0	0.00 U	34.4	69	54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00 U	36.5	73	55-127
108-90-7	PS Chlorobenzene	50.0	0.00 U	32.3	65	50-130
100-41-4	PS Ethylbenzene	50.0	0.00 U	30.8	62	50-121
179601-23-1	PS m,p-Xylenes	100	0.00 U	59.0	59	47-125
95-47-6	PS o-Xylene	50.0	0.00 U	29.9	60	51-127
100-42-5	PS Styrene	50.0	0.00 U	29.0	58	41-136
75-25-2	PS Bromoform	50.0	0.00 U	33.0	66	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00 U	25.5	51 *	52-129

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1510

Sample Type: Post Spike

Client ID: RE16-10-1474PS

Matrix: S

Lab Sample ID: 1202038396

%Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:27

Dilution: 1

Analyst: JEB

Pren Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

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	35.4	71	56-139
108-86-1	PS Bromobenzene	50.0	0.00 U	30.8	62	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00 U	23.5	47	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	25.8	52	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00 U	25.6	51	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	22.9	46	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	24.6	49	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	22.3	45 *	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	22.7	45	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	19.0	38 *	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	18.5	37	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	23.8	48	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	23.8	48	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00 U	16.1	32 *	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	25.4	51	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	35.2	70	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	23.4	47	42-128

Volatile

Page 4 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Post Spike Duplicate

Client ID: RE16-10-1474PSD

Matrix: S

Lab Sample ID: 1202038397

%Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:53

Dilution: 1

Analyst: JEB

Pren Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

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 37.2	74	39-148	1	0-19
74-87-3	PSD Chloromethane	50.0	0.00	U 29.7	59	42-131	1	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00	U 37.9	76	50-127	0	0-23
74-83-9	PSD Bromomethane	50.0	0.00	U 40.9	82	26-135	1	0-22
75-00-3	PSD Chloroethane	50.0	0.00	U 43.2	86	54-128	1	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 40.9	82	55-138	1	0-21
67-64-1	PSD Acetone	250	2.45	J 138	54	20-144	5	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 35.8	72	55-128	1	0-20
74-88-4	PSD Iodomethane	250	0.00	U 190	76	47-132	0	0-20
75-09-2	PSD Methylene chloride	50.0	0.00	U 40.0	80	56-123	1	0-20
75-15-0	PSD Carbon disulfide	250	0.00	U 202	81	53-133	3	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 36.4	73	57-119	1	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 36.9	74	62-125	0	0-20
78-93-3	PSD 2-Butanone	250	0.00	U 148	59	30-150	5	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 36.0	72	60-124	1	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 36.7	73	56-129	3	0-20
67-66-3	PSD Chloroform	50.0	0.00	U 38.9	78	62-120	0	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 38.4	77	51-135	2	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 38.3	77	58-129	2	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 37.9	76	59-126	5	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 38.0	76	55-132	5	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 35.8	72	54-121	3	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-1510

Sample Type: Post Spike Duplicate

Client ID: RE16-10-1474PSD

Matrix: S

Lab Sample ID:1202038397

% Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:53

Dilution: 1

Analyst: JEB

Pren Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD Benzene	50.0	0.00	U 37.9	76	58-120	2	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00	U 42.7	85	54-130	1	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U 36.2	72	59-121	1	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00	U 37.0	74	57-130	0	0-20
74-95-3	PSD Dibromomethane	50.0	0.00	U 37.4	75	57-124	1	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U 176	70	40-137	4	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U 34.4	69	50-131	1	0-20
108-88-3	PSD Toluene	50.0	0.00	U 36.6	73	54-119	5	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U 34.4	69	47-133	0	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U 37.7	75	60-130	1	0-20
591-78-6	PSD 2-Hexanone	250	0.00	U 151	61	30-139	6	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U 36.6	73	59-125	1	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U 36.9	74	50-126	13	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00	U 34.8	70	54-131	1	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U 36.7	73	55-127	1	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00	U 34.6	69	50-130	7	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00	U 34.2	68	50-121	10	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00	U 66.0	66	47-125	11	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U 32.8	66	51-127	9	0-24
100-42-5	PSD Styrene	50.0	0.00	U 31.5	63	41-136	8	0-24
75-25-2	PSD Bromoform	50.0	0.00	U 33.2	66	48-143	0	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U 27.7	55	52-129	8	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 6

SDG Number: 10-1510

Sample Type: Post Spike Duplicate

Client ID: RE16-10-1474PSD

Matrix: S

Lab Sample ID:1202038397

%Moisture: 26.4

Instrument: VOAA.I

Analysis Date: 02/10/2010 03:53

Dilution: 1

Analyst: JEB

Prep Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

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 34.6	69	56-139	2	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 33.4	67	54-125	8	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 28.7	57	46-127	20	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 29.5	59	47-130	14	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 30.1	60	42-126	16	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 27.5	55	44-132	18	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 28.4	57	46-127	14	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 28.2	56	48-136	23	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 27.0	54	42-132	17	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 25.4	51	47-130	29 *	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 24.4	49	36-142	28 *	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 27.5	55	41-130	14	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 27.3	55	41-126	14	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 22.4	45	37-136	33 *	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 25.9	52	42-143	2	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 36.2	72	58-127	3	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 26.4	53	42-128	12	0-24

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951184

Matrix: SOIL

Lab Sample ID: 1202038398

Instrument: VOAA.I

Analysis Date: 02/09/2010 17:49

Dilution: 1

Analyst: JEB

Pre Batch II 951184

Purge Vol: 5 mL

Batch ID: 951185

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	34.9	70	52-151
74-87-3	LCS Chloromethane	50.0	0.0	30.0	60	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	39.3	79	66-130
74-83-9	LCS Bromomethane	50.0	0.0	45.2	90	70-126
75-00-3	LCS Chloroethane	50.0	0.0	45.9	92	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	43.1	86	73-143
67-64-1	LCS Acetone	250	0.0	173	69	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	39.0	78	71-129
74-88-4	LCS Iodomethane	250	0.0	225	90	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	46.9	94	64-121
75-15-0	LCS Carbon disulfide	250	0.0	238	95	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	40.9	82	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	42.1	84	73-120
78-93-3	LCS 2-Butanone	250	0.0	198	79	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	41.5	83	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	43.6	87	73-134
67-66-3	LCS Chloroform	50.0	0.0	44.0	88	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	47.6	95	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	42.9	86	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	45.7	91	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	44.1	88	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	40.1	80	65-120

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951184

Matrix: SOIL

Lab Sample ID: 1202038398

Instrument: VOAA.I

Analysis Date: 02/09/2010 17:49

Dilution: 1

Analyst: JEB

Pre Batch ID: 951184

Purge Vol: 5 mL

Batch ID: 951185

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	45.8	92	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	46.5	93	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	44.0	88	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	44.3	89	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	46.4	93	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	250	100	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	46.5	93	78-127
108-88-3	LCS Toluene	50.0	0.0	47.4	95	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	47.3	95	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	49.5	99	75-120
591-78-6	LCS 2-Hexanone	250	0.0	207	83	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	47.3	95	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	52.6	105	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	46.8	94	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	49.8	100	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	48.6	97	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	47.5	95	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	95.4	95	76-120
95-47-6	LCS o-Xylene	50.0	0.0	47.8	96	76-122
100-42-5	LCS Styrene	50.0	0.0	48.3	97	75-125
75-25-2	LCS Bromoform	50.0	0.0	51.5	103	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	51.3	103	72-122

Volatile

Page 3 of 3

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951184

Matrix: SOIL

Lab Sample ID: 1202038398

Instrument: VOAA.I

Analysis Date: 02/09/2010 17:49

Dilution: 1

Analyst: JEB

Pren Batch ID: 951184

Purge Vol: 5 mL

Batch ID: 951185

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	50.4	101	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	51.9	104	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	47.4	95	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	48.7	97	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	46.9	94	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	46.8	94	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	46.8	94	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	50.2	100	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	46.7	93	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	48.1	96	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	47.8	96	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	52.3	105	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	51.8	104	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	48.7	97	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	49.2	98	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	48.7	97	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	51.4	103	75-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951184

Matrix: SOIL

Lab Sample ID: 1202038399

Instrument: VOAA.I

Analysis Date: 02/09/2010 18:42

Dilution: 1

Analyst: JEB

Prep Batch ID: 951184

Purge Vol: 5 mL

Batch ID: 951185

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 <i>Trichlorotrifluoroethane</i>	250	0.0	251	100	67-140

Method Blank Summary

Page 1 of 1

SDG Number:	10-1510	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 951184	Instrument ID:	VOAA.I	Data File:	020910\AX206LA.D
Lab Sample ID:	1202038395	Prep Date:	02/09/2010 16:11	Analyzed:	02/09/10 19:08
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 951184	1202038398	020910\AX203LA.D	02/09/10	1749
02 LCS for batch 951184	1202038399	020910\AX205LA.D	02/09/10	1842
03 RE15-10-7309	245959001	020910\AX213.D	02/09/10	2211
04 RE15-10-7308	245959002	020910\AX214.D	02/09/10	2238
05 RE15-10-7315	245959003	020910\AX215.D	02/09/10	2304
06 RE15-10-7317	245959004	020910\AX216.D	02/09/10	2330
07 RE15-10-7319	245959005	020910\AX217.D	02/09/10	2357
08 RE15-10-7312	245959006	020910\AX218.D	02/10/10	0023
09 RE15-10-7313	245959007	020910\AX219.D	02/10/10	0050
10 RE15-10-7314	245959008	020910\AX220.D	02/10/10	0116
11 RE15-10-7316	245959009	020910\AX221.D	02/10/10	0142
12 RE15-10-7318	245959010	020910\AX222.D	02/10/10	0208
13 RE15-10-7329	245959011	020910\AX223.D	02/10/10	0235
14 RE15-10-7324	245959012	020910\AX224.D	02/10/10	0301

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: VOAA.1

Injection Date/Time: 02-FEB-10 22:04

Column Description: DB-624

Lab File ID 020210\AW301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	25.6
75	30.0 - 60.0% of mass 95	56.3
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	67.7
175	5.0 - 9.0% of mass 174	6.8
176	95.0 - 101.0% of mass 174	96.7
177	5.0 - 9.0% of mass 176	6.9

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	WAVM100202-01	020210\AW303.D	02-FEB-10 22:55
ICALMIX[A]	WAVM100202-03	020210\AW305.D	02-FEB-10 23:47
ICALMIX [A]	WAVM100202-04	020210\AW306.D	03-FEB-10 00:14
ICALMIX[A]	WAVM100202-05	020210\AW307.D	03-FEB-10 00:40
ICALMIX[A]	WAVM100202-06	020210\AW308.D	03-FEB-10 01:06
ICALMIX[A]	WAVM100202-07	020210\AW309.D	03-FEB-10 01:32
ICALMIX [A]	WAVM100202-08	020210\AW310.D	03-FEB-10 01:59
ICALMIX[A]	WAVM100202-09	020210\AW311.D	03-FEB-10 02:25
ICALMIX[B]	WAVM100202-10	020210\AW313.D	03-FEB-10 03:17
ICALMIX[B]	WAVM100202-11	020210\AW314.D	03-FEB-10 03:43
ICALMIX[B]	WAVM100202-12	020210\AW315.D	03-FEB-10 04:09
ICALMIX[B]	WAVM100202-13	020210\AW316.D	03-FEB-10 04:35
ICALMIX[B]	WAVM100202-14	020210\AW317.D	03-FEB-10 05:02
ICALMIX[B]	WAVM100202-15	020210\AW318.D	03-FEB-10 05:28
ICALMIX[B]	WAVM100202-16	020210\AW319.D	03-FEB-10 05:55
ICVMIX[A]01	WAVM100202-17	020210\AW321.D	03-FEB-10 06:48
ICVMIX[B]03	WAVM100202-19	020210\AW323.D	03-FEB-10 07:40

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: VOAA.I

Injection Date/Time: 09-FEB-10 16:37

Column Description: DB-624

Lab File ID 020910\AX201.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	54.4
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	0.4
174	50.0 - 100.0% of mass 95	73
175	5.0 - 9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	96.6
177	5.0 - 9.0% of mass 176	6.5

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]02	WAVM100209-01	020910\AX202.D	09-FEB-10 17:01
BLK01LCS	1202038398	020910\AX203LA.D	09-FEB-10 17:49
CCVMIX[B]03	WAVM100209-03	020910\AX204.D	09-FEB-10 18:15
BLK01SLCS	1202038399	020910\AX205LA.D	09-FEB-10 18:42
BLK01	1202038395	020910\AX206LA.D	09-FEB-10 19:08
RE15-10-7309	245959001	020910\AX213.D	09-FEB-10 22:11
RE15-10-7308	245959002	020910\AX214.D	09-FEB-10 22:38
RE15-10-7315	245959003	020910\AX215.D	09-FEB-10 23:04
RE15-10-7317	245959004	020910\AX216.D	09-FEB-10 23:30
RE15-10-7319	245959005	020910\AX217.D	09-FEB-10 23:57
RE15-10-7312	245959006	020910\AX218.D	10-FEB-10 00:23
RE15-10-7313	245959007	020910\AX219.D	10-FEB-10 00:50
RE15-10-7314	245959008	020910\AX220.D	10-FEB-10 01:16
RE15-10-7316	245959009	020910\AX221.D	10-FEB-10 01:42
RE15-10-7318	245959010	020910\AX222.D	10-FEB-10 02:08
RE15-10-7329	245959011	020910\AX223.D	10-FEB-10 02:35
RE15-10-7324	245959012	020910\AX224.D	10-FEB-10 03:01

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1510

Instrument: VOAA.I

STD Analysis Time: 09-FEB-10 17:01

GC Column: DB-624

Data File: C:\msdchem\1\DATA\020910\AX202.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1396930		9.34	997004		12.5	581443		14.9
Upper Limit	2793860		9.84	1994008		13.0	1162886		15.4
Lower Limit	698465		8.84	498502		12.0	290722		14.4
Sample ID									
BLK01LCS	1450439		9.34	1030853		12.5	601075		14.9
BLK01SLCS	1447065		9.34	1025660		12.5	596963		14.9
BLK01	1414560		9.34	999180		12.5	574900		14.9
RE15-10-7309	1264629		9.34	898990		12.5	525884		14.9
RE15-10-7308	1231770		9.34	870696		12.5	499237		14.9
RE15-10-7315	1224743		9.34	870209		12.5	507488		14.9
RE15-10-7317	1192501		9.34	853820		12.5	506015		14.9
RE15-10-7319	1180078		9.34	841970		12.5	489686		14.9
RE15-10-7312	1170030		9.34	821431		12.5	469284		14.9
RE15-10-7313	1160325		9.34	824240		12.5	485070		14.9
RE15-10-7314	1143140		9.34	810440		12.5	471508		14.9
RE15-10-7316	1125206		9.34	795836		12.5	452447		14.9
RE15-10-7318	1110769		9.34	787055		12.5	452789		14.9
RE15-10-7329	1083656		9.34	771853		12.5	453248		14.9
RE15-10-7324	1081583		9.34	775163		12.5	455587		14.9

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 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: RE15-10-7309
 Batch ID: 951185
 Run Date: 02/09/2010 22:11
 Prep Date: 02/09/2010 18:06
 Data File: 020910\AX213.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959001	Date Received: 02/02/2010 09:10	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7309	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/09/2010 22:11	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:06	Aliquot: 5.2 g	Final Volume: 5 mL
Data File: 020910VAX213.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.33	ug/kg	1.71	5.33
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

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\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
InstName : VOAA
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 13:29:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1264629	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	898990	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	525884	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1264629	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	898990	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	525884	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	501543	47.68	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	95.36%			
43) Toluene-d8	10.987	10.987	0.878	98	1185859	49.02	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.04%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	511318	47.78	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	95.56%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	622	N.D.		
4) Vinyl chloride	4.245	4.265	0.454	62	590	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.099	6.082	0.653	43	3129	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	809	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	5522	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
InstName : VOAA
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 13:29:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	1332	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.621	12.617	1.009	91	154	N.D.	
55) m,p-Xylenes	12.727	12.730	1.017	106	399	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.664	13.529	0.914	105	117	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.957	13.957	0.934	91	111	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.198	14.198	0.950	91	108	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.534	14.530	0.973	105	526	N.D.	
71) sec-Butylbenzene	14.534	14.718	0.973	105	526	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	128	N.D.	
74) 1,4-Dichlorobenzene	14.965	14.969	1.001	146	728	N.D.	
75) n-Butylbenzene	15.089	15.276	1.010	91	343	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	733	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	2558	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	460	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.433	8.430	0.903	42	334	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
InstName : VOAA
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 13:29:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

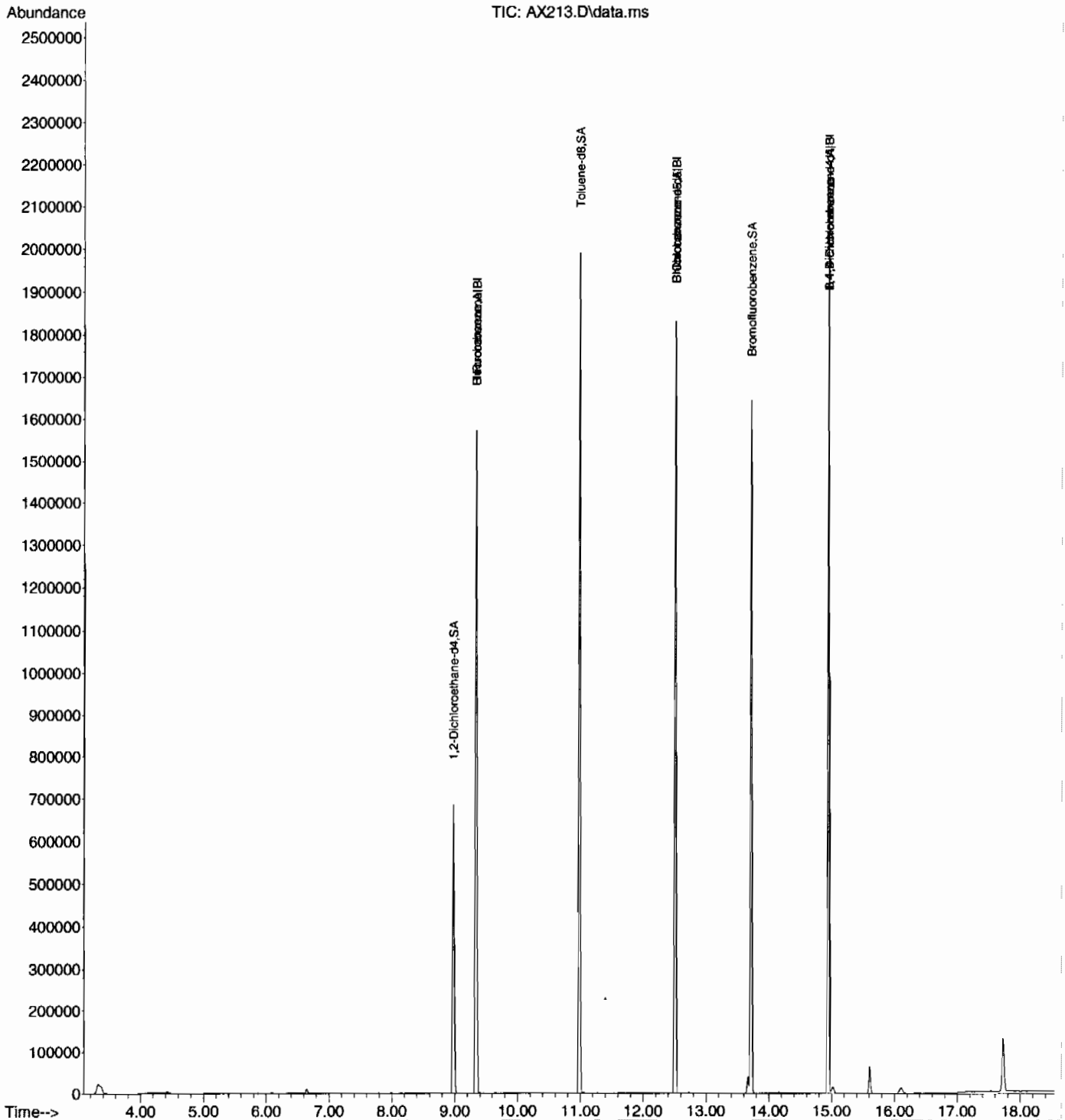
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.089	15.082	1.010	91	343	N.D.	
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044	45	4729	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\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
InstName : VOAA
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 13:29:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX213.D
Acq On : 9 Feb 2010 10:11 pm
Operator : JEB
Sample : |245959001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7308
 Batch ID: 951185
 Run Date: 02/09/2010 22:38
 Prep Date: 02/09/2010 18:07
 Data File: 020910\AX214.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.438	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.386	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.386	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.386	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.386	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.386	1.29
67-64-1	Acetone	U	6.44	ug/kg	2.14	6.44
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
74-88-4	Iodomethane	U	6.44	ug/kg	2.06	6.44
75-09-2	Methylene chloride	U	6.44	ug/kg	2.57	6.44
75-15-0	Carbon disulfide	U	6.44	ug/kg	1.61	6.44
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.386	1.29
78-93-3	2-Butanone	U	6.44	ug/kg	1.93	6.44
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.386	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.386	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.425	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.386	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.386	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.386	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.386	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.386	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.425	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.386	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.386	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.386	1.29
108-10-1	4-Methyl-2-pentanone	U	6.44	ug/kg	1.61	6.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.386	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.386	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.386	1.29
591-78-6	2-Hexanone	U	6.44	ug/kg	1.93	6.44
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.386	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.386	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.386	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.386	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.386	1.29

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAAJ
Analyst: JEB
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.3
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7308
Batch ID: 951185
Run Date: 02/09/2010 22:38
Prep Date: 02/09/2010 18:07
Data File: 020910\AX214.D

CAS No.	Parinname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.386	1.29
179601-23-1	m,p-Xylenes	U	2.57	ug/kg	0.386	2.57
95-47-6	o-Xylene	U	1.29	ug/kg	0.386	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.386	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.386	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.386	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.386	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.386	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.386	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.386	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.386	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.386	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.386	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.386	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.386	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.386	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.44	ug/kg	2.06	6.44
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.386	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.386	1.29

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\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
InstName : VOAA
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 10 13:30:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1231770	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	870696	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	499237	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1231770	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	870696	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	499237	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	476268	46.49	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	92.98%			
43) Toluene-d8	10.987	10.987	0.878	98	1155900	49.33	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.66%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	488723	48.10	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	96.20%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	354	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	571	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	3314	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.428	6.428	0.688	76	846	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	6662	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	9.084	9.084	0.972	78	348	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
InstName : VOAA
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 10 13:30:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	3466	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.008	91	3020	N.D.	
55) m,p-Xylenes	12.727	12.730	1.017	106	1613	N.D.	
56) o-Xylene	13.154	13.162	1.051	106	107	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	1260	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.205	14.198	0.951	91	263	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	731	N.D.	
71) sec-Butylbenzene	14.530	14.718	0.972	105	731	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.887	14.884	0.996	146	125	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	510	N.D.	
75) n-Butylbenzene	15.085	15.276	1.009	91	176	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	723	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	2814	N.D.	
81) 1,2,3-Trichlorobenzene	17.839	17.847	1.194	180	557	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.441	8.430	0.903	42	112	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
InstName : VOAA
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 10 13:30:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

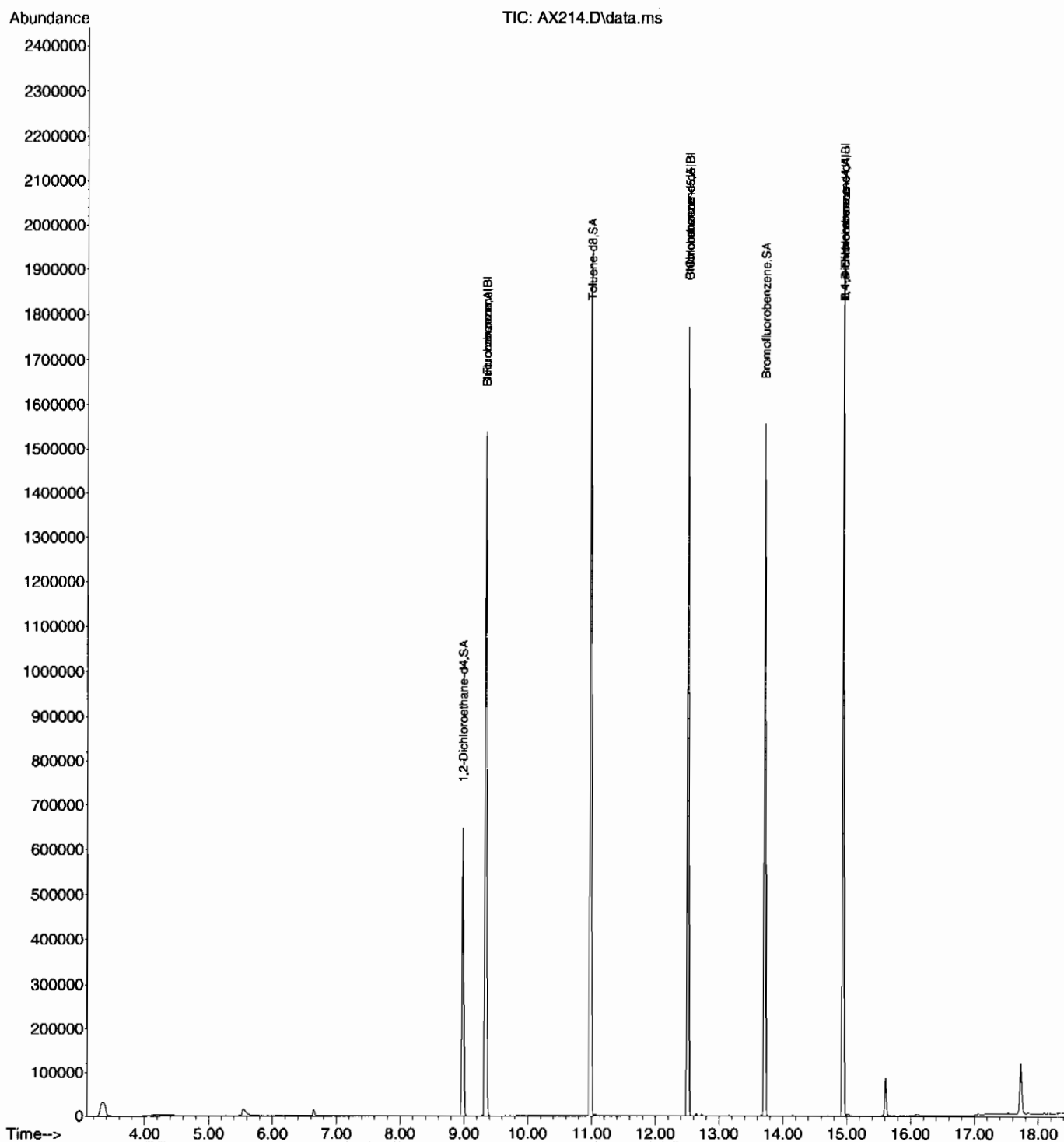
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.085	15.082	1.009	91	176	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044	45	6355	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\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
InstName : VOAA
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 10 13:30:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX214.D
Acq On : 9 Feb 2010 10:38 pm
Operator : JEB
Sample : |245959002|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959003	Date Received: 02/02/2010 09:10	%Moisture: 8.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7315	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/09/2010 23:04	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:08	Aliquot: 5.3 g	Final Volume: 5 mL
Data File: 020910\AX215.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	U	5.18	ug/kg	1.72	5.18
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.29	5.18
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.29	5.18
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAAJ
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 8.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7315
 Batch ID: 951185
 Run Date: 02/09/2010 23:04
 Prep Date: 02/09/2010 18:08
 Data File: 020910\AX215.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.18	ug/kg	1.66	5.18
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX215.D
Acq On : 9 Feb 2010 11:04 pm
Operator : JEB
InstName : VOAA
Sample : |245959003|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 10 13:34:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1224743	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	870209	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	507488	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1224743	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	870209	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	507488	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	497883	48.88	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	97.76%		
43) Toluene-d8	10.987	10.987	0.878	98	1148551	49.05	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	98.10%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	500413	48.45	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	96.90%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.033	4.043	0.432	50	544	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	424	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.103	6.082	0.653	43	2512	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.435	6.428	0.689	76	691	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	4792	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX215.D
Acq On : 9 Feb 2010 11:04 pm
Operator : JEB
InstName : VOAA
Sample : |245959003|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 10 13:34:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.061	11.057	0.884	91	2666	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.620	12.617	1.009	91	1102	N.D.	
55) m,p-Xylenes	12.734	12.730	1.018	106	931	N.D.	
56) o-Xylene	13.165	13.162	1.052	106	116	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.667	13.529	0.915	105	886	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0m	N.D.	d
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	14.194	13.957	0.950	91	504	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.194	14.198	0.950	91	504	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	695	N.D.	
71) sec-Butylbenzene	14.530	14.718	0.972	105	695	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.976	14.969	1.002	146	511	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	712	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.522	17.529	1.173	128	2601	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	247	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX215.D
Acq On : 9 Feb 2010 11:04 pm
Operator : JEB
InstName : VOAA
Sample : |245959003|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 10 13:34:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

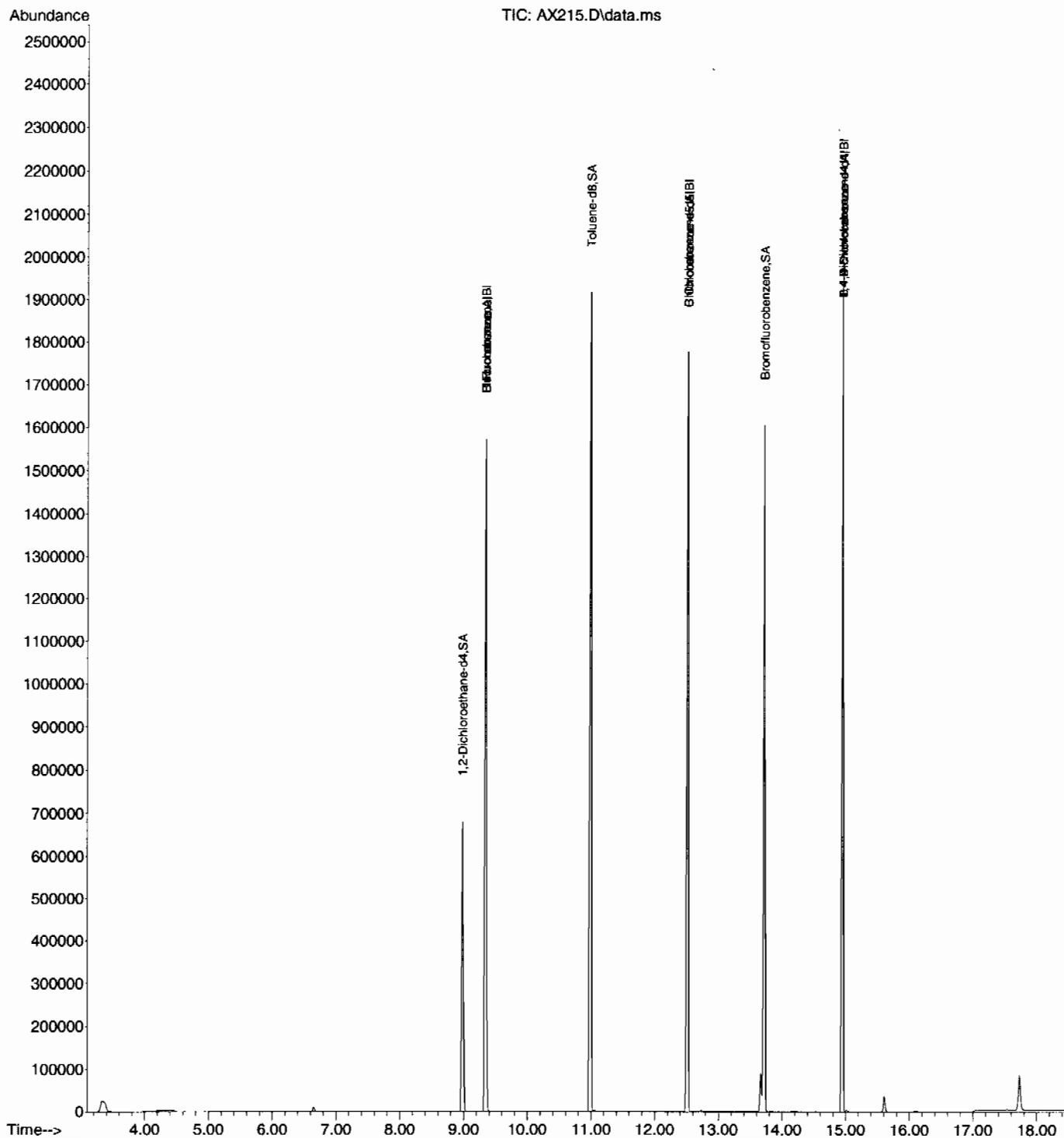
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.878	69	4279	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.944	15.082	1.000	91	1358	N.D.	
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044	45	2867	N.D.	

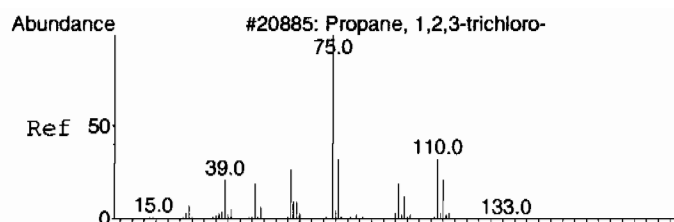
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

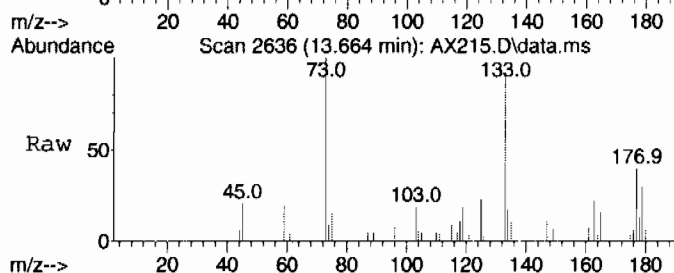
Data Path : C:\msdchem\1\DATA\020910\
Data File : AX215.D
Acq On : 9 Feb 2010 11:04 pm
Operator : JEB
InstName : VOAA
Sample : |245959003|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 10 13:34:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

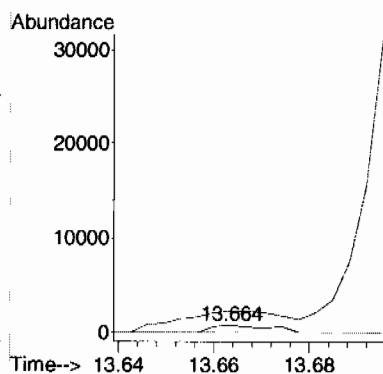
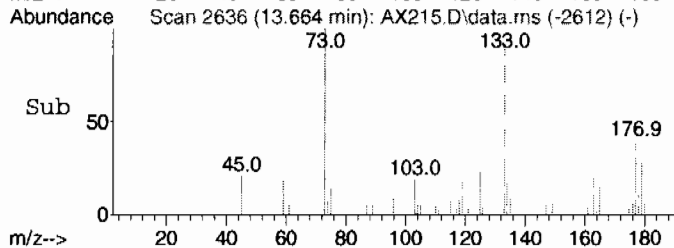




#63 BEFORE analyst DELETION
 1,2,3-Trichloropropane
 Concen: 0.34 ug/L
 RT: 13.664 min Scan# 2636
 Delta R.T. -0.216 min
 Lab File: AX215.D
 Acq: 9 Feb 2010 11:04 pm



Tgt Ion:110 Resp: 682
 Ion Ratio Lower Upper
 110 100
 75 531.7 242.8 302.8#
 77 0.0 52.2 112.2#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\

Data File : AX215.D

Acq On : 9 Feb 2010 11:04 pm

Operator : JEB

Sample : |245959003|951185|1|VOA|1|VOA8260BS|

Misc : LANL 5.3G N/A SOIL

ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: ron.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX215.D
Acq On : 9 Feb 2010 11:04 pm
Operator : JEB
Sample : |245959003|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 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: RE15-10-7317
 Batch ID: 951185
 Run Date: 02/09/2010 23:30
 Prep Date: 02/09/2010 18:09
 Data File: 020910\AX216.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959004

 Client ID: RE15-10-7317
 Batch ID: 951185
 Run Date: 02/09/2010 23:30
 Prep Date: 02/09/2010 18:09
 Data File: 020910\AX216.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAAJ
 Analyst: JEB
 Aliquot: 5.1 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.	Parname	Qualifier	Result	Units	MDL/L.O.D	PQL/L.O.Q
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.49	ug/kg	1.76	5.49
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX216.D
Acq On : 9 Feb 2010 11:30 pm
Operator : JEB
InstName : VOAA
Sample : |245959004|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 10 13:35:28 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1192501	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	853820	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	506015	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1192501	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	853820	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	506015	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.962	65	485337	48.93	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 97.86%			
43) Toluene-d8	10.987	10.987	0.878	98	1121907	48.83	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 97.66%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	494834	48.05	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 96.10%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.034	4.043	0.432	50	511	N.D.		
4) Vinyl chloride	4.265	4.265	0.457	62	523	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	2660	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.421	6.428	0.688	76	611	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	4986	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX216.D
Acq On : 9 Feb 2010 11:30 pm
Operator : JEB
InstName : VOAA
Sample : |245959004|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 10 13:35:28 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.061	11.057	0.884	91	1053	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.621	12.617	1.009	91	113	N.D.	
55) m,p-Xylenes	12.727	12.730	1.017	106	681	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.664	13.529	0.914	105	1777	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0m	N.D.	d
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	14.120	13.957	0.945	91	119	N.D.	
66) 1,3,5-Trimethylbenzene	14.124	14.116	0.945	105	1069	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000	14.530	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	14.718	0.000		0m	N.D.	d
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	627	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	488	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.522	17.529	1.173	128	2189	N.D.	
81) 1,2,3-Trichlorobenzene	17.840	17.847	1.194	180	233	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	6.694	6.687	0.717	59	107	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX216.D
Acq On : 9 Feb 2010 11:30 pm
Operator : JEB
InstName : VOAA
Sample : |245959004|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 10 13:35:28 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

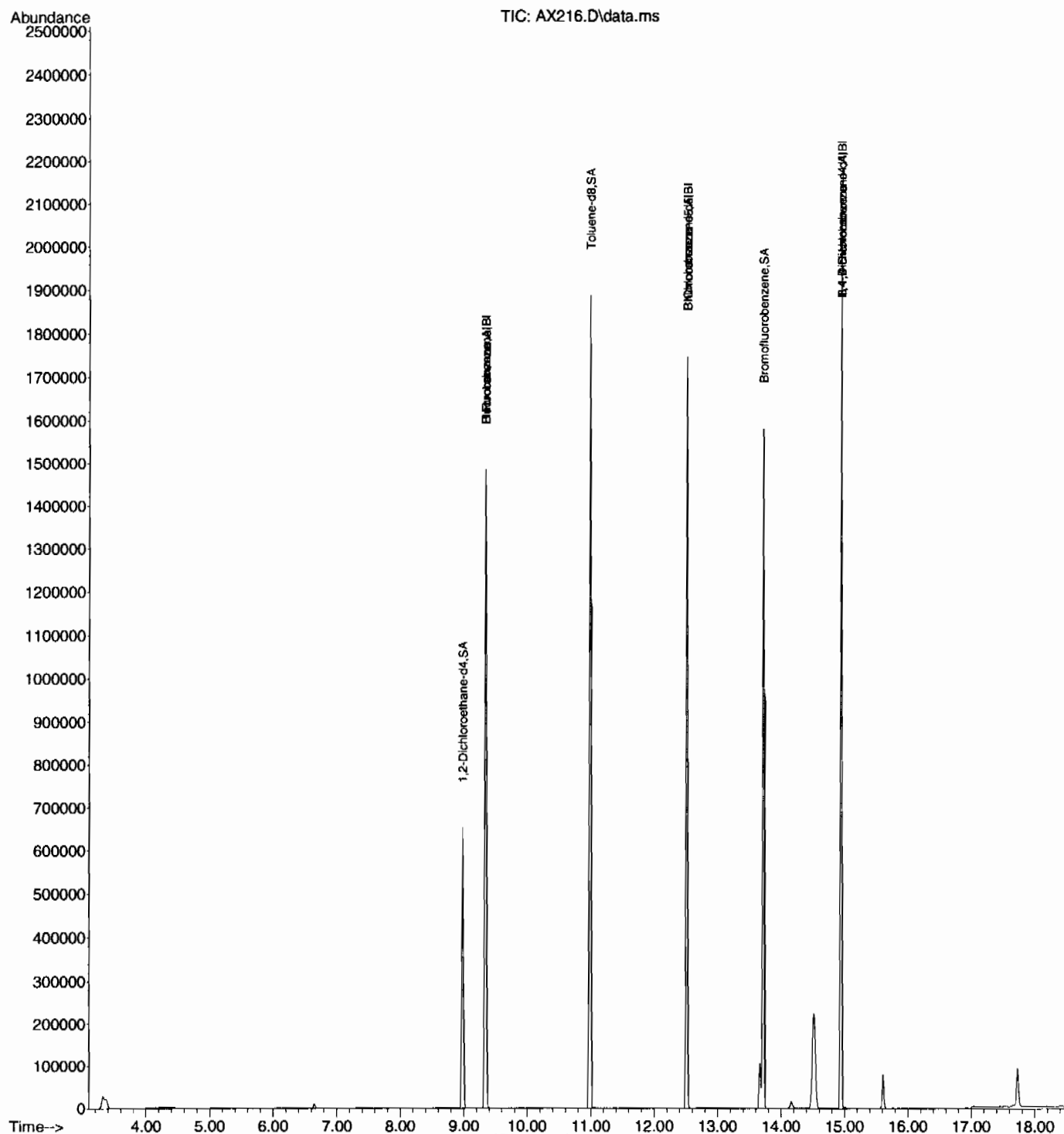
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.994	11.238	0.879	69	3831	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.941	15.082	1.000	91	1371	N.D.	
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044	45	5788	N.D.	

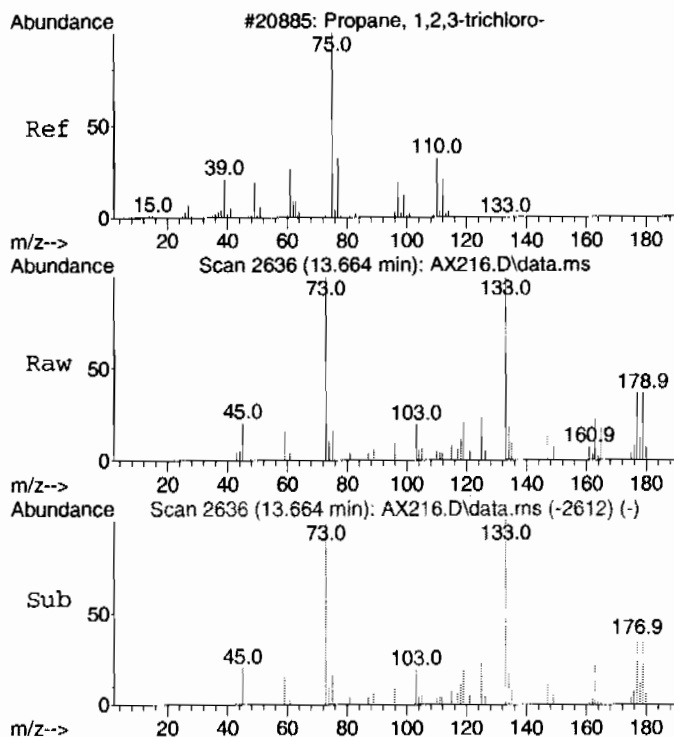
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX216.D
Acq On : 9 Feb 2010 11:30 pm
Operator : JEB
InstName : VOAA
Sample : |245959004|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

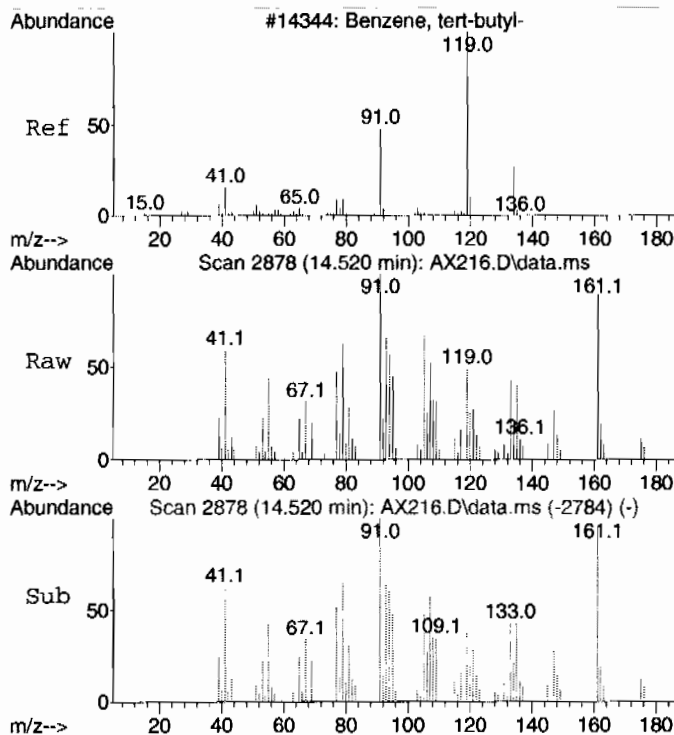
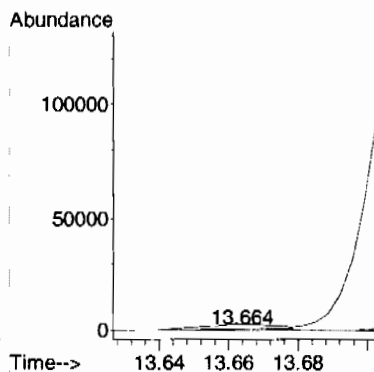
Quant Time: Feb 10 13:35:28 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





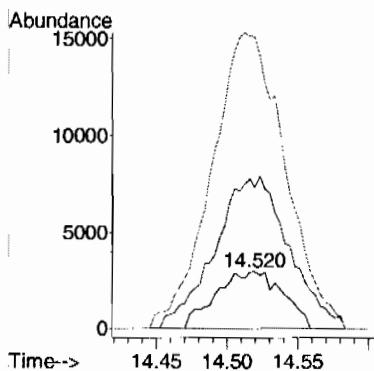
#63 BEFORE analyst DELETION
1,2,3-Trichloropropane
Concen: 0.61 ug/L
RT: 13.664 min Scan# 2636
Delta R.T. -0.216 min
Lab File: AX216.D
Acq: 9 Feb 2010 11:30 pm

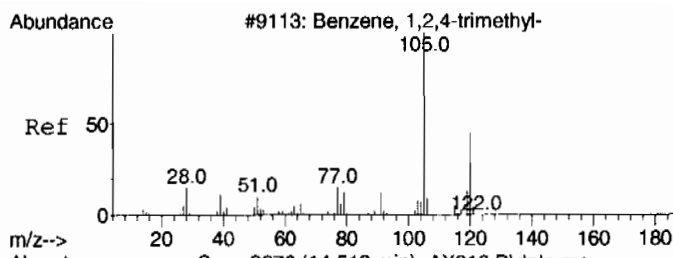
Tgt Ion	Ratio	Lower	Upper
110	100		
75	369.2	242.8	302.8#
77	0.0	52.2	112.2#



#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 2.10 ug/L
RT: 14.520 min Scan# 2878
Delta R.T. 0.032 min
Lab File: AX216.D
Acq: 9 Feb 2010 11:30 pm

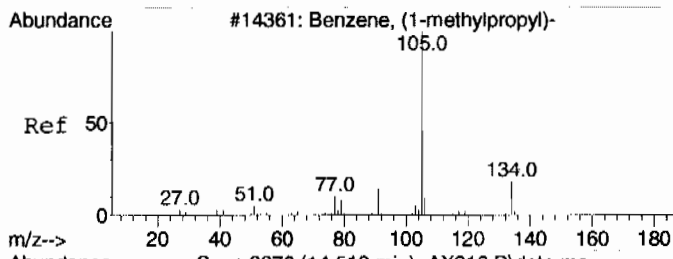
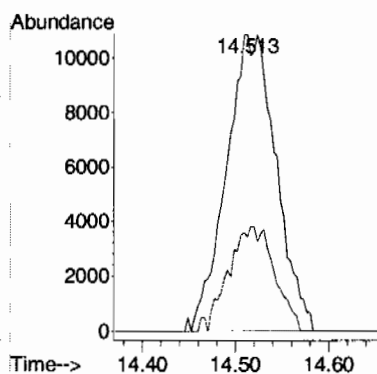
Tgt Ion	Ratio	Lower	Upper
134	100		
119	293.5	420.0	480.0#
91	565.6	318.4	378.4#





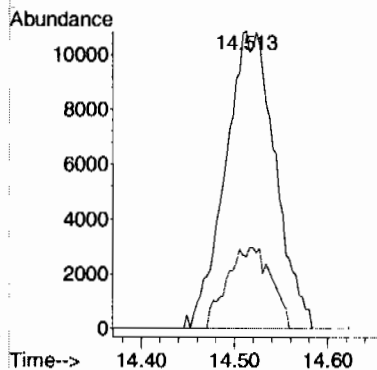
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 1.60 ug/L
RT: 14.513 min Scan# 2876
Delta R.T. -0.017 min
Lab File: AX216.D
Acq: 9 Feb 2010 11:30 pm

Tgt Ion:105 Resp: 40000
Ion Ratio Lower Upper
105 100
120 32.5 11.4 71.4



#71 BEFORE analyst DELETION
sec-Butylbenzene
Concen: 1.29 ug/L
RT: 14.513 min Scan# 2876
Delta R.T. -0.205 min
Lab File: AX216.D
Acq: 9 Feb 2010 11:30 pm

Tgt Ion:105 Resp: 40000
Ion Ratio Lower Upper
105 100
134 24.4 0.0 48.7



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\

Data File : AX216.D

Acq On : 9 Feb 2010 11:30 pm

Operator : JEB

Sample : |245959004|951185|1|VOA|1|VOA8260BS|

Misc : LANL 5.1G N/A SOIL

ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: ron.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX216.D
Acq On : 9 Feb 2010 11:30 pm
Operator : JEB
Sample : |245959004|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--
					# RT Resp Conc

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
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: RE15-10-7319
Batch ID: 951185
Run Date: 02/09/2010 23:57
Prep Date: 02/09/2010 18:10
Data File: 020910\AX217.D

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: 10-1510
 Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 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: RE15-10-7319
 Batch ID: 951185
 Run Date: 02/09/2010 23:57
 Prep Date: 02/09/2010 18:10
 Data File: 020910\AX217.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
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
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
InstName : VOAA
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 10 13:30:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1180078	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	841970	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	489686	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1180078	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	841970	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	489686	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	483027	49.21	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 98.42%			
43) Toluene-d8	10.987	10.987	0.878	98	1114137	49.17	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 98.34%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	479352	48.10	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 96.20%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	569	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	538	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	1975	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	222	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	4103	Below Cal		95
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
InstName : VOAA
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 10 13:30:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.058	11.057	0.884	91	1597	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.008	91	970	N.D.	
55) m,p-Xylenes	12.734	12.730	1.018	106	868	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.710	13.529	0.917	105	110	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.720	13.957	0.918	91	1293	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.527	14.530	0.972	105	359	N.D.	
71) sec-Butylbenzene	14.527	14.718	0.972	105	359	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	237	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	494	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1868	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	276	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.434	8.430	0.903	42	119	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
InstName : VOAA
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 10 13:30:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

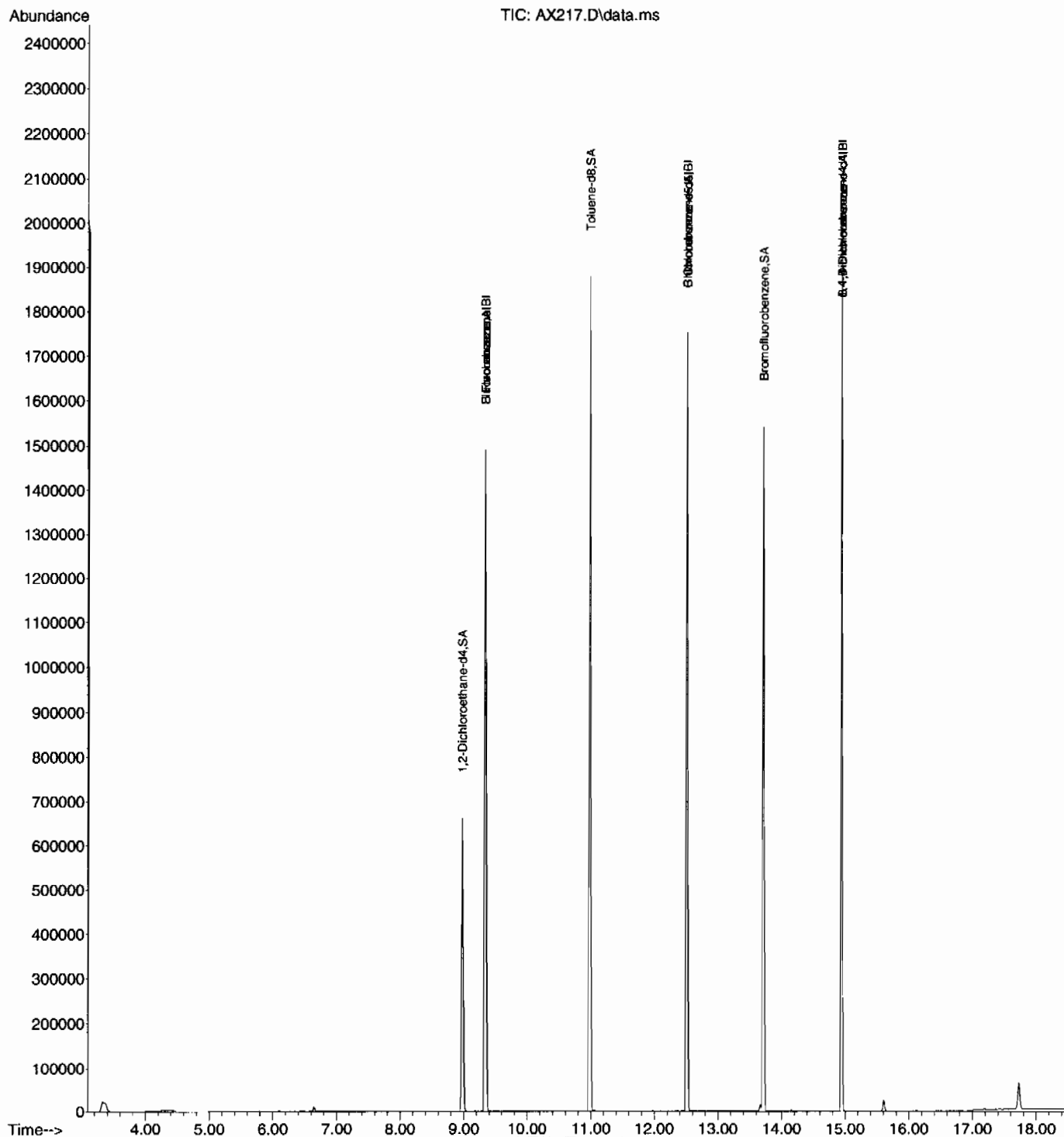
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.994	11.238	0.879	69	4036	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.941	15.082	1.000	91	1143	N.D.	
112) bis(2-Chloroisopropyl)...	15.612	15.485	1.045	45	1570	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\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
InstName : VOAA
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 10 13:30:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX217.D
Acq On : 9 Feb 2010 11:57 pm
Operator : JEB
Sample : |245959005|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959006
 Client ID: RE15-10-7312
 Batch ID: 951185
 Run Date: 02/10/2010 00:23
 Prep Date: 02/09/2010 18:11
 Data File: 020910\AX218.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.4 g
 Column: DB-624

Matrix: R
 %Moisture: 29.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.446	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone		18.8	ug/kg	2.18	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.433	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.433	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959006

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.4 g
 Column: DB-624

Matrix: R
 %Moisture: 29.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7312
 Batch ID: 951185
 Run Date: 02/10/2010 00:23
 Prep Date: 02/09/2010 18:11
 Data File: 020910VAX218.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene		1.51	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.36	8.26	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
InstName : VOAA
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 10 13:30:08 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1170030	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	821431	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	469284	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1170030	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	821431	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	469284	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	458943	47.16	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	94.32%		
43) Toluene-d8	10.987	10.987	0.878	98	1093484	49.47	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	98.94%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	461642	48.34	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	96.68%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	4.265	4.265	0.457	62	551	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.651	43	80350	14.36	ug/L	96
10) 1,1-Dichloroethylene	6.223	6.082	0.666	61	235	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	6.238	6.481	0.668	43	107	N.D.		
14) Carbon disulfide	6.421	6.428	0.687	76	653	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	9111	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.069	8.062	0.864	43	4602	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.787	8.791	0.941	56	2486	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	9.088	9.084	0.973	78	113	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
InstName : VOAA
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 10 13:30:08 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.058	11.057	0.884	91	5263	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.649	12.617	1.011	91	5786	N.D.	
55) m,p-Xylenes	12.727	12.730	1.017	106	2980	0.31 ug/L	98
56) o-Xylene	13.162	13.162	1.052	106	1039	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.551	13.529	0.907	105	3085	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.957	13.957	0.934	91	114	N.D.	
66) 1,3,5-Trimethylbenzene	14.117	14.116	0.945	105	115	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	14.198	0.950	91	111	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.527	14.530	0.972	105	2034	N.D.	
71) sec-Butylbenzene	14.937	14.718	1.000	105	1756	N.D.	
72) 4-Isopropyltoluene	14.845	14.841	0.993	119	26698	1.15 ug/L	89
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	230	N.D.	
75) n-Butylbenzene	15.132	15.276	1.013	91	6334	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	529	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	2224	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	114	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.202	6.188	0.664	45	5556	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.069	8.094	0.864	43	4602	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.430	8.430	0.902	42	116	N.D.	
98) Isobutyl alcohol	8.787	8.777	0.941	41	1124	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
InstName : VOAA
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 10 13:30:08 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

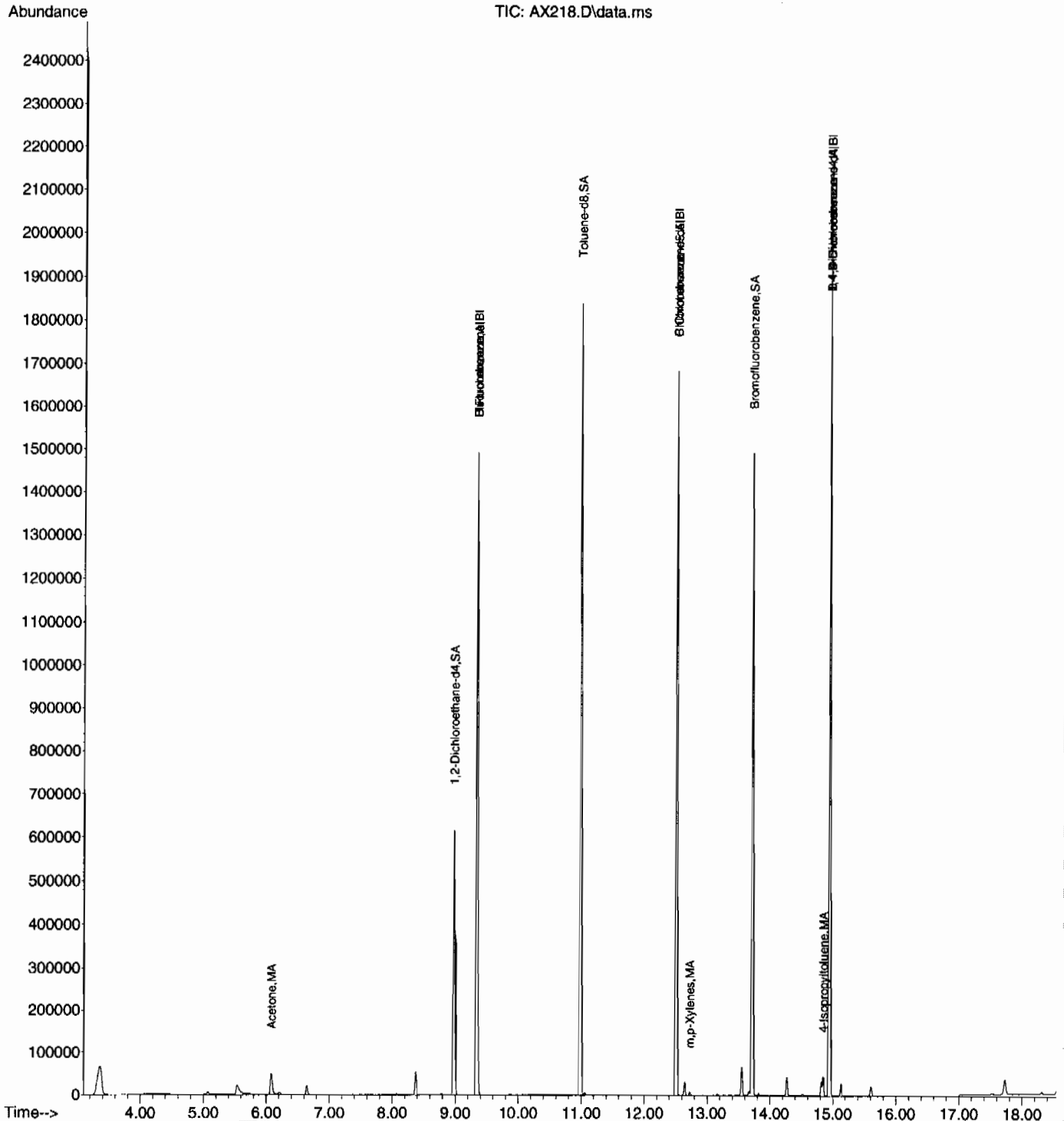
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.878	69	4093	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.551	13.554	0.907	53	2508	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.132	15.082	1.013	91	6334	N.D.	
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044	45	1759	N.D.	

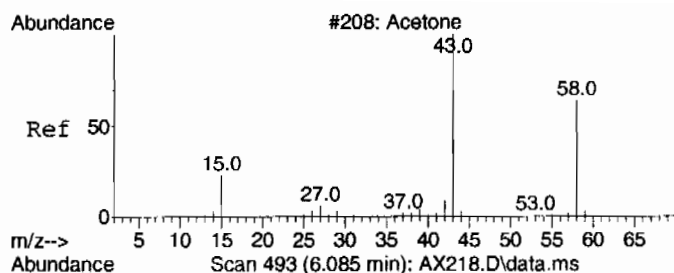
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
InstName : VOAA
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

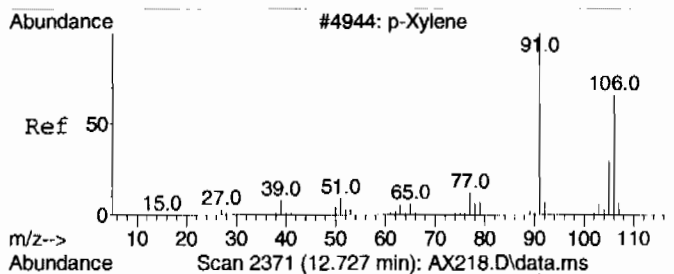
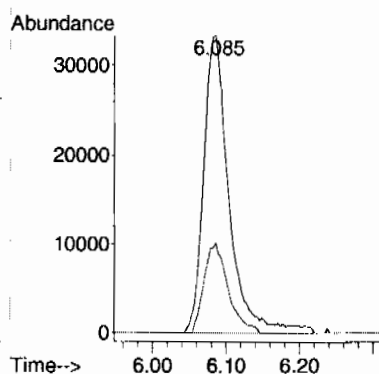
Quant Time: Feb 10 13:30:08 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





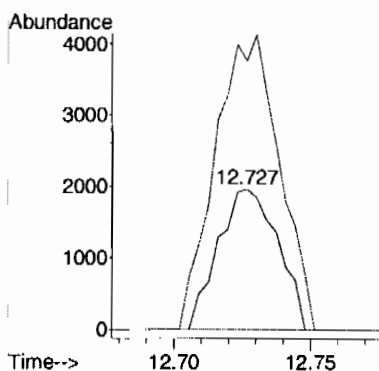
#9
Acetone
Concen: 14.36 ug/L
RT: 6.085 min Scan# 493
Delta R.T. 0.003 min
Lab File: AX218.D
Acq: 10 Feb 2010 12:23 am

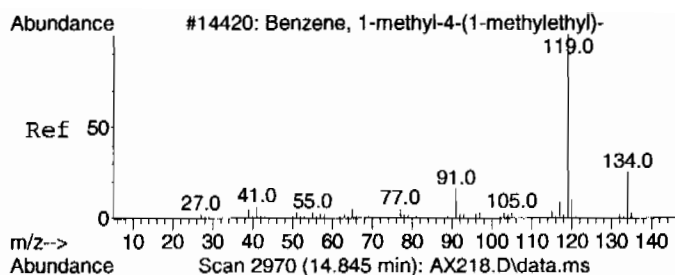
Tgt Ion	Ratio	Lower	Upper
43	100		
58	28.6	0.0	56.6



#55
m,p-Xylenes
Concen: 0.31 ug/L
RT: 12.727 min Scan# 2371
Delta R.T. -0.003 min
Lab File: AX218.D
Acq: 10 Feb 2010 12:23 am

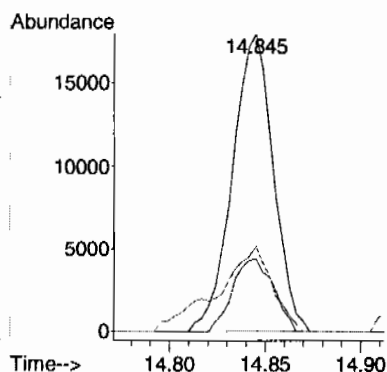
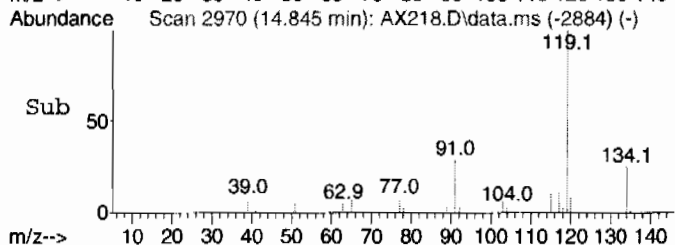
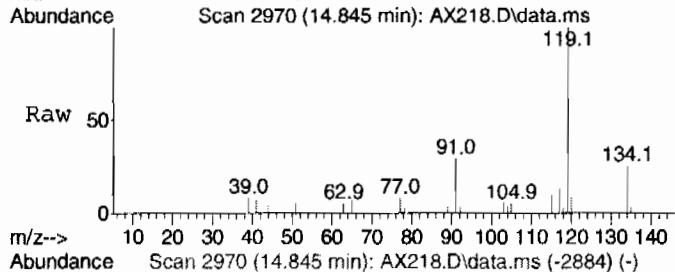
Tgt Ion	Ratio	Lower	Upper
106	100		
91	225.5	192.3	252.3





#72
4-Isopropyltoluene
Concen: 1.15 ug/L
RT: 14.845 min Scan# 2970
Delta R.T. 0.004 min
Lab File: AX218.D
Acq: 10 Feb 2010 12:23 am

Tgt Ion	Ratio	Lower	Upper
119	100		
134	24.4	0.0	54.5
91	38.5	0.0	58.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

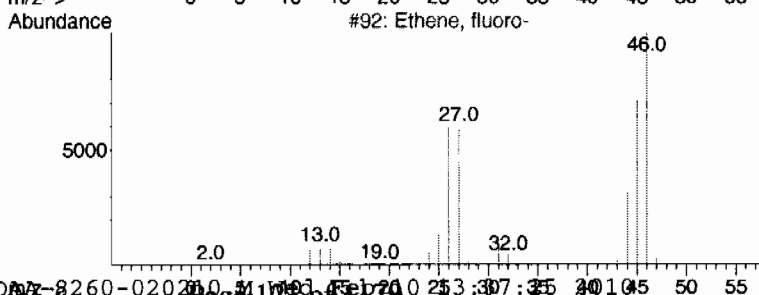
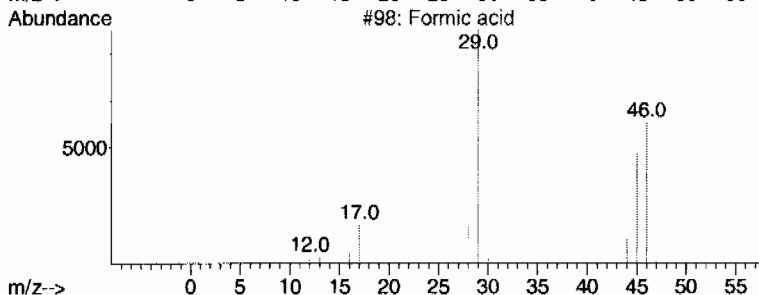
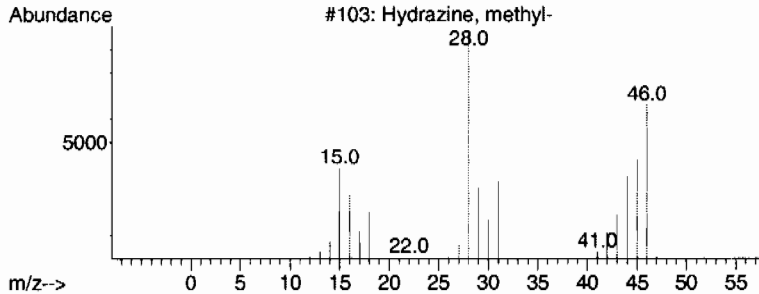
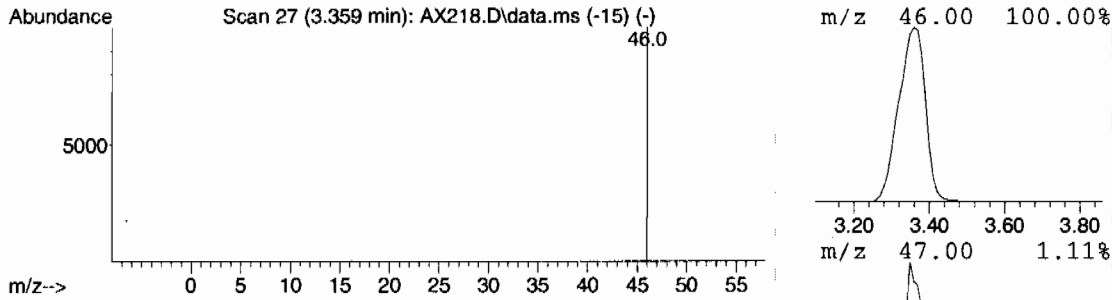
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.359	6.30 ug/L	329338	Fluorobenzene	9.342

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2	Formic acid	46	CH2O2	000064-18-6	4
3	Ethene, fluoro-	46	C2H3F	000075-02-5	3
4	Formic acid	46	CH2O2	000064-18-6	3
5	Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX218.D
Acq On : 10 Feb 2010 12:23 am
Operator : JEB
Sample : |245959006|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	3.359	6.3	ug/L	329338	1	9.342	2614900	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 00:50	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:12	Aliquot: 5.4 g	Final Volume: 5 mL
Data File: 020910\AX219.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.13	ug/kg	1.70	5.13
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.338	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.338	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.4 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: RE15-10-7313
 Batch ID: 951185
 Run Date: 02/10/2010 00:50
 Prep Date: 02/09/2010 18:12
 Data File: 020910\AX219.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.13	ug/kg	1.64	5.13
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
InstName : VOAA
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 10 13:39:59 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1160325	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	824240	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	485070	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1160325	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	824240	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	485070	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	482972	50.05	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 100.10%			
43) Toluene-d8	10.987	10.987	0.878	98	1090658	49.17	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 98.34%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	481904	48.82	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 97.64%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	711	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	348	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	2721	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	464	N.D.		
15) Methylene chloride	6.655	6.651	0.712	84	4545	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
InstName : VOAA
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 10 13:39:59 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.061	11.057	0.884	91	1568	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.610	12.617	1.008	91	242	N.D.	
55) m,p-Xylenes	12.723	12.730	1.017	106	574	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.667	13.529	0.915	105	2008	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0m	N.D.	d
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	1464	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.534	14.530	0.973	105	139	N.D.	
71) sec-Butylbenzene	14.714	14.718	0.985	105	2843	N.D.	
72) 4-Isopropyltoluene	14.686	14.841	0.983	119	251	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	463	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1850	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	6.690	6.687	0.716	59	107	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.437	8.430	0.903	42	110	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
InstName : VOAA
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 10 13:39:59 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

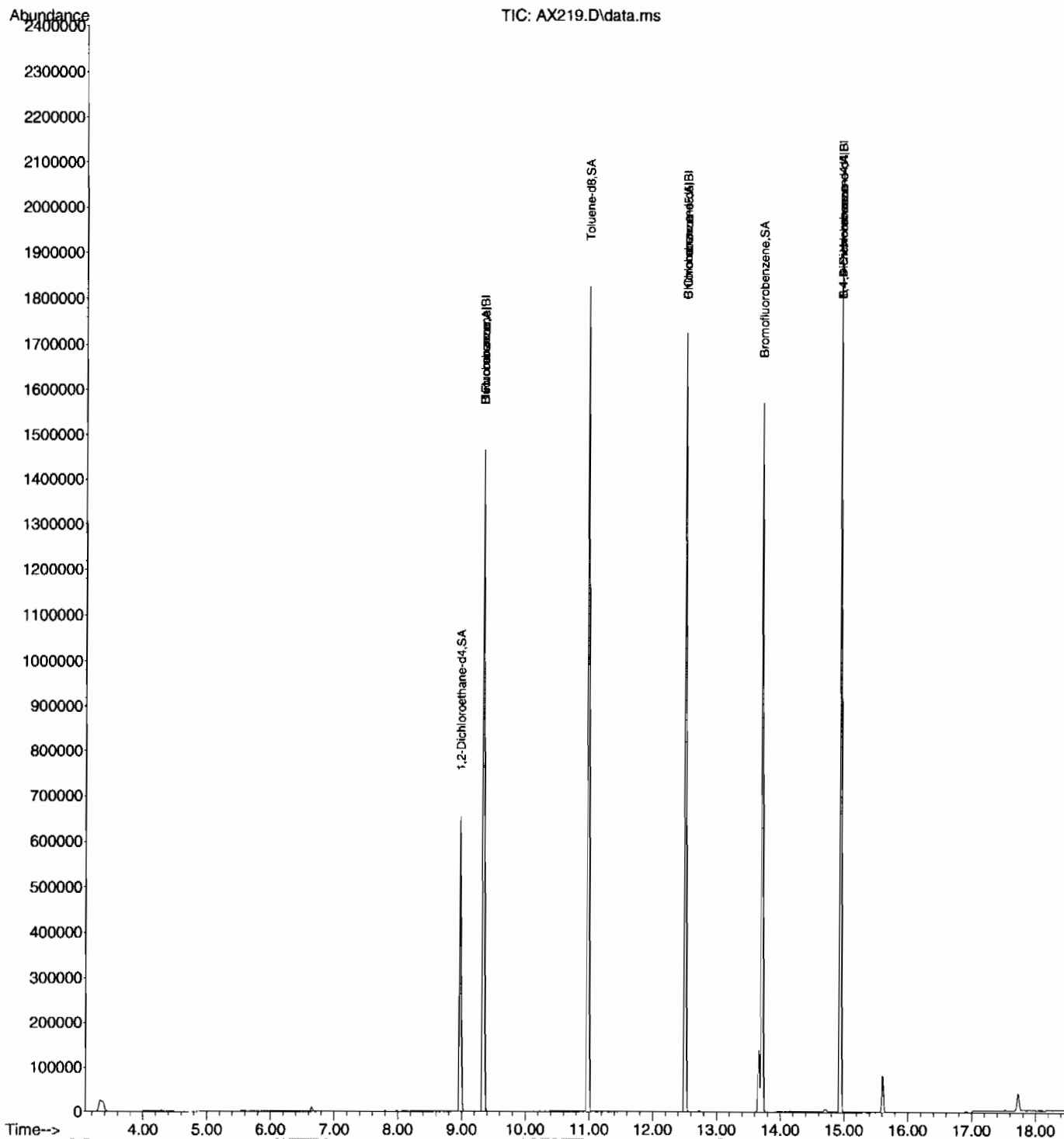
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.994	11.238	0.879	69	3792	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	1111	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

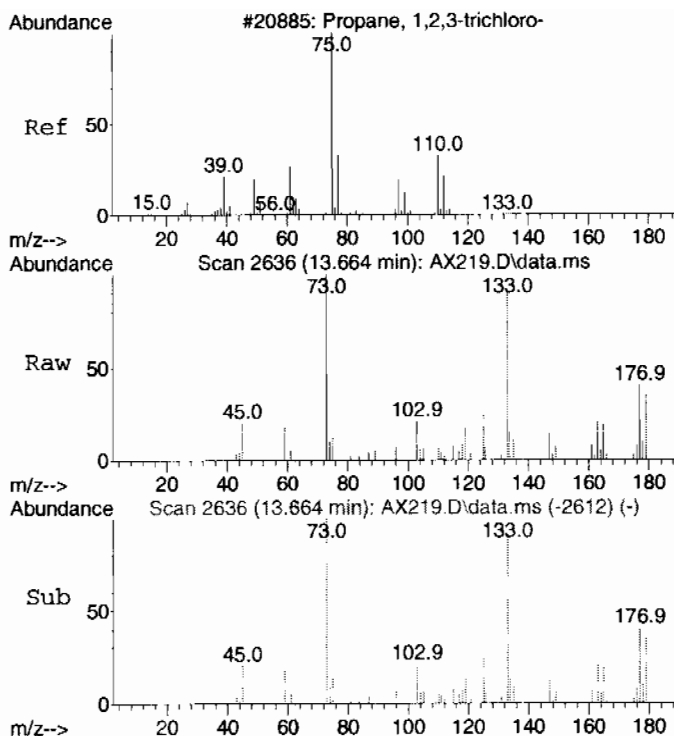
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
InstName : VOAA
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

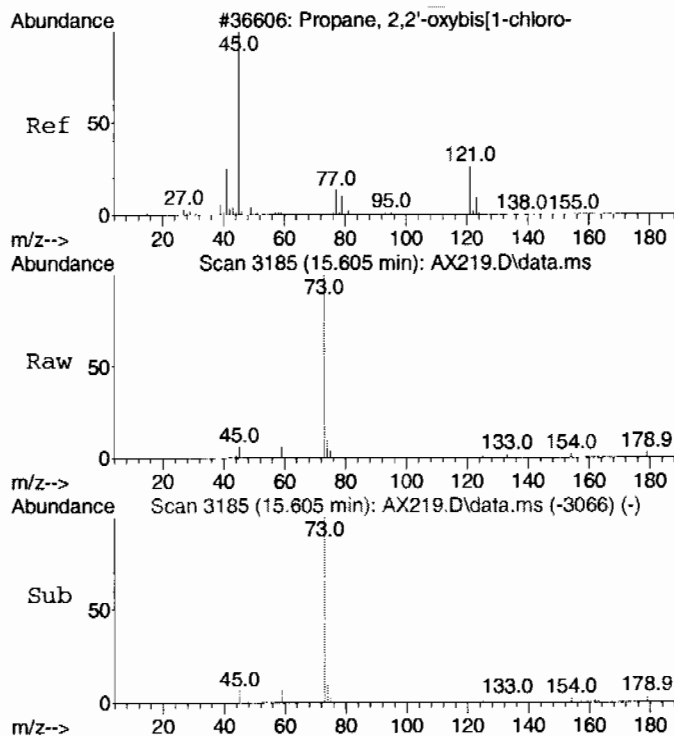
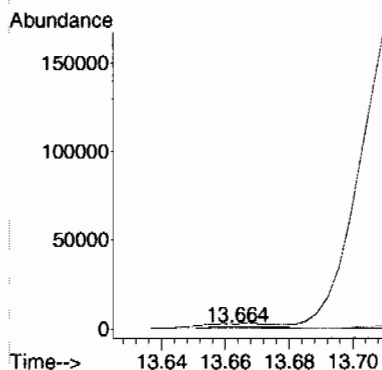
Quant Time: Feb 10 13:39:59 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





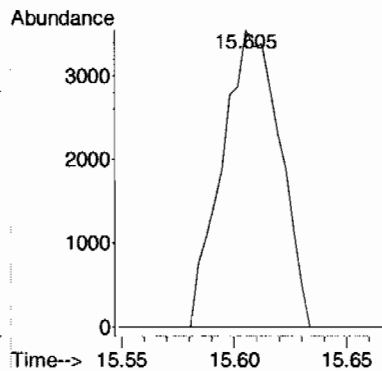
#63 BEFORE analyst DELETION
1,2,3-Trichloropropane
Concen: 0.91 ug/L
RT: 13.664 min Scan# 2636
Delta R.T. -0.216 min
Lab File: AX219.D
Acq: 10 Feb 2010 12:50 am

Tgt Ion	Ratio	Lower	Upper
110	100		
75	330.1	242.8	302.8#
77	0.0	52.2	112.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 1.51 ug/L
RT: 15.605 min Scan# 3185
Delta R.T. 0.120 min
Lab File: AX219.D
Acq: 10 Feb 2010 12:50 am

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	49.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX219.D
Acq On : 10 Feb 2010 12:50 am
Operator : JEB
Sample : |245959007|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.4G N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAAJ
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7314
 Batch ID: 951185
 Run Date: 02/10/2010 01:16
 Prep Date: 02/09/2010 18:13
 Data File: 020910\AX220.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.505	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.445	1.48
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.445	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.445	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.445	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.445	1.48
67-64-1	Acetone	U	7.42	ug/kg	2.46	7.42
75-35-4	1,1-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
74-88-4	Iodomethane	U	7.42	ug/kg	2.37	7.42
75-09-2	Methylene chloride	U	7.42	ug/kg	2.97	7.42
75-15-0	Carbon disulfide	U	7.42	ug/kg	1.85	7.42
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.445	1.48
78-93-3	2-Butanone	U	7.42	ug/kg	2.23	7.42
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.445	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.445	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.490	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.445	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.445	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.445	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.445	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.445	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.490	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.445	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.445	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.445	1.48
108-10-1	4-Methyl-2-pentanone	U	7.42	ug/kg	1.85	7.42
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
108-88-3	Toluene	U	1.48	ug/kg	0.445	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.445	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.445	1.48
591-78-6	2-Hexanone	U	7.42	ug/kg	2.23	7.42
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.445	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.445	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.445	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.445	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.445	1.48

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7314
 Batch ID: 951185
 Run Date: 02/10/2010 01:16
 Prep Date: 02/09/2010 18:13
 Data File: 020910\AX220.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.445	1.48
179601-23-1	m,p-Xylenes	U	2.97	ug/kg	0.445	2.97
95-47-6	o-Xylene	U	1.48	ug/kg	0.445	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.445	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.445	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.445	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.445	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.445	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.445	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.445	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.445	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.445	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.445	1.48
99-87-6	4-Isopropyltoluene	U	1.48	ug/kg	0.445	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.445	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.445	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.42	ug/kg	2.37	7.42
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.445	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.445	1.48

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\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
InstName : VOAA
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 13:30:12 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1143140	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	810440	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	471508	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1143140	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	810440	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	471508	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	459031	48.28	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	96.56%			
43) Toluene-d8	10.983	10.987	0.878	98	1078818	49.47	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.94%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	464476	48.40	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	96.80%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.034	4.043	0.432	50	153	N.D.		
4) Vinyl chloride	4.265	4.265	0.457	62	371	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.100	6.082	0.653	43	2183	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	117	N.D.		
15) Methylene chloride	6.644	6.651	0.711	84	5342	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
InstName : VOAA
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 13:30:12 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	1658	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.009	91	834	N.D.	
55) m,p-Xylenes	12.727	12.730	1.018	106	1124	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.713	13.529	0.918	105	108	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.717	13.957	0.918	91	1065	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	14.198	0.950	91	113	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.534	14.530	0.973	105	226	N.D.	
71) sec-Butylbenzene	14.534	14.718	0.973	105	226	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	272	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1528	N.D.	
81) 1,2,3-Trichlorobenzene	17.854	17.847	1.195	180	355	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.220	6.188	0.666	45	116	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
InstName : VOAA
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 13:30:12 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

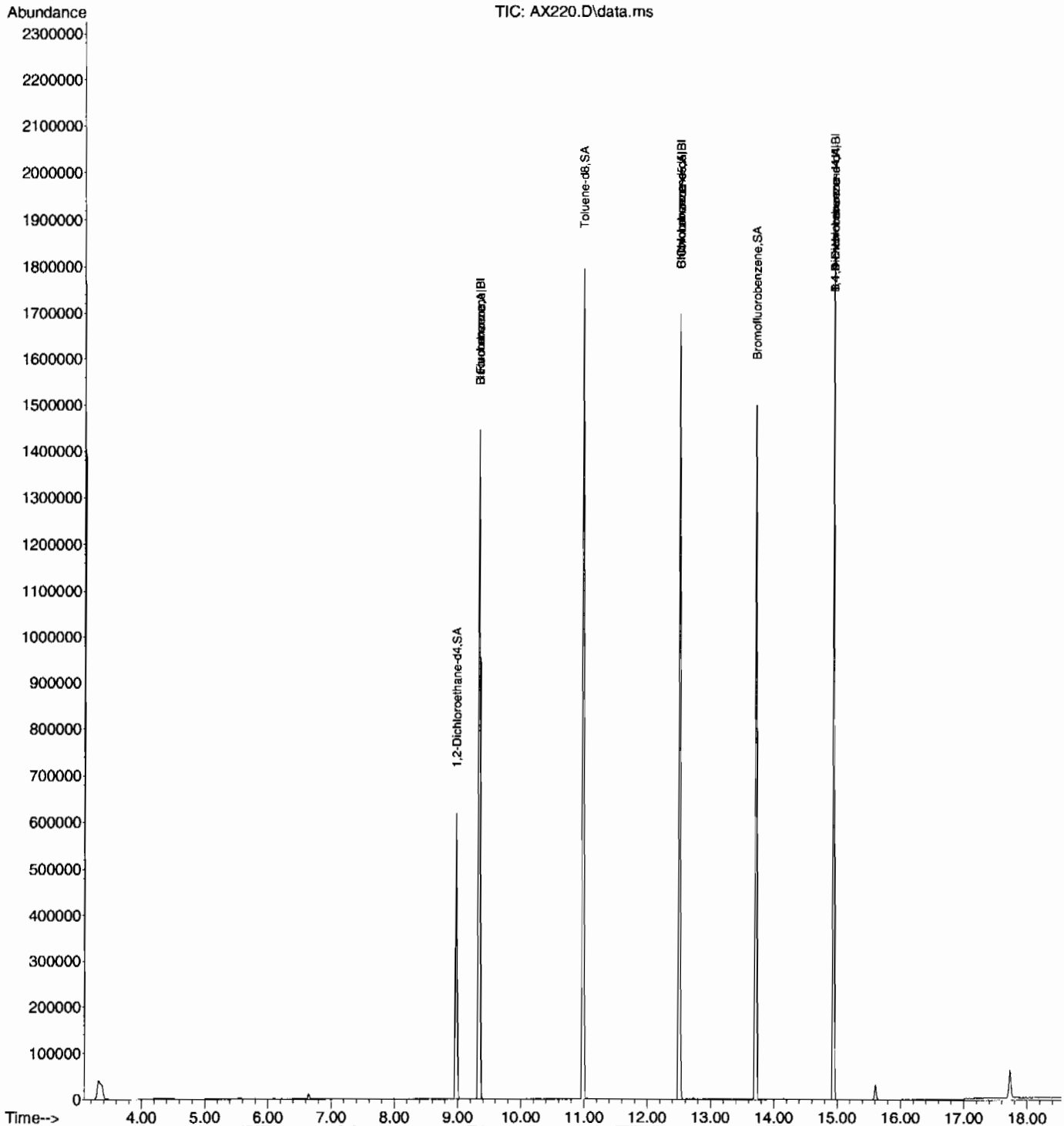
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.879	69	4028	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.941	15.082	1.000	91	1107	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044	45	2443	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\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
InstName : VOAA
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 13:30:12 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX220.D
Acq On : 10 Feb 2010 1:16 am
Operator : JEB
Sample : |245959008|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959009

Client ID: RE15-10-7316
 Batch ID: 951185
 Run Date: 02/10/2010 01:42
 Prep Date: 02/09/2010 18:14
 Data File: 020910\AX221.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.1
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 35.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.508	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.448	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.448	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.448	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.448	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.448	1.49
67-64-1	Acetone	U	7.47	ug/kg	2.48	7.47
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
74-88-4	Iodomethane	U	7.47	ug/kg	2.39	7.47
75-09-2	Methylene chloride	U	7.47	ug/kg	2.99	7.47
75-15-0	Carbon disulfide	U	7.47	ug/kg	1.87	7.47
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.448	1.49
78-93-3	2-Butanone	U	7.47	ug/kg	2.24	7.47
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.448	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.448	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.493	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.448	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.448	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.448	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.448	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.448	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.493	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.448	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.448	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.448	1.49
108-10-1	4-Methyl-2-pentanone	U	7.47	ug/kg	1.87	7.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
108-88-3	Toluene	J	0.538	ug/kg	0.448	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.448	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.448	1.49
591-78-6	2-Hexanone	U	7.47	ug/kg	2.24	7.47
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.448	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.448	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.448	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.448	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.448	1.49

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 35.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7316
 Batch ID: 951185
 Run Date: 02/10/2010 01:42
 Prep Date: 02/09/2010 18:14
 Data File: 020910\AX221.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.448	1.49
179601-23-1	m,p-Xylenes	U	2.99	ug/kg	0.448	2.99
95-47-6	o-Xylene	U	1.49	ug/kg	0.448	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.448	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.448	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.448	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.448	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.448	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.448	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.448	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.448	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.448	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.448	1.49
99-87-6	4-Isopropyltoluene	U	1.49	ug/kg	0.448	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.448	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.448	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.47	ug/kg	2.39	7.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.448	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.448	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.33	7.84	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
InstName : VOAA
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 10 13:40:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1125206	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	795836	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	452447	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1125206	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	795836	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	452447	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	451956	48.29	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	96.58%			
43) Toluene-d8	10.983	10.987	0.878	98	1052994	49.17	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.34%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	449216	48.79	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	97.58%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	308	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	372	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.092	6.082	0.652	43	4584	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0m	N.D.	d	
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.432	6.428	0.688	76	719	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	9320	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.295	7.454	0.781	43	126	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.066	8.062	0.863	43	110	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.784	8.791	0.940	56	1255	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	9.081	9.084	0.972	78	495	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
InstName : VOAA
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 10 13:40:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	7744	0.36 ug/L	98
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.614	12.617	1.008	91	1677	N.D.	
55) m,p-Xylenes	12.727	12.730	1.018	106	2742	N.D.	
56) o-Xylene	13.158	13.162	1.052	106	901	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.717	13.957	0.918	91	1196	N.D.	
66) 1,3,5-Trimethylbenzene	14.032	14.116	0.939	105	356	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.205	14.198	0.951	91	230	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	1257	N.D.	
71) sec-Butylbenzene	14.530	14.718	0.972	105	1257	N.D.	
72) 4-Isopropyltoluene	14.845	14.841	0.993	119	757	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.965	14.969	1.001	146	112	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.150	180	288	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1574	N.D.	
81) 1,2,3-Trichlorobenzene	17.854	17.847	1.195	180	134	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.216	6.188	0.665	45	6432	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.080	8.094	0.865	43	117	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	8.794	8.777	0.941	41	341	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
InstName : VOAA
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 10 13:40:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

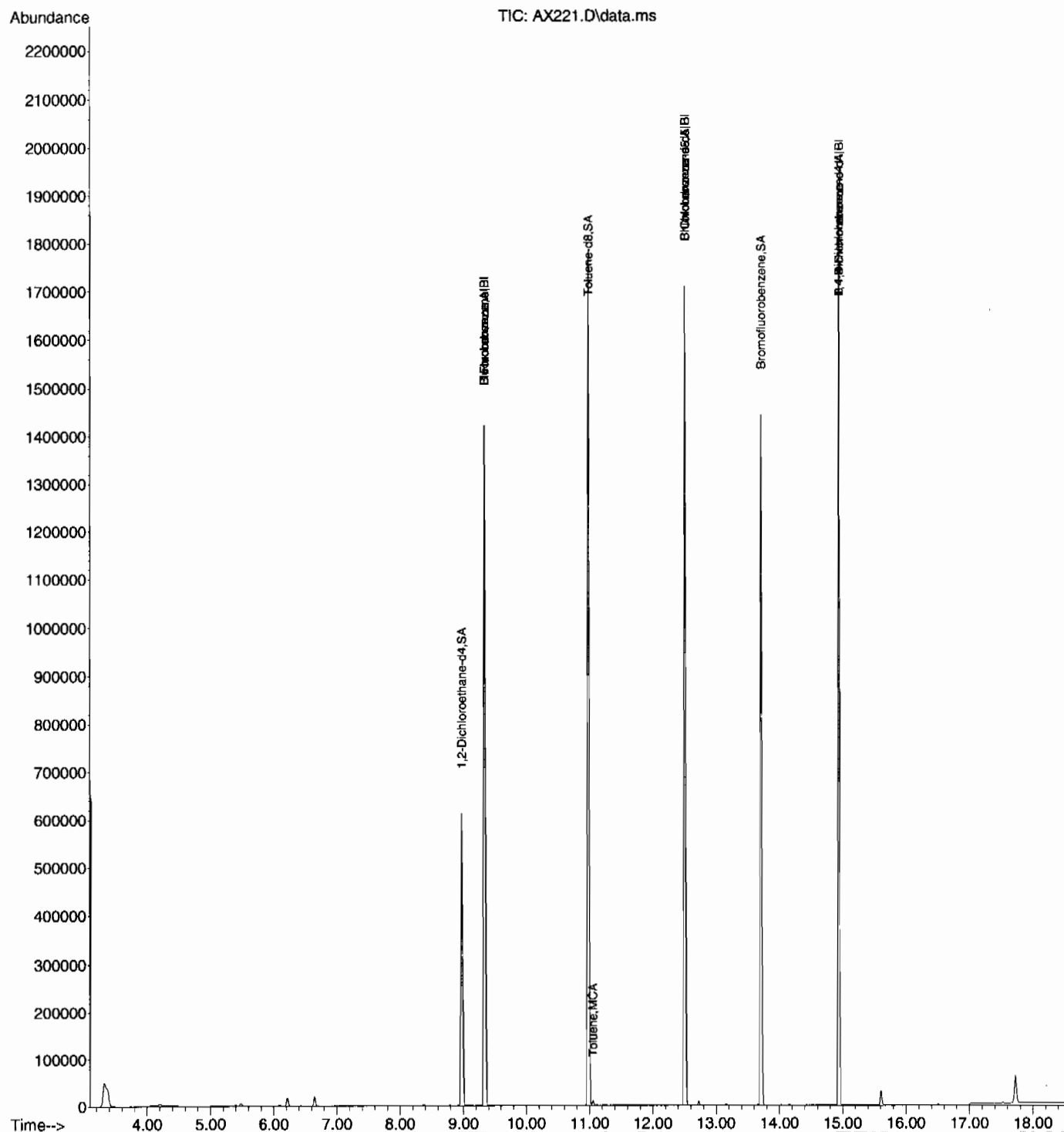
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.879	69	3860	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	939	N.D.	
112) bis(2-Chloroisopropyl)...	15.612	15.485	1.045	45	2068	N.D.	

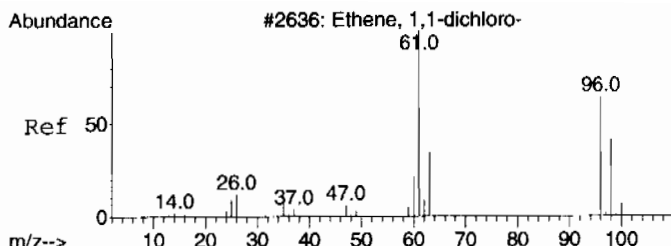
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
InstName : VOAA
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

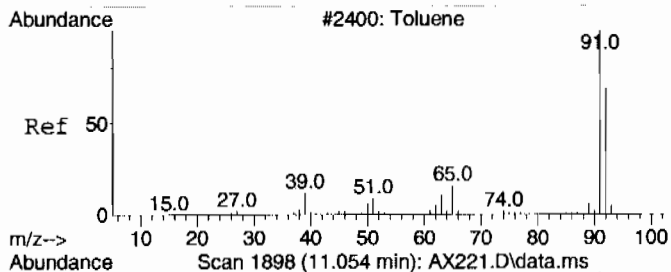
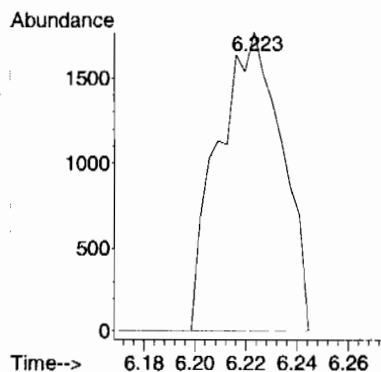
Quant Time: Feb 10 13:40:58 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





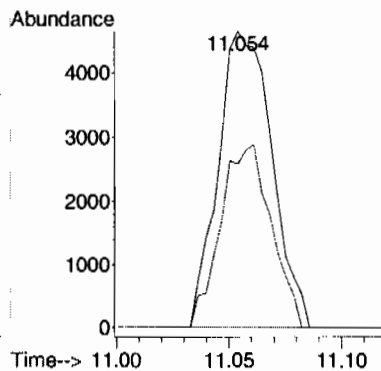
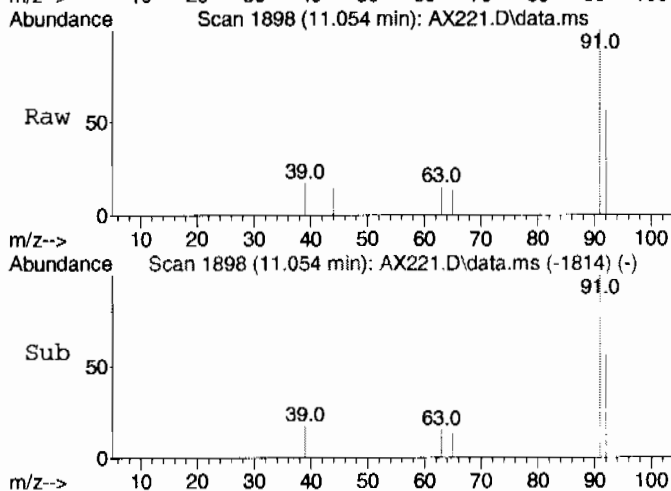
#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.30 ug/L
RT: 6.223 min Scan# 532
Delta R.T. 0.141 min
Lab File: AX221.D
Acq: 10 Feb 2010 1:42 am

Tgt Ion: 61 Resp: 3071
Ion Ratio Lower Upper
61 100
96 0.0 13.8 73.8#
63 0.0 1.0 61.0#



#44
Toluene
Concen: 0.36 ug/L
RT: 11.054 min Scan# 1898
Delta R.T. -0.003 min
Lab File: AX221.D
Acq: 10 Feb 2010 1:42 am

Tgt Ion: 91 Resp: 7744
Ion Ratio Lower Upper
91 100
92 58.4 29.5 89.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

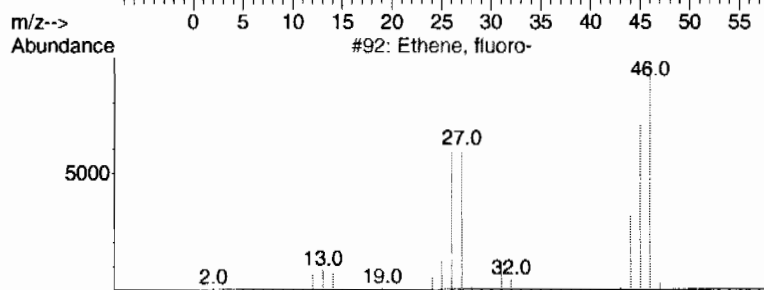
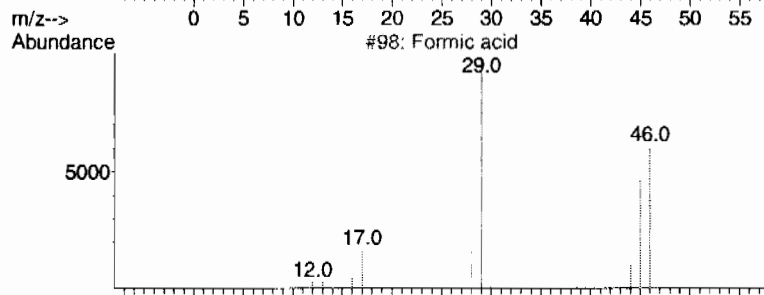
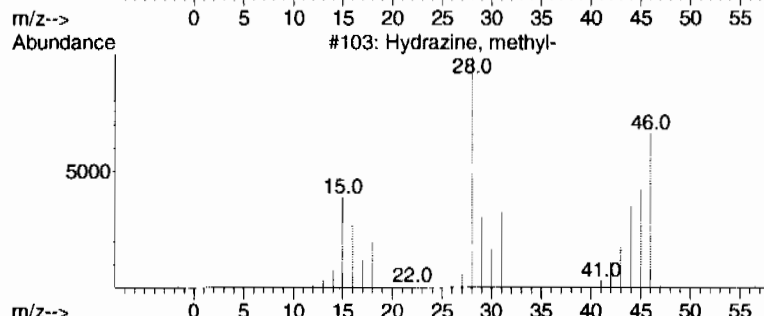
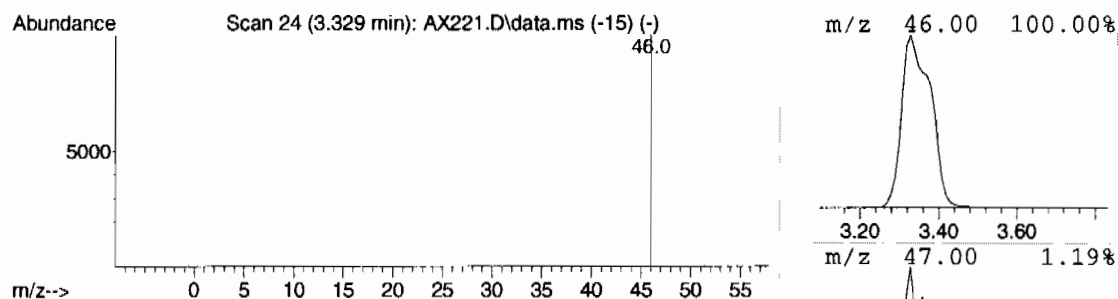
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.329	5.25 ug/L	265869	Fluorobenzene	9.342

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX221.D
Acq On : 10 Feb 2010 1:42 am
Operator : JEB
Sample : |245959009|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	3.329	5.3	ug/L	265869	1	9.342	2531120	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.2 g
 Column: DB-624

Matrix: R
 %Moisture: 14.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7318
 Batch ID: 951185
 Run Date: 02/10/2010 02:08
 Prep Date: 02/09/2010 18:15
 Data File: 020910\AX222.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7318	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.I	Dilution: 1
Run Date: 02/10/2010 02:08	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 18:15	Aliquot: 5.2 g	Final Volume: 5 mL
Data File: 020910\AX222.D	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.64	ug/kg	1.81	5.64
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
InstName : VOAA
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 10 13:42:01 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1110769	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	787055	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	452789	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1110769	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	787055	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	452789	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	455160	49.27	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	98.54%			
43) Toluene-d8	10.987	10.987	0.878	98	1046056	49.39	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.78%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	452471	49.10	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	98.20%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.013	4.043	0.430	50	163	N.D.		
4) Vinyl chloride	4.265	4.265	0.457	62	212	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	2139	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.432	6.428	0.688	76	106	N.D.		
15) Methylene chloride	6.655	6.651	0.712	84	5300	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
InstName : VOAA
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 10 13:42:01 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.061	11.057	0.884	91	1547	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.008	91	1081	N.D.	
55) m,p-Xylenes	12.727	12.730	1.017	106	1282	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.710	13.957	0.917	91	1283	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.527	14.530	0.972	105	110	N.D.	
71) sec-Butylbenzene	14.527	14.718	0.972	105	110	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	269	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	1460	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.223	6.188	0.666	45	713	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
InstName : VOAA
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 10 13:42:01 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

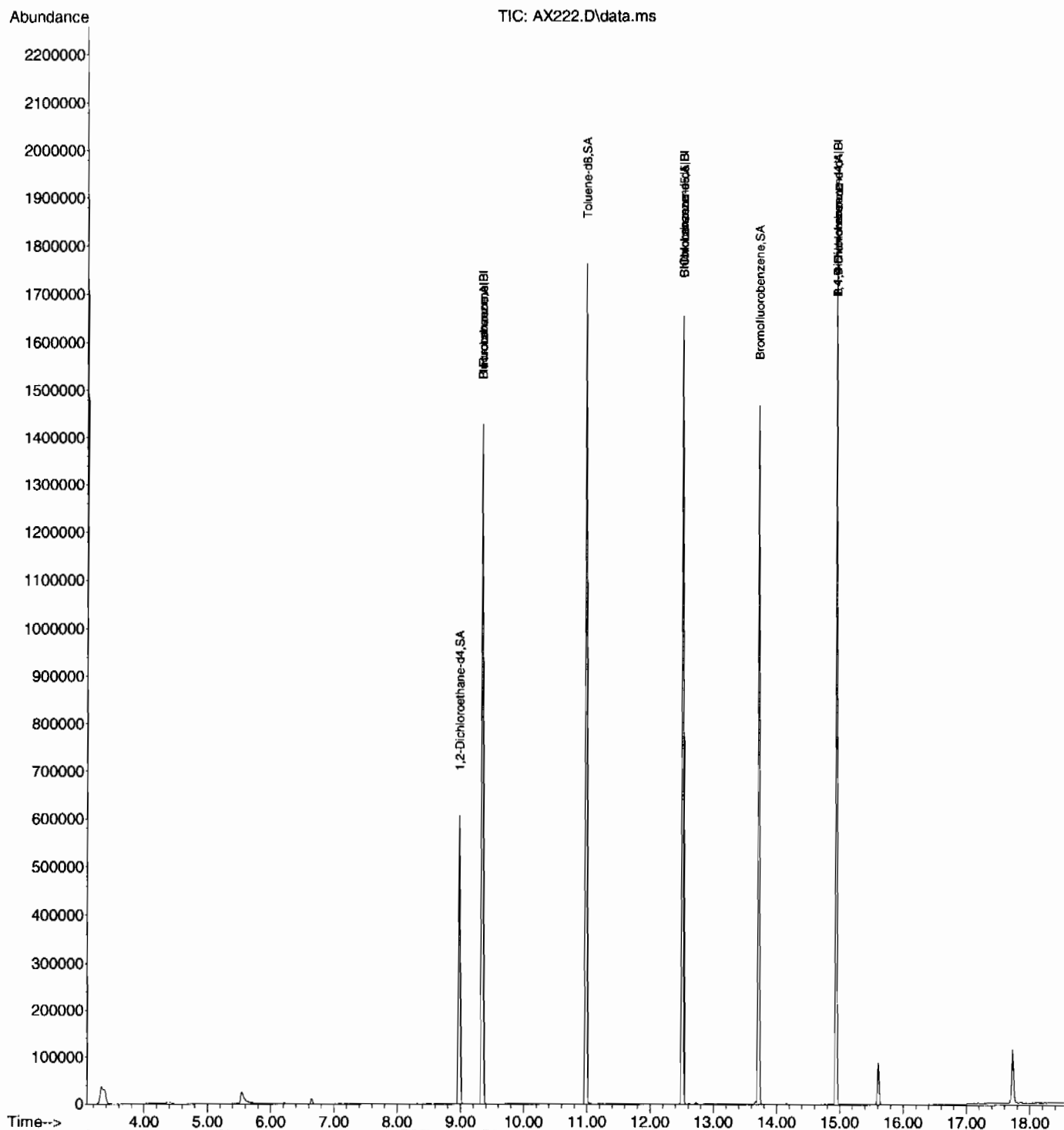
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	860	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

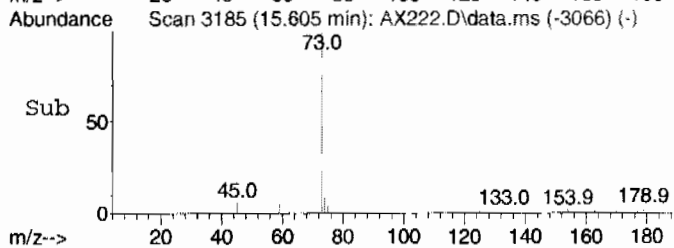
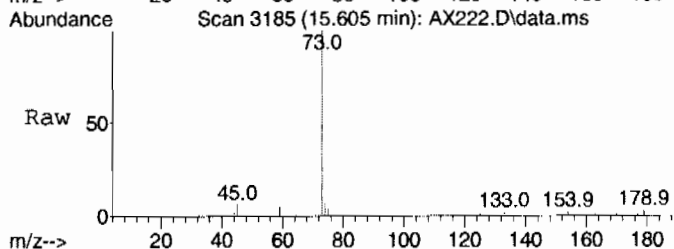
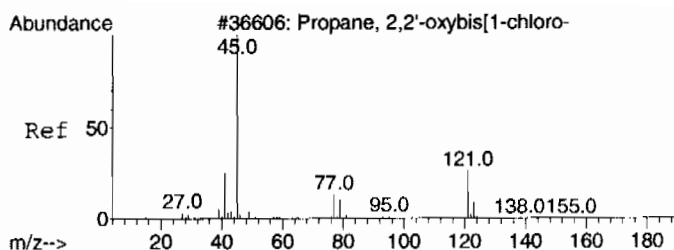
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
InstName : VOAA
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

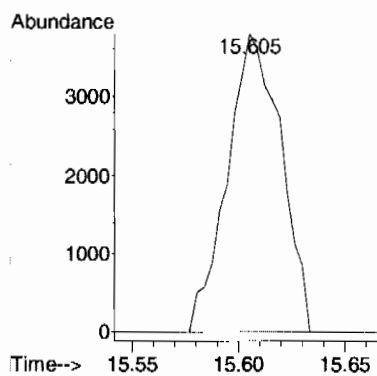
Quant Time: Feb 10 13:42:01 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl) ether
 Concen: 1.71 ug/L
 RT: 15.605 min Scan# 3185
 Delta R.T. 0.120 min
 Lab File: AX222.D
 Acq: 10 Feb 2010 2:08 am

Tgt Ion: 45 Resp: 6685
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 49.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX222.D
Acq On : 10 Feb 2010 2:08 am
Operator : JEB
Sample : |245959010|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.2G N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959011

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 g
 Column: DB-624

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

Client ID: RE15-10-7329
 Batch ID: 951185
 Run Date: 02/10/2010 02:35
 Prep Date: 02/09/2010 18:16
 Data File: 020910\AX223.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.980	ug/kg	0.333	0.980
74-87-3	Chloromethane	U	0.980	ug/kg	0.294	0.980
75-01-4	Vinyl chloride	U	0.980	ug/kg	0.294	0.980
74-83-9	Bromomethane	U	0.980	ug/kg	0.294	0.980
75-00-3	Chloroethane	U	0.980	ug/kg	0.294	0.980
75-69-4	Trichlorofluoromethane	U	0.980	ug/kg	0.294	0.980
67-64-1	Acetone	U	4.90	ug/kg	1.63	4.90
75-35-4	1,1-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
74-88-4	Iodomethane	U	4.90	ug/kg	1.57	4.90
75-09-2	Methylene chloride	U	4.90	ug/kg	1.96	4.90
75-15-0	Carbon disulfide	U	4.90	ug/kg	1.23	4.90
156-60-5	trans-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
75-34-3	1,1-Dichloroethane	U	0.980	ug/kg	0.294	0.980
78-93-3	2-Butanone	U	4.90	ug/kg	1.47	4.90
156-59-2	cis-1,2-Dichloroethylene	U	0.980	ug/kg	0.294	0.980
594-20-7	2,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
67-66-3	Chloroform	U	0.980	ug/kg	0.294	0.980
74-97-5	Bromochloromethane	U	0.980	ug/kg	0.324	0.980
71-55-6	1,1,1-Trichloroethane	U	0.980	ug/kg	0.294	0.980
563-58-6	1,1-Dichloropropene	U	0.980	ug/kg	0.294	0.980
56-23-5	Carbon tetrachloride	U	0.980	ug/kg	0.294	0.980
107-06-2	1,2-Dichloroethane	U	0.980	ug/kg	0.294	0.980
71-43-2	Benzene	U	0.980	ug/kg	0.294	0.980
79-01-6	Trichloroethylene	U	0.980	ug/kg	0.324	0.980
78-87-5	1,2-Dichloropropane	U	0.980	ug/kg	0.294	0.980
75-27-4	Bromodichloromethane	U	0.980	ug/kg	0.294	0.980
74-95-3	Dibromomethane	U	0.980	ug/kg	0.294	0.980
108-10-1	4-Methyl-2-pentanone	U	4.90	ug/kg	1.23	4.90
10061-01-5	cis-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
108-88-3	Toluene	U	0.980	ug/kg	0.294	0.980
10061-02-6	trans-1,3-Dichloropropylene	U	0.980	ug/kg	0.294	0.980
79-00-5	1,1,2-Trichloroethane	U	0.980	ug/kg	0.294	0.980
591-78-6	2-Hexanone	U	4.90	ug/kg	1.47	4.90
142-28-9	1,3-Dichloropropane	U	0.980	ug/kg	0.294	0.980
127-18-4	Tetrachloroethylene	U	0.980	ug/kg	0.294	0.980
124-48-1	Dibromochloromethane	U	0.980	ug/kg	0.294	0.980
106-93-4	1,2-Dibromoethane	U	0.980	ug/kg	0.294	0.980
108-90-7	Chlorobenzene	U	0.980	ug/kg	0.294	0.980

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959011

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.1 g
 Column: DB-624

Matrix: R
 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	0.980	ug/kg	0.294	0.980
179601-23-1	m,p-Xylenes	U	1.96	ug/kg	0.294	1.96
95-47-6	o-Xylene	U	0.980	ug/kg	0.294	0.980
100-42-5	Styrene	U	0.980	ug/kg	0.294	0.980
75-25-2	Bromoform	U	0.980	ug/kg	0.294	0.980
79-34-5	1,1,2,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
96-18-4	1,2,3-Trichloropropane	U	0.980	ug/kg	0.294	0.980
108-86-1	Bromobenzene	U	0.980	ug/kg	0.294	0.980
103-65-1	n-Propylbenzene	U	0.980	ug/kg	0.294	0.980
95-49-8	2-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-82-8	Isopropylbenzene	U	0.980	ug/kg	0.294	0.980
108-67-8	1,3,5-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
106-43-4	4-Chlorotoluene	U	0.980	ug/kg	0.294	0.980
98-06-6	tert-Butylbenzene	U	0.980	ug/kg	0.294	0.980
95-63-6	1,2,4-Trimethylbenzene	U	0.980	ug/kg	0.294	0.980
135-98-8	sec-Butylbenzene	U	0.980	ug/kg	0.294	0.980
99-87-6	4-Isopropyltoluene	U	0.980	ug/kg	0.294	0.980
541-73-1	1,3-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
106-46-7	1,4-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980
104-51-8	n-Butylbenzene	U	0.980	ug/kg	0.294	0.980
96-12-8	1,2-Dibromo-3-chloropropane	U	0.980	ug/kg	0.294	0.980
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	4.90	ug/kg	1.57	4.90
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	0.980	ug/kg	0.294	0.980
95-50-1	1,2-Dichlorobenzene	U	0.980	ug/kg	0.294	0.980

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\020910\
Data File : AX223.D
Acq On : 10 Feb 2010 2:35 am
Operator : JEB
InstName : VOAA
Sample : |245959011|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 13:30:18 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1083656	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	771853	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	453248	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1083656	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	771853	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	453248	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	456146	50.61	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	101.22%			
43) Toluene-d8	10.983	10.987	0.878	98	1034168	49.79	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.58%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	450488	48.84	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	97.68%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	371	N.D.		
4) Vinyl chloride	4.255	4.265	0.456	62	558	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.092	6.082	0.652	43	5251	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	235	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	3992	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.791	8.791	0.941	56	218	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX223.D
Acq On : 10 Feb 2010 2:35 am
Operator : JEB
InstName : VOAA
Sample : |245959011|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 13:30:18 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	1096	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.511	12.617	1.000	91	1694	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.710	13.529	0.917	105	107	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	1166	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.530	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	14.718	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	438	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	1174	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX223.D
Acq On : 10 Feb 2010 2:35 am
Operator : JEB
InstName : VOAA
Sample : |245959011|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 13:30:18 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

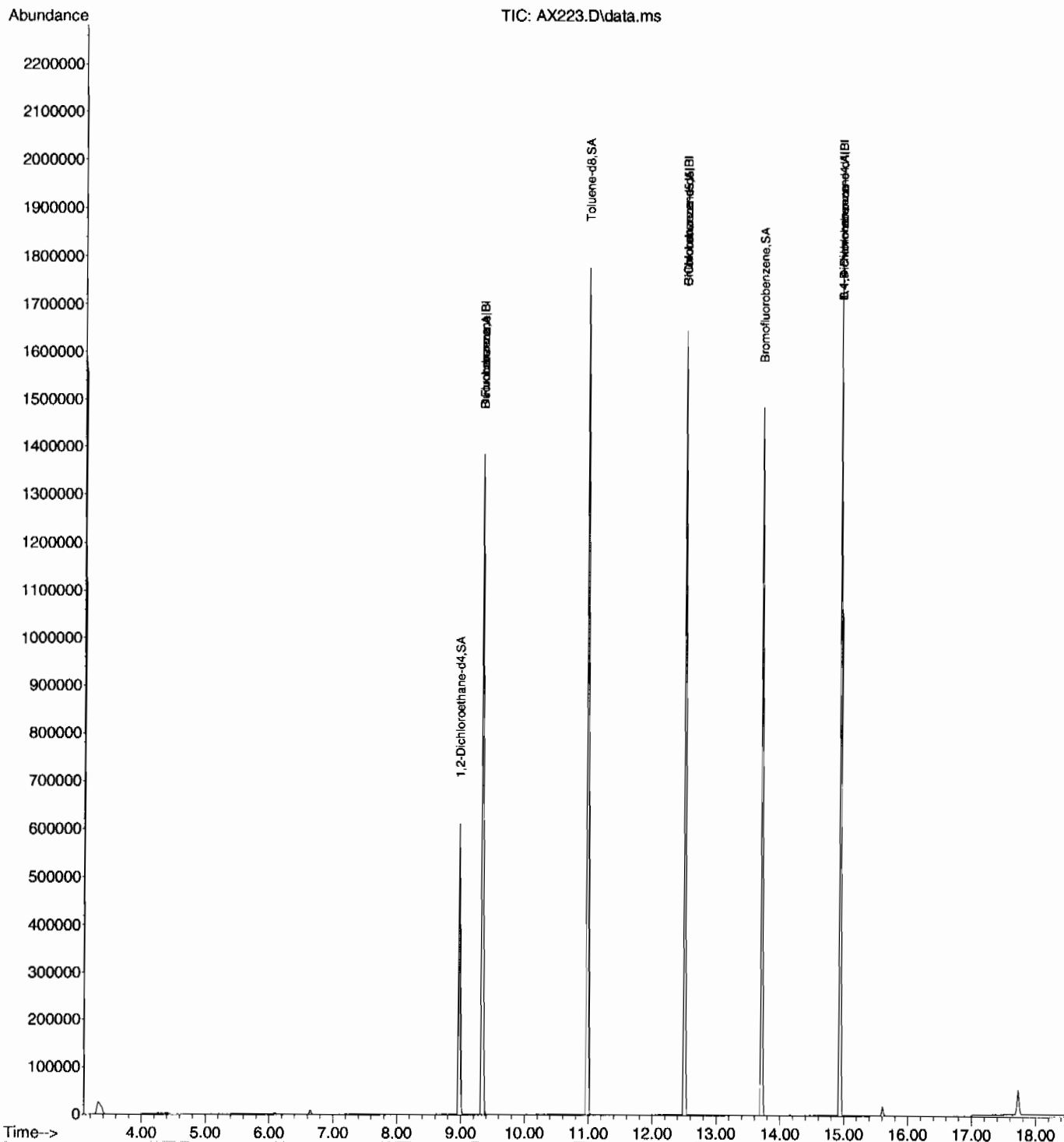
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.947	15.082	1.000	91	1035	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044	45	1422	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\020910\
Data File : AX223.D
Acq On : 10 Feb 2010 2:35 am
Operator : JEB
InstName : VOAA
Sample : |245959011|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 13:30:18 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\

Data File : AX223.D

Acq On : 10 Feb 2010 2:35 am

Operator : JEB

Sample : |245959011|951185|1|VOA|1|VOA8260BS|

Misc : LANL 5.1G N/A SOIL

ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: ron.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX223.D
Acq On : 10 Feb 2010 2:35 am
Operator : JEB
Sample : |245959011|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 10.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7324
 Batch ID: 951185
 Run Date: 02/10/2010 03:01
 Prep Date: 02/09/2010 18:17
 Data File: 020910\AX224.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.75	5.26
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 245959012
 Client ID: RE15-10-7324
 Batch ID: 951185
 Run Date: 02/10/2010 03:01
 Prep Date: 02/09/2010 18:17
 Data File: 020910\AX224.D

Date Collected: 01/28/2010 12:00
 Date Received: 02/02/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAA.I
 Analyst: JEB
 Aliquot: 5.3 g
 Column: DB-624

Matrix: R
 %Moisture: 10.3
 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	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.26	ug/kg	1.68	5.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

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\020910\
Data File : AX224.D
Acq On : 10 Feb 2010 3:01 am
Operator : JEB
InstName : VOAA
Sample : |245959012|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 13:43:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1081583	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	775163	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	455587	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1081583	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	775163	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	455587	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	463893	51.57	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 103.14%			
43) Toluene-d8	10.983	10.987	0.878	98	1034059	49.57	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 99.14%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	457787	49.37	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 98.74%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	540	N.D.		
4) Vinyl chloride	4.265	4.265	0.457	62	395	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	2440	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	108	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	4016	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX224.D
Acq On : 10 Feb 2010 3:01 am
Operator : JEB
InstName : VOAA
Sample : |245959012|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 13:43:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	1160	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.610	12.617	1.008	91	229	N.D.	
55) m,p-Xylenes	12.734	12.730	1.018	106	585	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.660	13.529	0.914	105	2005	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0m	N.D.	d
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.717	13.957	0.918	91	1231	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	345	N.D.	
71) sec-Butylbenzene	14.530	14.718	0.972	105	345	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	117	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	148	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1478	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	6.697	6.687	0.717	59	226	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX224.D
Acq On : 10 Feb 2010 3:01 am
Operator : JEB
InstName : VOAA
Sample : |245959012|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 13:43:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

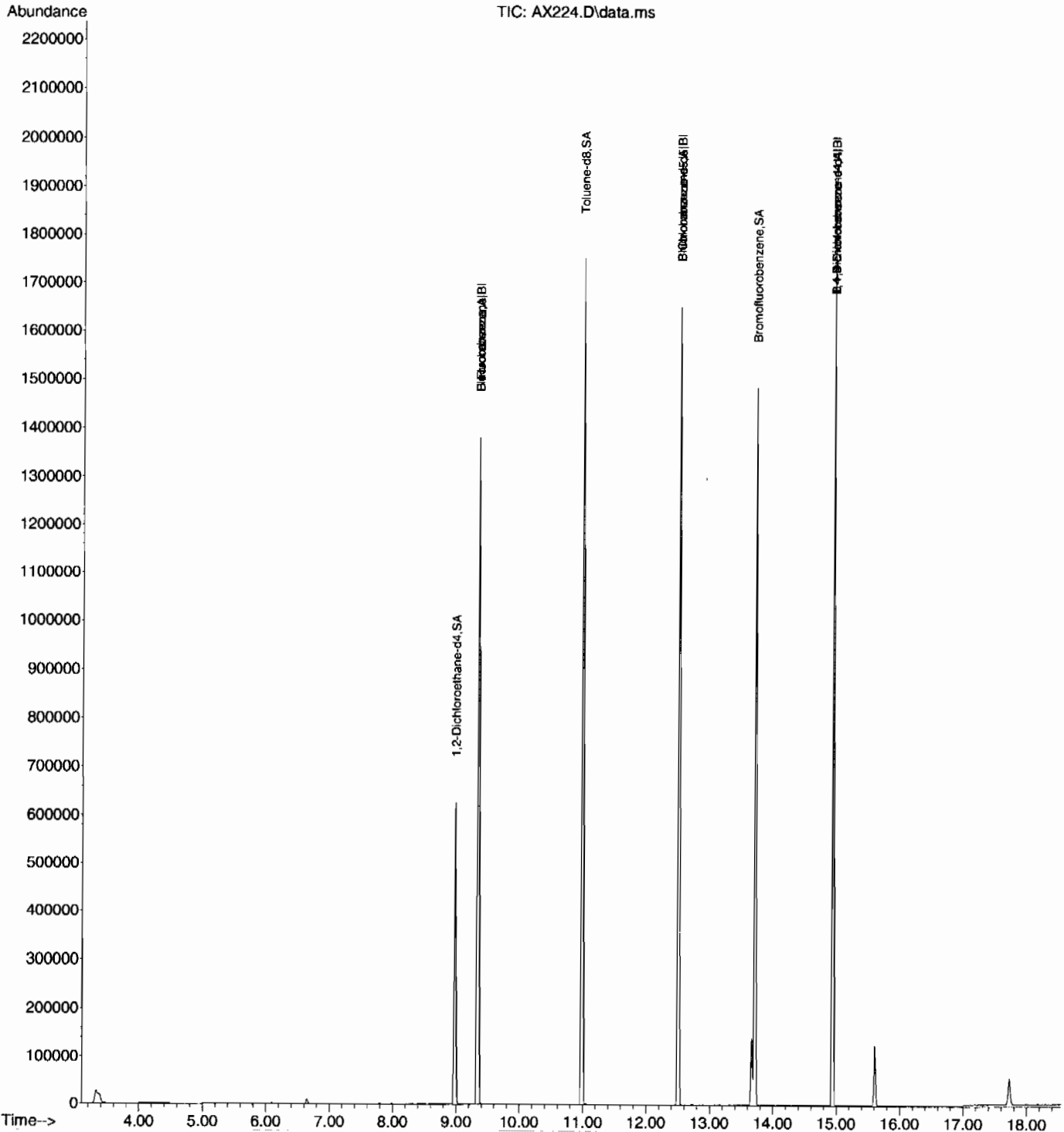
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.944	15.082	1.000	91	935	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

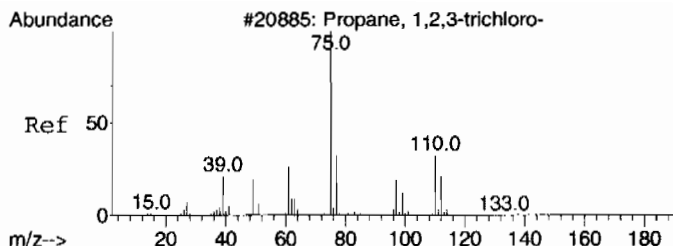
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

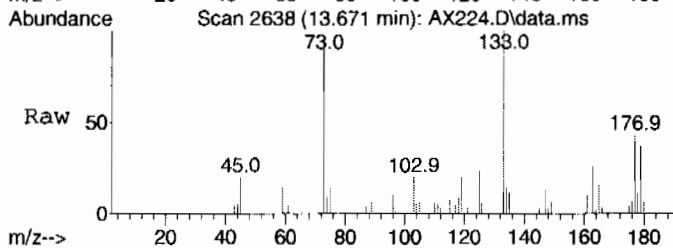
Data Path : C:\msdchem\1\DATA\020910\
Data File : AX224.D
Acq On : 10 Feb 2010 3:01 am
Operator : JEB
InstName : VOAA
Sample : |245959012|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 13:43:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

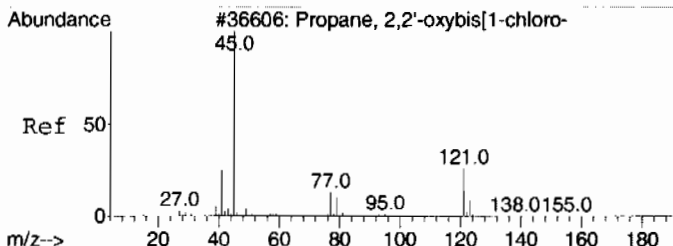
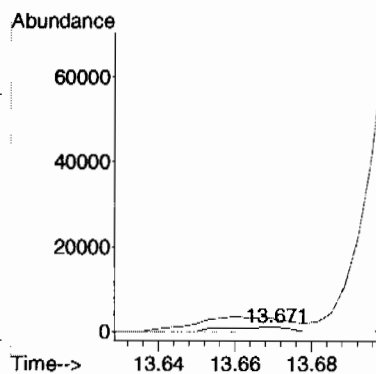
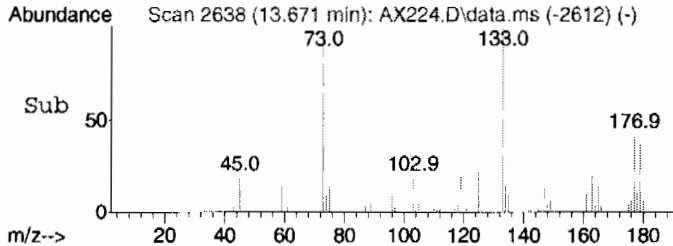




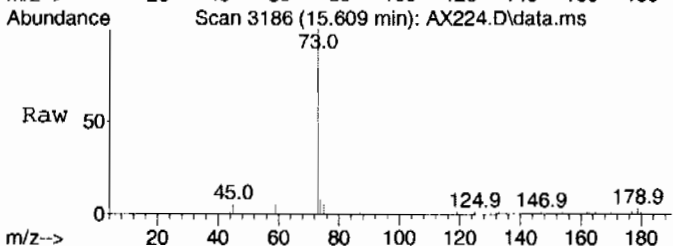
#63 BEFORE analyst DELETION
1,2,3-Trichloropropane
Concen: 0.77 ug/L
RT: 13.671 min Scan# 2638
Delta R.T. -0.208 min
Lab File: AX224.D
Acq: 10 Feb 2010 3:01 am



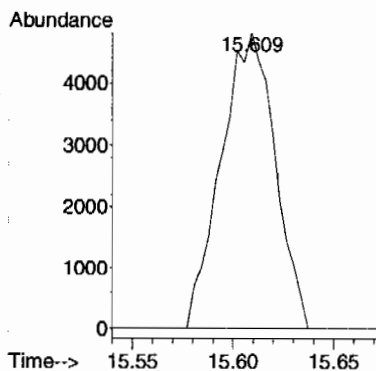
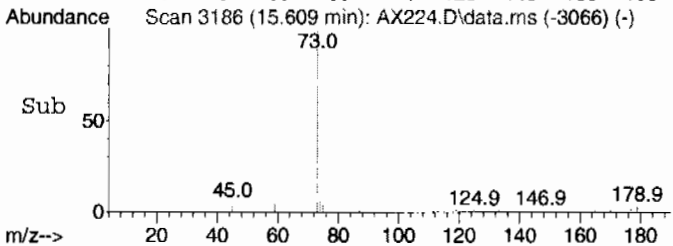
Tgt Ion: 110 Resp: 1382
Ion Ratio Lower Upper
110 100
75 446.6 242.8 302.8#
77 0.0 52.2 112.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.29 ug/L
RT: 15.609 min Scan# 3186
Delta R.T. 0.124 min
Lab File: AX224.D
Acq: 10 Feb 2010 3:01 am



Tgt Ion: 45 Resp: 9009
Ion Ratio Lower Upper
45 100
121 0.0 0.0 49.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX224.D
Acq On : 10 Feb 2010 3:01 am
Operator : JEB
Sample : |245959012|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.3G N/A SOIL
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\

Data File : AX224.D

Acq On : 10 Feb 2010 3:01 am

Operator : JEB

Sample : |245959012|951185|1|VOA|1|VOA8260BS|

Misc : LANL 5.3G N/A SOIL

ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: ron.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--
					# RT Resp Conc

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-chloropropene		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOAA

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\020210\AW303.D

Injection Date	Mix	Calibration File
2 Feb 2010 10:55 pm	A	C:\msdchem\1\DATA\020210\AW303.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\020210\AW313.D

Injection Date	Mix	Calibration File
2 Feb 2010 11:47 pm	A	C:\msdchem\1\DATA\020210\AW305.D
3 Feb 2010 3:17 am	B	C:\msdchem\1\DATA\020210\AW313.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\020210\AW314.D

Injection Date	Mix	Calibration File
3 Feb 2010 12:14 am	A	C:\msdchem\1\DATA\020210\AW306.D
3 Feb 2010 3:43 am	B	C:\msdchem\1\DATA\020210\AW314.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\020210\AW315.D

Injection Date	Mix	Calibration File
3 Feb 2010 12:40 am	A	C:\msdchem\1\DATA\020210\AW307.D
3 Feb 2010 4:09 am	B	C:\msdchem\1\DATA\020210\AW315.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\020210\AW316.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:06 am	A	C:\msdchem\1\DATA\020210\AW308.D
3 Feb 2010 4:35 am	B	C:\msdchem\1\DATA\020210\AW316.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\020210\AW317.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:32 am	A	C:\msdchem\1\DATA\020210\AW309.D
3 Feb 2010 5:02 am	B	C:\msdchem\1\DATA\020210\AW317.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\020210\AW318.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:59 am	A	C:\msdchem\1\DATA\020210\AW310.D
3 Feb 2010 5:28 am	B	C:\msdchem\1\DATA\020210\AW318.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\020210\AW319.D

Injection Date	Mix	Calibration File
3 Feb 2010 2:25 am	A	C:\msdchem\1\DATA\020210\AW311.D
3 Feb 2010 5:55 am	B	C:\msdchem\1\DATA\020210\AW319.D

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound ml m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA	Dichlorodifluoromethane	0.2385542	0.2177688 0.2252913	0.2448628	0.2683433	0.2418479	0.2373488	0.2391	AVRG		6.7100
3)MPA	Chloromethane	0.2994965	0.4188132 0.2788950	0.3649641	0.3207923	0.3084509	0.2977658	0.3270	AVRG		14.8649
4)MCA	Vinyl chloride	0.2917077	0.3196001 0.2733973	0.3131282	0.2949595	0.2950989	0.2889657	0.2967	AVRG		5.1991
5)MA	Bromomethane	0.1871993	0.1910020 0.1749093	0.1850689	0.1840110	0.1876557	0.1874027	0.1853	AVRG		2.7494
6)MA	Chloroethane 0.0052 0.1053 0.00	154410	4460 271253	9002	18270	32282	61349		LINR		0.9942
7)MA	Trichlorofluoromethane	0.4627652	0.4452675 0.4343512	0.4545760	0.4505400	0.4608244	0.4582548	0.4524	AVRG		2.2060
8)MA	Ethyl ether	0.2495694	0.2297650 0.2307527	0.2419205	0.2358205	0.2459701	0.2505338	0.2406	AVRG		3.5868
9)MA	Acetone	0.2210842	0.2871985 0.2217309	0.2560594	0.2422324	0.2322602	0.2132260	0.2391	AVRG		10.7351
10)MCA	1,1-Dichloroethylene	0.4448336	0.4366708 0.4546305	0.4627907	0.4806969	0.4780774	0.4189814	0.4538	AVRG		4.9113
11)MA	Iodomethane	0.3744511	0.3720631 0.3854221	0.3788423	0.4000460	0.3961622	0.3525849	0.3799	AVRG		4.2155
12)MA	Acetonitrile	0.0373952	0.0436397 0.0357479	0.0420264	0.0410509	0.0402577	0.0357799	0.0394	AVRG		7.9423
13)MA	Methyl acetate	0.2273735	0.2391667 0.2253824	0.2336584	0.2379882	0.2286672	0.2012925	0.2276	AVRG		5.6042
14)MA	Carbon disulfide	0.6952276	0.6959614 0.7328280	0.7149046	0.7610247	0.7539913	0.6574611	0.7159	AVRG		5.1051
15)MA	Methylene chloride 0.0035 0.2377 0.00	302164	621707	18197	36579	66367	116317		LINR		0.9997
16)MA	tert-Butyl methyl ether	0.7815815	0.8059361 0.7826571	0.9417937	0.8446745	0.9144057	0.7321587	0.8290	AVRG		9.1558

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For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

Page	b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
17)MA	trans-1,2-Dichloroethylene	0.4307833	0.4378040 0.4398208	0.4457491	0.4625292	0.4591634	0.4136231	0.4414	AVRG			3.7920
18)MA	Vinyl acetate	0.5701527	0.5788204 0.5162012	0.5655818	0.5407487	0.6057377	0.5882265	0.5665	AVRG			5.2813
19)MPA	1,1-Dichloroethane	0.5105945	0.5241222 0.5153500	0.5270672	0.5512337	0.5395770	0.4901051	0.5226	AVRG			3.8136
20)MA	2-Butanone	0.2603803	0.2788207 0.2795955	0.2614029	0.2694703	0.2616377	0.2535838	0.2664	AVRG			3.7094
21)MA	cis-1,2-Dichloroethylene	0.4942956	0.4907125 0.5009409	0.5121977	0.5264719	0.5162673	0.4757449	0.5024	AVRG			3.4311
22)MA	2,2-Dichloropropane	0.4508151	0.4785600 0.4609637	0.4641533	0.4684439	0.4691171	0.4277495	0.4600	AVRG			3.5960
23)MA	Bromochloromethane	0.1174770	0.1022611 0.1181459	0.1152830	0.1199884	0.1201518	0.1121099	0.1151	AVRG			5.4755
24)MCA	Chloroform	0.5012549	0.5161898 0.5057099	0.5080706	0.5286779	0.5173129	0.4839673	0.5087	AVRG			2.7866
25)MA	1,1,1-Trichloroethane	0.4835590	0.4938776 0.4950057	0.4808395	0.4980254	0.5038524	0.4588563	0.4877	AVRG			3.0815
26)MA	Cyclohexane	0.5061283	0.5273264 0.5200301	0.5251320	0.5568446	0.5481271	0.4852124	0.5241	AVRG			4.6166
27)MA	1,1-Dichloropropene	0.3698426	0.3724304 0.3747430	0.3711251	0.3893948	0.3896487	0.3507817	0.3740	AVRG			3.5364
28)MA	Carbon tetrachloride	0.4305904	0.4002523 0.4417764	0.4142526	0.4405889	0.4352747	0.4057424	0.4241	AVRG			4.0319
29)SA	1,2-Dichloroethane-d4	0.4185267	0.4144250 0.4089249	0.4132889	0.4118562	0.4237107	0.4202146	0.4158	AVRG			1.2437
30)MA	1,2-Dichloroethane	0.4709627	0.4713309 0.4768172	0.4875732	0.4975858	0.4878099	0.4565019	0.4784	AVRG			2.8664
31)MA	Benzene	0.9855503 0.9175513	0.9591128 0.9311177	0.96233504	0.9598272	0.9484654	0.8731669	0.9421	AVRG			3.6806

Response Factor Report VOAA
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Last Update : Wed Feb 03 22:34:28 2010
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
32)MA	Cyclohexene	0.5074292	0.5314294 0.5218520	0.5302267	0.5414424	0.5419136	0.4846988	0.5227	AVRG		3.9295
33)MA	n-Butyl alcohol	0.0080997 0.0099530	0.0081402 0.0102307	0.0083135	0.0088410	0.0095615	0.0096783	0.0091	AVRG #		9.4333
34)MA	Trichloroethylene	0.2591424	0.2586811 0.2615899	0.2627339	0.2735307	0.2706149	0.2508116	0.2624	AVRG		2.9138
35)MA	1,2-Dichloropropane	0.2696337	0.2677466 0.2731998	0.2711263	0.2806603	0.2777011	0.2629194	0.2719	AVRG		2.2056
36)MA	Methylcyclohexane	0.4192760	0.4229162 0.4257842	0.4344143	0.4465755	0.4499297	0.3955433	0.4278	AVRG		4.2967
37)MA	Dibromomethane	0.1586009	0.1456351 0.1599450	0.1555274	0.1606879	0.1632682	0.1543632	0.1569	AVRG		3.7015
38)MA	Bromodichloromethane	0.3834628	0.3523064 0.3925865	0.3535108	0.3728896	0.3810181	0.3707962	0.3724	AVRG		4.0543
39)MA	2-Chloroethylvinyl ether	0.1471383	0.1395627 0.1378339	0.1359818	0.1657474	0.1436456	0.1448516	0.1450	AVRG		6.8931
40)MA	cis-1,3-Dichloropropylene	0.4172425	0.3851300 0.4260431	0.3985142	0.4111912	0.4106941	0.4006699	0.4071	AVRG		3.3097
42)MA	4-Methyl-2-pentanone	0.1688665	0.1562685 0.1772762	0.1599605	0.1708793	0.1689419	0.1679933	0.1672	AVRG		4.1832
43)SA	Toluene-d8	1.3520386	1.3431112 1.3470052	1.3367832	1.3405691	1.3540508	1.3449102	1.3455	AVRG		0.4546
44)MA	Toluene	1.3076759	1.4332347 1.3402087	1.3833823	1.4204063	1.3681986	1.2769041	1.3614	AVRG		4.2031
45)MA	trans-1,3-Dichloropropyl	0.5675656	0.5249764 0.5869785	0.5245505	0.5538819	0.5601831	0.5542609	0.5532	AVRG		4.0522
46)MA	1,1,2-Trichloroethane	0.2305078	0.2183401 0.2333061	0.2276846	0.2422380	0.2358528	0.2296616	0.2311	AVRG		3.2016
47)MA	2-Hexanone	0.4768393	0.4889568 0.5193377	0.4659797	0.4981286	0.4716690	0.4793765	0.4858	AVRG		3.7593

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

Page	b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
48)	MA	1,3-Dichloropropane	0.5136580	0.5462279 0.5168251	0.5113419	0.5398010	0.5370849	0.5070997	0.5246	AVRG		3.0311
49)	MA	Tetrachloroethylene	0.2760900	0.2796135 0.2783270	0.2835482	0.2954103	0.2903799	0.2671434	0.2815	AVRG		3.3247
50)	MA	Dibromochloromethane	0.3537629	0.3176396 0.3723235	0.3076184	0.3304406	0.3404751	0.3409890	0.3376	AVRG		6.4389
51)	MA	1,2-Dibromoethane	0.2913374	0.2712531 0.2945651	0.2828386	0.2962203	0.2916184	0.2864034	0.2877	AVRG		2.9899
52)	MPA	Chlorobenzene	0.8305045	0.8760035 0.8507380	0.8663366	0.8805720	0.8674466	0.8396810	0.8588	AVRG		2.1954
53)	MA	1,1,1,2-Tetrachloroethane	0.3473239	0.3103580 0.3569188	0.3207451	0.3439889	0.3439351	0.3420465	0.3379	AVRG		4.8238
54)	MCA	Ethylbenzene	1.6044667	1.6711004 1.6449923	1.6712424	1.6859350	1.6556294	1.5962957	1.6471	AVRG		2.0948
55)	MA	m,p-Xylenes	0.5744294	0.5823123 0.5845427	0.5856266	0.6103719	0.5970936	0.5738560	0.5869	AVRG		2.2093
56)	MA	o-Xylene	0.5674394	0.5963361 0.5789702	0.5824064	0.6006407	0.5919341	0.5719526	0.5842	AVRG		2.1411
57)	MA	Styrene	0.9532494	0.9241700 0.9708665	0.9158416	0.9816904	0.9628218	0.9521263	0.9515	AVRG		2.5151
59)	MPA	Bromoform	0.4422719	0.3321333 0.4736539	0.3564595	0.3939360	0.4065686	0.4195564	0.4035	AVRG		12.0093
60)	MA	Isopropylbenzene	2.8059741	2.8390379 2.8902554	2.8238870	2.9173115	2.8965075	2.8091851	2.8546	AVRG		1.6036
61)	SA	Bromofluorobenzene	1.0199187	1.0178117 1.0169340	1.0131430	1.0000442	1.0297192	1.0254793	1.0176	AVRG		0.9348
62)	MPA	1,1,2,2-Tetrachloroethane	0.6373970	0.6405027 0.6531101	0.6235666	0.6434916	0.6392097	0.6529942	0.6415	AVRG		1.5790
63)	MA	1,2,3-Trichloropropane	0.2028210	0.1630728 0.2076139	0.1882528	0.2041486	0.2091267	0.2087850	0.1977	AVRG		8.5343

Response Factor Report VOAA

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA	Bromobenzene	0.6472395	0.6275916 0.6636465	0.6592886	0.6650334	0.6688129	0.6601157	0.6560	AVRG		2.1701
65)MA	n-Propylbenzene	3.3076036	3.4376263 3.3845357	3.3886454	3.4847729	3.4006035	3.3383655	3.3917	AVRG		1.7371
66)MA	1,3,5-Trimethylbenzene	2.3966152	2.3951956 2.4686459	2.3955560	2.4988192	2.4371692	2.4119383	2.4291	AVRG		1.6902
67)MA	2-Chlorotoluene	0.5970273	0.6190777 0.6122079	0.5991028	0.6139627	0.6275443	0.6013597	0.6100	AVRG		1.8600
68)MA	4-Chlorotoluene	2.0521041	2.2596291 2.0878533	2.1889672	2.1847149	2.1375415	2.0893009	2.1429	AVRG		3.3905
69)MA	tert-Butylbenzene	0.4593125	0.4406613 0.4708390	0.4423442	0.4697358	0.4684619	0.4608197	0.4589	AVRG		2.7593
70)MA	1,2,4-Trimethylbenzene	2.4298309	2.4238245 2.4848269	2.4635798	2.5554003	2.5112015	2.4680135	2.4767	AVRG		1.8569
71)MA	sec-Butylbenzene	3.0240989	2.9964036 3.1085773	3.0039693	3.1916152	3.0648005	3.0303279	3.0600	AVRG		2.2743
72)MA	4-Isopropyltoluene	2.4610780	2.4242923 2.5223827	2.4152221	2.5543251	2.5239590	2.4843057	2.4837	AVRG		2.1328
73)MA	1,3-Dichlorobenzene	1.1458512	1.2215020 1.1634890	1.2163990	1.2231063	1.2029470	1.1745468	1.1925	AVRG		2.6067
74)MA	1,4-Dichlorobenzene	1.1680582	1.3035530 1.1945796	1.2528810	1.2605453	1.2503431	1.2110366	1.2344	AVRG		3.7115
75)MA	n-Butylbenzene	2.4532193	2.5374983 2.5231534	2.5080422	2.6146500	2.5650730	2.5052073	2.5295	AVRG		2.0086
76)MA	1,2-Dichlorobenzene	1.1328855	1.2482598 1.1539174	1.1748818	1.1875679	1.1882662	1.1721890	1.1797	AVRG		3.0508
77)MA	1,2-Dibromo-3-chloroprop -0.0016 0.1568 0.00	81247	985	2758	7433	15003	31203		LINR		0.9999
78)MA	1,2,4-Trichlorobenzene	0.9694614	1.0715275 0.9966666	0.9938019	1.0355844	1.0274441	1.0046721	1.0142	AVRG		3.3036

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
79)MA	Hexachlorobutadiene	0.6819756	0.6650150 0.7091170	0.6684091	0.7147602	0.7033065	0.6844503	0.6896	AVRG		2.8638
80)MA	Naphthalene	2.1611243	2.3168870 2.2332118	2.1637434	2.1508661	2.1982944	2.2122179	2.2052	AVRG		2.6161
81)MA	1,2,3-Trichlorobenzene	0.9198888	0.9923768 0.9397709	0.9591250	0.9709012	0.9701899	0.9519720	0.9577	AVRG		2.4556
83)B	Chlorotrifluoroethylene	0.1675495	0.1545077 0.1826572	0.1637749	0.1711184	0.1655019	0.1998214	0.1721	AVRG		8.6296
84)B	2-Chloro-1,1,1-trifluoro	0.2688861	0.2536732 0.2682404	0.2503474	0.2514422	0.2473082	0.2616670	0.2574	AVRG		3.4338
85)B	Acrolein	0.0484340	0.0514738 0.0498812	0.0509818	0.0471297	0.0485942	0.0483780	0.0493	AVRG		3.1762
86)B	Trichlorotrifluoroethane	0.1022431	0.1139564 0.1039375	0.1012790	0.1002761	0.1039117	0.1011428	0.1038	AVRG		4.5082
87)B	Isopropyl Alcohol	0.0250177	0.0241432 0.0249797	0.0230015	0.0232875	0.0236424	0.0250832	0.0242	AVRG		3.6358
88)B	Allyl chloride	0.4628992	0.4879103 0.4640660	0.4759531	0.4631783	0.4779541	0.4652477	0.4710	AVRG		2.0635
89)B	tert-Butyl Alcohol	0.0420428	0.0402061 0.0419608	0.0383375	0.0389020	0.0399164	0.0415679	0.0404	AVRG		3.6788
90)B	Acrylonitrile	0.1039009	0.1022257 0.1034836	0.1019832	0.0993805	0.1049458	0.1019885	0.1026	AVRG		1.7453
91)B	Isopropyl ether	1.0796499	1.0803219 1.1215483	1.0559044	1.0790138	1.0559427	1.0977074	1.0814	AVRG		2.1308
92)B	2-Chloro-1,3-butadiene	0.4907408	0.4782511 0.5052759	0.4727880	0.4708845	0.4904941	0.4833293	0.4845	AVRG		2.4844
93)B	Ethyl tert-butyl ether	1.0286049	1.0019342 1.0794600	0.9907637	1.0044684	0.9901999	1.0389514	1.0192	AVRG		3.1729
94)B	Ethyl acetate	0.2856064	0.3301855 0.2860745	0.2906485	0.2800202	0.2869687	0.2824676	0.2917	AVRG		5.9294

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound ml m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
95)B	Propionitrile	0.0407366	0.0364711 0.0407413	0.0391705	0.0385692	0.0416155	0.0398314	0.0396	AVRG		4.3440
96)B	Methacrylonitrile	0.1830359	0.1818924 0.1818713	0.1857662	0.1789612	0.1877184	0.1815158	0.1830	AVRG		1.5923
97)B	Tetrahydrofuran	0.0883990	0.0960190 0.0872267	0.0939003	0.0890542	0.0905842	0.0873487	0.0904	AVRG		3.7541
98)B	Isobutyl alcohol	0.0119286	0.0127296 0.0117598	0.0115199	0.0108352	0.0116607	0.0115863	0.0117	AVRG		4.8134
99)B	Methyl tert-amyl ether	0.7915634	0.7996485 0.8353931	0.7704397	0.7713128	0.7632083	0.7974335	0.7899	AVRG		3.1273
100)B	Methyl methacrylate	0.1636172	0.1597414 0.1664293	0.1566936	0.1554329	0.1619850	0.1600165	0.1606	AVRG		2.3856
101)B	1,4-Dioxane	0.0026775	0.0019569 0.0027388	0.0023455	0.0025010	0.0026900	0.0027413	0.0025	AVRG	#	11.4303
102)B	2-Nitropropane	0.0961194	0.0747782 0.0988517	0.0774176	0.0775306	0.0848201	0.0882881	0.0854	AVRG		11.1394
104)B	Ethyl methacrylate	0.4371484	0.3877646 0.4431927	0.4030788	0.4122445	0.4315604	0.4316063	0.4209	AVRG		4.8295
106)B	1-Chlorohexane	0.7802548	0.7883855 0.8108573	0.7895554	0.7851573	0.7653485	0.7970432	0.7881	AVRG		1.7854
107)B	cis-1,4-Dichloro-2-buten	0.2883336	0.2357172 0.2997519	0.2487551	0.2527046	0.2689231	0.2769942	0.2673	AVRG		8.5669
108)B	Cyclohexanone	0.1281330	0.1118408 0.1399375	0.1201373	0.1216406	0.1290551	0.1267126	0.1254	AVRG		6.9818
109)B	trans-1,4-Dichloro-2-but	0.2688412	0.2218657 0.2766715	0.2402934	0.2459768	0.2568598	0.2603657	0.2530	AVRG		7.3253
110)B	Pentachloroethane	0.2078111	0.1718814 0.1804959	0.1901216	0.2004149	0.1950654	0.2298334	0.1965	AVRG		9.6534
111)B	Benzyl chloride	1.1464261	0.9262137 1.1767395	0.9816031	1.0299901	1.0918255	1.1006369	1.0648	AVRG		8.4479

Response Factor Report VOAA

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8 m1	6 m2	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
112)B	bis(2-Chloroisopropyl)et	0.4490478	0.4014342	0.4154083	0.4233880	0.4427023	0.4399476	0.4315	AVRG			4.2576

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(#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-1510

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.4158	0.41367		.01		-0.51227	30		Averaged	
S Toluene-d8	1.3455	1.35484		.01		0.69417	30		Averaged	
S Bromofluorobenzene	1.0176	1.01378		.01		-0.37539	30		Averaged	
Dichlorodifluoromethane	0.2391	0.23204		.01		-2.95274	30		Averaged	
Chloromethane	0.327	0.27449		.1		-16.0581	30		Averaged	spcc
Vinyl chloride	0.2967	0.28428		.01		-4.18605	20		Averaged	ccc
Bromomethane	0.1853	0.18155		.01		-2.02375	30		Averaged	
Chloroethane	50	50	50			0	30		Linear	
Trichlorofluoromethane	0.4524	0.45736		.01		1.09637	30		Averaged	
Ethyl ether	0.2406	0.23219		.01		-3.49543	30		Averaged	
Acetone	0.2391	0.18425		.01		-22.94019	40		Averaged	
1,1-Dichloroethylene	0.4538	0.4361		.01		-3.9004	20		Averaged	ccc
Iodomethane	0.3799	0.37491		.01		-1.3135	30		Averaged	
Acetonitrile	0.0394	0.03631		.01		-7.84264	30		Averaged	
Carbon disulfide	0.7159	0.74392		.01		3.91395	30		Averaged	
Methyl acetate	0.2276	0.21647		.01		-4.89016	40		Averaged	
Methylene chloride	50	51.17	50			2.34	30		Linear	
tert-Butyl methyl ether	0.829	0.78733		.01		-5.02654	30		Averaged	
trans-1,2-Dichloroethylene	0.4414	0.43645		.01		-1.12143	30		Averaged	
Vinyl acetate	0.5665	0.45697		.01		-19.33451	40		Averaged	
1,1-Dichloroethane	0.5226	0.51924		.1		-0.64294	30		Averaged	spcc
2-Butanone	0.2664	0.2146		.01		-19.44444	40		Averaged	
cis-1,2-Dichloroethylene	0.5024	0.50352		.01		0.22293	30		Averaged	
2,2-Dichloropropane	0.46	0.45136		.01		-1.87826	30		Averaged	
Bromochloromethane	0.1151	0.1198		.01		4.08341	30		Averaged	
Chloroform	0.5087	0.5124		.01		0.72734	20		Averaged	ccc
1,1,1-Trichloroethane	0.4877	0.49369		.01		1.22821	30		Averaged	
Cyclohexane	0.5241	0.51908		.01		-0.95783	30		Averaged	
1,1-Dichloropropene	0.374	0.37562		.01		0.43316	30		Averaged	
Carbon tetrachloride	0.4241	0.44132		.01		4.06036	30		Averaged	
1,2-Dichloroethane	0.4784	0.47662		.01		-0.37207	30		Averaged	
Benzene	0.9421	0.92378		.01		-1.94459	30		Averaged	
Cyclohexene	0.5227	0.50067		.01		-4.21465	30		Averaged	
n-Butyl alcohol	0.0091	0.00949		.01		4.28571	40		Averaged	
Trichloroethylene	0.2624	0.26825		.01		2.22942	30		Averaged	
1,2-Dichloropropane	0.2719	0.27456		.01		0.9783	20		Averaged	ccc
Methylcyclohexane	0.4278	0.42512		.01		-0.62646	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1569	0.15852		.01		1.0325	30		Averaged	
Bromodichloromethane	0.3724	0.38792		.01		4.16756	30		Averaged	
2-Chloroethylvinyl ether	0.145	0.131		.01		-9.65517	30		Averaged	
cis-1,3-Dichloropropylene	0.4071	0.41297		.01		1.44191	30		Averaged	
4-Methyl-2-pentanone	0.1672	0.1602		.01		-4.1866	40		Averaged	
Toluene	1.3614	1.32364		.01		-2.77362	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5532	0.5627		.01		1.71728	30		Averaged	
1,1,2-Trichloroethane	0.2311	0.22996		.01		-0.49329	30		Averaged	
2-Hexanone	0.4858	0.40036		.01		-17.58748	40		Averaged	
1,3-Dichloropropane	0.5246	0.51782		.01		-1.29241	30		Averaged	
Tetrachloroethylene	0.2815	0.27989		.01		-0.57194	30		Averaged	
Dibromochloromethane	0.3376	0.35528		.01		5.23697	30		Averaged	
1,2-Dibromoethane	0.2877	0.29123		.01		1.22697	30		Averaged	
Chlorobenzene	0.8588	0.85329		.3		-0.64159	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3379	0.35484		.01		5.01332	30		Averaged	
Ethylbenzene	1.6471	1.61437		.01		-1.98713	20		Averaged	ccc
m,p-Xylenes	0.5869	0.57705		.01		-1.67831	30		Averaged	
o-Xylene	0.5842	0.57647		.01		-1.32318	30		Averaged	
Styrene	0.9515	0.96058		.01		0.95428	30		Averaged	
Bromoform	0.4035	0.43647		.1		8.171	30		Averaged	spcc
Isopropylbenzene	2.8546	2.80344		.01		-1.7922	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6415	0.60262		.3		-6.0608	30		Averaged	spcc
1,2,3-Trichloropropane	0.1977	0.20214		.01		2.24583	30		Averaged	
Bromobenzene	0.656	0.66402		.01		1.22256	30		Averaged	
n-Propylbenzene	3.3917	3.2717		.01		-3.53805	30		Averaged	
2-Chlorotoluene	0.61	0.60918		.01		-0.13443	30		Averaged	
1,3,5-Trimethylbenzene	2.4291	2.38921		.01		-1.64217	30		Averaged	
4-Chlorotoluene	2.1429	2.05806		.01		-3.95912	30		Averaged	
tert-Butylbenzene	0.4589	0.46143		.01		0.55132	30		Averaged	
1,2,4-Trimethylbenzene	2.4767	2.42585		.01		-2.05314	30		Averaged	
sec-Butylbenzene	3.06	3.00994		.01		-1.63595	30		Averaged	
4-Isopropyltoluene	2.4837	2.44876		.01		-1.40677	30		Averaged	
1,3-Dichlorobenzene	1.1925	1.15178		.01		-3.41468	30		Averaged	
1,4-Dichlorobenzene	1.2344	1.18293		.01		-4.16964	30		Averaged	
n-Butylbenzene	2.5295	2.42397		.01		-4.17197	30		Averaged	
1,2-Dichlorobenzene	1.1797	1.15375		.01		-2.19971	30		Averaged	
1,2-Dibromo-3-chloropropane	50	49.08	50			-1.84	30		Linear	

Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0142	0.96718		.01		-4.63617	30		Averaged
Hexachlorobutadiene	0.6896	0.7053		.01		2.27668	30		Averaged
Naphthalene	2.2052	2.07507		.01		-5.90105	30		Averaged
1,2,3-Trichlorobenzene	0.9577	0.96128		.01		0.37381	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW321.D
Acq On : 3 Feb 2010 6:48 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1249146	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	911788	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	523089	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1249146	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	911788	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	523089	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	516737	49.74	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	1235324	50.35	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	530295	49.81	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	289855	48.51	ug/L	99
3) Chloromethane	4.034	4.043	0.432	50	342874	41.97	ug/L	99
4) Vinyl chloride	4.265	4.265	0.457	62	355107	47.91	ug/L	97
5) Bromomethane	4.829	4.839	0.517	94	226787	48.98	ug/L	98
6) Chloroethane	4.980	4.990	0.533	64	138042	50.00	ug/L	96
7) Trichlorofluoromethane	5.375	5.382	0.576	101	571306	50.55	ug/L	100
8) Ethyl ether	5.728	5.732	0.613	59	290039	48.25	ug/L	100
9) Acetone	6.075	6.082	0.650	43	1150776	192.64	ug/L	100
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	544758	48.05	ug/L	100
11) Iodomethane	6.298	6.305	0.674	142	2341568	246.69	ug/L	99
12) Acetonitrile	6.414	6.421	0.687	41	1133839	1151.49	ug/L	99
13) Methyl acetate	6.478	6.481	0.694	43	1352041	237.73	ug/L	100
14) Carbon disulfide	6.425	6.428	0.688	76	4646336	259.78	ug/L	100
15) Methylene chloride	6.644	6.651	0.711	84	308287	51.17	ug/L	99
16) tert-Butyl methyl ether	6.970	6.973	0.746	73	983484	47.48	ug/L	100
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749	61	545193	49.44	ug/L	99
18) Vinyl acetate	7.447	7.454	0.797	43	2854099	201.66	ug/L	100
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	648607	49.68	ug/L	100
20) 2-Butanone	8.059	8.062	0.863	43	1340327	201.38	ug/L	100
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	628967	50.11	ug/L	100
22) 2,2-Dichloropropane	8.133	8.140	0.871	77	563809	49.06	ug/L	100
23) Bromochloromethane	8.373	8.373	0.897	128	149644	52.06	ug/L	98
24) Chloroform	8.419	8.423	0.902	83	640063	50.36	ug/L	100
25) 1,1,1-Trichloroethane	8.688	8.692	0.930	97	616685	50.61	ug/L	99
26) Cyclohexane	8.787	8.791	0.941	56	648406	49.52	ug/L	99
27) 1,1-Dichloropropene	8.847	8.851	0.947	75	469202	50.22	ug/L	100
28) Carbon tetrachloride	8.883	8.886	0.951	117	551269	52.03	ug/L	99
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	595363	49.82	ug/L	98
31) Benzene	9.084	9.084	0.973	78	1153939	49.03	ug/L	100
32) Cyclohexene	9.204	9.208	0.986	67	625416	47.89	ug/L	99
33) n-Butyl alcohol	9.459	9.462	1.013	56	1185084	5211.45	ug/L	100
34) Trichloroethylene	9.728	9.731	1.042	95	335088	51.11	ug/L	99
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	342968	50.50	ug/L	100
36) Methylcyclohexane	9.979	9.982	1.069	83	531041	49.69	ug/L	100
37) Dibromomethane	10.092	10.095	1.081	93	198015	50.53	ug/L	99
38) Bromodichloromethane	10.212	10.216	1.094	83	484567	52.09	ug/L	100
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119	63	818163	225.91	ug/L	100
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	515858	50.72	ug/L	99
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	730341	239.58	ug/L	99
44) Toluene	11.058	11.057	0.884	91	1206877	48.61	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW321.D
Acq On : 3 Feb 2010 6:48 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	513063	50.86	ug/L 100
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	209672	49.76	ug/L 98
47) 2-Hexanone	11.623	11.627	0.929	43	1825213	206.05	ug/L 100
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	472143	49.36	ug/L 91
49) Tetrachloroethylene	11.652	11.655	0.932	164	255197	49.71	ug/L 100
50) Dibromochloromethane	11.882	11.881	0.950	129	323944	52.62	ug/L 100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	265542	50.61	ug/L 99
52) Chlorobenzene	12.539	12.543	1.003	112	778021	49.68	ug/L 99
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	323538	52.51	ug/L 99
54) Ethylbenzene	12.614	12.617	1.008	91	1471962	49.01	ug/L 99
55) m,p-Xylenes	12.727	12.730	1.018	106	1052288	98.32	ug/L 99
56) o-Xylene	13.162	13.162	1.052	106	525616	49.33	ug/L 99
57) Styrene	13.162	13.162	1.052	104	875848	50.48	ug/L 99
59) Bromoform	13.402	13.402	0.897	173	228315	54.08	ug/L 100
60) Isopropylbenzene	13.529	13.529	0.906	105	1466447	49.10	ug/L 100
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	315226	46.97	ug/L 99
63) 1,2,3-Trichloropropane	13.880	13.879	0.929	110	105735	51.12	ug/L 99
64) Bromobenzene	13.918	13.918	0.932	156	347340	50.61	ug/L 98
65) n-Propylbenzene	13.957	13.957	0.934	91	1711392	48.23	ug/L 100
66) 1,3,5-Trimethylbenzene	14.117	14.116	0.945	105	1249767	49.18	ug/L 100
67) 2-Chlorotoluene	14.095	14.095	0.943	126	318655	49.93	ug/L 99
68) 4-Chlorotoluene	14.198	14.198	0.950	91	1076549	48.02	ug/L 100
69) tert-Butylbenzene	14.488	14.488	0.970	134	241370	50.28	ug/L 99
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.973	105	1268936	48.97	ug/L 99
71) sec-Butylbenzene	14.714	14.718	0.985	105	1574467	49.18	ug/L 100
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1280921	49.30	ug/L 100
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	602486	48.29	ug/L 100
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	618780	47.91	ug/L 100
75) n-Butylbenzene	15.276	15.276	1.022	91	1267953	47.91	ug/L 99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	603515	48.90	ug/L 100
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	79646	49.08	ug/L 99
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	505922	47.68	ug/L 100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	368933	51.14	ug/L 100
80) Naphthalene	17.530	17.529	1.173	128	1085444	47.05	ug/L 100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	502835	50.18	ug/L 100
83) Chlorotrifluoroethylene	3.651	3.661	0.391		0m	N.D.	d
84) 2-Chloro-1,1,1-trifluo...	4.406	4.416	0.472		0m	N.D.	d
85) Acrolein	5.902	5.898	0.632		0m	N.D.	d
86) Trichlorotrifluoroethane	6.068	6.068	0.650		0m	N.D.	d
87) Isopropyl Alcohol	6.191	6.188	0.663		0m	N.D.	d
88) Allyl chloride	6.414	6.506	0.687		0m	N.D.	d
89) tert-Butyl Alcohol	6.694	6.687	0.717		0m	N.D.	d
90) Acrylonitrile	6.899	6.895	0.739		0m	N.D.	d
91) Isopropyl ether	7.447	7.489	0.797		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.585	7.581	0.812		0m	N.D.	d
93) Ethyl tert-butyl ether	8.105	7.893	0.868		0m	N.D.	d
94) Ethyl acetate	8.059	8.094	0.863		0m	N.D.	d
95) Propionitrile	8.055	8.122	0.863		0m	N.D.	d
96) Methacrylonitrile	8.303	8.306	0.889		0m	N.D.	d
97) Tetrahydrofuran	8.419	8.430	0.902		0m	N.D.	d
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d
99) Methyl tert-amyl ether	9.081	9.127	0.972		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d
101) 1,4-Dioxane	10.092	10.060	1.081		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

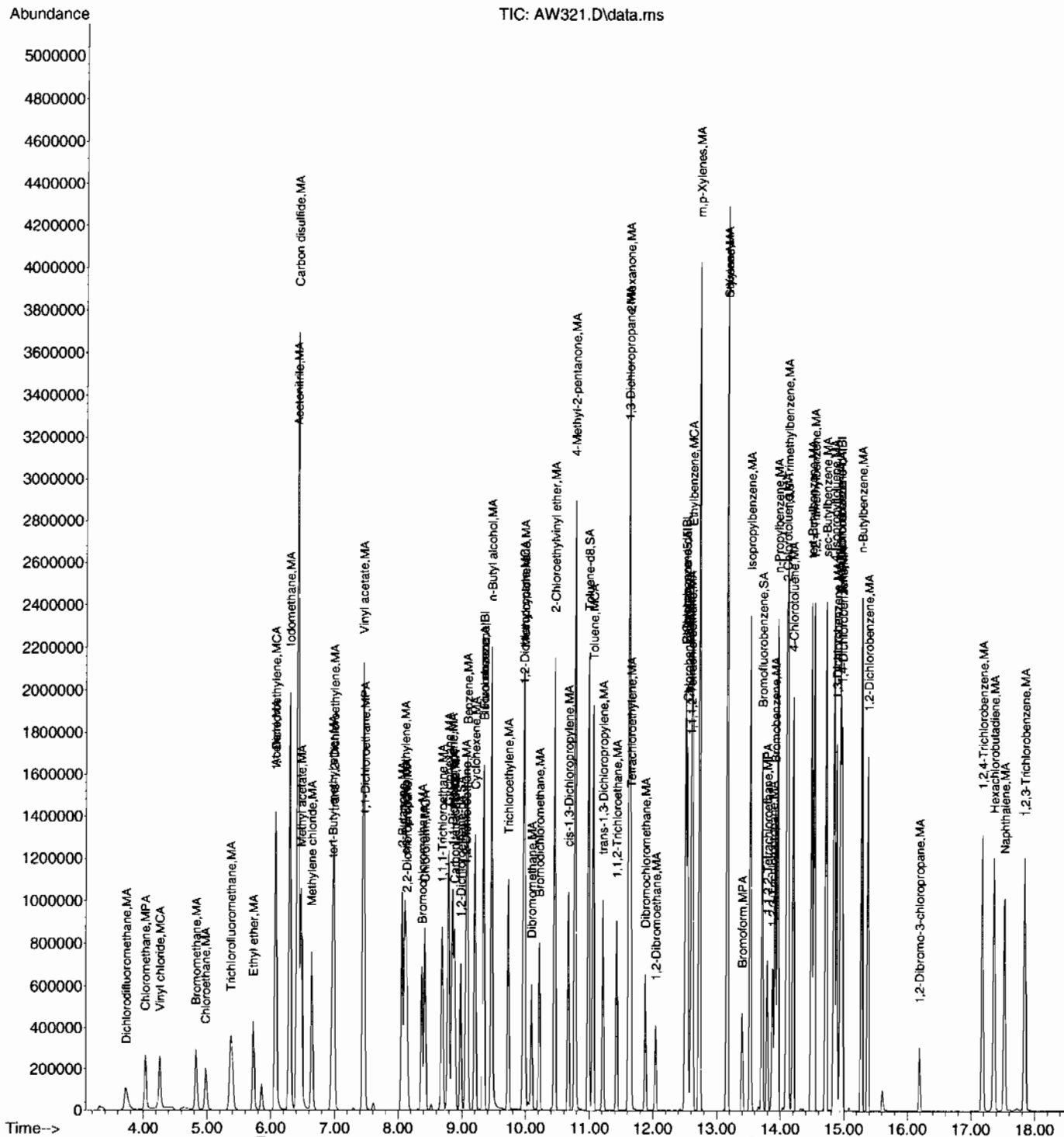
Data Path : C:\msdchem\1\DATA\020210\
Data File : AW321.D
Acq On : 3 Feb 2010 6:48 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	10.584	10.414	1.133		0m	N.D.	d
104) Ethyl methacrylate	11.238	11.238	0.898		0m	N.D.	d
106) 1-Chlorohexane	12.430	12.426	0.832		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.660	13.657	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.841	13.844	0.926		0m	N.D.	d
110) Pentachloroethane	14.541	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	15.082	15.082	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.482	15.485	1.036		0m	N.D.	d

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

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Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW321.D  
Acq On    : 3 Feb 2010    6:48 am  
Operator   : JEB  
InstName  : VOAA  
Sample    : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|  
Misc      : GEEL 5ML N/A MIX[A] 100126-01A/100202-01  
ALS Vial  : 21    Sample Multiplier: 1
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Abundance TIC: AW321.D\data.ms

Continuing Calibration Summary

Client SDG: 10-1510

Instrument ID: VOAA.I

Injection Date 03-FEB-10 07:40

Data File: 020210\AW323.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100202-19 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.4158	0.41146		.01		-1.04377	30		Averaged
SToluene-d8	1.3455	1.34459		.01		-0.06763	30		Averaged
SBromofluorobenzene	1.0176	0.99795		.01		-1.93101	30		Averaged
Chlorotrifluoroethylene	0.1721	0.13162		.01		-23.52121	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.2574	0.24703		.01		-4.02875	30		Averaged
Acrolein	0.0493	0.03977		.01		-19.33063	30		Averaged
Trichlorotrifluoroethane	0.1038	0.1054		.01		1.54143	30		Averaged
Isopropyl Alcohol	0.0242	0.02382		.01		-1.57025	40		Averaged
Allyl chloride	0.471	0.43912		.01		-6.76858	30		Averaged
tert-Butyl Alcohol	0.0404	0.03953		.01		-2.15347	40		Averaged
Acrylonitrile	0.1026	0.09834		.01		-4.15205	30		Averaged
Isopropyl ether	1.0814	1.00659		.01		-6.91788	30		Averaged
2-Chloro-1,3-butadiene	0.4845	0.47933		.01		-1.06708	30		Averaged
Ethyl tert-butyl ether	1.0192	0.9653		.01		-5.28846	30		Averaged
Ethyl acetate	0.2917	0.25283		.01		-13.32533	40		Averaged
Propionitrile	0.0396	0.03804		.01		-3.93939	30		Averaged
Methacrylonitrile	0.183	0.16856		.01		-7.89071	30		Averaged
Tetrahydrofuran	0.0904	0.08491		.01		-6.07301	30		Averaged
Isobutyl alcohol	0.0117	0.01057		.01		-9.65812	40		Averaged
Methyl tert-amyl ether	0.7899	0.74292		.01		-5.94759	30		Averaged
Methyl methacrylate	0.1606	0.15118		.01		-5.8655	30		Averaged
1,4-Dioxane	0.0025	0.00259		.01		3.6	40		Averaged
2-Nitropropane	0.0854	0.08732		.01		2.24824	30		Averaged
Ethyl methacrylate	0.4209	0.40888		.01		-2.85579	30		Averaged
1-Chlorohexane	0.7881	0.71856		.01		-8.82375	30		Averaged
cis-1,4-Dichloro-2-butene	0.2673	0.27531		.01		2.99663	30		Averaged
Cyclohexanone	0.1254	0.03024		.01		-75.88517	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.253	0.25984		.01		2.70356	30		Averaged
Pentachloroethane	0.1965	0.15216		.01		-22.56489	30		Averaged
Benzyl chloride	1.0648	0.95098		.01		-10.68933	30		Averaged
bis(2-Chloroisopropyl)ether	0.4315	0.41569		.01		-3.66396	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW323.D
Acq On : 3 Feb 2010 7:40 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1257590	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	917718	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	533691	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1257590	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	917718	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	533691	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	517449	49.47	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	1233954	49.97	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	532598	49.04	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	3.651	3.731	0.391		0m	N.D.	d	
3) Chloromethane	4.023	4.043	0.431		0m	N.D.	d	
4) Vinyl chloride	4.255	4.265	0.456		0m	N.D.	d	
5) Bromomethane	4.829	4.839	0.517		0m	N.D.	d	
6) Chloroethane	4.990	4.990	0.534		0m	N.D.	d	
7) Trichlorofluoromethane	5.367	5.382	0.575		0m	N.D.	d	
8) Ethyl ether	5.732	5.732	0.614		0m	N.D.	d	
9) Acetone	6.089	6.082	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.082	0.650		0m	N.D.	d	
11) Iodomethane	6.305	6.305	0.675		0m	N.D.	d	
12) Acetonitrile	6.510	6.421	0.697		0m	N.D.	d	
13) Methyl acetate	6.683	6.481	0.716		0m	N.D.	d	
14) Carbon disulfide	6.428	6.428	0.688		0m	N.D.	d	
15) Methylene chloride	6.648	6.651	0.712		0m	N.D.	d	
16) tert-Butyl methyl ether	6.980	6.973	0.747		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.998	6.994	0.749		0m	N.D.	d	
18) Vinyl acetate	7.489	7.454	0.802		0m	N.D.	d	
19) 1,1-Dichloroethane	7.471	7.471	0.800		0m	N.D.	d	
20) 2-Butanone	8.094	8.062	0.867		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.094	8.108	0.867		0m	N.D.	d	
22) 2,2-Dichloropropane	8.140	8.140	0.872		0m	N.D.	d	
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.419	8.423	0.902		0m	N.D.	d	
25) 1,1,1-Trichloroethane	8.692	8.692	0.931		0m	N.D.	d	
26) Cyclohexane	8.776	8.791	0.940		0m	N.D.	d	
27) 1,1-Dichloropropene	8.851	8.851	0.948		0m	N.D.	d	
28) Carbon tetrachloride	8.893	8.886	0.952		0m	N.D.	d	
30) 1,2-Dichloroethane	9.063	9.063	0.970		0m	N.D.	d	
31) Benzene	9.084	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	9.204	9.208	0.986		0m	N.D.	d	
33) n-Butyl alcohol	9.466	9.462	1.014		0m	N.D.	d	
34) Trichloroethylene	9.731	9.731	1.042		0m	N.D.	d	
35) 1,2-Dichloropropane	9.965	9.965	1.067		0m	N.D.	d	
36) Methylcyclohexane	9.968	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	10.095	10.095	1.081		0m	N.D.	d	
38) Bromodichloromethane	10.219	10.216	1.094		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	10.456	10.453	1.120		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	10.672	10.668	1.143		0m	N.D.	d	
42) 4-Methyl-2-pentanone	10.774	10.774	0.861		0m	N.D.	d	
44) Toluene	11.061	11.057	0.884		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW323.D
Acq On : 3 Feb 2010 7:40 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897		0m	N.D.	d
46) 1,1,2-Trichloroethane	11.425	11.429	0.913		0m	N.D.	d
47) 2-Hexanone	11.623	11.627	0.929		0m	N.D.	d
48) 1,3-Dichloropropane	11.616	11.620	0.929		0m	N.D.	d
49) Tetrachloroethylene	11.651	11.655	0.932		0m	N.D.	d
50) Dibromochloromethane	11.888	11.881	0.951		0m	N.D.	d
51) 1,2-Dibromoethane	12.040	12.044	0.963		0m	N.D.	d
52) Chlorobenzene	12.539	12.543	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007		0m	N.D.	d
54) Ethylbenzene	12.617	12.617	1.009		0m	N.D.	d
55) m,p-Xylenes	12.727	12.730	1.018		0m	N.D.	d
56) o-Xylene	13.165	13.162	1.053		0m	N.D.	d
57) Styrene	13.162	13.162	1.052		0m	N.D.	d
59) Bromoform	13.406	13.402	0.897		0m	N.D.	d
60) Isopropylbenzene	13.526	13.529	0.905		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.915	13.918	0.931		0m	N.D.	d
65) n-Propylbenzene	13.957	13.957	0.934		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945		0m	N.D.	d
67) 2-Chlorotoluene	14.095	14.095	0.943		0m	N.D.	d
68) 4-Chlorotoluene	14.201	14.198	0.950		0m	N.D.	d
69) tert-Butylbenzene	14.491	14.488	0.970		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972		0m	N.D.	d
71) sec-Butylbenzene	14.714	14.718	0.985		0m	N.D.	d
72) 4-Isopropyltoluene	14.845	14.841	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	14.884	14.884	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d
75) n-Butylbenzene	15.276	15.276	1.022		0m	N.D.	d
76) 1,2-Dichlorobenzene	15.382	15.379	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d
80) Naphthalene	17.529	17.529	1.173		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194		0m	N.D.	d
83) Chlorotrifluoroethylene	3.661	3.661	0.392	116	496559	114.69	ug/L 100
84) 2-Chloro-1,1,1-trifluo...	4.416	4.416	0.473	118	931987	143.98	ug/L 100
85) Acrolein	5.898	5.898	0.632	56	250080	201.81	ug/L 99
86) Trichlorotrifluoroethane	6.071	6.068	0.650	85	662722	253.79	ug/L 99
87) Isopropyl Alcohol	6.188	6.188	0.663	45	1498060	2464.75	ug/L 99
88) Allyl chloride	6.510	6.506	0.697	41	2761188	233.07	ug/L 99
89) tert-Butyl Alcohol	6.686	6.687	0.716	59	2485789	2445.17	ug/L 100
90) Acrylonitrile	6.899	6.895	0.739	53	618366	239.72	ug/L 99
91) Isopropyl ether	7.489	7.489	0.802	45	1265875	46.54	ug/L 99
92) 2-Chloro-1,3-butadiene	7.581	7.581	0.812	53	602806	49.46	ug/L 99
93) Ethyl tert-butyl ether	7.892	7.893	0.845	59	1213957	47.36	ug/L 100
94) Ethyl acetate	8.094	8.094	0.867	43	1589756	216.68	ug/L 100
95) Propionitrile	8.122	8.122	0.870	54	239166	240.18	ug/L 99
96) Methacrylonitrile	8.306	8.306	0.889	41	1059868	230.31	ug/L 100
97) Tetrahydrofuran	8.430	8.430	0.903	42	533886	234.91	ug/L 99
98) Isobutyl alcohol	8.776	8.777	0.940	41	664588	2255.08	ug/L 100
99) Methyl tert-amyl ether	9.130	9.127	0.978	73	934288	47.03	ug/L 98
100) Methyl methacrylate	9.968	9.968	1.067	69	950624	235.40	ug/L 99
101) 1,4-Dioxane	10.060	10.060	1.077	88	162970	2569.59	ug/L 100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW323.D
Acq On : 3 Feb 2010 7:40 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

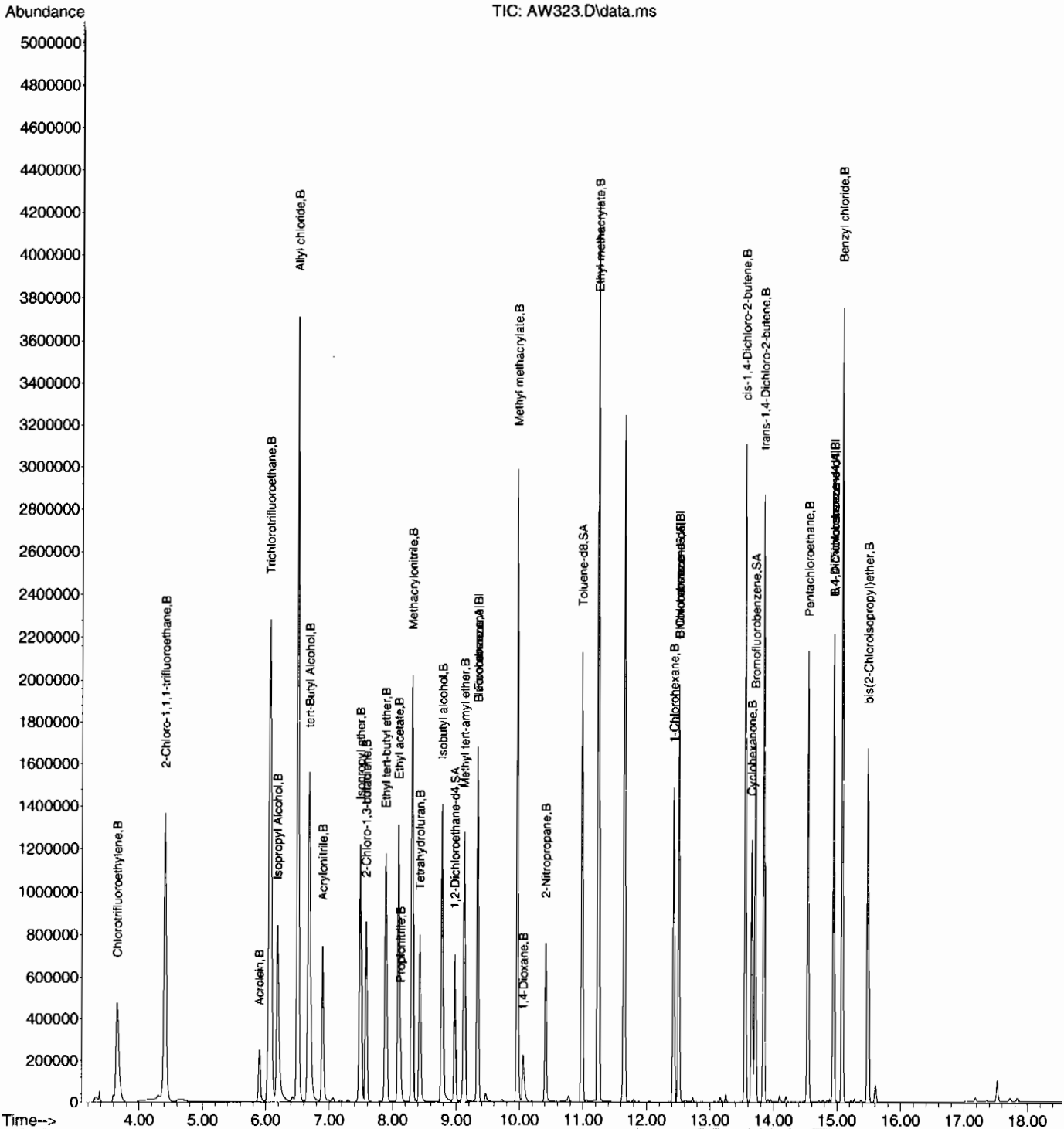
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	10.414	10.414	1.115	43	549045	255.61	ug/L 99
104) Ethyl methacrylate	11.238	11.238	0.898	69	1876183	242.84	ug/L 99
106) 1-Chlorohexane	12.426	12.426	0.832	55	383489	45.59	ug/L 99
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	734656	257.48	ug/L 100
108) Cyclohexanone	13.657	13.657	0.914	42	403446	301.54	ug/L 99
109) trans-1,4-Dichloro-2-b...	13.848	13.844	0.927	53	693381	256.78	ug/L 99
110) Pentachloroethane	14.544	14.541	0.973	167	406032	193.57	ug/L 99
111) Benzyl chloride	15.082	15.082	1.009	91	2537655	223.28	ug/L 100
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	1109248	240.84	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\020210\
Data File : AW323.D
Acq On : 3 Feb 2010 7:40 am
Operator : JEB
InstName : VOAA
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-1510

Instrument ID: VOAA.I

Injection Date 09-FEB-10 17:01

Data File: 020910VAX202.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100209-01

Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.4158	0.35992		.01		-13.43915	30		Averaged	
SToluene-d8	1.3455	1.33651		.01		-0.66815	30		Averaged	
SBromofluorobenzene	1.0176	0.96361		.01		-5.30562	30		Averaged	
Dichlorodifluoromethane	0.2391	0.22672		.01		-5.17775	30		Averaged	
Chloromethane	0.327	0.25572		.1		-21.79817	30		Averaged	spcc
Vinyl chloride	0.2967	0.2871		.01		-3.23559	20		Averaged	ccc
Bromomethane	0.1853	0.20557		.01		10.93902	30		Averaged	
Chloroethane	50	55.12	50			10.24	30		Linear	
Trichlorofluoromethane	0.4524	0.47069		.01		4.04288	30		Averaged	
Ethyl ether	0.2406	0.23012		.01		-4.35578	30		Averaged	
Acetone	0.2391	0.16921		.01		-29.23045	40		Averaged	
1,1-Dichloroethylene	0.4538	0.4383		.01		-3.4156	20		Averaged	ccc
Iodomethane	0.3799	0.40975		.01		7.85733	30		Averaged	
Acetonitrile	0.0394	0.03017		.01		-23.4264	30		Averaged	
Carbon disulfide	0.7159	0.80112		.01		11.9039	30		Averaged	
Methyl acetate	0.2276	0.19293		.01		-15.23286	40		Averaged	
Methylene chloride	50	51.93	50			3.86	30		Linear	
tert-Butyl methyl ether	0.829	0.73181		.01		-11.72376	30		Averaged	
trans-1,2-Dichloroethylene	0.4414	0.41925		.01		-5.01812	30		Averaged	
Vinyl acetate	0.5665	0.51649		.01		-8.82789	40		Averaged	
1,1-Dichloroethane	0.5226	0.49861		.1		-4.59051	30		Averaged	spcc
2-Butanone	0.2664	0.2199		.01		-17.45495	40		Averaged	
cis-1,2-Dichloroethylene	0.5024	0.46991		.01		-6.46696	30		Averaged	
2,2-Dichloropropane	0.46	0.45955		.01		-0.09783	30		Averaged	
Bromochloromethane	0.1151	0.11988		.01		4.15291	30		Averaged	
Chloroform	0.5087	0.50167		.01		-1.38195	20		Averaged	ccc
1,1,1-Trichloroethane	0.4877	0.47832		.01		-1.92331	30		Averaged	
Cyclohexane	0.5241	0.52514		.01		0.19844	30		Averaged	
1,1-Dichloropropene	0.374	0.38435		.01		2.76738	30		Averaged	
Carbon tetrachloride	0.4241	0.42968		.01		1.31573	30		Averaged	
1,2-Dichloroethane	0.4784	0.41872		.01		-12.47492	30		Averaged	
Benzene	0.9421	0.96361		.01		2.2832	30		Averaged	
Cyclohexene	0.5227	0.52965		.01		1.32963	30		Averaged	
n-Butyl alcohol	0.0091	0.00931		.01		2.30769	40		Averaged	
Trichloroethylene	0.2624	0.2722		.01		3.73476	30		Averaged	
1,2-Dichloropropane	0.2719	0.26107		.01		-3.98308	20		Averaged	ccc
Methylcyclohexane	0.4278	0.46183		.01		7.95465	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 09-FEB-10 17:01

Data File: 020910\AX202.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100209-01 Quant Type ISTD

Method: 122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Dibromomethane	0.1569	0.15688		.01		-0.01275	30		Averaged
Bromodichloromethane	0.3724	0.36454		.01		-2.11063	30		Averaged
2-Chloroethylvinyl ether	0.145	0.15293		.01		5.46897	30		Averaged
cis-1,3-Dichloropropylene	0.4071	0.41818		.01		2.72169	30		Averaged
4-Methyl-2-pentanone	0.1672	0.17369		.01		3.88158	40		Averaged
Toluene	1.3614	1.43074		.01		5.09329	20		Averaged ccc
trans-1,3-Dichloropropylene	0.5532	0.56531		.01		2.18908	30		Averaged
1,1,2-Trichloroethane	0.2311	0.24307		.01		5.17958	30		Averaged
1,3-Dichloropropane	0.5246	0.52558		.01		0.18681	30		Averaged
2-Hexanone	0.4858	0.43447		.01		-10.56608	40		Averaged
Tetrachloroethylene	0.2815	0.32427		.01		15.19361	30		Averaged
Dibromochloromethane	0.3376	0.34334		.01		1.70024	30		Averaged
1,2-Dibromoethane	0.2877	0.30383		.01		5.60653	30		Averaged
Chlorobenzene	0.8588	0.89401		.3		4.09991	30		Averaged spcc
1,1,1,2-Tetrachloroethane	0.3379	0.35725		.01		5.72655	30		Averaged
Ethylbenzene	1.6471	1.73788		.01		5.51151	20		Averaged ccc
m,p-Xylenes	0.5869	0.6222		.01		6.01465	30		Averaged
o-Xylene	0.5842	0.61368		.01		5.04622	30		Averaged
Styrene	0.9515	1.01047		.01		6.19758	30		Averaged
Bromoform	0.4035	0.43915		.1		8.83519	30		Averaged spcc
Isopropylbenzene	2.8546	2.98222		.01		4.47068	30		Averaged
1,1,2,2-Tetrachloroethane	0.6415	0.67647		.3		5.45129	30		Averaged spcc
1,2,3-Trichloropropane	0.1977	0.20092		.01		1.62873	30		Averaged
Bromobenzene	0.656	0.72548		.01		10.59146	30		Averaged
n-Propylbenzene	3.3917	3.59707		.01		6.05508	30		Averaged
2-Chlorotoluene	0.61	0.64753		.01		6.15246	30		Averaged
1,3,5-Trimethylbenzene	2.4291	2.52248		.01		3.84422	30		Averaged
4-Chlorotoluene	2.1429	2.17336		.01		1.42144	30		Averaged
tert-Butylbenzene	0.4589	0.50882		.01		10.87819	30		Averaged
1,2,4-Trimethylbenzene	2.4767	2.58437		.01		4.34732	30		Averaged
sec-Butylbenzene	3.06	3.28024		.01		7.19739	30		Averaged
4-Isopropyltoluene	2.4837	2.6504		.01		6.71176	30		Averaged
1,3-Dichlorobenzene	1.1925	1.32879		.01		11.42893	30		Averaged
1,4-Dichlorobenzene	1.2344	1.37477		.01		11.37152	30		Averaged
n-Butylbenzene	2.5295	2.75612		.01		8.95908	30		Averaged
1,2-Dichlorobenzene	1.1797	1.30302		.01		10.45351	30		Averaged
1,2-Dibromo-3-chloropropane	50	48.55	50			-2.9	30		Linear

Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 09-FEB-10 17:01

Data File: 020910\AX202.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100209-01 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0142	1.18984		.01		17.31808	30		Averaged
Hexachlorobutadiene	0.6896	0.82284		.01		19.32135	30		Averaged
Naphthalene	2.2052	2.35955		.01		6.99937	30		Averaged
1,2,3-Trichlorobenzene	0.9577	1.09851		.01		14.70293	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX202.D
Acq On : 9 Feb 2010 5:01 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A]100126-01B/100206-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 20:39:54 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	9.342	9.342	1.000	96	1396930	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	997004	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	581443	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1396930	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	997004	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	581443	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	502783	43.28	ug/L	0.00
43) Toluene-d8	10.987	10.987	0.878	98	1332504	49.67	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	560282	47.35	ug/L	0.00
Target Compounds								
2) Dichlorodifluoromethane	3.731	3.731	0.399	85	316711	47.40	ug/L	100
3) Chloromethane	4.043	4.043	0.433	50	357226	39.10	ug/L	98
4) Vinyl chloride	4.265	4.265	0.457	62	401053	48.38	ug/L	99
5) Bromomethane	4.839	4.839	0.518	94	287161	55.46	ug/L	98
6) Chloroethane	4.990	4.990	0.534	64	169431	55.12	ug/L	97
7) Trichlorofluoromethane	5.382	5.382	0.576	101	657519	52.02	ug/L	100
8) Ethyl ether	5.732	5.732	0.614	59	321458	47.82	ug/L	93
9) Acetone	6.082	6.082	0.651	43	1181877	176.91	ug/L	88
10) 1,1-Dichloroethylene	6.082	6.082	0.651	61	612277	48.29	ug/L	94
11) Iodomethane	6.305	6.305	0.675	142	2861982	269.62	ug/L	96
12) Acetonitrile	6.418	6.421	0.687	41	1053777	956.96	ug/L	99
13) Methyl acetate	6.481	6.481	0.694	43	1347578	211.88	ug/L	94
14) Carbon disulfide	6.428	6.428	0.688	76	5595514	279.75	ug/L	100
15) Methylene chloride	6.651	6.651	0.712	84	349843	51.93	ug/L	86
16) tert-Butyl methyl ether	6.973	6.973	0.746	73	1022293	44.14	ug/L	98
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	585665	47.50	ug/L	91
18) Vinyl acetate	7.454	7.454	0.798	43	3607467	227.93	ug/L	95
19) 1,1-Dichloroethane	7.472	7.471	0.800	63	696527	47.71	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	1535891	206.35	ug/L	91
21) cis-1,2-Dichloroethylene	8.108	8.108	0.868	61	656431	46.77	ug/L	92
22) 2,2-Dichloropropane	8.136	8.140	0.871	77	641958	49.95	ug/L	86
23) Bromochloromethane	8.373	8.373	0.896	128	167460	52.09	ug/L	# 87
24) Chloroform	8.423	8.423	0.902	83	700794	49.30	ug/L	100
25) 1,1,1-Trichloroethane	8.692	8.692	0.930	97	668178	49.04	ug/L	97
26) Cyclohexane	8.791	8.791	0.941	56	733584	50.10	ug/L	95
27) 1,1-Dichloropropene	8.851	8.851	0.947	75	536917	51.39	ug/L	86
28) Carbon tetrachloride	8.886	8.886	0.951	117	600232	50.66	ug/L	100
30) 1,2-Dichloroethane	9.063	9.063	0.970	62	584929	43.77	ug/L	99
31) Benzene	9.084	9.084	0.972	78	1346097	51.14	ug/L	95
32) Cyclohexene	9.204	9.208	0.985	67	739881	50.66	ug/L	93
33) n-Butyl alcohol	9.463	9.462	1.013	56	1300194	5112.77	ug/L	89
34) Trichloroethylene	9.731	9.731	1.042	95	380250	51.86	ug/L	100
35) 1,2-Dichloropropane	9.968	9.965	1.067	63	364700	48.02	ug/L	96
36) Methylcyclohexane	9.982	9.982	1.069	83	645142	53.98	ug/L	92
37) Dibromomethane	10.092	10.095	1.080	93	219152	50.01	ug/L	95
38) Bromodichloromethane	10.216	10.216	1.093	83	509241	48.95	ug/L	99
39) 2-Chloroethylvinyl ether	10.456	10.453	1.119	63	1068195	263.74	ug/L	98
40) cis-1,3-Dichloropropylene	10.672	10.668	1.142	75	584169	51.36	ug/L	87
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	865824	259.74	ug/L	# 80
44) Toluene	11.057	11.057	0.884	91	1426452	52.55	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX202.D
Acq On : 9 Feb 2010 5:01 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A]100126-01B/100206-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 20:39:54 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	563614	51.09	ug/L	89
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	242340	52.59	ug/L	99
47) 2-Hexanone	11.627	11.627	0.930	43	2165862	223.61	ug/L	90
48) 1,3-Dichloropropane	11.620	11.620	0.929	76	524002	50.10	ug/L #	81
49) Tetrachloroethylene	11.655	11.655	0.932	164	323298	57.60	ug/L	95
50) Dibromochloromethane	11.881	11.881	0.950	129	342314	50.85	ug/L	100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	302916	52.79	ug/L	99
52) Chlorobenzene	12.543	12.543	1.003	112	891333	52.05	ug/L	98
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007	131	356181	52.86	ug/L	98
54) Ethylbenzene	12.617	12.617	1.009	91	1732669	52.76	ug/L	99
55) m,p-Xylenes	12.730	12.730	1.018	106	1240672	106.02	ug/L	100
56) o-Xylene	13.162	13.162	1.052	106	611841	52.52	ug/L	98
57) Styrene	13.165	13.162	1.053	104	1007444	53.10	ug/L	94
59) Bromoform	13.406	13.402	0.897	173	255343	54.42	ug/L	100
60) Isopropylbenzene	13.529	13.529	0.905	105	1733989	52.24	ug/L	100
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	393330	52.73	ug/L	99
63) 1,2,3-Trichloropropane	13.879	13.879	0.929	110	116824	50.82	ug/L	99
64) Bromobenzene	13.918	13.918	0.931	156	421828	55.30	ug/L	93
65) n-Propylbenzene	13.961	13.957	0.934	91	2091490	53.03	ug/L	100
66) 1,3,5-Trimethylbenzene	14.120	14.116	0.945	105	1466681	51.92	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	376502	53.07	ug/L	95
68) 4-Chlorotoluene	14.198	14.198	0.950	91	1263683	50.71	ug/L	98
69) tert-Butylbenzene	14.488	14.488	0.969	134	295850	55.44	ug/L	89
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	1502665	52.17	ug/L	100
71) sec-Butylbenzene	14.718	14.718	0.985	105	1907273	53.60	ug/L	98
72) 4-Isopropyltoluene	14.845	14.841	0.993	119	1541055	53.36	ug/L	98
73) 1,3-Dichlorobenzene	14.887	14.884	0.996	146	772614	55.71	ug/L	96
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	799350	55.68	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	1602528	54.48	ug/L	100
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	757631	55.23	ug/L	96
77) 1,2-Dibromo-3-chloropr...	16.196	16.192	1.084	157	87553	48.55	ug/L	93
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	691824	58.66	ug/L	100
79) Hexachlorobutadiene	17.367	17.360	1.162	225	478433	59.66	ug/L	99
80) Naphthalene	17.529	17.529	1.173	128	1371944	53.50	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	638721	57.35	ug/L	100
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.866	5.898	0.628		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.425	6.188	0.688		0m	N.D.	d	
88) Allyl chloride	6.418	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.485	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.976	6.895	0.747		0m	N.D.	d	
91) Isopropyl ether	7.450	7.489	0.797		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.617	7.581	0.815		0m	N.D.	d	
93) Ethyl tert-butyl ether	8.112	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.059	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.416	8.306	0.901		0m	N.D.	d	
97) Tetrahydrofuran	8.430	8.430	0.902		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	
99) Methyl tert-amyl ether	9.084	9.127	0.972		0m	N.D.	d	
100) Methyl methacrylate	9.979	9.968	1.068		0m	N.D.	d	
101) 1,4-Dioxane	10.092	10.060	1.080		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX202.D
Acq On : 9 Feb 2010 5:01 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A]100126-01B/100206-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 20:39:54 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

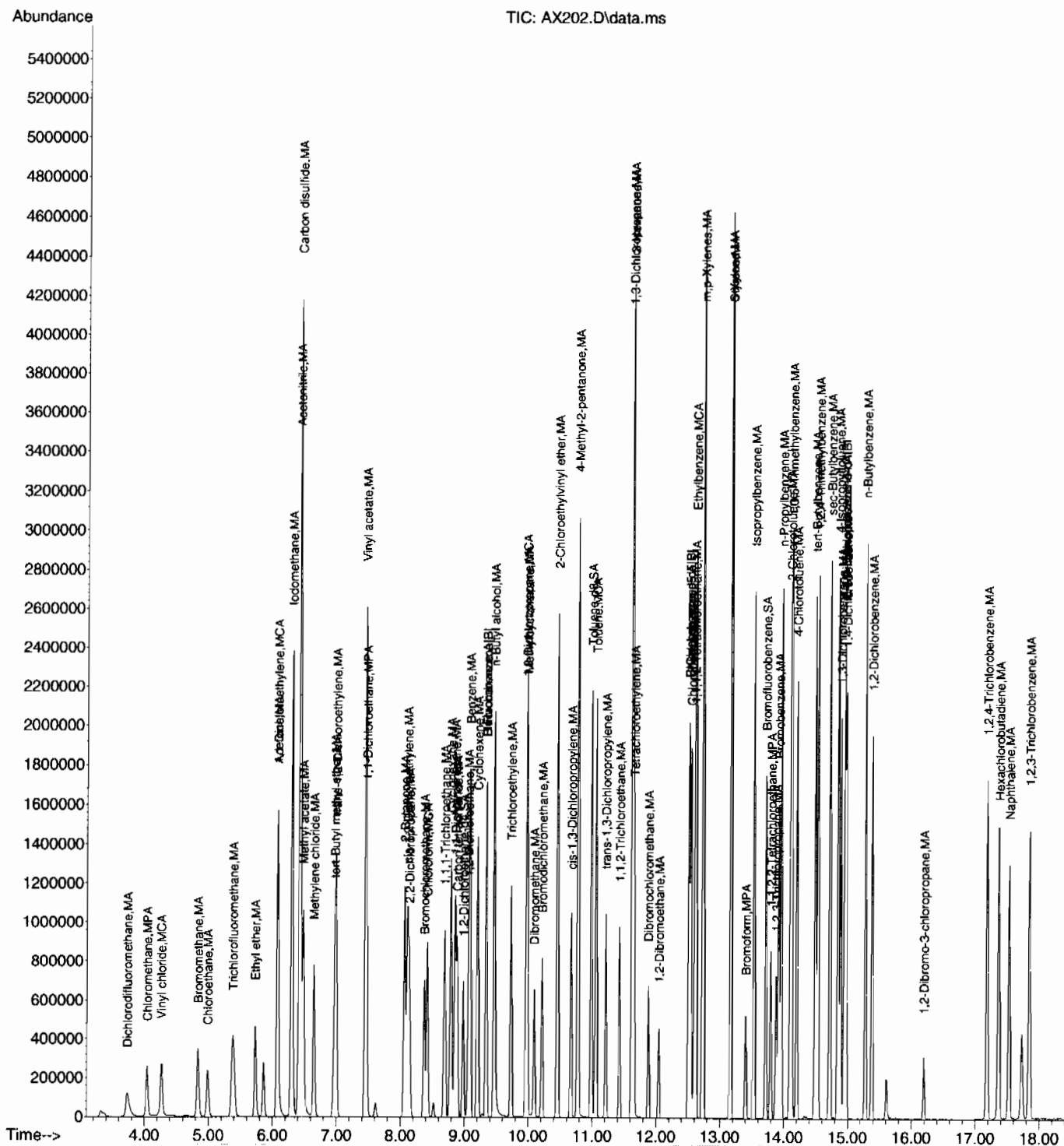
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	10.400	10.414	1.113		0m	N.D.	d
104) Ethyl methacrylate	10.990	11.238	0.879		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.526	13.657	0.905		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	14.541	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	15.276	15.082	1.022		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044		0m	N.D.	d

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

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX202.D
Acq On : 9 Feb 2010 5:01 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[A]|100126-01B|100206-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 20:39:54 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-1510

Instrument ID: VOAA.I

Injection Date 09-FEB-10 18:15

Data File: 020910\AX204.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100209-03

Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.4158	0.3506		.01		-15.68062	30		Averaged
SToluene-d8	1.3455	1.34625		.01		0.05574	30		Averaged
SBromofluorobenzene	1.0176	0.97479		.01		-4.20696	30		Averaged
Acrolein	0.0493	0.04726		.01		-4.13793	30		Averaged
Trichlorotrifluoroethane	0.1038	0.10755		.01		3.61272	30		Averaged
Allyl chloride	0.471	0.36642		.01		-22.20382	30		Averaged
Acrylonitrile	0.1026	0.09701		.01		-5.44834	30		Averaged
2-Chloro-1,3-butadiene	0.4845	0.41074		.01		-15.22394	30		Averaged
Ethyl acetate	0.2917	0.22391		.01		-23.23963	40		Averaged
Propionitrile	0.0396	0.03888		.01		-1.81818	30		Averaged
Methacrylonitrile	0.183	0.14209		.01		-22.35519	30		Averaged
Tetrahydrofuran	0.0904	0.07533		.01		-16.67035	30		Averaged
Isobutyl alcohol	0.0117	0.00919		.01		-21.45299	40		Averaged
Methyl methacrylate	0.1606	0.16311		.01		1.56289	30		Averaged
1,4-Dioxane	0.0025	0.00275		.01		10	40		Averaged
2-Nitropropane	0.0854	0.07204		.01		-15.64403	30		Averaged
Ethyl methacrylate	0.4209	0.44684		.01		6.16298	30		Averaged
cis-1,4-Dichloro-2-butene	0.2673	0.27635		.01		3.38571	30		Averaged
Cyclohexanone	0.1254	0.02625		.01		-79.06699	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.253	0.26391		.01		4.31225	30		Averaged
Pentachloroethane	0.1965	0.42726		.01		117.43511	30	*	Averaged
Benzyl chloride	1.0648	1.43434		.01		34.70511	30	*	Averaged
bis(2-Chloroisopropyl)ether	0.4315	0.40129		.01		-7.00116	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX204.D
Acq On : 9 Feb 2010 6:15 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-03|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B]100118-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 19:52:13 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1443707	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	1019514	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	592868	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1443707	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	1019514	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	592868	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	506170	42.16	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	1372525	50.03	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	577920	47.90	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.033	4.043	0.432		0m	N.D.	d	
4) Vinyl chloride	4.255	4.265	0.455		0m	N.D.	d	
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.089	6.082	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.082	6.082	0.651		0m	N.D.	d	
11) Iodomethane	6.301	6.305	0.674		0m	N.D.	d	
12) Acetonitrile	6.432	6.421	0.688		0m	N.D.	d	
13) Methyl acetate	6.489	6.481	0.695		0m	N.D.	d	
14) Carbon disulfide	6.425	6.428	0.688		0m	N.D.	d	
15) Methylene chloride	6.655	6.651	0.712		0m	N.D.	d	
16) tert-Butyl methyl ether	6.969	6.973	0.746		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.998	6.994	0.749		0m	N.D.	d	
18) Vinyl acetate	7.454	7.454	0.798		0m	N.D.	d	
19) 1,1-Dichloroethane	7.585	7.471	0.812		0m	N.D.	d	
20) 2-Butanone	8.094	8.062	0.866		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.094	8.108	0.866		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.419	8.423	0.901		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.780	8.791	0.940		0m	N.D.	d	
27) 1,1-Dichloropropene	8.854	8.851	0.948		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	9.059	9.063	0.970		0m	N.D.	d	
31) Benzene	9.088	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	9.204	9.208	0.985		0m	N.D.	d	
33) n-Butyl alcohol	9.466	9.462	1.013		0m	N.D.	d	
34) Trichloroethylene	9.735	9.731	1.042		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	9.968	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	9.968	10.216	1.067		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	10.449	10.453	1.118		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	10.672	10.668	1.142		0m	N.D.	d	
42) 4-Methyl-2-pentanone	10.771	10.774	0.861		0m	N.D.	d	
44) Toluene	11.057	11.057	0.884		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX204.D
Acq On : 9 Feb 2010 6:15 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-03|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B]100118-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 19:52:13 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
45) trans-1,3-Dichloroprop...	11.217	11.213	0.897		0m	N.D.	d
46) 1,1,2-Trichloroethane	11.422	11.429	0.913		0m	N.D.	d
47) 2-Hexanone	11.627	11.627	0.930		0m	N.D.	d
48) 1,3-Dichloropropane	11.613	11.620	0.928		0m	N.D.	d
49) Tetrachloroethylene	11.652	11.655	0.932		0m	N.D.	d
50) Dibromochloromethane	11.652	11.881	0.932		0m	N.D.	d
51) 1,2-Dibromoethane	12.048	12.044	0.963		0m	N.D.	d
52) Chlorobenzene	12.543	12.543	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007		0m	N.D.	d
54) Ethylbenzene	12.617	12.617	1.009		0m	N.D.	d
55) m,p-Xylenes	12.730	12.730	1.018		0m	N.D.	d
56) o-Xylene	13.162	13.162	1.052		0m	N.D.	d
57) Styrene	13.162	13.162	1.052		0m	N.D.	d
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.529	13.529	0.905		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	13.788	13.795	0.923		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.922	13.918	0.932		0m	N.D.	d
65) n-Propylbenzene	13.957	13.957	0.934		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945		0m	N.D.	d
67) 2-Chlorotoluene	14.095	14.095	0.943		0m	N.D.	d
68) 4-Chlorotoluene	14.198	14.198	0.950		0m	N.D.	d
69) tert-Butylbenzene	14.541	14.488	0.973		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972		0m	N.D.	d
71) sec-Butylbenzene	14.718	14.718	0.985		0m	N.D.	d
72) 4-Isopropyltoluene	14.841	14.841	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	14.884	14.884	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d
75) n-Butylbenzene	15.082	15.276	1.009		0m	N.D.	d
76) 1,2-Dichlorobenzene	15.379	15.379	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d
80) Naphthalene	17.530	17.529	1.173		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	5.901	5.898	0.632	56	341117	239.79 ug/L	94
86) Trichlorotrifluoroethane	6.071	6.068	0.650	85	776334	258.97 ug/L	91
87) Isopropyl Alcohol	0.000	6.188	0.000		0m	N.D.	d
88) Allyl chloride	6.510	6.506	0.697	41	2645038	194.48 ug/L	91
89) tert-Butyl Alcohol	0.000	6.687	0.000		0m	N.D.	d
90) Acrylonitrile	6.899	6.895	0.738	53	700234	236.46 ug/L	98
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.585	7.581	0.812	53	592987	42.38 ug/L	85
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0m	N.D.	d
94) Ethyl acetate	8.094	8.094	0.866	43	1616310	191.90 ug/L	94
95) Propionitrile	8.122	8.122	0.869	54	280681	245.53 ug/L	99
96) Methacrylonitrile	8.306	8.306	0.889	41	1025677	194.15 ug/L	98
97) Tetrahydrofuran	8.430	8.430	0.902	42	543783	208.42 ug/L	86
98) Isobutyl alcohol	8.780	8.777	0.940	41	663583	1961.39 ug/L	95
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	9.968	9.968	1.067	69	1177398	253.97 ug/L	# 77
101) 1,4-Dioxane	10.060	10.060	1.077	88	198834	2730.91 ug/L	92

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX204.D
Acq On : 9 Feb 2010 6:15 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-03|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B]100118-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 19:52:13 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

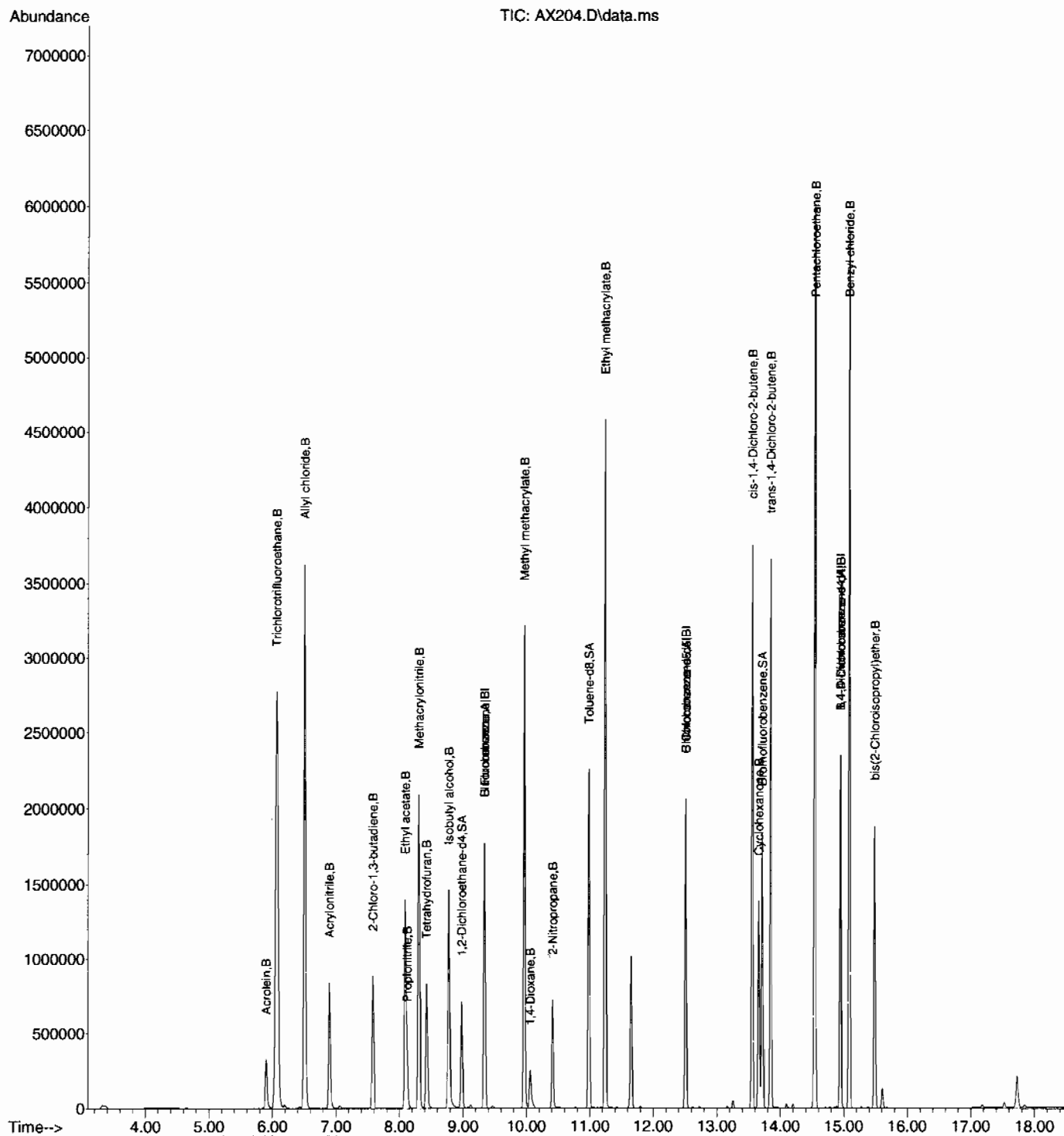
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
102) 2-Nitropropane	10.414	10.414	1.115	43	520020	210.89	ug/L	100
104) Ethyl methacrylate	11.238	11.238	0.898	69	2277782	265.38	ug/L	83
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	13.558	13.554	0.907	53	819193	258.45	ug/L	89
108) Cyclohexanone	13.660	13.657	0.914	42	389052	261.75	ug/L	79
109) trans-1,4-Dichloro-2-b...	13.848	13.844	0.927	53	782322	260.80	ug/L	82
110) Pentachloroethane	14.544	14.541	0.973	167	1266538	543.54	ug/L	94 E
111) Benzyl chloride	15.082	15.082	1.009	91	4251857	336.77	ug/L	98
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	1189570	232.50	ug/L	91

(#) = 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\020910\
Data File : AX204.D
Acq On : 9 Feb 2010 6:15 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM100209-03|CCV|1|VOA|1|VOA8260BL|
Misc : GEEL 5ML N/A MIX[B]100118-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 19:52:13 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



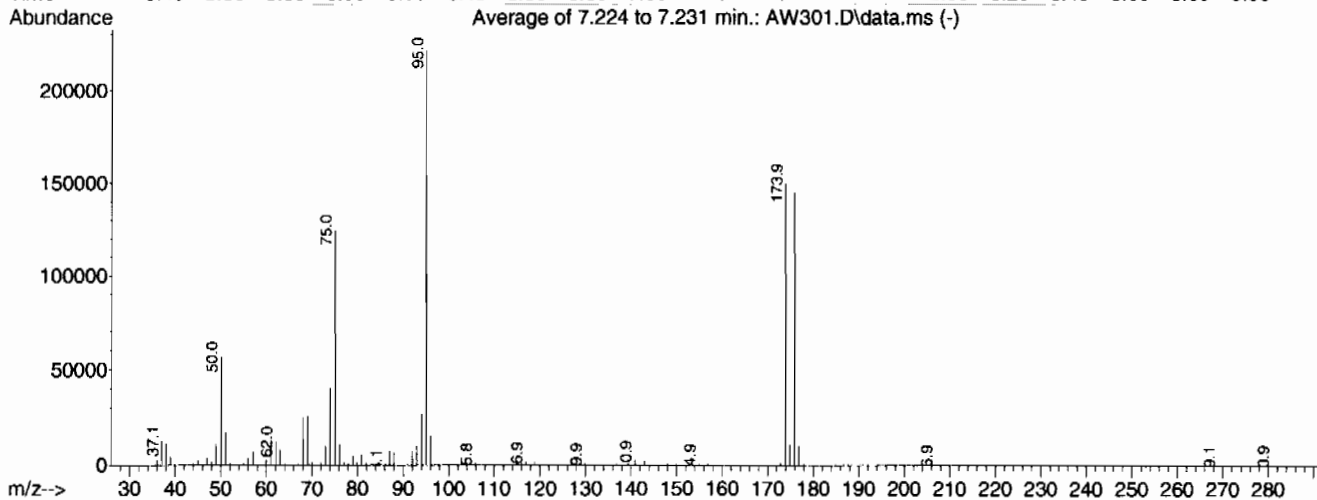
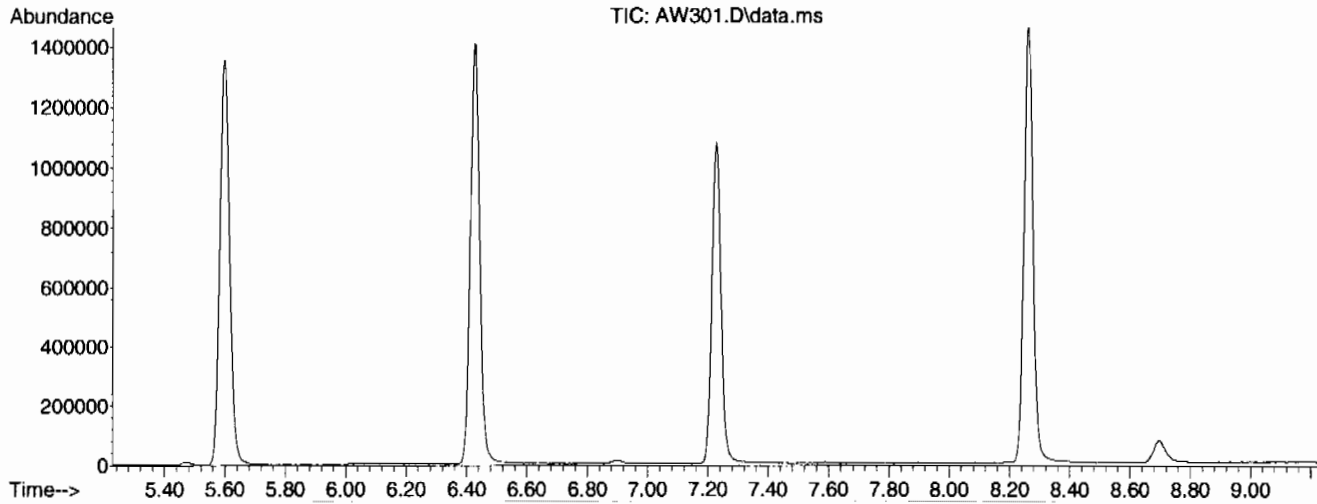
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\
Data File : AW301.D
Acq On : 2 Feb 2010 10:04 pm
Operator : JEB
Sample : |UVM100114-02|BFB|1|VOA|1|
Misc : GEL 5ML N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Jan 27 17:03:34 2010



AutoFind: Scans 835, 836, 837; Background Corrected with Scan 818

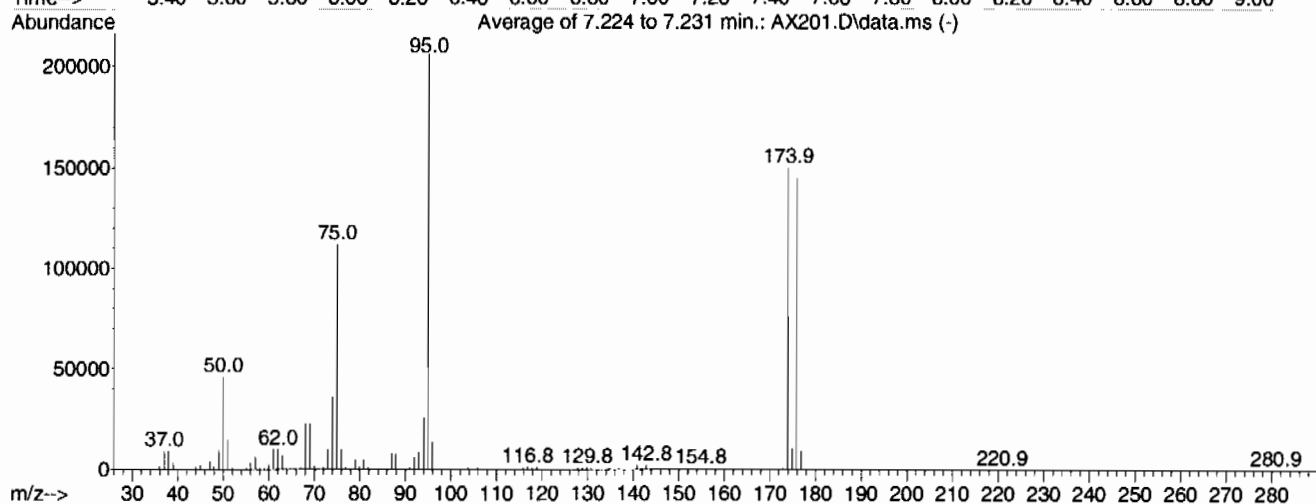
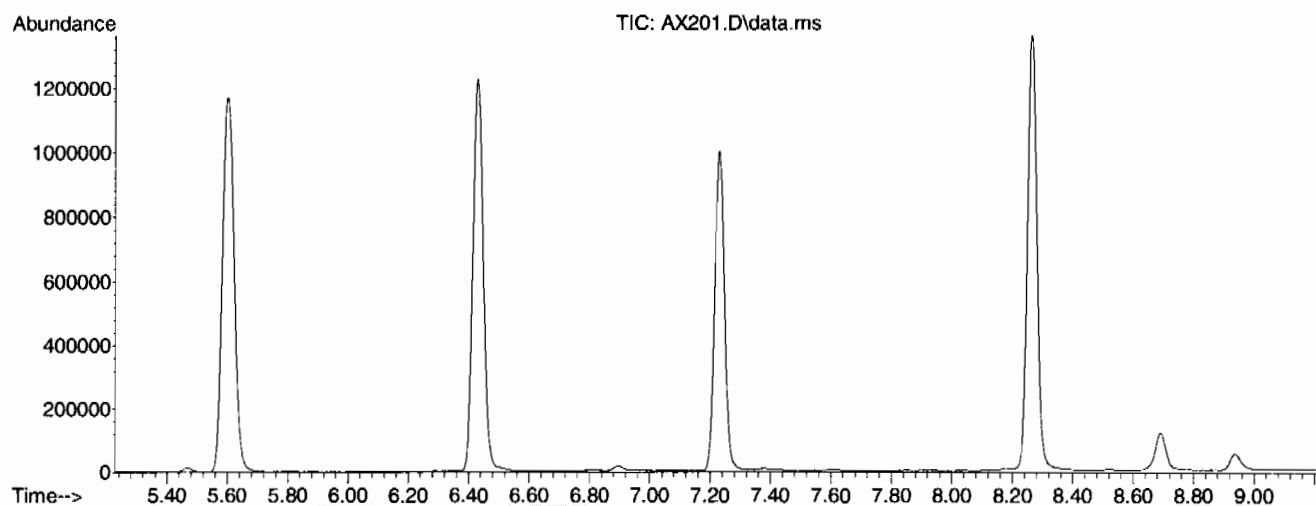
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.6	56651	PASS
75	95	30	60	56.3	124699	PASS
95	95	100	100	100.0	221440	PASS
96	95	5	9	6.9	15318	PASS
173	174	0.00	2	0.6	868	PASS
174	95	50	100	67.7	149909	PASS
175	174	5	9	6.8	10237	PASS
176	174	95	101	96.7	144960	PASS
177	176	5	9	6.9	10065	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX201.D
Acq On : 9 Feb 2010 4:37 pm
Operator : JEB
Sample : |UVM100114-02|BFB|1|VOA|1|
Misc : GEL 5ML N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Feb 03 22:34:28 2010



AutoFind: Scans 835, 836, 837; Background Corrected with Scan 818

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	45915	PASS
75	95	30	60	54.4	111893	PASS
95	95	100	100	100.0	205781	PASS
96	95	5	9	6.7	13710	PASS
173	174	0.00	2	0.4	664	PASS
174	95	50	100	73.0	150165	PASS
175	174	5	9	6.9	10394	PASS
176	174	95	101	96.6	145109	PASS
177	176	5	9	6.5	9373	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Matrix: SOIL	
Lab Sample ID: 1202038395		
Client Sample: QC for batch 951184	Client: LANL010	Project: QC
Client ID: MB for batch 951184	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 951185	Inst: VOAA.J	Dilution: 1
Run Date: 02/09/2010 19:08	Analyst: JEB	Purge Vol: 5 mL
Prep Date: 02/09/2010 16:11	Aliquot: 5 g	Final Volume: 5 mL
Data File: 020910\AX206LA.D	Column: DB-624	

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510
Lab Sample ID: 1202038395
Client Sample: QC for batch 951184
Client ID: MB for batch 951184
Batch ID: 951185
Run Date: 02/09/2010 19:08
Prep Date: 02/09/2010 16:11
Data File: 020910\AX206L.A.D

Client: LANL010
Method: SW846 8260B
Inst: VOAA.I
Analyst: JEB
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
	<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
	unknown siloxane	17.73	11	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX206LA.D
Acq On : 9 Feb 2010 7:08 pm
Operator : JEB
InstName : VOAA
Sample : |1202038395|951185|1|VOA|1|VOA8260BS|
Misc : GEEL 5G N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 09 19:54:15 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1414560	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	999180	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	574900	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1414560	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	999180	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	574900	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.962	65	463580	39.40	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 78.80%			
43) Toluene-d8	10.987	10.987	0.878	98	1324642	49.27	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 98.54%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	545672	46.64	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 93.28%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	1434	N.D.		
4) Vinyl chloride	4.245	4.265	0.455	62	1501	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.092	6.082	0.652	43	3887	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	6.425	6.421	0.688	41	360	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.428	6.428	0.688	76	3340	N.D.		
15) Methylene chloride	6.641	6.651	0.711	84	5006	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.069	8.062	0.864	43	719	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX206LA.D
Acq On : 9 Feb 2010 7:08 pm
Operator : JEB
InstName : VOAA
Sample : |1202038395|951185|1|VOA|1|VOA8260BS|
Misc : GEEL 5G N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 09 19:54:15 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	1487	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	11.634	11.627	0.930	43	1099	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	12.546	12.543	1.003	112	676	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.008	91	719	N.D.	
55) m,p-Xylenes	12.730	12.730	1.018	106	272	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	13.165	13.162	1.052	104	884	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.717	13.529	0.918	105	109	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.918	13.918	0.931	156	159	N.D.	
65) n-Propylbenzene	13.961	13.957	0.934	91	926	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	14.198	0.950	91	2051	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	370	N.D.	
71) sec-Butylbenzene	14.530	14.718	0.972	105	370	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.887	14.884	0.996	146	1419	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	2402	N.D.	
75) n-Butylbenzene	15.276	15.276	1.022	91	641	N.D.	
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	1149	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	2130	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	7508	N.D.	
81) 1,2,3-Trichlorobenzene	17.839	17.847	1.194	180	1638	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	6.503	6.506	0.696	41	134	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	6.906	6.895	0.739	53	2027	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.069	8.094	0.864	43	719	N.D.	
95) Propionitrile	8.129	8.122	0.870	54	459	N.D.	
96) Methacrylonitrile	8.306	8.306	0.889	41	1949	N.D.	
97) Tetrahydrofuran	8.441	8.430	0.904	42	1169	N.D.	
98) Isobutyl alcohol	8.777	8.777	0.940	41	2257	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX206LA.D
Acq On : 9 Feb 2010 7:08 pm
Operator : JEB
InstName : VOAA
Sample : |1202038395|951185|1|VOA|1|VOA8260BS|
Misc : GEEL 5G N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 09 19:54:15 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

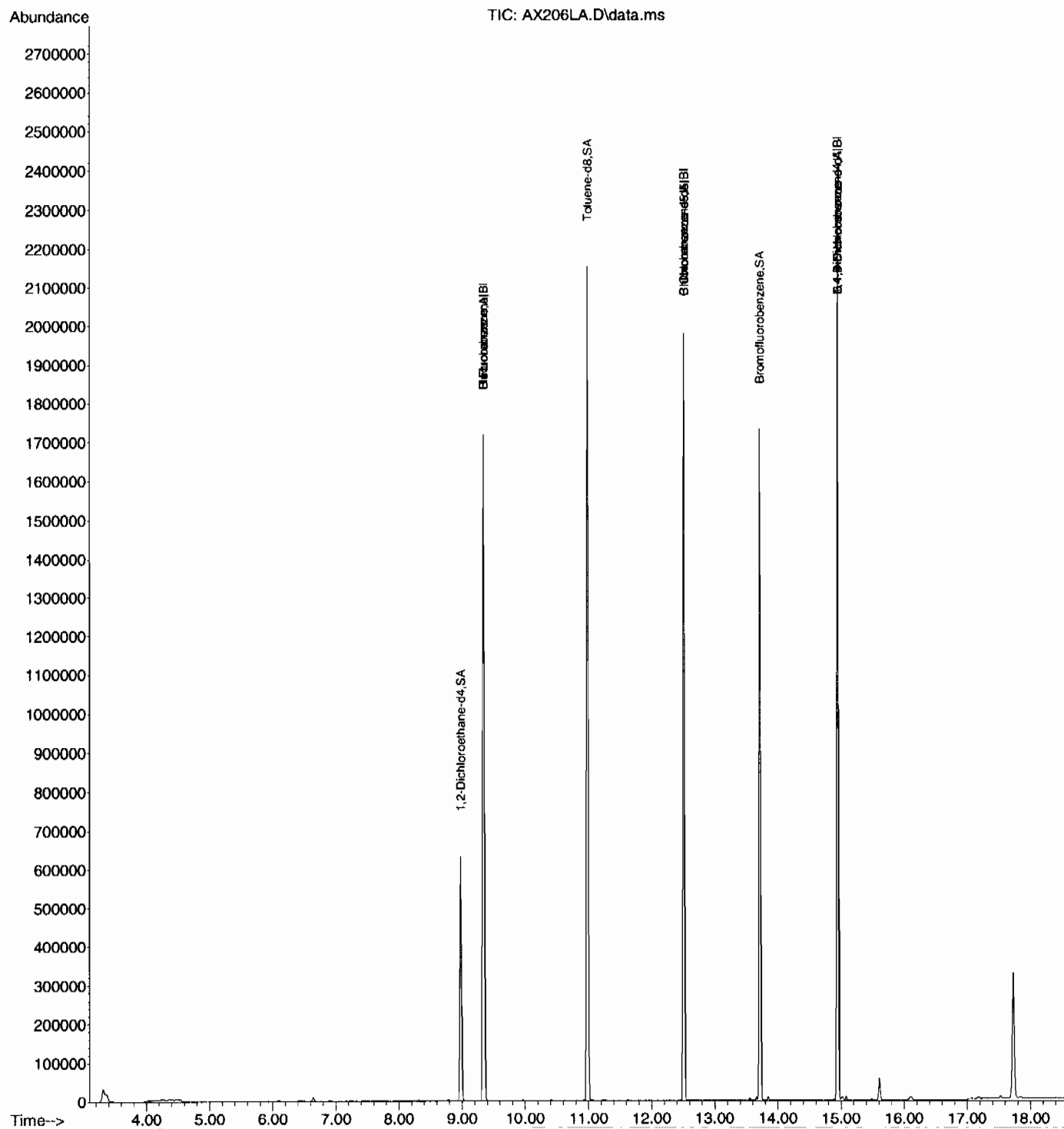
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	9.961	9.968	1.067	69	1181	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	10.414	10.414	1.115	43	1564	N.D.	
104) Ethyl methacrylate	11.241	11.238	0.899	69	2058	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.558	13.554	0.907	53	2036	N.D.	
108) Cyclohexanone	13.660	13.657	0.914	42	2324	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.082	15.082	1.009	91	10546	N.D.	
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	3802	N.D.	

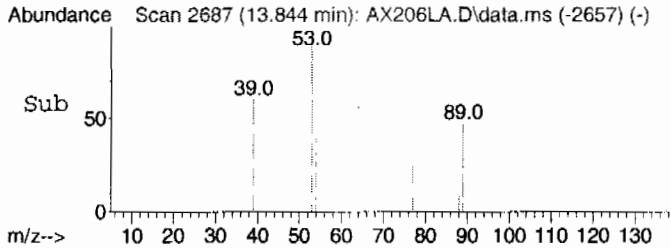
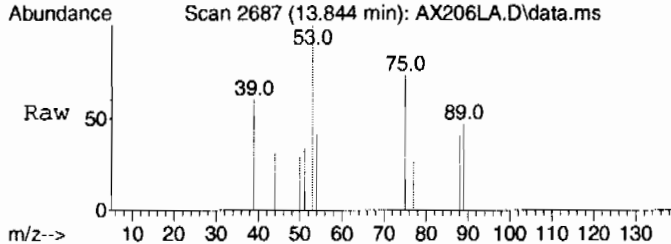
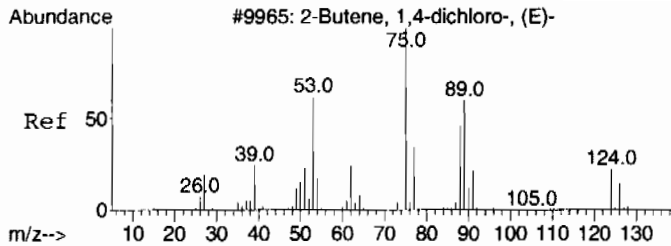
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX206LA.D
Acq On : 9 Feb 2010 7:08 pm
Operator : JEB
InstName : VOAA
Sample : |1202038395|951185|1|VOA|1|VOA8260BS|
Misc : GEEL 5G N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

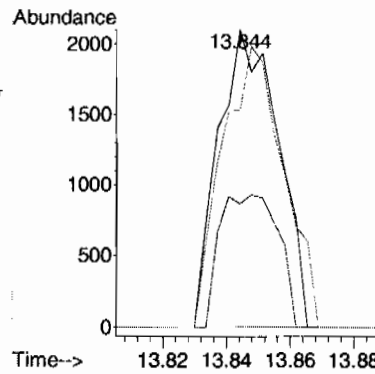
Quant Time: Feb 09 19:54:15 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 0.94 ug/L
 RT: 13.844 min Scan# 2687
 Delta R.T. -0.000 min
 Lab File: AX206LA.D
 Acq: 9 Feb 2010 7:08 pm

Tgt Ion: 53 Resp: 2734
 Ion Ratio Lower Upper
 53 100
 88 43.4 21.0 81.0
 75 96.4 61.9 121.9



Page: 1

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX206LA.D
Acq On : 9 Feb 2010 7:08 pm
Operator : JEB
Sample : |1202038395|951185|1|VOA|1|VOA8260BS|
Misc : GEEL 5G N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	17.729	11.0	ug/L	768683	6	14.944	3498090	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202038398

Client Sample: QC for batch 951184

Client: LANL010

Project: QC

Client ID: LCS for batch 951184

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 951185

Inst: VOAA.I

Dilution: 1

Run Date: 02/09/2010 17:49

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/09/2010 16:11

Aliquot: 5 g

Final Volume: 5 mL

Data File: 020910\AX203LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		34.9	ug/kg	0.340	1.00
74-87-3	Chloromethane		30.0	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		39.3	ug/kg	0.300	1.00
74-83-9	Bromomethane		45.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		45.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		43.1	ug/kg	0.300	1.00
67-64-1	Acetone		173	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		39.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		225	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		238	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		40.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		42.1	ug/kg	0.300	1.00
78-93-3	2-Butanone		198	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		41.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		43.6	ug/kg	0.300	1.00
67-66-3	Chloroform		44.0	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		47.6	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		42.9	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		45.7	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		44.1	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		40.1	ug/kg	0.300	1.00
71-43-2	Benzene		45.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		46.5	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		44.0	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		44.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		46.4	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		250	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.5	ug/kg	0.300	1.00
108-88-3	Toluene		47.4	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		47.3	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		49.5	ug/kg	0.300	1.00
591-78-6	2-Hexanone		207	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		47.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		52.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		46.8	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		49.8	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		48.6	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
 Lab Sample ID: 1202038398
 Client Sample: QC for batch 951184
 Client ID: LCS for batch 951184
 Batch ID: 951185
 Run Date: 02/09/2010 17:49
 Prep Date: 02/09/2010 16:11
 Data File: 020910\AX203LA.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		95.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		47.8	ug/kg	0.300	1.00
100-42-5	Styrene		48.3	ug/kg	0.300	1.00
75-25-2	Bromoform		51.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		51.3	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		50.4	ug/kg	0.300	1.00
108-86-1	Bromobenzene		51.9	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		47.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		46.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		46.8	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		46.8	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		50.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		46.7	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		48.1	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		47.8	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		52.3	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		51.8	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		48.7	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		49.2	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		48.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		51.4	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX203LA.D
Acq On : 9 Feb 2010 5:49 pm
Operator : JEB
InstName : VOAA
Sample : |1202038398|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOILMIX [A] 100126-01B/100206-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 20:40:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1450439	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	1030853	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	601075	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1450439	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	1030853	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	601075	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	516667	42.83	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	85.66%			
43) Toluene-d8	10.983	10.987	0.878	98	1380857	49.78	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.56%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	582505	47.62	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	95.24%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	242120	34.90	ug/L	100
3) Chloromethane	4.044	4.043	0.433	50	284564	30.00	ug/L	98
4) Vinyl chloride	4.265	4.265	0.457	62	338467	39.33	ug/L	98
5) Bromomethane	4.839	4.839	0.518	94	243127	45.22	ug/L	98
6) Chloroethane	4.990	4.990	0.534	64	147628	45.85	ug/L	96
7) Trichlorofluoromethane	5.378	5.382	0.576	101	565330	43.08	ug/L	99
8) Ethyl ether	5.728	5.732	0.613	59	281584	40.34	ug/L	92
9) Acetone	6.078	6.082	0.651	43	1196658	172.52	ug/L	88
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	513120	38.98	ug/L	94
11) Iodomethane	6.301	6.305	0.675	142	2475306	224.59	ug/L	96
12) Acetonitrile	6.418	6.421	0.687	41	1090153	953.47	ug/L	100
13) Methyl acetate	6.478	6.481	0.694	43	1329053	201.26	ug/L	93
14) Carbon disulfide	6.425	6.428	0.688	76	4944208	238.07	ug/L	100
15) Methylene chloride	6.648	6.651	0.712	84	328535	46.90	ug/L	85
16) tert-Butyl methyl ether	6.969	6.973	0.746	73	973036	40.46	ug/L	98
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749	61	523363	40.88	ug/L	91
18) Vinyl acetate	7.450	7.454	0.798	43	3391644	206.39	ug/L	94
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	637707	42.07	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	1529027	197.85	ug/L	91
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	604573	41.48	ug/L	90
22) 2,2-Dichloropropane	8.133	8.140	0.871	77	581115	43.55	ug/L	85
23) Bromochloromethane	8.370	8.373	0.896	128	158782	47.57	ug/L #	85
24) Chloroform	8.419	8.423	0.902	83	648648	43.95	ug/L	99
25) 1,1,1-Trichloroethane	8.692	8.692	0.931	97	606478	42.87	ug/L	97
26) Cyclohexane	8.787	8.791	0.941	56	662487	43.57	ug/L	95
27) 1,1-Dichloropropene	8.851	8.851	0.948	75	496105	45.73	ug/L	85
28) Carbon tetrachloride	8.883	8.886	0.951	117	542603	44.11	ug/L	100
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	556015	40.07	ug/L	98
31) Benzene	9.081	9.084	0.972	78	1250509	45.76	ug/L	95
32) Cyclohexene	9.201	9.208	0.985	67	648069	42.74	ug/L	93
33) n-Butyl alcohol	9.459	9.462	1.013	56	1453572	5505.03	ug/L	88
34) Trichloroethylene	9.728	9.731	1.042	95	354348	46.54	ug/L	99
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	346707	43.96	ug/L	96
36) Methylcyclohexane	9.979	9.982	1.069	83	586087	47.23	ug/L	91
37) Dibromomethane	10.092	10.095	1.081	93	210900	46.35	ug/L	94
38) Bromodichloromethane	10.212	10.216	1.094	83	478607	44.31	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119	63	883204	210.02	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX203LA.D
Acq On : 9 Feb 2010 5:49 pm
Operator : JEB
InstName : VOAA
Sample : |1202038398|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOILMIX [A] 100126-01B/100206-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 20:40:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	548517	46.45	ug/L	87
42) 4-Methyl-2-pentanone	10.771	10.774	0.861	58	860331	249.62	ug/L #	79
44) Toluene	11.058	11.057	0.884	91	1331097	47.42	ug/L	100
45) trans-1,3-Dichloroprop...	11.210	11.213	0.896	75	539647	47.32	ug/L	89
46) 1,1,2-Trichloroethane	11.425	11.429	0.913	83	235798	49.49	ug/L	99
47) 2-Hexanone	11.623	11.627	0.929	43	2077885	207.48	ug/L	90
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	511088	47.26	ug/L #	80
49) Tetrachloroethylene	11.652	11.655	0.932	164	305383	52.62	ug/L	92
50) Dibromochloromethane	11.882	11.881	0.950	129	325957	46.83	ug/L	100
51) 1,2-Dibromoethane	12.041	12.044	0.963	107	295296	49.78	ug/L	100
52) Chlorobenzene	12.539	12.543	1.003	112	861122	48.64	ug/L	98
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	339055	48.67	ug/L	99
54) Ethylbenzene	12.614	12.617	1.008	91	1612717	47.49	ug/L	99
55) m,p-Xylenes	12.727	12.730	1.018	106	1154739	95.43	ug/L	100
56) o-Xylene	13.158	13.162	1.052	106	575389	47.77	ug/L	97
57) Styrene	13.162	13.162	1.052	104	947396	48.29	ug/L	94
59) Bromoform	13.402	13.402	0.897	173	249910	51.52	ug/L	100
60) Isopropylbenzene	13.526	13.529	0.905	105	1609412	46.90	ug/L	100
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	395195	51.25	ug/L	99
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	119825	50.42	ug/L	97
64) Bromobenzene	13.918	13.918	0.932	156	409534	51.93	ug/L	91
65) n-Propylbenzene	13.957	13.957	0.934	91	1931340	47.37	ug/L	100
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945	105	1366450	46.79	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	356744	48.65	ug/L	95
68) 4-Chlorotoluene	14.198	14.198	0.950	91	1205360	46.79	ug/L	98
69) tert-Butylbenzene	14.488	14.488	0.970	134	276715	50.16	ug/L #	87
70) 1,2,4-Trimethylbenzene	14.527	14.530	0.972	105	1390042	46.69	ug/L	100
71) sec-Butylbenzene	14.714	14.718	0.985	105	1769084	48.09	ug/L	98
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1426588	47.78	ug/L	97
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	749336	52.27	ug/L	96
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	768570	51.79	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	1480922	48.70	ug/L	100
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	728684	51.38	ug/L	96
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	91647	49.15	ug/L	93
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	665292	54.57	ug/L	99
79) Hexachlorobutadiene	17.360	17.360	1.162	225	446333	53.84	ug/L	99
80) Naphthalene	17.530	17.529	1.173	128	1387174	52.33	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	637042	55.33	ug/L	99
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.859	5.898	0.627		0m	N.D.	d	
86) Trichlorotrifluoroethane	6.068	6.068	0.650		0m	N.D.	d	
87) Isopropyl Alcohol	6.428	6.188	0.688		0m	N.D.	d	
88) Allyl chloride	6.418	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.478	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.973	6.895	0.747		0m	N.D.	d	
91) Isopropyl ether	7.447	7.489	0.797		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.613	7.581	0.815		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.896	7.893	0.846		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.055	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.426	8.306	0.902		0m	N.D.	d	
97) Tetrahydrofuran	8.430	8.430	0.903		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX203LA.D
Acq On : 9 Feb 2010 5:49 pm
Operator : JEB
InstName : VOAA
Sample : |1202038398|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOILMIX [A] 100126-01B/100206-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 20:40:06 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.084	9.127	0.973	0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.069	0m	N.D.	d
101) 1,4-Dioxane	10.085	10.060	1.080	0m	N.D.	d
102) 2-Nitropropane	10.453	10.414	1.119	0m	N.D.	d
104) Ethyl methacrylate	11.241	11.238	0.899	0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905	0m	N.D.	d
108) Cyclohexanone	13.526	13.657	0.905	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.851	13.844	0.927	0m	N.D.	d
110) Pentachloroethane	14.544	14.541	0.973	0m	N.D.	d
111) Benzyl chloride	15.082	15.082	1.009	0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.482	15.485	1.036	0m	N.D.	d

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

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Data Path : C:\msdchem\1\DATA\020910\
Data File : AX203LA.D
Acq On    : 9 Feb 2010    5:49 pm
Operator  : JEB
InstName  : VOAA
Sample    : |1202038398|951185|1|VOA|1|VOA8260BS|
Misc      : LCS 5G N/A SOILMIX [A] 100126-01B/100206-01
ALS Vial  : 3    Sample Multiplier: 1

```

[illegible]

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202038399

Client Sample: QC for batch 951184

Client: LANL010

Project: QC

Client ID: LCS for batch 951184

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 951185

Inst: VOAA.I

Dilution: 1

Run Date: 02/09/2010 18:42

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/09/2010 16:11

Aliquot: 5 g

Final Volume: 5 mL

Data File: 020910\AX205LA.D

Column: DB-624

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202038399

Client Sample: QC for batch 951184

Client: LANL010

Project: QC

Client ID: LCS for batch 951184

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 951185

Inst: VOAA.I

Dilution: 1

Run Date: 02/09/2010 18:42

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/09/2010 16:11

Aliquot: 5 g

Final Volume: 5 mL

Data File: 020910\AX205LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		251	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\020910\
Data File : AX205LA.D
Acq On : 9 Feb 2010 6:42 pm
Operator : JEB
InstName : VOAA
Sample : |1202038399|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOIL MIX[B]100118-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 09 20:41:30 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1447065	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	1025660	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	596963	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1447065	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	1025660	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	596963	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	506518	42.09	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	84.18%			
43) Toluene-d8	10.987	10.987	0.878	98	1376644	49.88	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.76%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	580570	47.79	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	95.58%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431		0m	N.D.	d	
4) Vinyl chloride	4.255	4.265	0.455		0m	N.D.	d	
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.089	6.082	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.078	6.082	0.651		0m	N.D.	d	
11) Iodomethane	6.301	6.305	0.674		0m	N.D.	d	
12) Acetonitrile	6.428	6.421	0.688		0m	N.D.	d	
13) Methyl acetate	6.485	6.481	0.694		0m	N.D.	d	
14) Carbon disulfide	6.510	6.428	0.697		0m	N.D.	d	
15) Methylene chloride	6.655	6.651	0.712		0m	N.D.	d	
16) tert-Butyl methyl ether	6.966	6.973	0.746		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.454	7.454	0.798		0m	N.D.	d	
19) 1,1-Dichloroethane	7.585	7.471	0.812		0m	N.D.	d	
20) 2-Butanone	8.094	8.062	0.866		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.094	8.108	0.866		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.419	8.423	0.901		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.777	8.791	0.939		0m	N.D.	d	
27) 1,1-Dichloropropene	8.780	8.851	0.940		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	9.088	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	9.463	9.462	1.013		0m	N.D.	d	
34) Trichloroethylene	9.731	9.731	1.042		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	9.965	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	9.965	10.216	1.067		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX205LA.D
Acq On : 9 Feb 2010 6:42 pm
Operator : JEB
InstName : VOAA
Sample : |1202038399|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOIL MIX[B]100118-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 09 20:41:30 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	10.771	10.774	0.861		0m	N.D.	d
44) Toluene	11.058	11.057	0.884		0m	N.D.	d
45) trans-1,3-Dichloroprop...	11.220	11.213	0.897		0m	N.D.	d
46) 1,1,2-Trichloroethane	11.425	11.429	0.913		0m	N.D.	d
47) 2-Hexanone	11.623	11.627	0.929		0m	N.D.	d
48) 1,3-Dichloropropane	11.620	11.620	0.929		0m	N.D.	d
49) Tetrachloroethylene	11.652	11.655	0.931		0m	N.D.	d
50) Dibromochloromethane	11.652	11.881	0.931		0m	N.D.	d
51) 1,2-Dibromoethane	12.041	12.044	0.962		0m	N.D.	d
52) Chlorobenzene	12.543	12.543	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007		0m	N.D.	d
54) Ethylbenzene	12.617	12.617	1.008		0m	N.D.	d
55) m,p-Xylenes	12.727	12.730	1.017		0m	N.D.	d
56) o-Xylene	13.165	13.162	1.052		0m	N.D.	d
57) Styrene	13.165	13.162	1.052		0m	N.D.	d
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.530	13.529	0.905		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	13.848	13.795	0.927		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.922	13.918	0.932		0m	N.D.	d
65) n-Propylbenzene	13.961	13.957	0.934		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.120	14.116	0.945		0m	N.D.	d
67) 2-Chlorotoluene	14.099	14.095	0.943		0m	N.D.	d
68) 4-Chlorotoluene	14.198	14.198	0.950		0m	N.D.	d
69) tert-Butylbenzene	14.541	14.488	0.973		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972		0m	N.D.	d
71) sec-Butylbenzene	14.721	14.718	0.985		0m	N.D.	d
72) 4-Isopropyltoluene	14.838	14.841	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	14.880	14.884	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d
75) n-Butylbenzene	15.082	15.276	1.009		0m	N.D.	d
76) 1,2-Dichlorobenzene	15.379	15.379	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d
80) Naphthalene	17.530	17.529	1.173		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	5.902	5.898	0.632	56	331390	232.41 ug/L	94
86) Trichlorotrifluoroethane	6.075	6.068	0.650	85	753274	250.70 ug/L	90
87) Isopropyl Alcohol	0.000	6.188	0.000		0m	N.D.	d
88) Allyl chloride	6.510	6.506	0.697	41	2580712	189.31 ug/L	91
89) tert-Butyl Alcohol	0.000	6.687	0.000		0m	N.D.	d
90) Acrylonitrile	6.899	6.895	0.738	53	694145	233.86 ug/L	98
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.585	7.581	0.812	53	580301	41.38 ug/L	85
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0m	N.D.	d
94) Ethyl acetate	8.094	8.094	0.866	43	1589269	188.25 ug/L	94
95) Propionitrile	8.122	8.122	0.869	54	277329	242.04 ug/L	98
96) Methacrylonitrile	8.306	8.306	0.889	41	1011918	191.10 ug/L	98
97) Tetrahydrofuran	8.430	8.430	0.902	42	537960	205.71 ug/L	86
98) Isobutyl alcohol	8.780	8.777	0.940	41	651799	1922.09 ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX205LA.D
Acq On : 9 Feb 2010 6:42 pm
Operator : JEB
InstName : VOAA
Sample : |1202038399|951185|1|VOA|1|VOA8260BS|
Misc : LCS 5G N/A SOIL MIX[B]100118-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 09 20:41:30 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.		
100) Methyl methacrylate	9.968	9.968	1.067	69	1157199	249.03	ug/L	# 77
101) 1,4-Dioxane	10.060	10.060	1.077	88	192709	2640.64	ug/L	91
102) 2-Nitropropane	10.414	10.414	1.115	43	512457	207.34	ug/L	100
104) Ethyl methacrylate	11.238	11.238	0.898	69	2270169	262.91	ug/L	82
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	13.558	13.554	0.907	53	806635	252.74	ug/L	89
108) Cyclohexanone	13.660	13.657	0.914	42	382047	255.28	ug/L	79
109) trans-1,4-Dichloro-2-b...	13.848	13.844	0.927	53	770820	255.20	ug/L	82
110) Pentachloroethane	14.544	14.541	0.973	167	1212006	516.57	ug/L	94 E
111) Benzyl chloride	15.082	15.082	1.009	91	4138390	325.53	ug/L	98
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	1175369	228.15	ug/L	91

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

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Data Path : C:\msdchem\1\DATA\020910\
Data File : AX205LA.D
Acq On    : 9 Feb 2010    6:42 pm
Operator  : JEB
InstName  : VOA
Sample    : |1202038399|951185|1|VOA|1|VOA8260BS|
Misc      : LCS 5G N/A SOIL MIX[B]100118-08B
ALS Vial  : 5    Sample Multiplier: 1

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TIC: AX205LA.D\data.ms

Abundance

Time-->

7000000

6500000

6000000

5500000

5000000

4500000

4000000

3500000

3000000

2500000

2000000

1500000

1000000

500000

0

4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00

Acrolein, B

Trichlorotrifluoroethane, B

Allyl chloride, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Propionitrile, B

Ethyl acetate, B

Methacrylonitrile, B

Tetrahydrofuran, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

Bis(2-chloroisopropyl) ether, B

1,4-Dioxane, B

2-Nitropropane, B

Toluene-d8, SA

Ethyl methacrylate, B

Methyl methacrylate, B

Bis(2-chloroisopropyl) ether, B

cis-1,4-Dichloro-2-butene, B

trans-1,4-Dichloro-2-butene, B

Cyclohexanone, B

Benzoic acid, B

Pentachloroethane, B

Benzyl chloride, B

Bis(2-chloroisopropyl) ether, B

4-Bromobenzonitrile, B

Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: 951184 Verified by: _____
Analyst: John Bell, Jr.
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 14
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1	Serial Number	Spike Amount	Spike Units
1202038395 MB	09-FEB-2010 16:11:00	Soil	5	5	1				
1202038398 LCS	09-FEB-2010 16:11:00	Soil	5	5	1				
1202038399 LCS	09-FEB-2010 16:11:00	Soil	5	5	1				
245955001	09-FEB-2010 18:03:00	Soil	5	5	1				
245955002	09-FEB-2010 18:04:00	Soil	5.2	5	0.96154				
245955003	09-FEB-2010 18:05:00	Soil	5.2	5	0.96154				
245959001	09-FEB-2010 18:06:00	Soil	5.2	5	0.96154				
245959002	09-FEB-2010 18:07:00	Soil	5	5	1				
245959003	09-FEB-2010 18:08:00	Soil	5.3	5	0.9434				
245959004	09-FEB-2010 18:09:00	Soil	5.1	5	0.98039				
245959005	09-FEB-2010 18:10:00	Soil	5	5	1				
245959006	09-FEB-2010 18:11:00	Soil	5.4	5	0.92593				
245959007	09-FEB-2010 18:12:00	Soil	5.4	5	0.92593				
245959008	09-FEB-2010 18:13:00	Soil	5	5	1				
245959009	09-FEB-2010 18:14:00	Soil	5.2	5	0.96154				
245959010	09-FEB-2010 18:15:00	Soil	5.2	5	0.96154				
245959011	09-FEB-2010 18:16:00	Soil	5.1	5	0.98039				
245959012	09-FEB-2010 18:17:00	Soil	5.3	5	0.9434				
1202038396 PS (245955001)	09-FEB-2010 18:18:00	Soil	5.1	5	0.98039				
1202038397 PSD (245955001)	09-FEB-2010 18:19:00	Soil	5.1	5	0.98039				

Reagent/Solvent Lot ID	Description	Amount	Comments:
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Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX225.D
Acq On : 10 Feb 2010 3:27 am
Operator : JEB
InstName : VOAA
Sample : |1202038396|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 13:30:22 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	9.339	9.342	1.000	96	1115798	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	804204	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	469722	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1115798	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	804204	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	469722	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	449860	48.48	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	96.96%			
43) Toluene-d8	10.983	10.987	0.878	98	1071564	49.52	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.04%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	467277	48.88	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	97.76%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	201158	37.69	ug/L	100
3) Chloromethane	4.033	4.043	0.432	50	218860	29.99	ug/L	98
4) Vinyl chloride	4.265	4.265	0.457	62	251767	38.03	ug/L	98
5) Bromomethane	4.839	4.839	0.518	94	171706	41.52	ug/L	99
6) Chloroethane	4.990	4.990	0.534	64	108607	43.74	ug/L	99
7) Trichlorofluoromethane	5.378	5.382	0.576	101	409371	40.55	ug/L	99
8) Ethyl ether	5.732	5.732	0.614	59	185452	34.54	ug/L	99
9) Acetone	6.078	6.082	0.651	43	777201	145.65	ug/L	93
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	359542	35.50	ug/L	97
11) Iodomethane	6.301	6.305	0.675	142	1612373	190.17	ug/L	98
12) Acetonitrile	6.418	6.421	0.687	41	659059	749.31	ug/L	99
13) Methyl acetate	6.478	6.481	0.694	43	564357	111.09	ug/L	97
14) Carbon disulfide	6.425	6.428	0.688	76	3115790	195.03	ug/L	100
15) Methylene chloride	6.648	6.651	0.712	84	217890	40.33	ug/L	92
16) tert-Butyl methyl ether	6.969	6.973	0.746	73	635542	34.35	ug/L	98
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	355634	36.11	ug/L	95
18) Vinyl acetate	7.479	7.454	0.801	43	107	N.D.		
19) 1,1-Dichloroethane	7.472	7.471	0.800	63	429524	36.83	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	922579	155.18	ug/L	96
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	406079	36.22	ug/L	95
22) 2,2-Dichloropropane	8.136	8.140	0.871	77	364890	35.55	ug/L	91
23) Bromochloromethane	8.373	8.373	0.897	128	100292	39.06	ug/L	91
24) Chloroform	8.419	8.423	0.902	83	441948	38.93	ug/L	99
25) 1,1,1-Trichloroethane	8.692	8.692	0.931	97	406972	37.39	ug/L	98
26) Cyclohexane	8.787	8.791	0.941	56	332166	28.40	ug/L	98
27) 1,1-Dichloropropene	8.851	8.851	0.948	75	300874	36.05	ug/L	90
28) Carbon tetrachloride	8.886	8.886	0.952	117	342452	36.19	ug/L	100
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	391526	36.68	ug/L	99
31) Benzene	9.084	9.084	0.973	78	782596	37.22	ug/L	98
32) Cyclohexene	9.204	9.208	0.986	67	372516	31.93	ug/L	97
33) n-Butyl alcohol	9.463	9.462	1.013	56	684442	3369.56	ug/L	94
34) Trichloroethylene	9.728	9.731	1.042	95	251050	42.87	ug/L	98
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	217248	35.81	ug/L	96
36) Methylcyclohexane	9.982	9.982	1.069	83	215952	22.62	ug/L	95
37) Dibromomethane	10.092	10.095	1.081	93	132391	37.82	ug/L	97
38) Bromodichloromethane	10.216	10.216	1.094	83	307974	37.06	ug/L	100
39) 2-Chloroethylvinyl ether	10.665	10.453	1.142	63	1559	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX225.D
Acq On : 10 Feb 2010 3:27 am
Operator : JEB
InstName : VOAA
Sample : |1202038396|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 13:30:22 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	308394	33.95	ug/L	92
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	490025	182.25	ug/L	88
44) Toluene	11.058	11.057	0.884	91	762848	34.84	ug/L	99
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	306201	34.41	ug/L	92
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	139351	37.49	ug/L	99
47) 2-Hexanone	11.623	11.627	0.929	43	1250957	160.11	ug/L	95
48) 1,3-Dichloropropane	11.620	11.620	0.929	76	311387	36.91	ug/L	85
49) Tetrachloroethylene	11.652	11.655	0.932	164	147591	32.60	ug/L	95
50) Dibromochloromethane	11.882	11.881	0.950	129	186546	34.35	ug/L	100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	168977	36.51	ug/L	100
52) Chlorobenzene	12.539	12.543	1.003	112	446529	32.33	ug/L	99
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	191077	35.16	ug/L	98
54) Ethylbenzene	12.614	12.617	1.008	91	816170	30.81	ug/L	98
55) m,p-Xylenes	12.727	12.730	1.018	106	557206	59.03	ug/L	96
56) o-Xylene	13.158	13.162	1.052	106	280789	29.88	ug/L	99
57) Styrene	13.162	13.162	1.052	104	444221	29.03	ug/L	99
59) Bromoform	13.402	13.402	0.897	173	125056	32.99	ug/L	100
60) Isopropylbenzene	13.529	13.529	0.906	105	687141	25.62	ug/L	99
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	153584	25.49	ug/L	99
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	65697	35.37	ug/L	99
64) Bromobenzene	13.918	13.918	0.932	156	189853	30.81	ug/L	94
65) n-Propylbenzene	13.957	13.957	0.934	91	748005	23.48	ug/L	100
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945	105	522205	22.88	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	147586	25.75	ug/L	97
68) 4-Chlorotoluene	14.198	14.198	0.950	91	495753	24.63	ug/L	100
69) tert-Butylbenzene	14.488	14.488	0.970	134	96109	22.29	ug/L	95
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.973	105	528325	22.71	ug/L	99
71) sec-Butylbenzene	14.714	14.718	0.985	105	545849	18.99	ug/L	99
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	431035	18.47	ug/L	99
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	267012	23.83	ug/L	97
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	275929	23.79	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	383271	16.13	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	258951	23.37	ug/L	98
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	36572	25.35	ug/L	98
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	132734	13.93	ug/L	100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	71476	11.03	ug/L	100
80) Naphthalene	17.530	17.529	1.173	128	357588	17.26	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	117907	13.10	ug/L	100
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.859	5.898	0.627		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.209	6.188	0.665		0m	N.D.	d	
88) Allyl chloride	6.418	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.478	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.966	6.895	0.746		0m	N.D.	d	
91) Isopropyl ether	7.493	7.489	0.802		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.617	7.581	0.816		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.885	7.893	0.844		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.059	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.136	8.306	0.871		0m	N.D.	d	
97) Tetrahydrofuran	8.426	8.430	0.902		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX225.D
Acq On : 10 Feb 2010 3:27 am
Operator : JEB
InstName : VOAA
Sample : |1202038396|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 13:30:22 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

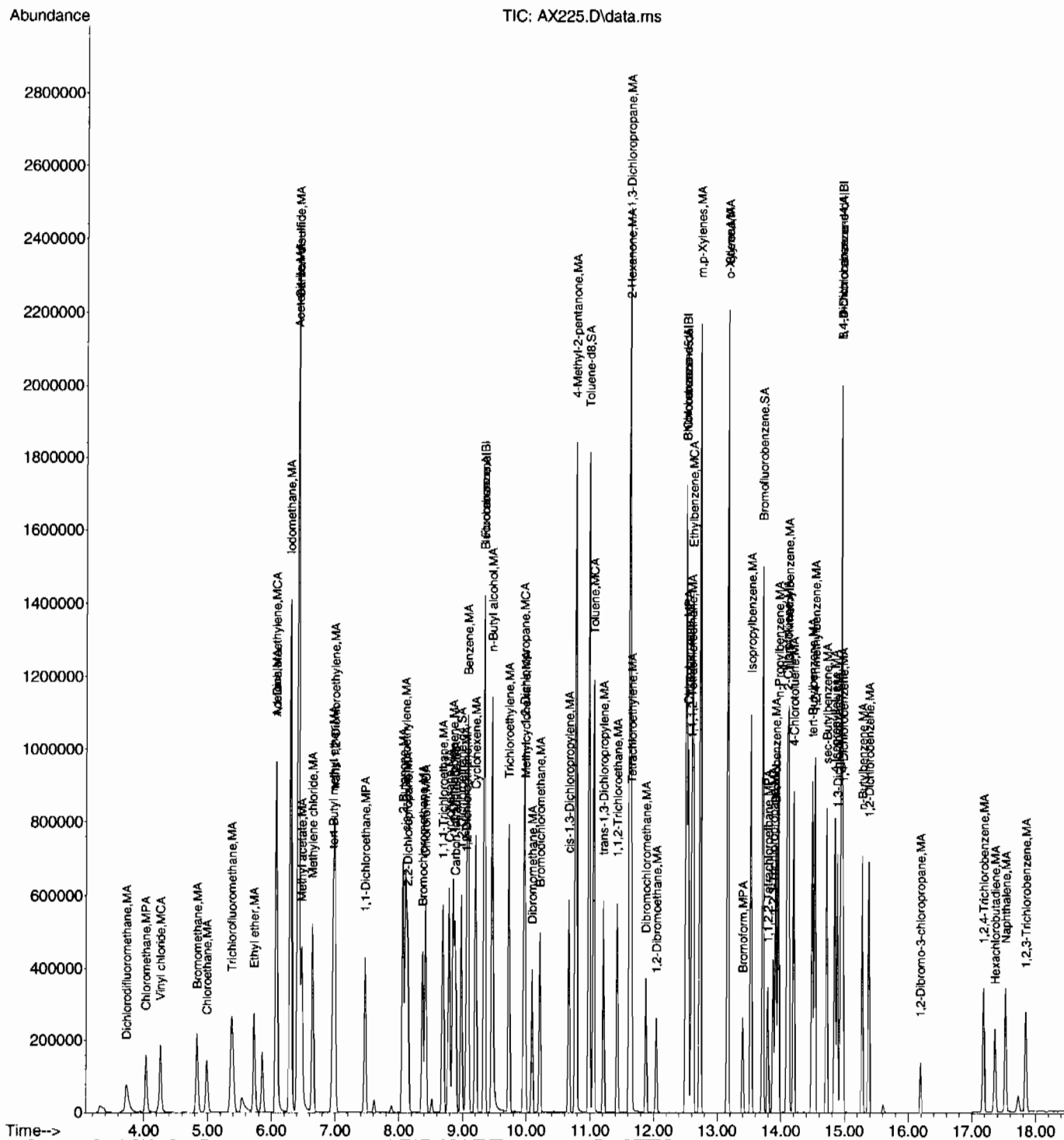
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.084	9.127	0.973		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	10.453	10.414	1.119		0m	N.D.	d
104) Ethyl methacrylate	10.990	11.238	0.879		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.529	13.657	0.906		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.957	13.844	0.934		0m	N.D.	d
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.082	15.082	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044		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\020910\
Data File : AX225.D
Acq On : 10 Feb 2010 3:27 am
Operator : JEB
InstName : VOAA
Sample : 1202038396|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 13:30:22 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX226.D
Acq On : 10 Feb 2010 3:53 am
Operator : JEB
InstName : VOAA
Sample : |1202038397|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:30:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
								Dev (Min)
Internal Standards								
1) Fluorobenzene	9.339	9.342	1.000	96	1121636	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	808468	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	476353	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1121636	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	808468	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	476353	50.00	ug/L	0.00
								Dev (Min)
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	460706	49.39	ug/L	0.00
Spiked Amount	50.000	Range 66	- 134	Recovery	= 98.78%			
43) Toluene-d8	10.983	10.987	0.878	98	1098833	50.51	ug/L	0.00
Spiked Amount	50.000	Range 71	- 128	Recovery	= 101.02%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	477708	49.28	ug/L	0.00
Spiked Amount	50.000	Range 65	- 130	Recovery	= 98.56%			
Target Compounds								
	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	3.721	3.731	0.398	85	199651	37.22	ug/L	99
3) Chloromethane	4.033	4.043	0.432	50	217625	29.67	ug/L	98
4) Vinyl chloride	4.265	4.265	0.457	62	251889	37.85	ug/L	98
5) Bromomethane	4.829	4.839	0.517	94	170163	40.93	ug/L	98
6) Chloroethane	4.980	4.990	0.533	64	107803	43.16	ug/L	97
7) Trichlorofluoromethane	5.378	5.382	0.576	101	415176	40.91	ug/L	99
8) Ethyl ether	5.725	5.732	0.613	59	181059	33.54	ug/L	93
9) Acetone	6.075	6.082	0.650	43	742621	138.45	ug/L	93
10) 1,1-Dichloroethylene	6.075	6.082	0.650	61	364163	35.77	ug/L	96
11) Iodomethane	6.298	6.305	0.674	142	1615387	189.53	ug/L	99
12) Acetonitrile	6.414	6.421	0.687	41	641461	725.50	ug/L	99
13) Methyl acetate	6.474	6.481	0.693	43	473102	92.64	ug/L	97
14) Carbon disulfide	6.421	6.428	0.688	76	3243315	201.95	ug/L	100
15) Methylene chloride	6.644	6.651	0.711	84	217009	39.95	ug/L	90
16) tert-Butyl methyl ether	6.966	6.973	0.746	73	621522	33.42	ug/L	98
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749	61	359974	36.36	ug/L	94
18) Vinyl acetate	7.475	7.454	0.800	43	112	N.D.		
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	432222	36.87	ug/L	99
20) 2-Butanone	8.059	8.062	0.863	43	886332	148.31	ug/L	95
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	405843	36.01	ug/L	94
22) 2,2-Dichloropropane	8.136	8.140	0.871	77	378477	36.68	ug/L	91
23) Bromochloromethane	8.370	8.373	0.896	128	99197	38.43	ug/L	92
24) Chloroform	8.419	8.423	0.902	83	443647	38.87	ug/L	100
25) 1,1,1-Trichloroethane	8.692	8.692	0.931	97	418737	38.27	ug/L	98
26) Cyclohexane	8.787	8.791	0.941	56	380969	32.40	ug/L	98
27) 1,1-Dichloropropene	8.847	8.851	0.947	75	318264	37.93	ug/L	90
28) Carbon tetrachloride	8.883	8.886	0.951	117	361721	38.02	ug/L	99
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	383851	35.77	ug/L	99
31) Benzene	9.084	9.084	0.973	78	800297	37.87	ug/L	97
32) Cyclohexene	9.204	9.208	0.986	67	403699	34.43	ug/L	96
33) n-Butyl alcohol	9.459	9.462	1.013	56	656269	3214.05	ug/L	93
34) Trichloroethylene	9.728	9.731	1.042	95	251067	42.65	ug/L	98
35) 1,2-Dichloropropane	9.961	9.965	1.067	63	220775	36.20	ug/L	97
36) Methylcyclohexane	9.979	9.982	1.069	83	278431	29.01	ug/L	94
37) Dibromomethane	10.089	10.095	1.080	93	131726	37.43	ug/L	96
38) Bromodichloromethane	10.212	10.216	1.094	83	309102	37.00	ug/L	99
39) 2-Chloroethylvinyl ether	10.661	10.453	1.142	63	1366	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX226.D
Acq On : 10 Feb 2010 3:53 am
Operator : JEB
InstName : VOAA
Sample : |1202038397|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:30:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	313839	34.37	ug/L	91
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	475474	175.90	ug/L	87
44) Toluene	11.057	11.057	0.884	91	804736	36.56	ug/L	100
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	308013	34.43	ug/L	92
46) 1,1,2-Trichloroethane	11.425	11.429	0.913	83	140918	37.71	ug/L	99
47) 2-Hexanone	11.623	11.627	0.929	43	1189621	151.46	ug/L	94
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	310520	36.61	ug/L	# 81
49) Tetrachloroethylene	11.652	11.655	0.932	164	168083	36.93	ug/L	95
50) Dibromochloromethane	11.881	11.881	0.950	129	189900	34.79	ug/L	99
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	170928	36.74	ug/L	99
52) Chlorobenzene	12.539	12.543	1.003	112	480719	34.62	ug/L	100
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007	131	197986	36.24	ug/L	98
54) Ethylbenzene	12.617	12.617	1.009	91	909596	34.15	ug/L	98
55) m,p-Xylenes	12.727	12.730	1.018	106	626377	66.01	ug/L	96
56) o-Xylene	13.162	13.162	1.052	106	310019	32.82	ug/L	99
57) Styrene	13.162	13.162	1.052	104	485232	31.54	ug/L	99
59) Bromoform	13.402	13.402	0.897	173	127436	33.15	ug/L	100
60) Isopropylbenzene	13.526	13.529	0.905	105	817732	30.07	ug/L	99
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	169135	27.68	ug/L	99
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	65106	34.57	ug/L	100
64) Bromobenzene	13.918	13.918	0.931	156	208757	33.40	ug/L	93
65) n-Propylbenzene	13.957	13.957	0.934	91	926958	28.69	ug/L	99
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945	105	636654	27.51	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	171464	29.50	ug/L	99
68) 4-Chlorotoluene	14.198	14.198	0.950	91	579543	28.39	ug/L	100
69) tert-Butylbenzene	14.488	14.488	0.969	134	123238	28.19	ug/L	94
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972	105	637446	27.02	ug/L	99
71) sec-Butylbenzene	14.718	14.718	0.985	105	739046	25.35	ug/L	98
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	578033	24.43	ug/L	98
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	312585	27.51	ug/L	96
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	321367	27.33	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	539648	22.39	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	296258	26.36	ug/L	97
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	37884	25.89	ug/L	97
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	158467	16.40	ug/L	100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	113323	17.25	ug/L	100
80) Naphthalene	17.530	17.529	1.173	128	398200	18.95	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	137080	15.02	ug/L	99
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	0.000	5.898	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.191	6.188	0.663		0m	N.D.	d	
88) Allyl chloride	6.414	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.478	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.962	6.895	0.746		0m	N.D.	d	
91) Isopropyl ether	7.479	7.489	0.801		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.606	7.581	0.814		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.889	7.893	0.845		0m	N.D.	d	
94) Ethyl acetate	8.059	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.055	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.133	8.306	0.871		0m	N.D.	d	
97) Tetrahydrofuran	8.423	8.430	0.902		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX226.D
Acq On : 10 Feb 2010 3:53 am
Operator : JEB
InstName : VOAA
Sample : |1202038397|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:30:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

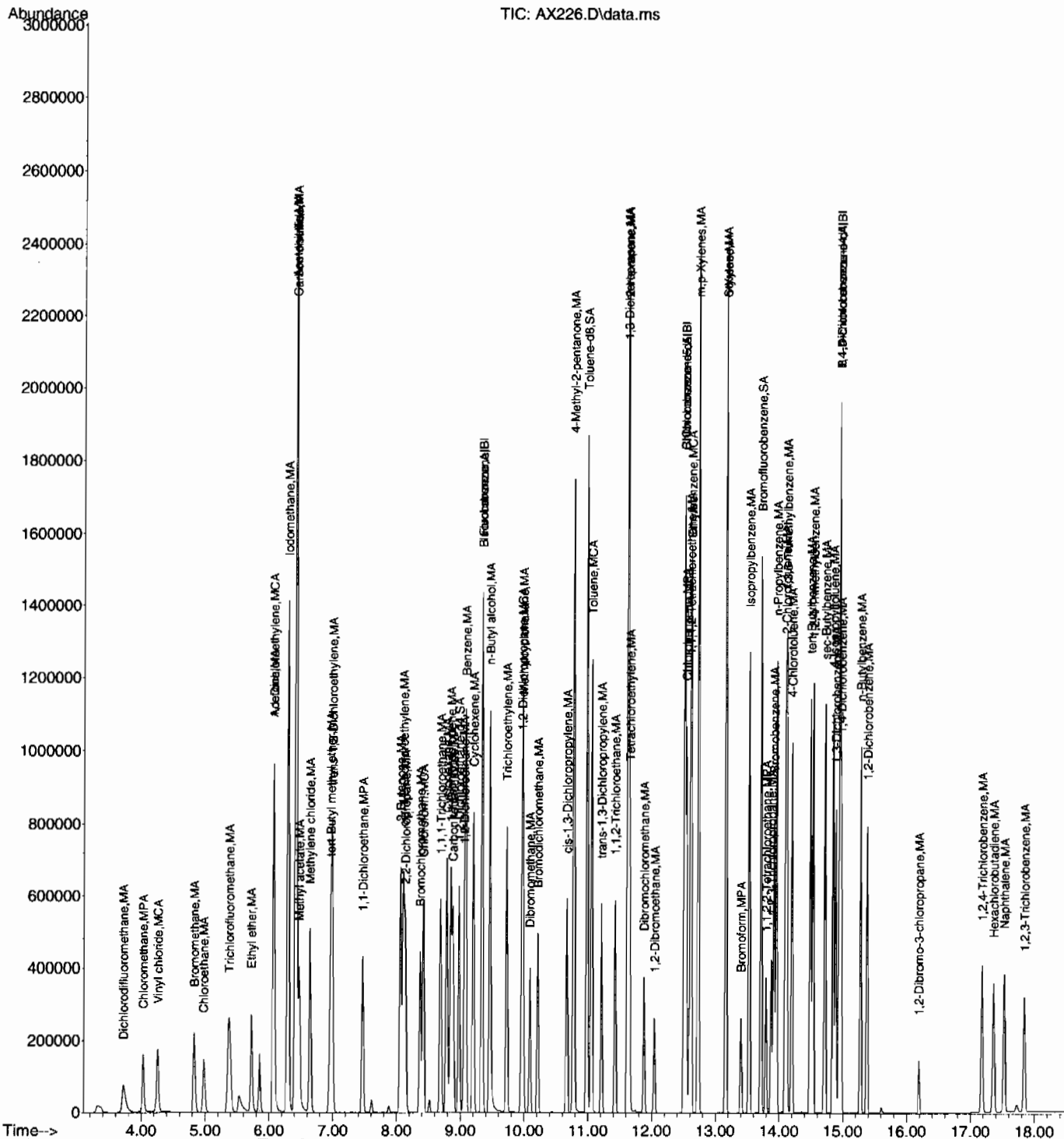
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.084	9.127	0.973		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	10.442	10.414	1.118		0m	N.D.	d
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.529	13.657	0.905		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.957	13.844	0.934		0m	N.D.	d
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.078	15.082	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044		0m	N.D.	d

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

GEL Laboratories, LLC

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Data Path : C:\msdchem\1\DATA\020910\  
Data File : AX226.D  
Acq On : 10 Feb 2010 3:53 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202038397|951185|1|VOA|1|VOA8260BS|  
Misc : LANL 5.1G N/A SOILMIX[A] 245955001MS  
ALS Vial : 26 Sample Multiplier: 1
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Quant Time: Feb 10 13:30:24 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
InstName : VOAA
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 10 13:29:52 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.342	9.342	1.000	96	1336623	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	946386	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	538041	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	1336623	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	946386	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	538041	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	487981	43.90	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 87.80%			
43) Toluene-d8	10.987	10.987	0.878	98	1255709	49.31	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 98.62%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	527760	48.20	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 96.40%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	520	N.D.		
4) Vinyl chloride	4.255	4.265	0.455	62	629	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.089	6.082	0.652	43	15684	2.45	ug/L	100
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.418	6.428	0.687	76	1497	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	8163	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.069	8.062	0.864	43	2112	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.794	8.791	0.941	56	528	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
InstName : VOAA
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 10 13:29:52 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	1832	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	11.623	11.627	0.929	43	5060	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	12.546	12.543	1.003	112	123	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.606	12.617	1.008	91	119	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	13.162	13.162	1.052	104	108	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.957	13.957	0.934	91	510	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.194	14.198	0.950	91	1170	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.534	14.530	0.973	105	113	N.D.	
71) sec-Butylbenzene	14.534	14.718	0.973	105	113	N.D.	
72) 4-Isopropyltoluene	14.848	14.841	0.994	119	1967	N.D.	
73) 1,3-Dichlorobenzene	14.887	14.884	0.996	146	698	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	1184	N.D.	
75) n-Butylbenzene	15.089	15.276	1.010	91	1190	N.D.	
76) 1,2-Dichlorobenzene	15.375	15.379	1.029	146	133	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	1322	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	5262	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	959	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.199	6.188	0.663	45	336	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	6.687	6.687	0.716	59	263	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.069	8.094	0.864	43	2112	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	8.444	8.430	0.904	42	114	N.D.	
98) Isobutyl alcohol	8.791	8.777	0.941	41	112	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
InstName : VOAA
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 10 13:29:52 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE

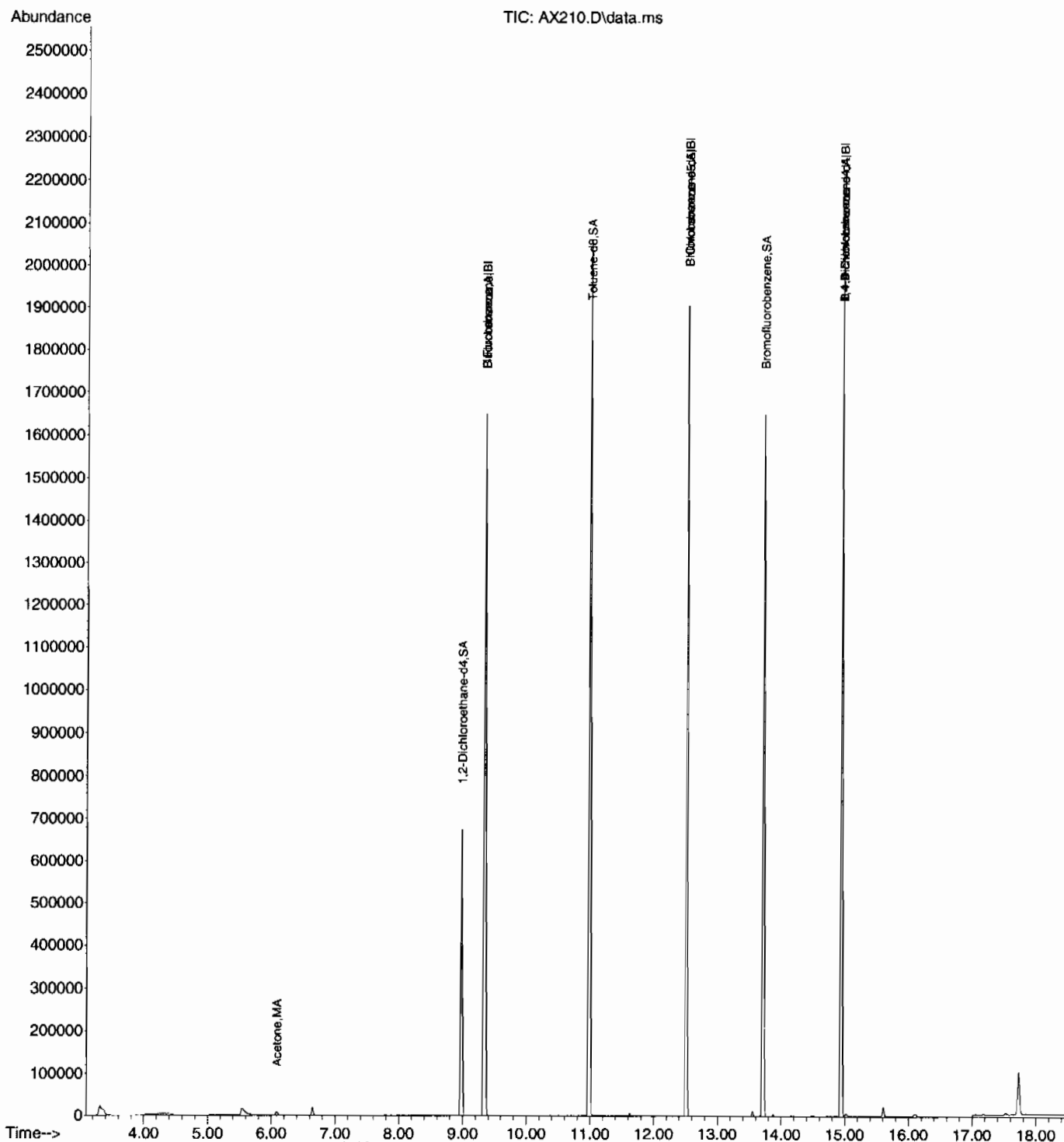
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	350	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.089	15.082	1.010	91	1190	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044	45	1702	N.D.	

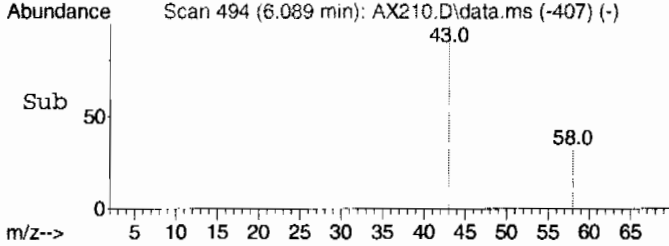
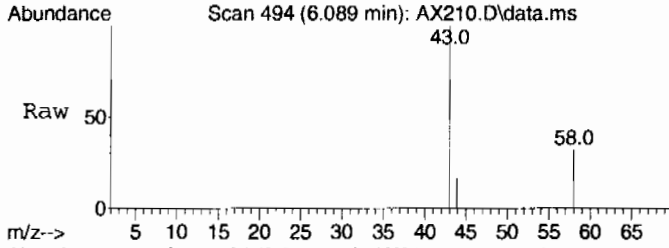
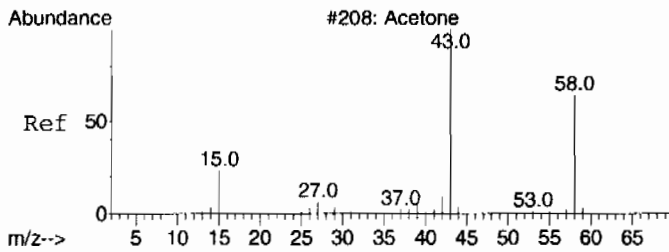
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
InstName : VOAA
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

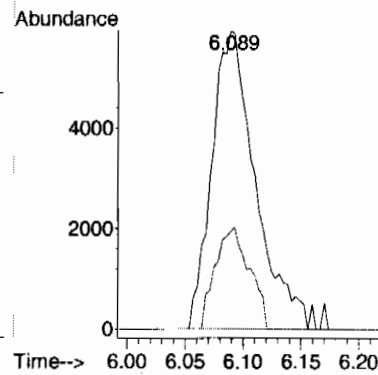
Quant Time: Feb 10 13:29:52 2010
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Feb 03 22:34:28 2010
Response via : Initial Calibration
Integrator: RTE





#9
Acetone
Concen: 2.45 ug/L
RT: 6.089 min Scan# 494
Delta R.T. 0.007 min
Lab File: AX210.D
Acq: 9 Feb 2010 8:52 pm

Tgt Ion: 43 Resp: 15684
Ion Ratio Lower Upper
43 100
58 26.8 0.0 56.6



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020910\
Data File : AX210.D
Acq On : 9 Feb 2010 8:52 pm
Operator : JEB
Sample : |245955001|951185|1|VOA|1|VOA8260BS|
Misc : LANL 5.0G N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Date: 2/2/2010 Method 8260B/624 Operator: JEB REVIEWED BY: _____
 Date: _____
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings: _____
 Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/2/2010 Daily Standard Volume Added for Purge (ul) MS/
 Bk/

Solution ID#	CCV	CCV	LCS	BFB
IS	UVM100114-01	1	1	1
SS	UVM100114-02	1	1	1
LCS/MS	N/A		5+5	
BFB	UVM100114-02			1
SHORT	N/A	5+5	5+5	
DEEC	N/A		5	

(See pg. 14 for ICAL Std. Sds) NaHSO4 lot # N/A Cl test lot # 84515
 Sequence Number: 020210VA

Purge Amount

5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS	Matrix	Analyst	C test (Y/N)	Acceptable (O/X)	Comments
2 Feb 2010	22:04	AW301.D	UVM100114-02	GEL	BFB	5ML	1	N/A	1	w	JEB	N/A	O	
2 Feb 2010	22:29	AW302.D	BLANK	GEEL	BLANK	5ML	1	N/A	2	w	JEB	N/A	O	
2 Feb 2010	22:55	AW303.D	WAVM100202-01	GEEL	ICAL	5ML	1	N/A	3	w	JEB	N/A	O	UVM100106-01B/UVM100202-01A
2 Feb 2010	23:21	AW304.D	WAVM100202-02	GEEL	ICAL	5ML	1	N/A	4	w	JEB	N/A	X	UVM100106-02B/UVM100202-02A
2 Feb 2010	23:47	AW305.D	WAVM100202-03	GEEL	ICAL	5ML	1	N/A	5	w	JEB	N/A	O	UVM100106-02B/UVM100202-02A
3 Feb 2010	00:14	AW306.D	WAVM100202-04	GEEL	ICAL	5ML	1	N/A	6	w	JEB	N/A	O	UVM100106-03B/UVM100202-03A
3 Feb 2010	00:40	AW307.D	WAVM100202-05	GEEL	ICAL	5ML	1	N/A	7	w	JEB	N/A	O	UVM100106-04B/UVM100202-04A
3 Feb 2010	01:06	AW308.D	WAVM100202-06	GEEL	ICAL	5ML	1	N/A	8	w	JEB	N/A	O	UVM100106-05B/UVM100202-05A
3 Feb 2010	01:32	AW309.D	WAVM100202-07	GEEL	ICAL	5ML	1	N/A	9	w	JEB	N/A	O	UVM100106-06B/UVM100202-06A
3 Feb 2010	01:59	AW310.D	WAVM100202-08	GEEL	ICAL	5ML	1	N/A	10	w	JEB	N/A	O	UVM100106-07B/UVM100202-07A
3 Feb 2010	02:25	AW311.D	WAVM100202-09	GEEL	ICAL	5ML	1	N/A	11	w	JEB	N/A	O	UVM100106-08B/UVM100202-08A
3 Feb 2010	02:51	AW312.D	BLANK	GEEL	BLANK	5ML	1	N/A	12	w	JEB	N/A	O	
3 Feb 2010	03:17	AW313.D	WAVM100202-10	GEEL	ICAL	5ML	1	N/A	13	w	JEB	N/A	O	UVM100118-01/UVM100125-01B
3 Feb 2010	03:43	AW314.D	WAVM100202-11	GEEL	ICAL	5ML	1	N/A	14	w	JEB	N/A	O	UVM100118-02/UVM100125-02B
3 Feb 2010	04:09	AW315.D	WAVM100202-12	GEEL	ICAL	5ML	1	N/A	15	w	JEB	N/A	O	UVM100118-03/UVM100125-03B
3 Feb 2010	04:35	AW316.D	WAVM100202-13	GEEL	ICAL	5ML	1	N/A	16	w	JEB	N/A	O	UVM100118-04/UVM100125-04B
3 Feb 2010	05:02	AW317.D	WAVM100202-14	GEEL	ICAL	5ML	1	N/A	17	w	JEB	N/A	O	UVM100118-05/UVM100125-05B
3 Feb 2010	05:28	AW318.D	WAVM100202-15	GEEL	ICAL	5ML	1	N/A	18	w	JEB	N/A	O	UVM100118-06/UVM100125-06B
3 Feb 2010	05:55	AW319.D	WAVM100202-16	GEEL	ICAL	5ML	1	N/A	19	w	JEB	N/A	O	UVM100118-07/UVM100125-07B
3 Feb 2010	06:21	AW320.D	BLANK	GEEL	BLANK	5ML	1	N/A	20	w	JEB	N/A	O	
3 Feb 2010	06:48	AW321.D	WAVM100202-17	GEEL	ICV	5ML	1	N/A	21	w	JEB	N/A	O	UVM100126-01A/UVM100202-01
3 Feb 2010	07:14	AW322.D	WAVM100202-18	GEEL	ICV	5ML	1	N/A	22	w	JEB	N/A	X	UVM100126-02A/UVM100202-01
3 Feb 2010	07:40	AW323.D	WAVM100202-19	GEEL	ICV	5ML	1	N/A	23	w	JEB	N/A	O	UVM100125-08A/UVM100118-08A

ORGANIC RUN LOG - INSTRUMENT ID#VOAA

Date: 2/9/2010 Method: 8260B/624 Operator: JEB
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1306

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/2/2010
Daily Standard Volume Added for Purge (ul) MS/ Bk/ Smp/ CCV LCS BFB
Solution ID# WAVM100209-01 5+5
IS UVM100114-01 1 1 1
SS UVM100114-02 1 1 1
LCS/MS WAVM100209-01,02 5+5
BFB UVM100114-02 1
SHORT WAVM100209-03 5+5
DHEC N/A 5
Purge Amount
5 Water Purge Vol:
VARIOUS Soil Purge Wt.
VARIOUS Mid level ext. MeOH Vol:
VARIOUS ul
N/A Methanol Lot #
x Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	pH	AS Slot #	Matrix w or s	Analyst	Ci test (Y/N)	Acceptable (Q/X)	Comments
9 Feb 2010	16:37	AX201.D	UVM100114-02	GEL	BFB	5ML	1	N/A	1	W	JEB	N/A	O	
9 Feb 2010	17:01	AX202.D	WAVM100209-01	GEL	CCV/LCS	5ML	1	N/A	2	W	JEB	N/A	O	UVM100126-01B/IVM100206-01
9 Feb 2010	17:49	AX203.D	WAVM100209-02	GEL	LCS	5GL	1	N/A	3	S	JEB	N/A	O	UVM100126-01B/IVM100206-01
9 Feb 2010	18:15	AX204.D	WAVM100209-03	GEL	CCV	5ML	1	N/A	4	W	JEB	N/A	O	UVM100118-08B
9 Feb 2010	18:42	AX205.D	WAVM100209-04	GEL	LCS	5G	1	N/A	5	W	JEB	N/A	O	UVM100118-08B
9 Feb 2010	19:08	AX206.D	BLANK	GEL	BLANK	5G	1	N/A	6	S	JEB	N/A	O	
9 Feb 2010	19:33	AX207.D	BLANK	GEL	BLANK	5ML	1	N/A	7	W	JEB	N/A	O	
9 Feb 2010	20:00	AX208.D	2 PPB	GEEL	BLANK	5ML	1	N/A	8	W	JEB	N/A	O	
9 Feb 2010	20:26	AX209.D	2 PPB	GEEL	BLANK	5ML	1	N/A	9	W	JEB	N/A	O	
9 Feb 2010	20:52	AX210.D	245955001	LANL	951185	5.0G	1	N/A	10	S	JEB	N/A	O	
9 Feb 2010	21:19	AX211.D	245955002	LANL	951185	5.2G	1	N/A	11	S	JEB	N/A	O	
9 Feb 2010	21:45	AX212.D	245955003	LANL	951185	5.2G	1	N/A	12	S	JEB	N/A	O	
9 Feb 2010	22:11	AX213.D	245959001	LANL	951185	5.2G	1	N/A	13	S	JEB	N/A	O	
9 Feb 2010	22:38	AX214.D	245959002	LANL	951185	5.0G	1	N/A	14	S	JEB	N/A	O	
9 Feb 2010	23:04	AX215.D	245959003	LANL	951185	5.3G	1	N/A	15	S	JEB	N/A	O	
9 Feb 2010	23:30	AX216.D	245959004	LANL	951185	5.1G	1	N/A	16	S	JEB	N/A	O	
9 Feb 2010	23:57	AX217.D	245959005	LANL	951185	5.0G	1	N/A	17	S	JEB	N/A	O	
2/10/2010	0:23	AX218.D	245959006	LANL	951185	5.4G	1	N/A	18	S	JEB	N/A	O	
2/10/2010	0:50	AX219.D	245959007	LANL	951185	5.4G	1	N/A	19	S	JEB	N/A	O	
2/10/2010	1:16	AX220.D	245959008	LANL	951185	5.0G	1	N/A	20	S	JEB	N/A	O	
2/10/2010	1:42	AX221.D	245959009	LANL	951185	5.2G	1	N/A	21	S	JEB	N/A	O	
2/10/2010	2:08	AX222.D	245959010	LANL	951185	5.2G	1	N/A	22	S	JEB	N/A	O	
2/10/2010	2:35	AX223.D	245959011	LANL	951185	5.1G	1	N/A	23	S	JEB	N/A	O	
2/10/2010	3:01	AX224.D	245959012	LANL	951185	5.3G	1	N/A	24	S	JEB	N/A	O	
2/10/2010	3:27	AX225.D	1202038396	LANL	951185	5.1G	1	N/A	25	S	JEB	N/A	O	SOILMIX[A] 245955001MS
2/10/2010	3:53	AX226.D	1202038397	LANL	951185	5.1G	1	N/A	26	S	JEB	N/A	O	SOILMIX[A] 245955001MS

DATA EXCEPTION REPORT

Mo.Day Yr. 15-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: 951185	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245955(10-1509),245959(10-1510) Application Issues: Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements Exception Description: 1.The Matrix Spike did not meet acceptance criteria for all recoveries. 2. The RPD recoveries for the MS/MSD (1202038396 & 1202038397) were outside acceptance criteria.		DER Disposition: The matrix spike and duplicate recovered in a similar manner therefore, it is possible that matrix interference was demonstrated.	

Originator's Name:

John Bell, Jr.

15-FEB-10

Data Validator/Group Leader:

Stacy Calloway

25-FEB-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1510**

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:	949132
Prep Batch Number:	949131

Sample Analysis

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

Sample ID	Client ID
245959001	RE15-10-7309
245959002	RE15-10-7308
245959003	RE15-10-7315
245959004	RE15-10-7317
245959005	RE15-10-7319
245959006	RE15-10-7312
245959007	RE15-10-7313
245959008	RE15-10-7314
245959009	RE15-10-7316
245959010	RE15-10-7318
245959012	RE15-10-7324
1202033476	Method Blank (MB)
1202033477	Laboratory Control Sample (LCS)
1202033478	246062001(RE52-10-12020) Matrix Spike (MS)
1202033479	246062001(RE52-10-12020) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the

'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. 2,4-Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, 2,4-Toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials. 2,4-Toluene diisocyanate is reported as an estimated value.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS failed recovery for Benzyl alcohol. Please see the spike recovery report for the specific failures. The failure represented less than 5% of the requested spike analyte list. That satisfied the clients acceptance criteria and the data were reported.

QC Sample Designation

The non-SDG sample 246062001 (RE52-10-12020) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD failed RPD for Benzoic acid and bis(2-Chloroethoxy)methane. Please see the spike recovery report for the specific failures. The MS and MSD pair passed recoveries for all analytes. Therefore, the data were reported un-qualified for the RPD value failure.

Internal Standard (ISTD) Acceptance

The internal standard responses were outside of the acceptance criteria for the following sample: 245959010 (RE15-10-7318). The sample was re-analyzed and the failures were not confirmed. The re-analysis data are reported.

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: 788971. 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
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (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: Don Buchanan Date: 2-28-10

Roadmap for LANL 10-1510 SVOA

This roadmap was analyzed by nat00999 on 02-10-2010, 07:04.

This roadmap was reviewed by dan01134 on 02-12-2010, 17:00.

Sample										
exclude	manual	datafile	smplid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0707.d	245959001	07-FEB-2010	15:09	10-1510.sub	RE15-10-7309	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0708.d	245959002	07-FEB-2010	15:37	10-1510.sub	RE15-10-7308	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0709.d	245959003	07-FEB-2010	16:05	10-1510.sub	RE15-10-7315	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0710.d	245959004	07-FEB-2010	16:32	10-1510.sub	RE15-10-7317	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0711.d	245959005	07-FEB-2010	17:00	10-1510.sub	RE15-10-7319	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0712.d	245959006	07-FEB-2010	17:28	10-1510.sub	RE15-10-7312	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0713.d	245959007	07-FEB-2010	17:55	10-1510.sub	RE15-10-7313	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0714.d	245959008	07-FEB-2010	18:23	10-1510.sub	RE15-10-7314	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0715.d	245959009	07-FEB-2010	18:50	10-1510.sub	RE15-10-7316	1	949132	
<input checked="" type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0716.d	245959010	07-FEB-2010	19:17	10-1510.sub	RE15-10-7318	1	949132	DUSE - failed IS - rr - see s6b0808
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0717.d	245959012	07-FEB-2010	19:44	10-1510.sub	RE15-10-7324	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020810.b/s6b0808.d	245959010	08-FEB-2010	17:00	10-1510.sub	RE15-10-7318	1	949132	USE - rr of s6b0716

QC Sample											
exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0705.d	1202033476	mb	07-FEB-2010	14:13	10-1510.sub	SBLK01	1	949132	
<input type="checkbox"/>	N	/chem/MSD6.i/s020710.b/s6b0706.d	1202033477	lcs	07-FEB-2010	14:41	10-1510.sub	SBLK01LCS	1	949132	failed <5%

Sample Data Summary

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959002	Date Received: 02/02/2010 09:10	%Moisture: 22.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7308	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/07/2010 15:37	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s6b0708.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	427	ug/kg	85.5	427
108-95-2	Phenol	U	427	ug/kg	85.5	427
95-57-8	2-Chlorophenol	U	427	ug/kg	85.5	427
106-46-7	1,4-Dichlorobenzene	U	427	ug/kg	85.5	427
621-64-7	N-Nitrosodipropylamine	U	427	ug/kg	85.5	427
59-50-7	4-Chloro-3-methylphenol	U	427	ug/kg	85.5	427
83-32-9	Acenaphthene	U	42.7	ug/kg	14.1	42.7
121-14-2	2,4-Dinitrotoluene	U	427	ug/kg	42.7	427
100-02-7	4-Nitrophenol	U	427	ug/kg	141	427
87-86-5	Pentachlorophenol	U	427	ug/kg	107	427
129-00-0	Pyrene	U	42.7	ug/kg	12.8	42.7
110-86-1	Pyridine	U	427	ug/kg	85.5	427
62-53-3	Aniline	U	427	ug/kg	128	427
111-44-4	bis(2-Chloroethyl) ether	U	427	ug/kg	85.5	427
541-73-1	1,3-Dichlorobenzene	U	427	ug/kg	85.5	427
100-51-6	Benzyl alcohol	U	427	ug/kg	128	427
95-50-1	1,2-Dichlorobenzene	U	427	ug/kg	85.5	427
108-60-1	bis(2-Chloroisopropyl) ether	U	427	ug/kg	85.5	427
95-48-7	o-Cresol	U	427	ug/kg	85.5	427
65794-96-9	m,p-Cresols	U	427	ug/kg	128	427
67-72-1	Hexachloroethane	U	427	ug/kg	85.5	427
98-95-3	Nitrobenzene	U	427	ug/kg	85.5	427
78-59-1	Isophorone	U	427	ug/kg	85.5	427
88-75-5	2-Nitrophenol	U	427	ug/kg	85.5	427
105-67-9	2,4-Dimethylphenol	U	427	ug/kg	150	427
111-91-1	bis(2-Chloroethoxy)methane	U	427	ug/kg	85.5	427
120-83-2	2,4-Dichlorophenol	U	427	ug/kg	85.5	427
65-85-0	Benzoic acid	U	855	ug/kg	214	855
91-20-3	Naphthalene	U	42.7	ug/kg	12.8	42.7
106-47-8	4-Chloroaniline	U	427	ug/kg	85.5	427
87-68-3	Hexachlorobutadiene	U	427	ug/kg	85.5	427
91-57-6	2-Methylnaphthalene	U	42.7	ug/kg	8.55	42.7
77-47-4	Hexachlorocyclopentadiene	U	427	ug/kg	85.5	427
88-06-2	2,4,6-Trichlorophenol	U	427	ug/kg	85.5	427
95-95-4	2,4,5-Trichlorophenol	U	427	ug/kg	85.5	427
91-58-7	2-Chloronaphthalene	U	42.7	ug/kg	14.1	42.7
88-74-4	2-Nitroaniline	U	427	ug/kg	85.5	427
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	427	ug/kg	85.5	427

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

SDG Number:	10-1510	Date Collected:	01/28/2010 12:00	Matrix:	R
Lab Sample ID:	245959002	Date Received:	02/02/2010 09:10	%Moisture:	22.3
Client ID:	RE15-10-7308	Client:	LANL010	Project:	LANL01004
Batch ID:	949132	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Run Date:	02/07/2010 15:37	Inst:	MSD6.I	Dilution:	1
Prep Date:	02/04/2010 20:55	Analyst:	NAG1	Inj. Vol:	.5 uL
Data File:	s6b0708.d	Aliquot:	30.11 g	Final Volume:	1 mL
		Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	427	ug/kg	85.5	427
208-96-8	2,6-Dinitrotoluene	U	427	ug/kg	42.7	427
51-28-5	Acenaphthylene	U	42.7	ug/kg	12.8	42.7
132-64-9	2,4-Dinitrophenol	U	855	ug/kg	162	855
84-66-2	Dibenzofuran	U	427	ug/kg	85.5	427
86-73-7	Diethylphthalate	U	427	ug/kg	85.5	427
7005-72-3	Fluorene	U	42.7	ug/kg	12.8	42.7
534-52-1	4-Chlorophenylphenylether	U	427	ug/kg	85.5	427
100-01-6	2-Methyl-4,6-dinitrophenol	U	427	ug/kg	85.5	427
122-39-4	4-Nitroaniline	U	427	ug/kg	128	427
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	427	ug/kg	85.5	427
118-74-1	Azobenzene	U	427	ug/kg	85.5	427
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	427	ug/kg	85.5	427
84-74-2	Hexachlorobenzene	U	427	ug/kg	85.5	427
206-44-0	Phenanthrene	U	42.7	ug/kg	12.8	42.7
85-68-7	Anthracene	U	42.7	ug/kg	8.55	42.7
56-55-3	Di-n-butylphthalate	U	427	ug/kg	85.5	427
91-94-1	Fluoranthene	U	42.7	ug/kg	12.8	42.7
218-01-9	Butylbenzylphthalate	U	427	ug/kg	85.5	427
117-81-7	Benzo(a)anthracene	U	42.7	ug/kg	12.8	42.7
117-84-0	3,3'-Dichlorobenzidine	U	427	ug/kg	128	427
205-99-2	Chrysene	U	42.7	ug/kg	12.8	42.7
207-08-9	bis(2-Ethylhexyl)phthalate	J	99.5	ug/kg	85.5	427
50-32-8	Di-n-octylphthalate	U	427	ug/kg	85.5	427
193-39-5	Benzo(b)fluoranthene	U	42.7	ug/kg	12.8	42.7
53-70-3	Benzo(k)fluoranthene	U	42.7	ug/kg	12.8	42.7
191-24-2	Benzo(a)pyrene	U	42.7	ug/kg	12.8	42.7
120-82-1	Indeno(1,2,3-cd)pyrene	U	42.7	ug/kg	12.8	42.7
	Dibenzo(a,h)anthracene	U	42.7	ug/kg	12.8	42.7
	Benzo(ghi)perylene	U	42.7	ug/kg	12.8	42.7
	1,2,4-Trichlorobenzene	U	427	ug/kg	85.5	427

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	485	ug/kg		JA
112-95-8	Eicosane	15.75	172	ug/kg	97	NJ

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959001	Date Received: 02/02/2010 09:10	%Moisture: 9.8
	Client: LANL.010	Project: LANL.01004
Client ID: RE15-10-7309	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.J	Dilution: 1
Run Date: 02/07/2010 15:09	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0707.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	U	36.9	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
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959001	Date Received: 02/02/2010 09:10	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7309	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/07/2010 15:09	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0707.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	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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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 Aldol Condensate	3.48	538	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	U	46.9	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	235	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	469	ug/kg	93.8	469

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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	469	ug/kg	93.8	469
606-20-2	2,6-Dinitrotoluene	U	469	ug/kg	46.9	469
208-96-8	Acenaphthylene	U	46.9	ug/kg	14.1	46.9
51-28-5	2,4-Dinitrophenol	U	938	ug/kg	178	938
132-64-9	Dibenzofuran	U	469	ug/kg	93.8	469
84-66-2	Diethylphthalate	U	469	ug/kg	93.8	469
86-73-7	Fluorene	U	46.9	ug/kg	14.1	46.9
7005-72-3	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
534-52-1	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469
100-01-6	4-Nitroaniline	U	469	ug/kg	141	469
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	469	ug/kg	93.8	469
122-66-7	Azobenzene	U	469	ug/kg	93.8	469
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
118-74-1	Hexachlorobenzene	U	469	ug/kg	93.8	469
85-01-8	Phenanthrene	U	46.9	ug/kg	14.1	46.9
120-12-7	Anthracene	U	46.9	ug/kg	9.38	46.9
84-74-2	Di-n-butylphthalate	U	469	ug/kg	93.8	469
206-44-0	Fluoranthene	U	46.9	ug/kg	14.1	46.9
85-68-7	Butylbenzylphthalate	U	469	ug/kg	93.8	469
56-55-3	Benzo(a)anthracene	U	46.9	ug/kg	14.1	46.9
91-94-1	3,3'-Dichlorobenzidine	U	469	ug/kg	141	469
218-01-9	Chrysene	U	46.9	ug/kg	14.1	46.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	469	ug/kg	93.8	469
117-84-0	Di-n-octylphthalate	U	469	ug/kg	93.8	469
205-99-2	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
207-08-9	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
50-32-8	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
53-70-3	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
120-82-1	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.26	417	ug/kg		J
	Unknown Aldol Condensate	3.47	637	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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
630-02-4	Octacosane		14.46	388	ug/kg	87	NJ
112-95-8	Eicosane		15.75	222	ug/kg	98	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
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: RE15-10-7313
Batch ID: 949132
Run Date: 02/07/2010 17:55
Prep Date: 02/04/2010 20:55
Data File: s6b0713.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	U	36.9	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					
	3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1510
Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
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: RE15-10-7313
Batch ID: 949132
Run Date: 02/07/2010 17:55
Prep Date: 02/04/2010 20:55
Data File: s6b0713.d

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
	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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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(h)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	2.27	215	ug/kg		J
	Unknown Aldol Condensate	3.48	669	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0713.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	13.85	272	ug/kg		J
	Unknown	13.87	467	ug/kg		J
79-63-0	Lanosterol	17.17	267	ug/kg	83	J

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959008	Date Received: 02/02/2010 09:10	%Moisture: 32.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/07/2010 18:23	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0714.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	494	ug/kg	98.8	494
108-95-2	Phenol	U	494	ug/kg	98.8	494
95-57-8	2-Chlorophenol	U	494	ug/kg	98.8	494
106-46-7	1,4-Dichlorobenzene	U	494	ug/kg	98.8	494
621-64-7	N-Nitrosodipropylamine	U	494	ug/kg	98.8	494
59-50-7	4-Chloro-3-methylphenol	U	494	ug/kg	98.8	494
83-32-9	Acenaphthene	U	49.4	ug/kg	16.3	49.4
121-14-2	2,4-Dinitrotoluene	U	494	ug/kg	49.4	494
100-02-7	4-Nitrophenol	U	494	ug/kg	163	494
87-86-5	Pentachlorophenol	U	494	ug/kg	124	494
129-00-0	Pyrene		205	ug/kg	14.8	49.4
110-86-1	Pyridine	U	494	ug/kg	98.8	494
62-53-3	Aniline	U	494	ug/kg	148	494
111-44-4	bis(2-Chloroethyl) ether	U	494	ug/kg	98.8	494
541-73-1	1,3-Dichlorobenzene	U	494	ug/kg	98.8	494
100-51-6	Benzyl alcohol	U	494	ug/kg	148	494
95-50-1	1,2-Dichlorobenzene	U	494	ug/kg	98.8	494
108-60-1	bis(2-Chloroisopropyl)ether	U	494	ug/kg	98.8	494
95-48-7	o-Cresol	U	494	ug/kg	98.8	494
65794-96-9	m,p-Cresols	U	494	ug/kg	148	494
67-72-1	Hexachloroethane	U	494	ug/kg	98.8	494
98-95-3	Nitrobenzene	U	494	ug/kg	98.8	494
78-59-1	Isophorone	U	494	ug/kg	98.8	494
88-75-5	2-Nitrophenol	U	494	ug/kg	98.8	494
105-67-9	2,4-Dimethylphenol	U	494	ug/kg	173	494
111-91-1	bis(2-Chloroethoxy)methane	U	494	ug/kg	98.8	494
120-83-2	2,4-Dichlorophenol	U	494	ug/kg	98.8	494
65-85-0	Benzoic acid	U	988	ug/kg	247	988
91-20-3	Naphthalene	J	20.8	ug/kg	14.8	49.4
106-47-8	4-Chloroaniline	U	494	ug/kg	98.8	494
87-68-3	Hexachlorobutadiene	U	494	ug/kg	98.8	494
91-57-6	2-Methylnaphthalene	J	12.3	ug/kg	9.88	49.4
77-47-4	Hexachlorocyclopentadiene	U	494	ug/kg	98.8	494
88-06-2	2,4,6-Trichlorophenol	U	494	ug/kg	98.8	494
95-95-4	2,4,5-Trichlorophenol	U	494	ug/kg	98.8	494
91-58-7	2-Chloronaphthalene	U	49.4	ug/kg	16.3	49.4
88-74-4	2-Nitroaniline	U	494	ug/kg	98.8	494
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	494	ug/kg	98.8	494

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959008	Date Received: 02/02/2010 09:10	%Moisture: 32.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:23	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0714.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	494	ug/kg	98.8	494
606-20-2	2,6-Dinitrotoluene	U	494	ug/kg	49.4	494
208-96-8	Acenaphthylene	U	49.4	ug/kg	14.8	49.4
51-28-5	2,4-Dinitrophenol	U	988	ug/kg	188	988
132-64-9	Dibenzofuran	U	494	ug/kg	98.8	494
84-66-2	Diethylphthalate	U	494	ug/kg	98.8	494
86-73-7	Fluorene	U	49.4	ug/kg	14.8	49.4
7005-72-3	4-Chlorophenylphenylether	U	494	ug/kg	98.8	494
534-52-1	2-Methyl-4,6-dinitrophenol	U	494	ug/kg	98.8	494
100-01-6	4-Nitroaniline	U	494	ug/kg	148	494
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	494	ug/kg	98.8	494
122-66-7	Azobenzene	U	494	ug/kg	98.8	494
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	494	ug/kg	98.8	494
118-74-1	Hexachlorobenzene	U	494	ug/kg	98.8	494
85-01-8	Phenanthrene		235	ug/kg	14.8	49.4
120-12-7	Anthracene	U	49.4	ug/kg	9.88	49.4
84-74-2	Di-n-butylphthalate	U	494	ug/kg	98.8	494
206-44-0	Fluoranthene		311	ug/kg	14.8	49.4
85-68-7	Butylbenzylphthalate	U	494	ug/kg	98.8	494
56-55-3	Benzo(a)anthracene	U	49.4	ug/kg	14.8	49.4
91-94-1	3,3'-Dichlorobenzidine	U	494	ug/kg	148	494
218-01-9	Chrysene		91.9	ug/kg	14.8	49.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	494	ug/kg	98.8	494
117-84-0	Di-n-octylphthalate	U	494	ug/kg	98.8	494
205-99-2	Benzo(b)fluoranthene		120	ug/kg	14.8	49.4
207-08-9	Benzo(k)fluoranthene	J	46.3	ug/kg	14.8	49.4
50-32-8	Benzo(a)pyrene	U	49.4	ug/kg	14.8	49.4
193-39-5	Indeno(1,2,3-cd)pyrene		173	ug/kg	14.8	49.4
53-70-3	Dibenzo(a,h)anthracene	U	49.4	ug/kg	14.8	49.4
191-24-2	Benzo(ghi)perylene	J	25.4	ug/kg	14.8	49.4
120-82-1	1,2,4-Trichlorobenzene	U	494	ug/kg	98.8	494

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	833	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.6	306	ug/kg	99	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365
108-95-2	Phenol	U	365	ug/kg	72.9	365
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5
110-86-1	Pyridine	U	365	ug/kg	72.9	365
62-53-3	Aniline	U	365	ug/kg	109	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	72.9	365
95-48-7	o-Cresol	U	365	ug/kg	72.9	365
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365
78-59-1	Isophorone	U	365	ug/kg	72.9	365
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	72.9	365
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	365	ug/kg	72.9	365

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959003	Date Received: 02/02/2010 09:10	%Moisture: 8.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7315	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 16:05	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s6b0709.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	365	ug/kg	72.9	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	72.9	365
122-66-7	Azobenzene	U	365	ug/kg	72.9	365
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	72.9	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365
206-44-0	Fluoranthene	J	12.3	ug/kg	10.9	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	532	ug/kg		JA
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.56	197	ug/kg	89	NJ

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

SDG Number: 10-1510 Lab Sample ID: 245959003 Client ID: RE15-10-7315 Batch ID: 949132 Run Date: 02/07/2010 16:05 Prep Date: 02/04/2010 20:55 Data File: s6b0709.d	Date Collected: 01/28/2010 12:00 Date Received: 02/02/2010 09:10 Client: LANL010 Method: SW846 8270C Inst: MSD6.I Analyst: NAGI Aliquot: 30.11 g Column: J&W DB-5MS	Matrix: R %Moisture: 8.9 Project: LANL01004 SOP Ref: GL-OA-E-009 Dilution: 1 Inj. Vol: .5 uL Final Volume: 1 mL Level: LOW
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CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.61	1490	ug/kg	99	NJ
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene	7.88	154	ug/kg	86	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.83	1770	ug/kg	97	NJ
	Unknown	11.91	151	ug/kg		J
	Unknown	11.95	162	ug/kg		J
	Unknown	13.33	258	ug/kg		J
	Unknown	17.17	244	ug/kg		J

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959009	Date Received: 02/02/2010 09:10	%Moisture: 35.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7316	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0715.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	514	ug/kg	103	514
108-95-2	Phenol	U	514	ug/kg	103	514
95-57-8	2-Chlorophenol	U	514	ug/kg	103	514
106-46-7	1,4-Dichlorobenzene	U	514	ug/kg	103	514
621-64-7	N-Nitrosodipropylamine	U	514	ug/kg	103	514
59-50-7	4-Chloro-3-methylphenol	U	514	ug/kg	103	514
83-32-9	Acenaphthene	U	51.4	ug/kg	17.0	51.4
121-14-2	2,4-Dinitrotoluene	U	514	ug/kg	51.4	514
100-02-7	4-Nitrophenol	U	514	ug/kg	170	514
87-86-5	Pentachlorophenol	U	514	ug/kg	129	514
129-00-0	Pyrene	U	51.4	ug/kg	15.4	51.4
110-86-1	Pyridine	U	514	ug/kg	103	514
62-53-3	Aniline	U	514	ug/kg	154	514
111-44-4	bis(2-Chloroethyl) ether	U	514	ug/kg	103	514
541-73-1	1,3-Dichlorobenzene	U	514	ug/kg	103	514
100-51-6	Benzyl alcohol	U	514	ug/kg	154	514
95-50-1	1,2-Dichlorobenzene	U	514	ug/kg	103	514
108-60-1	bis(2-Chloroisopropyl)ether	U	514	ug/kg	103	514
95-48-7	o-Cresol	U	514	ug/kg	103	514
65794-96-9	m,p-Cresols	U	514	ug/kg	154	514
67-72-1	Hexachloroethane	U	514	ug/kg	103	514
98-95-3	Nitrobenzene	U	514	ug/kg	103	514
78-59-1	Isophorone	U	514	ug/kg	103	514
88-75-5	2-Nitrophenol	U	514	ug/kg	103	514
105-67-9	2,4-Dimethylphenol	U	514	ug/kg	180	514
111-91-1	bis(2-Chloroethoxy)methane	U	514	ug/kg	103	514
120-83-2	2,4-Dichlorophenol	U	514	ug/kg	103	514
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.4	ug/kg	15.4	51.4
106-47-8	4-Chloroaniline	U	514	ug/kg	103	514
87-68-3	Hexachlorobutadiene	U	514	ug/kg	103	514
91-57-6	2-Methylnaphthalene	U	51.4	ug/kg	10.3	51.4
77-47-4	Hexachlorocyclopentadiene	U	514	ug/kg	103	514
88-06-2	2,4,6-Trichlorophenol	U	514	ug/kg	103	514
95-95-4	2,4,5-Trichlorophenol	U	514	ug/kg	103	514
91-58-7	2-Chloronaphthalene	U	51.4	ug/kg	17.0	51.4
88-74-4	2-Nitroaniline	U	514	ug/kg	103	514
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	514	ug/kg	103	514

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959009	Date Received: 02/02/2010 09:10	%Moisture: 35.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7316	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0715.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	514	ug/kg	103	514
606-20-2	2,6-Dinitrotoluene	U	514	ug/kg	51.4	514
208-96-8	Acenaphthylene	U	51.4	ug/kg	15.4	51.4
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	514	ug/kg	103	514
84-66-2	Diethylphthalate	U	514	ug/kg	103	514
86-73-7	Fluorene	U	51.4	ug/kg	15.4	51.4
7005-72-3	4-Chlorophenylphenylether	U	514	ug/kg	103	514
534-52-1	2-Methyl-4,6-dinitrophenol	U	514	ug/kg	103	514
100-01-6	4-Nitroaniline	U	514	ug/kg	154	514
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	514	ug/kg	103	514
122-66-7	Azobenzene	U	514	ug/kg	103	514
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	514	ug/kg	103	514
118-74-1	Hexachlorobenzene	U	514	ug/kg	103	514
85-01-8	Phenanthrene	U	51.4	ug/kg	15.4	51.4
120-12-7	Anthracene	U	51.4	ug/kg	10.3	51.4
84-74-2	Di-n-butylphthalate	U	514	ug/kg	103	514
206-44-0	Fluoranthene	U	51.4	ug/kg	15.4	51.4
85-68-7	Butylbenzylphthalate	U	514	ug/kg	103	514
56-55-3	Benzo(a)anthracene	U	51.4	ug/kg	15.4	51.4
91-94-1	3,3'-Dichlorobenzidine	U	514	ug/kg	154	514
218-01-9	Chrysene	U	51.4	ug/kg	15.4	51.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	514	ug/kg	103	514
117-84-0	Di-n-octylphthalate	U	514	ug/kg	103	514
205-99-2	Benzo(b)fluoranthene	U	51.4	ug/kg	15.4	51.4
207-08-9	Benzo(k)fluoranthene	U	51.4	ug/kg	15.4	51.4
50-32-8	Benzo(a)pyrene	U	51.4	ug/kg	15.4	51.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.4	ug/kg	15.4	51.4
53-70-3	Dibenzo(a,h)anthracene	U	51.4	ug/kg	15.4	51.4
191-24-2	Benzo(ghi)perylene	U	51.4	ug/kg	15.4	51.4
120-82-1	1,2,4-Trichlorobenzene	U	514	ug/kg	103	514

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	244	ug/kg		J
	Unknown Aldol Condensate	3.47	820	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959009	Date Received: 02/02/2010 09:10	%Moisture: 35.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7316	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 18:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0715.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
2416-20-8	Hexadecenoic acid, Z-11-	10.13	356	ug/kg	96	NJ
57-10-3	n-Hexadecanoic acid	10.16	290	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-	10.93	267	ug/kg	99	NJ
55282-15-0	Docosane, 7-butyl-	14.46	213	ug/kg	83	NJ
112-95-8	Eicosane	15.75	253	ug/kg	96	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959004

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.1
Analyst: NAG1
Aliquot: 30.08 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.5	373
108-95-2	Phenol	U	373	ug/kg	74.5	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.5	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.5	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.5	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.5	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	93.2	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.5	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.5	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.5	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.5	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.5	373
95-48-7	o-Cresol	U	373	ug/kg	74.5	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.5	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.5	373
78-59-1	Isophorone	U	373	ug/kg	74.5	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.5	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	130	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.5	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.5	373
65-85-0	Benzoic acid	U	745	ug/kg	186	745
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.5	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.5	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.45	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.5	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.5	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.5	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.5	373
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	373	ug/kg	74.5	373

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959004	Date Received: 02/02/2010 09:10	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7317	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/07/2010 16:32	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s6b0710.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	373	ug/kg	74.5	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	745	ug/kg	142	745
132-64-9	Dibenzofuran	U	373	ug/kg	74.5	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.5	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.5	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.5	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	373	ug/kg	74.5	373
122-66-7	Azobenzene	U	373	ug/kg	74.5	373
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	373	ug/kg	74.5	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.5	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.45	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.5	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.5	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	74.5	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.5	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	74.5	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	230	ug/kg		J
	Unknown Aldol Condensate	3.47	336	ug/kg		JA

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

SDG Number: 10-1510
Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7318
Batch ID: 949132
Run Date: 02/08/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6b0808.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
Client ID: RE15-10-7318	Client: LANL010	Project: LANL01004
Batch ID: 949132	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/08/2010 17:00	Inst: MSD6.I	Dilution: 1
Prep Date: 02/04/2010 20:55	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0808.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	485	ug/kg		JA
21112-37-8	Benzene, 2-(1,1-dimethylethyl)-1,4-dimet	7.38	157	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
Client ID: RE15-10-7318	Client: LANL010	Project: LANL01004
Batch ID: 949132	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/08/2010 17:00	Inst: MSD6.I	Dilution: 1
Prep Date: 02/04/2010 20:55	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0808.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
295-17-0	Cyclotetradecane	9.85	237	ug/kg	96	NJ
	Unknown	9.93	216	ug/kg		J
629-73-2	1-Hexadecene	10.32	244	ug/kg	96	NJ
	Unknown	10.42	746	ug/kg		J
112-95-8	Eicosane	15.67	164	ug/kg	95	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.18 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: RE15-10-7319
Batch ID: 949132
Run Date: 02/07/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6b0711.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.3	371
108-95-2	Phenol	U	371	ug/kg	74.3	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.3	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.3	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.3	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.3	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.3	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	123	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.3	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.3	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.3	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.3	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.3	371
95-48-7	o-Cresol	U	371	ug/kg	74.3	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.3	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.3	371
78-59-1	Isophorone	U	371	ug/kg	74.3	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.3	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.3	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.3	371
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.3	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.3	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.43	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.3	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.3	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.3	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.3	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.3	371
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	371	ug/kg	74.3	371

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

SDG Number: 10-1510
Lab Sample ID: 245959005

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.18 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: RE15-10-7319
Batch ID: 949132
Run Date: 02/07/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6b0711.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	371	ug/kg	74.3	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	371	ug/kg	74.3	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.3	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.3	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.3	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.3	371
122-66-7	Azobenzene	U	371	ug/kg	74.3	371
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.3	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.3	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.43	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.3	371
206-44-0	Fluoranthene	U	37.1	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.3	371
56-55-3	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.3	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.3	371
205-99-2	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.3	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.48	589	ug/kg		JA
	Unknown	17.17	179	ug/kg		J

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

SDG Number: 10-1510
Lab Sample ID: 245959012

Client ID: RE15-10-7324
Batch ID: 949132
Run Date: 02/07/2010 19:44
Prep Date: 02/04/2010 20:55
Data File: s6b0717.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371
108-95-2	Phenol	U	371	ug/kg	74.2	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.7	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.2	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371
95-48-7	o-Cresol	U	371	ug/kg	74.2	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371
78-59-1	Isophorone	U	371	ug/kg	74.2	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371
65-85-0	Benzoic acid	U	742	ug/kg	185	742
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.2	371
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	371	ug/kg	74.2	371

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959012	Date Received: 02/02/2010 09:10	%Moisture: 10.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7324	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 19:44	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0717.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	371	ug/kg	74.2	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	742	ug/kg	141	742
132-64-9	Dibenzofuran	U	371	ug/kg	74.2	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.2	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.2	371
122-66-7	Azobenzene	U	371	ug/kg	74.2	371
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.2	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.2	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.42	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.2	371
206-44-0	Fluoranthene	U	37.1	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.2	371
56-55-3	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.2	371
205-99-2	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	434	ug/kg		JA
	Unknown	14.46	171	ug/kg		J

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959012	Date Received: 02/02/2010 09:10	%Moisture: 10.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7324	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 19:44	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0717.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown		17.17	166	ug/kg		J

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1510

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
1202033476	MB for batch 949131	71	71	80	75	72	94
1202033477	LCS for batch 949131	69	70	72	72	71	89
245959001	RE15-10-7309	63	62	68	66	62	85
245959002	RE15-10-7308	57	56	61	60	57	88
245959003	RE15-10-7315	67	67	74	69	63	82
245959004	RE15-10-7317	47	46	54	52	39	71
245959005	RE15-10-7319	66	64	72	67	60	90
245959006	RE15-10-7312	58	55	63	61	48	74
245959007	RE15-10-7313	68	70	76	72	67	98
245959008	RE15-10-7314	59	56	63	61	53	81
245959009	RE15-10-7316	62	63	67	64	61	80
245959012	RE15-10-7324	59	59	64	62	57	84
245959010	RE15-10-7318	52	54	60	57	59	72

Surrogate**Acceptance Limits**

2FP	= 2-Fluorophenol	(29%-99%)
PHL	= Phenol-d5	(33%-98%)
NBZ	= Nitrobenzene-d5	(31%-105%)
FBP	= 2-Fluorobiphenyl	(25%-109%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(13%-150%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 4

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 949131

Matrix: SOIL

Lab Sample ID: 1202033477

Instrument: MSD6.I

Analysis Date: 02/07/2010 14:41

Dilution: 1

Analyst: NAG1

Prep Batch II 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1010	61	22-114
108-95-2	LCS Phenol	1670	0.0	1240	74	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1220	73	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1320	79	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1300	78	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1420	85	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1220	73	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1270	76	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	839	50	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1190	71	27-116
129-00-0	LCS Pyrene	1670	0.0	1370	82	42-113
110-86-1	LCS Pyridine	1670	0.0	1170	70	8-125
62-53-3	LCS Aniline	1670	0.0	1040	63	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1150	69	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1320	79	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	291	17 *	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1350	81	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1240	74	28-117
95-48-7	LCS o-Cresol	1670	0.0	1220	73	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1440	86	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1330	80	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1260	76	33-116

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 949131

Matrix: SOIL

Lab Sample ID: 1202033477

Instrument: MSD6.I

Analysis Date: 02/07/2010 14:41

Dilution: 1

Analyst: NAG1

Prep Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1300	78	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	1310	79	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1260	75	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1200	72	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1340	80	34-116
65-85-0	LCS Benzoic acid	3330	0.0	3250	98	22-138
91-20-3	LCS Naphthalene	1670	0.0	1190	71	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	902	54	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1460	88	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1380	83	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1240	75	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1280	77	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1240	74	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1350	81	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1140	68	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1130	68	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1300	78	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1240	74	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1320	79	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1240	74	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1240	75	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1350	81	51-126

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 4

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 949131

Matrix: SOIL

Lab Sample ID: 1202033477

Instrument: MSD6.I

Analysis Date: 02/07/2010 14:41

Dilution: 1

Analyst: NAG1

Prep Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS Fluorene	1670	0.0	1300	78	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1310	78	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1260	76	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1260	75	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1260	76	46-114
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1260	75	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1260	76	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1320	79	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1300	78	46-107
120-12-7	LCS Anthracene	1670	0.0	1300	78	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1390	83	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1360	82	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1430	86	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1290	78	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1000	60	36-103
218-01-9	LCS Chrysene	1670	0.0	1290	78	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1310	78	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1590	95	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1500	90	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1480	89	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1510	91	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1270	76	53-120

Semi-Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 949131

Matrix: SOIL

Lab Sample ID:1202033477

Instrument: MSD6.I

Analysis Date: 02/07/2010 14:41

Dilution: 1

Analyst: NAG1

Pre Batch II 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1260	76	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1260	76	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1400	84	32-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 8

SDG Number: 10-1510

Sample Type: Matrix Spike

Client ID: RE52-10-12020MS

Matrix: S

Lab Sample ID: 1202033478

%Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:04

Dilution: 1

Analyst: NAG1

Pred Batch II 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1860	0.00 U	1020	55	27-98
108-95-2	MS Phenol	1860	0.00 U	1380	74	33-94
95-57-8	MS 2-Chlorophenol	1860	0.00 U	1340	72	29-96
106-46-7	MS 1,4-Dichlorobenzene	1860	0.00 U	1350	72	27-96
621-64-7	MS N-Nitrosodipropylamine	1860	0.00 U	1440	77	29-102
59-50-7	MS 4-Chloro-3-methylphenol	1860	0.00 U	1700	91	29-110
83-32-9	MS Acenaphthene	1860	0.00 U	1370	74	17-109
121-14-2	MS 2,4-Dinitrotoluene	1860	0.00 U	1440	77	33-107
100-02-7	MS 4-Nitrophenol	1860	0.00 U	1320	71	15-110
87-86-5	MS Pentachlorophenol	1860	0.00 U	1580	85	23-110
129-00-0	MS Pyrene	1860	33.2 J	1570	83	24-118
110-86-1	MS Pyridine	1860	0.00 U	1070	58	25-102
62-53-3	MS Aniline	1860	0.00 U	1350	73	18-109
111-44-4	MS bis(2-Chloroethyl) ether	1860	0.00 U	1170	63	29-96
541-73-1	MS 1,3-Dichlorobenzene	1860	0.00 U	1330	72	26-97
100-51-6	MS Benzyl alcohol	1860	0.00 U	1020	55	19-112
95-50-1	MS 1,2-Dichlorobenzene	1860	0.00 U	1390	75	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	1860	0.00 U	1290	69	28-103
95-48-7	MS o-Cresol	1860	0.00 U	1350	73	32-107
65794-96-9	MS m,p-Cresols	1860	0.00 U	1540	83	33-115
67-72-1	MS Hexachloroethane	1860	0.00 U	1340	72	25-100
98-95-3	MS Nitrobenzene	1860	0.00 U	1360	73	27-106

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-1510

Sample Type: Matrix Spike

Client ID: RE52-10-12020MS

Matrix: S

Lab Sample ID: 1202033478

% Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:04

Dilution: 1

Analyst: NAG1

Prep Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1860	0.00 U	1490	80	29-104
88-75-5	MS 2-Nitrophenol	1860	0.00 U	1320	71	26-102
105-67-9	MS 2,4-Dimethylphenol	1860	0.00 U	1540	83	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	1860	0.00 U	1330	72	27-101
120-83-2	MS 2,4-Dichlorophenol	1860	0.00 U	1520	81	26-103
65-85-0	MS Benzoic acid	3730	0.00 U	3550	95	13-131
91-20-3	MS Naphthalene	1860	0.00 U	1280	69	23-103
106-47-8	MS 4-Chloroaniline	1860	0.00 U	1260	68	26-103
87-68-3	MS Hexachlorobutadiene	1860	0.00 U	1590	85	28-101
91-57-6	MS 2-Methylnaphthalene	1860	0.00 U	1550	83	27-106
77-47-4	MS Hexachlorocyclopentadiene	1860	0.00 U	930	50	24-117
88-06-2	MS 2,4,6-Trichlorophenol	1860	0.00 U	1500	81	26-105
95-95-4	MS 2,4,5-Trichlorophenol	1860	0.00 U	1500	81	30-110
91-58-7	MS 2-Chloronaphthalene	1860	0.00 U	1430	77	28-102
88-74-4	MS 2-Nitroaniline o-Nitroaniline	1860	0.00 U	1280	69	33-106
99-09-2	MS 3-Nitroaniline m-Nitroaniline	1860	0.00 U	1210	65	33-116
131-11-3	MS Dimethylphthalate	1860	0.00 U	1530	82	38-113
606-20-2	MS 2,6-Dinitrotoluene	1860	0.00 U	1450	78	29-107
208-96-8	MS Acenaphthylene	1860	0.00 U	1460	78	25-108
51-28-5	MS 2,4-Dinitrophenol	1860	0.00 U	1310	71	14-102
132-64-9	MS Dibenzofuran	1860	0.00 U	1360	73	35-112
84-66-2	MS Diethylphthalate	1860	0.00 U	1590	85	36-122

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1510

Sample Type: Matrix Spike

Client ID: RE52-10-12020MS

Matrix: S

Lab Sample ID: 1202033478

%Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:04

Dilution: 1

Analyst: NAG1

Pre Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1860	0.00 U	1480	79	33-105
7005-72-3	MS 4-Chlorophenylphenylether	1860	0.00 U	1470	79	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1860	0.00 U	1350	72	26-97
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	1860	0.00 U	1300	70	28-135
122-39-4	MS Diphenylamine	1860	0.00 U	1450	78	33-109
122-66-7	MS Azobenzene <i>1,2</i> -Diphenylhydrazine	1860	0.00 U	1400	75	31-113
101-55-3	MS 4-Bromophenylphenylether	1860	0.00 U	1470	79	31-109
118-74-1	MS Hexachlorobenzene	1860	0.00 U	1640	88	37-99
85-01-8	MS Phenanthrene	1860	17.5 J	1560	83	29-109
120-12-7	MS Anthracene	1860	0.00 U	1530	82	19-118
84-74-2	MS Di-n-butylphthalate	1860	0.00 U	1750	94	39-123
206-44-0	MS Fluoranthene	1860	33.3 J	1760	93	33-114
85-68-7	MS Butylbenzylphthalate	1860	0.00 U	1750	94	35-131
56-55-3	MS Benzo(a)anthracene	1860	0.00 U	1640	88	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	1860	0.00 U	1340	72	30-124
218-01-9	MS Chrysene	1860	0.00 U	1650	89	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	1860	0.00 U	1810	97	37-129
117-84-0	MS Di-n-octylphthalate	1860	0.00 U	1840	99	31-143
205-99-2	MS Benzo(b)fluoranthene	1860	15.0 J	1750	93	29-118
207-08-9	MS Benzo(k)fluoranthene	1860	0.00 U	1720	92	32-118
50-32-8	MS Benzo(a)pyrene	1860	12.4 J	1860	99	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1860	119	1790	90	29-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 8

SDG Number: 10-1510

Sample Type: Matrix Spike

Client ID: RE52-10-12020MS

Matrix: S

Lab Sample ID:1202033478

%Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:04

Dilution: 1

Analyst: NAG1

Prep Batch II 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1860	0.00 U	1800	97	27-119
191-24-2	MS Benzo(ghi)perylene	1860	0.00 U	1870	100	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	1860	0.00 U	1490	80	28-99

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1510

Sample Type: Matrix Spike Duplicate

Client ID: RE52-10-12020MSD

Matrix: S

Lab Sample ID:1202033479

%Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:32

Dilution: 1

Analyst: NAG1

Prep Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

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	1860	0.00	U	899	48	27-98	13	0-30
108-95-2	MSD Phenol	1860	0.00	U	1260	67	33-94	9	0-30
95-57-8	MSD 2-Chlorophenol	1860	0.00	U	1220	66	29-96	9	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1860	0.00	U	1170	63	27-96	14	0-30
621-64-7	MSD N-Nitrosodipropylamine	1860	0.00	U	1300	70	29-102	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1860	0.00	U	1540	83	29-110	10	0-30
83-32-9	MSD Acenaphthene	1860	0.00	U	1290	69	17-109	7	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1860	0.00	U	1390	74	33-107	4	0-30
100-02-7	MSD 4-Nitrophenol	1860	0.00	U	1250	67	15-110	5	0-30
87-86-5	MSD Pentachlorophenol	1860	0.00	U	1430	77	23-110	10	0-30
129-00-0	MSD Pyrene	1860	33.2	J	1520	80	24-118	3	0-30
110-86-1	MSD Pyridine	1860	0.00	U	915	49	25-102	16	0-30
62-53-3	MSD Aniline	1860	0.00	U	1210	65	18-109	11	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1860	0.00	U	1060	57	29-96	10	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1860	0.00	U	1190	64	26-97	12	0-30
100-51-6	MSD Benzyl alcohol	1860	0.00	U	895	48	19-112	13	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1860	0.00	U	1220	66	30-97	13	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1860	0.00	U	1130	61	28-103	13	0-30
95-48-7	MSD o-Cresol	1860	0.00	U	1270	68	32-107	6	0-30
65794-96-9	MSD m,p-Cresols	1860	0.00	U	1410	76	33-115	9	0-30
67-72-1	MSD Hexachloroethane	1860	0.00	U	1180	63	25-100	13	0-30
98-95-3	MSD Nitrobenzene	1860	0.00	U	1180	63	27-106	14	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1510

Sample Type: Matrix Spike Duplicate

Client ID: RE52-10-12020MSD

Matrix: S

Lab Sample ID: 1202033479

% Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:32

Dilution: 1

Analyst: NAG1

Prep Batch ID: 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1860	0.00 U	1320	71	29-104	12	0-30
88-75-5	MSD 2-Nitrophenol	1860	0.00 U	1210	65	26-102	9	0-30
105-67-9	MSD 2,4-Dimethylphenol	1860	0.00 U	1380	74	22-104	11	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1860	0.00 U	920	49	27-101	37 *	0-30
120-83-2	MSD 2,4-Dichlorophenol	1860	0.00 U	1380	74	26-103	9	0-30
65-85-0	MSD Benzoic acid	3730	0.00 U	2600	70	13-131	31 *	0-30
91-20-3	MSD Naphthalene	1860	0.00 U	1130	60	23-103	13	0-30
106-47-8	MSD 4-Chloroaniline	1860	0.00 U	1210	65	26-103	4	0-30
87-68-3	MSD Hexachlorobutadiene	1860	0.00 U	1370	73	28-101	15	0-30
91-57-6	MSD 2-Methylnaphthalene	1860	0.00 U	1380	74	27-106	12	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1860	0.00 U	925	50	24-117	1	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1860	0.00 U	1410	76	26-105	6	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1860	0.00 U	1320	71	30-110	13	0-30
91-58-7	MSD 2-Chloronaphthalene	1860	0.00 U	1340	72	28-102	7	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	1860	0.00 U	1250	67	33-106	2	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	1860	0.00 U	1280	69	33-116	6	0-30
131-11-3	MSD Dimethylphthalate	1860	0.00 U	1310	70	38-113	15	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1860	0.00 U	1240	67	29-107	15	0-30
208-96-8	MSD Acenaphthylene	1860	0.00 U	1390	74	25-108	5	0-30
51-28-5	MSD 2,4-Dinitrophenol	1860	0.00 U	1360	73	14-102	4	0-30
132-64-9	MSD Dibenzofuran	1860	0.00 U	1330	71	35-112	3	0-30
84-66-2	MSD Diethylphthalate	1860	0.00 U	1390	75	36-122	13	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1510

Sample Type: Matrix Spike Duplicate

Client ID: RE52-10-12020MSD

Matrix: S

Lab Sample ID: 1202033479

% Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:32

Dilution: 1

Analyst: NAG1

Pren Batch II 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1860	0.00 U	1400	75	33-105	5	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1860	0.00 U	1390	74	30-110	6	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1860	0.00 U	1270	68	26-97	6	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1860	0.00 U	1270	68	28-135	3	0-30
122-39-4	MSD Diphenylamine	1860	0.00 U	1290	69	33-109	12	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1860	0.00 U	1350	72	31-113	3	0-30
101-55-3	MSD 4-Bromophenylphenylether	1860	0.00 U	1380	74	31-109	6	0-30
118-74-1	MSD Hexachlorobenzene	1860	0.00 U	1550	83	37-99	6	0-30
85-01-8	MSD Phenanthrene	1860	17.5 J	1410	75	29-109	10	0-30
120-12-7	MSD Anthracene	1860	0.00 U	1460	78	19-118	4	0-30
84-74-2	MSD Di-n-butylphthalate	1860	0.00 U	1640	88	39-123	7	0-30
206-44-0	MSD Fluoranthene	1860	33.3 J	1680	88	33-114	5	0-30
85-68-7	MSD Butylbenzylphthalate	1860	0.00 U	1630	88	35-131	7	0-30
56-55-3	MSD Benzo(a)anthracene	1860	0.00 U	1650	89	30-111	1	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1860	0.00 U	1320	71	30-124	1	0-30
218-01-9	MSD Chrysene	1860	0.00 U	1570	84	32-108	5	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1860	0.00 U	1670	90	37-129	8	0-30
117-84-0	MSD Di-n-octylphthalate	1860	0.00 U	1730	93	31-143	6	0-30
205-99-2	MSD Benzo(b)fluoranthene	1860	15.0 J	1780	95	29-118	2	0-30
207-08-9	MSD Benzo(k)fluoranthene	1860	0.00 U	1650	89	32-118	4	0-30
50-32-8	MSD Benzo(a)pyrene	1860	12.4 J	1810	97	33-115	3	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1860	119	1810	91	29-114	1	0-30

Semi-Volatile

Page 8 of 8

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-1510

Sample Type: Matrix Spike Duplicate

Client ID: RE52-10-12020MSD

Matrix: S

Lab Sample ID: 1202033479

%Moisture: 10.6

Instrument: MSD6.I

Analysis Date: 02/08/2010 16:32

Dilution: 1

Analyst: NAG1

Prep Batch #: 949131

Inj. Vol: .5 uL

Batch ID: 949132

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1860	0.00 U	1820	98	27-119	1	0-30
191-24-2	MSD Benzo(ghi)perylene	1860	0.00 U	1910	103	28-112	2	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1860	0.00 U	1320	71	28-99	13	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1510	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 949131	Instrument ID:	MSD6.I	Data File:	s6b0705-1.d
Lab Sample ID:	1202033476	Prep Date:	02/04/2010 20:55	Analyzed:	02/07/10 14:13
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 949131	1202033477	s6b0706-1.d	02/07/10	1441
02 RE15-10-7309	245959001	s6b0707.d	02/07/10	1509
03 RE15-10-7308	245959002	s6b0708.d	02/07/10	1537
04 RE15-10-7315	245959003	s6b0709.d	02/07/10	1605
05 RE15-10-7317	245959004	s6b0710.d	02/07/10	1632
06 RE15-10-7319	245959005	s6b0711.d	02/07/10	1700
07 RE15-10-7312	245959006	s6b0712.d	02/07/10	1728
08 RE15-10-7313	245959007	s6b0713.d	02/07/10	1755
09 RE15-10-7314	245959008	s6b0714.d	02/07/10	1823
10 RE15-10-7316	245959009	s6b0715.d	02/07/10	1850
11 RE15-10-7324	245959012	s6b0717.d	02/07/10	1944
14 RE15-10-7318	245959010	s6b0808.d	02/08/10	1700

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: MSD6.I

Injection Date/Time: 07-FEB-10 13:00

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s020710.b/s6b0702.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	39.9
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	40.2
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	51.7
197	0 - 1% of mass 198	0.2
199	5 - 9% of mass 198	7.1
275	10 - 30% of mass 198	21.9
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	74.3
442	Greater than 40% of mass 198	65.2
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.4	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 13:14
APCVS	WBN100120-03.2	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 13:45
SBLK01	1202033476	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 14:13
SBLK01LCS	1202033477	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 14:41
RE15-10-7309	245959001	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 15:09
RE15-10-7308	245959002	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 15:37
RE15-10-7315	245959003	/chem/MSD6.i/s020710.b/s6b070	07-FEB-10 16:05
RE15-10-7317	245959004	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 16:32
RE15-10-7319	245959005	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 17:00
RE15-10-7312	245959006	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 17:28
RE15-10-7313	245959007	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 17:55
RE15-10-7314	245959008	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 18:23
RE15-10-7316	245959009	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 18:50
RE15-10-7324	245959012	/chem/MSD6.i/s020710.b/s6b071	07-FEB-10 19:44

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: MSD6.I

Injection Date/Time: 08-FEB-10 13:50

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s020810.b/s6b0801.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	43.6
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	42.4
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	52.2
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	21.5
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	60.1
443	17 - 23% of mass 442	19.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.4	/chem/MSD6.i/s020810.b/s6b080	08-FEB-10 14:04
APCVS	WBN100120-03.4	/chem/MSD6.i/s020810.b/s6b080	08-FEB-10 14:37
RE15-10-7318	245959010	/chem/MSD6.i/s020810.b/s6b080	08-FEB-10 17:00

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: MSD6.1

Injection Date/Time: 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1510

Instrument ID: MSD6.I

Injection Date/Time: 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
API2ICAL	WBN091016-01	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 11:59
API2ICAL	WBN091016-02	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 12:36
API2ICAL	WBN091016-03	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:13
API2ICAL	WBN091016-04	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:51
API2ICAL	WBN091016-05	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 14:30
API2ICAL	WBN091016-06	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:06
API2ICAL	WBN091016-07	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:43
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29
API2ICV	WBN091016-08.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 21:07

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1510

Instrument: MSD6.1

STD Analysis Time: 07-FEB-10 13:14

GC Column: J&W DB-5MS

Data File: s6b0703.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	283821		4.86	1117855		6.14	616750		8.01	1069246		9.62	879750		12.7	640102		15.0
Upper Limit	567642		5.36	2235710		6.64	1233500		8.51	2138492		10.1	1759500		13.2	1280204		15.5
Lower Limit	141911		4.36	558928		5.64	308375		7.51	534623		9.12	439875		12.2	320051		14.5
Sample ID																		
BLK01	290565		4.86	1069716		6.14	601024		8.01	1044062		9.62	745794		12.6	480805		15.0
BLK01LCS	291659		4.86	1160363		6.14	628390		8.01	1099347		9.62	807941		12.6	536868		15.0
RE15-10-7309	288212		4.86	1071309		6.14	606714		8.01	1041571		9.62	756547		12.6	526113		15.0
RE15-10-7308	293050		4.86	1093962		6.14	621625		8.01	1055503		9.62	648464		12.6	367688		15.0
RE15-10-7315	292356		4.86	1097024		6.14	618575		8.01	1076637		9.62	810019		12.6	573129		15.0
RE15-10-7317	289598		4.86	1096381		6.14	623560		8.01	1076277		9.62	720483		12.6	457127		15.0
RE15-10-7319	288629		4.86	1088255		6.14	625270		8.01	1072022		9.62	757008		12.6	504363		15.0
RE15-10-7312	299205		4.86	1108817		6.14	623957		8.01	1078893		9.62	783707		12.6	515934		15.0
RE15-10-7313	291869		4.86	1100925		6.14	630997		8.01	1096318		9.62	765474		12.6	500995		15.0
RE15-10-7314	286077		4.86	1081345		6.14	613814		8.01	1071206		9.62	713165		12.6	408352		15.0
RE15-10-7316	286854		4.86	1099087		6.14	633286		8.01	1109102		9.62	787093		12.6	514534		15.0
RE15-10-7324	306222		4.86	1155564		6.14	653753		8.01	1137122		9.62	762495		12.6	476937		15.0

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1510

Instrument: MSD6.I

STD Analysis Time: 08-FEB-10 14:04

GC Column: J&W DB-5MS

Data File: s6b0802.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	245875		4.81	949758		6.09	514386		7.96	876117		9.57	731973		12.6	606320		14.9
Upper Limit	491750		5.31	1899516		6.59	1028772		8.46	1752234		10.1	1463946		13.1	1212640		15.4
Lower Limit	122938		4.31	474879		5.59	257193		7.46	438059		9.07	365987		12.1	303160		14.4
Sample ID																		
RE15-10-7318	263355		4.81	961527		6.08	554935		7.96	950131		9.57	684309		12.6	362429		14.9

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-1510
Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.1
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 22.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7308
Batch ID: 949132
Run Date: 02/07/2010 15:37
Prep Date: 02/04/2010 20:55
Data File: s6b0708.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	427	ug/kg	85.5	427
108-95-2	Phenol	U	427	ug/kg	85.5	427
95-57-8	2-Chlorophenol	U	427	ug/kg	85.5	427
106-46-7	1,4-Dichlorobenzene	U	427	ug/kg	85.5	427
621-64-7	N-Nitrosodipropylamine	U	427	ug/kg	85.5	427
59-50-7	4-Chloro-3-methylphenol	U	427	ug/kg	85.5	427
83-32-9	Acenaphthene	U	42.7	ug/kg	14.1	42.7
121-14-2	2,4-Dinitrotoluene	U	427	ug/kg	42.7	427
100-02-7	4-Nitrophenol	U	427	ug/kg	141	427
87-86-5	Pentachlorophenol	U	427	ug/kg	107	427
129-00-0	Pyrene	U	42.7	ug/kg	12.8	42.7
110-86-1	Pyridine	U	427	ug/kg	85.5	427
62-53-3	Aniline	U	427	ug/kg	128	427
111-44-4	bis(2-Chloroethyl) ether	U	427	ug/kg	85.5	427
541-73-1	1,3-Dichlorobenzene	U	427	ug/kg	85.5	427
100-51-6	Benzyl alcohol	U	427	ug/kg	128	427
95-50-1	1,2-Dichlorobenzene	U	427	ug/kg	85.5	427
108-60-1	bis(2-Chloroisopropyl)ether	U	427	ug/kg	85.5	427
95-48-7	o-Cresol	U	427	ug/kg	85.5	427
65794-96-9	m,p-Cresols	U	427	ug/kg	128	427
67-72-1	Hexachloroethane	U	427	ug/kg	85.5	427
98-95-3	Nitrobenzene	U	427	ug/kg	85.5	427
78-59-1	Isophorone	U	427	ug/kg	85.5	427
88-75-5	2-Nitrophenol	U	427	ug/kg	85.5	427
105-67-9	2,4-Dimethylphenol	U	427	ug/kg	150	427
111-91-1	bis(2-Chloroethoxy)methane	U	427	ug/kg	85.5	427
120-83-2	2,4-Dichlorophenol	U	427	ug/kg	85.5	427
65-85-0	Benzoic acid	U	855	ug/kg	214	855
91-20-3	Naphthalene	U	42.7	ug/kg	12.8	42.7
106-47-8	4-Chloroaniline	U	427	ug/kg	85.5	427
87-68-3	Hexachlorobutadiene	U	427	ug/kg	85.5	427
91-57-6	2-Methylnaphthalene	U	42.7	ug/kg	8.55	42.7
77-47-4	Hexachlorocyclopentadiene	U	427	ug/kg	85.5	427
88-06-2	2,4,6-Trichlorophenol	U	427	ug/kg	85.5	427
95-95-4	2,4,5-Trichlorophenol	U	427	ug/kg	85.5	427
91-58-7	2-Chloronaphthalene	U	42.7	ug/kg	14.1	42.7
88-74-4	2-Nitroaniline	U	427	ug/kg	85.5	427
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	427	ug/kg	85.5	427

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959002	Date Received: 02/02/2010 09:10	%Moisture: 22.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7308	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 15:37	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s6b0708.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	427	ug/kg	85.5	427
606-20-2	2,6-Dinitrotoluene	U	427	ug/kg	42.7	427
208-96-8	Acenaphthylene	U	42.7	ug/kg	12.8	42.7
51-28-5	2,4-Dinitrophenol	U	855	ug/kg	162	855
132-64-9	Dibenzofuran	U	427	ug/kg	85.5	427
84-66-2	Diethylphthalate	U	427	ug/kg	85.5	427
86-73-7	Fluorene	U	42.7	ug/kg	12.8	42.7
7005-72-3	4-Chlorophenylphenylether	U	427	ug/kg	85.5	427
534-52-1	2-Methyl-4,6-dinitrophenol	U	427	ug/kg	85.5	427
100-01-6	4-Nitroaniline	U	427	ug/kg	128	427
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	427	ug/kg	85.5	427
122-66-7	Azobenzene	U	427	ug/kg	85.5	427
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	427	ug/kg	85.5	427
118-74-1	Hexachlorobenzene	U	427	ug/kg	85.5	427
85-01-8	Phenanthrene	U	42.7	ug/kg	12.8	42.7
120-12-7	Anthracene	U	42.7	ug/kg	8.55	42.7
84-74-2	Di-n-butylphthalate	U	427	ug/kg	85.5	427
206-44-0	Fluoranthene	U	42.7	ug/kg	12.8	42.7
85-68-7	Butylbenzylphthalate	U	427	ug/kg	85.5	427
56-55-3	Benzo(a)anthracene	U	42.7	ug/kg	12.8	42.7
91-94-1	3,3'-Dichlorobenzidine	U	427	ug/kg	128	427
218-01-9	Chrysene	U	42.7	ug/kg	12.8	42.7
117-81-7	bis(2-Ethylhexyl)phthalate	J	99.5	ug/kg	85.5	427
117-84-0	Di-n-octylphthalate	U	427	ug/kg	85.5	427
205-99-2	Benzo(b)fluoranthene	U	42.7	ug/kg	12.8	42.7
207-08-9	Benzo(k)fluoranthene	U	42.7	ug/kg	12.8	42.7
50-32-8	Benzo(a)pyrene	U	42.7	ug/kg	12.8	42.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.7	ug/kg	12.8	42.7
53-70-3	Dibenzo(a,h)anthracene	U	42.7	ug/kg	12.8	42.7
191-24-2	Benzo(ghi)perylene	U	42.7	ug/kg	12.8	42.7
120-82-1	1,2,4-Trichlorobenzene	U	427	ug/kg	85.5	427

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	485	ug/kg		JA
112-95-8	Eicosane	15.75	172	ug/kg	97	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0708.d
Lab Smp Id: 245959002 Client Smp ID: RE15-10-7308
Inj Date : 07-FEB-2010 15:37
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959002|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	22.30000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	293050	40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1093962	40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	621625	40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1055503	40.0000	
* 91 Chrysene-d12	240	12.633	12.646	(1.000)	648464	40.0000	
* 98 Perylene-d12	264	14.978	14.990	(1.000)	367688	40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697	(0.763)	417116	56.8384	2430
\$ 5 Phenol-d5	99	4.472	4.474	(0.920)	519971	56.1381	2400
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	235860	30.4782	1300
\$ 39 2-Fluorobiphenyl	172	7.259	7.265	(0.907)	480627	30.0021	1280
\$ 60 2,4,6-Tribromophenol	329	8.855	8.860	(1.106)	103954	57.2953	2450
\$ 81 p-Terphenyl-d14	244	11.321	11.324	(0.896)	459485	43.9380	1880

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149		12.572	12.577	(0.995)	21814	2.32736	99.5 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s6b0708.d

Report Date: 02/08/2010 09:13

Lab. ID: 245959002

SampleType: SAMPLE

Injection Date: 07-FEB-2010 15:37

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959002|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	23884	4.47	4.55	80-120	100	(T)
93	105	4.53	4.55	217-277	0	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	33272	5.39	5.24	80-120	100	(T)
42	21477	5.39	5.24	39- 99	65	(T)

22	Isophorone		CAS#: 78-59-1			
82	235860	5.39	5.66	80-120	100	(T)
138	5844	6.14	5.66	0- 49	2	(T)

43	Dimethylphthalate		CAS#: 131-11-3			
163	111211	8.01	7.70	80-120	100	(T)
164	621625	8.01	7.70	0- 40	559	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	81668	8.01	8.21	80-120	100	(T)
89	603	8.01	8.21	43-103	1	(QT)
63	522	8.01	8.21	18- 78	1	(QT)

53	Fluorene		CAS#: 86-73-7			
166	6529	8.85	8.60	80-120	100	(T)
165	6262	8.85	8.60	62-122	96	(T)
167	2294	8.85	8.60	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	102	8.84	8.65	80-120	100	(T)
105	110	8.84	8.65	11- 71	108	(QT)
51	467	8.85	8.65	23- 83	455	(QT)

93	bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7		
149	21814	12.57	12.58	80-120	100	()
167	6509	12.57	12.58	1- 61	30	()

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0708.d
Report Date: 12-Feb-2010 16:11

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0708.d
Lab Smp Id: 245959002 Client Smp ID: RE15-10-7308
Inj Date : 07-FEB-2010 15:37
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959002|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	22.30000	% moisture

Cpnd Variable

Local Compound Variable

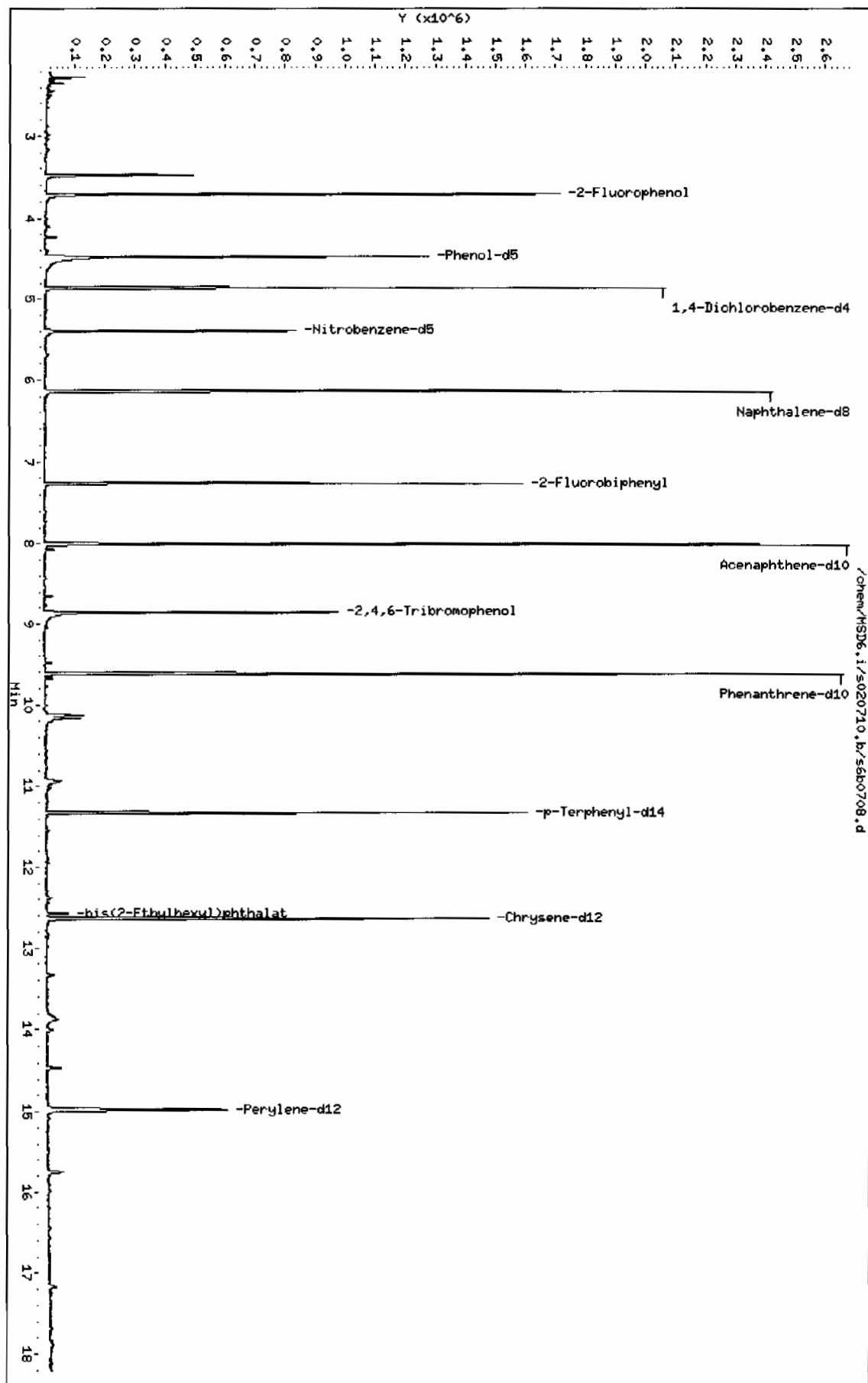
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1752385	40.000
* 98 Perylene-d12	14.978	1043803	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate							
3.473	497540	11.3568574	485	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY			
=====									
=====									
Eicosane					CAS #: 112-95-8				
15.750	104720	4.01302052	172	97	NIST05.L	113488	98		

Data File: /chem/HSD6.i/s020710.b/sdp0708.d
 Date : 07-FEB-2010 15:37
 Client ID: RE15-10-7308
 Sample Info: 1245969002194913211SVH11LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 07-FEB-2010 15:37

Client ID: RE15-10-7308

Instrument: MSD6.i

Sample Info: 12459590021949132111SVMI11LANL

Volume Injected (uL): 0.5

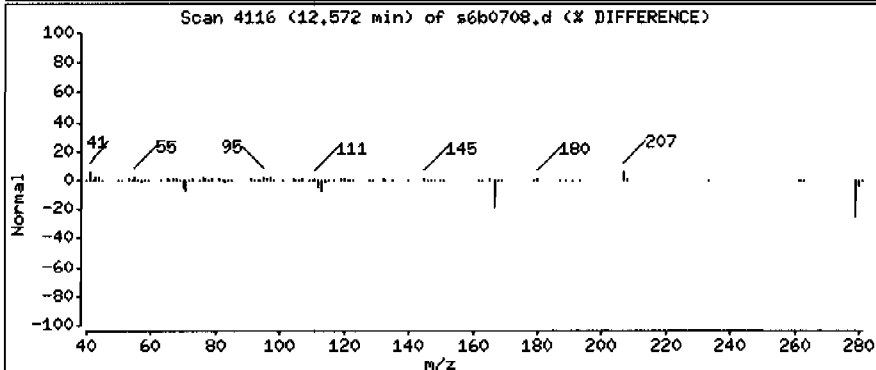
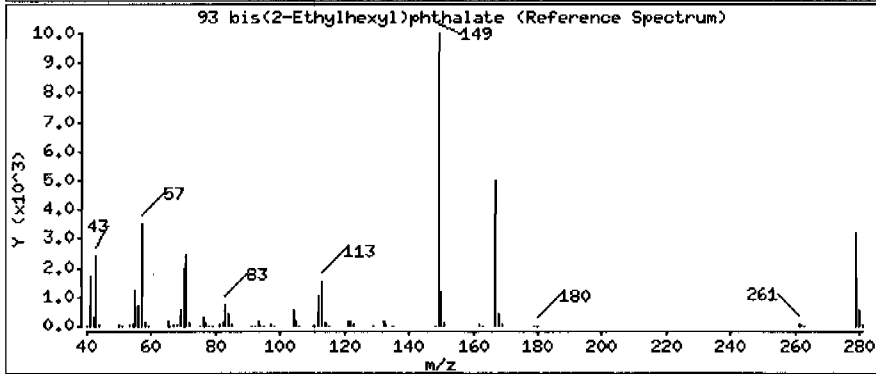
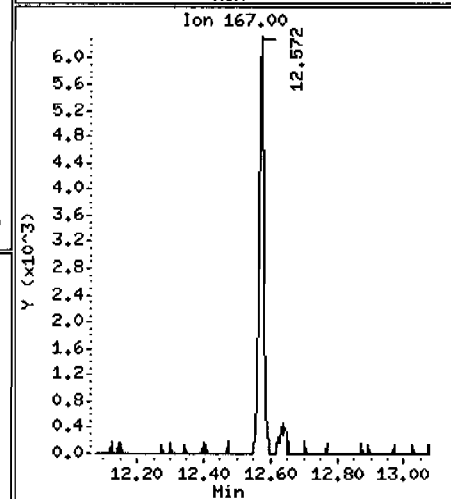
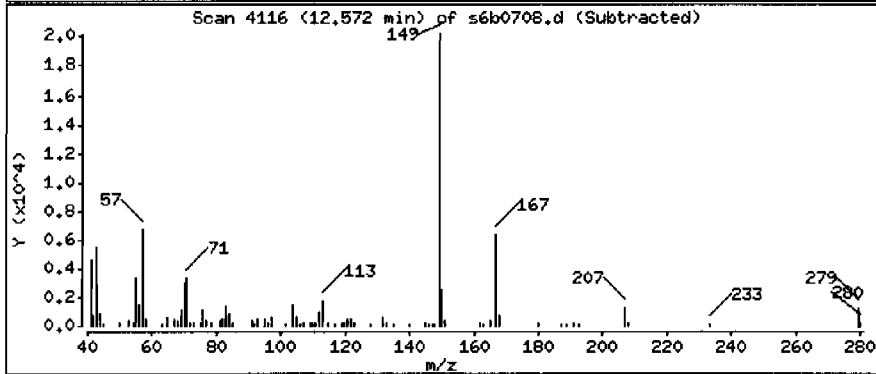
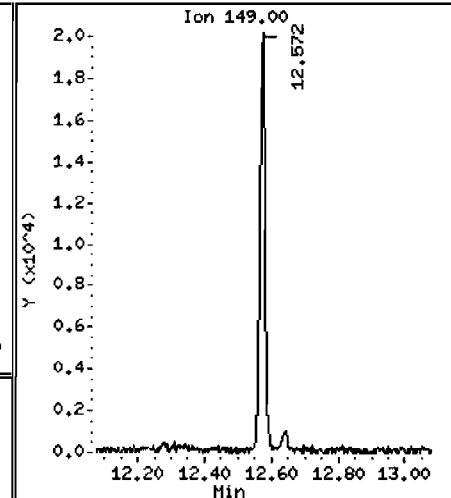
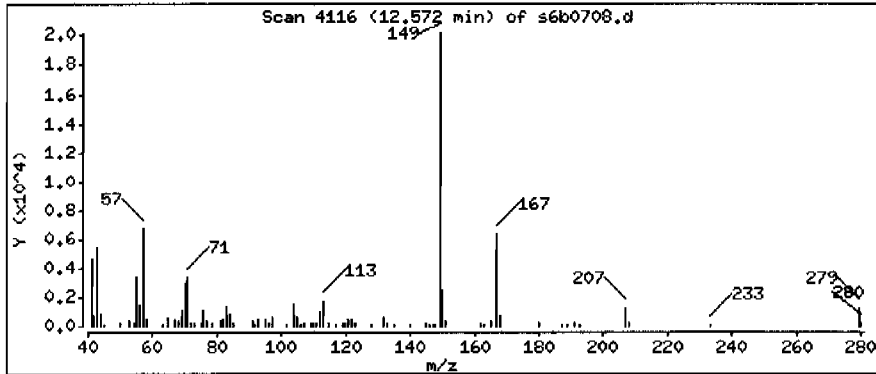
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 99.5 ug/Kg



Date : 07-FEB-2010 15:37

Client ID: RE15-10-7308

Instrument: HSD6.i

Sample Info: 12459590021949132111SVH111LANL

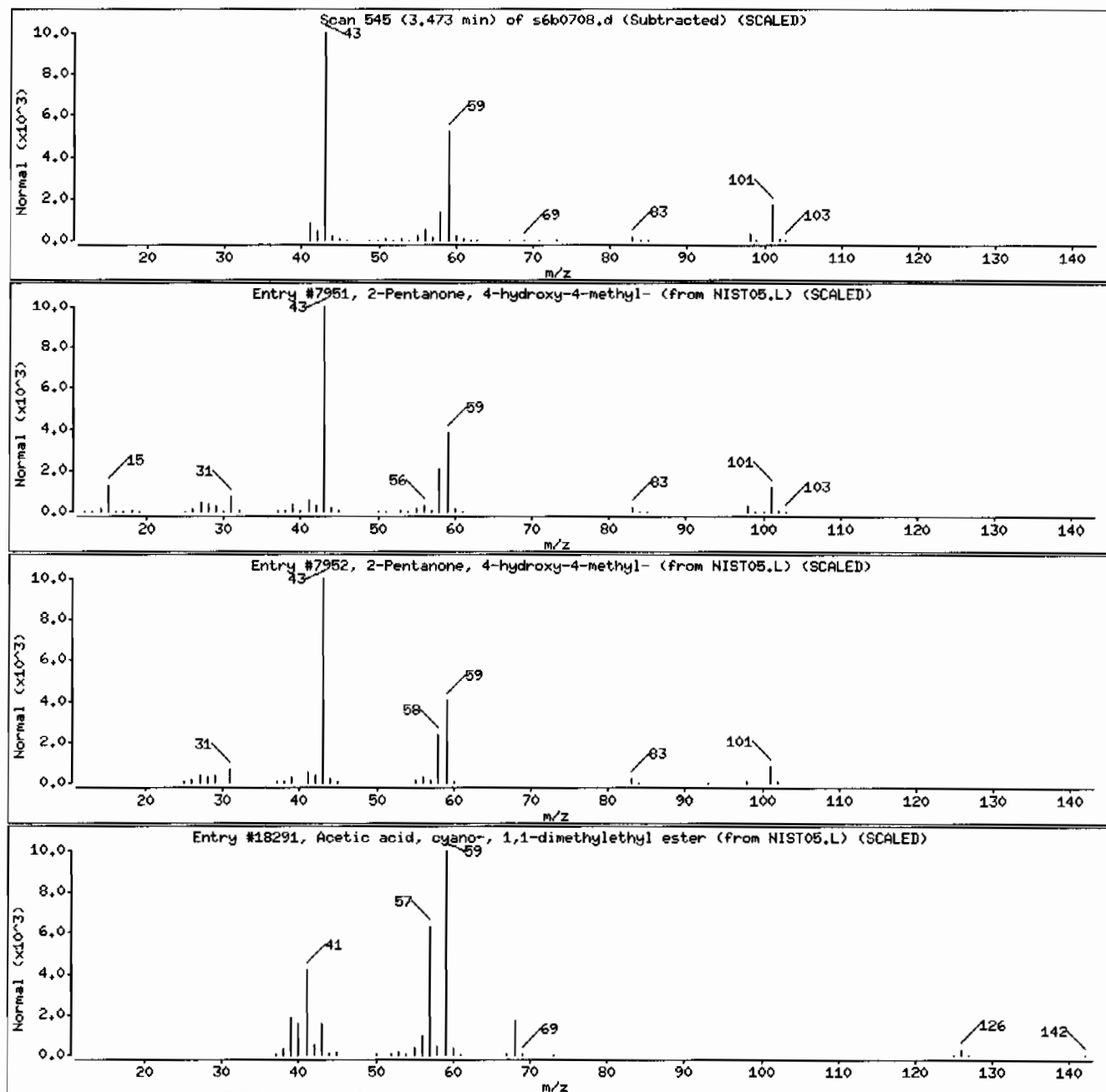
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 07-FEB-2010 15:37

Client ID: RE15-10-7308

Instrument: MSD6.i

Sample Info: 1245959002194913211SVH11ILANL

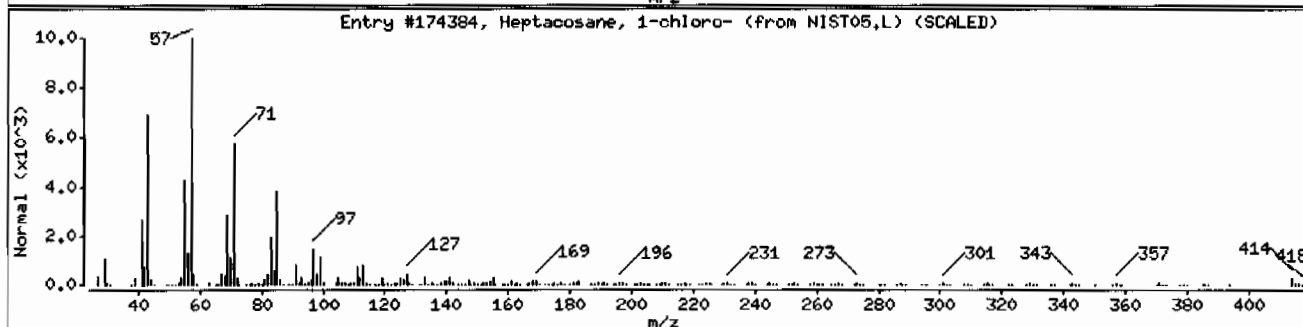
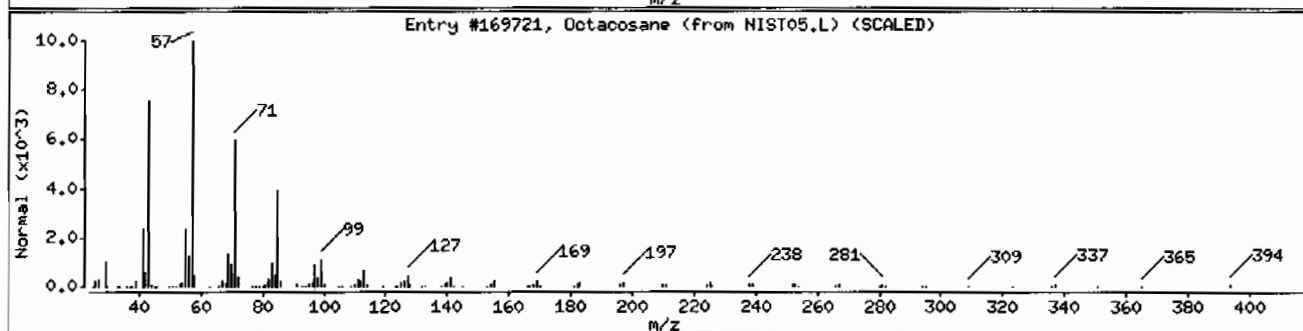
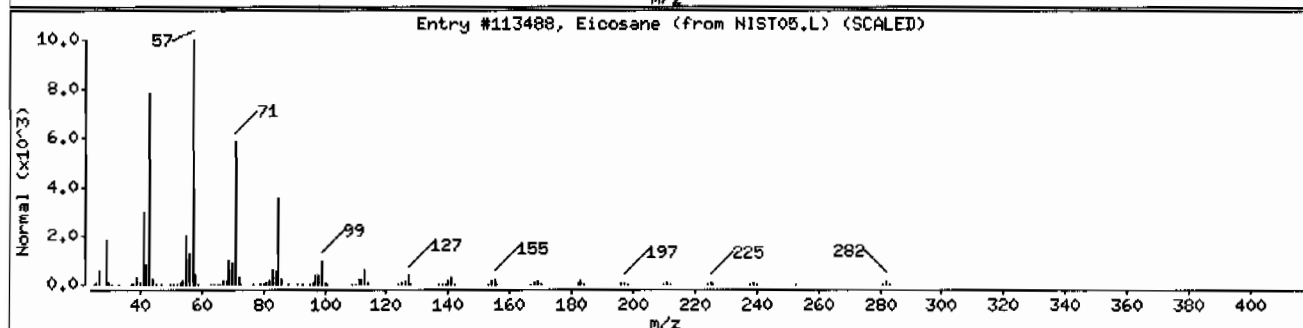
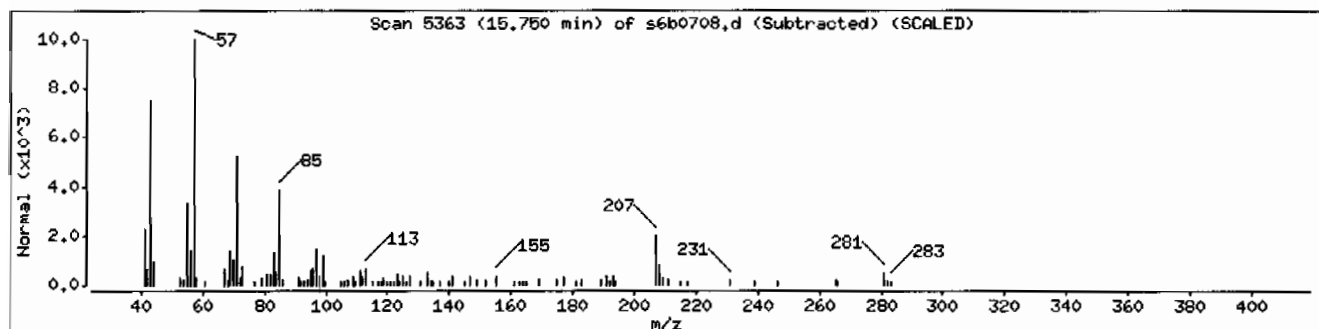
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	97	C20H42	282
Octacosane	630-02-4	NIST05.L	169721	70	C28H58	394
Heptacosane, 1-chloro-	62016-79-9	NIST05.L	174384	68	C27H55Cl	414



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

SDG Number: 10-1510
Lab Sample ID: 245959001

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.J
Analyst: NAG1
Aliquot: 30.07 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: RE15-10-7309
Batch ID: 949132
Run Date: 02/07/2010 15:09
Prep Date: 02/04/2010 20:55
Data File: s6b0707.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/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	U	36.9	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
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959001	Date Received: 02/02/2010 09:10	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7309	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 15:09	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0707.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	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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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 Aldol Condensate	3.48	538	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0707.d
Lab Smp Id: 245959001 Client Smp ID: RE15-10-7309
Inj Date : 07-FEB-2010 15:09
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959001|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	9.84000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	288212		40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1071309		40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	606714		40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1041571		40.0000	
* 91 Chrysene-d12	240	12.636	12.646	(1.000)	756547		40.0000	
* 98 Perylene-d12	264	14.983	14.990	(1.000)	526113		40.0000	
\$ 3 2-Fluorophenol	112	3.710	3.697	(0.763)	457043		63.3245	2340
\$ 5 Phenol-d5	99	4.472	4.474	(0.920)	563589		61.8687	2280
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	256731		33.8767	1250
\$ 39 2-Fluorobiphenyl	172	7.259	7.265	(0.907)	514613		32.9131	1210
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860	(1.106)	108915		61.5049	2270
\$ 81 p-Terphenyl-d14	244	11.321	11.324	(0.896)	518931		42.5333	1570

ION RATIO REPORT

SV REPORT

Data file: s6b0707.d

Report Date: 02/08/2010 09:13

Lab. ID: 245959001

SampleType: SAMPLE

Injection Date: 07-FEB-2010 15:09

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959001|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	37162	5.39	5.24	80-120	100	(T)
42	22640	5.39	5.24	39- 99	61	(T)

22 Isophorone				CAS#: 78-59-1		
82	256731	5.39	5.66	80-120	100	(T)
138	6011	6.14	5.66	0- 49	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	107801	8.01	7.70	80-120	100	(T)
164	606714	8.01	7.70	0- 40	563	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	80553	8.01	8.21	80-120	100	(T)
89	966	8.00	8.21	43-103	1	(QT)
63	986	8.00	8.21	18- 78	1	(QT)

53 Fluorene				CAS#: 86-73-7		
166	7581	8.86	8.60	80-120	100	(T)
165	7744	8.85	8.60	62-122	102	(T)
167	2332	8.85	8.60	0- 44	31	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	148	8.86	8.65	80-120	100	(T)
105	884	8.85	8.65	11- 71	596	(QT)
51	848	8.86	8.65	23- 83	572	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0707.d
Lab Smp Id: 245959001 Client Smp ID: RE15-10-7309
Inj Date : 07-FEB-2010 15:09
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959001|949132|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	9.84000	% moisture

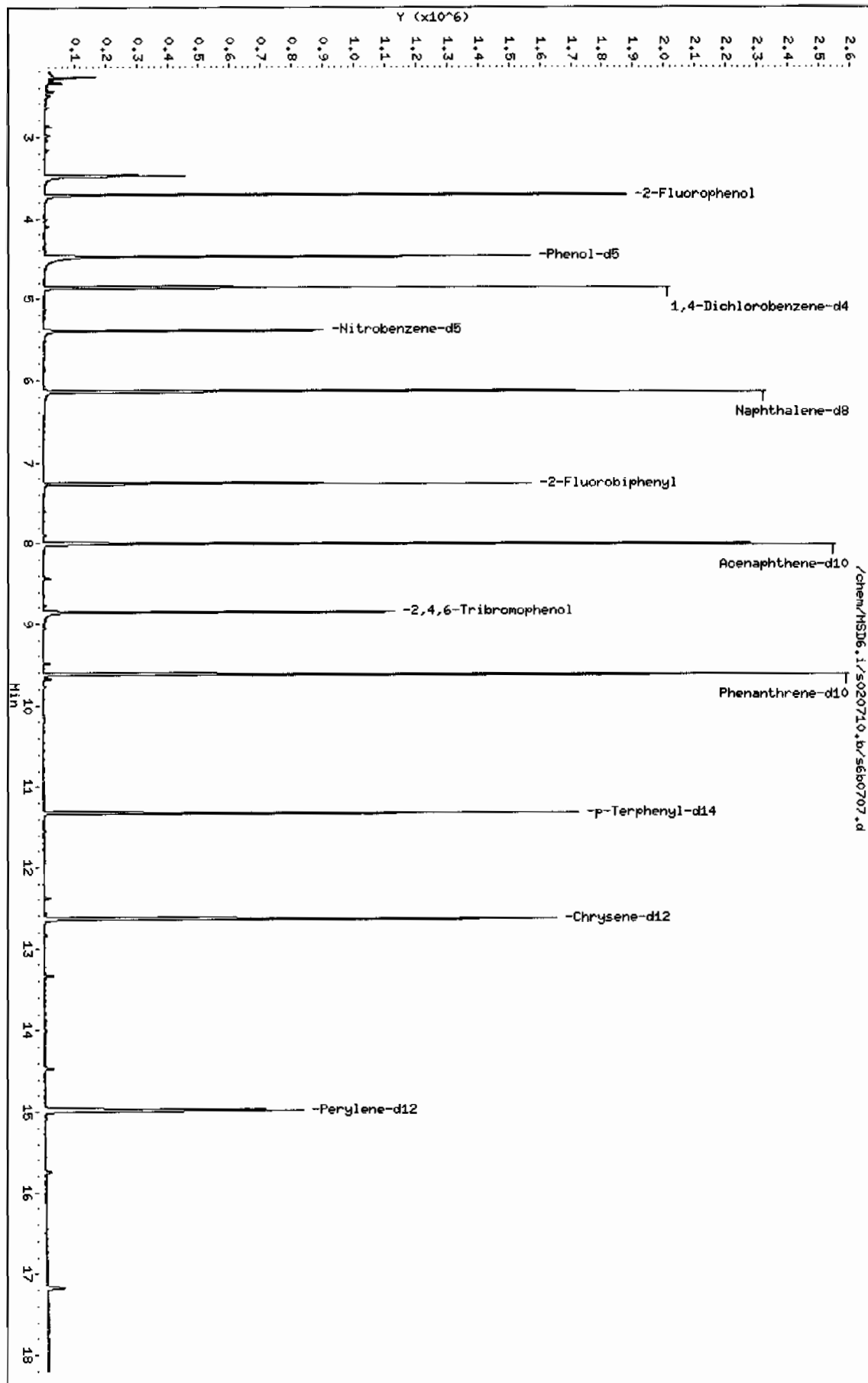
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1710077	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.475	623210	14.5773493	538	0		0	10

Data File: /chem/MSD6.1/s020710.b/s6b0707.d
Date: 07-FEB-2010 15:09
Client ID: REIS-10-7309
Sample Info: 124595900194913211SVH11LRL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.1
Operator: nag1
Column diameter: 0.20



Date : 07-FEB-2010 15:09

Client ID: RE15-10-7309

Instrument: MSD6.i

Sample Info: I245959001194913211ISVM11ILANL

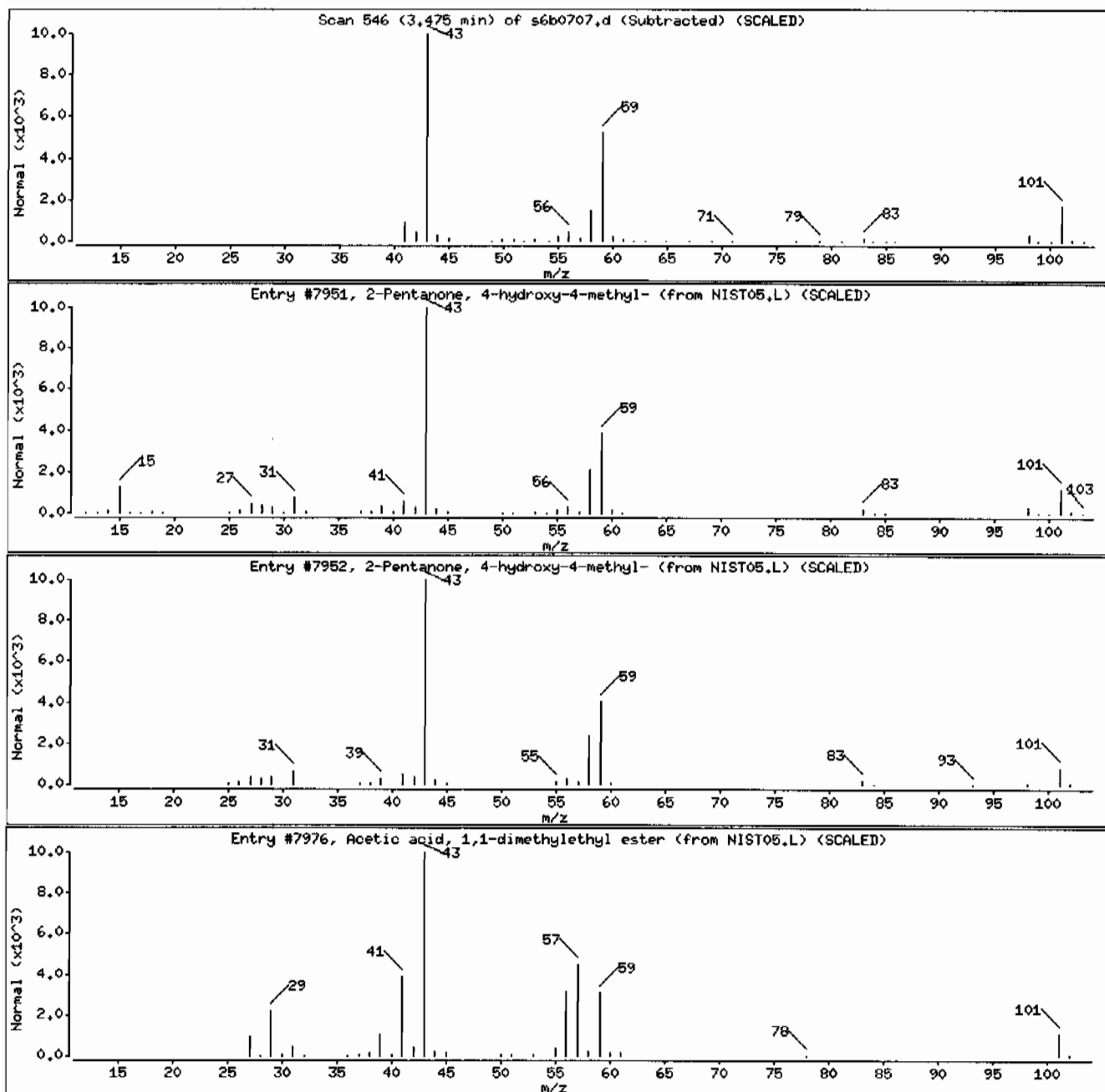
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	U	46.9	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	235	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469
99-09-2	<i>o</i> -Nitroaniline	U	469	ug/kg	93.8	469
	3-Nitroaniline					

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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	469	ug/kg	93.8	469
606-20-2	2,6-Dinitrotoluene	U	469	ug/kg	46.9	469
208-96-8	Acenaphthylene	U	46.9	ug/kg	14.1	46.9
51-28-5	2,4-Dinitrophenol	U	938	ug/kg	178	938
132-64-9	Dibenzofuran	U	469	ug/kg	93.8	469
84-66-2	Diethylphthalate	U	469	ug/kg	93.8	469
86-73-7	Fluorene	U	46.9	ug/kg	14.1	46.9
7005-72-3	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
534-52-1	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469
100-01-6	4-Nitroaniline	U	469	ug/kg	141	469
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	469	ug/kg	93.8	469
122-66-7	Azobenzene	U	469	ug/kg	93.8	469
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
118-74-1	Hexachlorobenzene	U	469	ug/kg	93.8	469
85-01-8	Phenanthrene	U	46.9	ug/kg	14.1	46.9
120-12-7	Anthracene	U	46.9	ug/kg	9.38	46.9
84-74-2	Di-n-butylphthalate	U	469	ug/kg	93.8	469
206-44-0	Fluoranthene	U	46.9	ug/kg	14.1	46.9
85-68-7	Butylbenzylphthalate	U	469	ug/kg	93.8	469
56-55-3	Benzo(a)anthracene	U	46.9	ug/kg	14.1	46.9
91-94-1	3,3'-Dichlorobenzidine	U	469	ug/kg	141	469
218-01-9	Chrysene	U	46.9	ug/kg	14.1	46.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	469	ug/kg	93.8	469
117-84-0	Di-n-octylphthalate	U	469	ug/kg	93.8	469
205-99-2	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
207-08-9	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
50-32-8	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
53-70-3	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
120-82-1	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.26	417	ug/kg		J
	Unknown Aldol Condensate	3.47	637	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959006	Date Received: 02/02/2010 09:10	%Moisture: 29.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s6b0712.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
630-02-4	Octacosane		14.46	388	ug/kg	87	NJ
112-95-8	Eicosane		15.75	222	ug/kg	98	NJ

Data File: /chem/MSD6.i/s020710.b/s6b0712.d
Report Date: 12-Feb-2010 16:12

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0712.d
Lab Smp Id: 245959006 Client Smp ID: RE15-10-7312
Inj Date : 07-FEB-2010 17:28
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959006|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.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	30.18000	weight of sample
M	29.40000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.859	4.862	(1.000)	299205	40.0000	
* 29 Naphthalene-d8		136	6.136	6.141	(1.000)	1108817	40.0000	
* 46 Acenaphthene-d10		164	8.006	8.011	(1.000)	623957	40.0000	
* 67 Phenanthrene-d10		188	9.619	9.622	(1.000)	1078893	40.0000	
* 91 Chrysene-d12		240	12.633	12.646	(1.000)	783707	40.0000	
* 98 Perylene-d12		264	14.978	14.990	(1.000)	515934	40.0000	
\$ 3 2-Fluorophenol		112	3.707	3.697	(0.763)	432626	57.7392	2710
\$ 5 Phenol-d5		99	4.472	4.474	(0.920)	515622	54.5234	2560
\$ 20 Nitrobenzene-d5		82	5.394	5.404	(0.879)	247863	31.6002	1480
\$ 39 2-Fluorobiphenyl		172	7.260	7.265	(0.907)	494241	30.7366	1440
\$ 60 2,4,6-Tribromophenol		329	8.857	8.860	(1.106)	87374	47.9771	2250
\$ 81 p-Terphenyl-d14		244	11.321	11.324	(0.896)	466032	36.8737	1730

ION RATIO REPORT

SV REPORT

Data file: s6b0712.d

Report Date: 02/08/2010 09:14

Lab. ID: 245959006

SampleType: SAMPLE

Injection Date: 07-FEB-2010 17:28

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959006|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	25848	4.47	4.55	80-120	100	(T)
93	112	4.52	4.55	217-277	0	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	35429	5.39	5.24	80-120	100	(T)
42	22210	5.39	5.24	39- 99	63	(T)

22	Isophorone		CAS#: 78-59-1			
82	247863	5.39	5.66	80-120	100	(T)
138	381	5.92	5.66	0- 49	0	(T)

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	5268	7.45	7.41	80-120	100	()
164	530	7.82	7.41	3- 63	10	(T)
127	1819	7.26	7.41	8- 68	35	(T)

43	Dimethylphthalate		CAS#: 131-11-3			
163	110903	8.01	7.70	80-120	100	(T)
164	623957	8.01	7.70	0- 40	563	(QT)

45	Acenaphthylene		CAS#: 208-96-8			
152	11852	8.00	7.86	80-120	100	(T)
151	3217	8.00	7.86	0- 50	27	(T)
153	12844	8.00	7.86	0- 43	108	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
47 Acenaphthene			CAS#: 83-32-9			
154	12235	8.00	8.05	80-120	100	()
153	12844	8.00	8.05	77-137	105	()
152	11852	8.00	8.05	21- 81	97	(Q)
<hr/>						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	81129	8.01	8.21	80-120	100	(T)
89	1691	8.01	8.21	43-103	2	(QT)
63	2691	8.01	8.21	18- 78	3	(QT)
<hr/>						
52 4-Nitrophenol			CAS#: 100-02-7			
139	251	8.23	8.12	80-120	100	(T)
109	101	8.32	8.13	36- 96	41	(T)
65	123	8.11	8.12	60-120	49	(Q)
<hr/>						
53 Fluorene			CAS#: 86-73-7			
166	5758	8.85	8.60	80-120	100	(T)
165	5074	8.86	8.60	62-122	88	(T)
167	1298	8.86	8.60	0- 44	23	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	168	8.85	8.65	80-120	100	(T)
105	616	8.85	8.65	11- 71	366	(QT)
51	708	8.85	8.65	23- 83	420	(QT)
<hr/>						
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	206	16.98	16.98	80-120	100	()
138	171	17.15	16.98	7- 67	83	(QT)
<hr/>						
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	117	17.00	17.01	80-120	100	()
139	0	0.00	17.01	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0712.d
 Lab Smp Id: 245959006 Client Smp ID: RE15-10-7312
 Inj Date : 07-FEB-2010 17:28
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245959006|949132|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	30.18000	weight of sample
M	29.40000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1779730	40.000
* 98 Perylene-d12	14.978	1452056	40.000

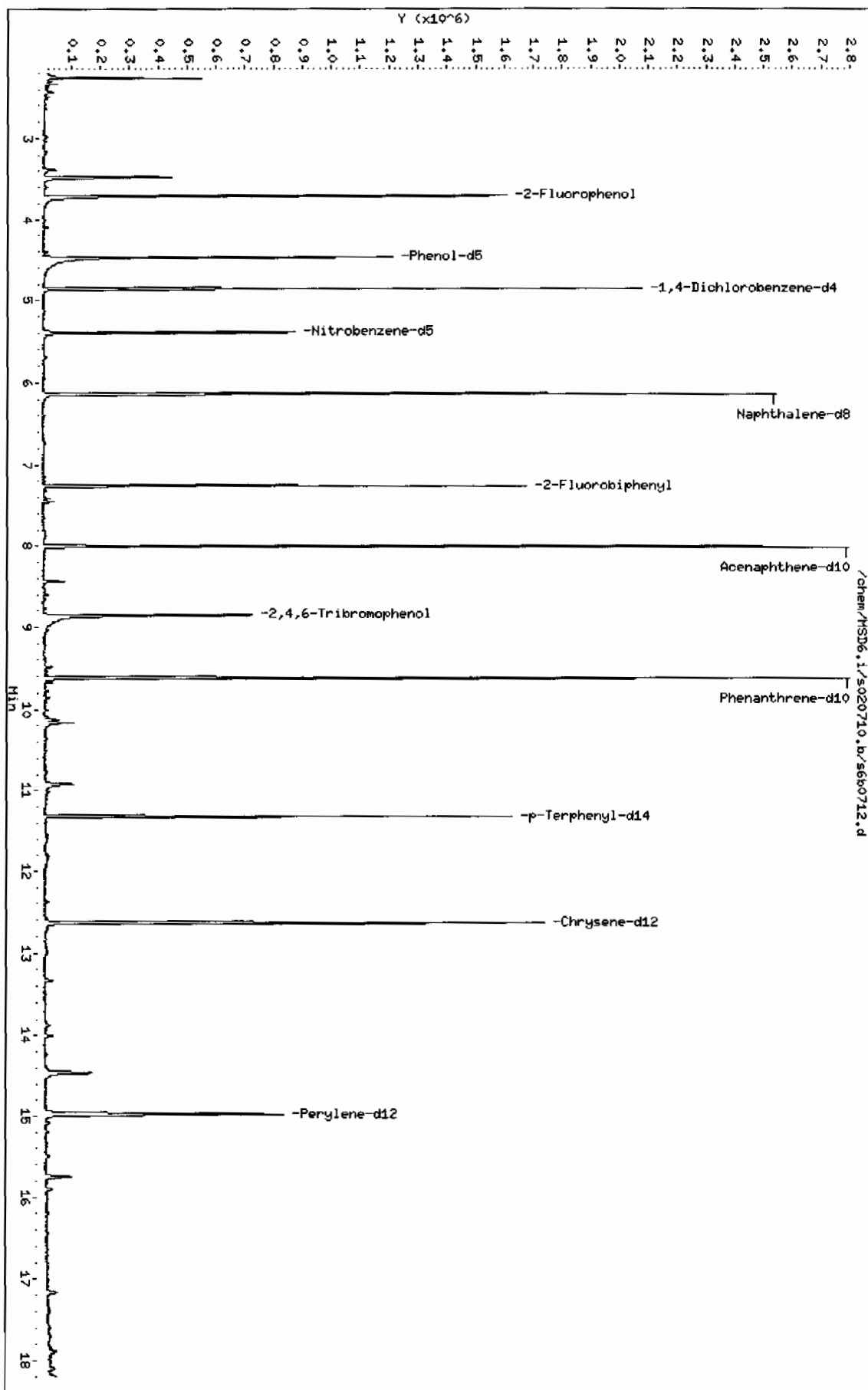
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.263	395028	8.87837769	417	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	L1B ENTRY	
====	----	-----	-----	----	-----	-----	-----
Unknown Aldol Condensate					CAS #:		
3.473	603464	13.5630367	636	0		0	10
Octacosane					CAS #: 630-02-4		
14.458	300070	8.26607712	388	87	NIST05.L	169721	98
Eicosane					CAS #: 112-95-8		
15.747	171996	4.73800567	222	98	NIST05.L	113488	98

Data File: /chem/HSD6.i/s020710.b/s6b0712.d
Date: 07-FEB-2010 17:28
Client ID: RE15-10-7312
Sample Info: 1245959006194913211SVH11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SHS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 07-FEB-2010 17:28

Client ID: RE15-10-7312

Instrument: HSD6.i

Sample Info: 12459590061949132111SVH111LANL

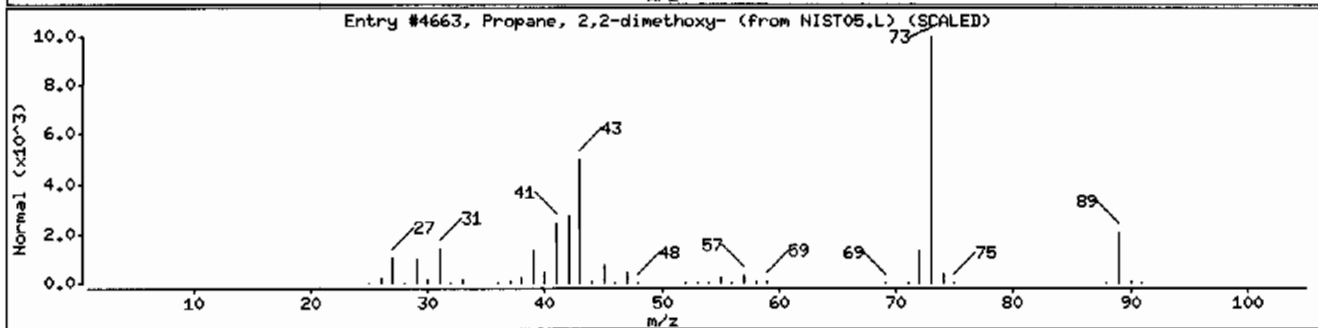
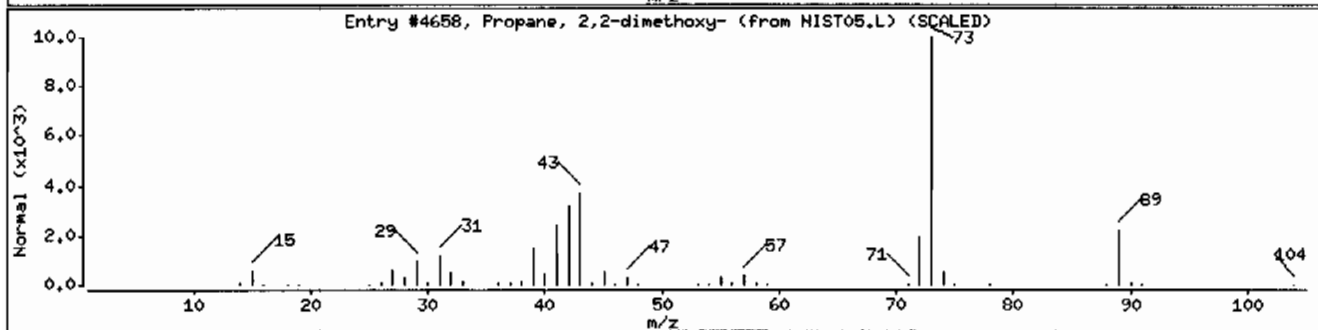
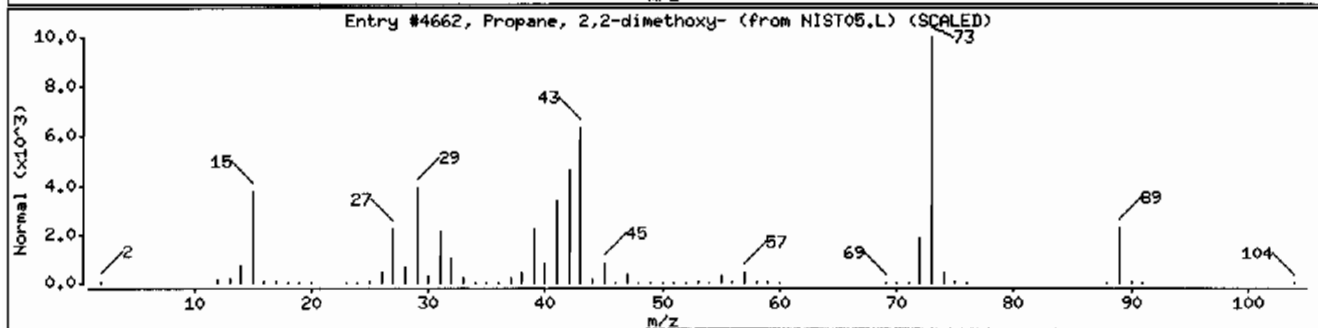
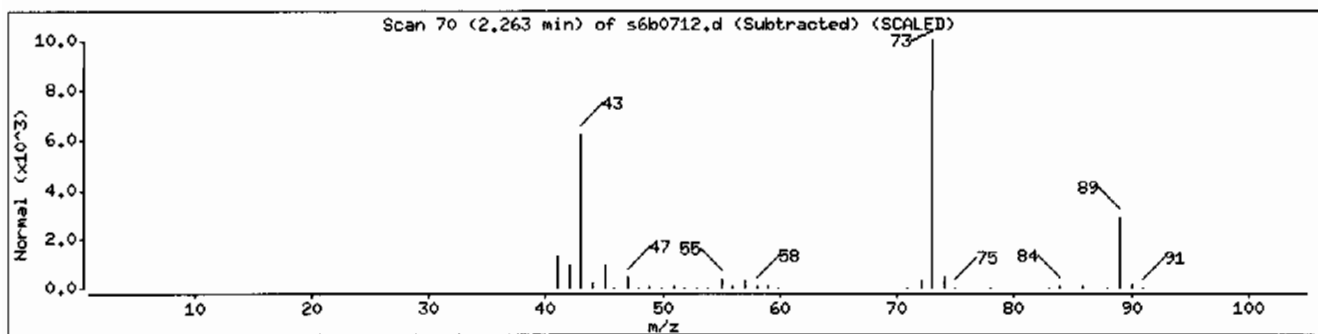
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	33	C5H12O2	104



Date : 07-FEB-2010 17:28

Client ID: RE15-10-7312

Instrument: HSD6.i

Sample Info: 1245959006194913211SVH111LANL

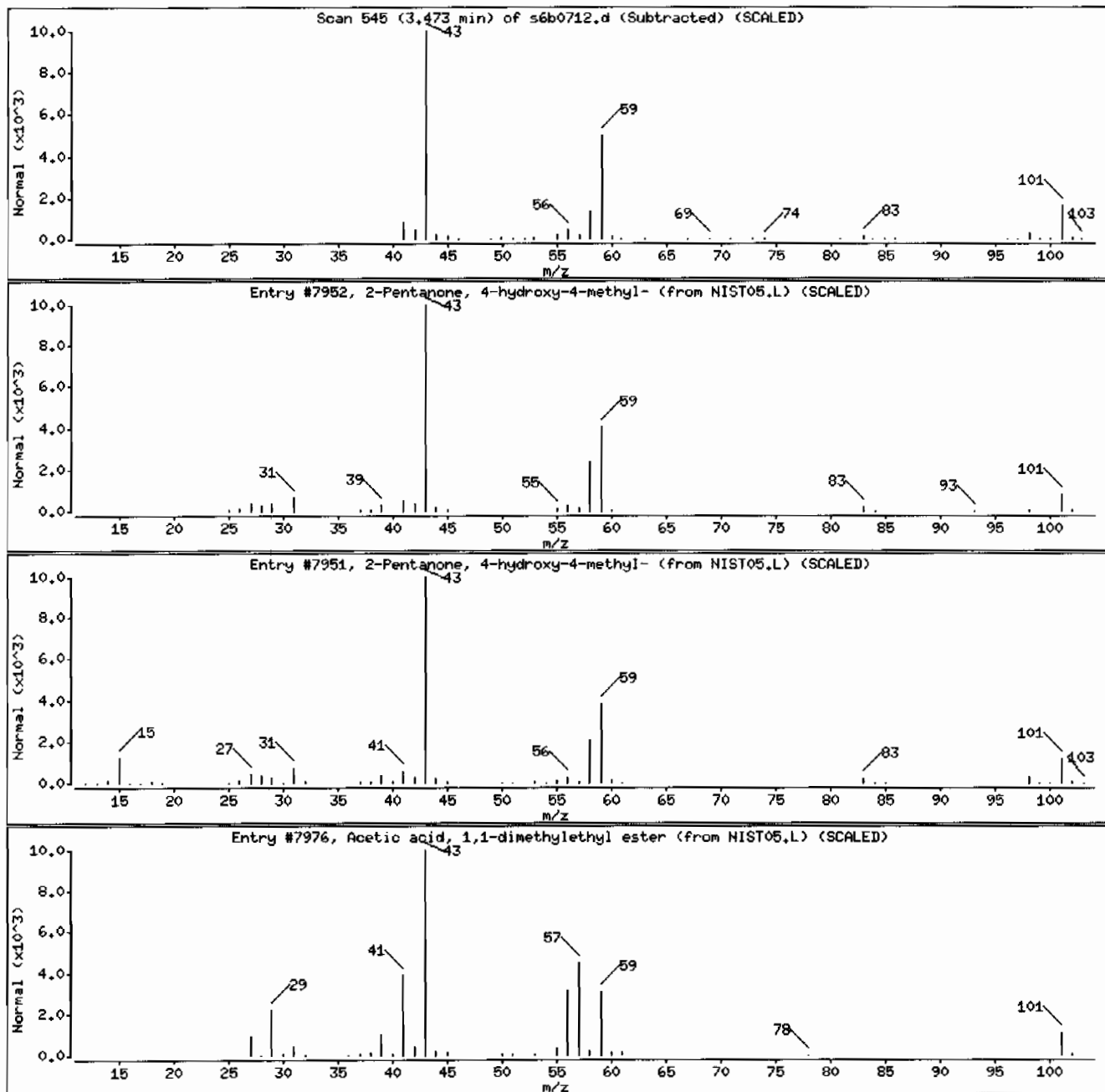
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 07-FEB-2010 17:28

Client ID: RE15-10-7312

Instrument: HSD6.1

Sample Info: 1245959006194913211SVH11ILANL

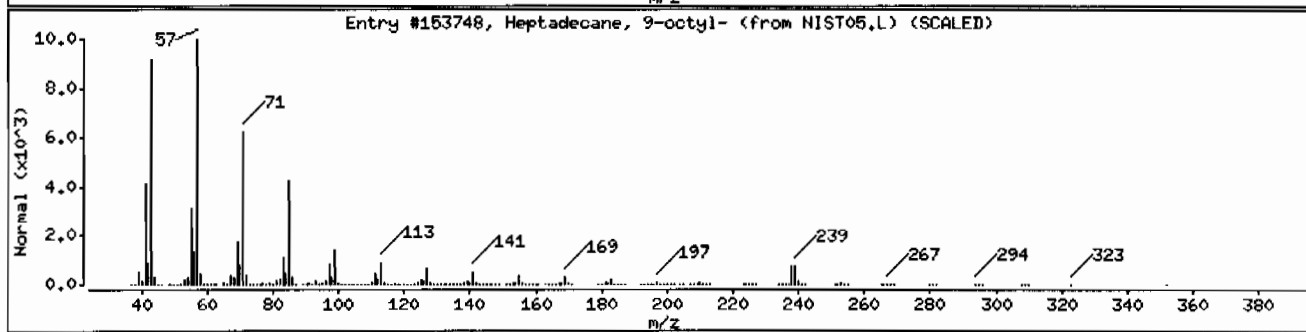
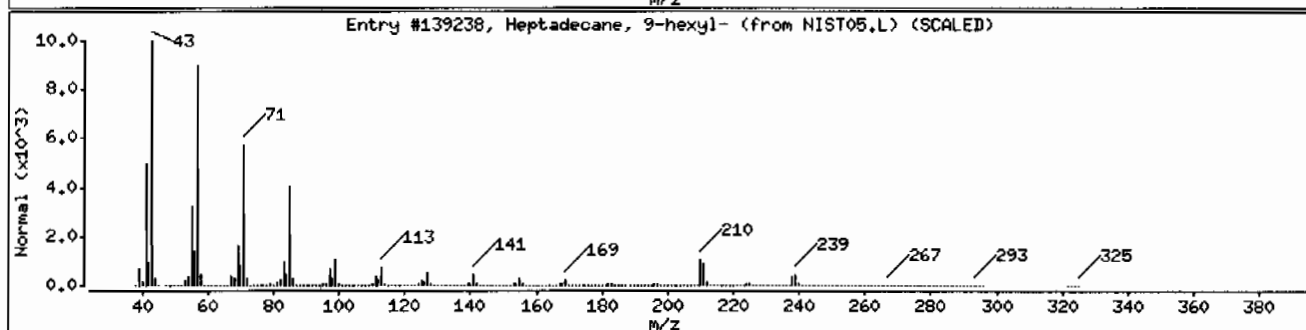
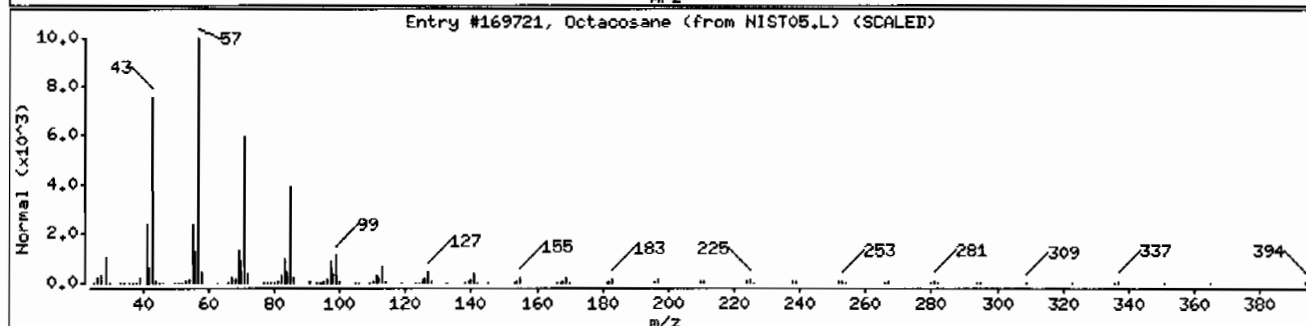
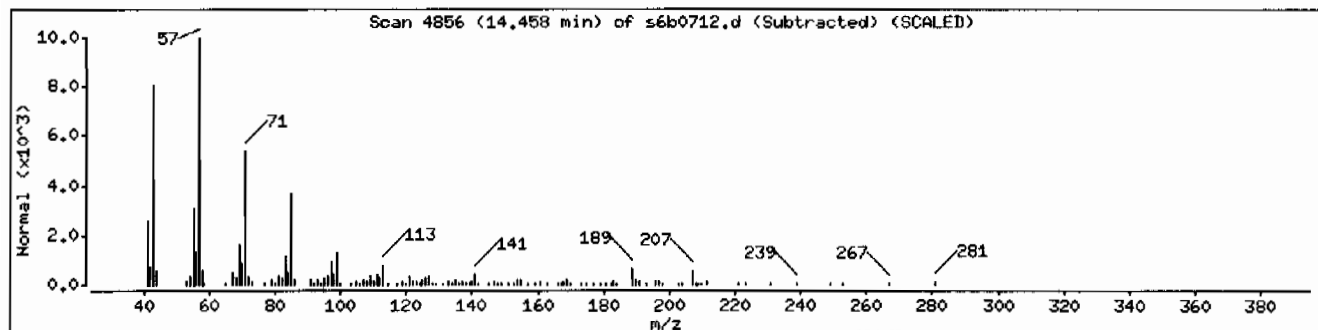
Volume Injected (uL): 0.5

Operator: nag1

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	87	C28H58	394
Heptadecane, 9-hexyl-	55124-79-3	NIST05.L	139238	83	C23H48	324
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	83	C25H52	352



Date : 07-FEB-2010 17:28

Client ID: RE15-10-7312

Instrument: MSD6.i

Sample Info: 1245959006194913211SVH111LANL

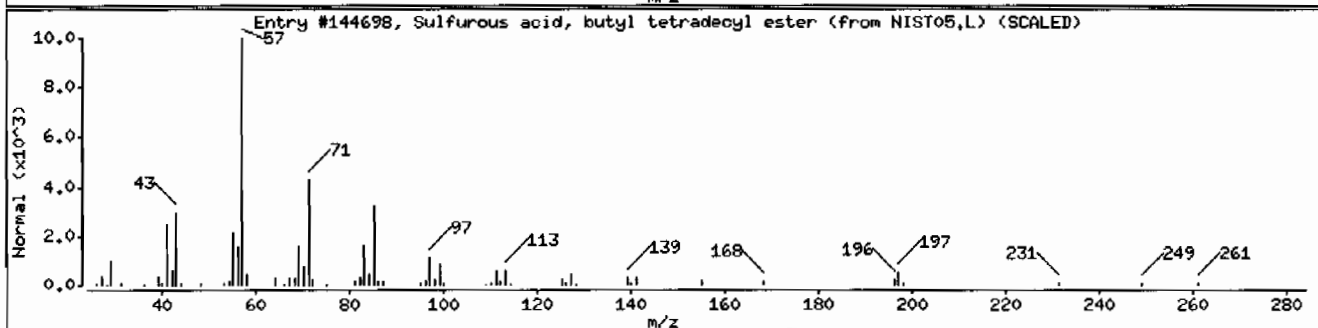
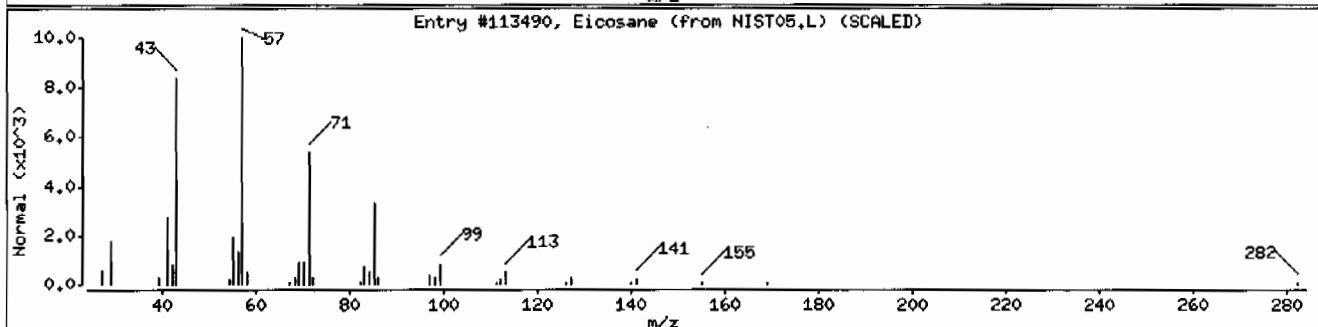
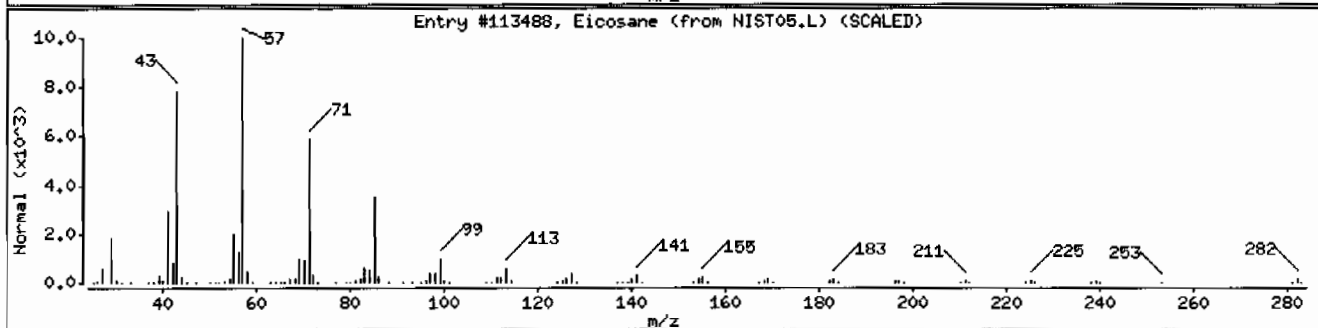
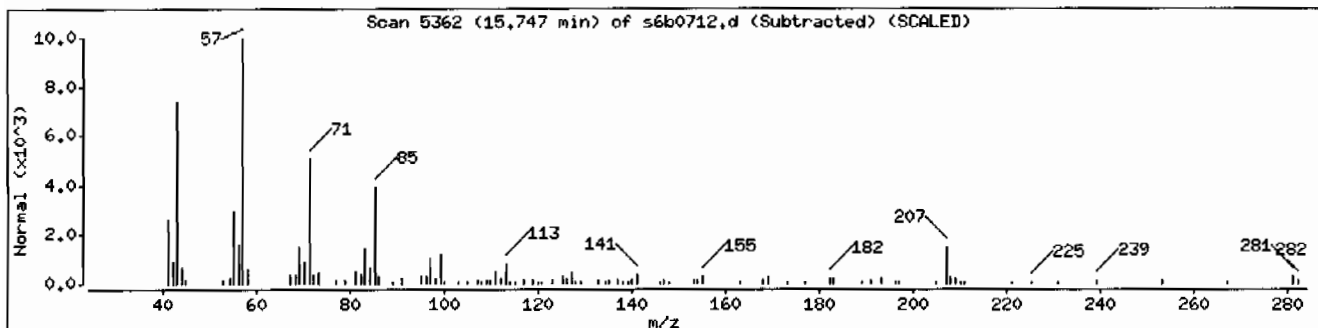
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	95	C ₂₀ H ₄₂	282
Sulfurous acid, butyl tetradecyl ester	1000309-18-1	NIST05.L	144698	87	C ₁₈ H ₃₈ O ₃ S	334



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

SDG Number: 10-1510
Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
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: RE15-10-7313
Batch ID: 949132
Run Date: 02/07/2010 17:55
Prep Date: 02/04/2010 20:55
Data File: s6b0713.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	U	36.9	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: 10-1510
Lab Sample ID: 245959007

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.J
Analyst: NAG1
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: RE15-10-7313
Batch ID: 949132
Run Date: 02/07/2010 17:55
Prep Date: 02/04/2010 20:55
Data File: s6b0713.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
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-Nitroaniline</i>					
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-Diphenylhydrazine</i>					
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	U	36.9	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	U	369	ug/kg	73.8	369
206-44-0	Fluoranthene	U	36.9	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	U	36.9	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	2.27	215	ug/kg		J
	Unknown Aldol Condensate	3.48	669	ug/kg		JA

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959007	Date Received: 02/02/2010 09:10	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7313	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 17:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0713.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown		13.85	272	ug/kg		J
	Unknown		13.87	467	ug/kg		J
79-63-0	Lanosterol		17.17	267	ug/kg	83	J

Data File: /chem/MSD6.i/s020710.b/s6b0713.d
Report Date: 12-Feb-2010 16:12

Page 1

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Data file : /chem/MSD6.i/s020710.b/s6b0713.d
Lab Smp Id: 245959007 Client Smp ID: RE15-10-7313
Inj Date : 07-FEB-2010 17:55
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959007|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.72000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	291869		40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1100925		40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	630997		40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1096318		40.0000	
* 91 Chrysene-d12	240	12.636	12.646	(1.000)	765474		40.0000	
* 98 Perylene-d12	264	14.983	14.990	(1.000)	500995		40.0000	
\$ 3 2-Fluorophenol	112	3.708	3.697	(0.763)	494653		67.6767	2500
\$ 5 Phenol-d5	99	4.472	4.474	(0.920)	641152		69.5014	2560
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	295276		37.9148	1400
\$ 39 2-Fluorobiphenyl	172	7.262	7.265	(0.907)	586424		36.0626	1330
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860	(1.106)	124070		67.3668	2480
\$ 81 p-Terphenyl-d14	244	11.324	11.324	(0.896)	607624		49.2221	1820

ION RATIO REPORT

SV REPORT

Data file: s6b0713.d

Report Date: 02/08/2010 09:14

Lab. ID: 245959007

SampleType: SAMPLE

Injection Date: 07-FEB-2010 17:55

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959007|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	43662	5.40	5.24	80-120	100	(T)
42	26443	5.39	5.24	39- 99	61	(T)

22 Isophorone				CAS#: 78-59-1		
82	295276	5.39	5.66	80-120	100	(T)
138	5873	6.14	5.66	0- 49	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	112769	8.01	7.70	80-120	100	(T)
164	630997	8.01	7.70	0- 40	560	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	83783	8.00	8.21	80-120	100	(T)
89	972	8.01	8.21	43-103	1	(QT)
63	939	8.00	8.21	18- 78	1	(QT)

53 Fluorene				CAS#: 86-73-7		
166	8645	8.85	8.60	80-120	100	(T)
165	7857	8.85	8.60	62-122	91	(T)
167	2646	8.85	8.60	0- 44	31	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	329	8.86	8.65	80-120	100	(T)
105	911	8.86	8.65	11- 71	277	(QT)
51	854	8.85	8.65	23- 83	259	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0713.d
Report Date: 12-Feb-2010 16:12

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0713.d
Lab Smp Id: 245959007 Client Smp ID: RE15-10-7313
Inj Date : 07-FEB-2010 17:55
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959007|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.72000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.859	1743063	40.000
* 98 Perylene-d12	14.983	1420453	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.270	253811	5.82449228	215	0		0	10

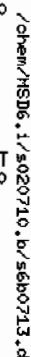
RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate							
3.476	790172	18.1329516	669	0		0	10
CAS #:							
Unknown							
13.852	261801	7.37231881	272	0		0	98
CAS #:							
Unknown							
13.874	449826	12.6670961	467	0		0	98
CAS #:							
Lanosterol							
17.172	257046	7.23840980	267	83	NIST05.L	176558	98 (L)
CAS #: 79-63-0							

QC Flag Legend

L - Operator selected an alternate library search match.

Page 1

Instrument: MS16+1



Date : 07-FEB-2010 17:55

Client ID: RE15-10-7313

Instrument: HSD6.i

Sample Info: I245959007194913211SVH11ILANL

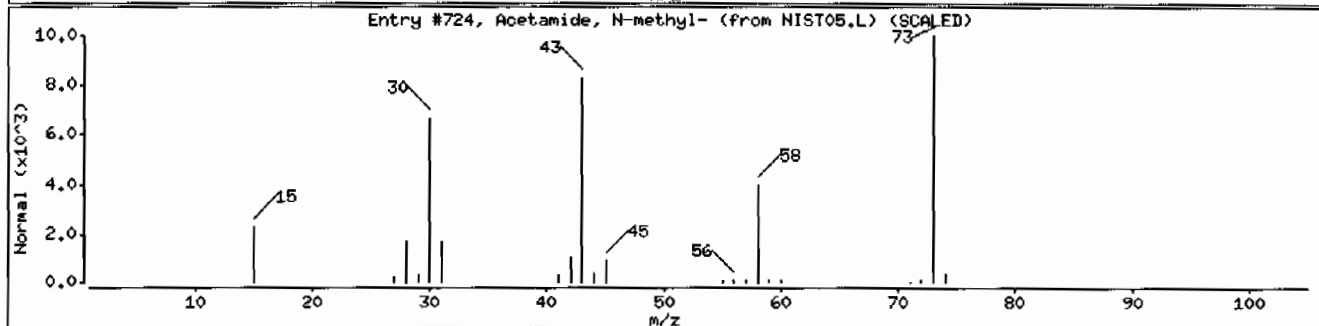
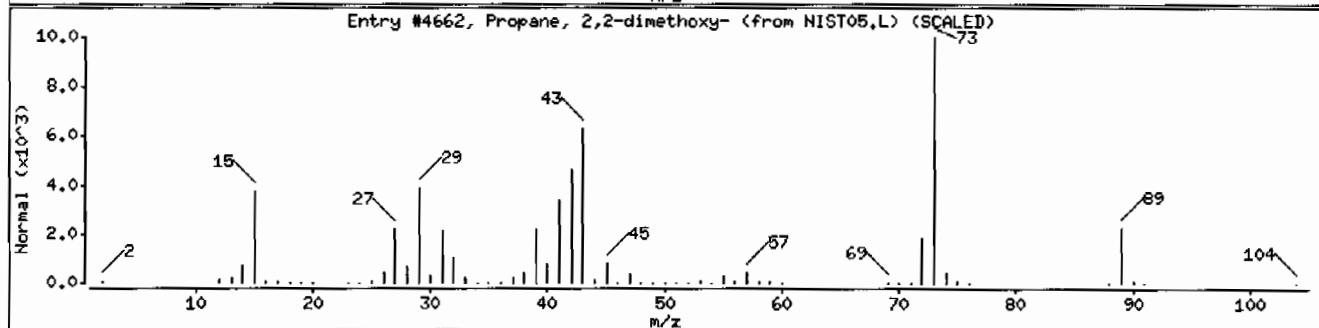
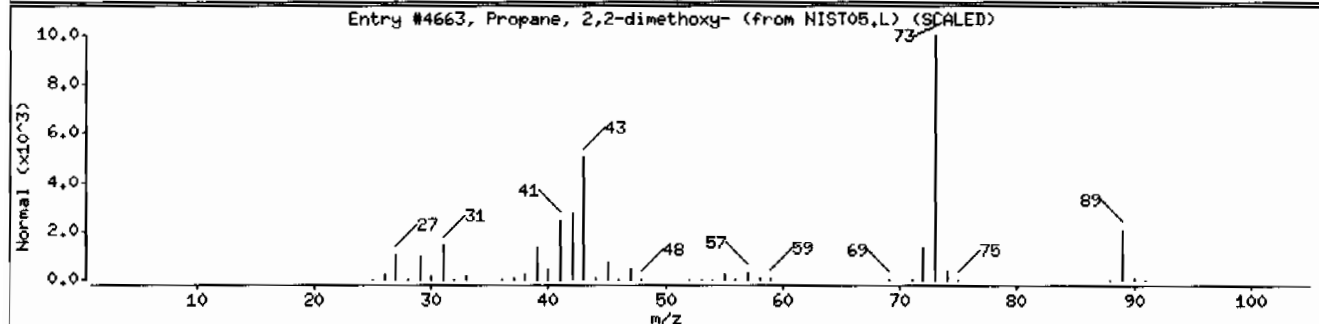
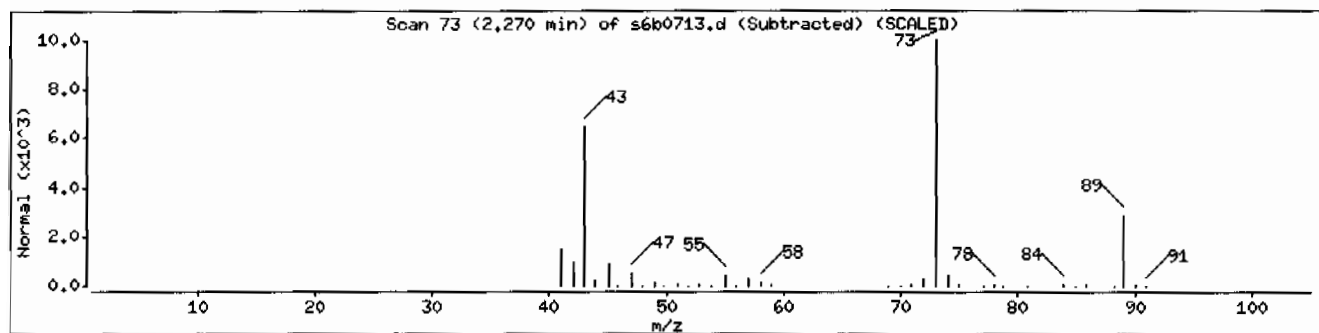
Volume Injected (uL): 0.6

Operator: nag1

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
Acetamide, N-methyl-	79-16-3	NIST05.L	724	37	C3H7NO	73



Date : 07-FEB-2010 17:55

Client ID: RE15-10-7313

Instrument: MSD6.i

Sample Info: 1245959007194913211ISVH11LANL

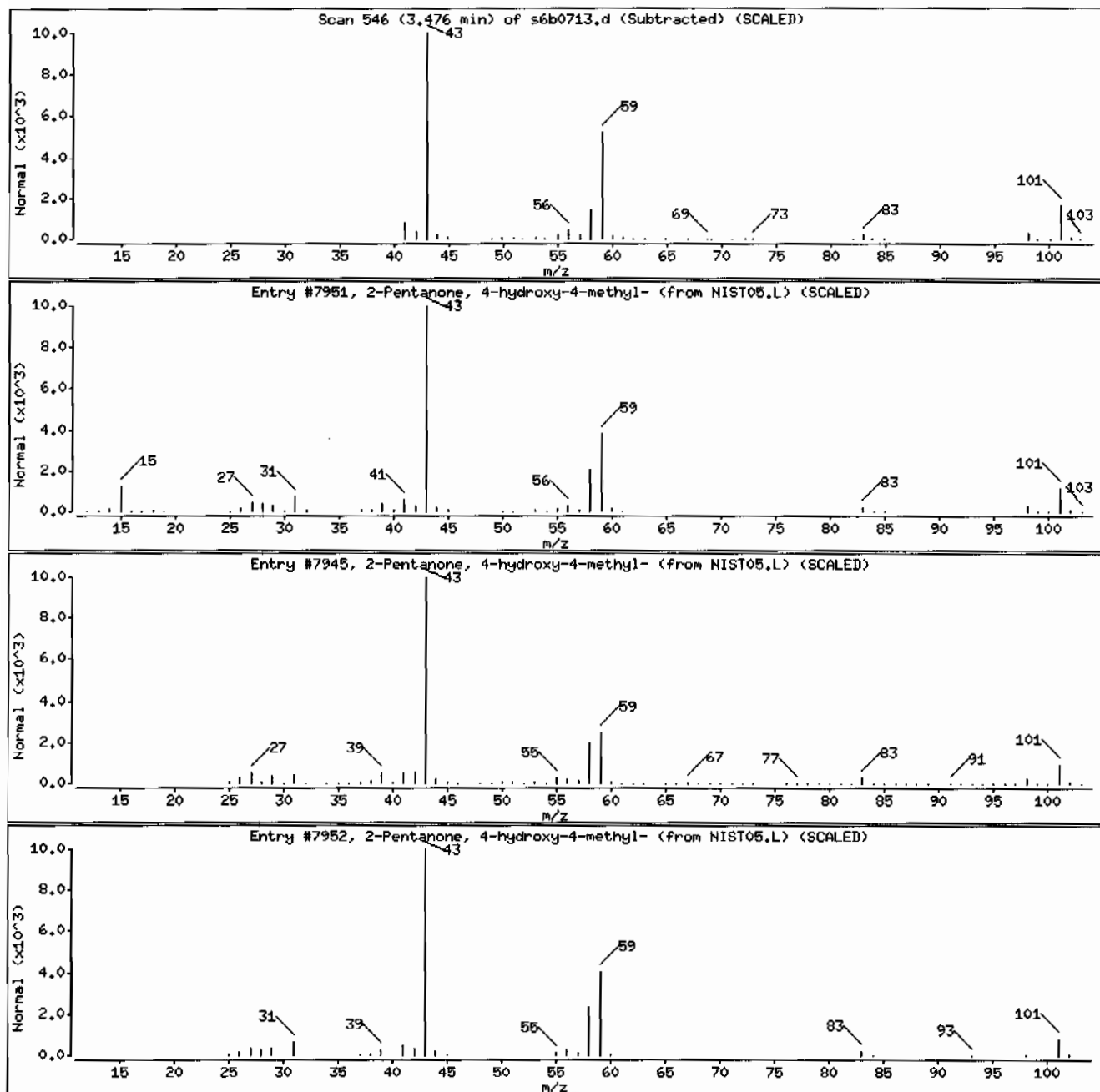
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116



Date : 07-FEB-2010 17:55

Client ID: RE15-10-7313

Instrument: MSD6.1

Sample Info: 1245959007194913211|SVH11|LANL

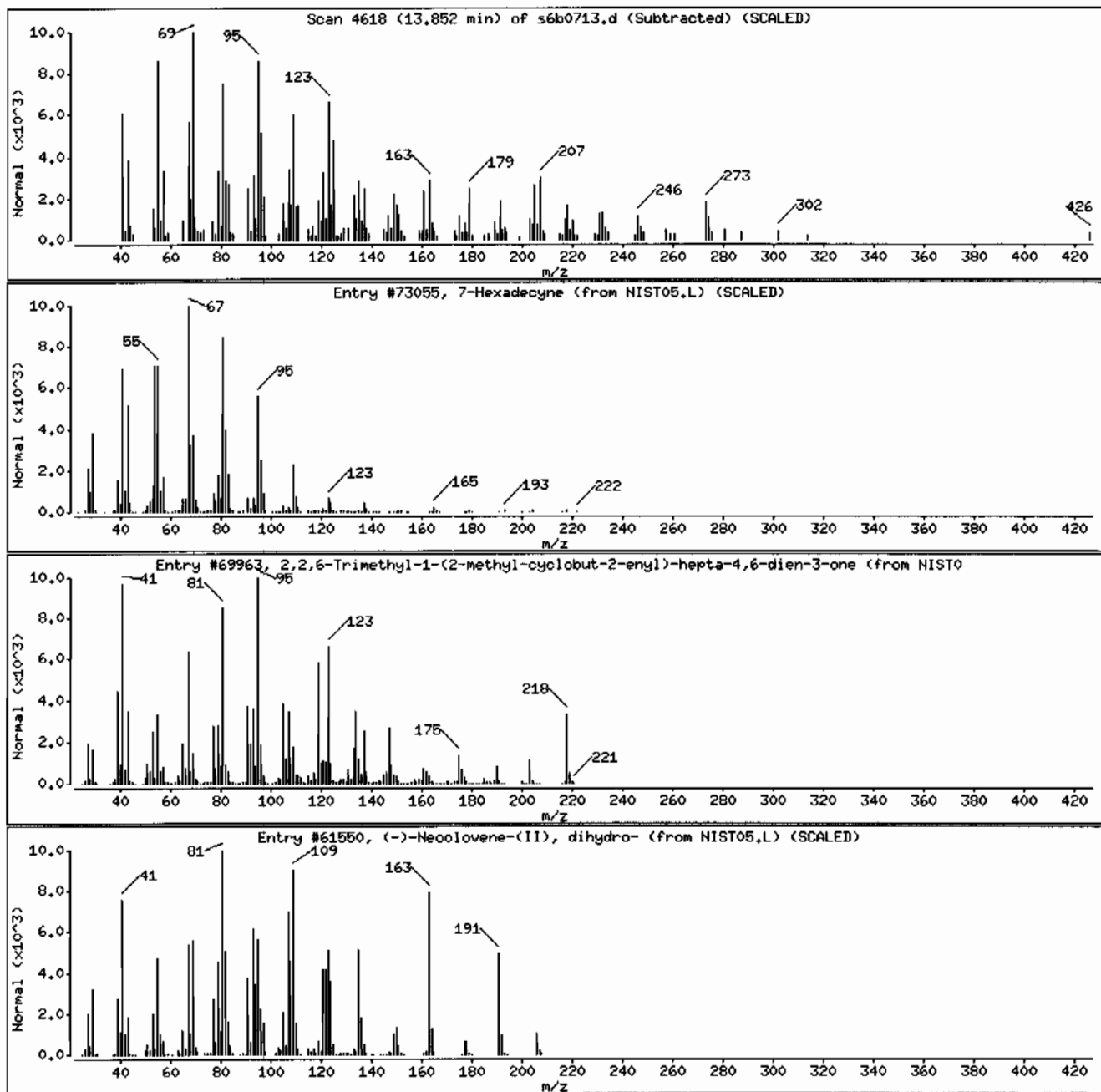
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Hexadecyne	74686-28-2	NIST05.L	73055	78	C16H30	222
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	60	C15H22O	218
(-)-Neoclovene-(II), dihydro-	1000152-83-6	NIST05.L	61550	52	C15H26	206



Date : 07-FEB-2010 17:55

Client ID: RE15-10-7313

Instrument: MSD6.i

Sample Info: 1245959007194913211SVH11LANL

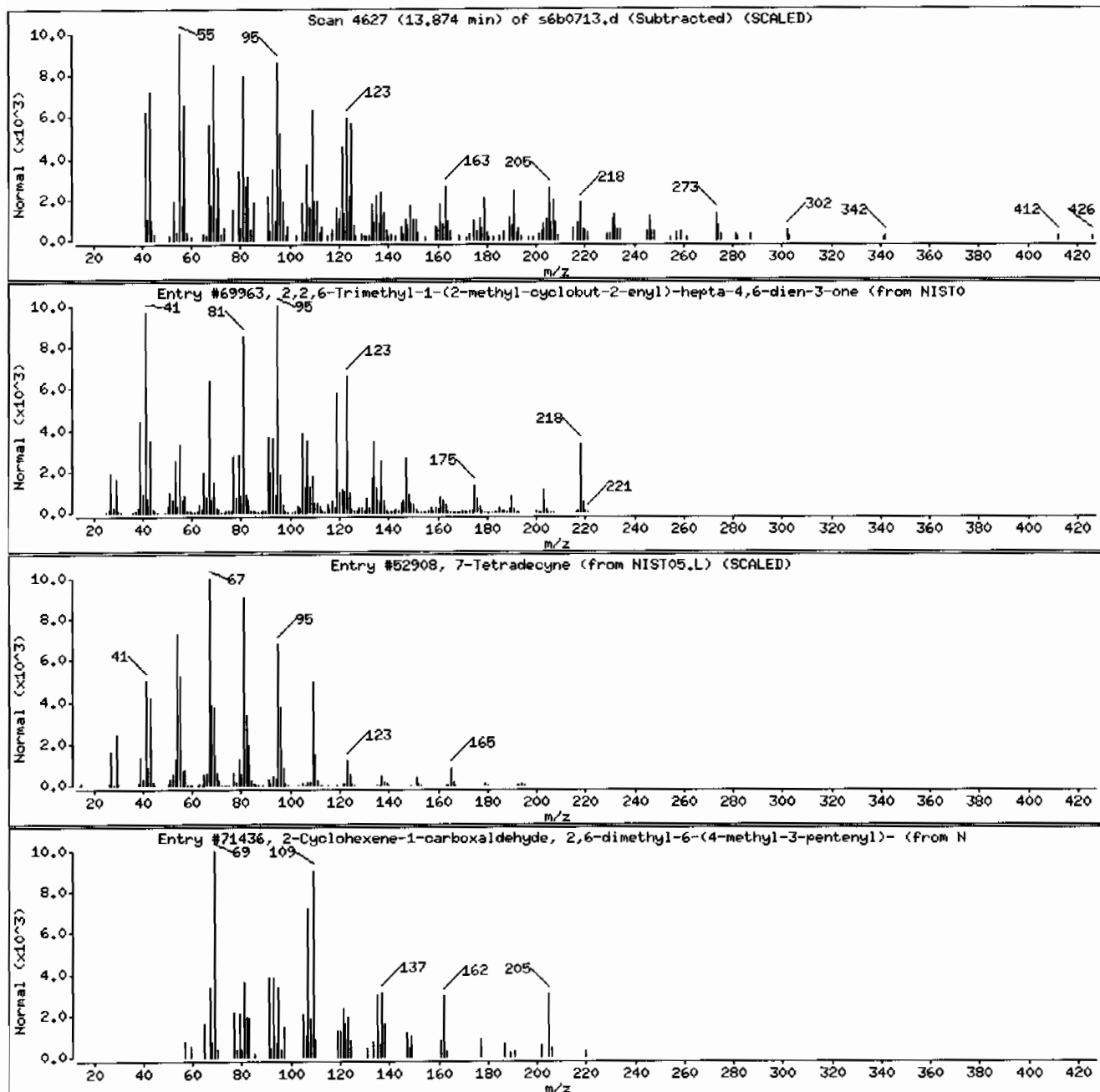
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	60	C15H22O	218
7-Tetradecyne	35216-11-6	NIST05.L	52908	55	C14H26	194
2-Cyclohexene-1-carboxaldehyde, 2,6-dimethyl-6-(4-methyl-3-pentenyl)-	56772-07-7	NIST05.L	71436	48	C15H24O	220



Date: 07-FEB-2010 17:55

Client ID: RE15-10-7313

Instrument: MSD6.i

Sample Info: 1245959007194913211SVMI11LANL

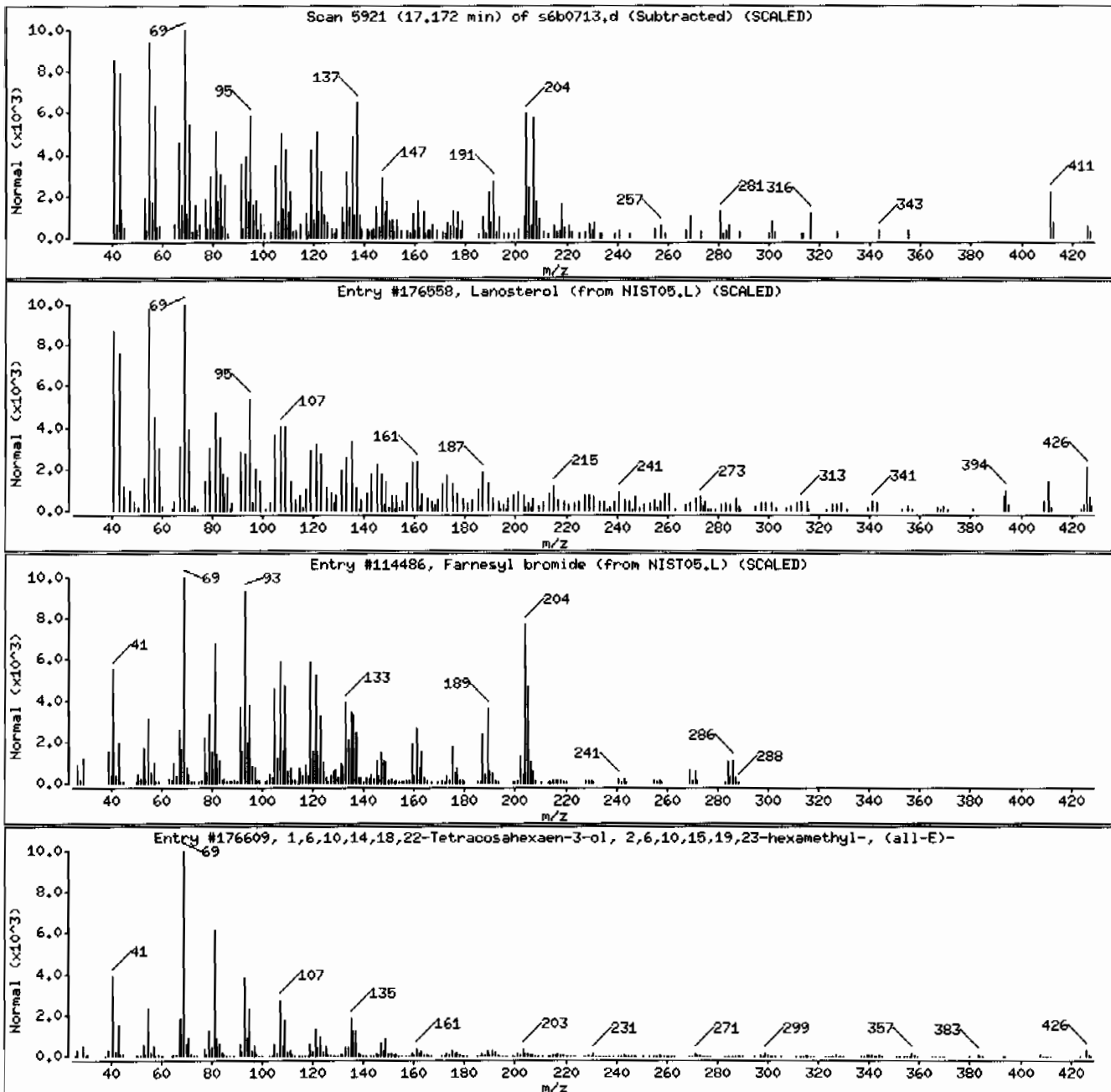
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Lanosterol	79-63-0	NIST05.L	176558	83	C ₃₀ H ₅₀	426
Farnesyl bromide	6874-67-5	NIST05.L	114486	50	C ₁₅ H ₂₅ Br	284
1,6,10,14,18,22-Tetracosahexaen-3-ol, 2,	54159-46-5	NIST05.L	176609	46	C ₃₀ H ₅₀	426



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

SDG Number: 10-1510
Lab Sample ID: 245959008

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7314
Batch ID: 949132
Run Date: 02/07/2010 18:23
Prep Date: 02/04/2010 20:55
Data File: s6b0714.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	494	ug/kg	98.8	494
108-95-2	Phenol	U	494	ug/kg	98.8	494
95-57-8	2-Chlorophenol	U	494	ug/kg	98.8	494
106-46-7	1,4-Dichlorobenzene	U	494	ug/kg	98.8	494
621-64-7	N-Nitrosodipropylamine	U	494	ug/kg	98.8	494
59-50-7	4-Chloro-3-methylphenol	U	494	ug/kg	98.8	494
83-32-9	Accnaphthene	U	49.4	ug/kg	16.3	49.4
121-14-2	2,4-Dinitrotoluene	U	494	ug/kg	49.4	494
100-02-7	4-Nitrophenol	U	494	ug/kg	163	494
87-86-5	Pentachlorophenol	U	494	ug/kg	124	494
129-00-0	Pyrene		205	ug/kg	14.8	49.4
110-86-1	Pyridine	U	494	ug/kg	98.8	494
62-53-3	Aniline	U	494	ug/kg	148	494
111-44-4	bis(2-Chloroethyl) ether	U	494	ug/kg	98.8	494
541-73-1	1,3-Dichlorobenzene	U	494	ug/kg	98.8	494
100-51-6	Benzyl alcohol	U	494	ug/kg	148	494
95-50-1	1,2-Dichlorobenzene	U	494	ug/kg	98.8	494
108-60-1	bis(2-Chloroisopropyl)ether	U	494	ug/kg	98.8	494
95-48-7	o-Cresol	U	494	ug/kg	98.8	494
65794-96-9	m,p-Cresols	U	494	ug/kg	148	494
67-72-1	Hexachloroethane	U	494	ug/kg	98.8	494
98-95-3	Nitrobenzene	U	494	ug/kg	98.8	494
78-59-1	Isophorone	U	494	ug/kg	98.8	494
88-75-5	2-Nitrophenol	U	494	ug/kg	98.8	494
105-67-9	2,4-Dimethylphenol	U	494	ug/kg	173	494
111-91-1	bis(2-Chloroethoxy)methane	U	494	ug/kg	98.8	494
120-83-2	2,4-Dichlorophenol	U	494	ug/kg	98.8	494
65-85-0	Benzoic acid	U	988	ug/kg	247	988
91-20-3	Naphthalene	J	20.8	ug/kg	14.8	49.4
106-47-8	4-Chloroaniline	U	494	ug/kg	98.8	494
87-68-3	Hexachlorobutadiene	U	494	ug/kg	98.8	494
91-57-6	2-Methylnaphthalene	J	12.3	ug/kg	9.88	49.4
77-47-4	Hexachlorocyclopentadiene	U	494	ug/kg	98.8	494
88-06-2	2,4,6-Trichlorophenol	U	494	ug/kg	98.8	494
95-95-4	2,4,5-Trichlorophenol	U	494	ug/kg	98.8	494
91-58-7	2-Chloronaphthalene	U	49.4	ug/kg	16.3	49.4
88-74-4	2-Nitroaniline	U	494	ug/kg	98.8	494
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	494	ug/kg	98.8	494

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

SDG Number: 10-1510
Lab Sample ID: 245959008

Client ID: RE15-10-7314
Batch ID: 949132
Run Date: 02/07/2010 18:23
Prep Date: 02/04/2010 20:55
Data File: s6b0714.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	494	ug/kg	98.8	494
606-20-2	2,6-Dinitrotoluene	U	494	ug/kg	49.4	494
208-96-8	Acenaphthylene	U	49.4	ug/kg	14.8	49.4
51-28-5	2,4-Dinitrophenol	U	988	ug/kg	188	988
132-64-9	Dibenzofuran	U	494	ug/kg	98.8	494
84-66-2	Diethylphthalate	U	494	ug/kg	98.8	494
86-73-7	Fluorene	U	49.4	ug/kg	14.8	49.4
7005-72-3	4-Chlorophenylphenylether	U	494	ug/kg	98.8	494
534-52-1	2-Methyl-4,6-dinitrophenol	U	494	ug/kg	98.8	494
100-01-6	4-Nitroaniline	U	494	ug/kg	148	494
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	494	ug/kg	98.8	494
122-66-7	Azobenzene	U	494	ug/kg	98.8	494
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	494	ug/kg	98.8	494
118-74-1	Hexachlorobenzene	U	494	ug/kg	98.8	494
85-01-8	Phenanthrene		235	ug/kg	14.8	49.4
120-12-7	Anthracene	U	49.4	ug/kg	9.88	49.4
84-74-2	Di-n-butylphthalate	U	494	ug/kg	98.8	494
206-44-0	Fluoranthene		311	ug/kg	14.8	49.4
85-68-7	Butylbenzylphthalate	U	494	ug/kg	98.8	494
56-55-3	Benzo(a)anthracene	U	49.4	ug/kg	14.8	49.4
91-94-1	3,3'-Dichlorobenzidine	U	494	ug/kg	148	494
218-01-9	Chrysene		91.9	ug/kg	14.8	49.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	494	ug/kg	98.8	494
117-84-0	Di-n-octylphthalate	U	494	ug/kg	98.8	494
205-99-2	Benzo(b)fluoranthene		120	ug/kg	14.8	49.4
207-08-9	Benzo(k)fluoranthene	J	46.3	ug/kg	14.8	49.4
50-32-8	Benzo(a)pyrene	U	49.4	ug/kg	14.8	49.4
193-39-5	Indeno(1,2,3-cd)pyrene		173	ug/kg	14.8	49.4
53-70-3	Dibenzo(a,h)anthracene	U	49.4	ug/kg	14.8	49.4
191-24-2	Benzo(ghi)perylene	J	25.4	ug/kg	14.8	49.4
120-82-1	1,2,4-Trichlorobenzene	U	494	ug/kg	98.8	494

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	833	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.6	306	ug/kg	99	NJ

Data File: /chem/MSD6.i/s020710.b/s6b0714.d
 Report Date: 12-Feb-2010 16:12

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0714.d
 Lab Smp Id: 245959008 Client Smp ID: RE15-10-7314
 Inj Date : 07-FEB-2010 18:23
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245959008|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	32.60000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862 (1.000)	286077	40.0000	
* 29 Naphthalene-d8	136	6.136	6.141 (1.000)	1081345	40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011 (1.000)	613814	40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622 (1.000)	1071206	40.0000	
* 91 Chrysene-d12	240	12.636	12.646 (1.000)	713165	40.0000	
* 98 Perylene-d12	264	14.980	14.990 (1.000)	408352	40.0000	
\$ 3 2-Fluorophenol	112	3.710	3.697 (0.763)	423977	59.1815	2920
\$ 5 Phenol-d5	99	4.472	4.474 (0.920)	505090	55.8607	2760
\$ 20 Nitrobenzene-d5	82	5.394	5.404 (0.879)	240183	31.3990	1550
\$ 39 2-Fluorobiphenyl	172	7.262	7.265 (0.907)	480697	30.3883	1500
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860 (1.106)	94644	52.8278	2610
\$ 81 p-Terphenyl-d14	244	11.321	11.324 (0.896)	464392	40.3785	1990

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.178	11.186	(0.885)	81365	4.14795	205
30 Naphthalene	128	6.156	6.164	(1.003)	9097	0.42173	20.8 (a)
34 2-Methylnaphthalene	142	6.882	6.885	(1.122)	3247	0.24945	12.3 (a)
68 Phenanthrene	178	9.642	9.650	(1.002)	105328	4.75459	235
76 Fluoranthene	202	10.929	10.936	(1.136)	133618	6.29647	311
92 Chrysene	228	12.669	12.682	(1.003)	27405	1.85886	91.8
95 Benzo (b) fluoranthene	252	14.292	14.305	(0.954)	22026	2.43771	120
96 Benzo (k) fluoranthene	252	14.338	14.353	(0.957)	8424	0.93758	46.3 (a)
99 Indeno (1,2,3-cd) pyrene	276	16.978	16.983	(1.133)	3782	3.50703	173
101 Benzo (ghi) perylene	276	17.493	17.500	(1.168)	3065	0.51407	25.4 (aQ)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation (BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s6b0714.d

Report Date: 02/08/2010 09:15

Lab. ID: 245959008

SampleType: SAMPLE

Injection Date: 07-FEB-2010 18:23

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959008|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	23478	4.47	4.55	80-120	100	(T)
93	648	4.53	4.55	217-277	3	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	35105	5.39	5.24	80-120	100	(T)
42	21289	5.39	5.24	39- 99	61	(T)

22	Isophorone		CAS#: 78-59-1			
82	240183	5.39	5.66	80-120	100	(T)
138	5759	6.14	5.66	0- 49	2	(T)

30	Naphthalene		CAS#: 91-20-3			
128	9097	6.16	6.16	80-120	100	()
129	786	6.16	6.16	0- 41	9	()
127	1143	6.16	6.16	0- 30	13	()

34	2-Methylnaphthalene		CAS#: 91-57-6			
142	3247	6.88	6.88	80-120	100	()
141	2552	6.88	6.88	55-115	79	()

43	Dimethylphthalate		CAS#: 131-11-3			
163	109957	8.01	7.70	80-120	100	(T)
164	613814	8.01	7.70	0- 40	558	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	79817	8.01	8.21	80-120	100	(T)
89	1100	8.01	8.21	43-103	1	(QT)
63	616	8.01	8.21	18- 78	1	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	3240	8.22	8.12	80-120	100	(T)
109	197	8.20	8.13	36- 96	6	(QT)
65	255	8.23	8.12	60-120	8	(QT)

53 Fluorene				CAS#: 86-73-7		
166	5616	8.85	8.60	80-120	100	(T)
165	5849	8.86	8.60	62-122	104	(T)
167	1867	8.85	8.60	0- 44	33	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	224	8.86	8.65	80-120	100	(T)
105	576	8.85	8.65	11- 71	257	(QT)
51	517	8.85	8.65	23- 83	231	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	105328	9.64	9.65	80-120	100	()
179	16828	9.64	9.65	0- 46	16	()
176	20189	9.64	9.65	0- 49	19	()

69 Anthracene				CAS#: 120-12-7		
178	105328	9.64	9.71	80-120	100	(T)
179	16828	9.64	9.70	0- 46	16	(T)
176	20189	9.64	9.71	0- 49	19	(T)

76 Fluoranthene				CAS#: 206-44-0		
202	133618	10.93	10.94	80-120	100	()
203	23638	10.93	10.94	0- 48	18	()
101	17217	10.93	10.94	0- 43	13	()

79 Pyrene				CAS#: 129-00-0		
202	81365	11.18	11.19	80-120	100	()
200	16482	11.18	11.19	0- 51	20	()
101	12244	11.18	11.19	0- 45	15	()

89 Benzo(a)anthracene				CAS#: 56-55-3		
228	11260	12.62	12.63	80-120	100	()
226	2833	12.62	12.63	0- 56	25	()
229	1703	12.62	12.63	0- 50	15	()

92 Chrysene				CAS#: 218-01-9		
228	27405	12.67	12.68	80-120	100	()
229	6007	12.67	12.68	0- 50	22	()
226	8842	12.67	12.68	0- 59	32	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	22026	14.29	14.30	80-120	100	()
253	2347	14.29	14.30	0- 52	11	()
125	1012	14.29	14.30	0- 43	5	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	8424	14.34	14.35	80-120	100	()
253	1627	14.34	14.35	0- 52	19	()
125	389	14.33	14.35	0- 43	5	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	4862	14.78	14.89	80-120	100	(T)
253	703	14.78	14.89	0- 52	14	(T)
125	613	14.78	14.89	0- 30	13	(T)

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	3782	16.98	16.98	80-120	100	()
138	279	16.98	16.98	7- 67	7	()

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	187	17.01	17.01	80-120	100	()
139	118	16.99	17.01	0- 30	63	(Q)

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	3065	17.49	17.50	80-120	100	()
138	1133	17.50	17.50	0- 30	37	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0714.d
 Lab Smp Id: 245959008 Client Smp ID: RE15-10-7314
 Inj Date : 07-FEB-2010 18:23
 Operator : nag1 Inst ID: MSD6.i
 Smp Info : |245959008|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	32.60000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1731347	40.000
* 46 Acenaphthene-d10	8.006	2589849	40.000

CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:		
3.473	729887	16.8628713	833	0	0	10

Data File: /chem/MSD6.i/s020710.b/s6b0714.d
Report Date: 12-Feb-2010 16:12

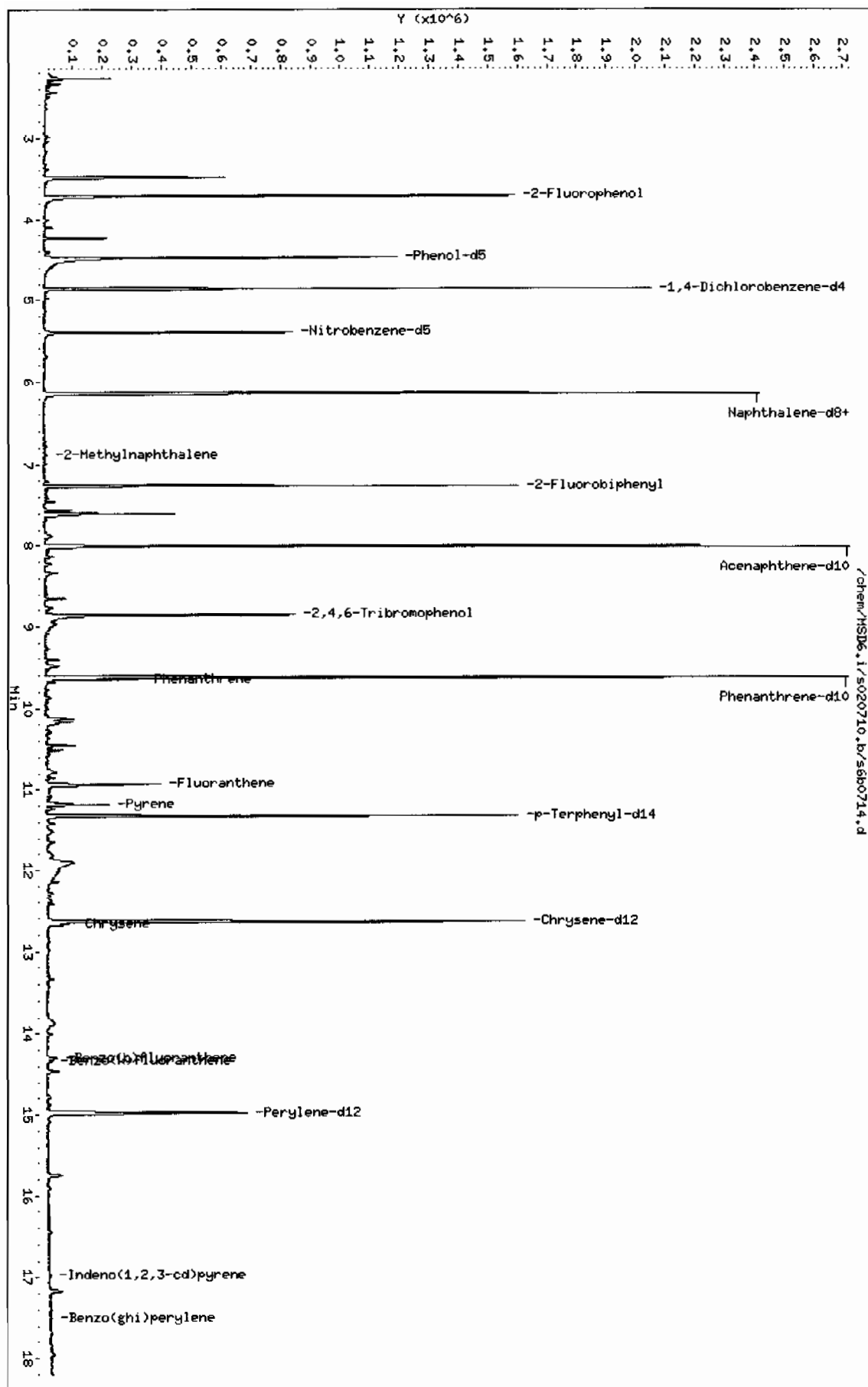
Page 2

RT	CONCENTRATIONS			QUANT			CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
7.603	401102	6.19499167	306	99	NIST05.L	60018	46

1,4-Methanoazulene, decahydro-4,8,8-trim CAS #: 475-20-7

Data File: /chem/MSD6.1/s020710.b/s60714.d
 Date: 07-FEB-2010 18:23
 Client ID: RE15-10-7314
 Sample Info: 124595908|94913211|SVH11|LNL
 Volume Injected (uL): 0.5
 Column phase: 3uM DB-SHS

Instrument: MSD6.1
 Operator: nag1
 Column diameter: 0.20



Data File: /chem/MSD6.i/s020710.b/s6b0714.d

Page 2

Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008/94913211/SVM/11/LANL

Volume Injected (uL): 0.5

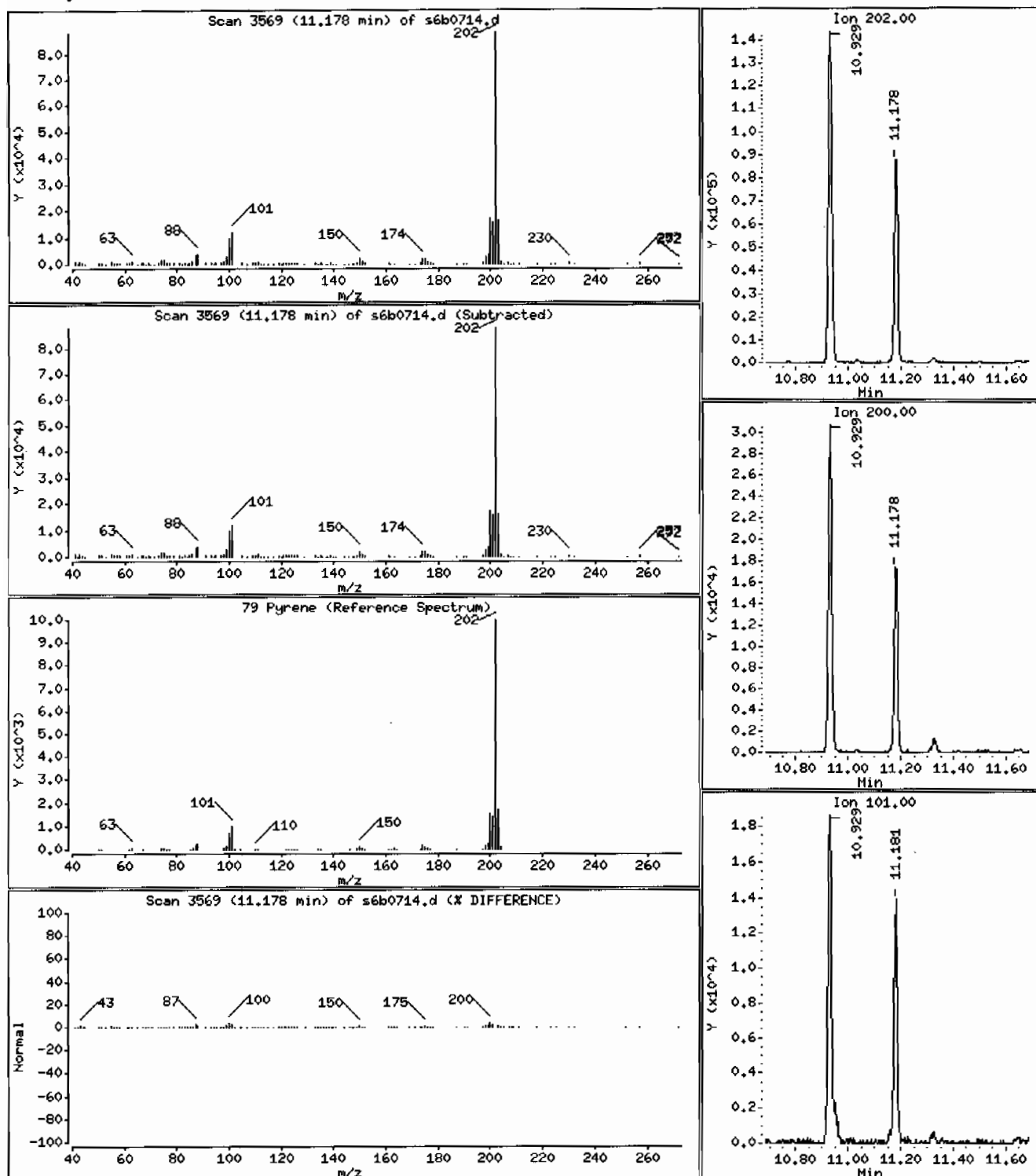
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 205 ug/Kg



Data File: /chem/MSD6.i/s020710.b/s6b0714.d

Page 3

Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211SVMI1ILANL

Volume Injected (uL): 0.5

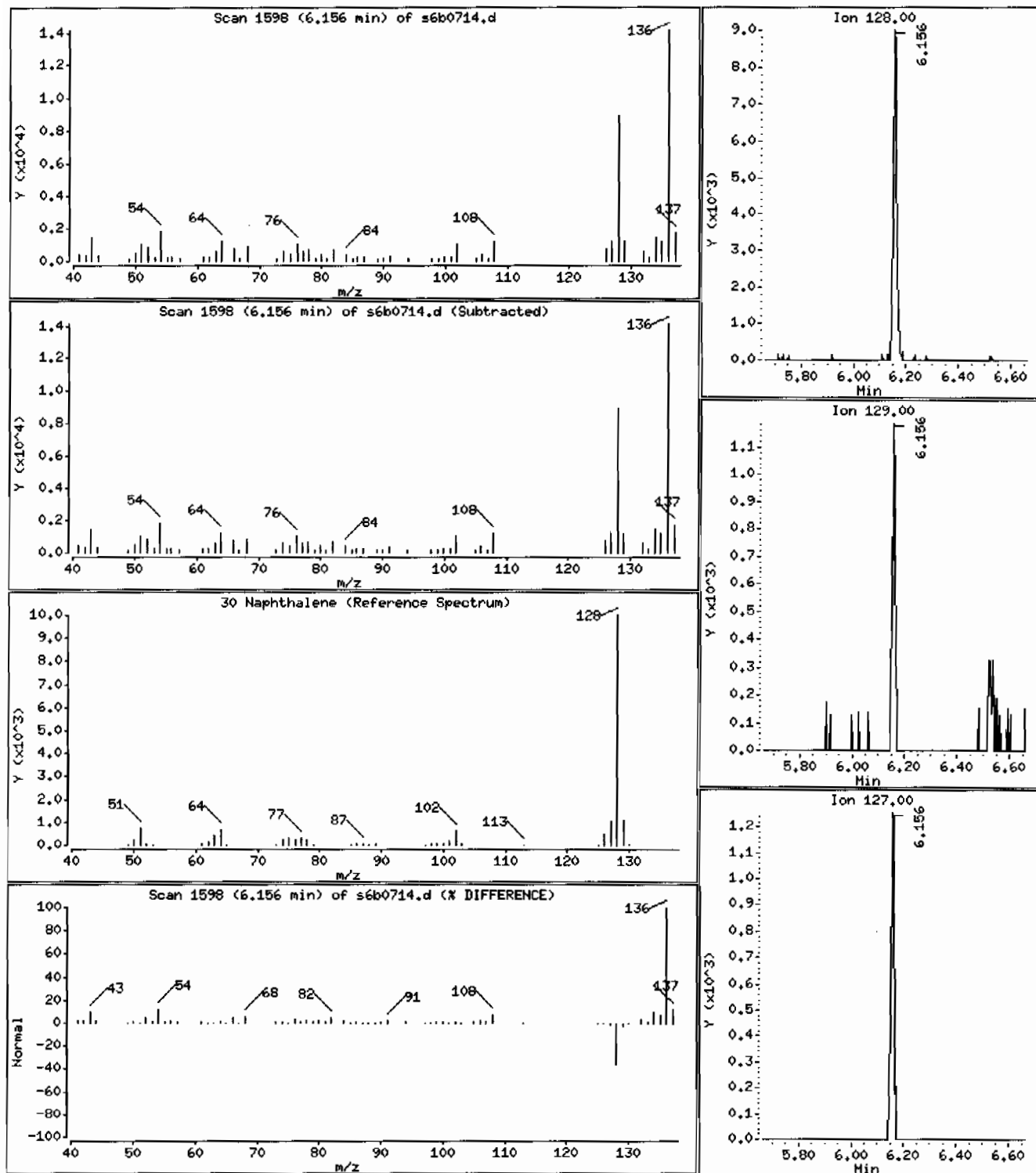
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

30 Naphthalene

Concentration: 20.8 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211SVH111LANL

Volume Injected (uL): 0.5

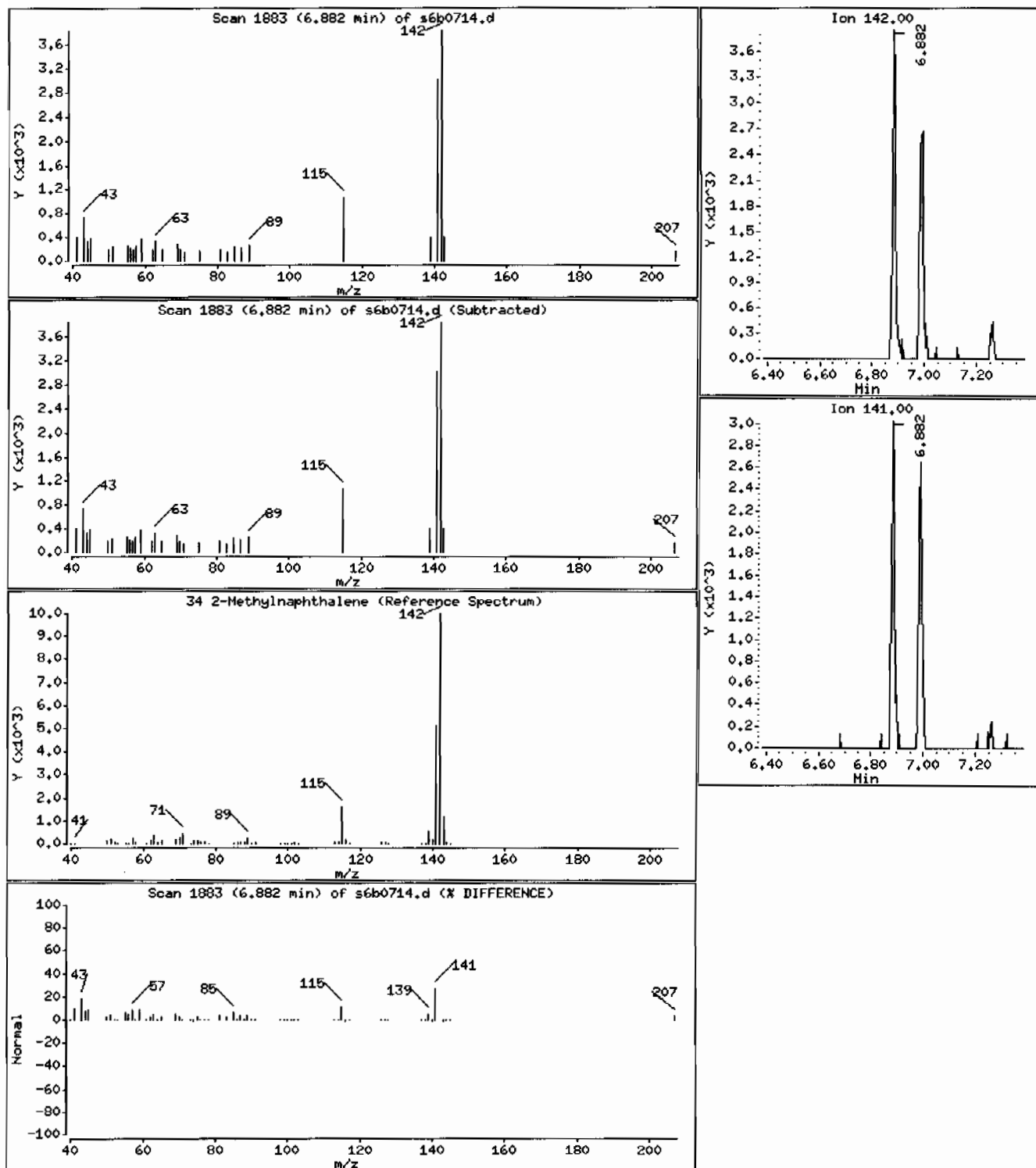
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

34 2-Methylnaphthalene

Concentration: 12.3 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211SVH111LANL

Volume Injected (uL): 0.5

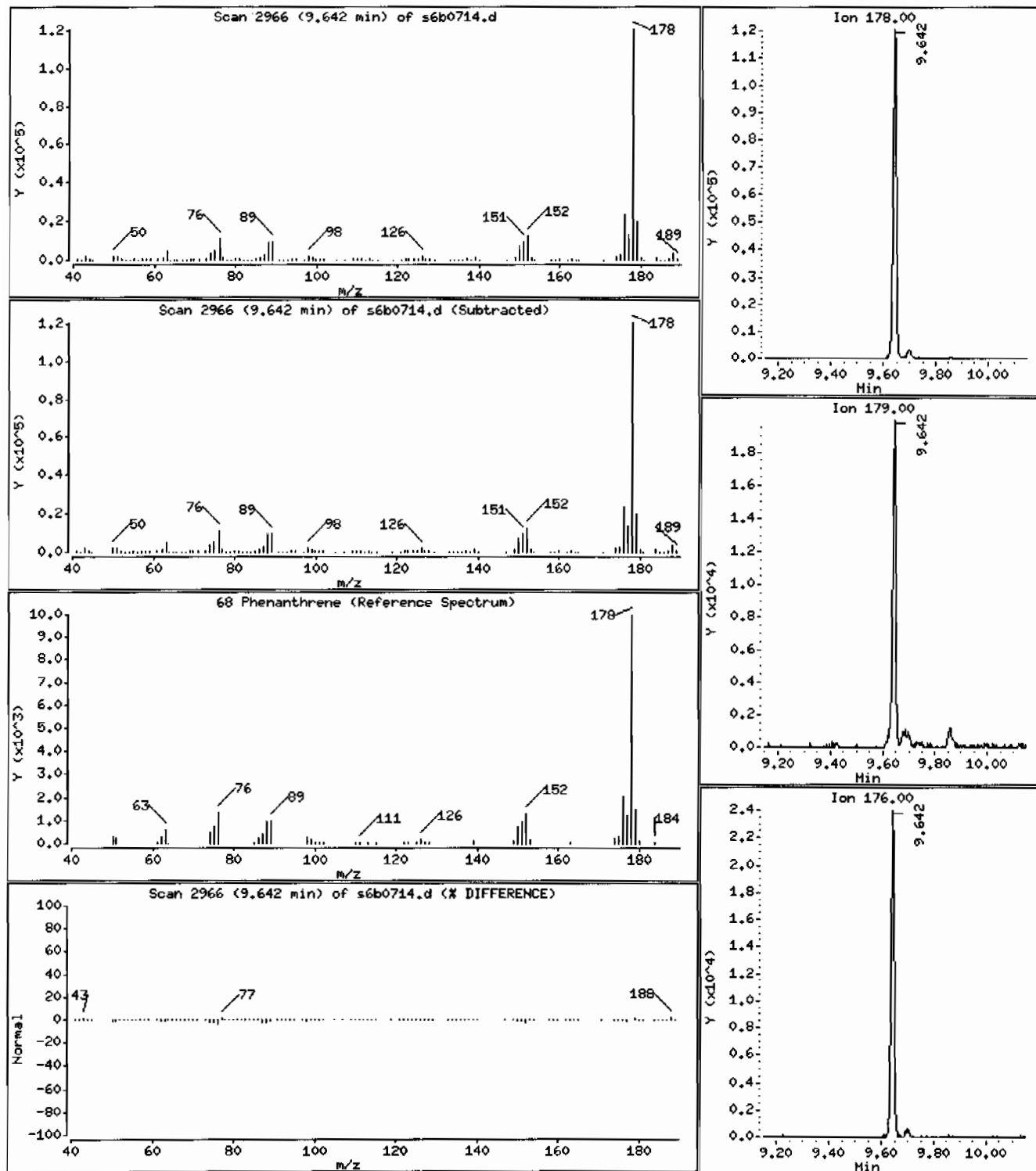
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 235 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211ISVH111LANL

Volume Injected (uL): 0.5

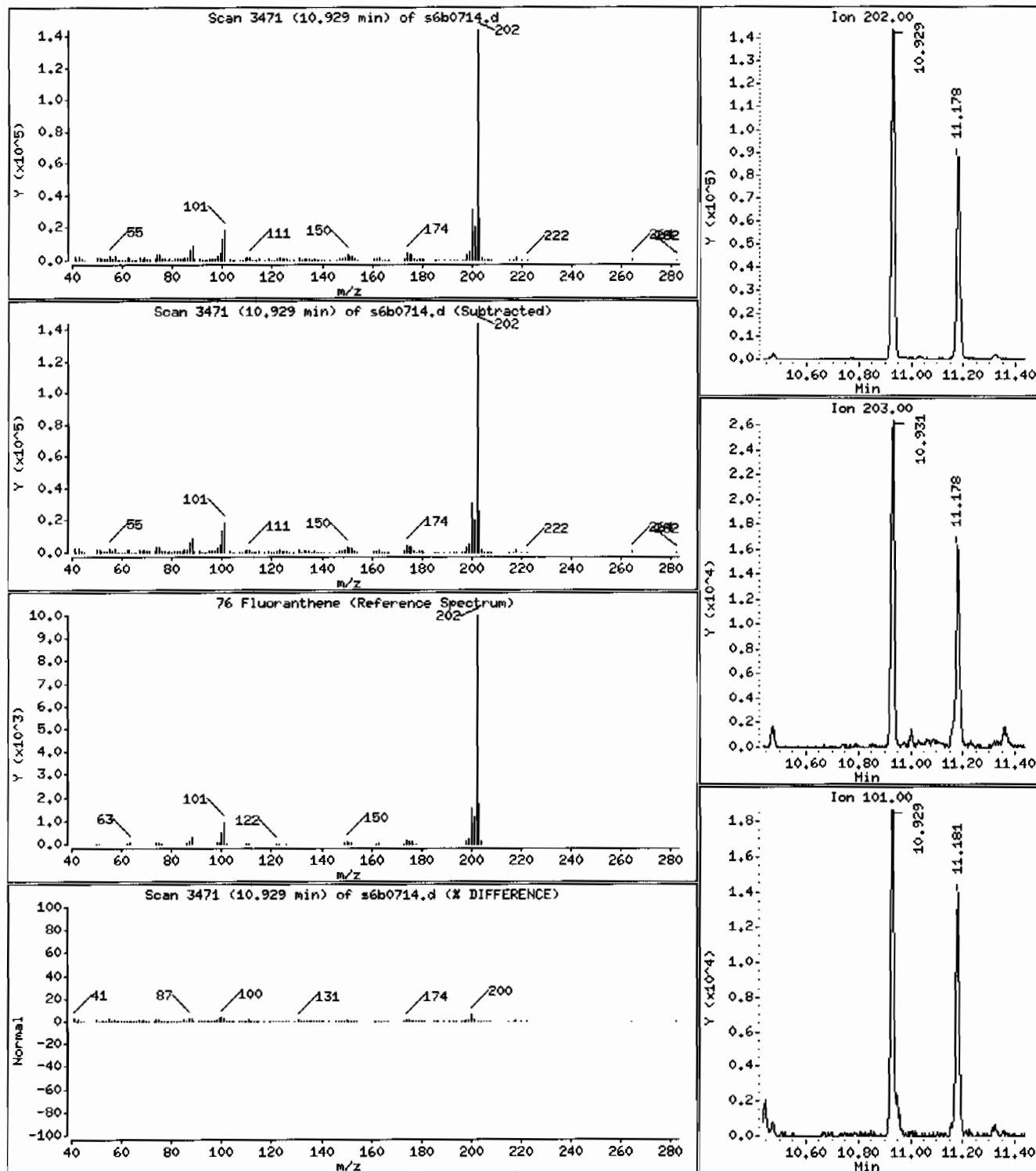
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 311 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 12459590081949132111SVH111LANL

Volume Injected (uL): 0.5

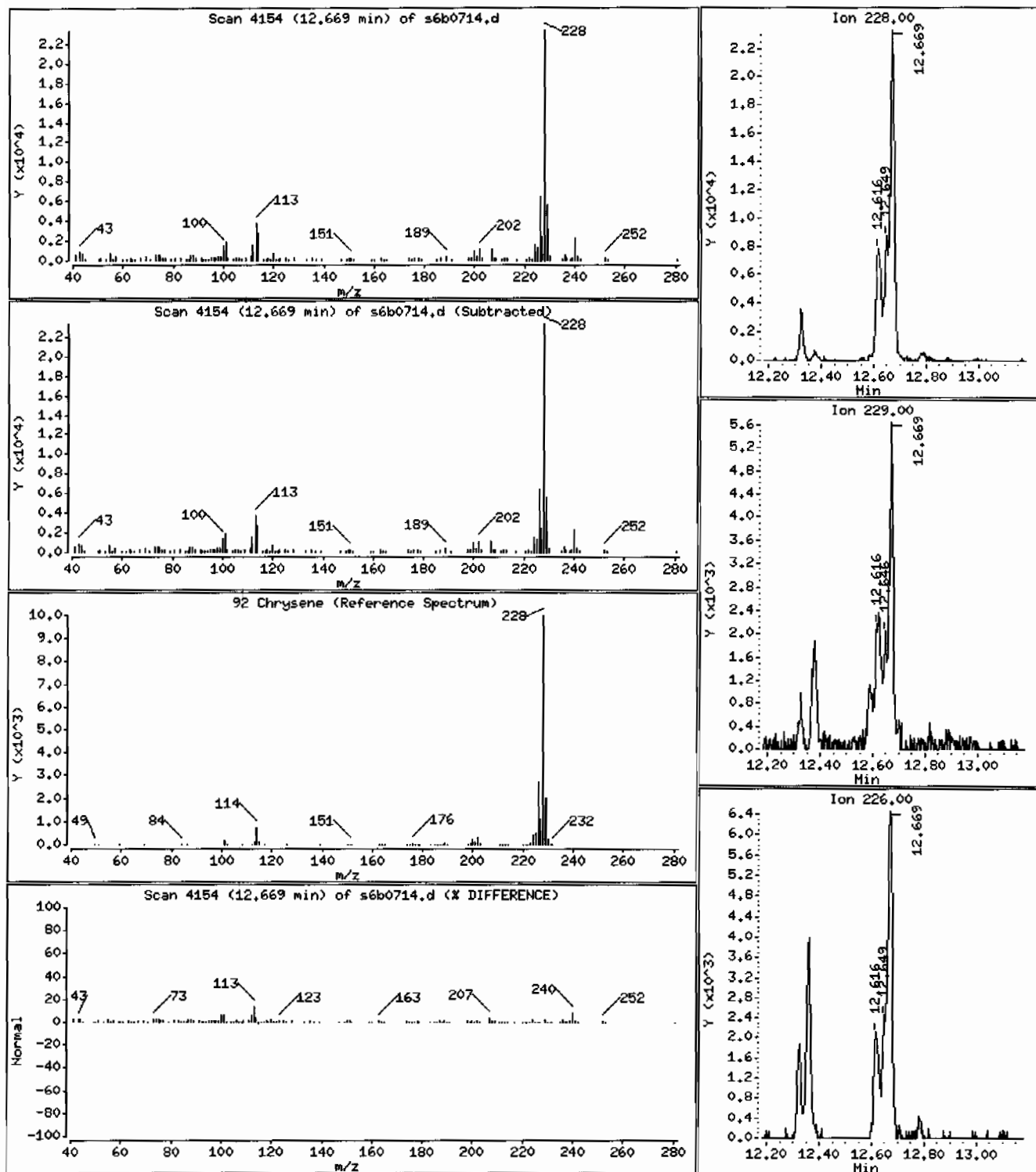
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 91.8 ug/Kg



Date: 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 12459590081949132111SVMI11LANL

Volume Injected (uL): 0.5

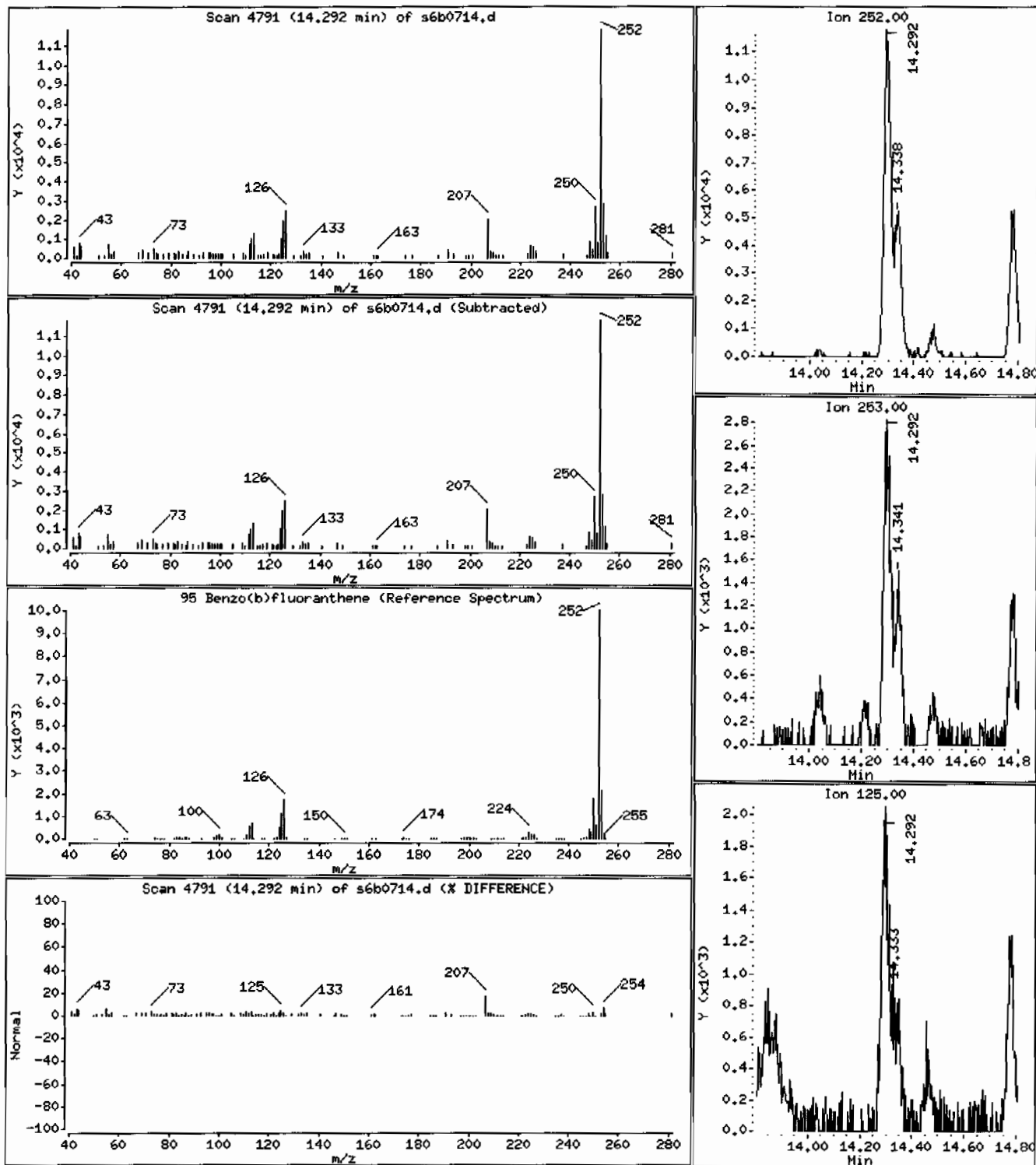
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 120 ug/Kg



Data File: /chem/MSD6.i/s020710.b/s6b0714.d

Page 9

Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211ISVM11ILANL

Volume Injected (uL): 0.5

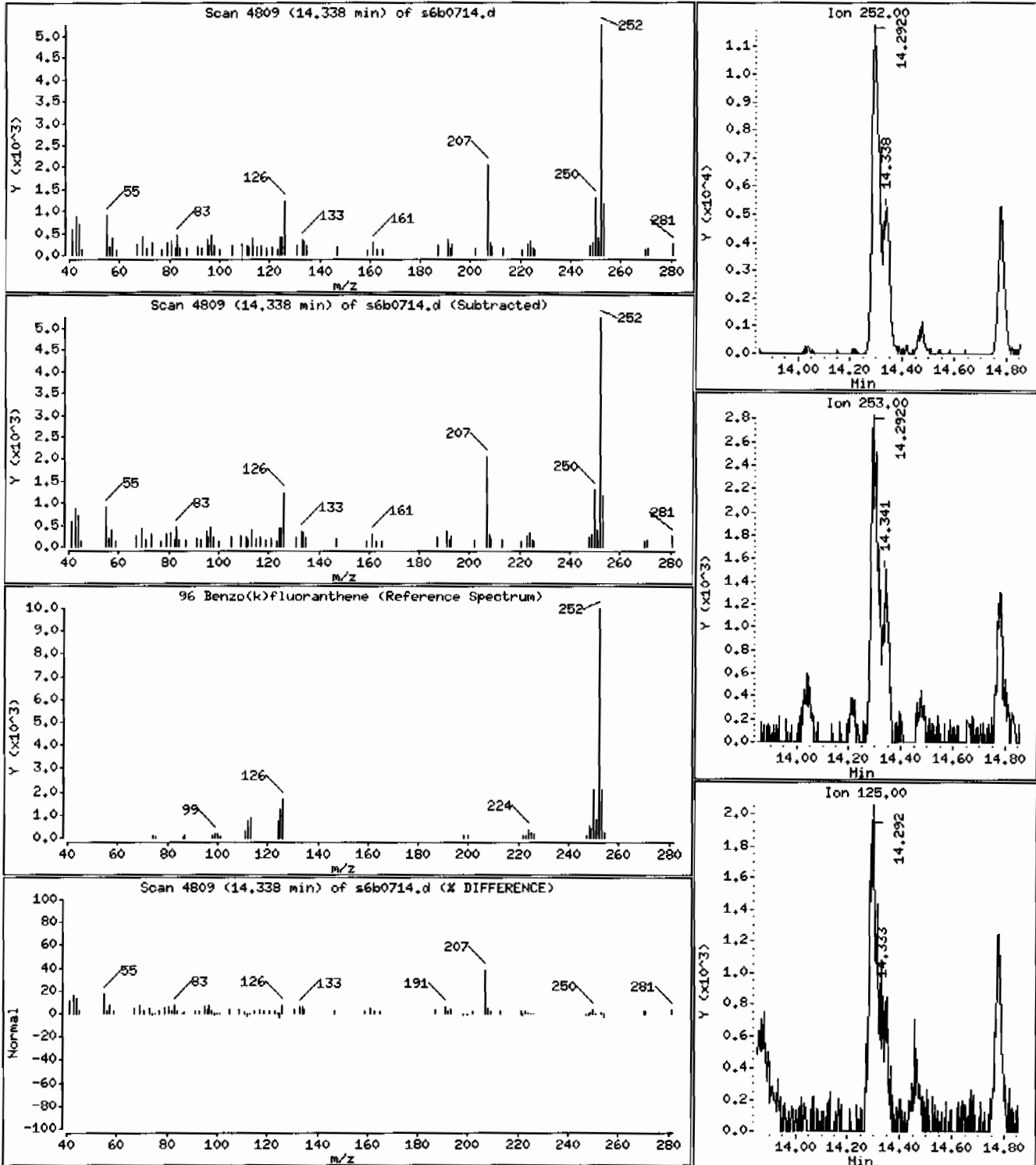
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 46.3 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211SVH111LANL

Volume Injected (uL): 0.5

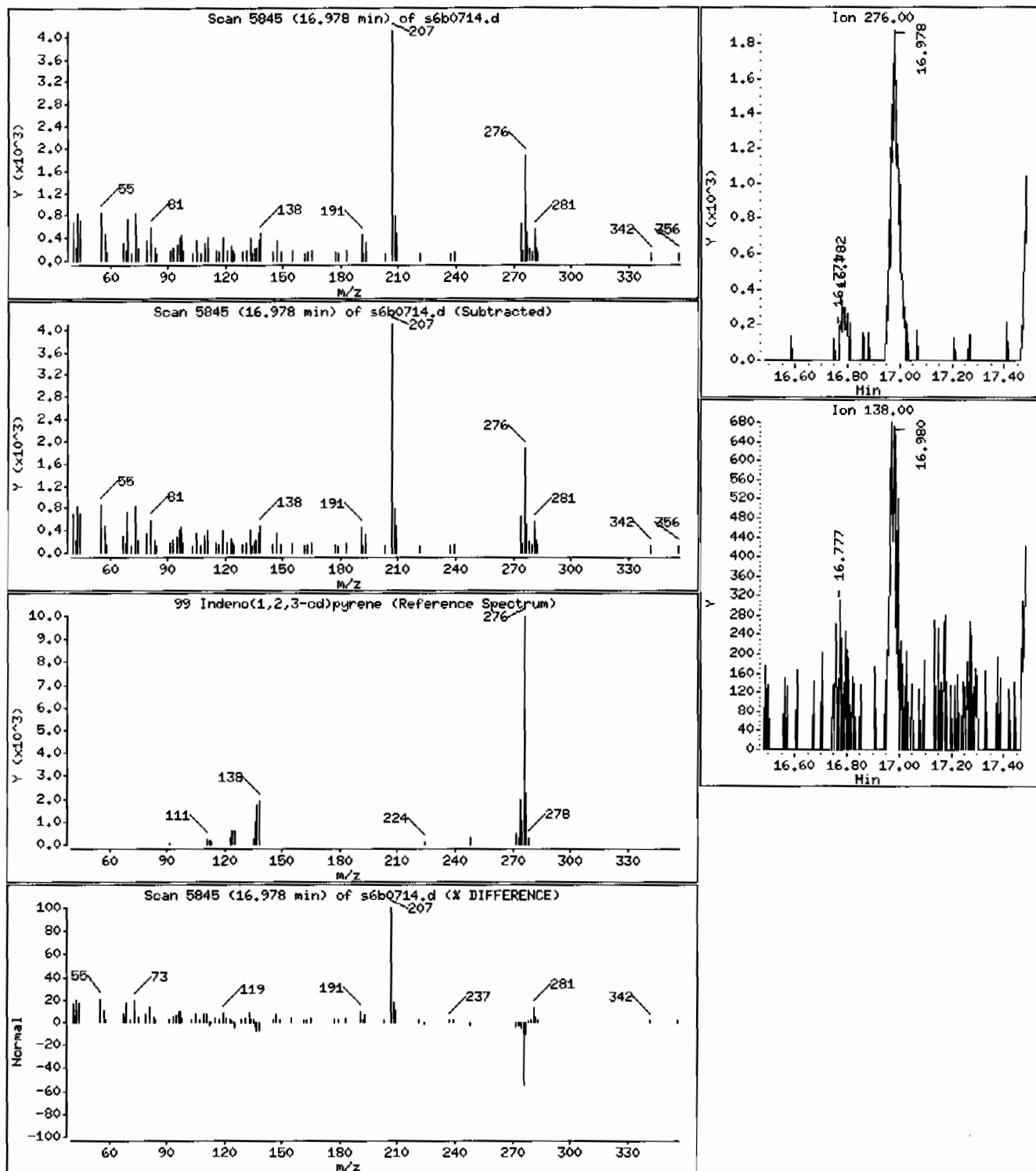
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 173 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 1245959008194913211ISVM11ILANL

Volume Injected (uL): 0.5

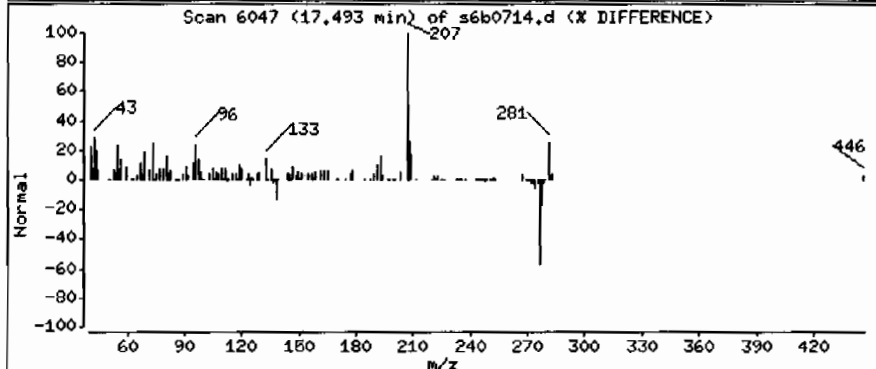
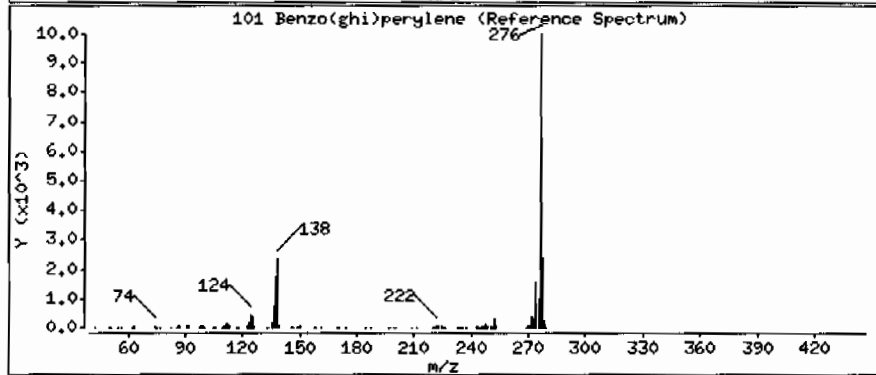
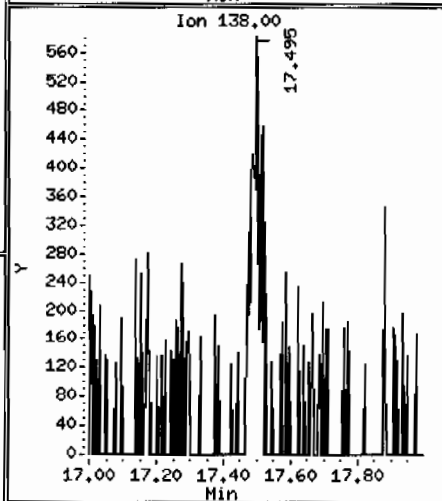
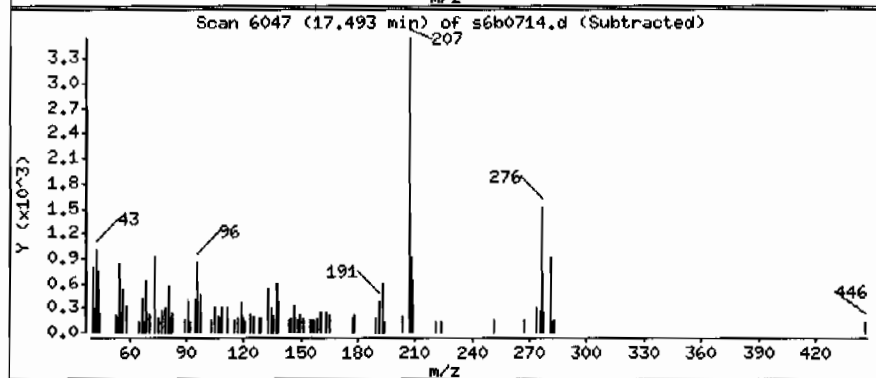
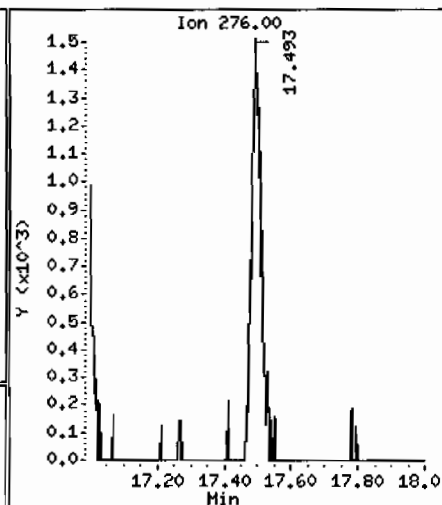
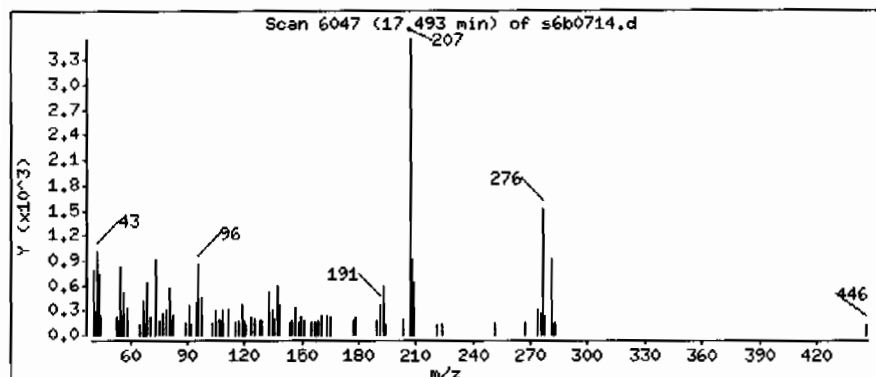
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 25.4 ug/Kg



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: HSD6.i

Sample Info: 1248959008194913211SVMI11LANL

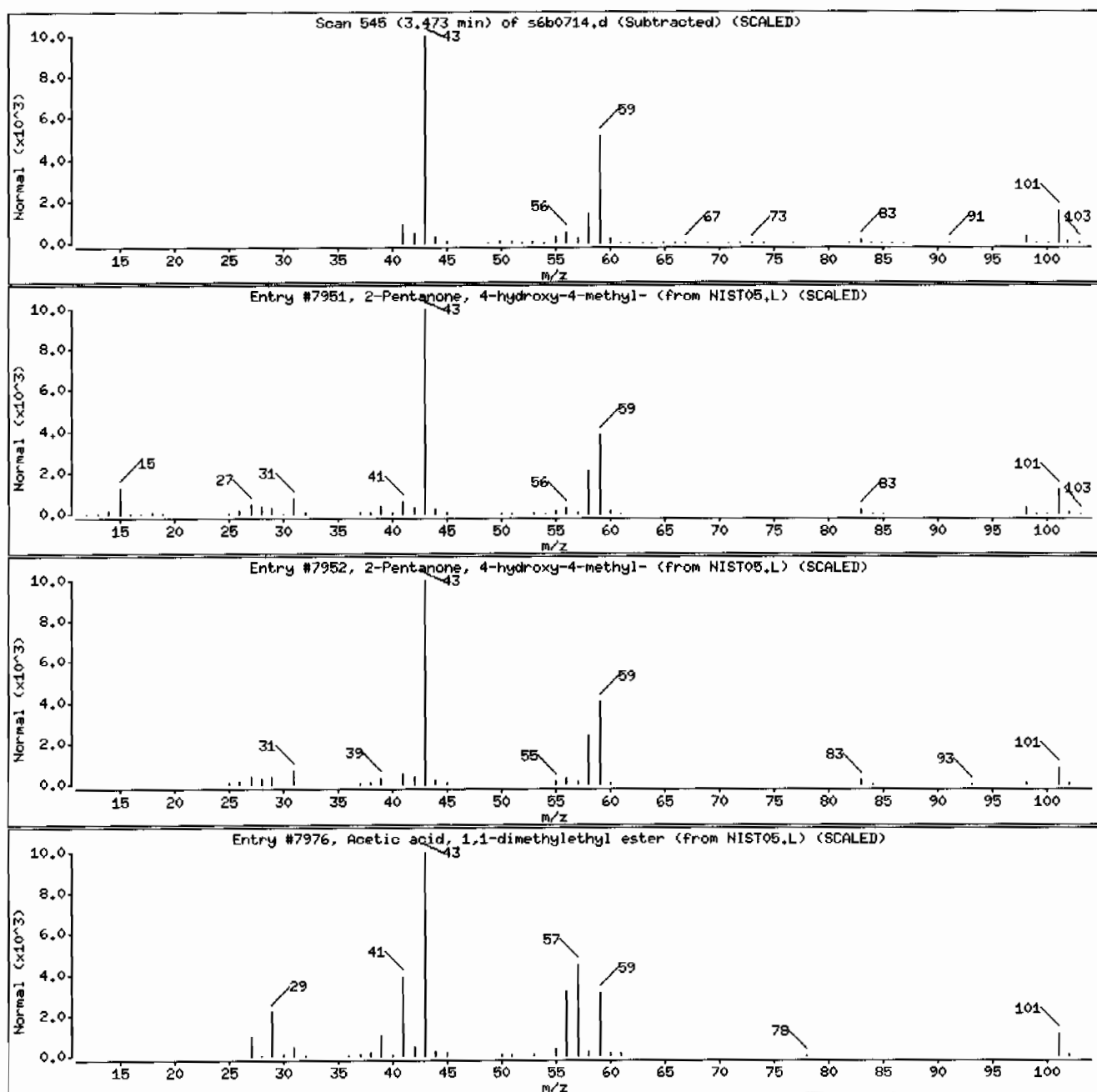
Volume Injected (uL): 0.5

Operator: nag1

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	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 07-FEB-2010 18:23

Client ID: RE15-10-7314

Instrument: MSD6.i

Sample Info: 12459590081949132111SVH111LANL

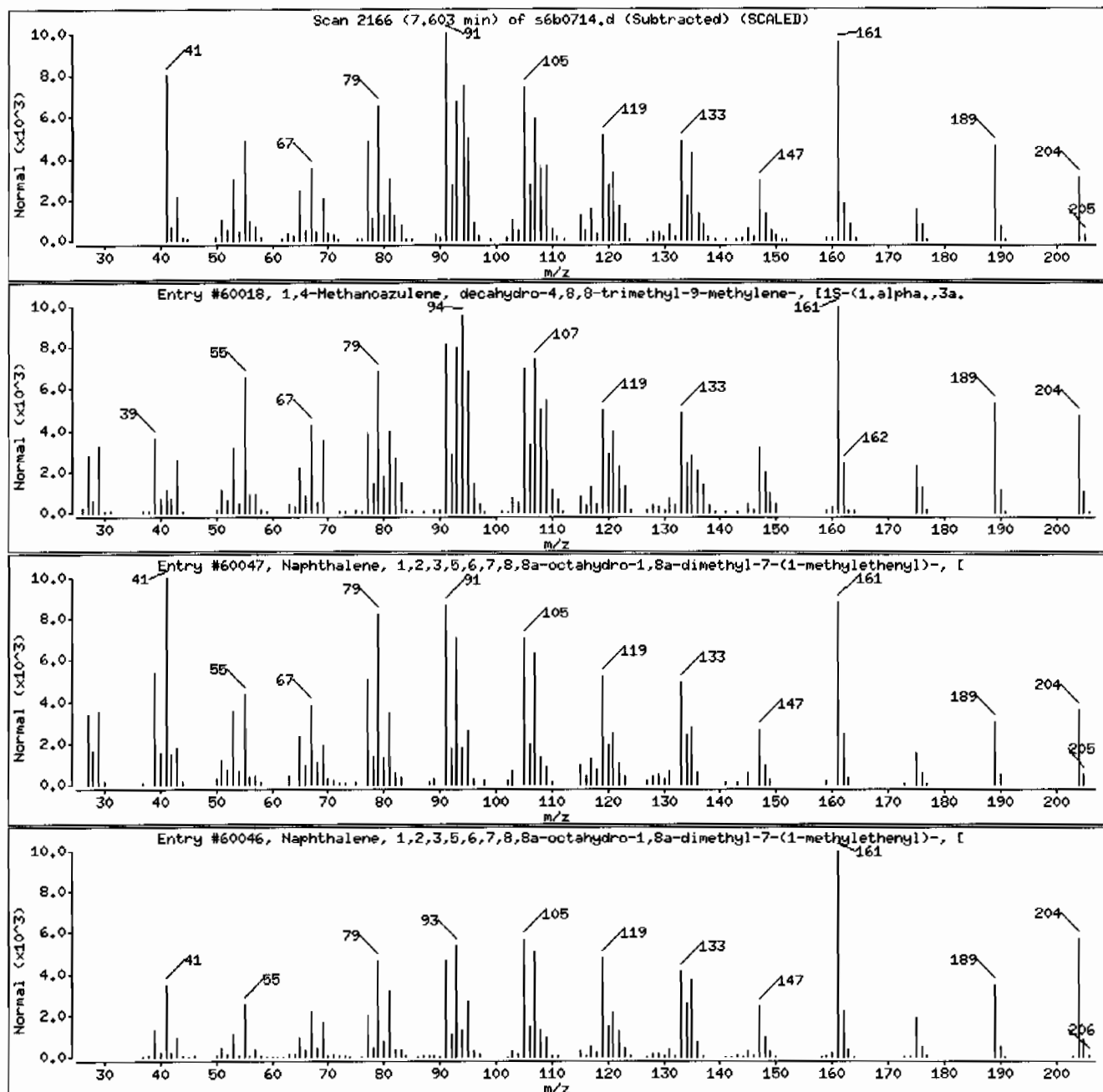
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204



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

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7315
Batch ID: 949132
Run Date: 02/07/2010 16:05
Prep Date: 02/04/2010 20:55
Data File: s6b0709.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365
108-95-2	Phenol	U	365	ug/kg	72.9	365
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5
110-86-1	Pyridine	U	365	ug/kg	72.9	365
62-53-3	Aniline	U	365	ug/kg	109	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365
108-60-1	bis(2-Chloroisopropyl) ether	U	365	ug/kg	72.9	365
95-48-7	o-Cresol	U	365	ug/kg	72.9	365
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365
78-59-1	Isophorone	U	365	ug/kg	72.9	365
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	72.9	365
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	365	ug/kg	72.9	365

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959003	Date Received: 02/02/2010 09:10	%Moisture: 8.9
Client ID: RE15-10-7315	Client: LANL010	Project: LANL01004
Batch ID: 949132	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/07/2010 16:05	Inst: MSD6.I	Dilution: 1
Prep Date: 02/04/2010 20:55	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0709.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	365	ug/kg	72.9	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	365	ug/kg	72.9	365
122-66-7	Azobenzene	U	365	ug/kg	72.9	365
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	365	ug/kg	72.9	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365
206-44-0	Fluoranthene	J	12.3	ug/kg	10.9	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	532	ug/kg		JA
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.56	197	ug/kg	89	NJ

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

SDG Number: 10-1510
Lab Sample ID: 245959003

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.11 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7315
Batch ID: 949132
Run Date: 02/07/2010 16:05
Prep Date: 02/04/2010 20:55
Data File: s6b0709.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim		7.61	1490	ug/kg	99	NJ
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene		7.88	154	ug/kg	86	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		11.83	1770	ug/kg	97	NJ
	Unknown		11.91	151	ug/kg		J
	Unknown		11.95	162	ug/kg		J
	Unknown		13.33	258	ug/kg		J
	Unknown		17.17	244	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0709.d
Lab Smp Id: 245959003 Client Smp ID: RE15-10-7315
Inj Date : 07-FEB-2010 16:05
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959003|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	8.92000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.859	4.862	(1.000)	292356	40.0000	
* 29 Naphthalene-d8		136	6.136	6.141	(1.000)	1097024	40.0000	
* 46 Acenaphthene-d10		164	8.006	8.011	(1.000)	618575	40.0000	
* 67 Phenanthrene-d10		188	9.619	9.622	(1.000)	1076637	40.0000	
* 91 Chrysene-d12		240	12.636	12.646	(1.000)	810019	40.0000	
* 98 Perylene-d12		264	14.980	14.990	(1.000)	573129	40.0000	
\$ 3 2-Fluorophenol		112	3.708	3.697	(0.763)	491757	67.1684	2450
\$ 5 Phenol-d5		99	4.472	4.474	(0.920)	618074	66.8881	2440
\$ 20 Nitrobenzene-d5		82	5.394	5.404	(0.879)	285311	36.7655	1340
\$ 39 2-Fluorobiphenyl		172	7.262	7.265	(0.907)	552118	34.6347	1260
\$ 60 2,4,6-Tribromophenol		329	8.857	8.860	(1.106)	113957	63.1182	2300
\$ 81 p-Terphenyl-d14		244	11.321	11.324	(0.896)	537844	41.1734	1500

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
76 Fluoranthene	202	10.931	10.936	(1.136)	7220	0.33851	12.3 (aH)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s6b0709.d

Report Date: 02/08/2010 09:14

Lab. ID: 245959003

SampleType: SAMPLE

Injection Date: 07-FEB-2010 16:05

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959003|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	11331	2.27	2.74	80-120	100	(T)
42	25656	2.27	2.74	62-122	226	(QT)
43	163787	2.27	2.74	10- 70	1445	(QT)

4 Aniline				CAS#: 62-53-3		
66	30406	4.47	4.55	80-120	100	(T)
93	158	4.52	4.55	217-277	1	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	40407	5.40	5.24	80-120	100	(T)
42	25183	5.39	5.24	39- 99	62	(T)

22 Isophorone				CAS#: 78-59-1		
82	285311	5.39	5.66	80-120	100	(T)
138	5932	6.14	5.66	0- 49	2	(T)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	27896	7.61	7.41	80-120	100	(T)
164	978	7.60	7.41	3- 63	4	(T)
127	2213	7.61	7.41	8- 68	8	(T)

42 o-Nitroaniline				CAS#: 88-74-4		
65	36189	7.61	7.51	80-120	100	(T)
92	43784	7.61	7.51	36- 96	121	(QT)
138	2862	7.61	7.51	81-141	8	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
43 Dimethylphthalate				CAS#: 131-11-3		
163	110283	8.01	7.70	80-120	100	(T)
164	618575	8.01	7.70	0- 40	561	(QT)
<hr/>						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	81156	8.01	8.21	80-120	100	(T)
89	576	8.00	8.21	43-103	1	(QT)
63	684	8.01	8.21	18- 78	1	(QT)
<hr/>						
53 Fluorene				CAS#: 86-73-7		
166	8056	8.85	8.60	80-120	100	(T)
165	8172	8.85	8.60	62-122	101	(T)
167	2312	8.85	8.60	0- 44	29	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	166	8.86	8.65	80-120	100	(T)
105	712	8.86	8.65	11- 71	429	(QT)
51	567	8.85	8.65	23- 83	342	(QT)
<hr/>						
56 p-Nitroaniline				CAS#: 100-01-6		
138	663	8.73	8.62	80-120	100	(T)
108	17673	8.74	8.62	32- 92	2663	(QT)
92	5220	8.74	8.62	12- 72	786	(QT)
<hr/>						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	8551	8.86	9.11	80-120	100	(T)
141	64999	8.85	9.11	48-108	760	(QT)
250	16054	8.85	9.11	67-127	188	(QT)
<hr/>						
76 Fluoranthene				CAS#: 206-44-0		
202	7220	10.93	10.94	80-120	100	()
203	1181	10.93	10.94	0- 48	16	()
101	664	10.93	10.94	0- 43	9	()
<hr/>						
79 Pyrene				CAS#: 129-00-0		
202	7220	10.93	11.19	80-120	100	(T)
200	1502	10.93	11.19	0- 51	21	(T)
101	664	10.93	11.19	0- 45	9	(T)
<hr/>						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	642	16.98	16.98	80-120	100	()
138	144	16.98	16.98	7- 67	22	()

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0709.d
Report Date: 12-Feb-2010 16:11

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0709.d
Lab Smp Id: 245959003 Client Smp ID: RE15-10-7315
Inj Date : 07-FEB-2010 16:05
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959003|949132|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	8.92000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1743172	40.000
* 46 Acenaphthene-d10	8.006	2650208	40.000
* 91 Chrysene-d12	12.636	2263322	40.000
* 98 Perylene-d12	14.980	1629570	40.000

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

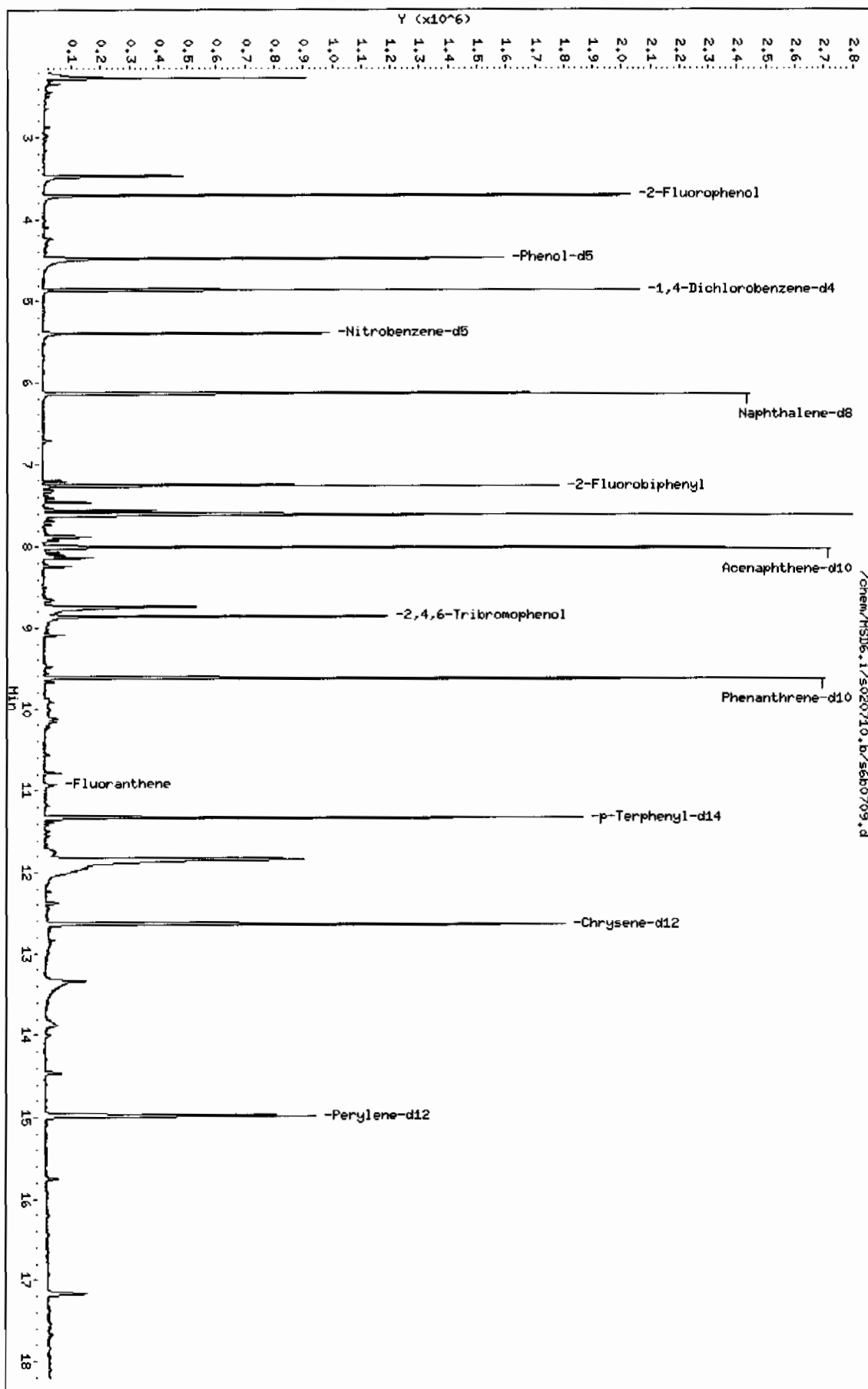
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
3.473	635485	14.5822585	532	0		0	10
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
7.558	357135	5.39028576	196	89	NIST05.L	59909	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.606	2700388	40.7573556	1490	99	NIST05.L	60024	46(L)
1,5,5-Trimethyl-6-methylene-cyclohexene					CAS #: 514-95-4		
7.879	280223	4.22945411	154	86	NIST05.L	15292	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
11.826	2747289	48.5532125	1770	97	NIST05.L	116239	91
Unknown					CAS #:		
11.912	234994	4.15308738	151	0		0	91
Unknown					CAS #:		
11.951	250737	4.43130921	162	0		0	91
Unknown					CAS #:		
13.334	400904	7.08523322	258	0		0	91
Unknown					CAS #:		
17.169	272750	6.69501008	244	0		0	98

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/MSD6.i/5020710.b/560709.d
 Date: 07-FEB-2010 16:05
 Client ID: RE15-10-7315
 Sample Info: 12459690031949132111SWH11LNL
 Volume Injected (uL): 0.5
 Column phase: 3M DB-SMS

Instrument: MSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVMI11LANL

Volume Injected (uL): 0.5

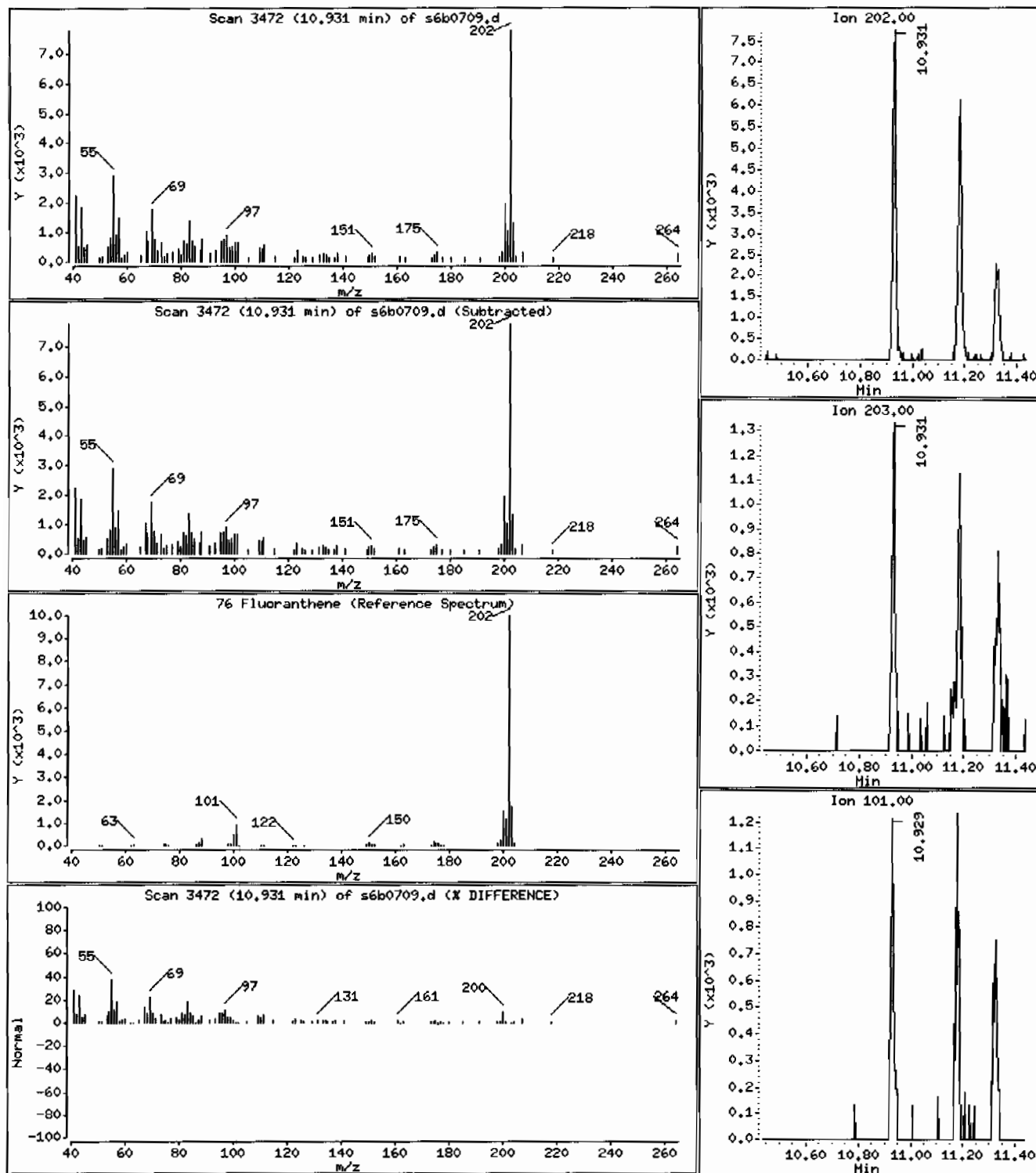
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 12.3 ug/Kg



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 12459590031949132111SVMI11LANL

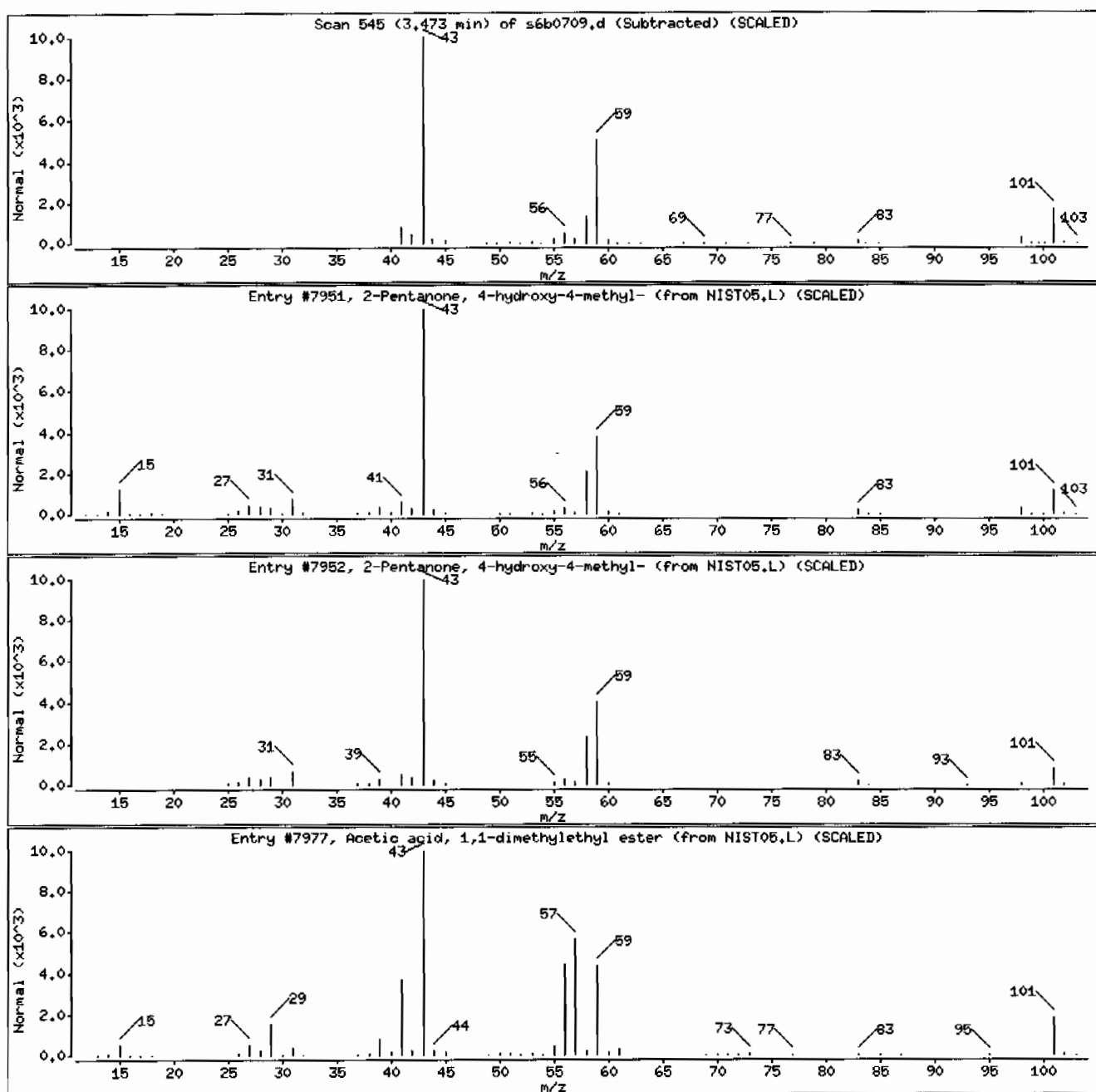
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVH11ILANL

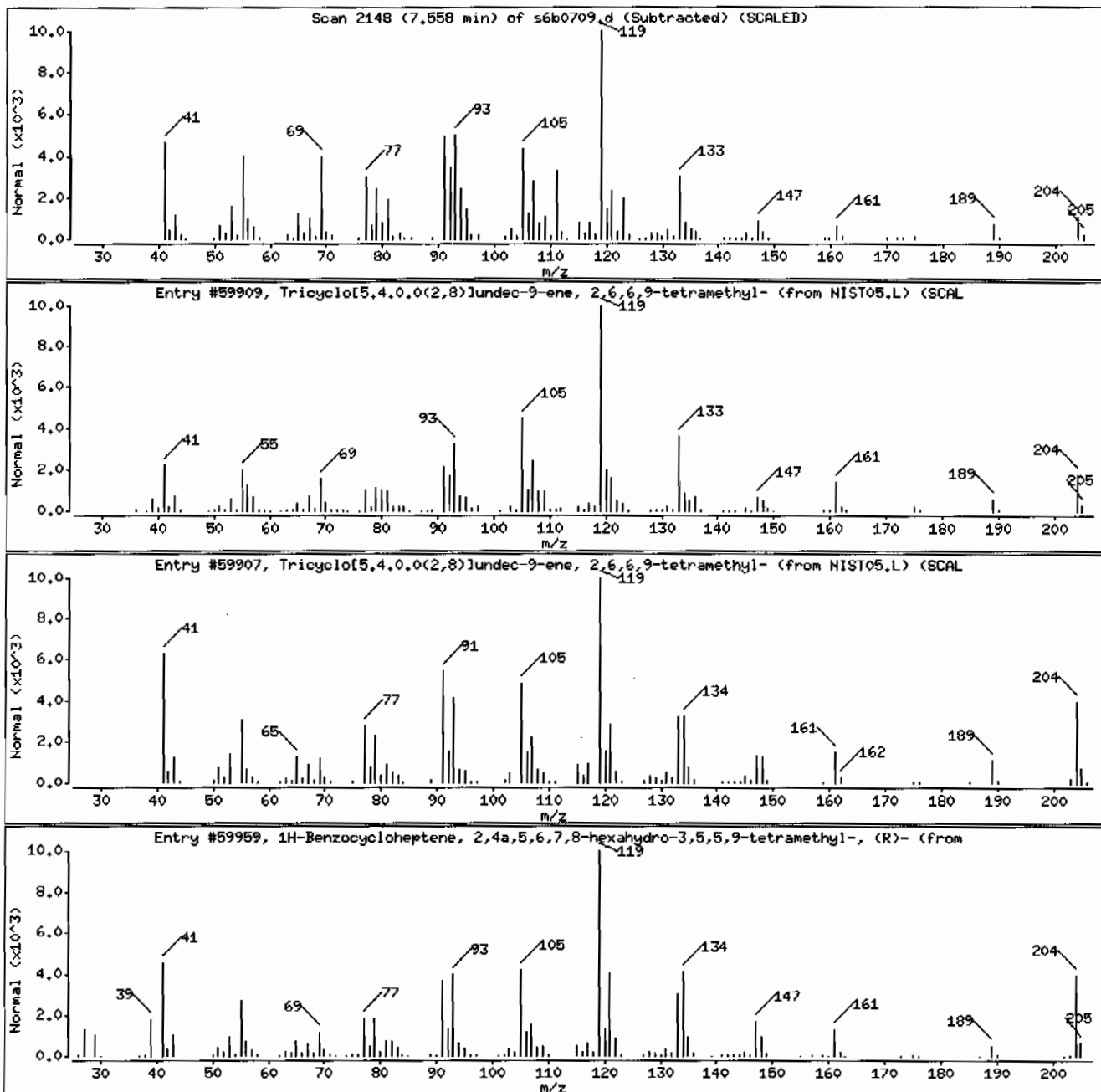
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	89	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	86	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8-hexah	1461-03-6	NIST05.L	59959	58	C15H24	204



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1248959003194913211SVMI11LANL

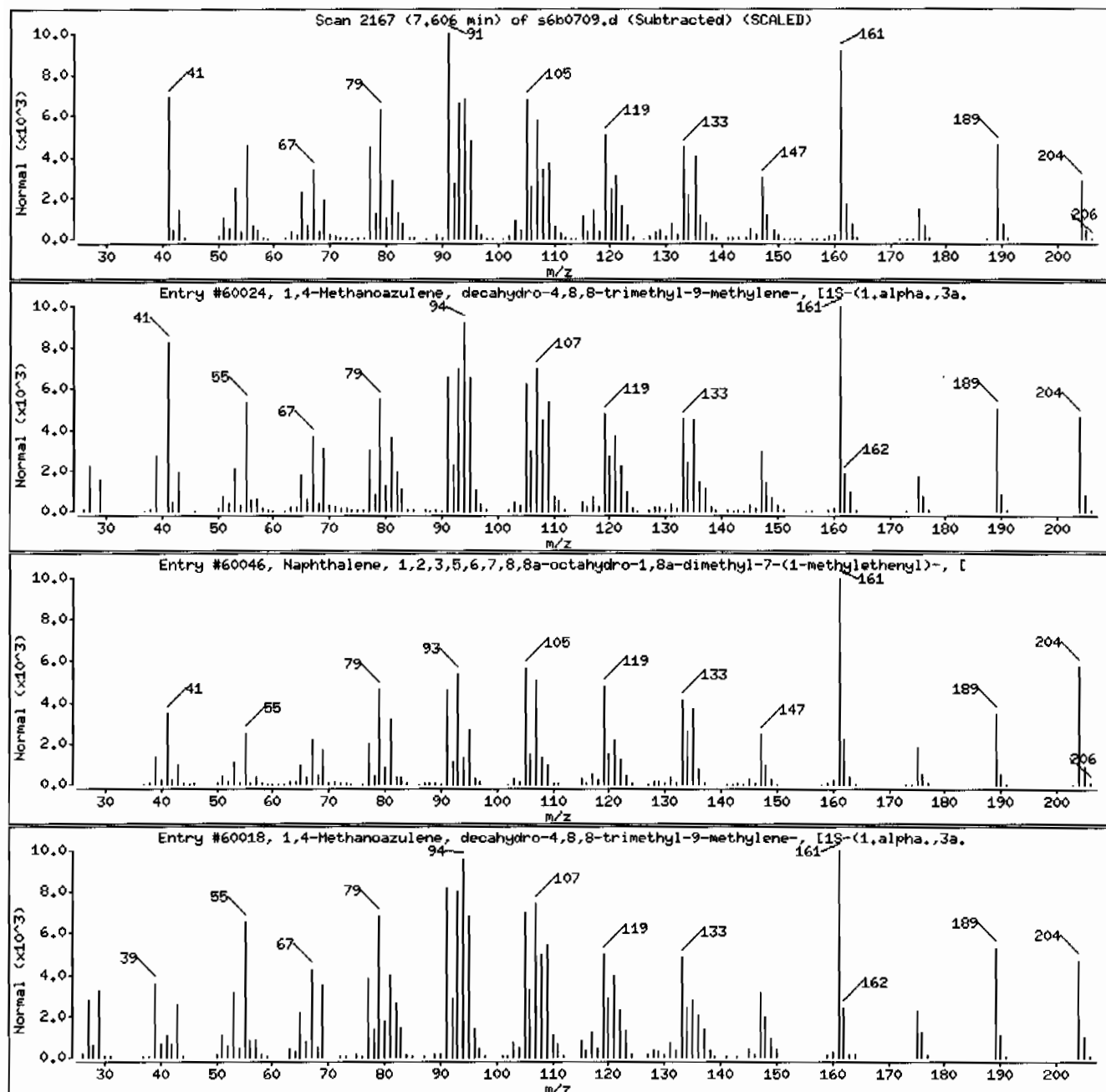
Volume Injected (uL): 0.5

Operator: nag1

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 : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVMI11LANL

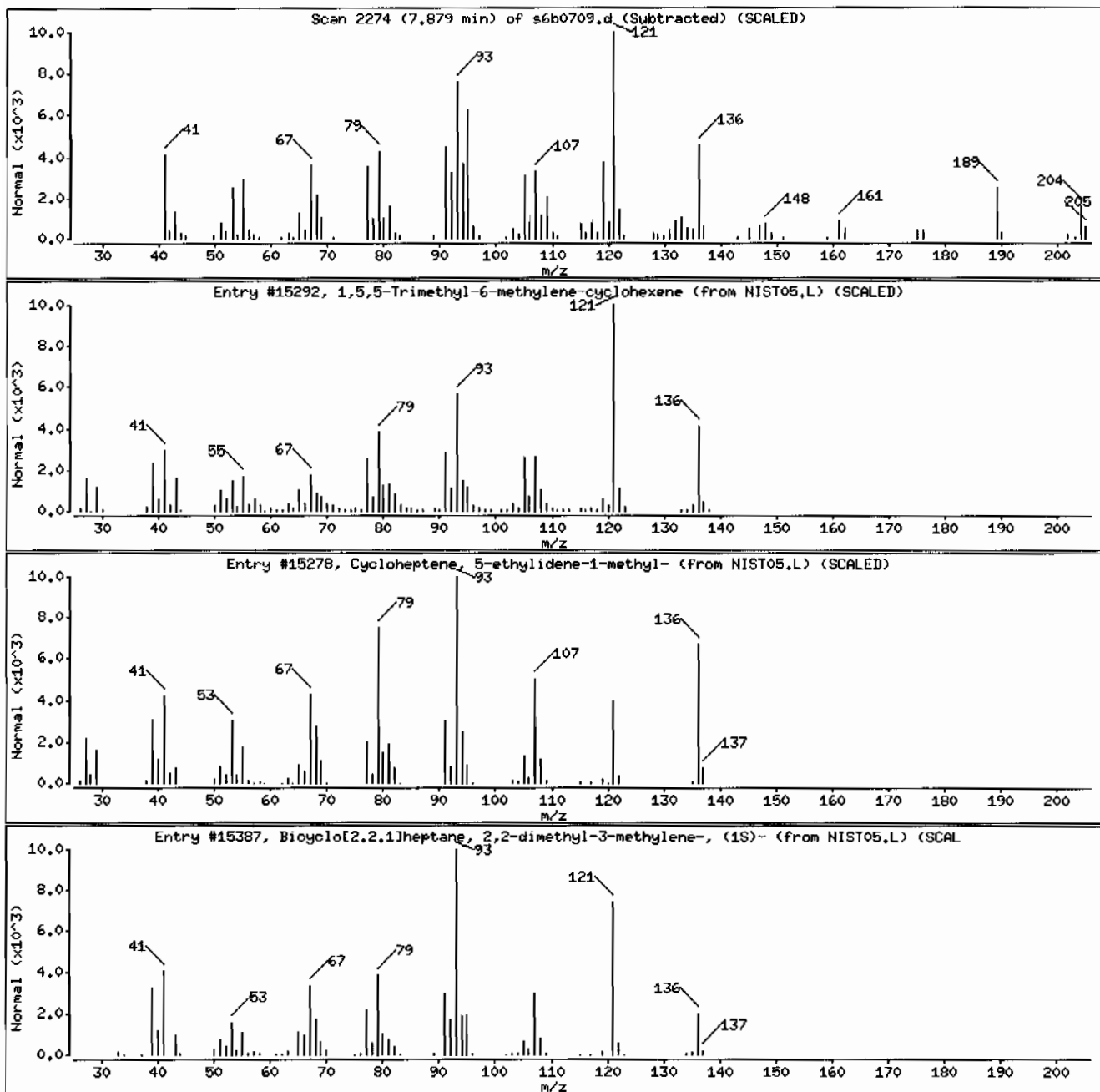
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,5,5-Trimethyl-6-methylene-cyclohexene	514-95-4	NIST05.L	15292	86	C10H16	136
Cycloheptene, 5-ethylidene-1-methyl-	15402-94-5	NIST05.L	15278	83	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST05.L	15387	70	C10H16	136



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1248959003194913211SVMI11LANL

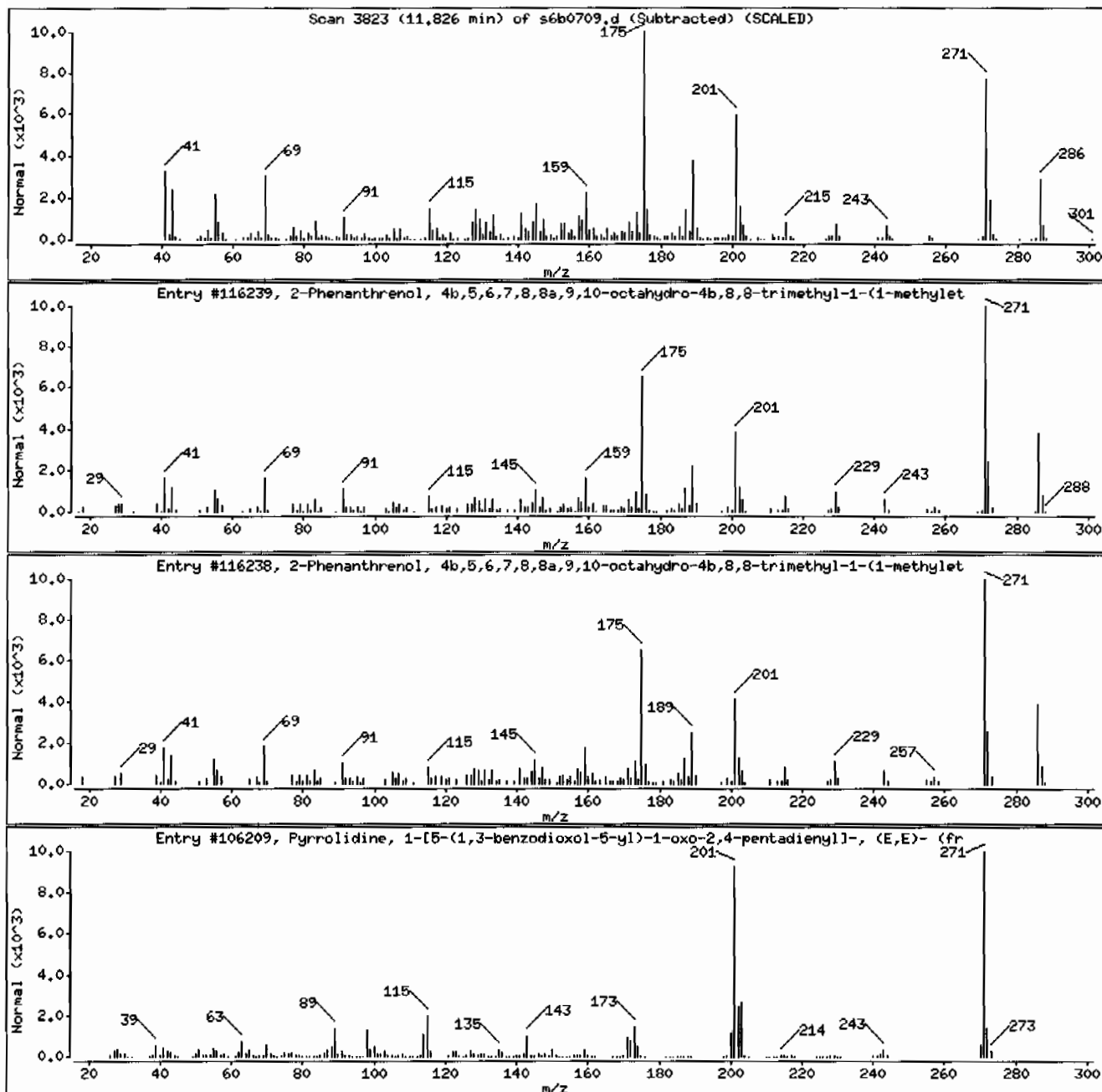
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	97	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	87	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	50	C16H17NO3	271



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVH111LANL

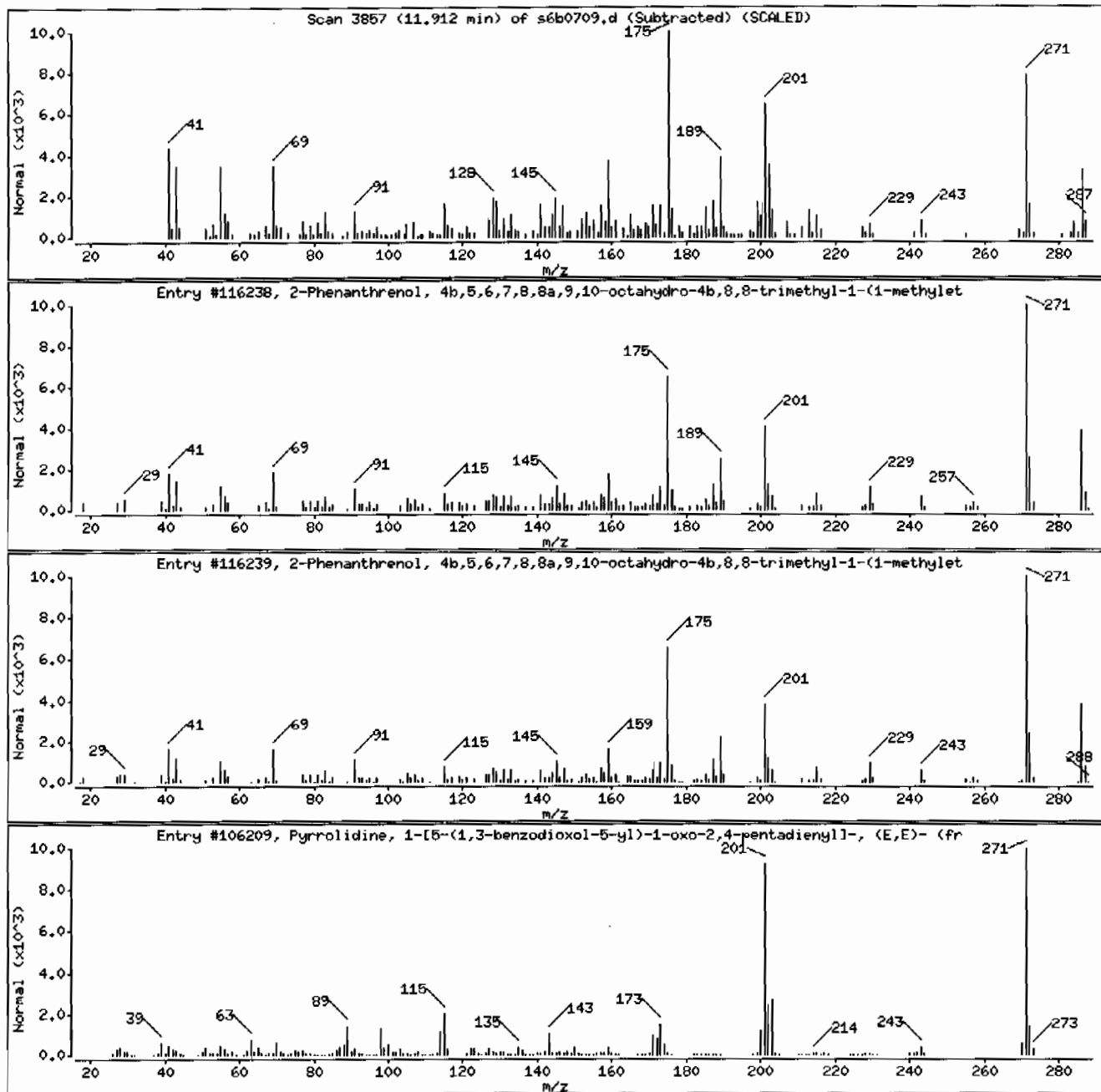
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	87	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	49	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	27	C16H17NO3	271



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVMI11LANL

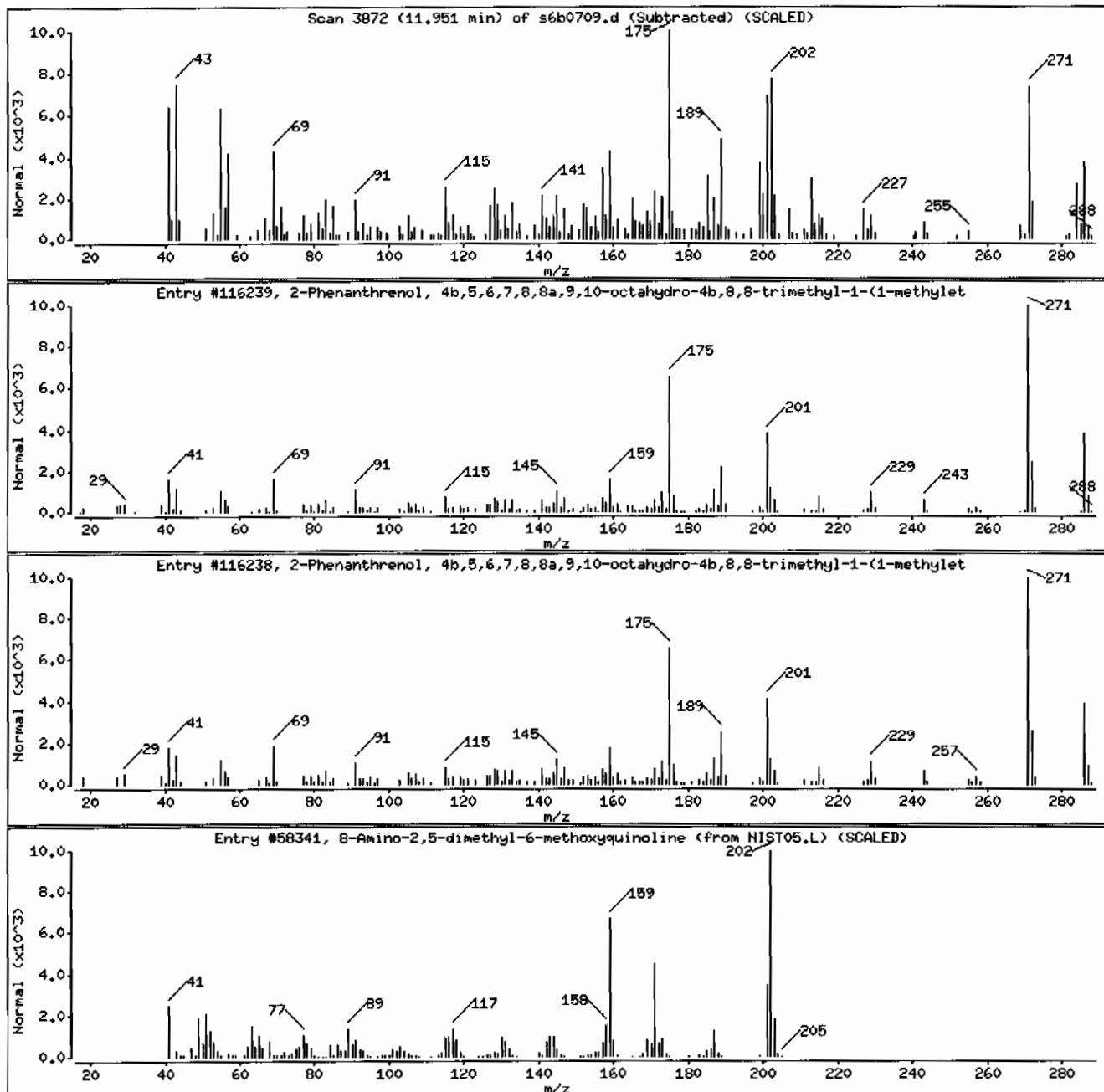
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	58	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	46	C20H30O	286
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	35	C12H14N2O	202



Date : 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: MSD6.i

Sample Info: 1245959003194913211SVMI11LANL

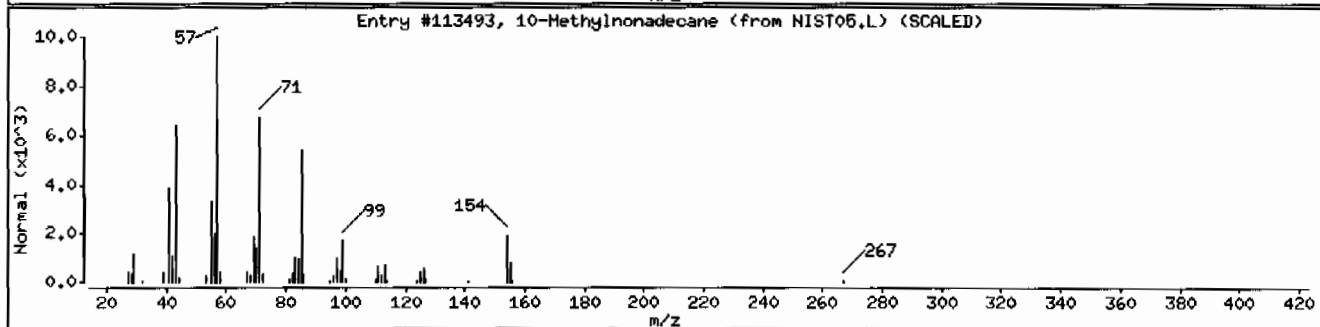
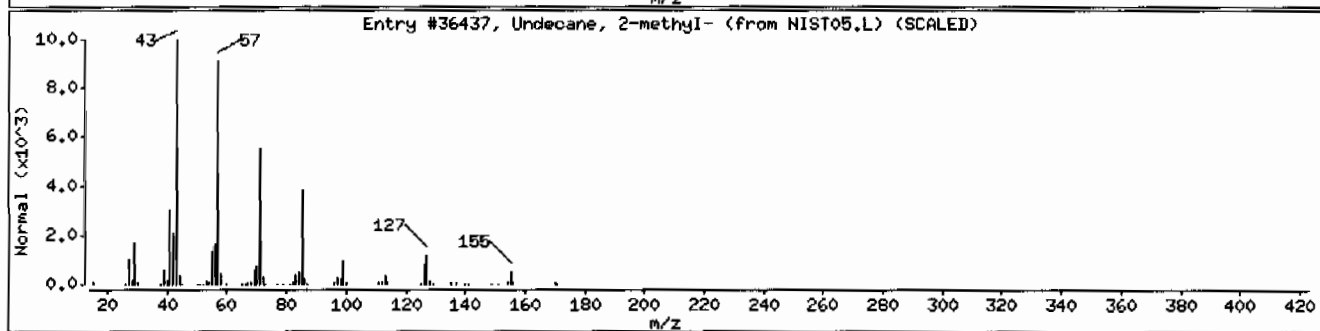
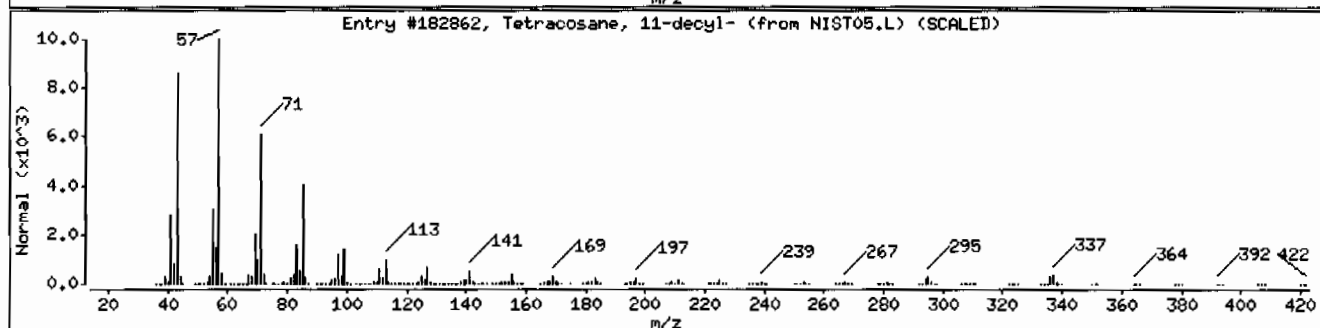
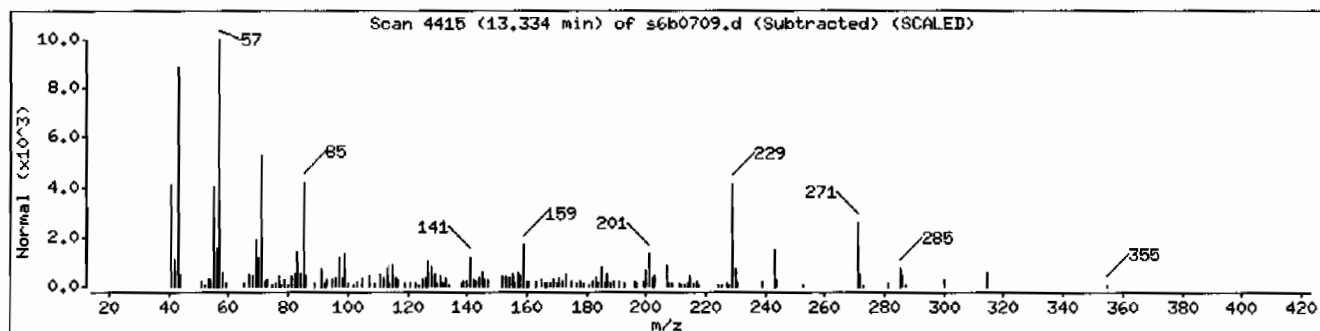
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracosane, 11-decyl-	55429-84-0	NIST05.L	182862	46	C ₃₄ H ₇₀	479
Undecane, 2-methyl-	7045-71-8	NIST05.L	36437	46	C ₁₂ H ₂₆	170
10-Methylnonadecane	56962-62-5	NIST05.L	113493	41	C ₂₀ H ₄₂	282



Date: 07-FEB-2010 16:05

Client ID: RE15-10-7315

Instrument: HSD6.i

Sample Info: 1245959003194913211SVH11ILANL

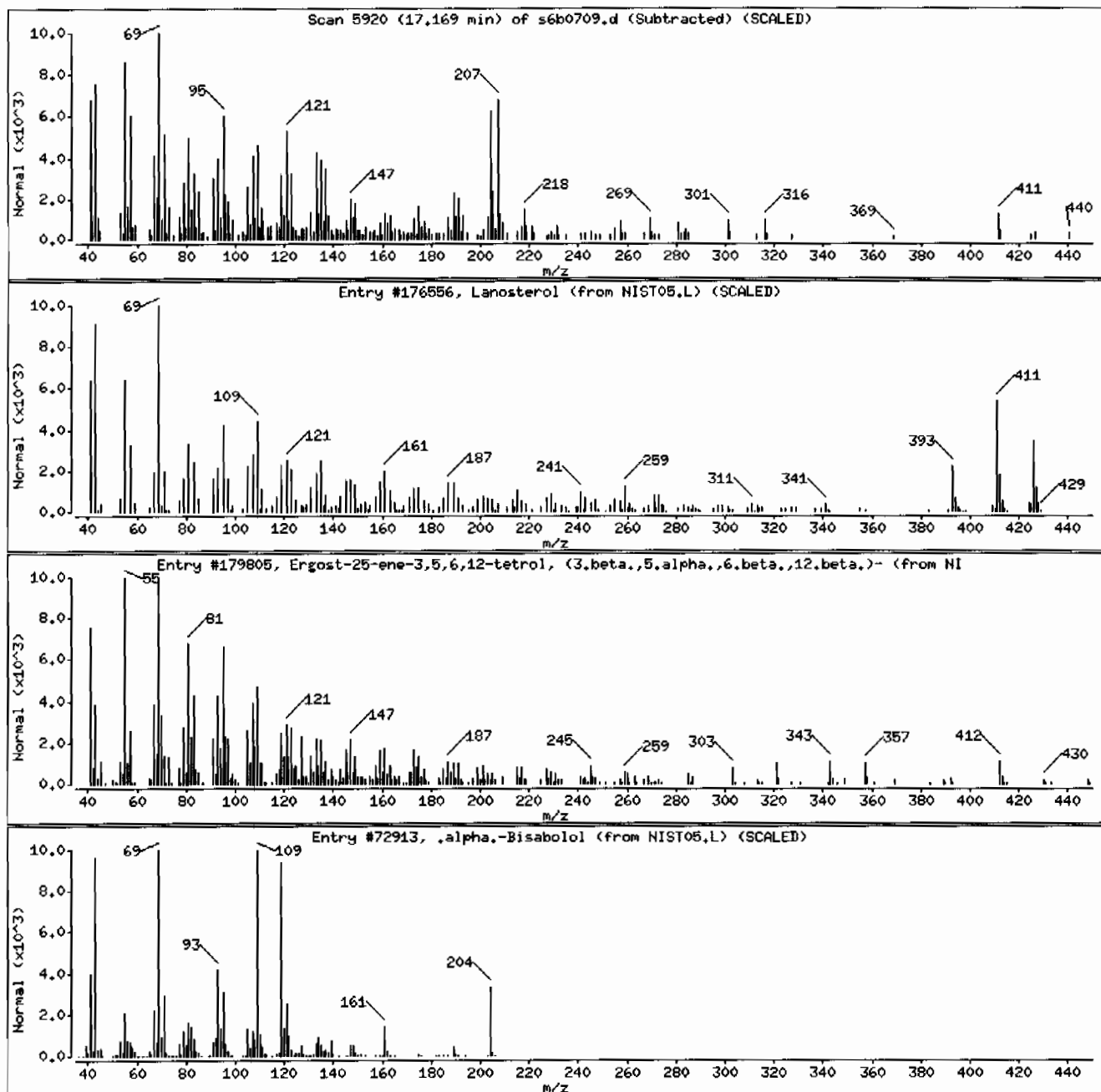
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Lanosterol	79-63-0	NIST05.L	176556	64	C30H50O	426
Ergost-25-ene-3,5,6,12-tetrol, (3,β,.,	56052-97-2	NIST05.L	179805	43	C28H48O4	448
.α,.-Bisabolol	72691-24-8	NIST05.L	72913	35	C15H26O	222



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

SDG Number: 10-1510
Lab Sample ID: 245959009

Client ID: RE15-10-7316
Batch ID: 949132
Run Date: 02/07/2010 18:50
Prep Date: 02/04/2010 20:55
Data File: s6b0715.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.1
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35.6
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	514	ug/kg	103	514
108-95-2	Phenol	U	514	ug/kg	103	514
95-57-8	2-Chlorophenol	U	514	ug/kg	103	514
106-46-7	1,4-Dichlorobenzene	U	514	ug/kg	103	514
621-64-7	N-Nitrosodipropylamine	U	514	ug/kg	103	514
59-50-7	4-Chloro-3-methylphenol	U	514	ug/kg	103	514
83-32-9	Acenaphthene	U	51.4	ug/kg	17.0	51.4
121-14-2	2,4-Dinitrotoluene	U	514	ug/kg	51.4	514
100-02-7	4-Nitrophenol	U	514	ug/kg	170	514
87-86-5	Pentachlorophenol	U	514	ug/kg	129	514
129-00-0	Pyrene	U	51.4	ug/kg	15.4	51.4
110-86-1	Pyridine	U	514	ug/kg	103	514
62-53-3	Aniline	U	514	ug/kg	154	514
111-44-4	bis(2-Chloroethyl) ether	U	514	ug/kg	103	514
541-73-1	1,3-Dichlorobenzene	U	514	ug/kg	103	514
100-51-6	Benzyl alcohol	U	514	ug/kg	154	514
95-50-1	1,2-Dichlorobenzene	U	514	ug/kg	103	514
108-60-1	bis(2-Chloroisopropyl)ether	U	514	ug/kg	103	514
95-48-7	o-Cresol	U	514	ug/kg	103	514
65794-96-9	m,p-Cresols	U	514	ug/kg	154	514
67-72-1	Hexachloroethane	U	514	ug/kg	103	514
98-95-3	Nitrobenzene	U	514	ug/kg	103	514
78-59-1	Isophorone	U	514	ug/kg	103	514
88-75-5	2-Nitrophenol	U	514	ug/kg	103	514
105-67-9	2,4-Dimethylphenol	U	514	ug/kg	180	514
111-91-1	bis(2-Chloroethoxy)methane	U	514	ug/kg	103	514
120-83-2	2,4-Dichlorophenol	U	514	ug/kg	103	514
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.4	ug/kg	15.4	51.4
106-47-8	4-Chloroaniline	U	514	ug/kg	103	514
87-68-3	Hexachlorobutadiene	U	514	ug/kg	103	514
91-57-6	2-Methylnaphthalene	U	51.4	ug/kg	10.3	51.4
77-47-4	Hexachlorocyclopentadiene	U	514	ug/kg	103	514
88-06-2	2,4,6-Trichlorophenol	U	514	ug/kg	103	514
95-95-4	2,4,5-Trichlorophenol	U	514	ug/kg	103	514
91-58-7	2-Chloronaphthalene	U	51.4	ug/kg	17.0	51.4
88-74-4	2-Nitroaniline	U	514	ug/kg	103	514
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	514	ug/kg	103	514

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

SDG Number: 10-1510
Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7316
Batch ID: 949132
Run Date: 02/07/2010 18:50
Prep Date: 02/04/2010 20:55
Data File: s6b0715.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	514	ug/kg	103	514
606-20-2	2,6-Dinitrotoluene	U	514	ug/kg	51.4	514
208-96-8	Acenaphthylene	U	51.4	ug/kg	15.4	51.4
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	514	ug/kg	103	514
84-66-2	Diethylphthalate	U	514	ug/kg	103	514
86-73-7	Fluorene	U	51.4	ug/kg	15.4	51.4
7005-72-3	4-Chlorophenylphenylether	U	514	ug/kg	103	514
534-52-1	2-Methyl-4,6-dinitrophenol	U	514	ug/kg	103	514
100-01-6	4-Nitroaniline	U	514	ug/kg	154	514
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	514	ug/kg	103	514
122-66-7	Azobenzene	U	514	ug/kg	103	514
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	514	ug/kg	103	514
118-74-1	Hexachlorobenzene	U	514	ug/kg	103	514
85-01-8	Phenanthrene	U	51.4	ug/kg	15.4	51.4
120-12-7	Anthracene	U	51.4	ug/kg	10.3	51.4
84-74-2	Di-n-butylphthalate	U	514	ug/kg	103	514
206-44-0	Fluoranthene	U	51.4	ug/kg	15.4	51.4
85-68-7	Butylbenzylphthalate	U	514	ug/kg	103	514
56-55-3	Benzo(a)anthracene	U	51.4	ug/kg	15.4	51.4
91-94-1	3,3'-Dichlorobenzidine	U	514	ug/kg	154	514
218-01-9	Chrysene	U	51.4	ug/kg	15.4	51.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	514	ug/kg	103	514
117-84-0	Di-n-octylphthalate	U	514	ug/kg	103	514
205-99-2	Benzo(b)fluoranthene	U	51.4	ug/kg	15.4	51.4
207-08-9	Benzo(k)fluoranthene	U	51.4	ug/kg	15.4	51.4
50-32-8	Benzo(a)pyrene	U	51.4	ug/kg	15.4	51.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.4	ug/kg	15.4	51.4
53-70-3	Dibenzo(a,h)anthracene	U	51.4	ug/kg	15.4	51.4
191-24-2	Benzo(ghi)perylene	U	51.4	ug/kg	15.4	51.4
120-82-1	1,2,4-Trichlorobenzene	U	514	ug/kg	103	514

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	244	ug/kg		J
	Unknown Aldol Condensate	3.47	820	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959009

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
2416-20-8	Hexadecenoic acid, Z-11-		10.13	356	ug/kg	96	NJ
57-10-3	n-Hexadecanoic acid		10.16	290	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-		10.93	267	ug/kg	99	NJ
55282-15-0	Docosane, 7-butyl-		14.46	213	ug/kg	83	NJ
112-95-8	Eicosane		15.75	253	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0715.d
 Lab Smp Id: 245959009 Client Smp ID: RE15-10-7316
 Inj Date : 07-FEB-2010 18:50
 Operator : nag1 Inst ID: MSD6.i
 Smp Info : |245959009|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	30.19000	weight of sample
M	35.60000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	286854	40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1099087	40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	633286	40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1109102	40.0000	
* 91 Chrysene-d12	240	12.638	12.646	(1.000)	787093	40.0000	
* 98 Perylene-d12	264	14.983	14.990	(1.000)	514534	40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697	(0.763)	447838	62.3429	3210
\$ 5 Phenol-d5	99	4.474	4.474	(0.921)	568120	62.6613	3220
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	259881	33.4257	1720
\$ 39 2-Fluorobiphenyl	172	7.259	7.265	(0.907)	521412	31.9487	1640
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860	(1.106)	112234	60.7199	3120
\$ 81 p-Terphenyl-d14	244	11.324	11.324	(0.896)	507093	39.9500	2050

ION RATIO REPORT

SV REPORT

Data file: s6b0715.d

Report Date: 02/08/2010 09:15

Lab. ID: 245959009

SampleType: SAMPLE

Injection Date: 07-FEB-2010 18:50

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959009|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	28768	4.47	4.55	80-120	100	(T)
93	165	4.39	4.55	217-277	1	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	36723	5.39	5.24	80-120	100	(T)
42	23088	5.39	5.24	39- 99	63	(T)

22	Isophorone		CAS#: 78-59-1			
82	259881	5.39	5.66	80-120	100	(T)
138	5859	6.14	5.66	0- 49	2	(T)

43	Dimethylphthalate		CAS#: 131-11-3			
163	113199	8.01	7.70	80-120	100	(T)
164	633286	8.01	7.70	0- 40	559	(QT)

48	2,4-Dinitrophenol		CAS#: 51-28-5			
184	118	8.56	8.07	80-120	100	(T)
154	4258	8.01	8.07	19- 79	3606	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	83254	8.00	8.21	80-120	100	(T)
89	1044	8.00	8.21	43-103	1	(QT)
63	1312	8.01	8.21	18- 78	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52 4-Nitrophenol		CAS#: 100-02-7				
139	352	8.01	8.12	80-120	100	(T)
109	1396	8.01	8.13	36- 96	397	(QT)
65	2740	8.01	8.12	60-120	778	(QT)

53 Fluorene		CAS#: 86-73-7				
166	6701	8.86	8.60	80-120	100	(T)
165	7213	8.86	8.60	62-122	108	(T)
167	2363	8.86	8.60	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	222	8.86	8.65	80-120	100	(T)
105	576	8.85	8.65	11- 71	259	(QT)
51	565	8.85	8.65	23- 83	254	(QT)

56 p-Nitroaniline		CAS#: 100-01-6				
138	191	8.66	8.62	80-120	100	()
108	110	8.60	8.62	32- 92	58	()
92	1659	8.86	8.62	12- 72	865	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0715.d
Report Date: 12-Feb-2010 16:13

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0715.d
Lab Smp Id: 245959009 Client Smp ID: RE15-10-7316
Inj Date : 07-FEB-2010 18:50
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959009|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.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	30.19000	weight of sample
M	35.60000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1727719	40.000
* 67 Phenanthrene-d10	9.619	2776337	40.000
* 98 Perylene-d12	14.983	1453540	40.000

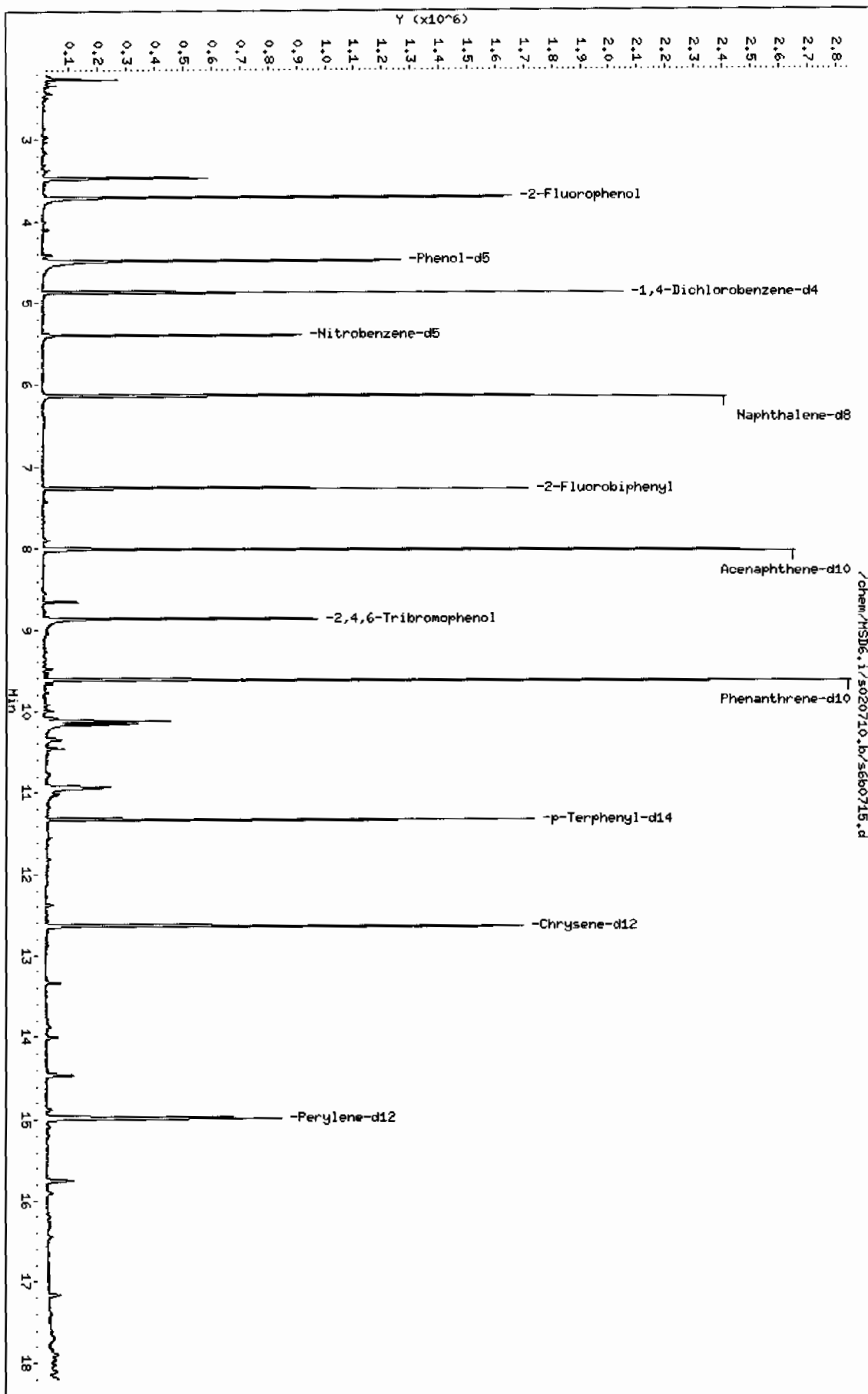
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
2.265	205177	4.75024892	244	0		0	10
Unknown Aldol Condensate					CAS #:		
3.473	688289	15.9352038	820	0		0	10
Hexadecenoic acid, 2-11-					CAS #: 2416-20-8		
10.126	480800	6.92710925	356	96	NIST05.L	94748	67
n-Hexadecanoic acid					CAS #: 57-10-3		
10.162	390919	5.63215259	290	98	NIST05.L	96235	67
9-Octadecenoic acid, (E)-					CAS #: 112-79-8		
10.931	360896	5.19959410	267	99	NIST05.L	113363	67
Docosane, 7-butyl-					CAS #: 55282-15-0		
14.463	150663	4.14610960	213	83	NIST05.L	159839	98
Eicosane					CAS #: 112-95-8		
15.750	178496	4.91203931	253	96	NIST05.L	113488	98

Data File: /chem/MSD6.i/s020710.b/s60715.d
Date: 07-FEB-2010 18:50
Client ID: RE15-10-7316
Sample Info: 1245959009194913211SVH11LRL
Volume Injected (uL): 0.5
Column phase: 3uM DB-SMS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: I2459690091949132111SVH111LANL

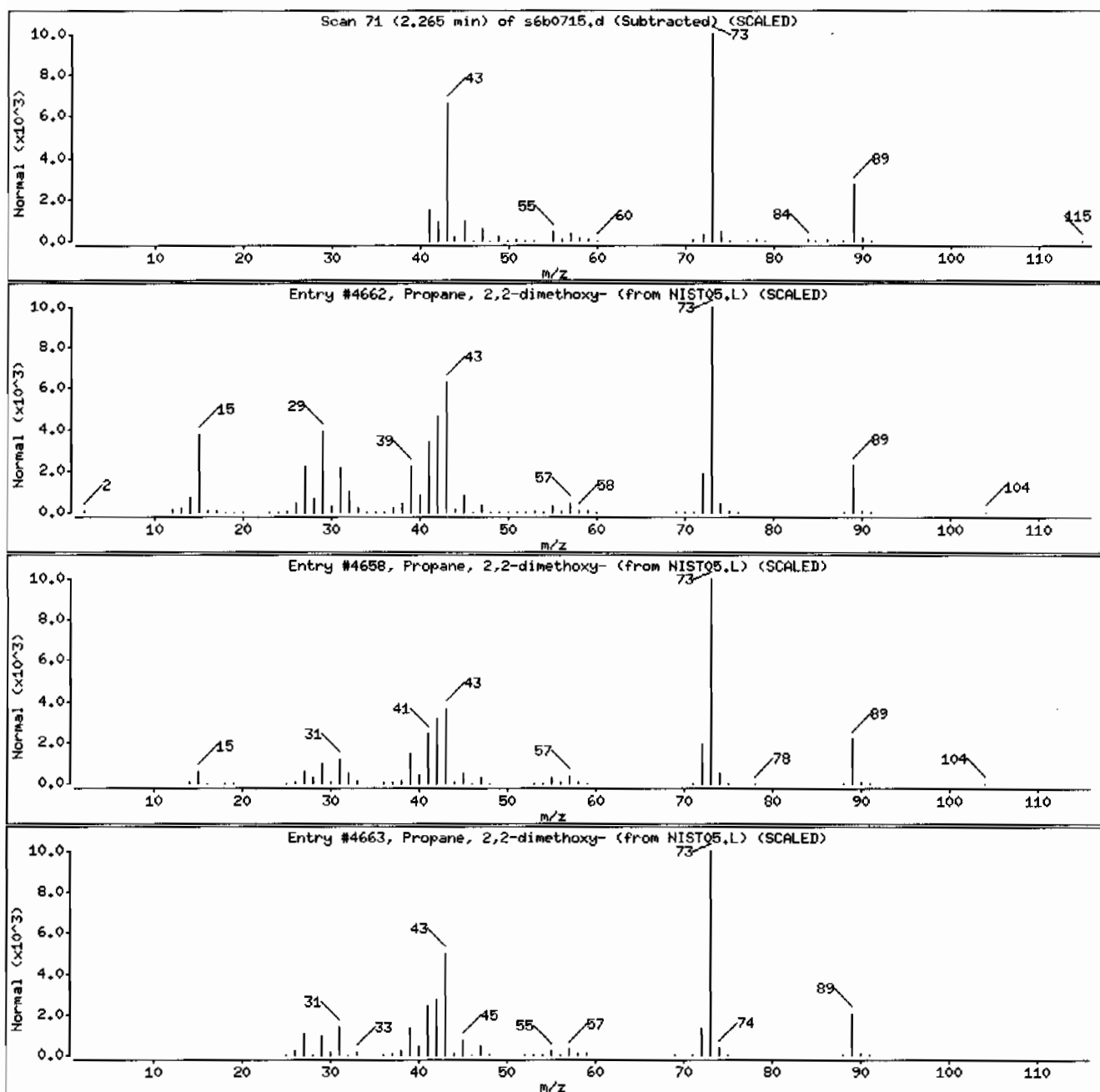
Volume Injected (uL): 0.5

Operator: nag1

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	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104



Date: 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: 1245959009194913211SVMI1ILANL

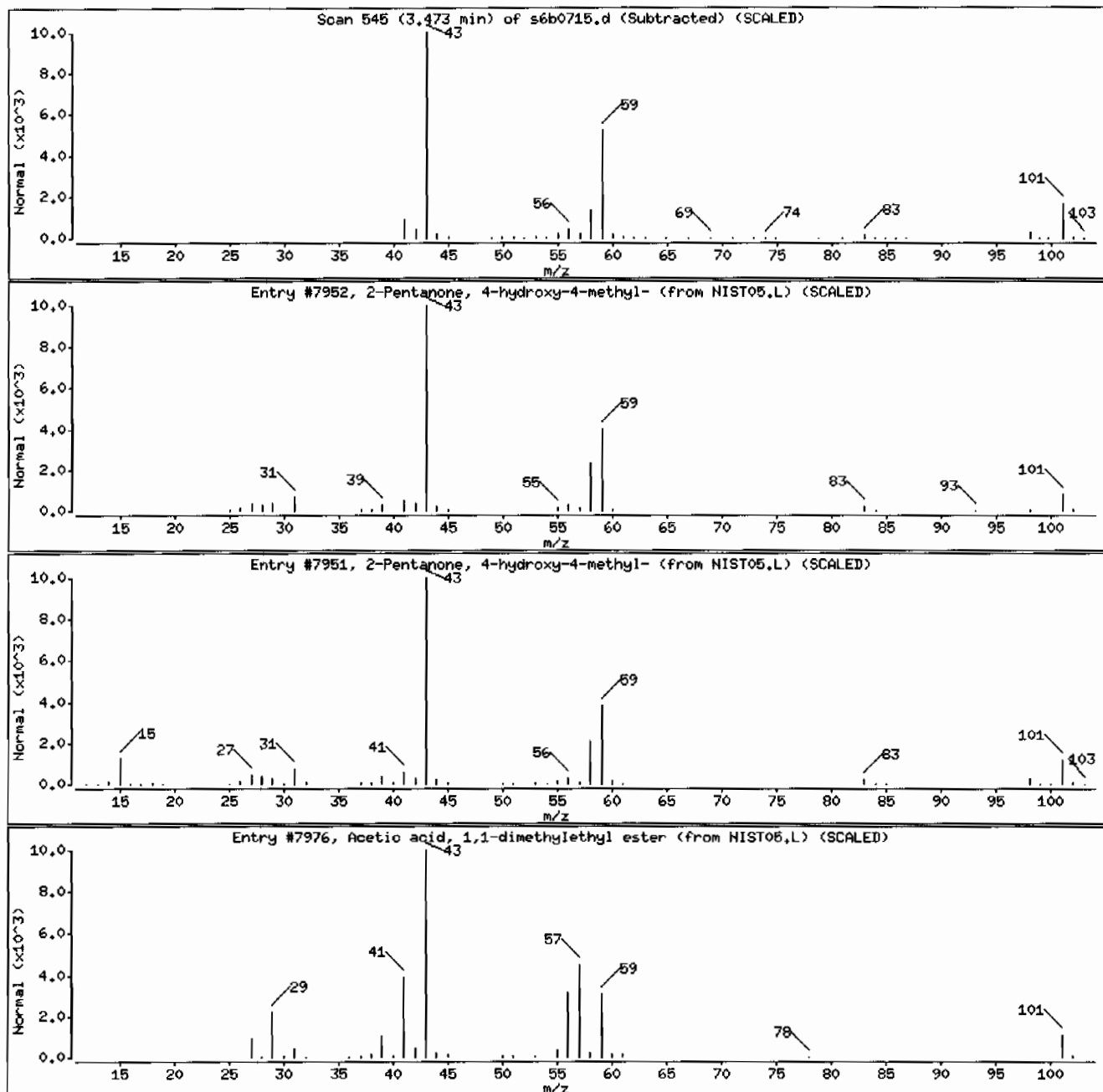
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	17	C6H12O2	116



Date: 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: 1245959009194913211SVMI1ILANL

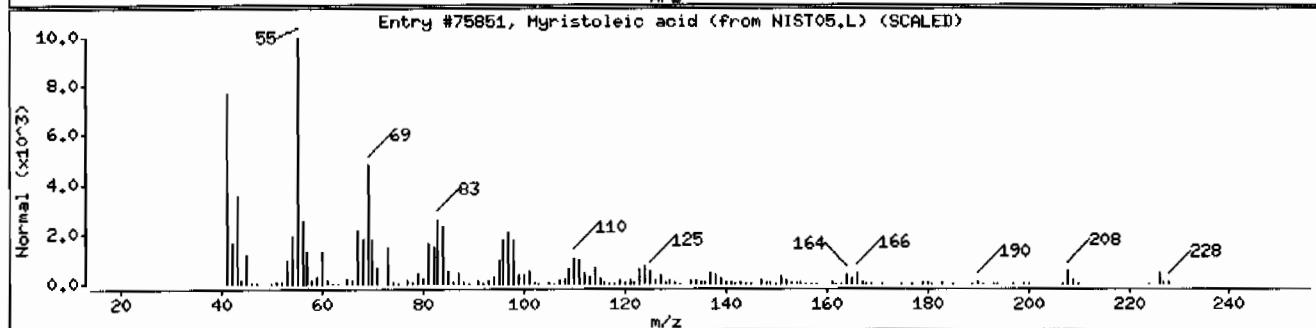
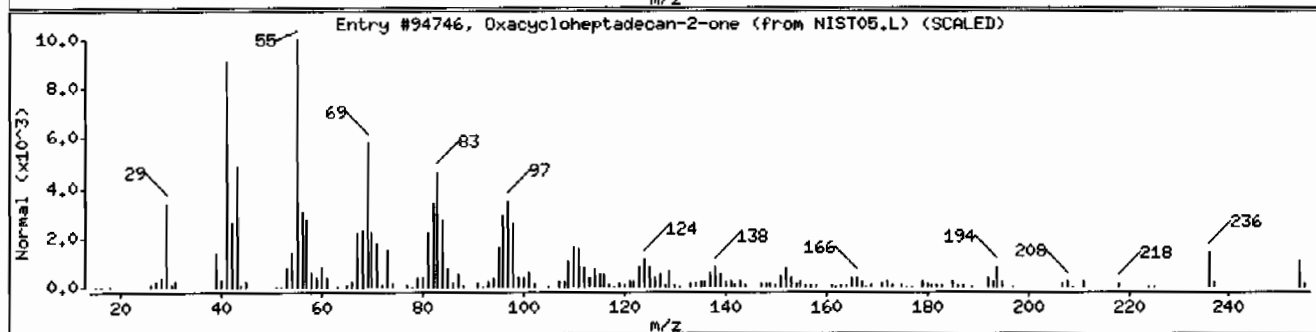
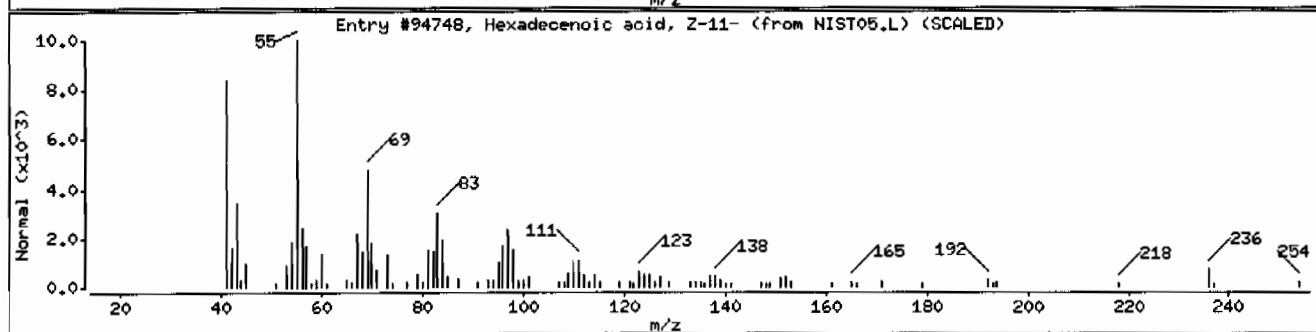
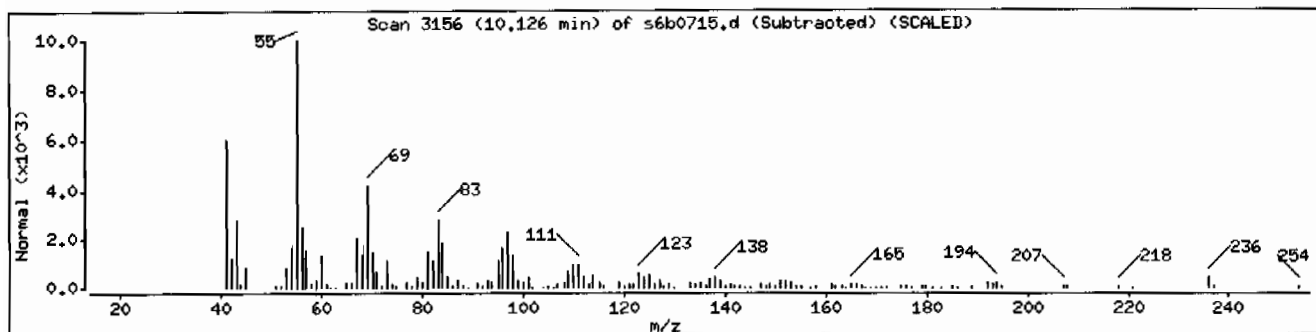
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecenoic acid, Z-11-	2416-20-8	NIST05.L	94748	96	C16H30O2	254
Oxacycloheptadecan-2-one	109-29-5	NIST05.L	94746	94	C16H30O2	254
Myristoleic acid	544-64-9	NIST05.L	75851	91	C14H26O2	226



Date: 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: 1245959009194913211SVMI11LANL

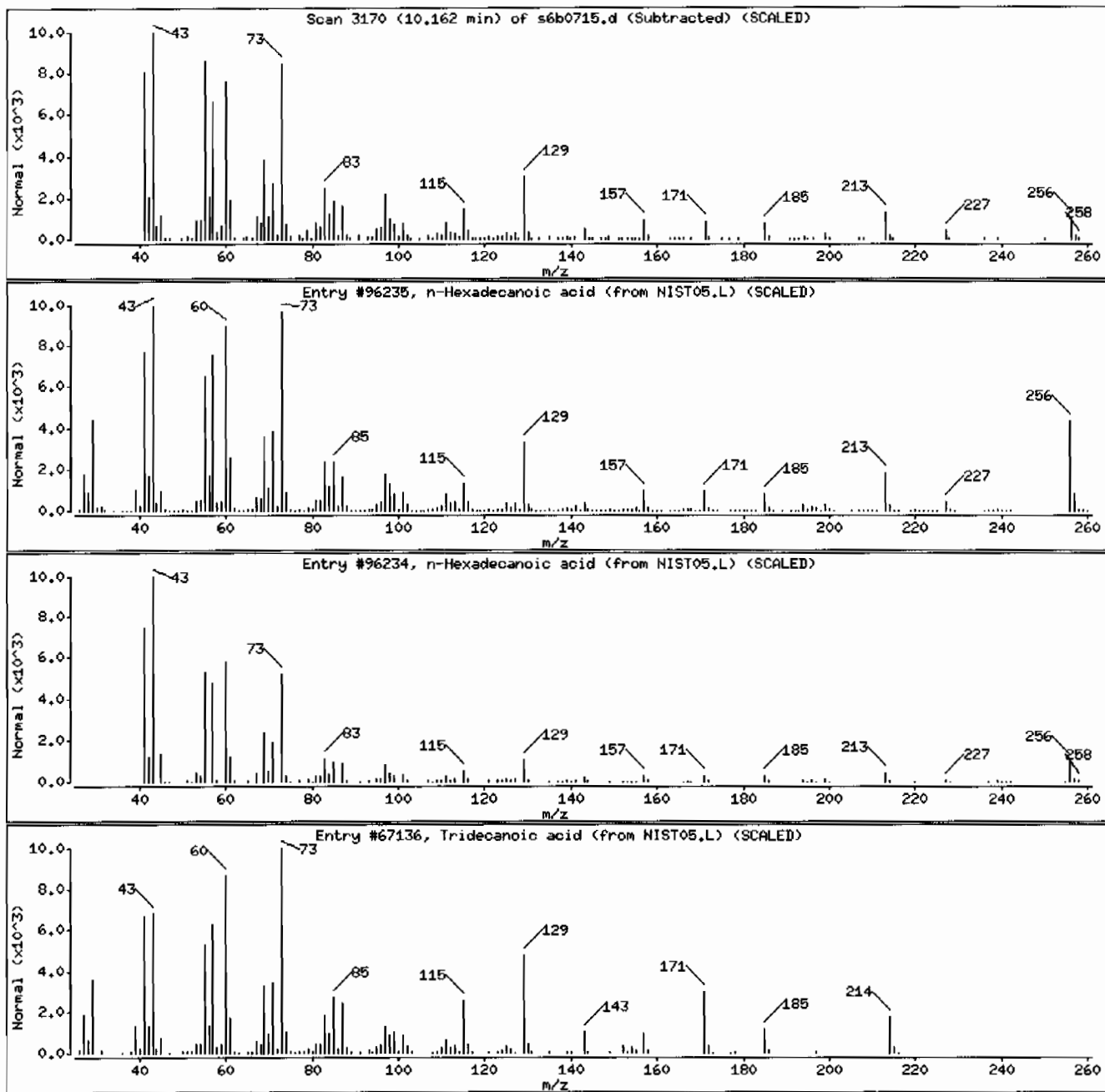
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	98	C16H32O2	256
Tridecanoic acid	638-53-9	NIST05.L	67136	95	C13H26O2	214



Date : 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: HSD6.i

Sample Info: 1245959009194913211SVH111LANL

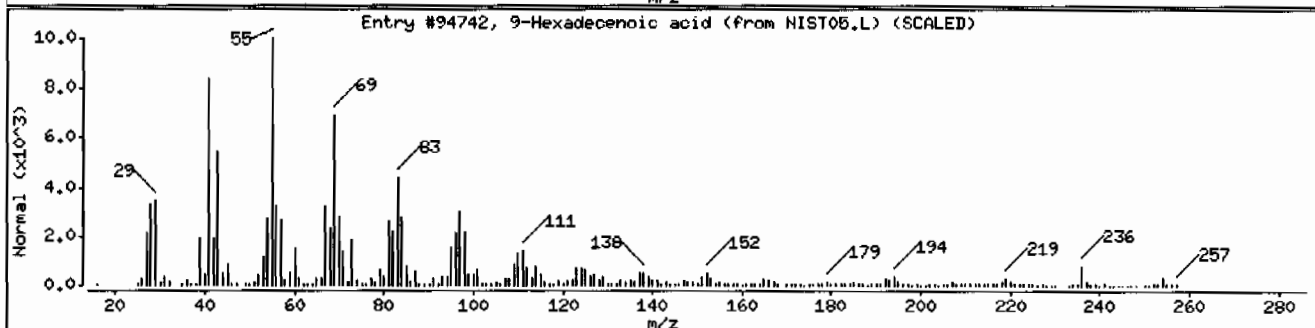
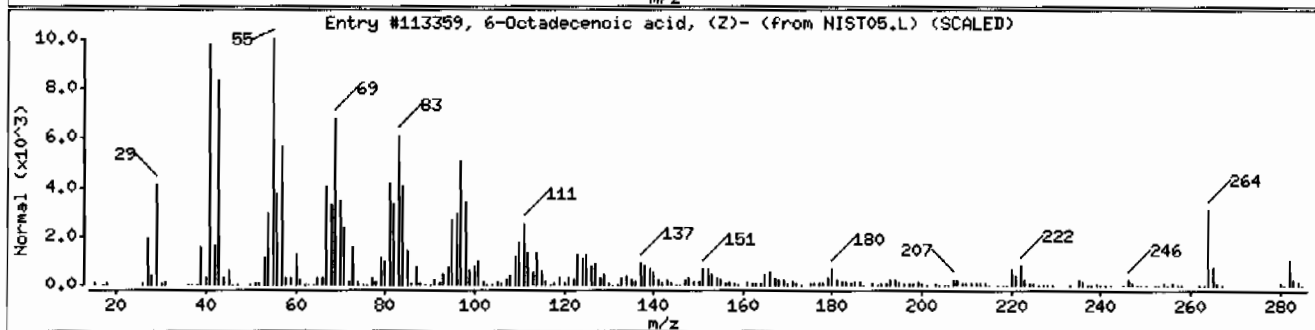
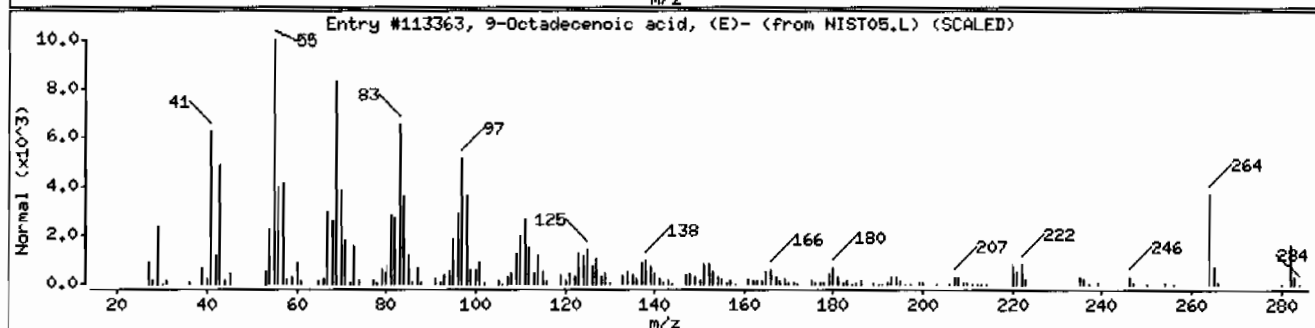
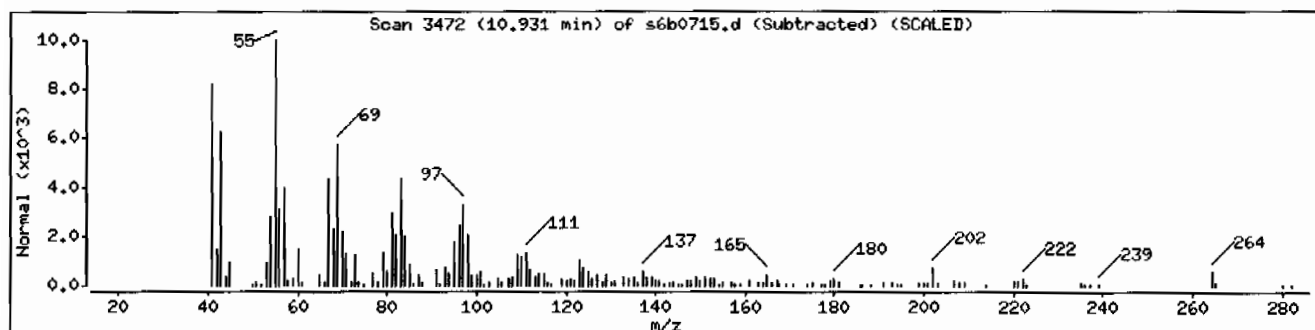
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	99	C18H34O2	282
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	83	C18H34O2	282
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	68	C16H30O2	254



Date : 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: 12459590091949132111SVH111LANL

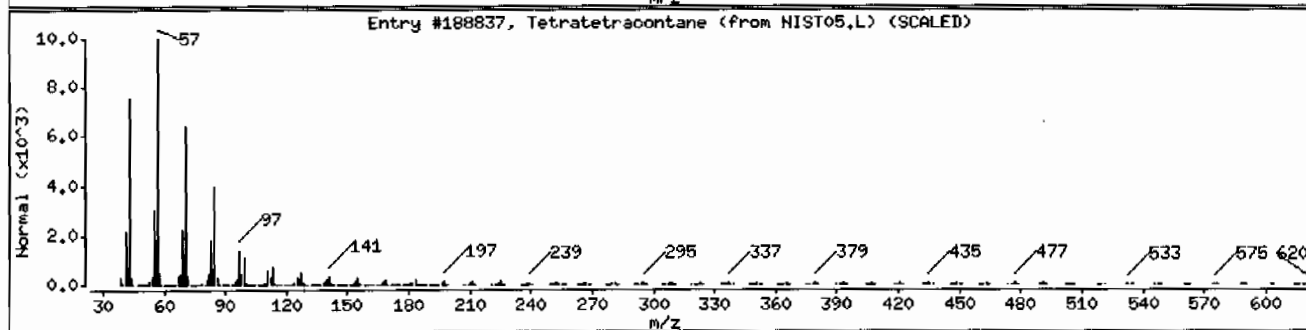
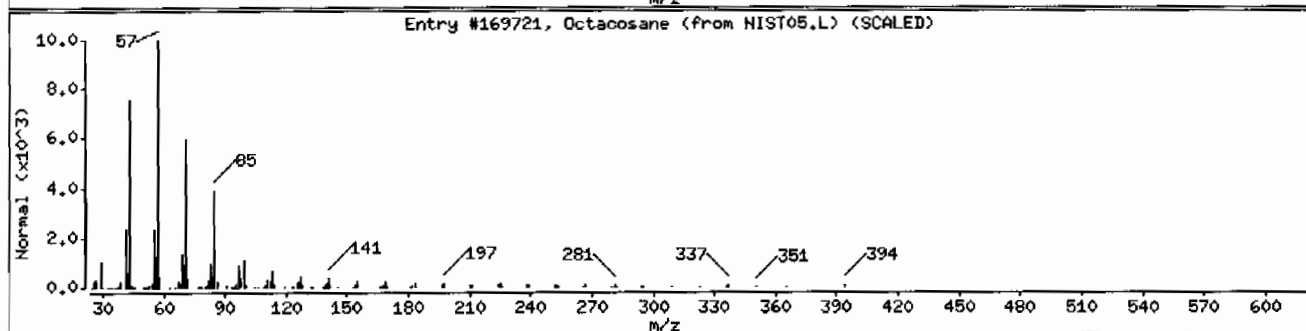
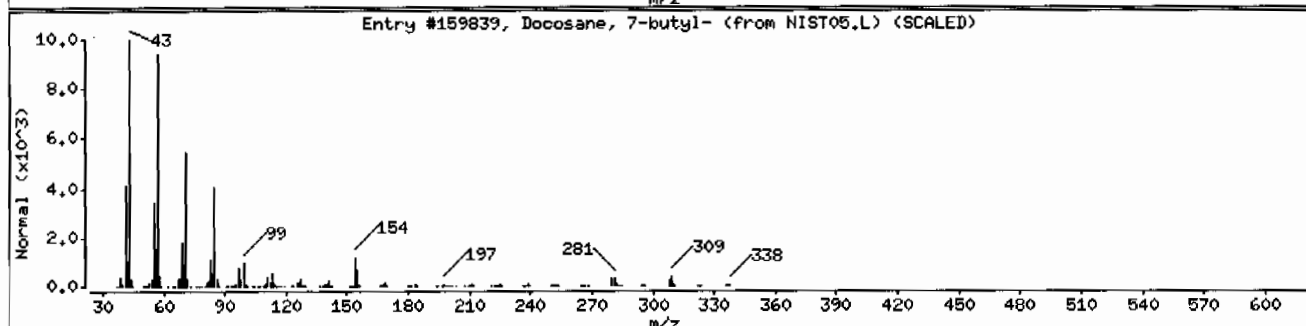
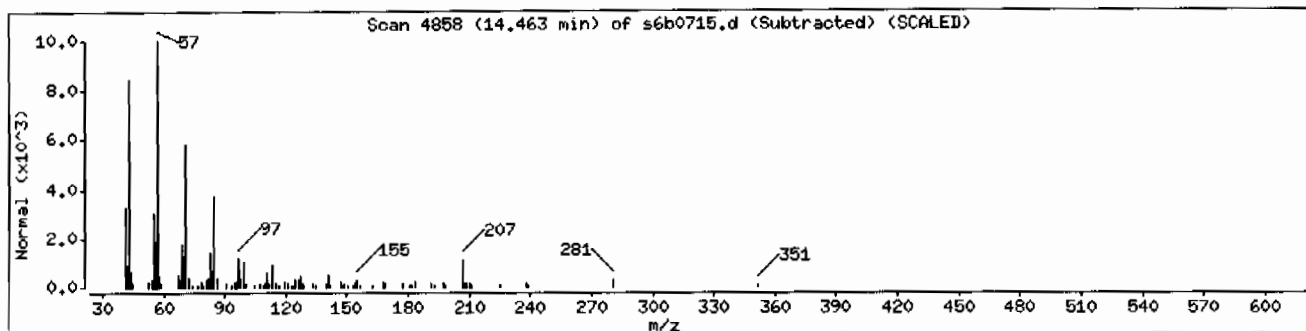
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosane, 7-butyl-	55282-15-0	NIST05.L	159839	83	C ₂₆ H ₅₄	366
Octacosane	630-02-4	NIST05.L	169721	81	C ₂₈ H ₅₈	394
Tetratetracontane	7098-22-8	NIST05.L	188837	81	C ₄₄ H ₉₀	619



Date : 07-FEB-2010 18:50

Client ID: RE15-10-7316

Instrument: MSD6.i

Sample Info: 1245959009194913211SVH111LANL

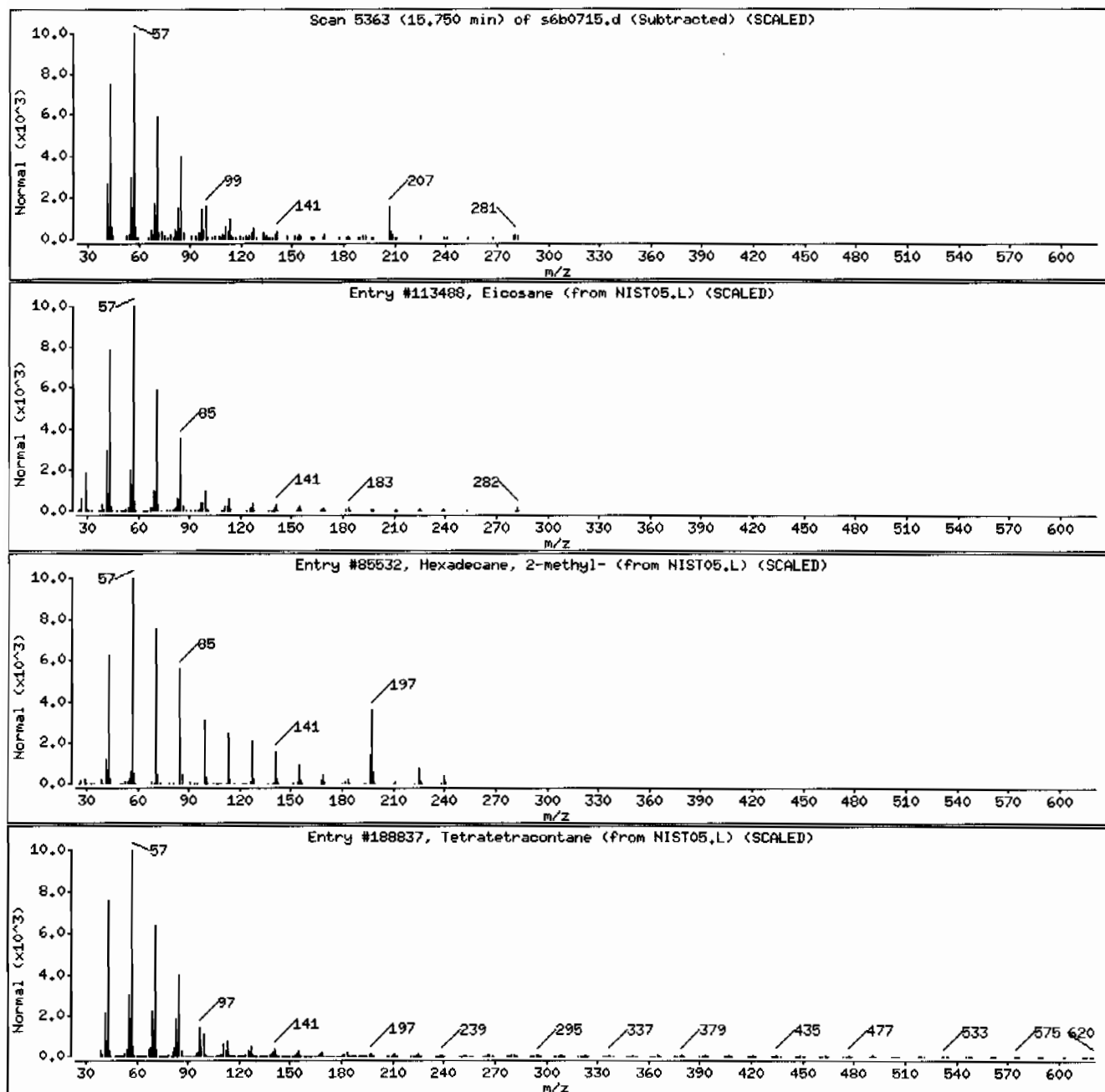
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282
Hexadecane, 2-methyl-	1560-92-5	NIST05.L	85532	90	C17H36	240
Tetratetracontane	7098-22-8	NIST05.L	188837	87	C44H90	619



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

SDG Number: 10-1510
Lab Sample ID: 245959004

Client ID: RE15-10-7317
Batch ID: 949132
Run Date: 02/07/2010 16:32
Prep Date: 02/04/2010 20:55
Data File: s6b0710.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.08 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.5	373
108-95-2	Phenol	U	373	ug/kg	74.5	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.5	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.5	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.5	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.5	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	93.2	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.5	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.5	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.5	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.5	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.5	373
95-48-7	o-Cresol	U	373	ug/kg	74.5	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.5	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.5	373
78-59-1	Isophorone	U	373	ug/kg	74.5	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.5	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	130	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.5	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.5	373
65-85-0	Benzoic acid	U	745	ug/kg	186	745
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.5	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.5	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.45	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.5	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.5	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.5	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.5	373
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	373	ug/kg	74.5	373

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959004

Client ID: RE15-10-7317
Batch ID: 949132
Run Date: 02/07/2010 16:32
Prep Date: 02/04/2010 20:55
Data File: s6b0710.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.08 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.5	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	745	ug/kg	142	745
132-64-9	Dibenzofuran	U	373	ug/kg	74.5	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.5	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.5	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.5	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.5	373
122-66-7	Azobenzene	U	373	ug/kg	74.5	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.5	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.5	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.45	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.5	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.5	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	74.5	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.5	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	74.5	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.27	230	ug/kg		J
	Unknown Aldol Condensate	3.47	336	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0710.d
 Lab Smp Id: 245959004 Client Smp ID: RE15-10-7317
 Inj Date : 07-FEB-2010 16:32
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245959004|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	30.08000	weight of sample
M	10.80000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL
							(ng/ul) (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	289598	40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1096381	40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	623560	40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1076277	40.0000	
* 91 Chrysene-d12	240	12.636	12.646	(1.000)	720483	40.0000	
* 98 Perylene-d12	264	14.980	14.990	(1.000)	457127	40.0000	
\$ 3 2-Fluorophenol	112	3.705	3.697	(0.762)	337577	46.5483	1730
\$ 5 Phenol-d5	99	4.472	4.474	(0.920)	422268	46.1331	1720
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	207668	26.7760	998
\$ 39 2-Fluorobiphenyl	172	7.259	7.265	(0.907)	418629	26.0509	971
\$ 60 2,4,6-Tribromophenol	329	8.855	8.860	(1.106)	71177	39.1082	1460
\$ 81 p-Terphenyl-d14	244	11.321	11.324	(0.896)	414302	35.6573	1330

ION RATIO REPORT

SV REPORT

Data file: s6b0710.d

Report Date: 02/08/2010 09:14

Lab. ID: 245959004

SampleType: SAMPLE

Injection Date: 07-FEB-2010 16:32

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959004|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	29699	5.39	5.24	80-120	100	(T)
42	19005	5.39	5.24	39- 99	64	(T)

22 Isophorone				CAS#: 78-59-1		
82	207668	5.39	5.66	80-120	100	(T)
138	5835	6.13	5.66	0- 49	3	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	111352	8.01	7.70	80-120	100	(T)
164	623560	8.01	7.70	0- 40	560	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	82152	8.01	8.21	80-120	100	(T)
89	631	8.00	8.21	43-103	1	(QT)
63	977	8.01	8.21	18- 78	1	(QT)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	106	8.85	8.65	80-120	100	(T)
105	608	8.85	8.65	11- 71	570	(QT)
51	273	8.85	8.65	23- 83	256	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0710.d
Report Date: 12-Feb-2010 16:12

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0710.d
Lab Smp Id: 245959004 Client Smp ID: RE15-10-7317
Inj Date : 07-FEB-2010 16:32
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959004|949132|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.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	30.08000	weight of sample
M	10.80000	% moisture

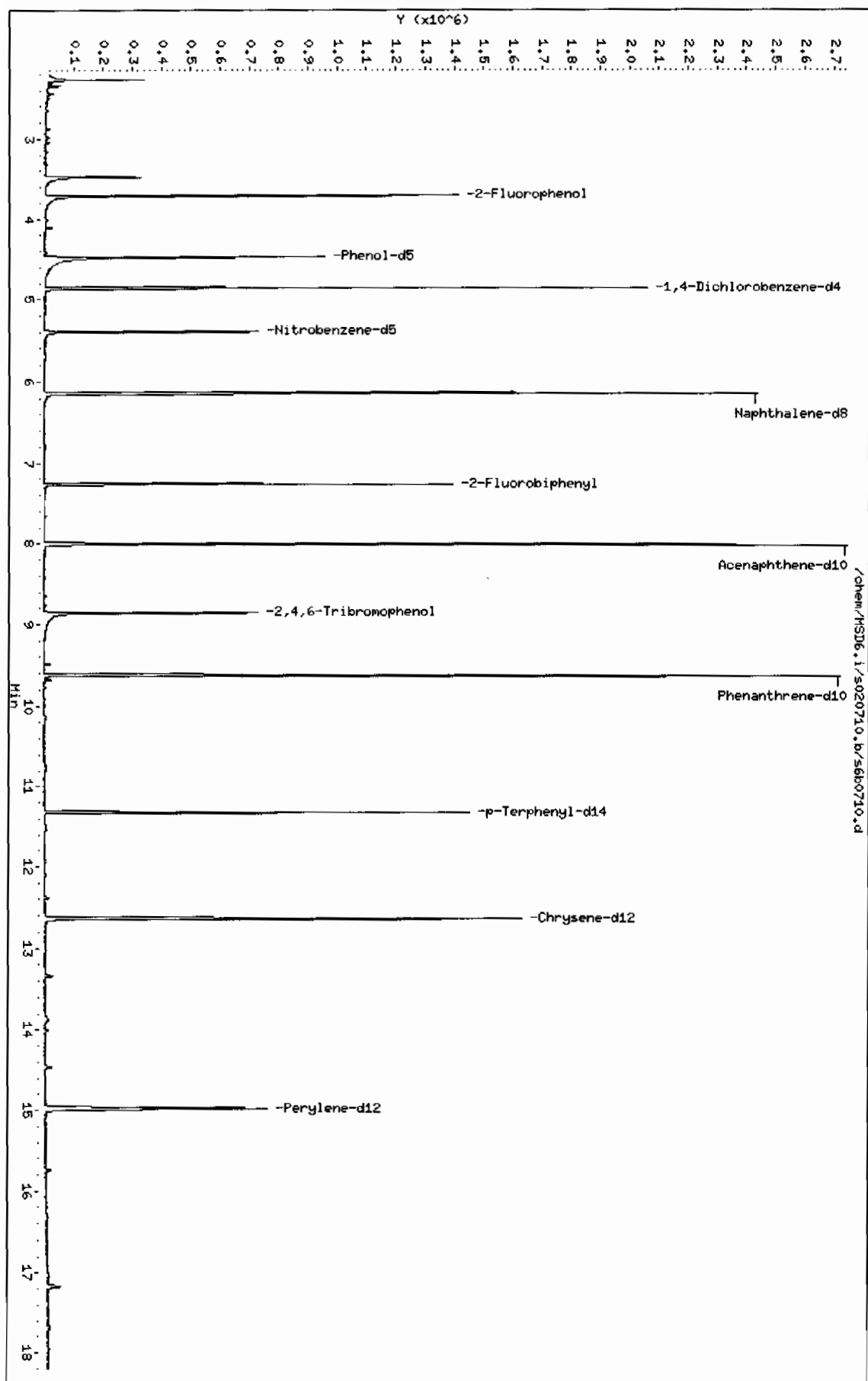
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1730850	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.268	267381	6.17917149	230	0		0	10
Unknown Aldol Condensate				CAS #:			
3.470	389740	9.00689302	336	0		0	10

Data File: /chem/HSD6.i/s020710.b/s60710.d
Date : 07-FEB-2010 16:32
Client ID: RE15-10-7317
Sample Info: 124595004194913211SVH11L1ANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20



Date : 07-FEB-2010 16:32

Client ID: RE15-10-7317

Instrument: MSD6.i

Sample Info: 1245959004194913211ISVH111LANL

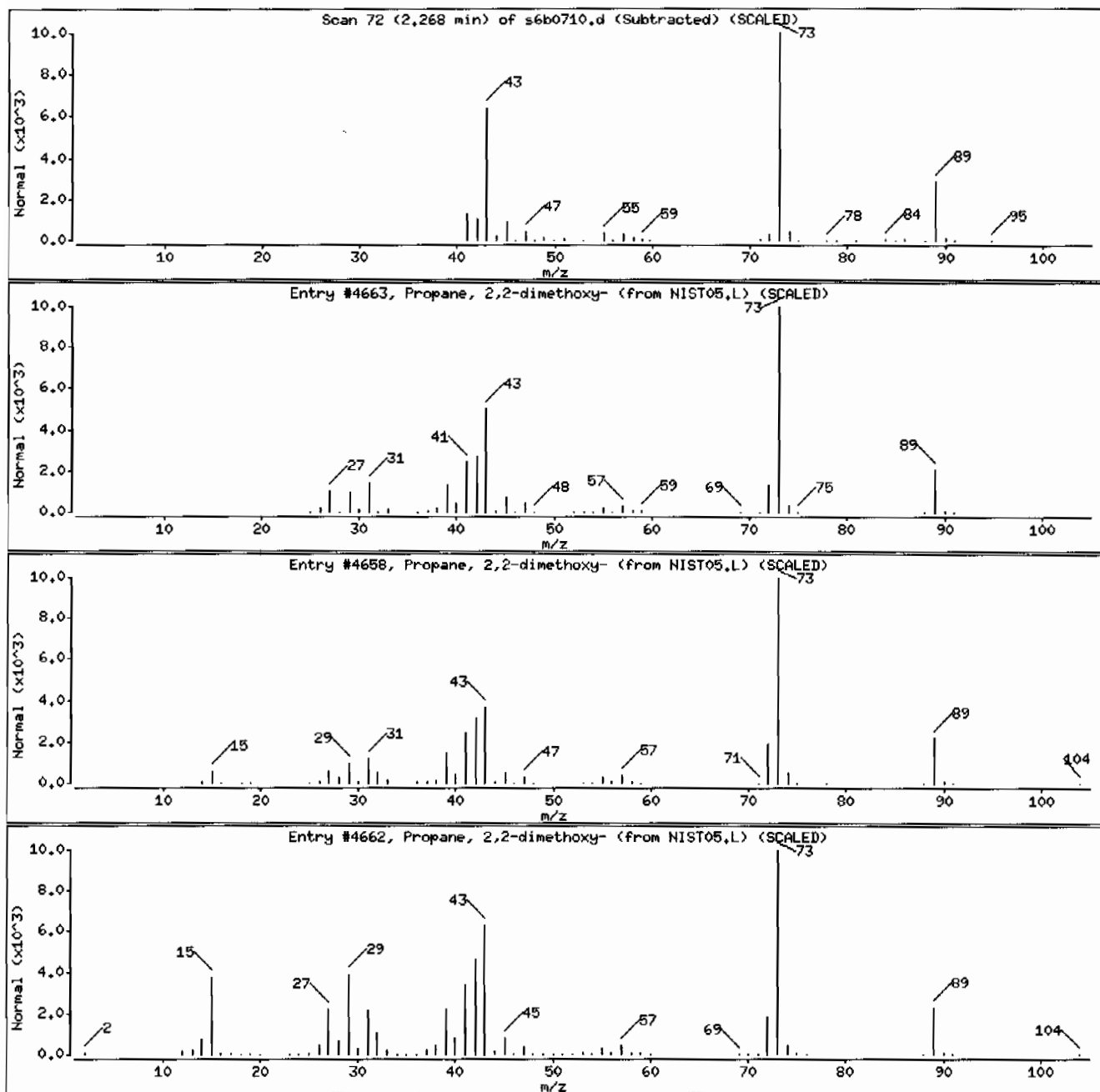
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104



Date: 07-FEB-2010 16:32

Client ID: RE15-10-7317

Instrument: MSD6.1

Sample Info: 1245959004194913211SVH111LANL

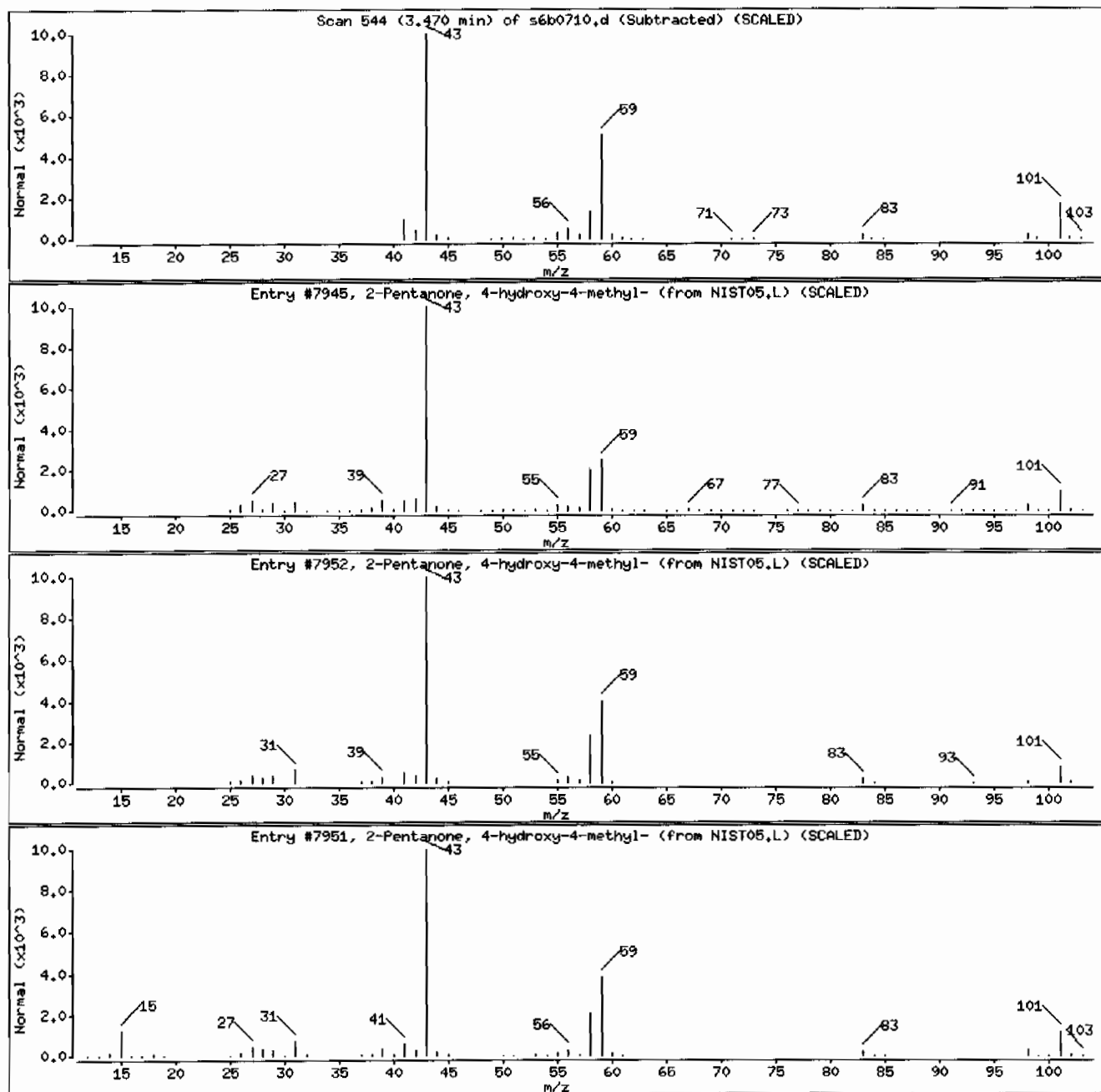
Volume Injected (uL): 0.5

Operator: nag1

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	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	39	C6H12O2	116



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

SDG Number: 10-1510
Lab Sample ID: 245959010

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7318
Batch ID: 949132
Run Date: 02/08/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6b0808.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7318	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.1	Dilution: 1
Run Date: 02/08/2010 17:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0808.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	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	485	ug/kg		JA
21112-37-8	Benzene, 2-(1,1-dimethylethyl)-1,4-dimet	7.38	157	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959010	Date Received: 02/02/2010 09:10	%Moisture: 14.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7318	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/08/2010 17:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s6b0808.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
295-17-0	Cyclotetradecane	9.85	237	ug/kg	96	NJ
	Unknown	9.93	216	ug/kg		J
629-73-2	1-Hexadecene	10.32	244	ug/kg	96	NJ
	Unknown	10.42	746	ug/kg		J
112-95-8	Eicosane	15.67	164	ug/kg	95	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020810.b/s6b0808.d
Lab Smp Id: 245959010 Client Smp ID: RE15-10-7318
Inj Date : 08-FEB-2010 17:00
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959010|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m
Meth Date : 09-Feb-2010 07:32 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	14.77280	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
								(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		4.811	4.813	(1.000)		263355	40.0000	
* 29 Naphthalene-d8	136		6.085	6.090	(1.000)		961527	40.0000	
* 46 Acenaphthene-d10	164		7.955	7.960	(1.000)		554935	40.0000	
* 67 Phenanthrene-d10	188		9.568	9.571	(1.000)		950131	40.0000	
* 91 Chrysene-d12	240		12.575	12.580	(1.000)		684309	40.0000	
* 98 Perylene-d12	264		14.896	14.904	(1.000)		362429	40.0000	
\$ 3 2-Fluorophenol	112		3.659	3.649	(0.761)		345938	52.4546	2050
\$ 5 Phenol-d5	99		4.426	4.429	(0.920)		446582	53.6513	2090
\$ 20 Nitrobenzene-d5	82		5.346	5.354	(0.879)		202722	29.8042	1160
\$ 39 2-Fluorobiphenyl	172		7.211	7.214	(0.906)		408372	28.5553	1110
\$ 60 2,4,6-Tribromophenol	329		8.809	8.809	(1.107)		95508	58.9663	2300
\$ 81 p-Terphenyl-d14	244		11.273	11.273	(0.896)		398417	36.1028	1410

ION RATIO REPORT

SV REPORT

Data file: s6b0808.d

Report Date: 02/09/2010 07:57

Lab. ID: 245959010

SampleType: SAMPLE

Injection Date: 08-FEB-2010 17:00

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959010|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100205-01

Comment:

Method used: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	22612	4.43	4.51	80-120	100	(T)
93	1424	4.48	4.51	198-258	6	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	30020	5.35	5.19	80-120	100	(T)
42	17768	5.34	5.19	42-102	59	(T)

22 Isophorone		CAS#: 78-59-1				
82	202722	5.35	5.61	80-120	100	(T)
138	4999	6.09	5.61	0- 49	2	(T)

43 Dimethylphthalate		CAS#: 131-11-3				
163	100572	7.96	7.65	80-120	100	(T)
164	554935	7.96	7.65	0- 40	552	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	72845	7.96	8.16	80-120	100	(T)
89	873	7.96	8.16	46-106	1	(QT)
63	830	7.96	8.16	22- 82	1	(QT)

53 Fluorene		CAS#: 86-73-7				
166	6399	8.81	8.55	80-120	100	(T)
165	6122	8.81	8.55	62-122	96	(T)
167	2241	8.80	8.55	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	100	8.80	8.60	80-120	100	(T)
105	786	8.81	8.60	11- 71	781	(QT)
51	734	8.80	8.60	29- 89	730	(QT)

99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	460	16.90	16.89	80-120	100	()
138	130	16.90	16.89	5- 65	28	()

100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	401	16.91	16.91	80-120	100	()
139	189	16.91	16.91	0- 30	47	(Q)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020810.b/s6b0808.d
Lab Smp Id: 245959010 Client Smp ID: RE15-10-7318
Inj Date : 08-FEB-2010 17:00
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959010|949132|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m
Meth Date : 09-Feb-2010 07:32 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	14.77280	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.811	1576823	40.000
* 46 Acenaphthene-d10	7.955	2322921	40.000
* 67 Phenanthrene-d10	9.568	2340832	40.000
* 98 Perylene-d12	14.896	1027849	40.000

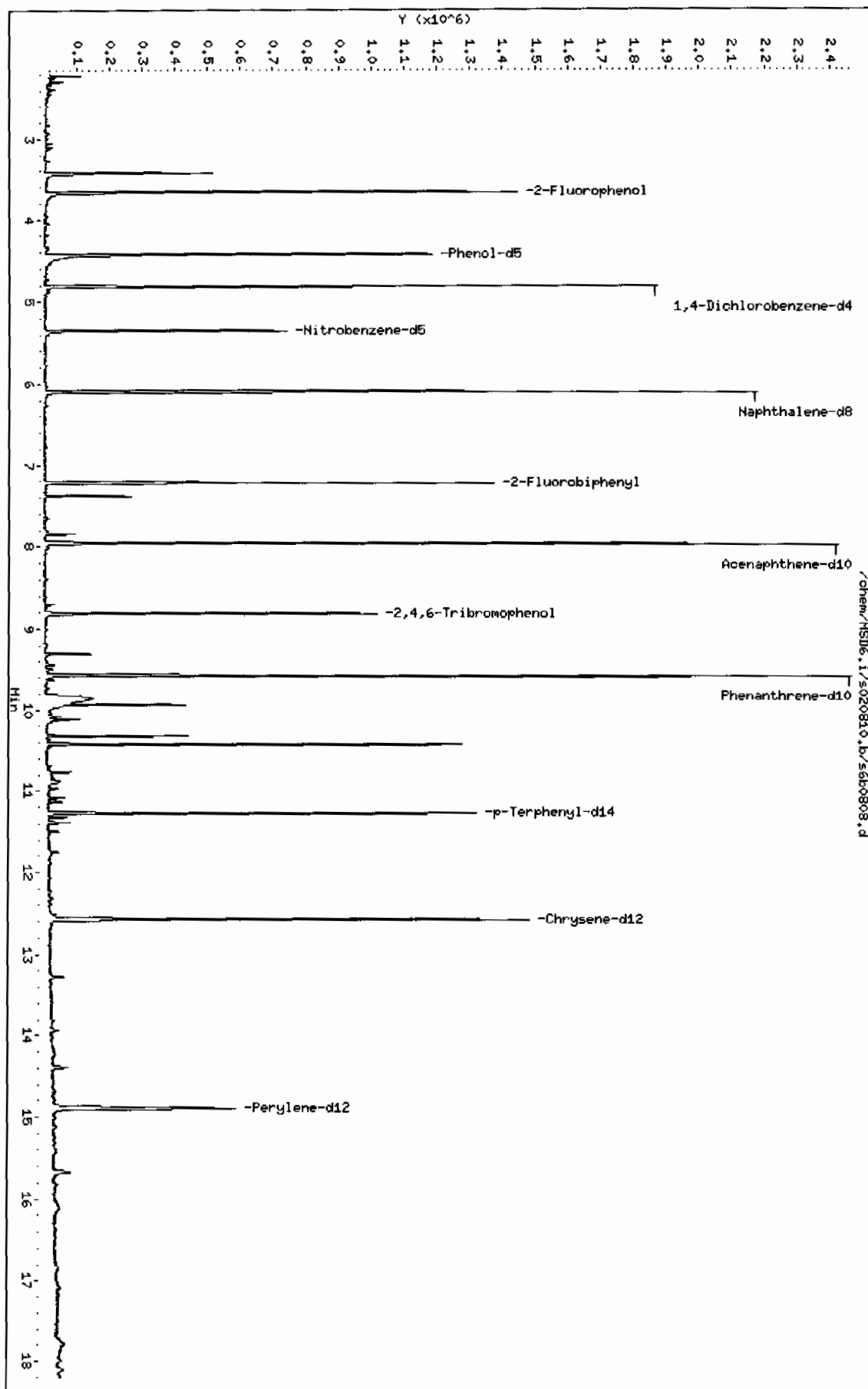
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.422	490202	12.4351777	485	0		0	10
Benzene, 2-(1,1-dimethylethyl)-1,4-dimet					CAS #: 21112-37-8		
7.377	233684	4.02396012	157	90	NIST05.L	52670	46
Cyclotetradecane					CAS #: 295-17-0		
9.848	354916	6.06479058	237	96	NIST05.L	54515	67
Unknown					CAS #:		
9.930	324022	5.53687374	216	0		0	67
1-Hexadecene					CAS #: 629-73-2		
10.317	365915	6.25273668	244	96	NIST05.L	74522	67
Unknown					CAS #:		
10.422	1118343	19.1101807	746	0		0	67
Eicosane					CAS #: 112-95-8		
15.671	107910	4.19945679	164	95	NIST05.L	113489	98

Data File: /chem/HSD6.i/s020810.b/s60808.d
Date : 08-FEB-2010 17:00
Client ID: RE18-10-7318
Sample Info: 124899010194913211SMH11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-6MS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: MSD6.i

Sample Info: 1245959010194913211SVMI1ILANL

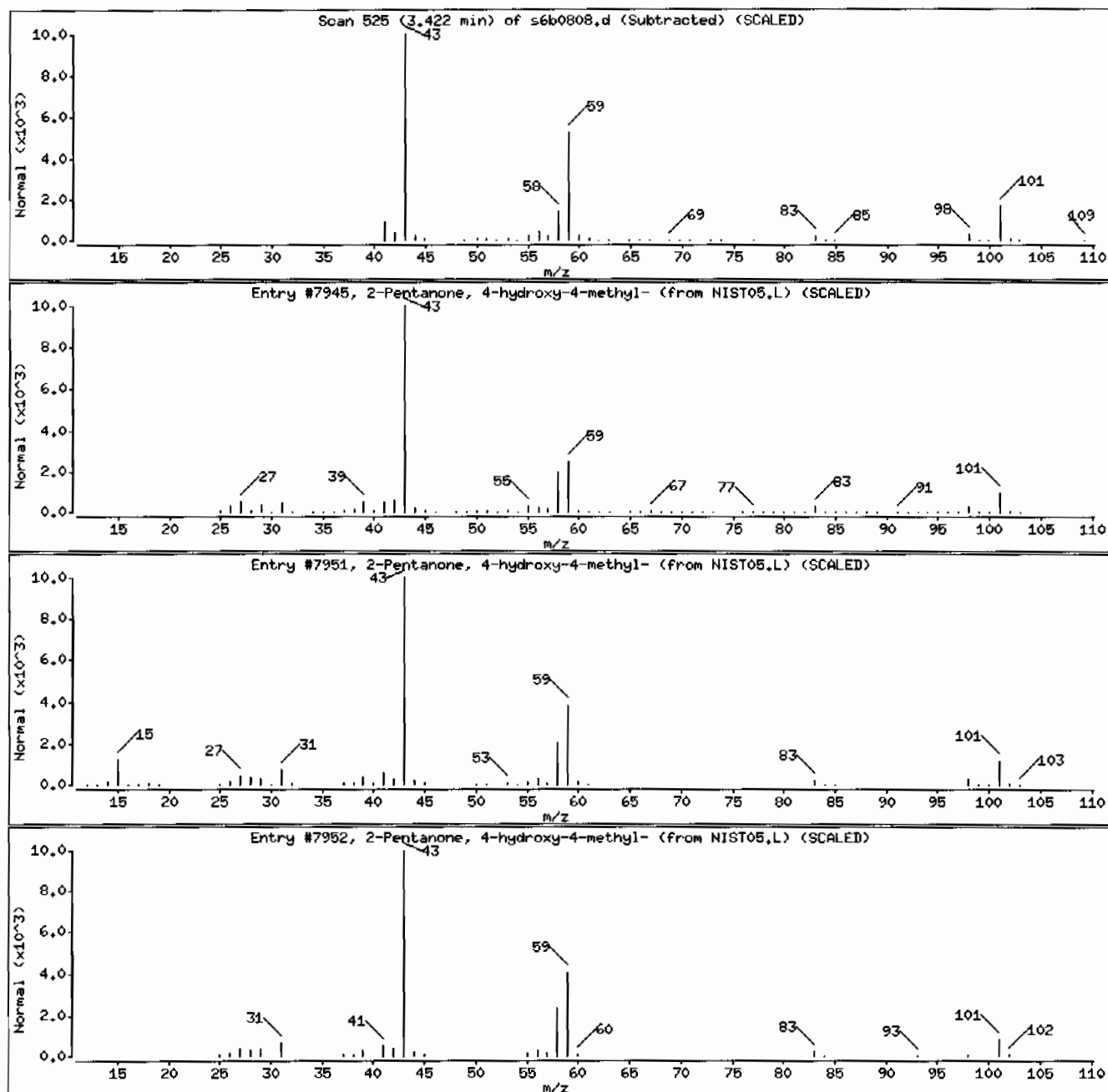
Volume Injected (uL): 0.5

Operator: nag1

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
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: HSD6.i

Sample Info: 1245959010194913211SVMI11LANL

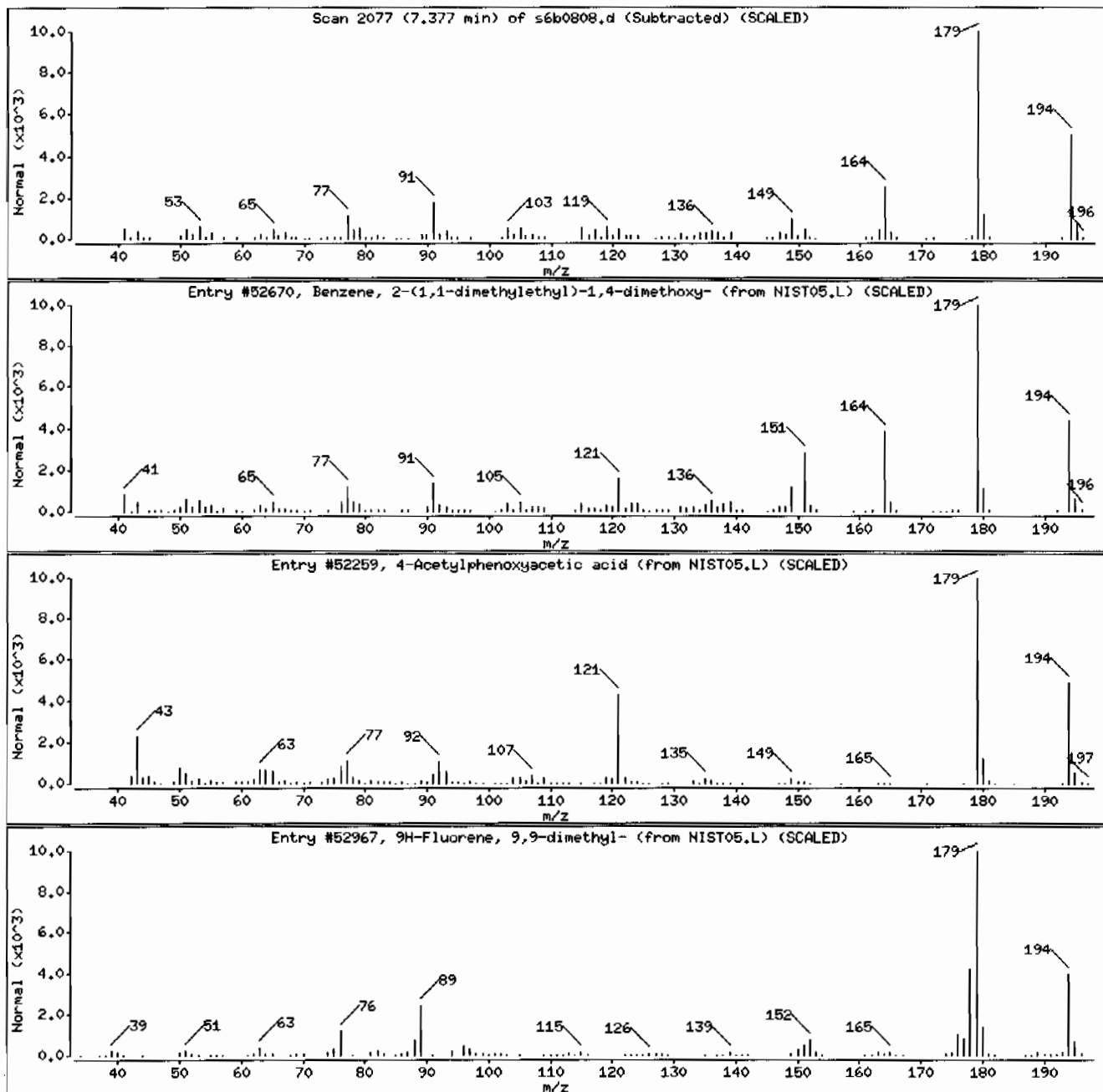
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 2-(1,1-dimethylethyl)-1,4-dimet	21112-37-8	NIST05.L	52670	90	C12H18O2	194
4-Acetylphenoxyacetic acid	1878-81-5	NIST05.L	52259	68	C10H10O4	194
9H-Fluorene, 9,9-dimethyl-	4569-45-3	NIST05.L	52967	64	C15H14	194



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: MSD6.i

Sample Info: 1245959010194913211ISVM11ILANL

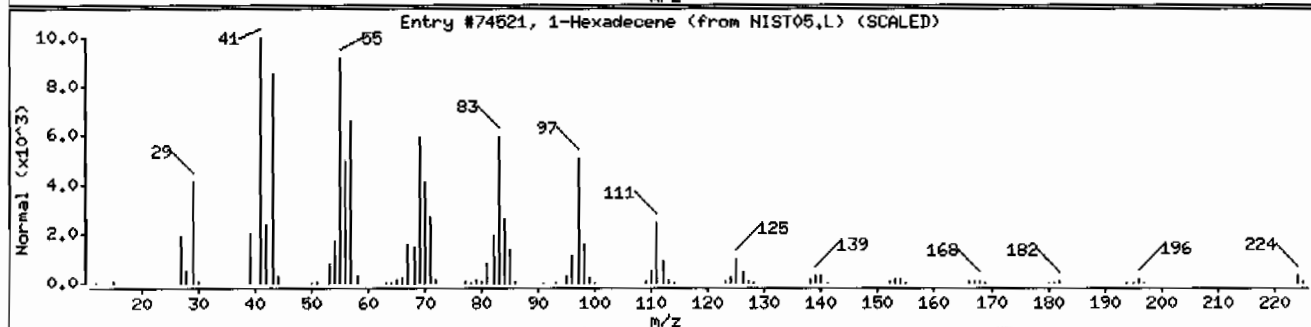
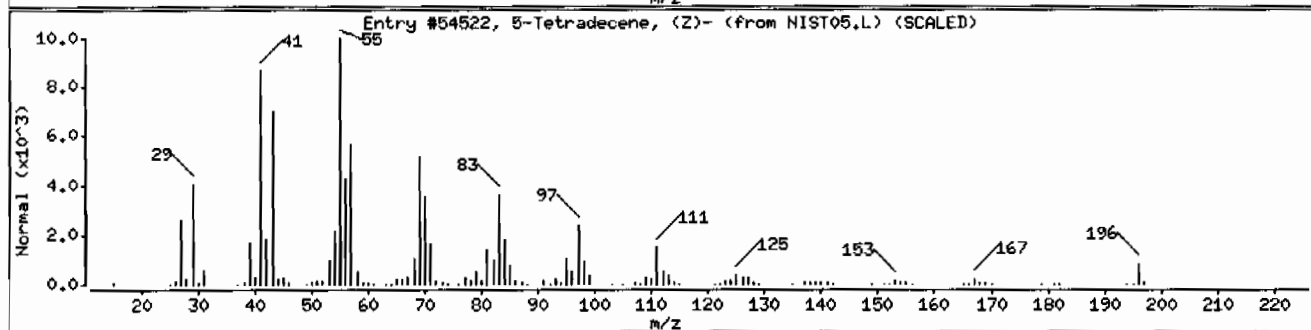
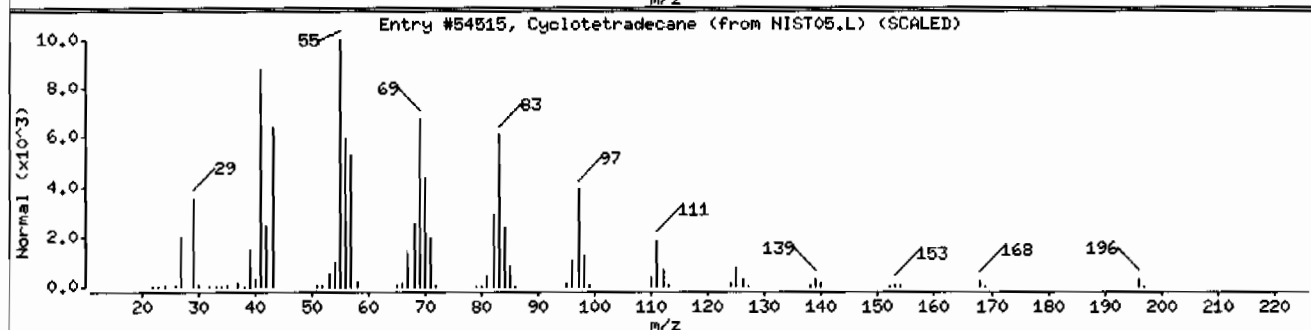
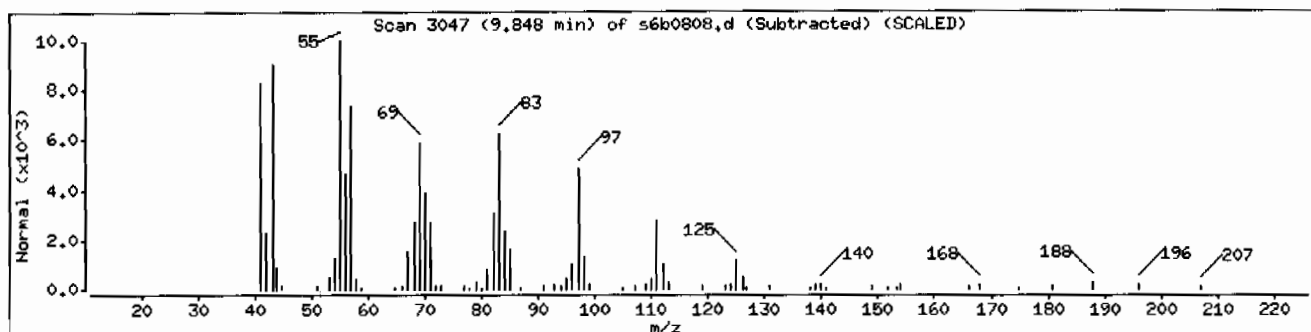
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetradecane	295-17-0	NIST05.L	54515	96	C ₁₄ H ₂₈	196
5-Tetradecene, (Z)-	41446-62-2	NIST05.L	54522	91	C ₁₄ H ₂₈	196
1-Hexadecene	629-73-2	NIST05.L	74521	91	C ₁₆ H ₃₂	224



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: MSD6.i

Sample Info: I245959010194913211SVH111LANL

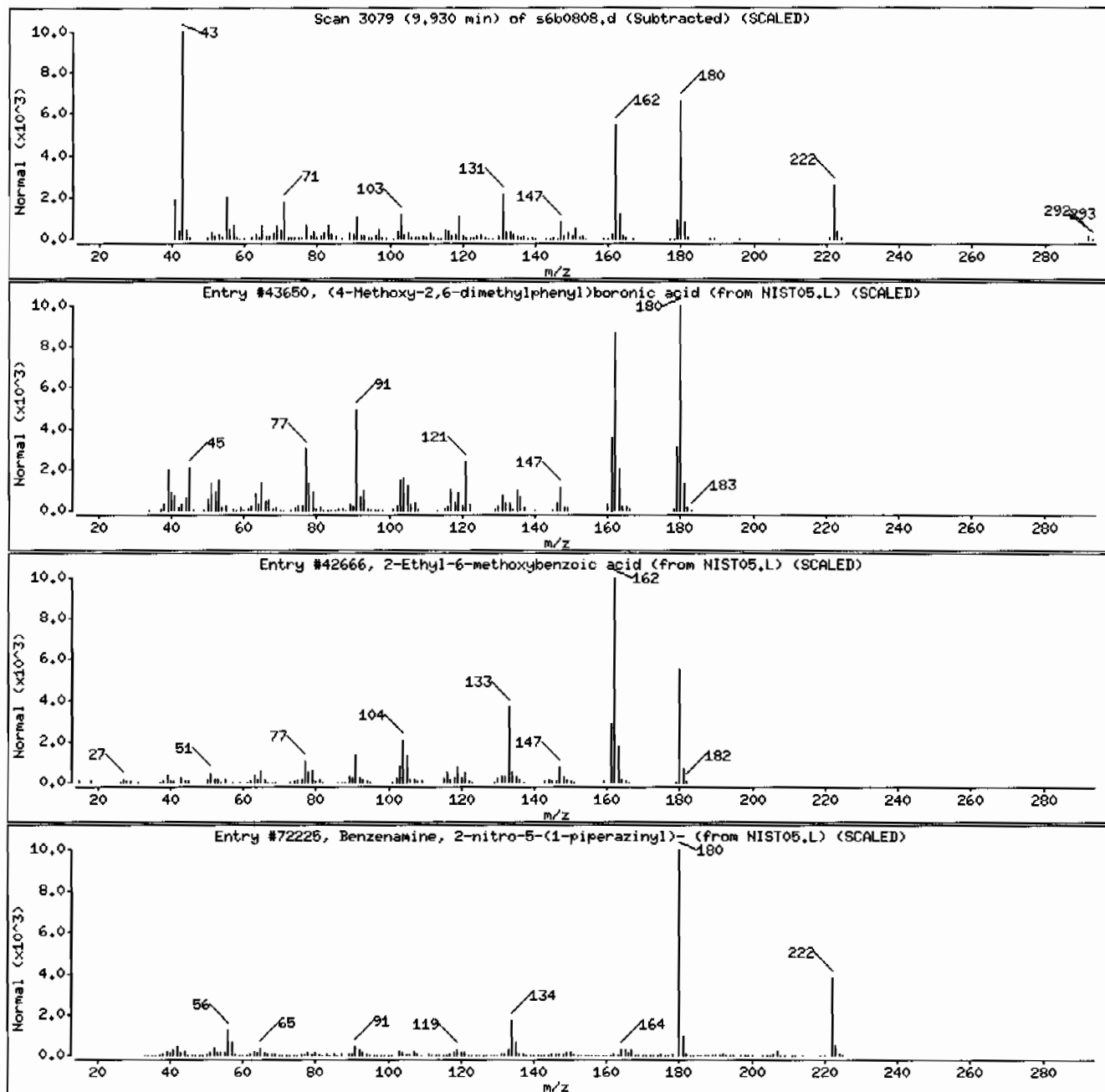
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(4-Methoxy-2,6-dimethylphenyl)boronic ac	1000306-55-2	NIST05.L	43650	47	C9H13B03	180
2-Ethyl-6-methoxybenzoic acid	72216-29-6	NIST05.L	42666	43	C10H12O3	180
Benzenamine, 2-nitro-5-(1-piperazinyl)-	96103-52-5	NIST05.L	72225	38	C10H14N4O2	222



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: MSD6.i

Sample Info: 12459590101949132111SVMI11LANL

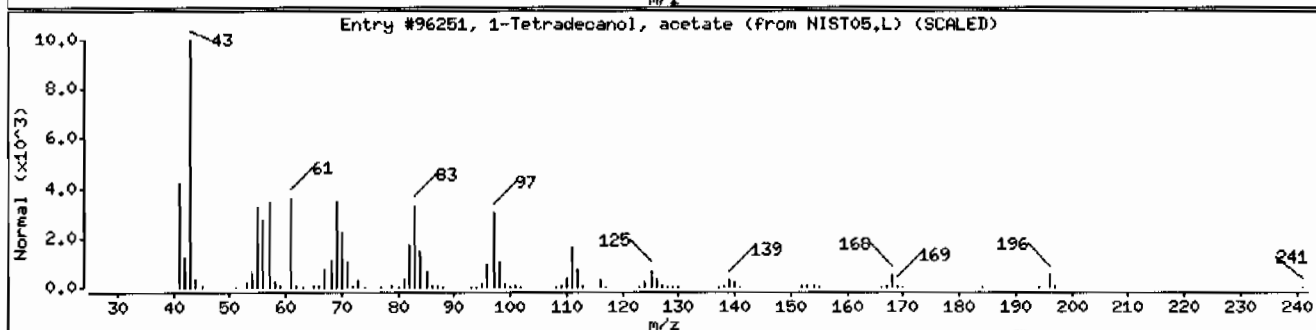
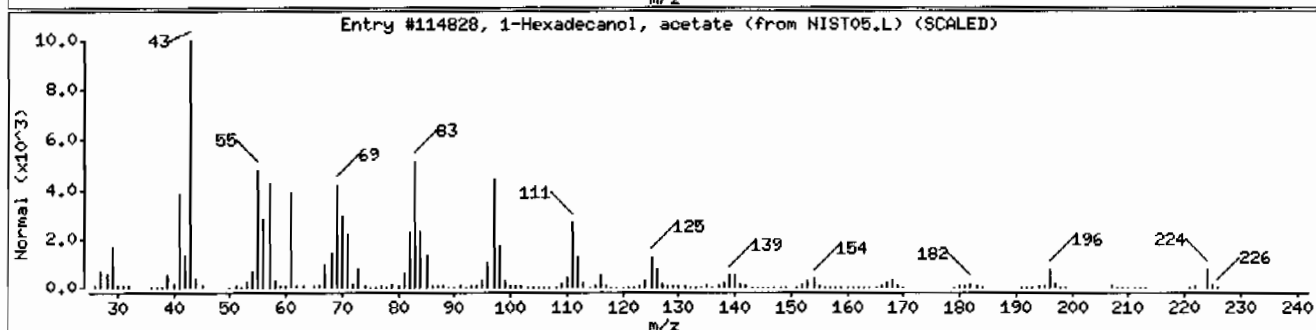
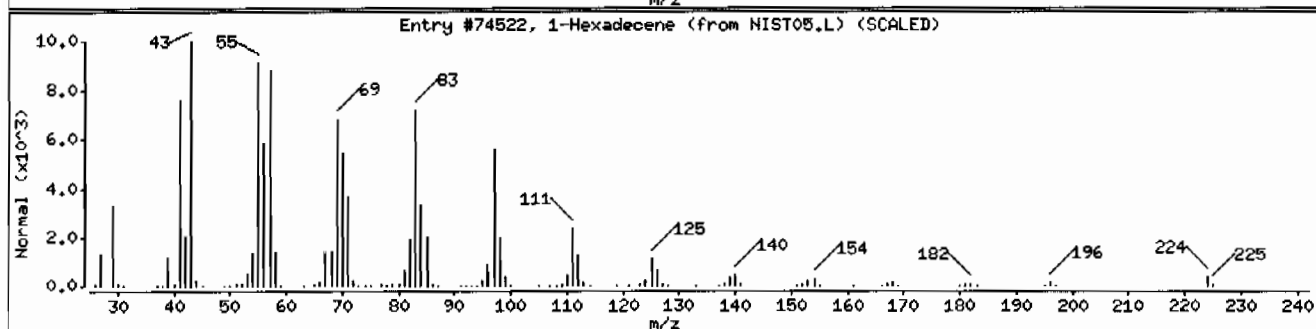
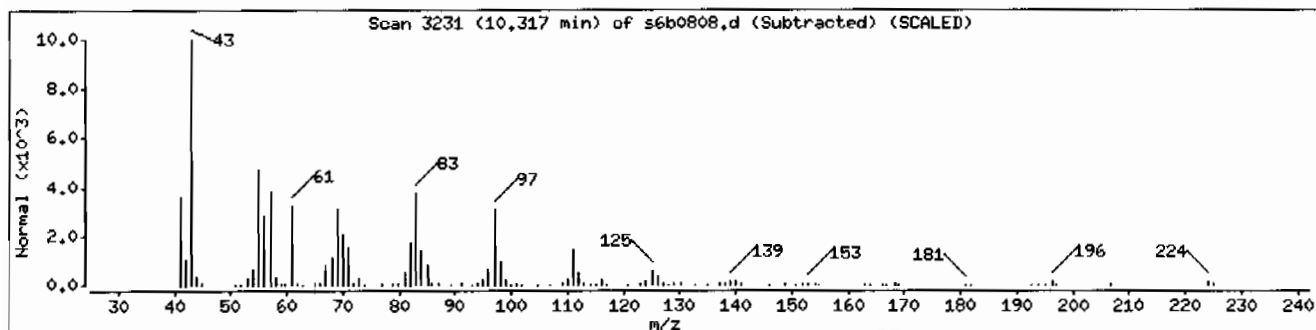
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexadecene	629-73-2	NIST05.L	74522	96	C16H32	224
1-Hexadecanol, acetate	629-70-9	NIST05.L	114828	91	C18H36O2	284
1-Tetradecanol, acetate	638-59-5	NIST05.L	96251	80	C16H32O2	256



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: HSD6,i

Sample Info: 1245959010194913211SVH11ILANL

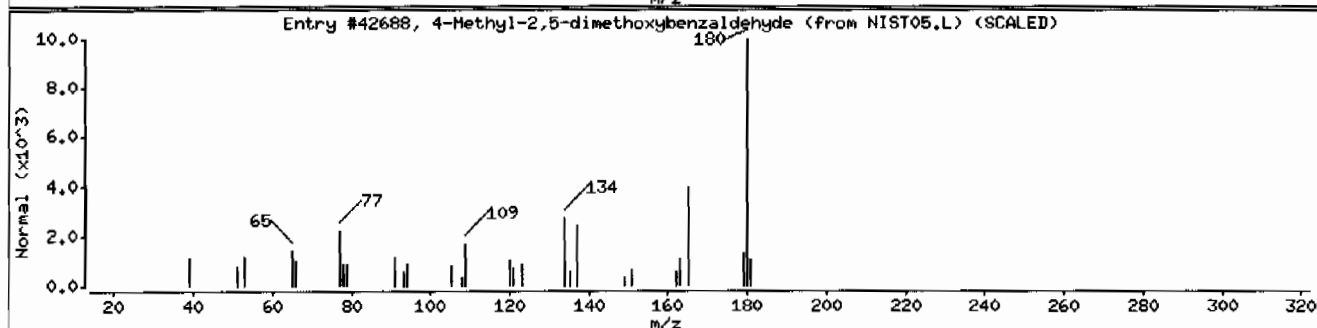
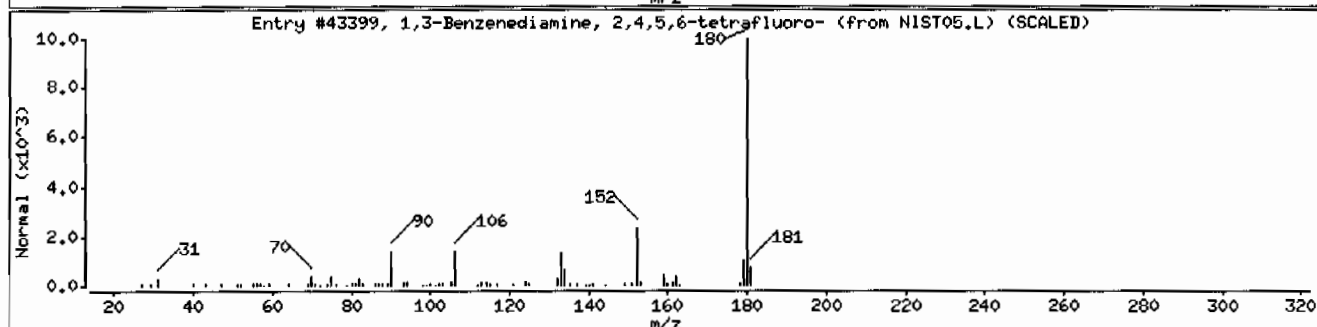
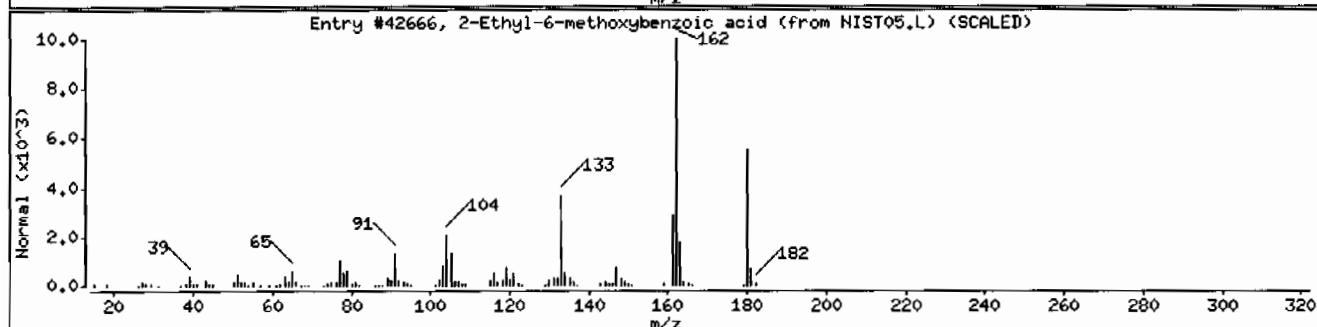
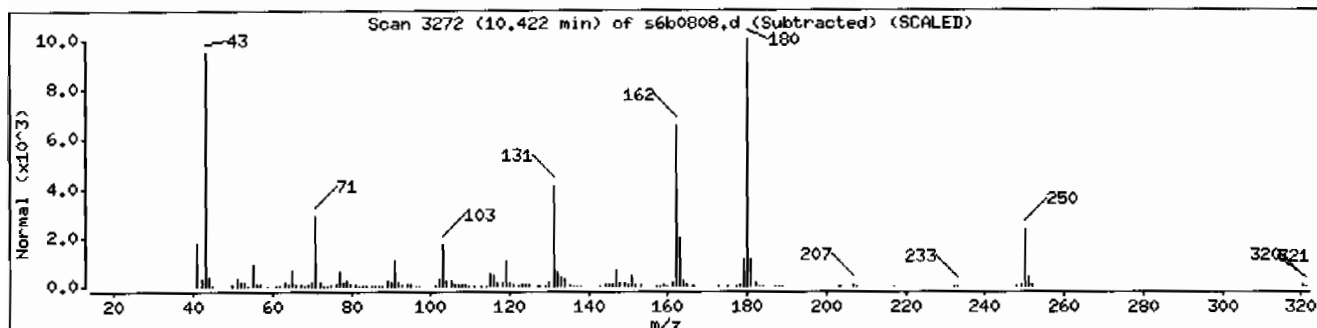
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethyl-6-methoxybenzoic acid	72216-29-6	NIST05.L	42666	37	C10H12O3	180
1,3-Benzenediamine, 2,4,5,6-tetrafluoro-	1198-63-6	NIST05.L	43399	27	C6H4F4N2	180
4-Methyl-2,5-dimethoxybenzaldehyde	4925-88-6	NIST05.L	42688	27	C10H12O3	180



Date : 08-FEB-2010 17:00

Client ID: RE15-10-7318

Instrument: MSD6.i

Sample Info: I245959010194913211SVH11ILANL

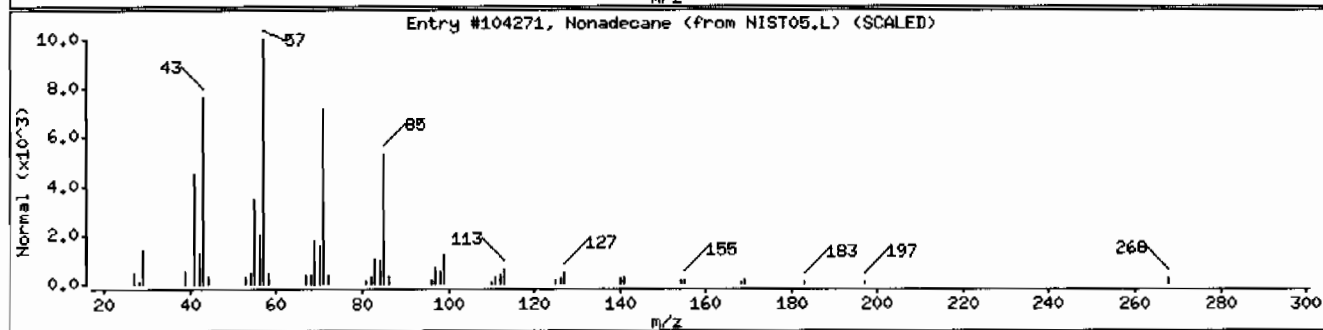
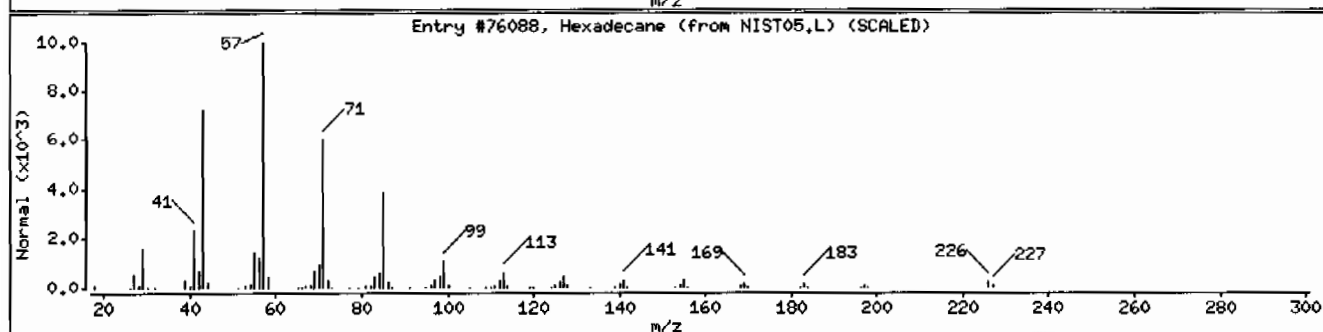
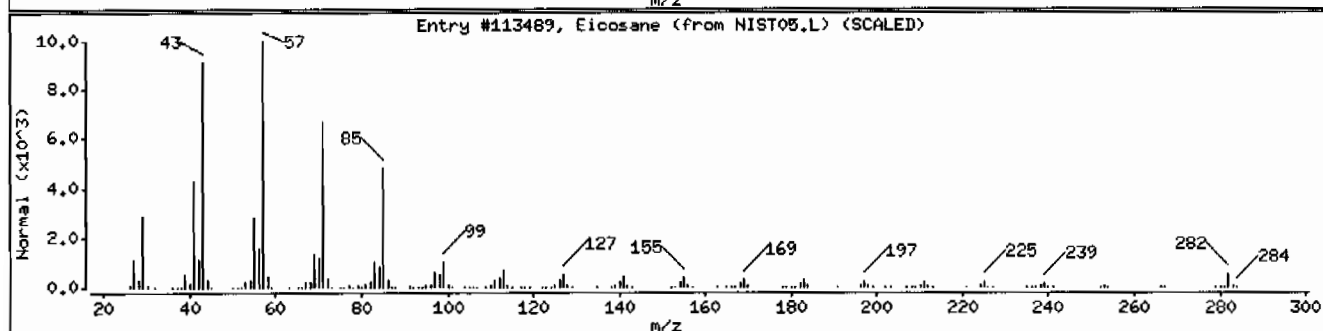
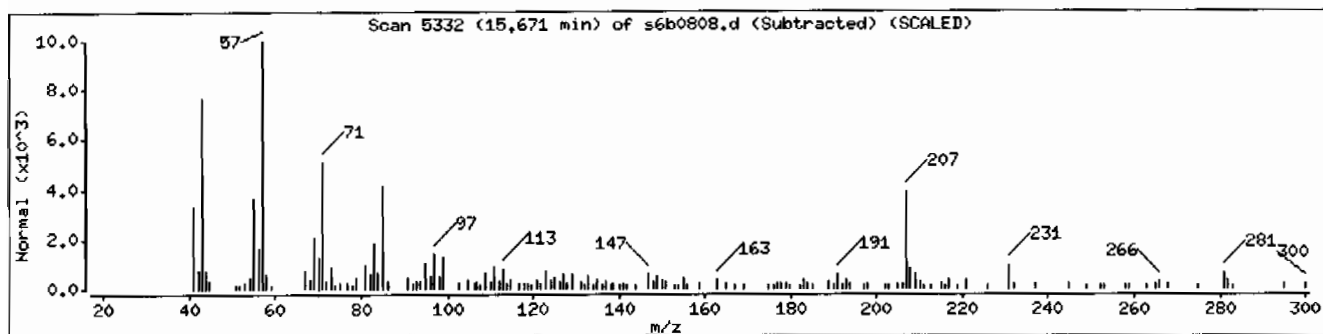
Volume Injected (uL): 0.5

Operator: nag1

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	95	C20H42	282
Hexadecane	544-76-3	NIST05.L	76088	95	C16H34	226
Nonadecane	629-92-5	NIST05.L	104271	91	C19H40	268



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

SDG Number: 10-1510	Date Collected: 01/28/2010 12:00	Matrix: R
Lab Sample ID: 245959005	Date Received: 02/02/2010 09:10	%Moisture: 10.8
Client ID: RE15-10-7319	Client: LANL010	Project: LANL01004
Batch ID: 949132	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/07/2010 17:00	Inst: MSD6.I	Dilution: 1
Prep Date: 02/04/2010 20:55	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0711.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.3	371
108-95-2	Phenol	U	371	ug/kg	74.3	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.3	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.3	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.3	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.3	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.3	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	123	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.3	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.3	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.3	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.3	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.3	371
95-48-7	o-Cresol	U	371	ug/kg	74.3	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.3	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.3	371
78-59-1	Isophorone	U	371	ug/kg	74.3	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.3	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.3	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.3	371
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.3	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.3	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.43	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.3	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.3	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.3	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.3	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.3	371
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	371	ug/kg	74.3	371

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

SDG Number: 10-1510
Lab Sample ID: 245959005

Client ID: RE15-10-7319
Batch ID: 949132
Run Date: 02/07/2010 17:00
Prep Date: 02/04/2010 20:55
Data File: s6h0711.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.18 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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	371	ug/kg	74.3	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	371	ug/kg	74.3	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.3	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.3	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.3	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.3	371
122-66-7	Azobenzene	U	371	ug/kg	74.3	371
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.3	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.3	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.43	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.3	371
206-44-0	Fluoranthene	U	37.1	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.3	371
56-55-3	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.3	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.3	371
205-99-2	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.3	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.48	589	ug/kg		JA
	Unknown	17.17	179	ug/kg		J

Data File: /chem/MSD6.i/s020710.b/s6b0711.d
 Report Date: 12-Feb-2010 16:12

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0711.d
 Lab Smp Id: 245959005 Client Smp ID: RE15-10-7319
 Inj Date : 07-FEB-2010 17:00
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245959005|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	30.18000	weight of sample
M	10.80000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862	(1.000)	288629		40.0000	
* 29 Naphthalene-d8	136	6.136	6.141	(1.000)	1088255		40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011	(1.000)	625270		40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622	(1.000)	1072022		40.0000	
* 91 Chrysene-d12	240	12.636	12.646	(1.000)	757008		40.0000	
* 98 Perylene-d12	264	14.980	14.990	(1.000)	504363		40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697	(0.763)	475682		65.8117	2440
\$ 5 Phenol-d5	99	4.472	4.474	(0.920)	585086		64.1357	2380
\$ 20 Nitrobenzene-d5	82	5.394	5.404	(0.879)	278438		36.1689	1340
\$ 39 2-Fluorobiphenyl	172	7.262	7.265	(0.907)	543540		33.7315	1250
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860	(1.106)	109425		59.9591	2230
\$ 81 p-Terphenyl-d14	244	11.321	11.324	(0.896)	549072		44.9763	1670

ION RATIO REPORT

SV REPORT

Data file: s6b0711.d

Report Date: 02/08/2010 09:14

Lab. ID: 245959005

SampleType: SAMPLE

Injection Date: 07-FEB-2010 17:00

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959005|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	39498	5.39	5.24	80-120	100	(T)
42	25209	5.39	5.24	39- 99	64	(T)

22 Isophorone				CAS#: 78-59-1		
82	278438	5.39	5.66	80-120	100	(T)
138	6043	6.14	5.66	0- 49	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	111908	8.01	7.70	80-120	100	(T)
164	625270	8.01	7.70	0- 40	559	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	81395	8.01	8.21	80-120	100	(T)
89	1086	8.01	8.21	43-103	1	(QT)
63	946	8.01	8.21	18- 78	1	(QT)

53 Fluorene				CAS#: 86-73-7		
166	7245	8.85	8.60	80-120	100	(T)
165	7774	8.85	8.60	62-122	107	(T)
167	2376	8.86	8.60	0- 44	33	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	161	8.86	8.65	80-120	100	(T)
105	727	8.86	8.65	11- 71	451	(QT)
51	487	8.86	8.65	23- 83	302	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0711.d
Report Date: 12-Feb-2010 16:12

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0711.d
Lab Smp Id: 245959005 Client Smp ID: RE15-10-7319
Inj Date : 07-FEB-2010 17:00
Operator : nagl Inst ID: MSD6.i
Smp Info : |245959005|949132|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.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	30.18000	weight of sample
M	10.80000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1737353	40.000
* 98 Perylene-d12	14.980	1429350	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate							
3.476	688845	15.8596491	589	0		0	10

Data File: /chem/MSD6.i/s020710.b/s6b0711.d
Report Date: 12-Feb-2010 16:12

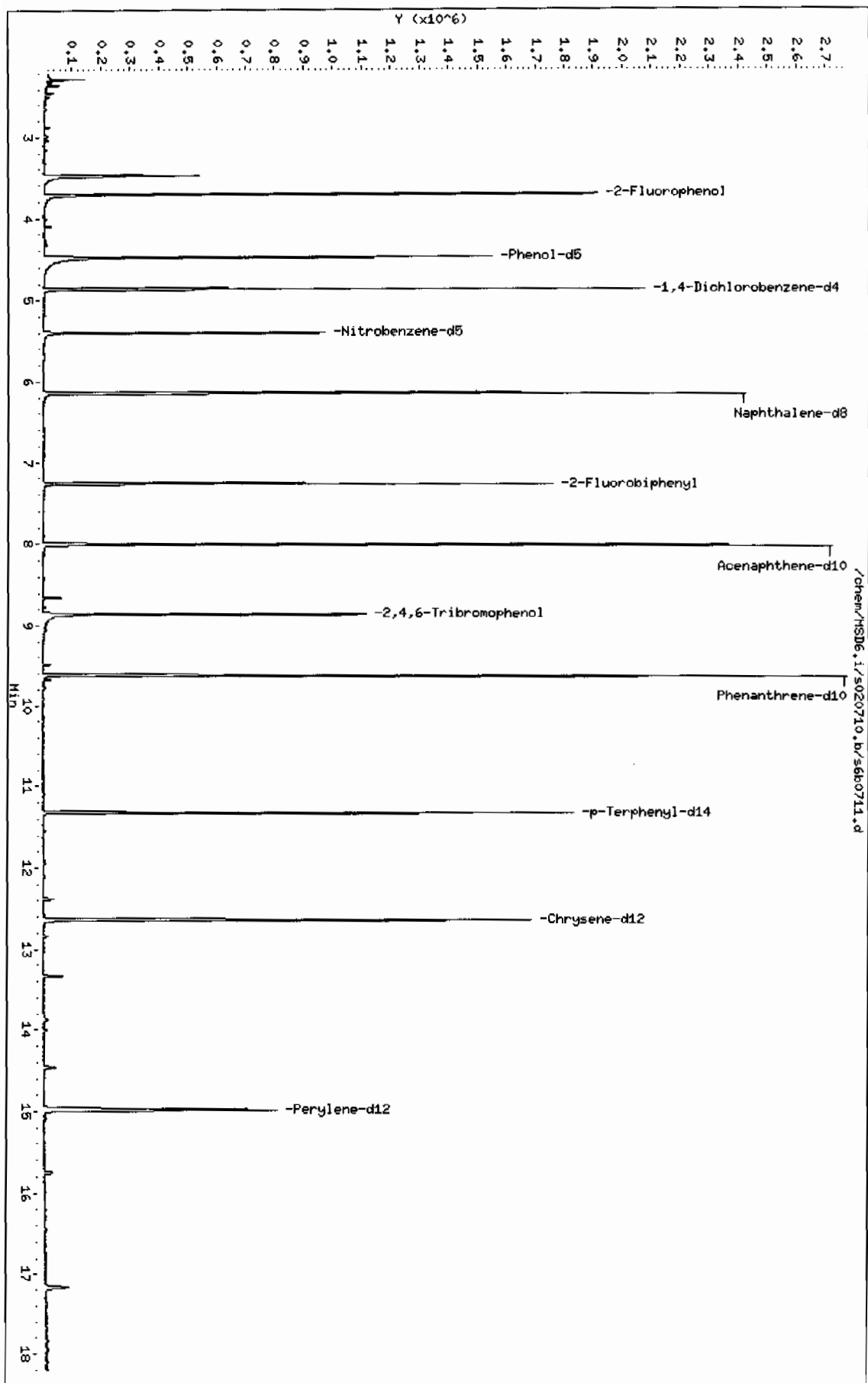
Page 2

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Unknown							
				CAS #:			
17.169	172275	4.82106198	179	0		0	98

Data File: /chem/HSD6.i/s020710.b/s60711.d
Date : 07-FEB-2010 17:00
Client ID: RELS-10-7319
Sample Info: 124599005194913211SVH11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 07-FEB-2010 17:00

Client ID: RE15-10-7319

Instrument: MSD6.i

Sample Info: 12459590051949132111SVH111LANL

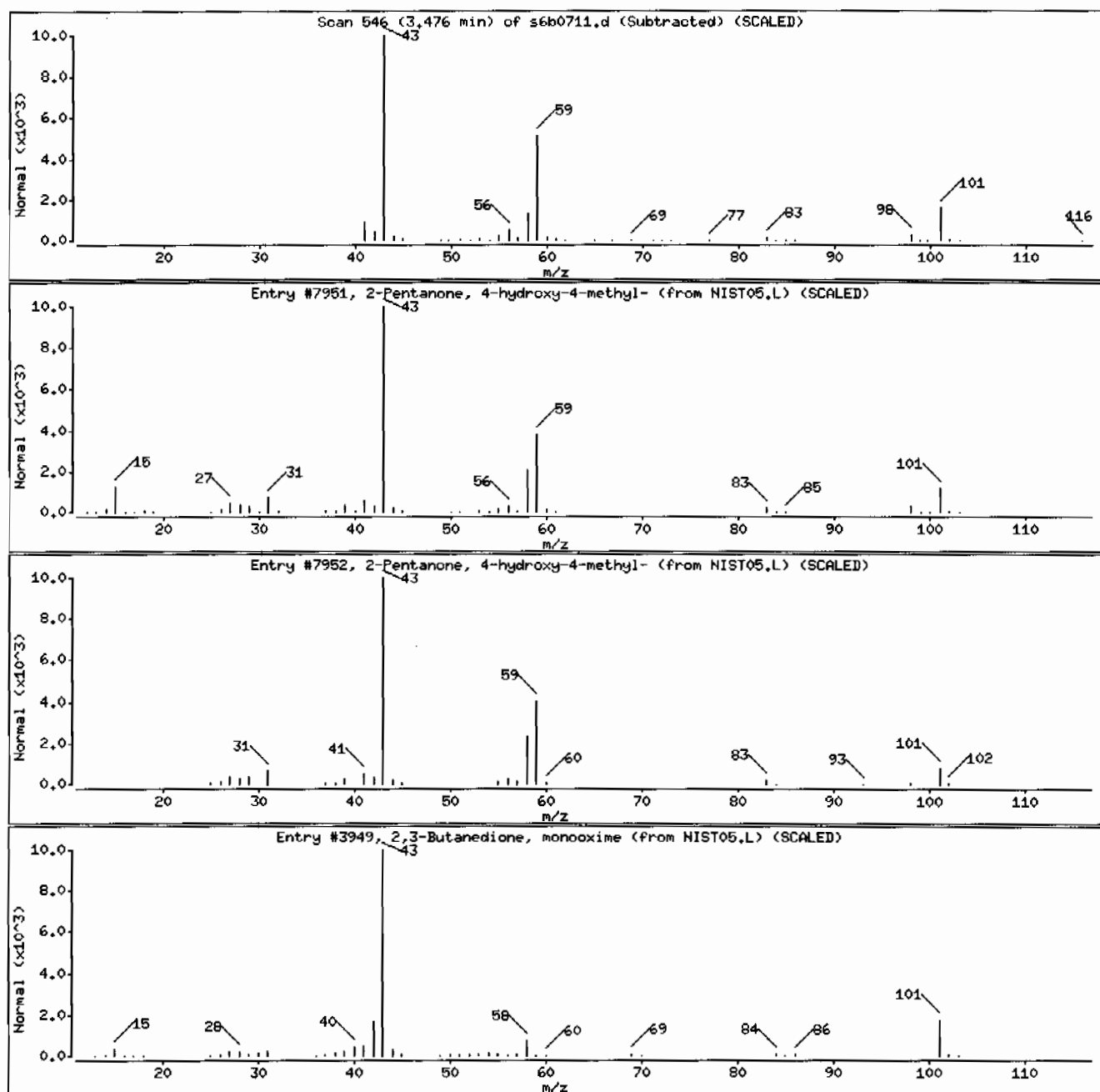
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 07-FEB-2010 17:00

Client ID: RE15-10-7319

Instrument: MSD6.i

Sample Info: 1245959005194913211|SVM11|LANL

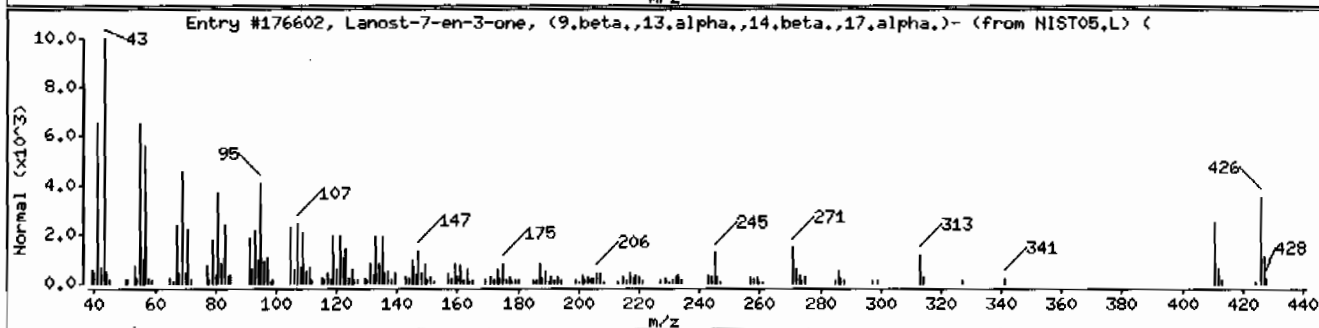
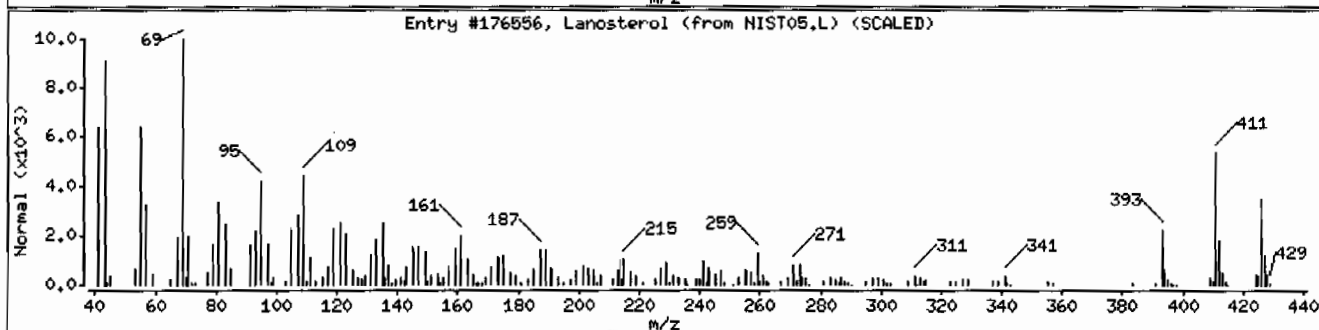
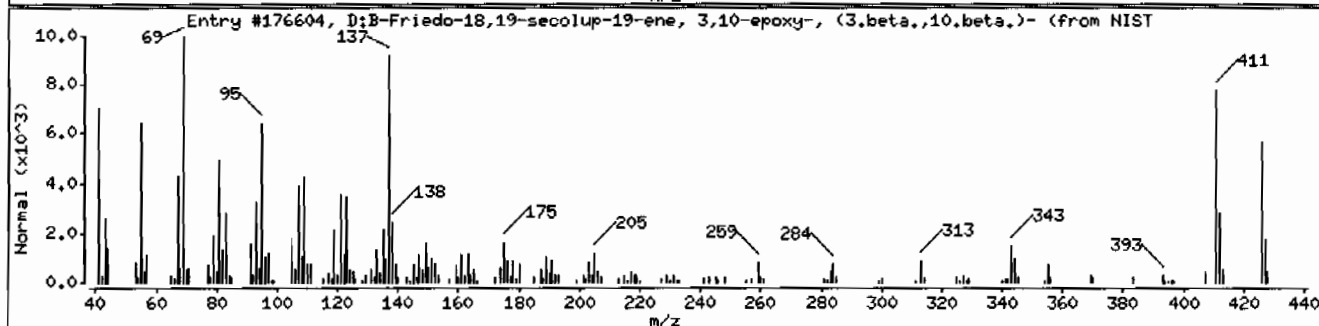
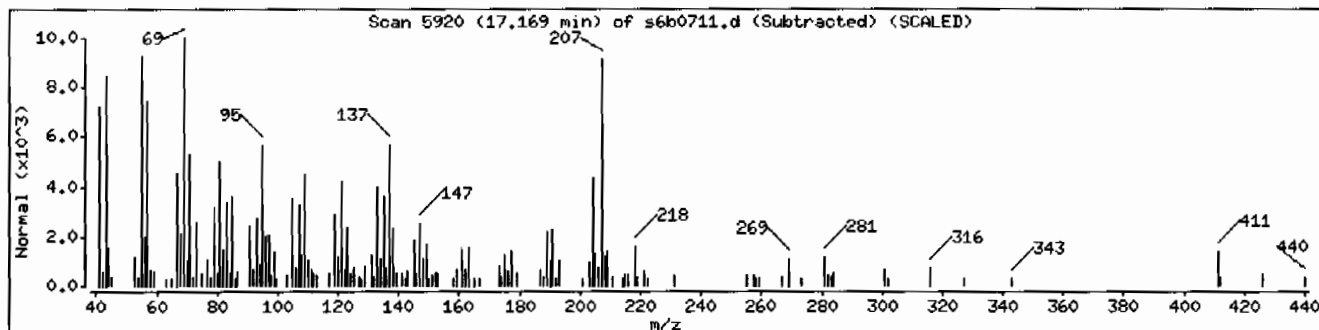
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D:B-Friedo-18,19-secolup-19-ene, 3,10-ep	35060-26-5	NIST05.L	176604	55	C30H50O	426
Lanosterol	79-63-0	NIST05.L	176556	52	C30H50O	426
Lanost-7-en-3-one, (9.beta.,13.alpha.,14	55515-18-9	NIST05.L	176602	49	C30H50O	426



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

SDG Number: 10-1510
Lab Sample ID: 245959012

Client ID: RE15-10-7324
Batch ID: 949132
Run Date: 02/07/2010 19:44
Prep Date: 02/04/2010 20:55
Data File: s6b0717.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371
108-95-2	Phenol	U	371	ug/kg	74.2	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.7	371
129-00-0	Pyrene	U	37.1	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.2	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371
95-48-7	o-Cresol	U	371	ug/kg	74.2	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371
78-59-1	Isophorone	U	371	ug/kg	74.2	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371
65-85-0	Benzoic acid	U	742	ug/kg	185	742
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.2	371
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	371	ug/kg	74.2	371

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

SDG Number: 10-1510
Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7324
Batch ID: 949132
Run Date: 02/07/2010 19:44
Prep Date: 02/04/2010 20:55
Data File: s6b0717.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	371	ug/kg	74.2	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	742	ug/kg	141	742
132-64-9	Dibenzofuran	U	371	ug/kg	74.2	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.2	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.2	371
122-66-7	Azobenzene	U	371	ug/kg	74.2	371
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.2	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.2	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.42	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.2	371
206-44-0	Fluoranthene	U	37.1	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.2	371
56-55-3	Benzo(a)anthracene	U	37.1	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.2	371
205-99-2	Benzo(b)fluoranthene	U	37.1	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	434	ug/kg		JA
	Unknown	14.46	171	ug/kg		J

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

SDG Number: 10-1510
Lab Sample ID: 245959012

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	17.17	166	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0717.d
 Lab Smp Id: 245959012 Client Smp ID: RE15-10-7324
 Inj Date : 07-FEB-2010 19:44
 Operator : nag1 Inst ID: MSD6.i
 Smp Info : |245959012|949132|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.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	10.30000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.859	4.862	(1.000)	306222	40.0000	
* 29 Naphthalene-d8		136	6.136	6.141	(1.000)	1155564	40.0000	
* 46 Acenaphthene-d10		164	8.006	8.011	(1.000)	653753	40.0000	
* 67 Phenanthrene-d10		188	9.619	9.622	(1.000)	1137122	40.0000	
* 91 Chrysene-d12		240	12.636	12.646	(1.000)	762495	40.0000	
* 98 Perylene-d12		264	14.978	14.990	(1.000)	476937	40.0000	
\$ 3 2-Fluorophenol		112	3.710	3.697	(0.764)	451862	58.9245	2190
\$ 5 Phenol-d5		99	4.472	4.474	(0.920)	573631	59.2675	2200
\$ 20 Nitrobenzene-d5		82	5.394	5.404	(0.879)	261495	31.9895	1190
\$ 39 2-Fluorobiphenyl		172	7.260	7.265	(0.907)	520965	30.9220	1150
\$ 60 2,4,6-Tribromophenol		329	8.857	8.860	(1.106)	108102	56.6534	2100
\$ 81 p-Terphenyl-d14		244	11.321	11.324	(0.896)	517509	42.0859	1560

ION RATIO REPORT

SV REPORT

Data file: s6b0717.d

Report Date: 02/08/2010 09:15

Lab. ID: 245959012

SampleType: SAMPLE

Injection Date: 07-FEB-2010 19:44

Operator: nagl

Instrument: MSD6.i

Sample Info: |245959012|949132|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1510

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38686	5.40	5.24	80-120	100	(T)
42	24269	5.39	5.24	39- 99	63	(T)

22 Isophorone				CAS#: 78-59-1		
82	261495	5.39	5.66	80-120	100	(T)
138	5939	6.13	5.66	0- 49	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	117480	8.01	7.70	80-120	100	(T)
164	653753	8.01	7.70	0- 40	556	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	85087	8.01	8.21	80-120	100	(T)
89	761	8.01	8.21	43-103	1	(QT)
63	995	8.01	8.21	18- 78	1	(QT)

53 Fluorene				CAS#: 86-73-7		
166	7062	8.86	8.60	80-120	100	(T)
165	7038	8.85	8.60	62-122	100	(T)
167	908	8.86	8.60	0- 44	13	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	154	8.86	8.65	80-120	100	(T)
105	735	8.85	8.65	11- 71	476	(QT)
51	840	8.86	8.65	23- 83	544	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020710.b/s6b0717.d
Report Date: 12-Feb-2010 16:34

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0717.d
Lab Smp Id: 245959012 Client Smp ID: RE15-10-7324
Inj Date : 07-FEB-2010 19:44
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245959012|949132|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.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	10.30000	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1840429	40.000
* 98 Perylene-d12	14.978	1346992	40.000

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

Unknown Aldol Condensate

CAS #:

3.473	538474	11.7032251	434	0		0	10
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Data File: /chem/MSD6.i/s020710.b/s6b0717.d
Report Date: 12-Feb-2010 16:34

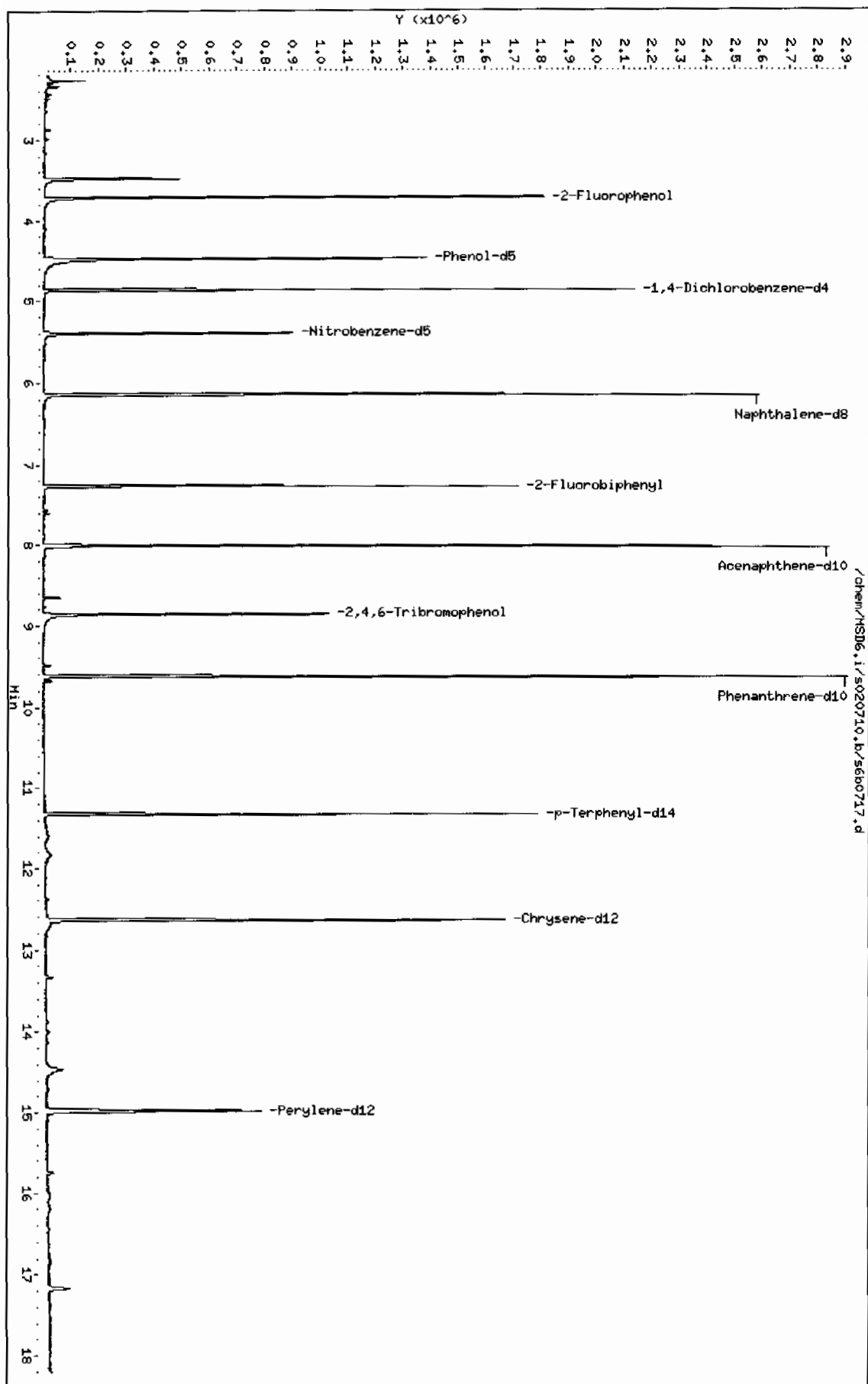
Page 2

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
14.458	155126	4.60659086	171	0		0	98
Unknown				CAS #:			
17.167	150469	4.46830237	166	0		0	98

Data File: /chem/HSD6.i/s020710.k/s6p0717.d
Date : 07-FEB-2010 19:44
Client ID: REL5-10-7324
Sample Info: 124595912194913211SVH11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 07-FEB-2010 19:44

Client ID: RE15-10-7324

Instrument: MSD6.i

Sample Info: 1245959012194913211SVMI11LANL

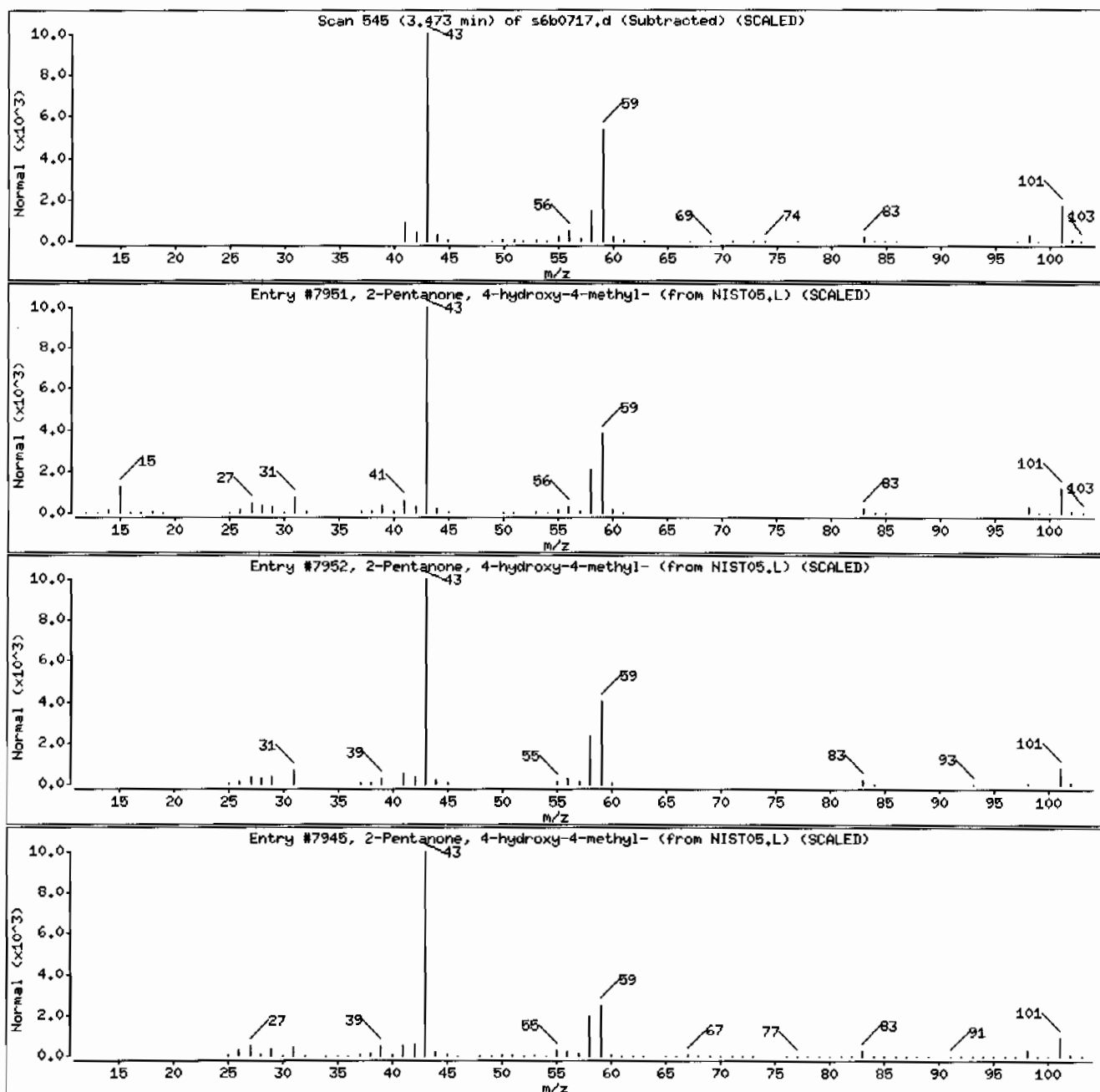
Volume Injected (uL): 0.5

Operator: nag1

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116



Date : 07-FEB-2010 19:44

Client ID: RE15-10-7324

Instrument: MSD6.i

Sample Info: 1245959012194913211SVH11ILANL

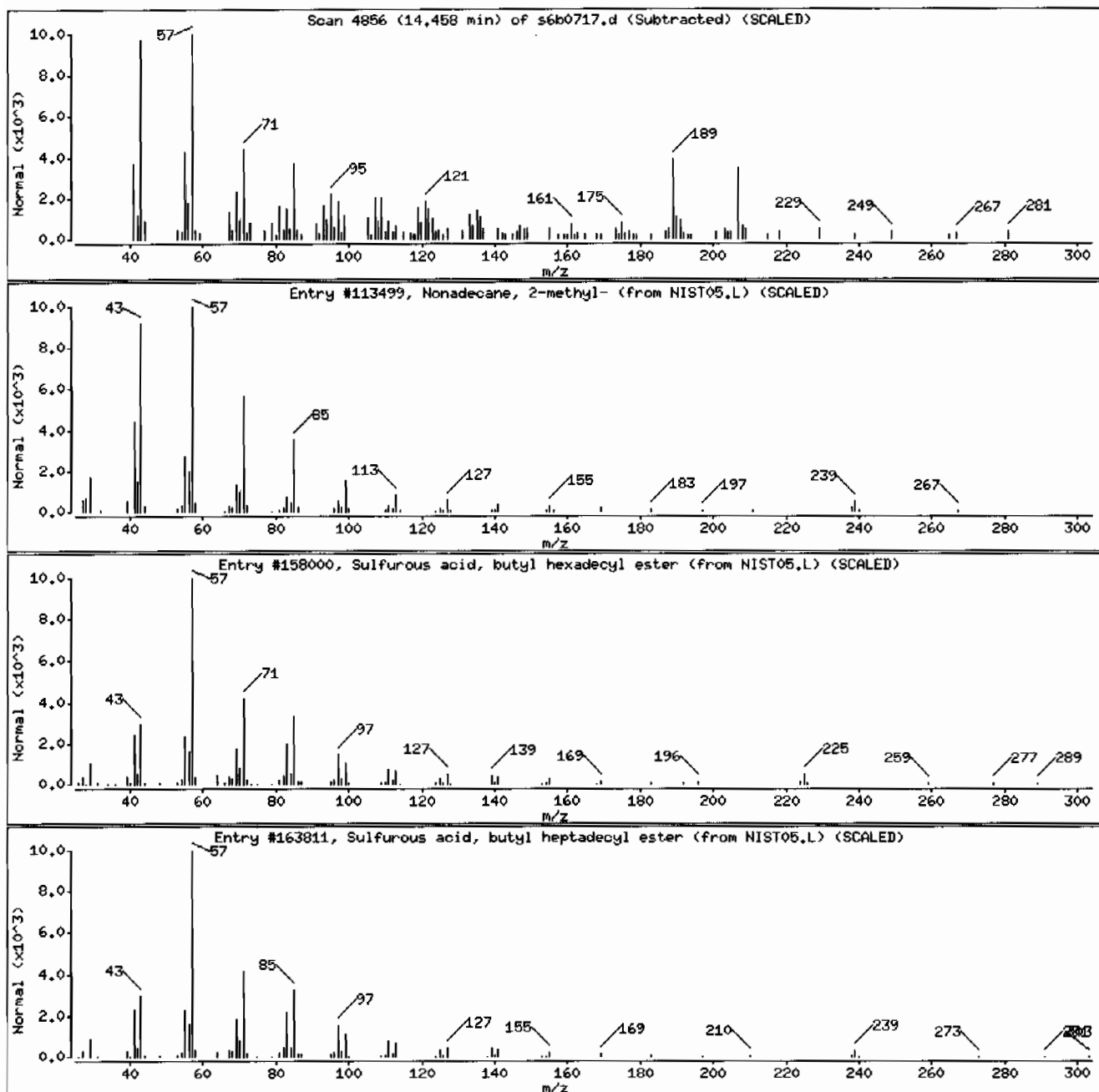
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Nonadecane, 2-methyl-	1560-86-7	NIST05.L	113499	20	C20H42	282
Sulfurous acid, butyl hexadecyl ester	1000309-18-3	NIST05.L	158000	20	C20H42O3S	362
Sulfurous acid, butyl heptadecyl ester	1000309-18-4	NIST05.L	163811	20	C21H44O3S	376



Date : 07-FEB-2010 19:44

Client ID: RE15-10-7324

Instrument: MSD6.i

Sample Info: 12459590121949132111SVH111LANL

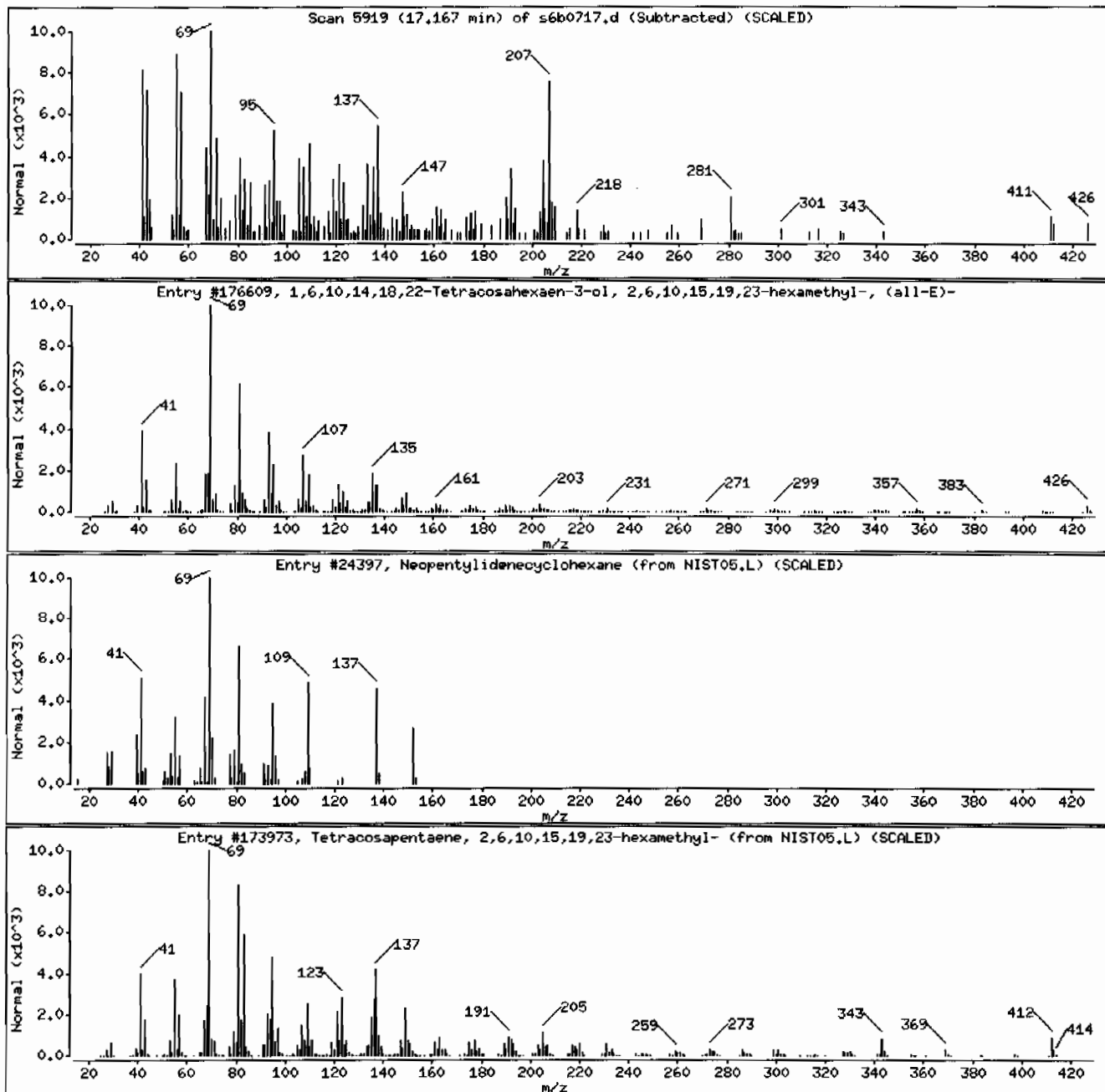
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,6,10,14,18,22-Tetracosahexaen-3-ol, 2,	54159-46-5	NIST05.L	176609	48	C30H50O	426
Neopentylidenecyclohexane	39546-80-0	NIST05.L	24397	47	C11H20	152
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	38	C30H52	412



Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-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,j)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: 08-Feb-2010 11:54

Calibration History

Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d
Cal Level: 7 , Cal Amount: 100.00000		

11-NOV-2009 04:10	NEV	/chem/MSD6.i/s110909.b/s6k0953.d
11-NOV-2009 01:18	HEX	/chem/MSD6.i/s110909.b/s6k0947.d
10-NOV-2009 19:21	PEST	/chem/MSD6.i/s110909.b/s6k0935.d
10-NOV-2009 15:06	AP12	/chem/MSD6.i/s110909.b/s6k0928.d
09-NOV-2009 22:39	MEGA	/chem/MSD6.i/s110909.b/s6k0919.d

Cal Level: 8 , Cal Amount: 120.00000		
11-NOV-2009 04:38	NEV	/chem/MSD6.i/s110909.b/s6k0954.d
10-NOV-2009 19:58	PEST	/chem/MSD6.i/s110909.b/s6k0936.d
10-NOV-2009 15:43	AP12	/chem/MSD6.i/s110909.b/s6k0929.d
09-NOV-2009 23:16	MEGA	/chem/MSD6.i/s110909.b/s6k0920.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
07-FEB-2010 13:14	MEGA	/chem/MSD6.i/s020710.b/s6b0703.d
Ccal Level: 4 , Ccal Amount: 40.0		
07-FEB-2010 13:45	AP12	/chem/MSD6.i/s020710.b/s6b0704.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
 End Cal Date : 11-NOV-2009 04:38
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

Calibration File Names:

Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
 Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
 Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
 Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
 Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
 Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
 Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
 Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	ml	Coeficients	m2	1RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	ml	Coeficients	m2	1RSD
1 N-Methyl-N-nitrosomethylamine	++++	0.62711	0.72014	0.69994	0.71294	0.67761	AVRG		0.68098		4.78734	
2 Pyridine	++++	0.78506	0.84345	0.94451	0.94132	0.77430	AVRG					
4 Aniline	++++	0.82190	0.82246				AVRG		0.84757		8.16958	
209 Benzaldehyde	++++	0.51849	0.51247	0.52949	0.53182	0.51964	AVRG		0.52752		3.21865	
6 Phenol	++++	0.79828	0.74667	0.92064	0.86617	0.84259	AVRG		0.86127		8.23824	
	++++	1.29580	1.38609	1.27955	1.27629	1.24279	AVRG					
	1.20107	1.21677					AVRG		1.27120		4.82676	

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 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	0.93365 0.79075	0.90056 0.79709	0.92748	0.85273	0.86174	0.82247	AVRG		3.86081		6.48811
8 2-Chlorophenol	++++ 0.95375	1.05270 0.94058	1.10343	1.04994	1.05384	0.99340	AVRG		1.02139		5.85808
203 n-Decane	++++ ++++	1.57696 ++++	1.59018	1.40648	1.36249	1.17658	AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	++++ 1.08668	1.22415 1.07881	1.27608	1.20806	1.21136	1.14335	AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	++++ 1.09639	1.27202 1.07447	1.32037	1.21925	1.20743	1.15141	AVRG		1.19162		7.54222
12 Benzyl alcohol	++++ 0.63021	0.60900 0.64767	0.65716	0.63043	0.62465	0.64143	AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	++++ 1.03460	1.16666 1.02472	1.21707	1.13327	1.12016	1.08966	AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl) ether	++++ 1.72252	2.07635 1.69272	2.13325	1.99088	1.97675	1.86028	AVRG		1.92182		8.81925
15 o-Cresol	++++ 0.80386	0.82992 0.79407	0.88629	0.84024	0.85639	0.80893	AVRG		0.83139		3.92027

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 Cal Date : 08-Feb-2010 08:45 nat00999

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
26 2,4-Dichlorophenol	++++ 0.18142	0.19875 0.17985	0.21444 0.17985	0.20921 0.17985	0.20622 0.17985	0.19391 0.17985	AVRG		0.19769		6.80078
27 Benzoic acid	++++ 0.15049	0.14556 0.14556	0.13585 0.14556	0.12338 0.14556	0.14032 0.14556	0.14157 0.14556	AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	++++ 0.21050	0.27809 0.20278	0.27557 0.20278	0.25214 0.20278	0.25046 0.20278	0.22876 0.20278	AVRG		0.24261		12.25857
30 Naphthalene	0.93577 ++++	0.85146 ++++	0.85267 ++++	0.76017 ++++	0.74029 ++++	0.64713 ++++	AVRG		0.79792		12.8240
204 alpha-Terpineol	++++ 0.17723	0.23577 ++++	0.25490 ++++	0.22003 ++++	0.21987 ++++	0.20427 ++++	AVRG		0.21868		12.15593
31 4-Chloroaniline	++++ 0.23771	0.26389 0.23114	0.28196 0.23114	0.26991 0.23114	0.26064 0.23114	0.24995 0.23114	AVRG		0.25646		7.00922
189 Caprolactam	++++ 0.07075	0.06766 0.07172	0.07272 0.07172	0.08214 0.07172	0.08102 0.07172	0.07115 0.07172	AVRG		0.07388		7.43636
32 Hexachlorobutadiene	++++ 0.10931	0.14265 0.10542	0.14557 0.10542	0.13182 0.10542	0.13097 0.10542	0.11864 0.10542	AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	++++ 0.17957	0.20824 0.17303	0.22585 0.17303	0.20971 0.17303	0.20633 0.17303	0.19424 0.17303	AVRG		0.19957		9.25582

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 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
34 2-Methylnaphthalene	0.56779 0.39981	0.53746 0.38884	0.54769 0.38884	0.49857 0.38884	0.47476 0.38884	0.43707 0.38884	AVRG AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872 0.38935	0.52838 0.38051	0.53208 0.38051	0.48366 0.38051	0.46920 0.38051	0.42612 0.38051	AVRG AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	++++ 0.18308	0.13520 0.16783	0.17775 0.16783	0.15114 0.16783	0.16219 0.16783	0.15378 0.16783	AVRG AVRG		0.16157		10.19735
208 1,1'-Biphenyl	++++ 1.12776	1.32152 1.10528	1.23439 1.10528	1.25731 1.10528	1.19710 1.10528	1.16580 1.10528	AVRG AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	++++ 0.42997	0.51880 0.43664	0.53286 0.43664	0.48272 0.43664	0.49159 0.43664	0.46096 0.43664	AVRG AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	++++ 0.25242	0.27570 0.25556	0.29634 0.25556	0.28058 0.25556	0.28008 0.25556	0.26989 0.25556	AVRG AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	++++ 0.28523	0.28031 0.28197	0.30282 0.28197	0.29443 0.28197	0.29832 0.28197	0.29160 0.28197	AVRG AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208 0.81926	0.94921 0.82647	0.97975 0.82647	0.90835 0.82647	0.91949 0.82647	0.87198 0.82647	AVRG AVRG		0.89832		6.24992
42 o-Nitroaniline	++++ 0.29539	0.28653 0.30412	0.32807 0.30412	0.30812 0.30412	0.31848 0.30412	0.31056 0.30412	AVRG AVRG		0.30732		4.50651

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 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
41 m-Nitroaniline	++++ 0.22216	0.19029 0.23314	0.23187	0.23025	0.23197	0.23511	AVRG		0.22497		7.03906
43 Dimethylphthalate	++++ 0.95493	1.10253 0.88796	1.11895	1.05121	1.05401	1.01311	AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	++++ 0.22903	0.24859 0.23656	0.25869	0.24751	0.24771	0.24514	AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077 1.30118	1.53234 1.31187	1.59736	1.47314	1.47686	1.41153	AVRG		1.44438		7.03164
47 Acenaphthene	0.97754 0.82122	0.93463 0.83304	0.97051	0.90906	0.90733	0.85875	AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	++++ 185455	++++ ++++	15920	45695	60199	121040	LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	++++ 1.09035	1.31036 1.11352	1.35172	1.24091	1.23630	1.17505	AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	++++ 0.30077	0.28688 0.30301	0.32526	0.31392	0.31582	0.31468	AVRG		0.30862		4.09740
51 Diethylphthalate	++++ 0.93441	1.08427 0.95637	1.13193	1.06273	1.05585	1.00787	AVRG		1.03335		6.84784

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 Integrator : HP RTE
 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	1	10	20	40	50	80	Curve	b	mi	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	++++ 294363	12277 379687	40572	90802	114423	208122	LNLR	0.18209	0.20146		0.99664
53 Fluorene	1.06940 0.89677	1.05468 0.90440	1.10259	1.30777	1.00699	0.94775	AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	++++ 0.43029	0.49941 0.42560	0.52344	0.48539	0.48490	0.45443	AVRG		0.47192		7.7070
55 2-Methyl-4,6-dinitrophenol	++++ 279188	9251 346834	34357	85168	107219	199515	LNLR	0.17722	0.10780		0.99957
56 p-Nitroaniline	++++ 377942	18297 477974	49968	114446	144020	267165	LNLR	0.17663	0.25514		0.99741
133 Diphenylamine	++++ 0.45142	0.51235 0.45392	0.51279	0.48995	0.49110	0.46341	AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	++++ 0.56393	0.65288 0.55466	0.67935	0.62730	0.62752	0.58724	AVRG		0.61327		7.55575
59 Tributylphosphate	++++ 1.19433	1.19922 1.14050	1.25332	1.24022	1.27997	1.24188	AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	++++ 0.14977	0.15321 0.15022	0.16758	0.15949	0.16092	0.15366	AVRG		0.15784		4.30183

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
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 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
	Level 7	Level 8									
63 Hexachlorobenzene	++++ 0.5730	0.17072 0.15822	0.17525 0.16702	0.16702 0.16690	0.16690 0.16190	AVRG AVRG			0.16533		3.97990
207 Atrazine	++++ 0.03746	0.04466 0.03425	0.04316 0.04336	0.04336 0.04050	0.04050 0.04104	AVRG AVRG			0.04063		9.04410
65 Pentachlorophenol	++++ 259470	12427 326879	38945	8021	100581	192628	LNR	0.13427	0.09964		0.99838
206 n-Octadecane	++++ 0.37377	0.51627 0.35992	0.51598	0.45832	0.46068	0.40718	AVRG		0.44173		14.37986
68 Phenanthrene	0.95060 0.73349	0.88603 0.72773	0.89746	0.83221	0.81673	0.77346	AVRG		0.82721		9.72714
69 Anthracene	0.87683 0.75133	0.86194 0.75196	0.90534	0.83970	0.83829	0.78921	AVRG		0.82682		6.91971
72 Di-n-butylphthalate	++++ 0.85606	1.00113 0.84350	1.04654	0.99105	0.98676	0.92173	AVRG		0.94954		8.15043
76 Fluoranthene	0.78392 0.73596	0.79487 0.73727	0.87026	0.82674	0.81613	0.77420	AVRG		0.79242		5.73137
77 Benzidine	++++ 0.39765	0.35813 0.44234	0.40641	0.39242	0.37729	0.37701	AVRG		0.39304		6.85454

GEL Laboratories LLC

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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										
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083	AVRG			1.10021		11.38295
	0.96007	0.94734										
85 Butylbenzylphthalate	++++	0.52543	0.54028	0.51608	0.52406	0.49119	AVRG			0.50351		6.16544
	0.46906	0.45845										
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423	AVRG			0.86301		4.55256
	0.82127	0.83891										
90 3,3'-Dichlorobenzidine	++++	0.23529	0.28074	0.29290	0.29384	0.28532	AVRG			0.28252		7.74710
	0.28779	0.30173										
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729	AVRG			0.82690		4.03552
	0.78155	0.79409										
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889	WL:NR	0.01019		0.70092		0.99014
	1389660	1700943										
94 Di-n-octylphthalate	++++	1.19610	1.35485	1.31605	1.35770	1.25055	AVRG			1.27127		6.18607
	1.27306	1.15060										
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239	AVRG			0.88507		7.19928
	0.89332	0.91506										
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945	AVRG			0.88011		7.72381
	0.88010	0.85909										

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Start Cal Date : 09-NOV-2009 18:53
 End Cal Date : 11-NOV-2009 04:38
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 Integrator : HP RTE
 Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 08-Feb-2010 08:45 nat00999

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									
97 Benzo(a)pyrene	0.54179 0.80179	0.70605 0.80647	0.81133	0.81358	0.82559	0.80913	AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888 1348903	60939 1889688	200863	402882	510813	1012556	LNLR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385 1094612	46770 1529825	157194	361792	411532	815285	LNLR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694 0.62968	0.53228 0.63931	0.60870	0.63962	0.60436	0.63133	AVRG		0.58403		12.88683
102 1,4-Dioxane	++++ 0.35237	0.37671 0.33052	0.37043	0.39061	0.37803	0.36375	AVRG		0.36606		5.38827
103 Methyl methacrylate	++++ 0.18964	0.19626 0.17876	0.19646	0.20436	0.20625	0.18540	AVRG		0.19388		5.13082
104 Ethyl methacrylate	++++ 0.79571	0.79650 0.75648	0.81191	0.84398	0.82898	0.80568	AVRG		3.80561		3.45659
105 2-Picoline	++++ 1.27506	1.39124 1.19912	1.31746	1.36987	1.31904	1.28927	AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	++++ 0.51463	0.50512 0.52429	0.48970	0.52453	0.49928	0.51969	AVRG		0.51104		2.61826

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 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
107 Methyl methanesulfonate	++++ 0.50923	0.56429 0.49498	0.53321 0.47987	0.56316 0.51154	0.50377 0.48534	0.53102 0.49862	AVRG AVRG		0.52852 0.49553		5.24900 2.15019
108 N-Nitrosodiethylamine	++++ 0.49304	0.50310 0.49722	0.47987 0.47987	0.51154 0.51154	0.48534 0.48534	0.49862 0.49862	AVRG AVRG		0.49553 0.49553		2.15019 2.15019
109 Ethyl Methanesulfonate	++++ 0.64399	0.65808 0.64860	0.64977 0.64977	0.67344 0.67344	0.62747 0.62747	0.66045 0.66045	AVRG AVRG		0.65169 0.65169		2.21442 2.21442
110 Pentachloroethane	++++ 0.31148	0.32209 0.30303	0.31386 0.31386	0.33094 0.33094	0.32010 0.32010	0.31614 0.31614	AVRG AVRG		0.31681 0.31681		2.78134 2.78134
111 N-Nitrosopyrrolidine	++++ 0.49385	0.44182 0.44600	0.46376 0.46376	0.50830 0.50830	0.47779 0.47779	0.50143 0.50143	AVRG AVRG		0.47614 0.47614		5.57640 5.57640
113 N-Nitrosomorpholine	++++ 0.65974	0.71032 0.65547	0.67134 0.67134	0.71256 0.71256	0.65887 0.65887	0.68726 0.68726	AVRG AVRG		0.67936 0.67936		3.58698 3.58698
114 o-Toluidine	++++ 1.58070	1.74797 1.58178	1.65530 1.65530	1.71709 1.71709	1.64005 1.64005	1.64679 1.64679	AVRG AVRG		1.65281 1.65281		3.79762 3.79762
115 N-Nitrosopiperidine	++++ 0.13997	0.13834 0.14373	0.13623 0.13623	0.14736 0.14736	0.13885 0.13885	0.14290 0.14290	AVRG AVRG		0.14105 0.14105		2.69891 2.69891
116 a,a-Dimethylphenethylamine	++++ 0.86623	0.78770 0.87565	0.81587 0.81587	0.88476 0.88476	0.87463 0.87463	0.88336 0.88336	AVRG AVRG		0.85546 0.85546		4.44785 4.44785

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 Cal Date : 08-Feb-2010 08:45 nat00999

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						
117 Triethylphosphorothioate	+++ 0.12857	0.14741 0.12370	0.14492	0.13783	0.14116	0.13439	AVRG			0.13685		6.28357
118 2,6-Dichlorophenol	+++ 0.20568	0.19682 0.21118	0.19992	0.21240	0.20960	0.21251	AVRG			0.20687		3.05257
119 Hexachloropropene	+++ 0.10654	0.08644 0.11112	0.09499	0.10791	0.10350	0.10830	AVRG			0.10269		8.60612
120 p-Phenylenediamine	+++ 0.22043	0.19714 0.21678	0.24091	0.25567	0.24421	0.23168	AVRG			0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++ 0.19348	0.22447 0.19524	0.22501	0.22216	0.21154	0.19839	AVRG			0.21004		6.76180
122 Saffrole	+++ 0.17956	0.18675 0.17958	0.18585	0.19677	0.19040	0.18675	AVRG			0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++ 0.40609	0.45393 0.40229	0.42422	0.44255	0.41650	0.41676	AVRG			0.42319		4.45863
124 Isosafrole	+++ 0.33627	0.34011 0.33702	0.33198	0.35164	0.33779	0.34233	AVRG			0.33959		1.83025
125 1,4-Naphthoquinone	+++ 0.28366	0.30018 0.26235	0.32824	0.34894	0.32634	0.29745	AVRG			0.30674		9.65282

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
126 m-Dinitrobenzene	++++ 0.16754	0.15441 0.16904	0.17500	0.17160	0.17355	0.17392	AVRG		0.16929		4.19006
127 Pentachlorobenzene	++++ 0.35182	0.38426 0.35035	0.36575	0.37736	0.36552	0.35674	AVRG		0.36454		3.50537
128 1-Naphthylamine	++++ 0.86367	0.90674 0.88454	0.92102	0.95184	0.91692	0.90718	AVRG		0.90742		3.07978
129 2-Naphthylamine	++++ 0.93471	0.96578 0.95520	1.00999	1.02440	0.99125	0.97953	AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	++++ 0.21460	0.20640 0.22254	0.23481	0.21862	0.21374	0.22201	AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	++++ 0.28841	0.22084 0.30508	0.26615	0.28994	0.29013	0.29251	AVRG		0.27901		10.07623
132 Thionazin	++++ 0.16987	0.16760 0.16398	0.17396	0.17237	0.17849	0.17822	AVRG		0.17207		3.11896
134 Sulfotepp	++++ 0.08265	0.08934 0.08005	0.08902	0.08507	0.08886	0.08655	AVRG		0.08579		4.00843
135 Phorate	++++ 0.35020	0.38230 0.32660	0.38968	0.37391	0.38904	0.37359	AVRG		0.36933		6.25438

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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	ml	Coefficients	m2	%RSD or R^2
		Level 7	120	Level 8														
136 3,3,5-Trinitrobenzene	++++	265730	14861	45341	104071	130665	222134						LINR	0.09141	0.12978			0.99734
137 Phenacetin	++++	0.26738	0.21732	0.25812	0.27209	0.26902	0.27044						AVRG		0.26240			8.05167
138 Dillate	++++	0.22716	0.26191	0.24374	0.25182	0.23998	0.23522						AVRG		0.24056			5.55643
139 Dimethoate	++++	0.22398	0.18958	0.19806	0.21061	0.22946	0.23158						AVRG		0.21468			7.45885
140 4-Aminobiphenyl	++++	0.53276	0.50489	0.50584	0.54599	0.56556	0.56494						AVRG		0.53562			4.66298
141 Pentachloronitrobenzene	++++	0.06084	0.06195	0.06081	0.06546	0.06329	0.06151						AVRG		0.06192			3.12402
142 Pronamide	++++	0.25173	0.26962	0.26582	0.27431	0.26759	0.26151						AVRG		0.26319			3.31411
143 Dinoseb	++++	375481	479562	47856	123552	154632	280906						AVRG		0.14736			0.99949
144 Disulfotor.	++++	0.29624	0.31933	0.32969	0.31920	0.32975	0.31125						AVRG		0.31196			6.02930

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
145 Methyl parathion	++++	0.14493	0.15978	0.17270	0.18140	0.18775	AVRG		0.17237		8.70434
	0.18141	0.17864									
146 4-Nitroquinoline-1-oxide	++++	0.02012	0.03296	0.02700	0.02533	0.02224	AVRG		0.02349		22.76469
	0.01930	0.01750									
147 Methapyrilene	++++	0.40623	0.42209	0.41103	0.39768	0.37937	AVRG		0.38603		8.45747
	0.35132	0.33430									
148 Isodrin	++++	0.10036	0.09753	0.10130	0.09757	0.09481	AVRG		0.09631		4.58453
	0.09122	0.09037									
149 Aranite	++++	0.03841	0.04251	0.04600	0.04566	0.04690	AVRG		0.04420		6.60357
	0.04564	0.04428									
150 Kepone	++++	0.05674	0.06191	0.06311	0.06098	0.06085	AVRG		0.06173		4.75009
151 p-(Dimethylamino)azobenzene	++++	0.06194	0.06656	0.3378	0.32474	0.31931	AVRG		0.31734		2.95033
	0.31446	0.30396									
152 Chlorobenzilate	++++	0.30009	0.27506	0.30295	0.29512	0.29377	AVRG		0.29130		3.50189
	0.29203	0.28006									
153 3,3'-Dimethylbenzidine	++++	0.49489	0.52397	0.53487	0.52482	0.53397	AVRG		0.52763		3.04743
	0.53619	0.54473									

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	ml	m2	%RSD or R ²
	100	120									
	Level 7	Level 8									
154 Famphur	++++ 0.35655	0.28850 0.33317	0.33742	0.33640	0.36516	0.37704	AVRG		0.34203		8.4381
155 2-Acetylaminofluorene	++++ 598627	23996 953419	98558	217618	290932	478700	LINR	0.12414	0.37309		0.99874
157 7,12Dimethylbenz(a)anthracene	++++ 0.49422	0.45745 0.48353	0.44941	0.48919	0.48420	0.49542	AVRG		0.47906		3.80416
158 3-Methylchoianthrene	++++ 0.38995	0.29343 0.40328	0.35502	0.37871	0.37695	0.38953	AVRG		0.36955		9.94080
26 Phthalic anhydride	++++ 306459	10939 ++++	40864	83487	108159	203846	LINR	0.14938	0.09004		0.99590
173 Carbazole	0.68572 0.65208	0.63216 0.65947	0.65059	0.65023	0.64669	0.65901	AVRG		0.65449		2.32370
174 Hexachlorophene	++++ ++++	0.04700 ++++	0.06194	0.06687	0.06701	0.06606	AVRG		0.06178		13.78238
179 Dibenzo(a,e)pyrene	++++ ++++	21397 ++++	67635	183254	214017	467062	LINR	0.16800	0.36891		0.99459
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++	++++	++++	++++	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									
184 p-Benzoquinone	++++ 0.12211	0.09983 0.12583	0.11502	0.14598	0.13665	0.14571	AVRG			0.12730	13.25929
191 Parathion	++++ 0.06253	0.05089 0.06173	0.05709	0.06102	0.06360	0.06315	AVRG			0.06003	7.60183
192 Methoxychlor	++++ 0.49223	0.54663 0.53082	0.59527	0.57022	0.57190	0.55995	AVRG			0.55243	6.05482
210 m-Toluidine	++++ 1.39731	1.07152 0.92523	1.09862	1.08267	1.09477	1.19760	AVRG			1.12396	12.87193
211 p-Toluidine	++++ 0.67790	0.98878 ++++	1.01175	0.93629	0.93823	0.84629	AVRG			0.89987	13.64283
212 Cis Diallate	++++ 0.24871	0.25680 0.25860	0.24216	0.25774	0.25015	0.25647	AVRG			0.25295	2.41779
213 Trans Diallate	++++ 0.26725	0.30813 0.26364	0.28675	0.29626	0.28232	0.27673	AVRG			0.28301	5.55643
214 1,4-Dinitrobenzene	++++ 0.18381	0.15465 0.19324	0.18602	0.18671	0.19154	0.19074	AVRG			0.18392	7.23195
215 2-Ethoxyethanol	++++ 0.68979	0.69474 0.68463	0.75708	0.72314	0.72734	0.69576	AVRG			0.71035	3.71426

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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									
216 Methylenebis (2-chloroaniline)	++++	11622	37526	94270	117296	226774	LINR	0.14094	0.14618		0.99920
	306702	394688									
229 2,2'-Dichlorobenzid	++++	0.65548	0.70788	0.67278	++++	0.85557	AVRG		0.73761		1.58274
	0.79635	++++									
230 4-Chlorothioanisole	++++	65505	120100	275307	++++	727615	LINR	0.13623	0.30665		0.99347
	828249	++++									
231 4-Chlorothiophenol	++++	14955	49890	195788	++++	593706	LINR	0.29380	0.27176		0.99219
	683100	++++									
232 bis (p-Chlorophenyl)sulfone	++++	0.41911	0.42098	0.38909	++++	0.48605					
	0.44832	++++					AVRG		0.43271		8.42306
233 bis (p-Chlorophenyl)disulfide	++++	0.19644	0.20913	0.18244	++++	0.22594					
	0.20806	++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	++++	0.20078	0.21401	0.19911	++++	0.24759					
	0.23595	++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	++++	0.77537	0.76082	0.73538	++++	0.86393					
	0.82035	++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	++++	0.43220	0.43102	0.40994	++++	0.50304					
	0.47114	++++					AVRG		0.44947		8.28032

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients	m1	m2	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients	m1	m2	%RSD
	100	120										
	Level 7	Level 8										
237 Hydroxymethyl phthalimide	++++	0.14671	0.15531	0.12673	++++	0.19818	AVRG			0.16131		17.36813
238 Phthalic acid	++++	13646	40994	115933	++++	343308	LINR	0.25337	0.15547			0.99358
239 Thiopheno:	++++	41092	104698	327879	++++	922601	LINR	0.23456	1.46946			0.99364
240 bis(Chloromethyl)ether	++++	1.01755	1.00429	0.94829	++++	1.10480	AVRG		1.02641			5.71407
241 Octachlorostyrene	++++	0.06097	0.06109	0.05953	++++	0.07399	AVRG		0.06526			10.12747
M 225 Trichlorophenols	++++	0.27800	0.29958	0.28751	0.28920	0.28074	AVRG		0.28180			3.98593
M 226 Tetrachlorophenols	++++	0.20640	0.23481	0.21862	0.21374	0.22201	AVRG		0.21896			4.07356
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592	AVRG		0.88259			7.33906
M 228 TIO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00			0.000e+00

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 Cal Date : 08-Feb-2010 08:45 nat00999

Compound	i	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	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	++++	0.98202	1.07204	1.02934	1.03017	0.98830		AVRG				
	0.95348	0.95648							1.00169			4.36295
\$ 5 Phenol-d5	++++	1.23734	1.34586	1.27212	1.28456	1.26316		AVRG				
	1.22407	1.22277							1.26427			3.41674
\$ 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	++++	0.30745	0.31426	0.29453	0.29315	0.27101		AVRG				
	0.25359	0.24671							0.28296			9.27927
\$ 39 2-Fluorobiphenyl	++++	1.11512	1.14628	1.04977	1.05601	0.99136		AVRG				
	0.92488	0.93239							1.03083			8.29816
\$ 60 2,4,6-Tribromophenol	++++	0.10485	0.11685	0.1180	0.11267	0.12310		AVRG				
	0.12190	0.12607							0.11675			6.41378
\$ 8: p-Terphenyl-d14	++++	0.71309	0.69797	0.64349	0.66522	0.61764		AVRG				
	0.59401	0.58404							0.64507			7.73004

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Cal Date : 08-Feb-2010 08:45 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	Averaged
40 2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	Averaged
42 o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	Averaged
41 m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	Averaged
43 Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	Averaged
50 2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	Averaged
45 Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	Averaged
47 Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	Averaged ccc
48 2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	Linear spcc
49 Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	Averaged
51 Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	Averaged
52 4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	Linear spcc
53 Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	Averaged
54 4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	Averaged
55 2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	Linear
56 p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	Linear
133 Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	Averaged
61 4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	Averaged
63 Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	Averaged
65 Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	Linear ccc
206 n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	Averaged
68 Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	Averaged
69 Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	Averaged
72 Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	Averaged
76 Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	Averaged ccc
79 Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	Averaged
85 Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	Averaged
89 Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	Averaged
92 Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	Averaged
93 bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	Wt Linear

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged
96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged
97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear
100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear
101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged
126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged
143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear
173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged
184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged
192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged
211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged
210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged
26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear <-
179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear
214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged
215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged
216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear
M 225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged
M 226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Report Date: 11-Nov-2009 10:50

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4		152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8		136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10		164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10		188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12		240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12		264	14.955	14.955	(1.000)	524055	40.0000	
\$ 3 2-Fluorophenol		112	3.646	3.646	(0.754)	277141	40.0000	41.3
\$ 5 Phenol-d5		99	4.431	4.431	(0.917)	332800	40.0000	39.3
\$ 20 Nitrobenzene-d5		82	5.371	5.371	(0.878)	301256	40.0000	42.3
\$ 39 2-Fluorobiphenyl		172	7.242	7.242	(0.907)	552805	40.0000	42.0
\$ 60 2,4,6-Tribromophenol		329	8.834	8.834	(1.106)	66156	40.0000	44.4
\$ 81 p-Terphenyl-d14		244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine		74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine		79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline		66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol		94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether		63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol		128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane		43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene		146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene		146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene		146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether		45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol		108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol		107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols		107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3 (H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d

Date : 10-NOV-2009 20:29

Client ID: MEGAICV

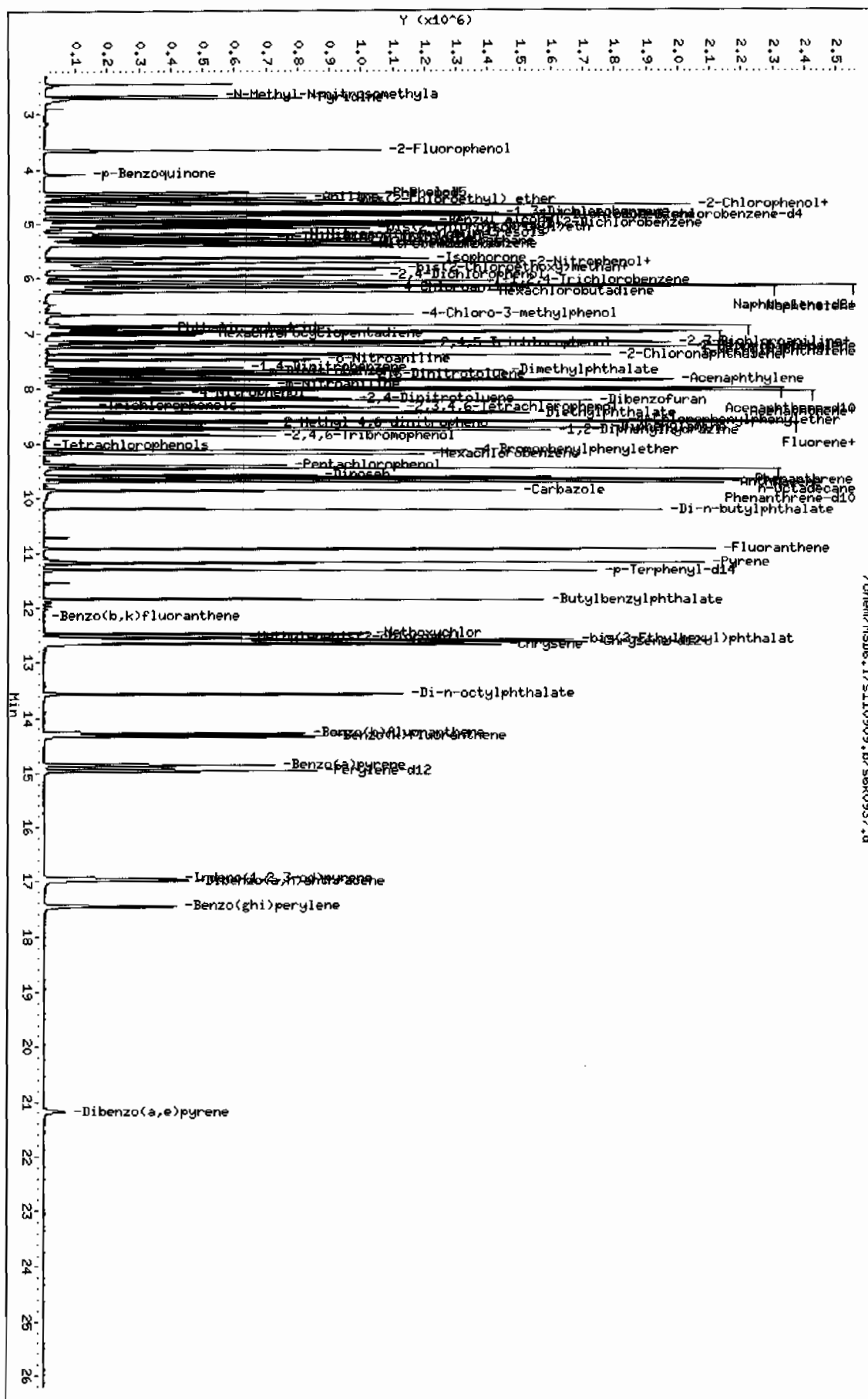
Sample Info: 1MBN091106-09.1140 PPH11SVHF11MEGALICV

Column phase: J&W DB-5MS

Instrument: MS06.i

Operator: JMB3

Column diameter: Ø.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF %D / %DRIFT	MAX RRF %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.67526	0.67526 0.000	-21.59733	60.00000	Averaged
16 Acetophenone	1.16908	1.08481	1.08481 0.000	-7.20809	60.00000	Averaged
189 Caprolactam	0.07388	0.08118	0.08118 0.000	9.87786	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.15865	1.15865 0.000	-3.55099	60.00000	Averaged
207 Atrazine	0.04063	0.03738	0.03738 0.000	-8.01727	60.00000	Averaged
77 Benzidine	0.39304	0.35886	0.35886 0.000	-8.69608	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.30132	0.30132 0.000	6.65684	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.45837	0.45837 0.000	25.21672	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.26059	0.26059 0.000	34.40927	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.97594	0.97594 0.000	21.14390	60.00000	Averaged
105 2-Picoline	1.30872	1.36092	1.36092 0.000	3.98846	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.53755	0.53755 0.000	5.18772	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.52223	0.52223 0.000	-1.19058	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.51026	0.51026 0.000	2.97098	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.73760	0.73760 0.000	13.18337	60.00000	Averaged
110 Pentachloroethane	0.31681	0.42390	0.42390 0.000	33.80401	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.46325	0.46325 0.000	-2.70540	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.65676	0.65676 0.000	-3.32751	60.00000	Averaged
114 o-Toluidine	1.65281	1.64899	1.64899 0.000	-0.23102	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180 0.000	0.52679	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.87204	0.87204 0.000	1.93819	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20008	0.20008 0.000	-3.28259	60.00000	Averaged
119 Hexachloropropene	0.10269	0.14537	0.14537 0.000	41.57055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.23182	0.23182 0.000	0.99155	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.21749	0.21749 0.000	3.54470	60.00000	Averaged
122 Safrole	0.18653	0.20933	0.20933 0.000	12.22661	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.42512	0.42512 0.000	0.45545	60.00000	Averaged
124 Isosafrole	0.33959	0.43257	0.43257 0.000	27.38086	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.30375	0.30375 0.000	-0.97466	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36394	0.36394 0.000	-0.16566	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.91190	0.91190 0.000	0.49410	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.91865	0.91865 0.000	-6.27177	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28996	0.28996 0.000	3.92480	60.00000	Averaged
136 1,3,5-Trinitrobenzene	46.05690	40.00000	0.13757 0.000	15.14226	60.00000	Linear
137 Phenacetin	0.26240	0.25991	0.25991 0.000	-0.94903	60.00000	Averaged
138 Diallate	0.24056	0.23148	0.23148 0.000	-3.77545	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
 Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
 Analysis Type: Init. Cal. Times: 18:53 04:38
 Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
 Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.58994	0.58994	0.000	10.14239	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06213	0.06213	0.000	0.34079	60.00000	Averaged
142 Pronamide	0.26319	0.26234	0.26234	0.000	-0.32101	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02580	0.02580	0.000	9.82299	60.00000	Averaged
147 Methapyrilene	0.38600	0.39422	0.39422	0.000	2.12820	60.00000	Averaged
148 Isodrin	0.09631	0.08838	0.08838	0.000	-8.22821	60.00000	Averaged
149 Aramite	0.04420	0.04155	0.04155	0.000	-5.99495	60.00000	Averaged
150 Kepone	0.06173	0.05889	0.05889	0.000	-4.59530	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33079	0.33079	0.000	4.23929	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.29321	0.29321	0.000	0.65640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.57778	0.57778	0.000	9.50435	60.00000	Averaged
155 2-Acetylaminofluorene	41.44131	40.00000	0.34022	0.000	3.60328	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.47906	0.41447	0.41447	0.000	-13.48259	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.35869	0.35869	0.000	-2.93887	60.00000	Averaged
212 Cis Diallate	0.25295	0.25705	0.25705	0.000	1.62146	60.00000	Averaged
213 Trans Diallate	0.28301	0.27233	0.27233	0.000	-3.77545	60.00000	Averaged

Data File: /chem/MSD6.i/s110909.b/s6k0938.d
Report Date: 11-Nov-2009 09:25

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0938.d
Lab Smp Id: WBN091016-08.1 Client Smp ID: AP12ICV
Inj Date : 10-NOV-2009 21:07
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091016-08.1|40 PPM|1|SVMF|1|AP12ICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 09:25 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4		152	4.834	4.834	(1.000)	282437	40.0000	
* 29 Naphthalene-d8		136	6.113	6.113	(1.000)	974498	40.0000	
* 46 Acenaphthene-d10		164	7.983	7.983	(1.000)	519475	40.0000	
* 67 Phenanthrene-d10		188	9.599	9.599	(1.000)	914999	40.0000	
* 91 Chrysene-d12		240	12.613	12.613	(1.000)	718441	40.0000	
* 98 Perylene-d12		264	14.950	14.950	(1.000)	524113	40.0000	
209 Benzaldehyde		77	4.428	4.428	(0.916)	190719	40.0000	31.4
16 Acetophenone		105	5.211	5.211	(1.078)	306390	40.0000	37.1
189 Caprolactam		113	6.531	6.531	(1.068)	79108	40.0000	44.0
208 1,1'-Biphenyl		154	7.354	7.354	(0.921)	601890	40.0000	38.6
207 Atrazine		173	9.249	9.249	(0.964)	34200	40.0000	36.8
77 Benzidine		184	11.038	11.038	(0.875)	257818	40.0000	36.5
90 3,3'-Dichlorobenzidine		252	12.539	12.539	(0.994)	216482	40.0000	42.7
102 1,4-Dioxane		88	2.456	2.456	(0.508)	129460	40.0000	50.1
103 Methyl methacrylate		100	2.454	2.454	(0.508)	73600	40.0000	53.8
104 Ethyl methacrylate		69	2.971	2.971	(0.615)	275642	40.0000	48.4
105 2-Picoline		93	3.228	3.228	(0.668)	384374	40.0000	41.6
106 N-Nitrosomethylethylamine		88	3.297	3.297	(0.682)	151823	40.0000	42.1
107 Methyl methanesulfonate		80	3.521	3.521	(0.728)	147497	40.0000	39.5
108 N-Nitrosodiethylamine		102	3.858	3.858	(0.798)	144115	40.0000	41.2
109 Ethyl Methanesulfonate		79	4.097	4.097	(0.848)	208326	40.0000	45.3
110 Pentachloroethane		167	4.574	4.574	(0.946)	119725	40.0000	53.5
111 N-Nitrosopyrrolidine		100	5.190	5.190	(1.074)	130840	40.0000	38.9 (Q)
113 N-Nitrosomorpholine		56	5.223	5.223	(1.081)	185493	40.0000	38.7
114 o-Toluidine		106	5.249	5.249	(1.086)	465737	40.0000	39.9
115 N-Nitrosopiperidine		114	5.539	5.539	(0.906)	138180	40.0000	40.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.962	5.962	(0.975)	849798	40.0000	40.8
118 2,6-Dichlorophenol	162	6.184	6.184	(1.012)	194979	40.0000	38.7
119 Hexachloropropene	213	6.222	6.222	(1.018)	141665	40.0000	56.6
120 p-Phenylenediamine	108	6.541	6.541	(1.070)	225910	40.0000	40.4
121 N-Nitrosodi-n-butylamine	84	6.515	6.515	(1.066)	211942	40.0000	41.4(T)
122 Safrole	162	6.750	6.750	(1.104)	203993	40.0000	44.9
123 1,2,4,5-Tetrachlorobenzene	216	7.035	7.035	(0.881)	220840	40.0000	40.2
124 Isosafrole	162	7.305	7.305	(0.915)	224711	40.0000	51.0
125 1,4-Naphthoquinone	158	7.565	7.565	(0.948)	157789	40.0000	39.6
127 Pentachlorobenzene	250	8.156	8.156	(1.022)	189057	40.0000	39.9
128 1-Naphthylamine	143	8.284	8.284	(1.038)	473709	40.0000	40.2
129 2-Naphthylamine	143	8.368	8.368	(1.048)	477216	40.0000	37.5
131 5-Nitro-o-toluidine	152	8.574	8.574	(1.074)	150626	40.0000	41.6
136 1,3,5-Trinitrobenzene	75	8.946	8.946	(0.932)	125876	40.0000	46.0
137 Phenacetin	108	9.010	9.010	(0.939)	237813	40.0000	39.6(Q)
138 Diallate	86	8.990	8.990	(0.937)	211803	40.0000	38.5
140 4-Aminobiphenyl	169	9.374	9.374	(0.977)	539794	40.0000	44.0
141 Pentachloronitrobenzene	237	9.392	9.392	(0.978)	56852	40.0000	40.1(Q)
142 Pronamide	173	9.423	9.423	(0.982)	240044	40.0000	39.9
146 4-Nitroquinoline-1-oxide	101	10.445	10.445	(1.088)	23608	40.0000	43.9
147 Methapyrilene	58	10.518	10.518	(1.096)	360709	40.0000	40.8
148 Isodrin	193	10.750	10.750	(1.120)	80870	40.0000	36.7
149 Aramite	185	11.265	11.265	(1.174)	38019	40.0000	37.6
150 Kepone	272	11.933	11.933	(1.243)	53886	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.456	11.456	(0.908)	237654	40.0000	41.7
152 Chlorobenzilate	251	11.499	11.499	(0.912)	210653	40.0000	40.3
153 3,3'-Dimethylbenzidine	212	11.838	11.838	(0.939)	415103	40.0000	43.8
155 2-Acetylaminofluorene	181	12.154	12.154	(0.964)	244425	40.0000	41.4
157 7,12Dimethylbenz(a)anthracene	256	14.251	14.251	(0.953)	217229	40.0000	34.6
158 3-Methylcholanthrene	268	15.477	15.477	(1.035)	187994	40.0000	38.8(Q)
212 Cis Diallate	86	9.092	9.092	(0.947)	35280	6.00000	6.1
213 Trans Diallate	86	8.990	8.990	(0.937)	211803	34.0000	32.7

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s410909.b/s6k0938.d

Date: 10-NOV-2009 21:07

Client ID: AP12ICV

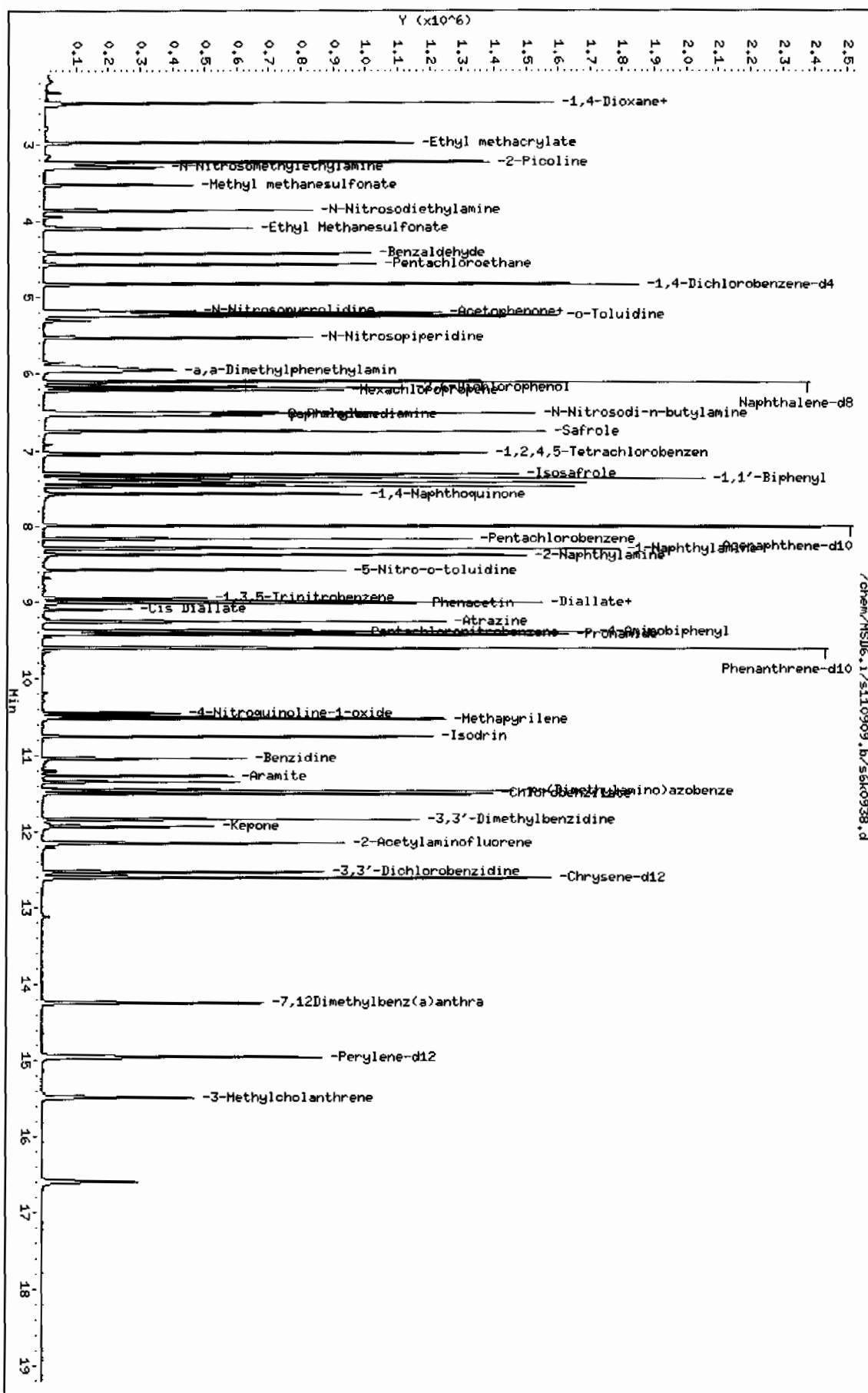
Sample Info: IWB091016-08.1.40 PPH11SWHF11AP12ICV

Column Phase: J&W DB-5MS

Instrument: MSD6.1

Operator: JMB3

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 07-FEB-2010 13:14
Lab File ID: s6b0703.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

COMPOUND		RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3	2-Fluorophenol	1.00169	0.91521	0.91521	0.000	-8.63370	60.00000	Averaged
5	Phenol-d5	1.26427	1.15595	1.15595	0.000	-8.56774	60.00000	Averaged
20	Nitrobenzene-d5	0.28296	0.27008	0.27008	0.000	-4.55039	60.00000	Averaged
39	2-Fluorobiphenyl	1.03083	1.02610	1.02610	0.000	-0.45934	60.00000	Averaged
60	2,4,6-Tribromophenol	0.11675	0.10778	0.10778	0.000	-7.68146	60.00000	Averaged
81	p-Terphenyl-d14	0.64507	0.67439	0.67439	0.000	4.54636	60.00000	Averaged
1	N-Methyl-N-nitrosomethylami	0.68098	0.57173	0.57173	0.000	-16.04308	60.00000	Averaged
2	Pyridine	0.84757	0.63328	0.63328	0.000	-25.28356	60.00000	Averaged
4	Aniline	0.52752	0.47494	0.47494	0.000	-9.96671	60.00000	Averaged
6	Phenol	1.27120	1.22285	1.22285	0.001	-3.80333	20.00000	Averaged ccc
7	bis(2-Chloroethyl) ether	0.86081	0.73879	0.73879	0.000	-14.17485	60.00000	Averaged
8	2-Chlorophenol	1.02109	0.96052	0.96052	0.000	-5.93193	60.00000	Averaged
203	n-Decane	1.42254	1.15710	1.15710	0.000	-18.65917	60.00000	Averaged
9	1,3-Dichlorobenzene	1.17550	1.22184	1.22184	0.000	3.94238	60.00000	Averaged
11	1,4-Dichlorobenzene	1.19162	1.20241	1.20241	0.001	0.90539	20.00000	Averaged ccc
13	1,2-Dichlorobenzene	1.11231	1.13163	1.13163	0.000	1.73737	60.00000	Averaged
14	bis(2-Chloroisopropyl)ether	1.92182	1.77149	1.77149	0.000	-7.82237	60.00000	Averaged
12	Benzyl alcohol	0.63436	0.46716	0.46716	0.000	-26.35748	60.00000	Averaged
15	o-Cresol	0.83139	0.81358	0.81358	0.000	-2.14223	60.00000	Averaged
18	m,p-Cresols	1.05346	1.03768	1.03768	0.000	-1.49758	60.00000	Averaged
17	N-Nitrosodipropylamine	0.70865	0.73616	0.73616	0.050	3.88128	60.00000	Averaged spcc
19	Hexachloroethane	0.46100	0.46679	0.46679	0.000	1.25746	60.00000	Averaged
21	Nitrobenzene	0.28519	0.27391	0.27391	0.000	-3.95602	60.00000	Averaged
22	Isophorone	0.50552	0.50988	0.50988	0.000	0.86298	60.00000	Averaged
23	2-Nitrophenol	0.13154	0.13557	0.13557	0.001	3.06020	20.00000	Averaged ccc
24	2,4-Dimethylphenol	0.21795	0.23430	0.23430	0.000	7.50182	60.00000	Averaged
25	bis(2-Chloroethoxy)methane	0.29749	0.27659	0.27659	0.000	-7.02725	60.00000	Averaged
26	2,4-Dichlorophenol	0.19769	0.21419	0.21419	0.001	8.34646	20.00000	Averaged ccc
27	Benzoic acid	0.13453	0.14210	0.14210	0.000	5.62434	60.00000	Averaged
28	1,2,4-Trichlorobenzene	0.24261	0.24954	0.24954	0.000	2.85280	60.00000	Averaged
30	Naphthalene	0.79792	0.74198	0.74198	0.000	-7.01028	60.00000	Averaged
204	alpha-Terpineol	0.21868	0.20491	0.20491	0.000	-6.29618	60.00000	Averaged
31	4-Chloroaniline	0.25646	0.24494	0.24494	0.000	-4.49298	60.00000	Averaged
32	Hexachlorobutadiene	0.12634	0.13748	0.13748	0.001	8.81408	20.00000	Averaged ccc
33	4-Chloro-3-methylphenol	0.19957	0.21326	0.21326	0.001	6.86192	20.00000	Averaged ccc
34	2-Methylnaphthalene	0.48150	0.51482	0.51482	0.000	6.92074	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 07-FEB-2010 13:14
Lab File ID: s6b0703.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D	%DRIFT	%D	%DRIFT		
35 1-Methylnaphthalene	0.47100	0.50080	0.50080 0.000	6.32584	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.13878	0.13878 0.050	-14.10173	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.46555	0.46555 0.000	-2.82378	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.27767	0.27767 0.001	1.73291	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.29209	0.29209 0.000	0.48893	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.86452	0.86452 0.000	-3.76288	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.24375	0.24375 0.000	-20.68621	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.20206	0.20206 0.000	-10.18425	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.01730	1.01730 0.000	-0.85783	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.23260	0.23260 0.000	-4.96337	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.29754	0.29754 0.000	-3.59118	60.00000	Averaged
45 Acenaphthylene	1.44438	1.44404	1.44404 0.000	-0.02347	60.00000	Averaged
47 Acenaphthene	0.90151	0.82890	0.82890 0.001	-8.05432	20.00000	Averaged ccc
48 2,4-Dinitrophenol	45.85365	40.00000	0.10249 0.050	14.63413	60.00000	Linear spcc
49 Dibenzofuran	1.21689	1.19163	1.19163 0.000	-2.07577	60.00000	Averaged
51 Diethylphthalate	1.03335	1.03764	1.03764 0.000	0.41539	60.00000	Averaged
52 4-Nitrophenol	41.26112	40.00000	0.17113 0.050	3.15279	60.00000	Linear spcc
53 Fluorene	0.99879	0.98594	0.98594 0.000	-1.28701	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.46660	0.46660 0.000	-1.12857	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	51.82338	40.00000	0.12056 0.000	29.55846	60.00000	Linear
56 p-Nitroaniline	33.73858	40.00000	0.17014 0.000	-15.65356	60.00000	Linear
133 Diphenylamine	0.48213	0.45139	0.45139 0.001	-6.37606	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.57130	0.57130 0.000	-6.84268	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15151	0.15151 0.000	-4.00828	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.15621	0.15621 0.000	-5.51685	60.00000	Averaged
65 Pentachlorophenol	40.94652	40.00000	0.08862 0.001	2.36629	20.00000	Linear ccc
206 n-Octadecane	0.44173	0.41603	0.41603 0.000	-5.81938	60.00000	Averaged
68 Phenanthrene	0.82721	0.80558	0.80558 0.000	-2.61518	60.00000	Averaged
69 Anthracene	0.82682	0.81390	0.81390 0.000	-1.56255	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	0.99922	0.99922 0.000	5.23226	60.00000	Averaged
76 Fluoranthene	0.79242	0.83377	0.83377 0.001	5.21769	20.00000	Averaged ccc
79 Pyrene	1.10021	1.05219	1.05219 0.000	-4.36431	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.51111	0.51111 0.000	1.50970	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.83029	0.83029 0.000	-3.79106	60.00000	Averaged
92 Chrysene	0.82690	0.80182	0.80182 0.000	-3.03314	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	38.82791	40.00000	0.67324 0.000	-2.93023	60.00000	Wt. Linear

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 07-FEB-2010 13:14
Lab File ID: s6b0703.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
=====	=====	=====	=====	=====	=====	=====
94 Di-n-octylphthalate	1.27127	1.37116	1.37116	0.001	7.85711	Averaged ccc
95 Benzo(b)fluoranthene	0.88507	0.96305	0.96305	0.000	8.81056	Averaged
96 Benzo(k)fluoranthene	0.88011	0.94688	0.94688	0.000	7.58704	Averaged
97 Benzo(a)pyrene	0.76447	0.85092	0.85092	0.001	11.30843	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	37.81211	40.00000	0.68480	0.000	-5.46972	Linear
100 Dibenzo(a,h)anthracene	37.34544	40.00000	0.55132	0.000	-6.63641	Linear
101 Benzo(ghi)perylene	0.58403	0.56060	0.56060	0.000	-4.01229	Averaged
126 m-Dinitrobenzene	0.16929	0.15485	0.15485	0.000	-8.53470	Averaged
130 2,3,4,6-Tetrachlorophenol	0.21896	0.23245	0.23245	0.000	6.16195	Averaged
143 Dinoseb	40.87769	40.00000	0.12778	0.000	2.19422	Linear
173 Carbazole	0.65449	0.66524	0.66524	0.000	1.64113	Averaged
184 p-Benzoquinone	0.12730	0.06068	0.06068	0.000	-52.33838	Averaged
192 Methoxychlor	0.55243	0.52474	0.52474	0.000	-5.01217	Averaged
211 p-Toluidine	0.89987	0.87194	0.87194	0.000	-3.10452	Averaged
210 m-Toluidine	1.12396	1.04804	1.04804	0.000	-6.75437	Averaged
215 2-Ethoxyethanol	0.71035	0.52795	0.52795	0.000	-25.67864	Averaged
179 Dibenzo(a,e)pyrene	27.81380	40.00000	0.19454	0.000	-30.46550	Linear
26 Phthalic anhydride	47.89785	40.00000	0.09437	0.000	19.74463	Linear
214 1,4-Dinitrobenzene	0.18382	0.15901	0.15901	0.000	-13.49251	Averaged
216 Methylenebis(2-chloroanilin	29.50241	40.00000	0.08721	0.000	-26.24397	Linear
IM 225 Trichlorophenols	0.28180	0.28488	0.28488	0.000	1.09136	Averaged
IM 226 Tetrachlorophenols	0.21896	0.23245	0.23245	0.000	6.16195	Averaged
IM 227 Benzo(b,k)fluoranthene	0.88259	0.95497	0.95497	0.000	8.20052	Averaged

Data File: /chem/MSD6.i/s020710.b/s6b0703.d
Report Date: 08-Feb-2010 08:45

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Data file : /chem/MSD6.i/s020710.b/s6b0703.d
Lab Smp Id: WBN100121-17.4 Client Smp ID: MEGACVS
Inj Date : 07-FEB-2010 13:14
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN100121-17.4|CCV|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.862	4.862 (1.000)	283821	40.0000	(H)
* 29 Naphthalene-d8	136	6.141	6.141 (1.000)	1117855	40.0000	(H)
* 46 Acenaphthene-d10	164	8.011	8.011 (1.000)	616750	40.0000	(H)
* 67 Phenanthrene-d10	188	9.622	9.622 (1.000)	1069246	40.0000	(H)
* 91 Chrysene-d12	240	12.646	12.646 (1.000)	879750	40.0000	(H)
* 98 Perylene-d12	264	14.990	14.990 (1.000)	640102	40.0000	(H)
\$ 3 2-Fluorophenol	112	3.697	3.697 (0.755)	259755	40.0000	36.5
\$ 5 Phenol-d5	99	4.474	4.474 (0.914)	328083	40.0000	36.6 (H)
\$ 20 Nitrobenzene-d5	82	5.404	5.404 (0.874)	301913	40.0000	38.2 (H)
\$ 39 2-Fluorobiphenyl	172	7.265	7.265 (0.902)	632845	40.0000	39.8 (H)
\$ 60 2,4,6-Tribromophenol	329	8.860	8.860 (1.101)	66474	40.0000	36.9 (H)
\$ 81 p-Terphenyl-d14	244	11.324	11.324 (0.892)	593298	40.0000	41.8 (H)
1 N-Methyl-N-nitrosomethylamine	74	2.739	2.739 (0.560)	162268	40.0000	33.6 (H)
2 Pyridine	79	2.777	2.777 (0.567)	179737	40.0000	29.9 (H)
4 Aniline	66	4.553	4.553 (0.930)	134799	40.0000	36.0 (H)
6 Phenol	94	4.490	4.490 (0.917)	347070	40.0000	38.5 (Q)
7 bis(2-Chloroethyl) ether	63	4.589	4.589 (0.938)	209684	40.0000	34.3
8 2-Chlorophenol	128	4.665	4.665 (0.953)	272616	40.0000	37.6 (H)
203 n-Decane	43	4.663	4.663 (0.953)	328410	40.0000	32.5
9 1,3-Dichlorobenzene	146	4.811	4.811 (0.983)	346784	40.0000	41.6 (H)
11 1,4-Dichlorobenzene	146	4.880	4.880 (0.997)	341269	40.0000	40.4
13 1,2-Dichlorobenzene	146	5.027	5.027 (1.027)	321181	40.0000	40.7
14 bis(2-Chloroisopropyl)ether	45	5.096	5.096 (1.041)	502786	40.0000	36.9 (H)
12 Benzyl alcohol	108	4.976	4.976 (1.017)	132590	40.0000	29.4 (H)
15 o-Cresol	107	5.063	5.063 (1.034)	230910	40.0000	39.1 (H)
18 m,p-Cresols	107	5.218	5.218 (1.066)	294516	40.0000	39.4 (H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.239	5.239	(1.070)	208937	40.0000	41.6 (H)
19 Hexachloroethane	117	5.359	5.359	(1.095)	132486	40.0000	40.5 (H)
21 Nitrobenzene	77	5.425	5.425	(0.878)	306190	40.0000	38.4
22 Isophorone	82	5.657	5.657	(0.915)	569970	40.0000	40.3
23 2-Nitrophenol	139	5.738	5.738	(0.928)	151548	40.0000	41.2
24 2,4-Dimethylphenol	122	5.754	5.754	(0.931)	261916	40.0000	43.0 (H)
25 bis(2-Chloroethoxy)methane	93	5.853	5.853	(0.947)	309184	40.0000	37.2 (H)
26 2,4-Dichlorophenol	162	5.983	5.983	(0.968)	239428	40.0000	43.3
27 Benzoic acid	105	5.868	5.868	(0.949)	158842	40.0000	42.2
28 1,2,4-Trichlorobenzene	180	6.072	6.072	(0.982)	278945	40.0000	41.1 (H)
30 Naphthalene	128	6.164	6.164	(0.997)	829426	40.0000	37.2 (H)
204 alpha-Terpineol	59	6.151	6.151	(0.995)	229060	40.0000	37.5 (H)
31 4-Chloroaniline	127	6.205	6.205	(1.004)	273802	40.0000	38.2 (H)
32 Hexachlorobutadiene	225	6.268	6.268	(1.014)	153678	40.0000	43.5
33 4-Chloro-3-methylphenol	107	6.691	6.691	(1.082)	238393	40.0000	42.7 (H)
34 2-Methylnaphthalene	142	6.885	6.885	(1.114)	575496	40.0000	42.8 (H)
35 1-Methylnaphthalene	142	6.992	6.992	(1.131)	559820	40.0000	42.5 (H)
36 Hexachlorocyclopentadiene	237	7.040	7.040	(0.875)	85595	40.0000	34.4
205 2,3-Dichloroaniline	161	7.183	7.183	(0.892)	287128	40.0000	38.9 (H)
37 2,4,6-Trichlorophenol	196	7.178	7.178	(0.892)	171252	40.0000	40.7 (H)
38 2,4,5-Trichlorophenol	196	7.219	7.219	(0.897)	180146	40.0000	40.2 (H)
40 2-Chloronaphthalene	162	7.410	7.410	(0.921)	533193	40.0000	38.5 (H)
42 o-Nitroaniline	65	7.512	7.512	(0.933)	150333	40.0000	31.7
41 m-Nitroaniline	138	7.958	7.958	(0.989)	124620	40.0000	35.9 (H)
43 Dimethylphthalate	163	7.698	7.698	(0.956)	627419	40.0000	39.6
44 2,6-Dinitrotoluene	165	7.772	7.772	(0.965)	143456	40.0000	38.0
50 2,4-Dinitrotoluene	165	8.207	8.207	(1.020)	183506	40.0000	38.6
45 Acenaphthylene	152	7.861	7.861	(0.977)	890613	40.0000	40.0 (H)
47 Acenaphthene	154	8.047	8.047	(1.000)	511224	40.0000	36.8 (H)
48 2,4-Dinitrophenol	184	8.072	8.072	(1.003)	63213	40.0000	45.8 (H)
49 Dibenzofuran	168	8.230	8.230	(1.022)	734937	40.0000	39.2 (H)
51 Diethylphthalate	149	8.447	8.447	(1.049)	639964	40.0000	40.2 (H)
52 4-Nitrophenol	139	8.123	8.123	(1.009)	105543	40.0000	41.3
53 Fluorene	166	8.602	8.602	(1.069)	608078	40.0000	39.5
54 4-Chlorophenylphenylether	204	8.584	8.584	(1.066)	287773	40.0000	39.5 (H)
55 2-Methyl-4,6-dinitrophenol	198	8.653	8.653	(0.894)	128905	40.0000	51.8
56 p-Nitroaniline	138	8.620	8.620	(1.071)	104932	40.0000	33.7 (H)
133 Diphenylamine	169	8.714	8.714	(0.900)	482650	40.0000	37.4 (H)
58 1,2-Diphenylhydrazine	77	8.760	8.760	(0.905)	610865	40.0000	37.3
61 4-Bromophenylphenylether	248	9.114	9.114	(0.942)	162003	40.0000	38.4 (H)
63 Hexachlorobenzene	284	9.193	9.193	(0.950)	167026	40.0000	37.8
65 Pentachlorophenol	266	9.405	9.405	(0.972)	94757	40.0000	40.9 (H)
206 n-Octadecane	57	9.441	9.441	(0.975)	444834	40.0000	37.7 (H)
68 Phenanthrene	178	9.650	9.650	(0.997)	861364	40.0000	39.0 (H)
69 Anthracene	178	9.706	9.706	(1.003)	870264	40.0000	39.4 (H)
72 Di-n-butylphthalate	149	10.203	10.203	(1.054)	1068410	40.0000	42.1 (H)
76 Fluoranthene	202	10.936	10.936	(1.130)	891500	40.0000	42.1 (H)

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	11.186	11.186 (0.882)	925664	40.0000	38.2 (H)
85 Butylbenzylphthalate	149	11.856	11.856 (0.934)	449646	40.0000	40.6 (H)
89 Benzo(a)anthracene	228	12.626	12.626 (0.995)	730447	40.0000	38.5 (H)
92 Chrysene	228	12.682	12.682 (0.999)	705399	40.0000	38.8 (H)
93 bis(2-Ethylhexyl)phthalate	149	12.577	12.577 (0.991)	592285	40.0000	38.8 (H)
94 Di-n-octylphthalate	149	13.563	13.563 (0.901)	877681	40.0000	43.1 (H)
95 Benzo(b)fluoranthene	252	14.305	14.305 (0.950)	616453	40.0000	43.5 (H)
96 Benzo(k)fluoranthene	252	14.353	14.353 (0.953)	606100	40.0000	43.0 (H)
97 Benzo(a)pyrene	252	14.886	14.886 (0.988)	544673	40.0000	44.5 (H)
99 Indeno(1,2,3-cd)pyrene	276	16.983	16.983 (1.128)	438341	40.0000	37.8 (H)
100 Dibenzo(a,h)anthracene	278	17.008	17.008 (1.129)	352901	40.0000	37.3 (H)
101 Benzo(ghi)perylene	276	17.500	17.500 (1.162)	358838	40.0000	38.4 (QH)
126 m-Dinitrobenzene	168	7.749	7.749 (0.963)	95501	40.0000	36.6 (H)
130 2,3,4,6-Tetrachlorophenol	232	8.353	8.353 (1.038)	143364	40.0000	42.5 (H)
143 Dinoseb	211	9.583	9.583 (0.990)	136624	40.0000	40.9 (H)
173 Carbazole	167	9.869	9.869 (1.019)	711301	40.0000	40.6 (H)
184 p-Benzoquinone	54	4.128	4.128 (0.843)	17221	40.0000	19.1 (H)
192 Methoxychlor	227	12.486	12.486 (0.984)	461643	40.0000	38.0 (H)
211 p-Toluidine	106	5.282	5.282 (1.079)	247474	40.0000	38.8 (H)
210 m-Toluidine	106	5.318	5.318 (1.086)	297457	40.0000	37.3 (H)
215 2-Ethoxyethanol	59	2.530	2.530 (0.517)	149842	40.0000	29.7 (H)
179 Dibenzo(a,e)pyrene	302	21.241	21.241 (1.410)	124527	40.0000	27.8 (H)
26 Phthalic anhydride	104	6.951	6.951 (1.124)	105491	40.0000	47.9
214 1,4-Dinitrobenzene	75	7.665	7.665 (0.952)	98072	40.0000	34.6 (H)
216 Methylenebis(2-chloroaniline)	231	12.565	12.565 (0.990)	76726	40.0000	29.5 (QH)
M 225 Trichlorophenols	196			351398	80.0000	80.9
M 226 Tetrachlorophenols	232			143364	40.0000	42.5
M 227 Benzo(b,k)fluoranthene	252			1222553	80.0000	86.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s020710.b/seb0703.d

Date : 07-FEB-2010 13:14

Client ID: MEGACVS

Sample Info: IWBH00121-17.41CCV111SM11MEGACVS

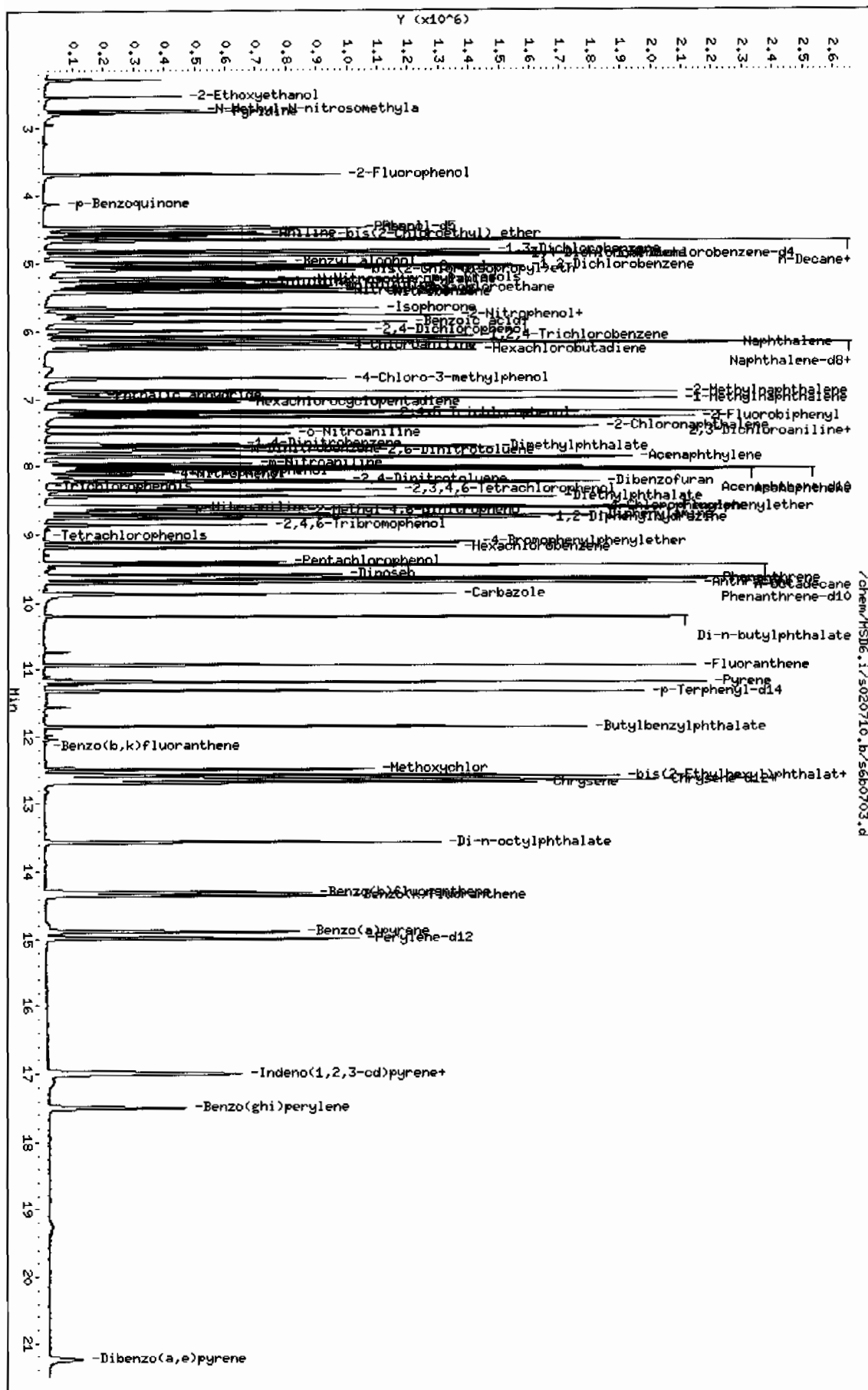
Column Phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

Page 1



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 07-FEB-2010 13:45
Lab File ID: s6b0704.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100120-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF %D / %DRIFT	%D / %DRIFT	
209 Benzaldehyde	0.86127	0.86077	0.86077	0.000	-0.05826	60.00000 Averaged
16 Acetophenone	1.16908	1.14618	1.14618	0.000	-1.95826	60.00000 Averaged
189 Caprolactam	0.07388	0.08449	0.08449	0.000	14.35564	60.00000 Averaged
208 1,1'-Biphenyl	1.20131	1.13982	1.13982	0.000	-5.11866	60.00000 Averaged
207 Atrazine	0.04063	0.04230	0.04230	0.000	4.08876	60.00000 Averaged
77 Benzidine	0.39304	0.20486	0.20486	0.000	-47.87736	60.00000 Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.28377	0.28377	0.000	0.44259	60.00000 Averaged
102 1,4-Dioxane	0.36606	0.34234	0.34234	0.000	-6.47942	60.00000 Averaged
103 Methyl methacrylate	0.19388	0.18514	0.18514	0.000	-4.50879	60.00000 Averaged
104 Ethyl methacrylate	0.80561	0.74060	0.74060	0.000	-8.06917	60.00000 Averaged
105 2-Picoline	1.30872	1.21521	1.21521	0.000	-7.14534	60.00000 Averaged
106 N-Nitrosomethylethylamine	0.51104	0.45849	0.45849	0.000	-10.28158	60.00000 Averaged
107 Methyl methanesulfonate	0.52852	0.50540	0.50540	0.000	-4.37548	60.00000 Averaged
108 N-Nitrosodiethylamine	0.49553	0.48349	0.48349	0.000	-2.43049	60.00000 Averaged
109 Ethyl Methanesulfonate	0.65169	0.61776	0.61776	0.000	-5.20613	60.00000 Averaged
110 Pentachloroethane	0.31681	0.32198	0.32198	0.000	1.63346	60.00000 Averaged
111 N-Nitrosopyrrolidine	0.47614	0.50951	0.50951	0.000	7.00945	60.00000 Averaged
113 N-Nitrosomorpholine	0.67936	0.68072	0.68072	0.000	0.20008	60.00000 Averaged
114 o-Toluidine	1.65281	1.62054	1.62054	0.000	-1.95265	60.00000 Averaged
115 N-Nitrosopiperidine	0.14105	0.13968	0.13968	0.000	-0.97421	60.00000 Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.80331	0.80331	0.000	-6.09535	60.00000 Averaged
118 2,6-Dichlorophenol	0.20687	0.21452	0.21452	0.000	3.69525	60.00000 Averaged
119 Hexachloropropene	0.10269	0.10464	0.10464	0.000	1.90683	60.00000 Averaged
120 p-Phenylenediamine	0.22955	0.22778	0.22778	0.000	-0.76859	60.00000 Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.20687	0.20687	0.000	-1.50885	60.00000 Averaged
122 Safrole	0.18653	0.19005	0.19005	0.000	1.88792	60.00000 Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.40593	0.40593	0.000	-4.08036	60.00000 Averaged
124 Isosafrole	0.33959	0.31418	0.31418	0.000	-7.48212	60.00000 Averaged
125 1,4-Naphthoquinone	0.30674	0.32034	0.32034	0.000	4.43446	60.00000 Averaged
127 Pentachlorobenzene	0.36454	0.36361	0.36361	0.000	-0.25712	60.00000 Averaged
128 1-Naphthylamine	0.90742	0.88833	0.88833	0.000	-2.10279	60.00000 Averaged
129 2-Naphthylamine	0.98012	0.93650	0.93650	0.000	-4.45102	60.00000 Averaged
131 5-Nitro-o-toluidine	0.27901	0.26852	0.26852	0.000	-3.75827	60.00000 Averaged
136 1,3,5-Trinitrobenzene	42.39536	40.00000	0.12569	0.000	5.98839	60.00000 Linear
137 Phenacetin	0.26240	0.26838	0.26838	0.000	2.28059	60.00000 Averaged
138 Diallate	0.24056	0.23679	0.23679	0.000	-1.56564	60.00000 Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 07-FEB-2010 13:45
 Lab File ID: s6b0704.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
 Analysis Type: Init. Cal. Times: 18:53 04:38
 Lab Sample ID: WBN100120-03.2 Quant Type: ISTD
 Method: /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
212 Cis Diallate	0.25295	0.24767	0.24767	0.000	-2.08549	Averaged
213 Trans Diallate	0.28301	0.27858	0.27858	0.000	-1.56564	Averaged
140 4-Aminobiphenyl	0.53562	0.44549	0.44549	0.000	-16.82573	Averaged
141 Pentachloronitrobenzene	0.06192	0.06426	0.06426	0.000	3.78032	Averaged
142 Pronamide	0.26319	0.27017	0.27017	0.000	2.65247	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.01387	0.01387	0.000	-40.94858	Averaged
147 Methapyrilene	0.38600	0.38302	0.38302	0.000	-0.77216	Averaged
148 Isodrin	0.09631	0.10145	0.10145	0.000	5.33667	Averaged
149 Aramite	0.04420	0.04752	0.04752	0.000	7.50074	Averaged
150 Kepone	0.06173	0.05423	0.05423	0.000	-12.15004	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33170	0.33170	0.000	4.52527	Averaged
152 Chlorobenzilate	0.29130	0.28720	0.28720	0.000	-1.40711	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.42787	0.42787	0.000	-18.90749	Averaged
155 2-Acetylaminofluorene	43.32919	40.00000	0.35782	0.000	8.32297	Linear
157 7,12Dimethylbenz(a)anthracene	0.47906	0.50704	0.50704	0.000	5.84130	Averaged
158 3-Methylcholanthrene	0.36955	0.36594	0.36594	0.000	-0.97649	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0704.d
Lab Smp Id: WBN100120-03.2 Client Smp ID: APCVS
Inj Date : 07-FEB-2010 13:45
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN100120-03.2|CCV|1|SVM|1|APCVS
Misc Info : |MSD8270|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.862	4.862	(1.000)	284240	40.0000	
* 29 Naphthalene-d8	136	6.138	6.138	(1.000)	1045541	40.0000	
* 46 Acenaphthene-d10	164	8.009	8.009	(1.000)	606152	40.0000	
* 67 Phenanthrene-d10	188	9.624	9.624	(1.000)	1050445	40.0000	
* 91 Chrysene-d12	240	12.641	12.641	(1.000)	813259	40.0000	
* 98 Perylene-d12	264	14.985	14.985	(1.000)	562144	40.0000	
209 Benzaldehyde	77	4.464	4.464	(0.918)	244666	40.0000	40.0 (H)
16 Acetophenone	105	5.244	5.244	(1.079)	325791	40.0000	39.2 (H)
189 Caprolactam	113	6.577	6.577	(1.071)	88334	40.0000	45.7 (H)
208 1,1'-Biphenyl	154	7.377	7.377	(0.921)	690903	40.0000	38.0 (H)
207 Atrazine	173	9.280	9.280	(0.964)	44430	40.0000	41.6 (H)
77 Benzidine	184	11.064	11.064	(0.875)	166605	40.0000	20.8 (H)
90 3,3'-Dichlorobenzidine	252	12.565	12.565	(0.994)	230775	40.0000	40.2 (H)
102 1,4-Dioxane	88	2.528	2.528	(0.520)	97307	40.0000	37.4 (H)
103 Methyl methacrylate	100	2.523	2.523	(0.519)	52623	40.0000	38.2 (H)
104 Ethyl methacrylate	69	3.022	3.022	(0.622)	210508	40.0000	36.8 (H)
105 2-Picoline	93	3.282	3.282	(0.675)	345411	40.0000	37.1
106 N-Nitrosomethylethylamine	88	3.348	3.348	(0.689)	130322	40.0000	35.9
107 Methyl methanesulfonate	80	3.575	3.575	(0.735)	143654	40.0000	38.2 (H)
108 N-Nitrosodiethylamine	102	3.901	3.901	(0.802)	137427	40.0000	39.0 (H)
109 Ethyl Methanesulfonate	79	4.138	4.138	(0.851)	175592	40.0000	37.9 (H)
110 Pentachloroethane	167	4.602	4.602	(0.947)	91520	40.0000	40.6
111 N-Nitrosopyrrolidine	100	5.231	5.231	(1.076)	144823	40.0000	42.8 (QH)
113 N-Nitrosomorpholine	56	5.262	5.262	(1.082)	193489	40.0000	40.1 (H)
114 o-Toluidine	106	5.280	5.280	(1.086)	460622	40.0000	39.2 (H)
115 N-Nitrosopiperidine	114	5.573	5.573	(0.908)	146040	40.0000	39.6 (H)

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58		5.940	5.940	(0.968)	839897	40.0000	37.6 (H)
118 2,6-Dichlorophenol	162		6.215	6.215	(1.012)	224286	40.0000	41.5 (H)
119 Hexachloropropene	213		6.243	6.243	(1.017)	109409	40.0000	40.8
120 p-Phenylenediamine	108		6.579	6.579	(1.072)	238155	40.0000	39.7 (H)
121 N-Nitrosodi-n-butylamine	84		6.541	6.541	(1.066)	216295	40.0000	39.4 (QH)
122 Safrole	162		6.773	6.773	(1.103)	198702	40.0000	40.8 (H)
123 1,2,4,5-Tetrachlorobenzene	216		7.058	7.058	(0.881)	246053	40.0000	38.4 (H)
124 Isosafrole	162		7.328	7.328	(0.915)	190442	40.0000	37.0 (H)
125 1,4-Naphthoquinone	158		7.598	7.598	(0.949)	194174	40.0000	41.8 (H)
127 Pentachlorobenzene	250		8.182	8.182	(1.022)	220400	40.0000	39.9 (H)
128 1-Naphthylamine	143		8.312	8.312	(1.038)	538466	40.0000	39.2 (H)
129 2-Naphthylamine	143		8.398	8.398	(1.049)	567659	40.0000	38.2 (H)
131 5-Nitro-o-toluidine	152		8.607	8.607	(1.075)	162765	40.0000	38.5 (H)
136 1,3,5-Trinitrobenzene	75		9.005	9.005	(0.936)	132030	40.0000	42.4 (H)
137 Phenacetin	108		9.046	9.046	(0.940)	281918	40.0000	40.9 (Q)
138 Diallate	86		9.007	9.007	(0.936)	248740	40.0000	39.4
212 Cis Diallate	86		9.109	9.109	(0.947)	39025	6.00000	5.9
213 Trans Diallate	86		9.007	9.007	(0.936)	248740	34.0000	33.5
140 4-Aminobiphenyl	169		9.405	9.405	(0.977)	467967	40.0000	33.3 (H)
141 Pentachloronitrobenzene	237		9.415	9.415	(0.978)	67505	40.0000	41.5 (Q)
142 Pronamide	173		9.443	9.443	(0.981)	283798	40.0000	41.1 (H)
146 4-Nitroquinoline-1-oxide	101		10.480	10.480	(1.089)	14573	40.0000	23.6
147 Methapyrilene	58		10.531	10.531	(1.094)	402344	40.0000	39.7 (H)
148 Isodrin	193		10.766	10.766	(1.119)	106564	40.0000	42.1
149 Aramite	185		11.278	11.278	(1.172)	49913	40.0000	43.0
150 Kepone	272		11.943	11.943	(1.241)	56964	40.0000	35.1 (H)
151 p-(Dimethylamino)azobenzene	120		11.477	11.477	(0.908)	269757	40.0000	41.8
152 Chlorobenzilate	251		11.515	11.515	(0.911)	233566	40.0000	39.4 (H)
153 3,3'-Dimethylbenzidine	212		11.861	11.861	(0.938)	347971	40.0000	32.4 (H)
155 2-Acetylaminofluorene	181		12.185	12.185	(0.964)	291004	40.0000	43.3 (H)
157 7,12Dimethylbenz(a)anthracene	256		14.274	14.274	(0.953)	285031	40.0000	42.3 (H)
158 3-Methylcholanthrene	268		15.505	15.505	(1.035)	205712	40.0000	39.6 (QH)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/HSD6.i/s020710.b/s6b0704.d

Date : 07-FEB-2010 13:45

Client ID: APCVS

Sample Info: IWBH00120-03.21CCV111SVH11APCVS

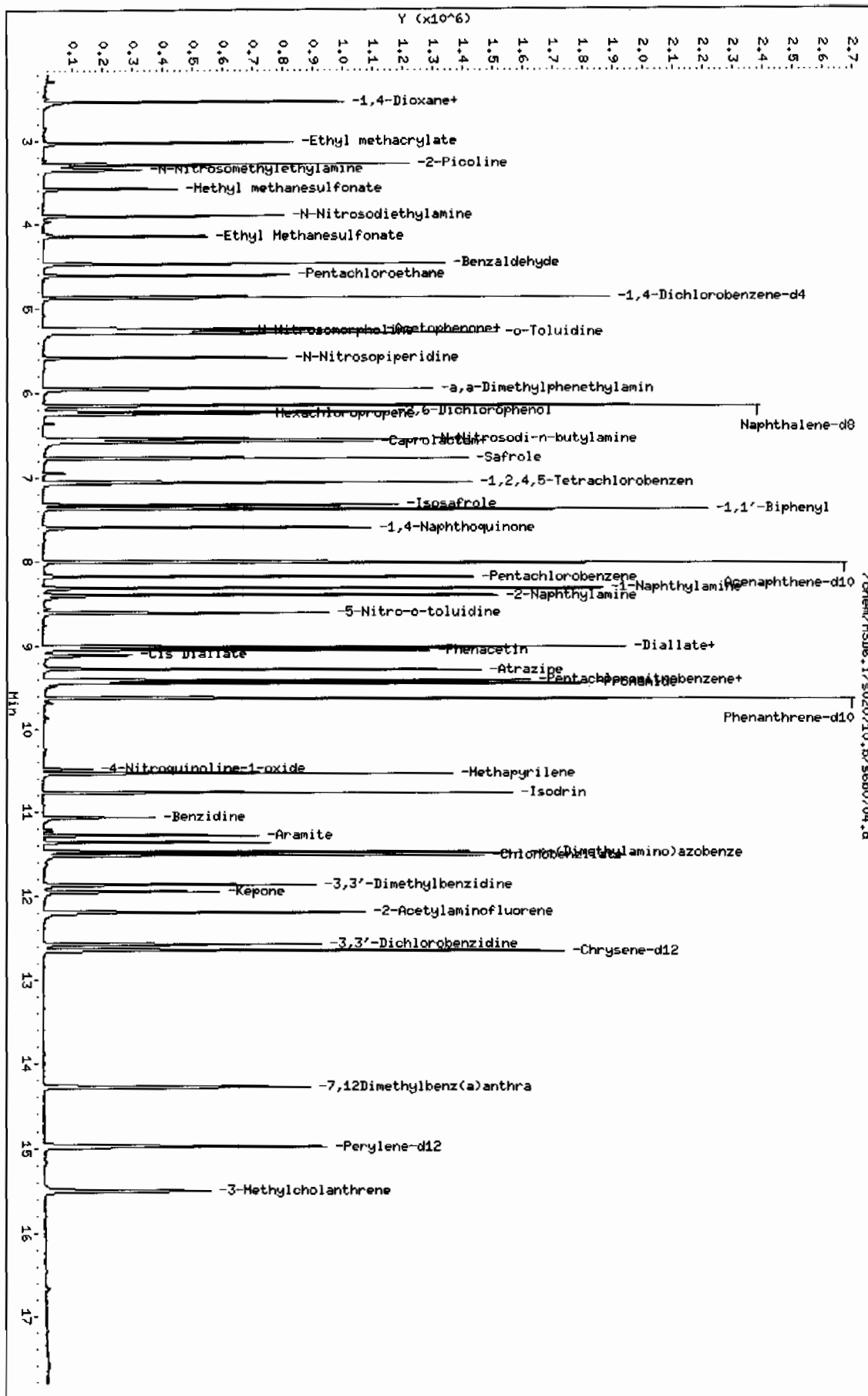
Column phase: J&W DB-5MS

Instrument: HSD6.i

Operator: nag1

Column diameter: 0.20

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-FEB-2010 14:04
Lab File ID: s6b0802.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.00169	0.92225	0.92225	0.000	-7.93068	60.00000	Averaged
5 Phenol-d5	1.26427	1.22069	1.22069	0.000	-3.44675	60.00000	Averaged
20 Nitrobenzene-d5	0.28296	0.29513	0.29513	0.000	4.30236	60.00000	Averaged
39 2-Fluorobiphenyl	1.03083	1.02743	1.02743	0.000	-0.32953	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11675	0.11580	0.11580	0.000	-0.81448	60.00000	Averaged
81 p-Terphenyl-d14	0.64507	0.69082	0.69082	0.000	7.09308	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.56602	0.56602	0.000	-16.88177	60.00000	Averaged
2 Pyridine	0.84757	0.59778	0.59778	0.000	-29.47206	60.00000	Averaged
4 Aniline	0.52752	0.48852	0.48852	0.000	-7.39223	60.00000	Averaged
6 Phenol	1.27120	1.27121	1.27121	0.001	0.00118	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.77350	0.77350	0.000	-10.14222	60.00000	Averaged
8 2-Chlorophenol	1.02109	0.99759	0.99759	0.000	-2.30136	60.00000	Averaged
203 n-Decane	1.42254	1.26339	1.26339	0.000	-11.18777	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.21794	1.21794	0.000	3.61091	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.20984	1.20984	0.001	1.52917	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.13542	1.13542	0.000	2.07776	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.87210	1.87210	0.000	-2.58714	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.54902	0.54902	0.000	-13.45348	60.00000	Averaged
15 o-Cresol	0.83139	0.80422	0.80422	0.000	-3.26740	60.00000	Averaged
18 m,p-Cresols	1.05346	1.05681	1.05681	0.000	0.31807	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.74729	0.74729	0.050	5.45224	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.47348	0.47348	0.000	2.70784	60.00000	Averaged
21 Nitrobenzene	0.28519	0.29135	0.29135	0.000	2.15934	60.00000	Averaged
22 Isophorone	0.50552	0.53308	0.53308	0.000	5.45206	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13313	0.13313	0.001	1.20723	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23960	0.23960	0.000	9.93249	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.28407	0.28407	0.000	-4.51211	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.21176	0.21176	0.001	7.11820	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.16912	0.16912	0.000	25.71028	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.25438	0.25438	0.000	4.84834	60.00000	Averaged
30 Naphthalene	0.79792	0.74674	0.74674	0.000	-6.41376	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.22019	0.22019	0.000	0.69245	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.21067	0.21067	0.000	-17.85413	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.14342	0.14342	0.001	13.51543	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.23040	0.23040	0.001	15.45290	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.51252	0.51252	0.000	6.44206	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-FEB-2010 14:04
Lab File ID: s6b0802.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D	%DRIFT	%D	%DRIFT		
35 1-Methylnaphthalene	0.47100	0.48849	0.48849	0.000	3.71165	60.00000 Averaged
36 Hexachlorocyclopentadiene	0.16157	0.11534	0.11534	0.050	-28.61236	60.00000 Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.45287	0.45287	0.000	-5.47053	60.00000 Averaged
37 2,4,6-Trichlorophenol	0.27294	0.28271	0.28271	0.001	3.58144	20.00000 Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.30591	0.30591	0.000	5.24457	60.00000 Averaged
40 2-Chloronaphthalene	0.89832	0.88616	0.88616	0.000	-1.35363	60.00000 Averaged
42 o-Nitroaniline	0.30732	0.26881	0.26881	0.000	-12.53275	60.00000 Averaged
41 m-Nitroaniline	0.22497	0.11224	0.11224	0.000	-50.10967	60.00000 Averaged
43 Dimethylphthalate	1.02610	1.02745	1.02745	0.000	0.13168	60.00000 Averaged
44 2,6-Dinitrotoluene	0.24475	0.23861	0.23861	0.000	-2.50667	60.00000 Averaged
50 2,4-Dinitrotoluene	0.30862	0.30090	0.30090	0.000	-2.50073	60.00000 Averaged
45 Acenaphthylene	1.44438	1.44808	1.44808	0.000	0.25594	60.00000 Averaged
47 Acenaphthene	0.90151	0.83909	0.83909	0.001	-6.92380	20.00000 Averaged ccc
48 2,4-Dinitrophenol	43.34159	40.00000	0.09428	0.050	8.35398	60.00000 Linear spcc
49 Dibenzofuran	1.21689	1.17273	1.17273	0.000	-3.62878	60.00000 Averaged
51 Diethylphthalate	1.03335	1.07872	1.07872	0.000	4.39062	60.00000 Averaged
52 4-Nitrophenol	41.73486	40.00000	0.17351	0.050	4.33714	60.00000 Linear spcc
53 Fluorene	0.99879	0.98141	0.98141	0.000	-1.74039	60.00000 Averaged
54 4-Chlorophenylphenylether	0.47192	0.46851	0.46851	0.000	-0.72337	60.00000 Averaged
55 2-Methyl-4,6-dinitrophenol	51.09492	40.00000	0.11859	0.000	27.73729	60.00000 Linear
56 p-Nitroaniline	16.54678	40.00000	0.06048	0.000	-58.63306	60.00000 Linear
133 Diphenylamine	0.48213	0.40470	0.40470	0.001	-16.05986	20.00000 Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.58894	0.58894	0.000	-3.96671	60.00000 Averaged
61 4-Bromophenylphenylether	0.15784	0.15343	0.15343	0.000	-2.79031	60.00000 Averaged
63 Hexachlorobenzene	0.16533	0.16619	0.16619	0.000	0.52292	60.00000 Averaged
65 Pentachlorophenol	43.02591	40.00000	0.09380	0.001	7.56477	20.00000 Linear ccc
206 n-Octadecane	0.44173	0.44420	0.44420	0.000	0.55842	60.00000 Averaged
68 Phenanthrene	0.82721	0.82108	0.82108	0.000	-0.74140	60.00000 Averaged
69 Anthracene	0.82682	0.82611	0.82611	0.000	-0.08621	60.00000 Averaged
72 Di-n-butylphthalate	0.94954	1.06191	1.06191	0.000	11.83470	60.00000 Averaged
76 Fluoranthene	0.79242	0.84561	0.84561	0.001	6.71243	20.00000 Averaged ccc
79 Pyrene	1.10021	1.03984	1.03984	0.000	-5.48679	60.00000 Averaged
85 Butylbenzylphthalate	0.50351	0.54278	0.54278	0.000	7.79993	60.00000 Averaged
89 Benzo(a)anthracene	0.86301	0.84896	0.84896	0.000	-1.62773	60.00000 Averaged
92 Chrysene	0.82690	0.81908	0.81908	0.000	-0.94544	60.00000 Averaged
93 bis(2-Ethylhexyl)phthalate	44.00867	40.00000	0.76403	0.000	10.02168	60.00000 Wt Linear

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-FEB-2010 14:04
Lab File ID: s6b0802.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100121-17.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.27127	1.46651	1.46651	0.001	15.35796	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.88507	0.94384	0.94384	0.000	6.63925	60.00000	Averaged
96 Benzo(k)fluoranthene	0.88011	0.93548	0.93548	0.000	6.29128	60.00000	Averaged
97 Benzo(a)pyrene	0.76447	0.86308	0.86308	0.001	12.89990	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	42.01674	40.00000	0.76760	0.000	5.04184	60.00000	Linear
100 Dibenzo(a,h)anthracene	41.62001	40.00000	0.61936	0.000	4.05003	60.00000	Linear
101 Benzo(ghi)perylene	0.58403	0.64055	0.64055	0.000	9.67790	60.00000	Averaged
126 m-Dinitrobenzene	0.16929	0.15786	0.15786	0.000	-6.75293	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.21896	0.23927	0.23927	0.000	9.27711	60.00000	Averaged
143 Dinoseb	40.46724	40.00000	0.12626	0.000	1.16809	60.00000	Linear
173 Carbazole	0.65449	0.38470	0.38470	0.000	-41.22189	60.00000	Averaged
184 p-Benzquinone	0.12730	0.07143	0.07143	0.000	-43.88693	60.00000	Averaged
192 Methoxychlor	0.55243	0.57324	0.57324	0.000	3.76627	60.00000	Averaged
211 p-Toluidine	0.89987	0.73676	0.73676	0.000	-18.12668	60.00000	Averaged
210 m-Toluidine	1.12396	0.93384	0.93384	0.000	-16.91486	60.00000	Averaged
215 2-Ethoxyethanol	0.71035	0.58470	0.58470	0.000	-17.68852	60.00000	Averaged
179 Dibenzo(a,e)pyrene	32.35034	40.00000	0.23638	0.000	-19.12414	60.00000	Linear
26 Phthalic anhydride	47.87922	40.00000	0.09433	0.000	19.69805	60.00000	Linear
214 1,4-Dinitrobenzene	0.18302	0.18172	0.18172	0.000	-1.14131	60.00000	Averaged
216 Methylenebis(2-chloroanilin	25.89384	40.00000	0.07403	0.000	-35.26540	60.00000	Linear
M 225 Trichlorophenols	0.28180	0.29431	0.29431	0.000	4.43916	60.00000	Averaged
M 226 Tetrachlorophenols	0.21896	0.23927	0.23927	0.000	9.27711	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.88259	0.93966	0.93966	0.000	6.46576	60.00000	Averaged

Data File: /chem/MSD6.i/s020810.b/s6b0802.d
Report Date: 09-Feb-2010 07:32

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020810.b/s6b0802.d
Lab Smp Id: WBN100121-17.4 Client Smp ID: MEGACVS
Inj Date : 08-FEB-2010 14:04
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN100121-17.4|CCV|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN100205-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m
Meth Date : 09-Feb-2010 07:32 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4		152	4.813	4.813	(1.000)	245875	40.0000	
* 29 Naphthalene-d8		136	6.090	6.090	(1.000)	949758	40.0000	
* 46 Acenaphthene-d10		164	7.960	7.960	(1.000)	514386	40.0000	
* 67 Phenanthrene-d10		188	9.571	9.571	(1.000)	876117	40.0000	
* 91 Chrysene-d12		240	12.580	12.580	(1.000)	731973	40.0000	
* 98 Perylene-d12		264	14.904	14.904	(1.000)	606320	40.0000	
\$ 3 2-Fluorophenol		112	3.649	3.649	(0.758)	226758	40.0000	36.8
\$ 5 Phenol-d5		99	4.429	4.429	(0.920)	300138	40.0000	38.6
\$ 20 Nitrobenzene-d5		82	5.354	5.354	(0.879)	280304	40.0000	41.7
\$ 39 2-Fluorobiphenyl		172	7.214	7.214	(0.906)	528498	40.0000	39.9
\$ 60 2,4,6-Tribromophenol		329	8.809	8.809	(1.107)	59565	40.0000	39.7
\$ 81 p-Terphenyl-d14		244	11.273	11.273	(0.896)	505663	40.0000	42.8
1 N-Methyl-N-nitrosomethylamine		74	2.688	2.688	(0.558)	139169	40.0000	33.2
2 Pyridine		79	2.726	2.726	(0.566)	146978	40.0000	28.2
4 Aniline		66	4.505	4.505	(0.936)	120116	40.0000	37.0
6 Phenol		94	4.441	4.441	(0.923)	312559	40.0000	40.0 (Q)
7 bis(2-Chloroethyl) ether		63	4.541	4.541	(0.943)	190185	40.0000	35.9
8 2-Chlorophenol		128	4.617	4.617	(0.959)	245283	40.0000	39.1
203 n-Decane		43	4.615	4.615	(0.959)	310635	40.0000	35.5
9 1,3-Dichlorobenzene		146	4.762	4.762	(0.989)	299462	40.0000	41.4
11 1,4-Dichlorobenzene		146	4.831	4.831	(1.004)	297470	40.0000	40.6
13 1,2-Dichlorobenzene		146	4.979	4.979	(1.034)	279171	40.0000	40.8
14 bis(2-Chloroisopropyl)ether		45	5.045	5.045	(1.048)	460303	40.0000	39.0
12 Benzyl alcohol		108	4.928	4.928	(1.024)	134990	40.0000	34.6
15 o-Cresol		107	5.015	5.015	(1.042)	197738	40.0000	38.7
18 m,p-Cresols		107	5.170	5.170	(1.074)	259843	40.0000	40.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.190	5.190	(1.078)	183740	40.0000	42.2
19 Hexachloroethane	117	5.308	5.308	(1.103)	116417	40.0000	41.1
21 Nitrobenzene	77	5.374	5.374	(0.882)	276711	40.0000	40.9
22 Isophorone	82	5.608	5.608	(0.921)	506294	40.0000	42.2
23 2-Nitrophenol	139	5.690	5.690	(0.934)	126444	40.0000	40.5
24 2,4-Dimethylphenol	122	5.703	5.703	(0.936)	227562	40.0000	44.0
25 bis(2-Chloroethoxy)methane	93	5.805	5.805	(0.953)	269797	40.0000	38.2
26 2,4-Dichlorophenol	162	5.932	5.932	(0.974)	201118	40.0000	42.8
27 Benzoic acid	105	5.815	5.815	(0.955)	160620	40.0000	50.3
28 1,2,4-Trichlorobenzene	180	6.021	6.021	(0.989)	241597	40.0000	41.9
30 Naphthalene	128	6.113	6.113	(1.004)	709222	40.0000	37.4
204 alpha-Terpineol	59	6.098	6.098	(1.001)	209130	40.0000	40.3
31 4-Chloroaniline	127	6.156	6.156	(1.011)	200085	40.0000	32.8
32 Hexachlorobutadiene	225	6.217	6.217	(1.021)	136210	40.0000	45.4
33 4-Chloro-3-methylphenol	107	6.643	6.643	(1.091)	218828	40.0000	46.2
34 2-Methylnaphthalene	142	6.834	6.834	(1.122)	486767	40.0000	42.6
35 1-Methylnaphthalene	142	6.941	6.941	(1.140)	463943	40.0000	41.5
36 Hexachlorocyclopentadiene	237	6.989	6.989	(0.878)	59329	40.0000	28.6
205 2,3-Dichloroaniline	161	7.135	7.135	(0.896)	232950	40.0000	37.8
37 2,4,6-Trichlorophenol	196	7.127	7.127	(0.895)	145424	40.0000	41.4
38 2,4,5-Trichlorophenol	196	7.168	7.168	(0.900)	157357	40.0000	42.1
40 2-Chloronaphthalene	162	7.359	7.359	(0.924)	455830	40.0000	39.4
42 o-Nitroaniline	65	7.466	7.466	(0.938)	138271	40.0000	35.0
41 m-Nitroaniline	138	7.912	7.912	(0.994)	57734	40.0000	20.0
43 Dimethylphthalate	163	7.647	7.647	(0.961)	528507	40.0000	40.0
44 2,6-Dinitrotoluene	165	7.721	7.721	(0.970)	122739	40.0000	39.0
50 2,4-Dinitrotoluene	165	8.156	8.156	(1.025)	154780	40.0000	39.0
45 Acenaphthylene	152	7.810	7.810	(0.981)	744871	40.0000	40.1
47 Acenaphthene	154	7.996	7.996	(1.004)	431617	40.0000	37.2
48 2,4-Dinitrophenol	184	8.024	8.024	(1.008)	48497	40.0000	43.3
49 Dibenzofuran	168	8.179	8.179	(1.028)	603236	40.0000	38.5
51 Diethylphthalate	149	8.396	8.396	(1.055)	554877	40.0000	41.8
52 4-Nitrophenol	139	8.077	8.077	(1.015)	89253	40.0000	41.7
53 Fluorene	166	8.549	8.549	(1.074)	504824	40.0000	39.3
54 4-Chlorophenylphenylether	204	8.534	8.534	(1.072)	240994	40.0000	39.7
55 2-Methyl-4,6-dinitrophenol	198	8.600	8.600	(0.899)	103902	40.0000	51.1
56 p-Nitroaniline	138	8.579	8.579	(1.078)	31109	40.0000	16.5
133 Diphenylamine	169	8.664	8.664	(0.905)	354568	40.0000	33.6
58 1,2-Diphenylhydrazine	77	8.709	8.709	(0.910)	515982	40.0000	38.4
61 4-Bromophenylphenylether	248	9.066	9.066	(0.947)	134426	40.0000	38.9
63 Hexachlorobenzene	284	9.143	9.143	(0.955)	145606	40.0000	40.2
65 Pentachlorophenol	266	9.352	9.352	(0.977)	82180	40.0000	43.0
206 n-Octadecane	57	9.392	9.392	(0.981)	389170	40.0000	40.2
68 Phenanthrene	178	9.596	9.596	(1.003)	719363	40.0000	39.7
69 Anthracene	178	9.652	9.652	(1.009)	723770	40.0000	40.0
72 Di-n-butylphthalate	149	10.154	10.154	(1.061)	930358	40.0000	44.7
76 Fluoranthene	202	10.883	10.883	(1.137)	740853	40.0000	42.7

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	11.135	11.135	(0.885)	761135	40.0000	37.8
85 Butylbenzylphthalate	149	11.803	11.803	(0.938)	397299	40.0000	43.1
89 Benzo(a)anthracene	228	12.560	12.560	(0.998)	621415	40.0000	39.3
92 Chrysene	228	12.616	12.616	(1.003)	599545	40.0000	39.6
93 bis(2-Ethylhexyl)phthalate	149	12.519	12.519	(0.995)	559246	40.0000	44.0
94 Di-n-octylphthalate	149	13.495	13.495	(0.905)	889177	40.0000	46.1
95 Benzo(b)fluoranthene	252	14.226	14.226	(0.955)	572267	40.0000	42.6
96 Benzo(k)fluoranthene	252	14.272	14.272	(0.958)	567198	40.0000	42.5
97 Benzo(a)pyrene	252	14.799	14.799	(0.993)	523304	40.0000	45.2
99 Indeno(1,2,3-cd)pyrene	276	16.889	16.889	(1.133)	465409	40.0000	42.0
100 Dibenzo(a,h)anthracene	278	16.912	16.912	(1.135)	375528	40.0000	41.6
101 Benzo(ghi)perylene	276	17.398	17.398	(1.167)	388378	40.0000	43.9(Q)
126 m-Dinitrobenzene	168	7.698	7.698	(0.967)	81202	40.0000	37.3
130 2,3,4,6-Tetrachlorophenol	232	8.304	8.304	(1.043)	123078	40.0000	43.7
143 Dinoseb	211	9.532	9.532	(0.996)	110622	40.0000	40.5
173 Carbazole	167	9.820	9.820	(1.026)	337042	40.0000	23.5
184 p-Benzquinone	54	4.082	4.082	(0.848)	17564	40.0000	22.4
192 Methoxychlor	227	12.422	12.422	(0.987)	419595	40.0000	41.5
211 p-Toluidine	106	5.234	5.234	(1.087)	181150	40.0000	32.7
210 m-Toluidine	106	5.267	5.267	(1.094)	229609	40.0000	33.2
215 2-Ethoxyethanol	59	2.482	2.482	(0.516)	143764	40.0000	32.9
179 Dibenzo(a,e)pyrene	302	21.075	21.075	(1.414)	143323	40.0000	32.4
26 Phthalic anhydride	104	6.900	6.900	(1.133)	89588	40.0000	47.9
214 1,4-Dinitrobenzene	75	7.616	7.616	(0.957)	93473	40.0000	39.5
216 Methylenebis(2-chloroaniline)	231	12.504	12.504	(0.994)	54185	40.0000	25.9(Q)
M 225 Trichlorophenols	196				302781	80.0000	83.6
M 226 Tetrachlorophenols	232				123078	40.0000	43.7
M 227 Benzo(b,k)fluoranthene	252				1139465	80.0000	85.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.1/s020810.b/s60802.d

Date: 08-FEB-2010 14:04

Client ID: MEGACVS

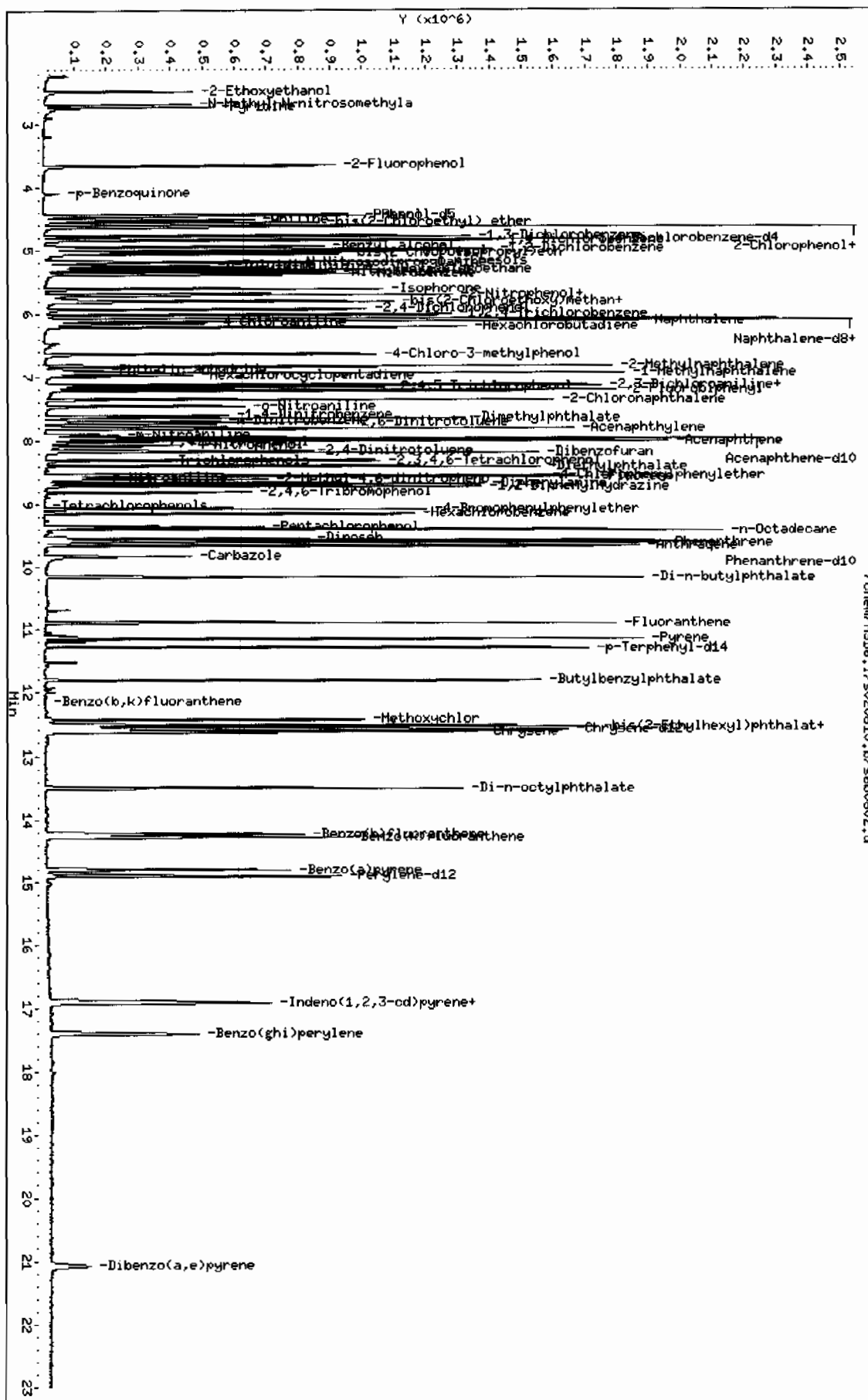
Sample Info: IABN100121-17.4/CCV11/SNH11/MEGACVS

Column phase: J&W DB-5MS

Instrument: MSD6.1

Operator: nag1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-FEB-2010 14:37
Lab File ID: s6b0803.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN100120-03.4 Quant Type: ISTD
Method: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.82314	0.82314	0.000	-4.42788	60.00000	Averaged
16 Acetophenone	1.16908	1.10366	1.10366	0.000	-5.59537	60.00000	Averaged
189 Caprolactam	0.07388	0.07862	0.07862	0.000	6.42118	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.05337	1.05337	0.000	-12.31458	60.00000	Averaged
207 Atrazine	0.04063	0.03929	0.03929	0.000	-3.31856	60.00000	Averaged
77 Benzidine	0.39304	0.05986	0.05986	0.000	-84.77057	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.24753	0.24753	0.000	-12.38297	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.33415	0.33415	0.000	-8.71679	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.17226	0.17226	0.000	-11.14911	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.67752	0.67752	0.000	-15.89918	60.00000	Averaged
105 2-Picoline	1.30872	1.15356	1.15356	0.000	-11.85598	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.44110	0.44110	0.000	-13.68588	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.46909	0.46909	0.000	-11.24554	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.45967	0.45967	0.000	-7.23784	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.55865	0.55865	0.000	-14.27561	60.00000	Averaged
110 Pentachloroethane	0.31681	0.30271	0.30271	0.000	-4.44857	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.48678	0.48678	0.000	2.23575	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.65778	0.65778	0.000	-3.17715	60.00000	Averaged
114 o-Toluidine	1.65281	1.51274	1.51274	0.000	-8.47483	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.13570	0.13570	0.000	-3.79710	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.73752	0.73752	0.000	-13.78618	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.19630	0.19630	0.000	-5.11214	60.00000	Averaged
119 Hexachloropropene	0.10269	0.08866	0.08866	0.000	-13.66269	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.11110	0.11110	0.000	-51.59866	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.19477	0.19477	0.000	-7.27333	60.00000	Averaged
122 Safrole	0.18653	0.17605	0.17605	0.000	-5.61521	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.38926	0.38926	0.000	-8.01896	60.00000	Averaged
124 Isosafrole	0.33959	0.29660	0.29660	0.000	-12.65917	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.31795	0.31795	0.000	3.65461	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.34930	0.34930	0.000	-4.18010	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.71930	0.71930	0.000	-20.73112	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.79069	0.79069	0.000	-19.32776	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.24153	0.24153	0.000	-13.43112	60.00000	Averaged
136 1,3,5-Trinitrobenzene	37.58026	40.00000	0.11007	0.000	-6.04935	60.00000	Linear
137 Phenacetin	0.26240	0.24158	0.24158	0.000	-7.93384	60.00000	Averaged
138 Diallate	0.24056	0.22580	0.22580	0.000	-6.13621	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-FEB-2010 14:37
 Lab File ID: s6b0803.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
 Analysis Type: Init. Cal. Times: 18:53 04:38
 Lab Sample ID: WBN100120-03.4 Quant Type: ISTD
 Method: /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.25295	0.23800	0.23800	0.000	-5.90963	60.00000	Averaged
213 Trans Diallate	0.28301	0.26565	0.26565	0.000	-6.13621	60.00000	Averaged
140 4-Aminobiphenyl	0.53562	0.37982	0.37982	0.000	-29.08639	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06329	0.06329	0.000	2.20501	60.00000	Averaged
142 Pronamide	0.26319	0.25531	0.25531	0.000	-2.99346	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.00801	0.00801	0.000	-65.88539	60.00000	Averaged
147 Methapyrilene	0.38600	0.36754	0.36754	0.000	-4.78428	60.00000	Averaged
148 Isodrin	0.09631	0.10251	0.10251	0.000	6.43586	60.00000	Averaged
149 Aramite	0.04420	0.04911	0.04911	0.000	11.11733	60.00000	Averaged
150 Kepone	0.06173	0.06220	0.06220	0.000	0.76100	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.29477	0.29477	0.000	-7.11205	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.28838	0.28838	0.000	-1.00006	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.29795	0.29795	0.000	-43.53155	60.00000	Averaged
155 2-Acetylaminofluorene	41.82599	40.00000	0.34380	0.000	4.56497	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.47470	0.47470	0.000	-0.90964	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.35909	0.35909	0.000	-2.83044	60.00000	Averaged

Data File: /chem/MSD6.i/s020810.b/s6b0803.d
 Report Date: 08-Feb-2010 15:26

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020810.b/s6b0803.d
 Lab Smp Id: WBN100120-03.4 Client Smp ID: APCVS
 Inj Date : 08-FEB-2010 14:37
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |WBN100120-03.4|CCV|1|SVM|1|APCVS
 Misc Info : |MSD8270|WBN100205-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020810.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 15:26 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AP12.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.811	4.811	(1.000)	268690	40.0000	
* 29 Naphthalene-d8	136	6.087	6.087	(1.000)	977928	40.0000	
* 46 Acenaphthene-d10	164	7.955	7.955	(1.000)	565925	40.0000	
* 67 Phenanthrene-d10	188	9.571	9.571	(1.000)	984819	40.0000	
* 91 Chrysene-d12	240	12.575	12.575	(1.000)	809610	40.0000	
* 98 Perylene-d12	264	14.896	14.896	(1.000)	631228	40.0000	
209 Benzaldehyde	77	4.416	4.416	(0.918)	221169	40.0000	38.2
16 Acetophenone	105	5.196	5.196	(1.080)	296543	40.0000	37.8
189 Caprolactam	113	6.523	6.523	(1.072)	76889	40.0000	42.6
208 1,1'-Biphenyl	154	7.326	7.326	(0.921)	596130	40.0000	35.1
207 Atrazine	173	9.229	9.229	(0.964)	38690	40.0000	38.7
77 Benzidine	184	11.018	11.018	(0.876)	48461	40.0000	6.1
90 3,3'-Dichlorobenzidine	252	12.501	12.501	(0.994)	200404	40.0000	35.0
102 1,4-Dioxane	88	2.484	2.484	(0.516)	89783	40.0000	36.5
103 Methyl methacrylate	100	2.479	2.479	(0.515)	46285	40.0000	35.5
104 Ethyl methacrylate	69	2.976	2.976	(0.619)	182043	40.0000	33.6
105 2-Picoline	93	3.236	3.236	(0.673)	309950	40.0000	35.2
106 N-Nitrosomethylethylamine	88	3.302	3.302	(0.686)	118518	40.0000	34.5
107 Methyl methanesulfonate	80	3.527	3.527	(0.733)	126039	40.0000	35.5
108 N-Nitrosodiethylamine	102	3.853	3.853	(0.801)	123508	40.0000	37.1
109 Ethyl Methanesulfonate	79	4.090	4.090	(0.850)	150105	40.0000	34.3
110 Pentachloroethane	167	4.551	4.551	(0.946)	81336	40.0000	38.2
111 N-Nitrosopyrrolidine	100	5.183	5.183	(1.077)	130793	40.0000	40.9(Q)
113 N-Nitrosomorpholine	56	5.213	5.213	(1.084)	176739	40.0000	38.7
114 o-Toluidine	106	5.231	5.231	(1.087)	406458	40.0000	36.6
115 N-Nitrosopiperidine	114	5.522	5.522	(0.907)	132702	40.0000	38.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.889	5.889	(0.967)	721243	40.0000	34.5
118 2,6-Dichlorophenol	162	6.164	6.164	(1.013)	191964	40.0000	38.0
119 Hexachloropropene	213	6.192	6.192	(1.017)	86699	40.0000	34.5
120 p-Phenylenediamine	108	6.533	6.533	(1.073)	108651	40.0000	19.4
121 N-Nitrosodi-n-butylamine	84	6.490	6.490	(1.066)	190467	40.0000	37.1(Q)
122 Safrole	162	6.724	6.724	(1.105)	172166	40.0000	37.8
123 1,2,4,5-Tetrachlorobenzene	216	7.010	7.010	(0.881)	220291	40.0000	36.8
124 Isosafrole	162	7.280	7.280	(0.915)	167854	40.0000	34.9
125 1,4-Naphthoquinone	158	7.550	7.550	(0.949)	179934	40.0000	41.5
127 Pentachlorobenzene	250	8.128	8.128	(1.022)	197680	40.0000	38.3
128 1-Naphthylamine	143	8.261	8.261	(1.038)	407069	40.0000	31.7
129 2-Naphthylamine	143	8.348	8.348	(1.049)	447469	40.0000	32.3
131 5-Nitro-o-toluidine	152	8.554	8.554	(1.075)	136690	40.0000	34.6
136 1,3,5-Trinitrobenzene	75	8.959	8.959	(0.936)	108396	40.0000	37.6
137 Phenacetin	108	8.995	8.995	(0.940)	237910	40.0000	36.8(Q)
138 Diallyl	86	8.959	8.959	(0.936)	222372	40.0000	37.5
212 Cis Diallyl	86	9.059	9.059	(0.946)	35158	6.00000	5.6
213 Trans Diallyl	86	8.959	8.959	(0.936)	222372	34.0000	31.9
140 4-Aminobiphenyl	169	9.354	9.354	(0.977)	374058	40.0000	28.4
141 Pentachloronitrobenzene	237	9.364	9.364	(0.978)	62327	40.0000	40.9(Q)
142 Pronamide	173	9.395	9.395	(0.982)	251434	40.0000	38.8
146 4-Nitroquinoline-1-oxide	101	10.429	10.429	(1.090)	7893	40.0000	13.6
147 Methapyrilene	58	10.483	10.483	(1.095)	361956	40.0000	38.1
148 Isodrin	193	10.715	10.715	(1.120)	100949	40.0000	42.6
149 Aramite	185	11.230	11.230	(1.173)	48369	40.0000	44.4
150 Kepone	272	11.884	11.884	(1.242)	61254	40.0000	40.3
151 p-(Dimethylamino)azobenzene	120	11.426	11.426	(0.909)	238648	40.0000	37.2
152 Chlorobenzilate	251	11.464	11.464	(0.912)	233478	40.0000	39.6
153 3,3'-Dimethylbenzidine	212	11.805	11.805	(0.939)	241221	40.0000	22.6
155 2-Acetylaminofluorene	181	12.126	12.126	(0.964)	278347	40.0000	41.8
157 7,12Dimethylbenz(a)anthracene	256	14.193	14.193	(0.953)	299645	40.0000	39.6
158 3-Methylcholanthrene	268	15.414	15.414	(1.035)	226668	40.0000	38.9(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.1/s020810.b/s60803.d

Date: 08-FEB-2010 14:37

Client ID: APCVS

Sample Info: 1MBH00120-03.41CCV111SM111PCVS

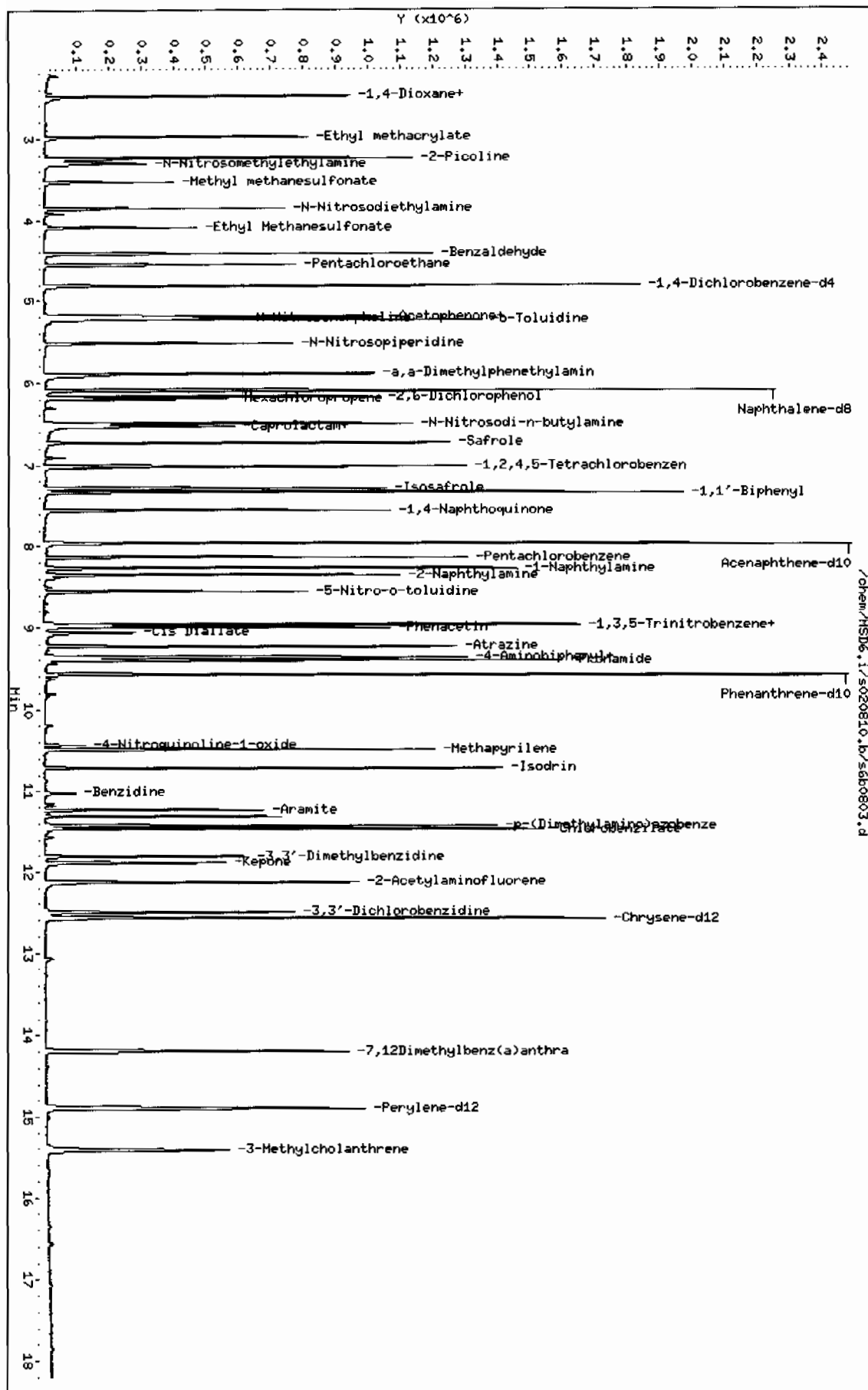
Column phase: J&W DB-SMS

Instrument: MSD6.1

Operator: nag1

Column diameter: 0.20

Page 1



QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Page 1

Date : 09-NOV-2009 18:00

Client ID: DFTPP

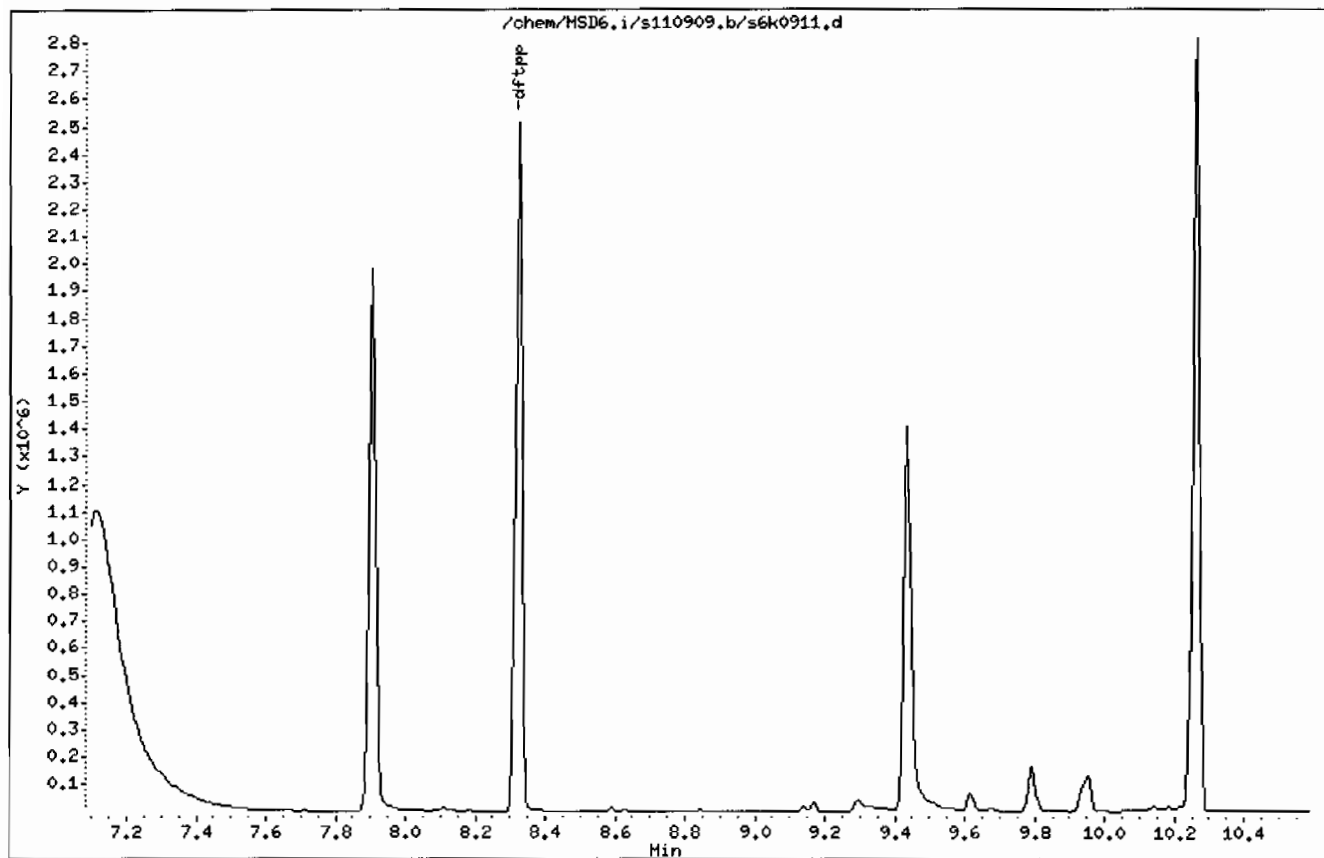
Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPM111SVMF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 09-NOV-2009 18:00

Client ID: DFTTP

Instrument: MSD6.i

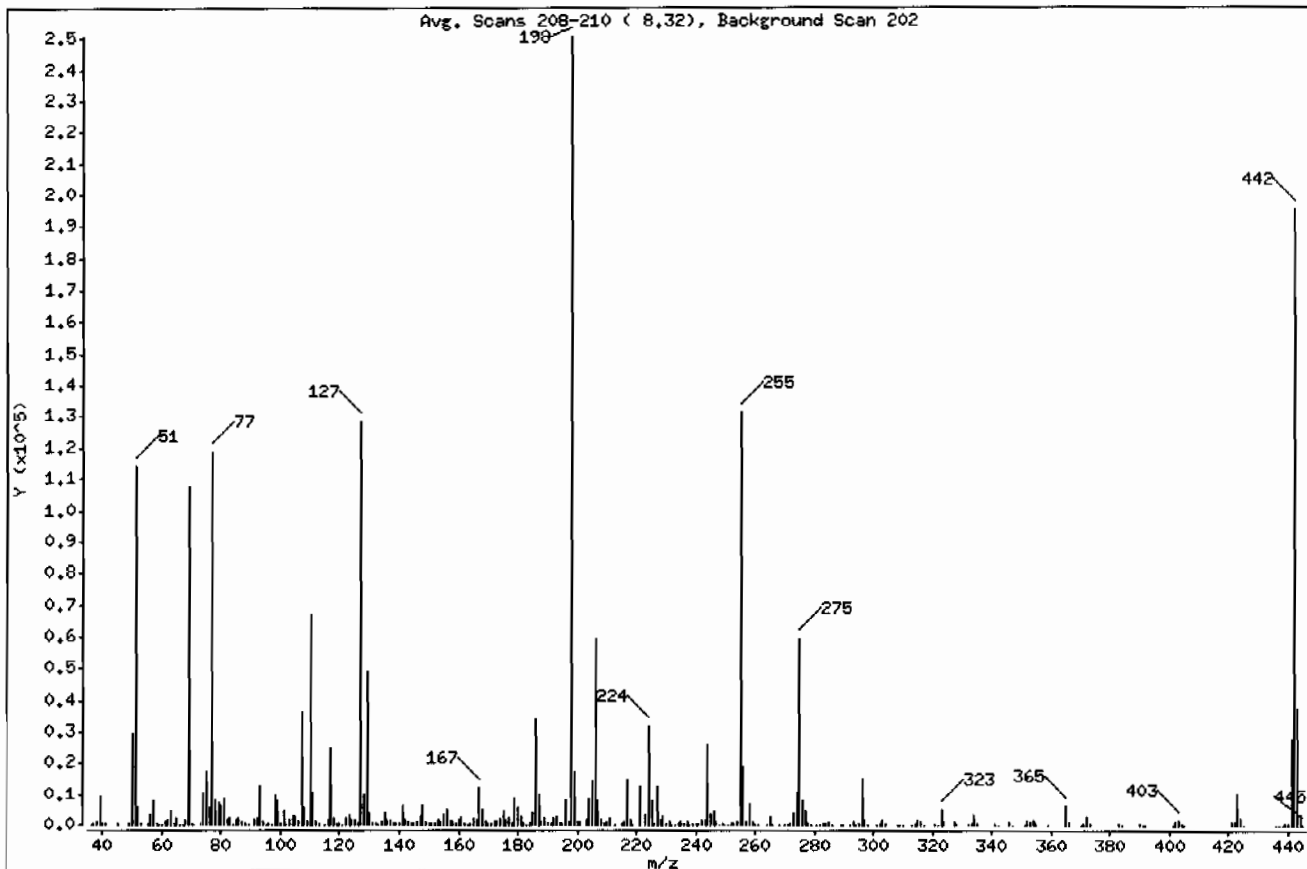
Sample Info: IWBH091101-01150 PPH11ISVMF11IDFTTP

Operator: JMB3

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	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWB091101-01150 PPH11SVHF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0,20

Data File: s6k0911.d

Spectrum: Avg, Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	146.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: 1WBN091101-01150 PPH11SVHF11DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8,32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y

79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491

84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3598	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134

89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754

95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	258
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153

100.00	745	177.00	2269	258.00	6873	401.00	116
101.00	4358	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98

105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193

110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7957	440.00	309

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPH11|SVHF11|DFTPP

Operator: JHB3

Column phase: Phenomenex ZB-6MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8,32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Page 1

Date : 10-NOV-2009 11:07

Client ID: DFTPP

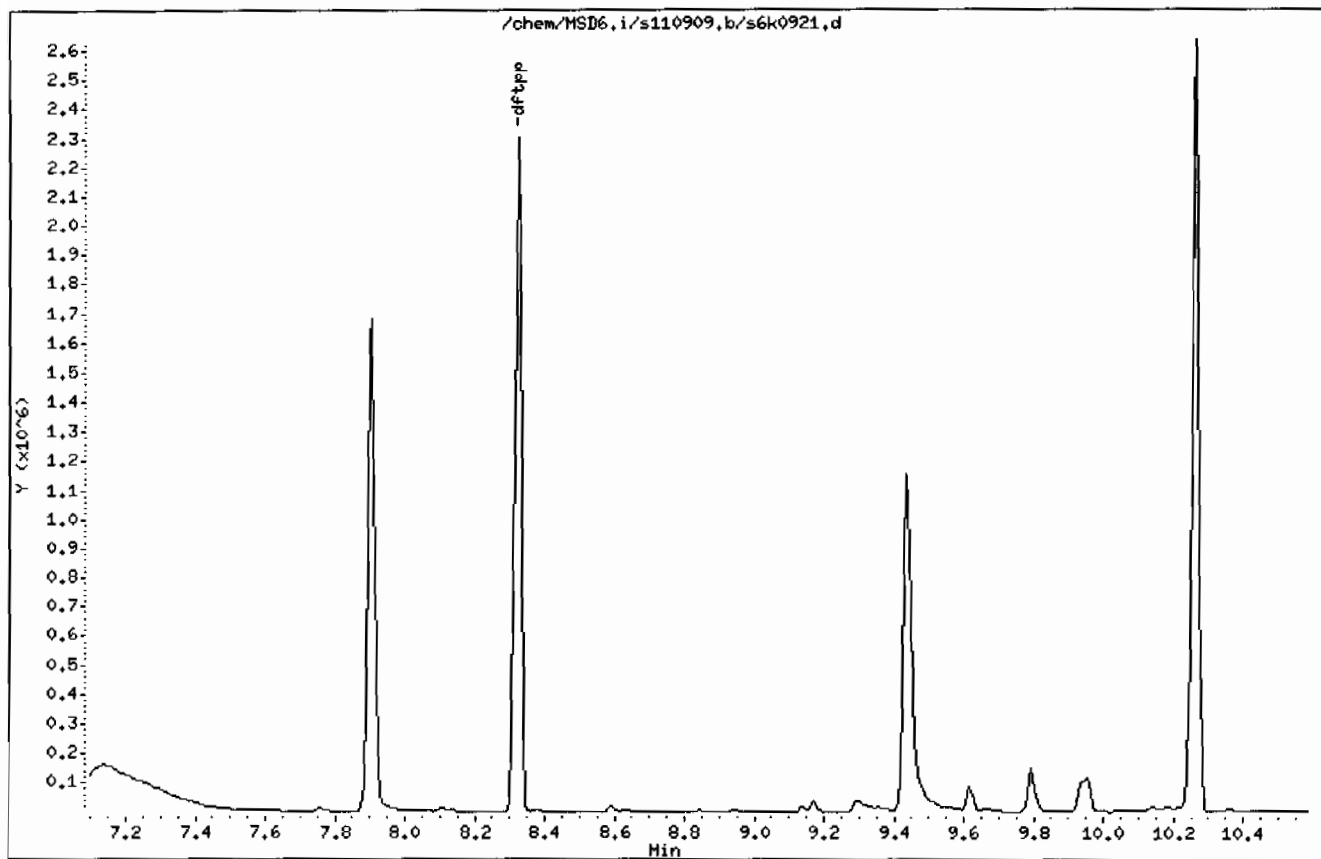
Instrument: MSD6.i

Sample Info: IWBH091101-01150 PPH111SVHF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 10-NOV-2009 11:07

Client ID: DFTTP

Instrument: HSD6.i

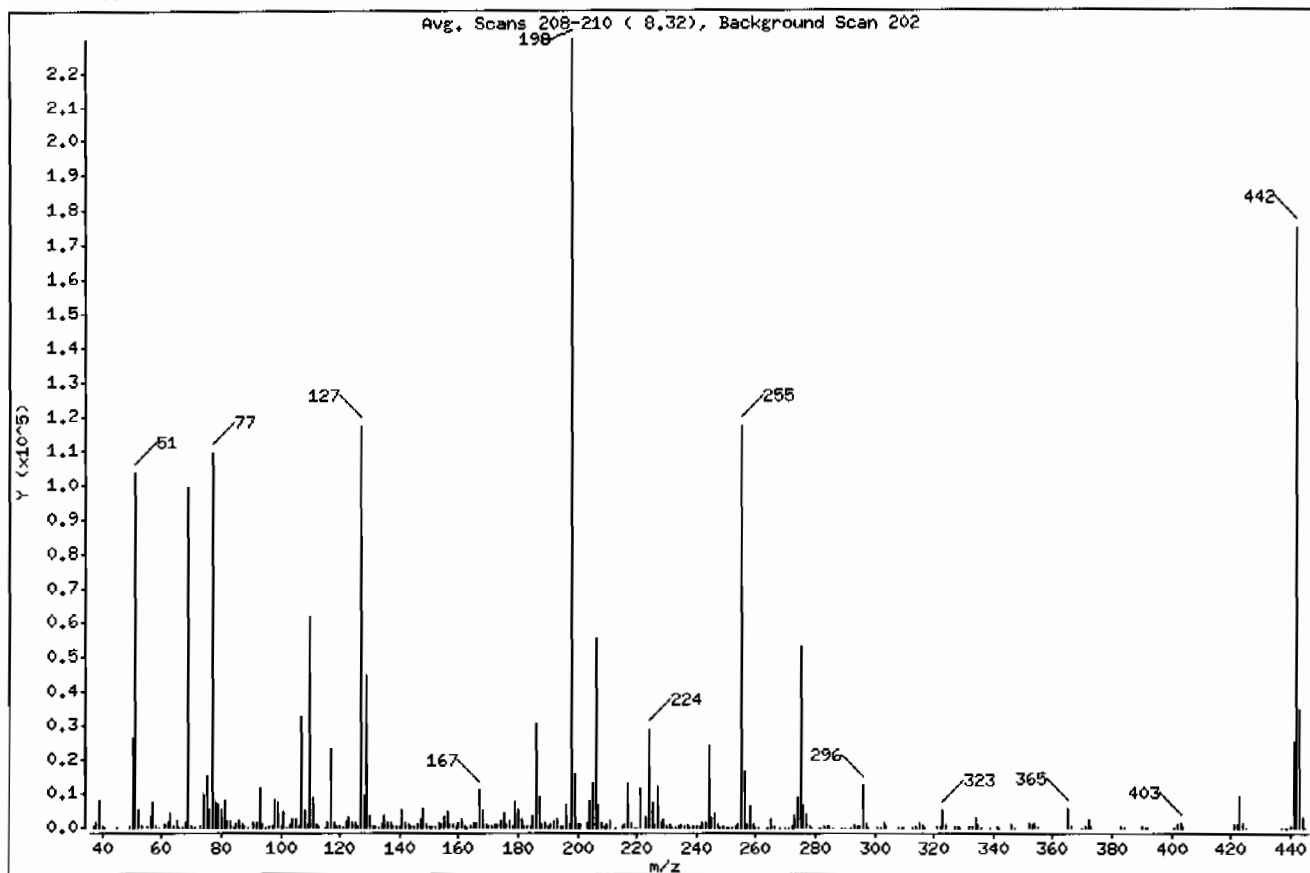
Sample Info: INBN091101-01150 PPH11SVMF11IDFTTP

Operator: JHB3

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	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Date : 10-NOV-2009 11:07

Client ID: DFTTP

Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPH111SVHF111DFTTP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5895	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Date : 10-NOV-2009 11:07

Client ID: DFTTP

Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPH111SVHF111DFTTP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y

81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119

86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995

92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611

97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157

102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265

107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54

112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPH111SVMF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d

Spectrum: Avg. Scans 208-210 (8,32), Background Scan 202

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s020710.b/s6b0702.d

Page 1

Date : 07-FEB-2010 13:00

Client ID: DFTPP

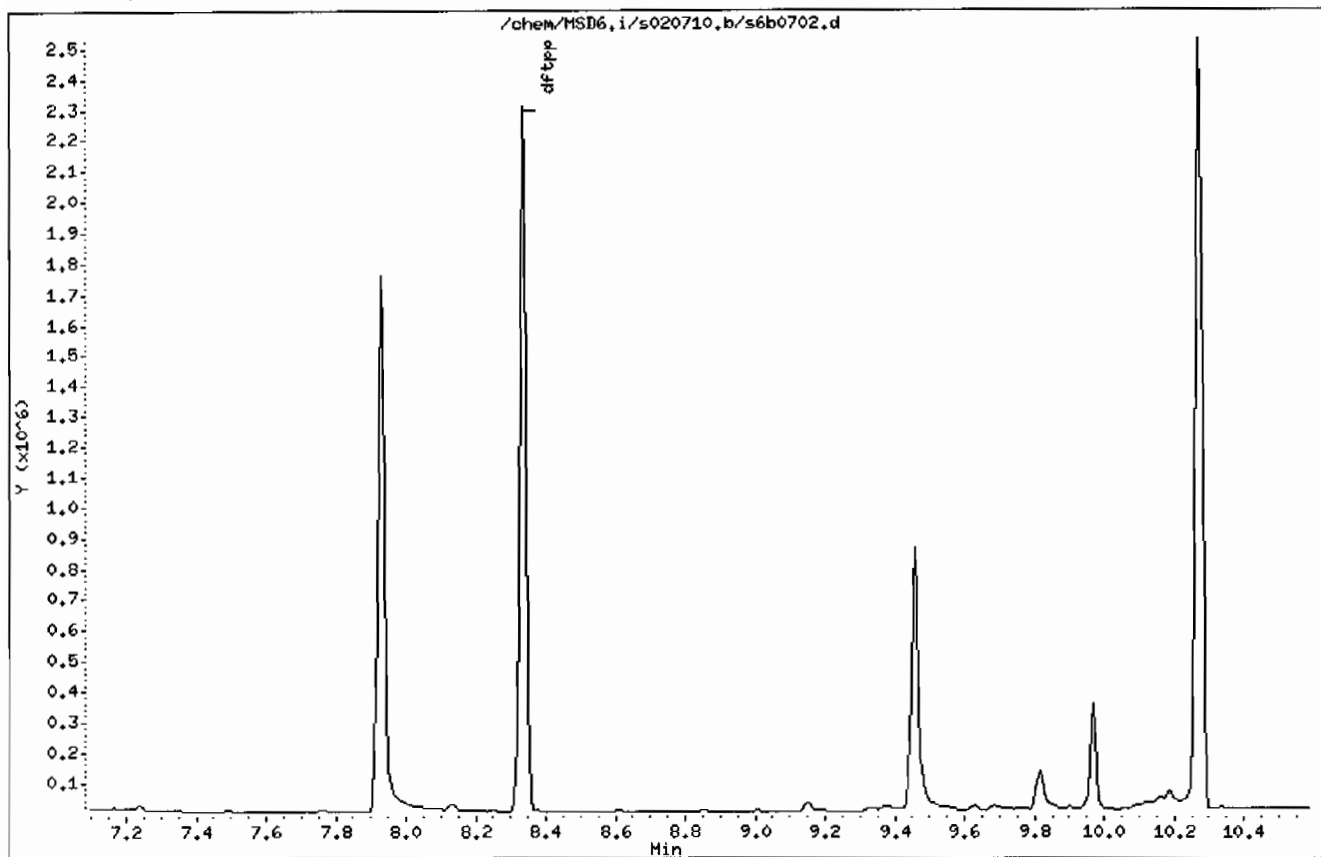
Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 07-FEB-2010 13:00

Client ID: DFTPP

Instrument: MSD6.i

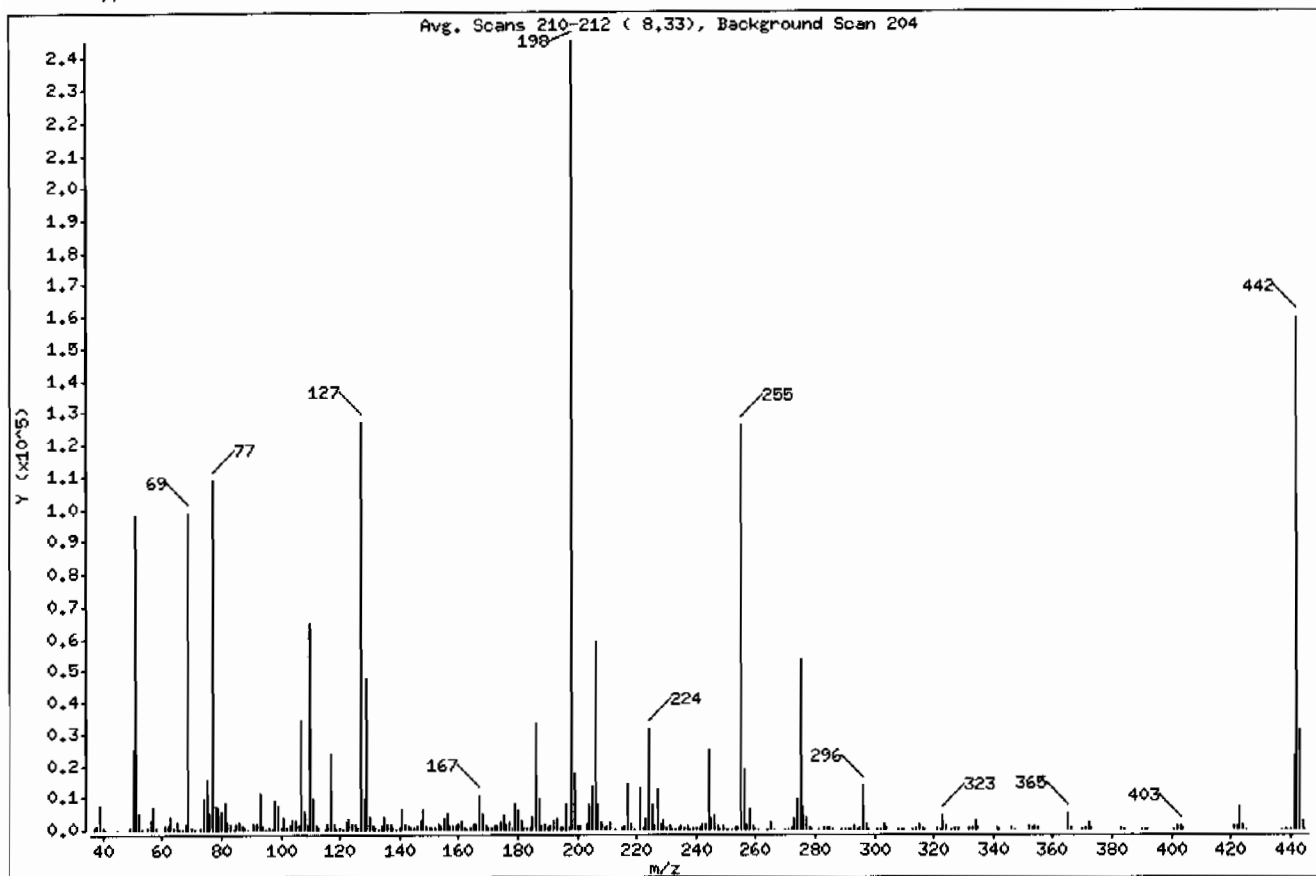
Sample Info: INBN100107-011DFTPP11ISVMF11DFTPP

Operator: nag1

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
61	30.00 - 60.00% of mass 198	39.92
68	Less than 2.00% of mass 69	0.62 (1.55)
69	Mass 69 relative abundance	40.16
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	51.70
197	Less than 1.00% of mass 198	0.19
199	5.00 - 9.00% of mass 198	7.05
275	10.00 - 30.00% of mass 198	21.91
365	Greater than 1.00% of mass 198	2.06
441	Present, but less than mass 443	9.37
442	Greater than 40.00% of mass 198	65.16
443	17.00 - 23.00% of mass 442	12.60 (19.34)

Date : 07-FEB-2010 13:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: INBN100107-01:DFTPP11:SVHF11:DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0702.d

Spectrum: Avg, Scans 210-212 (8.33), Background Scan 204

Location of Maximum: 198.00

Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	396	124.00	1556	199.00	17296	285.00	710
38.00	1162	125.00	1537	200.00	1330	286.00	109
39.00	7220	126.00	542	201.00	1241	289.00	225
40.00	325	127.00	126800	203.00	1489	290.00	93
41.00	192	128.00	9689	204.00	7995	291.00	43
45.00	198	129.00	47224	205.00	13644	292.00	220
49.00	582	130.00	4026	206.00	59184	293.00	939
50.00	24792	131.00	850	207.00	7930	294.00	277
51.00	97920	132.00	491	208.00	2041	295.00	308
52.00	4946	133.00	65	209.00	645	296.00	13350
53.00	233	134.00	1335	210.00	902	297.00	1722
55.00	413	135.00	3770	211.00	2310	298.00	45
56.00	3059	136.00	1528	213.00	191	301.00	140
57.00	6845	137.00	1807	215.00	588	302.00	236
58.00	285	138.00	389	216.00	1199	303.00	1577
61.00	1270	139.00	237	217.00	13990	304.00	444
62.00	1269	140.00	498	218.00	1807	308.00	182
63.00	3981	141.00	5952	219.00	174	309.00	155
64.00	497	142.00	1861	221.00	13181	310.00	203
65.00	2017	143.00	1287	222.00	567	313.00	102
66.00	175	144.00	330	223.00	3402	314.00	651
67.00	168	145.00	355	224.00	31336	315.00	1431
68.00	1525	146.00	1117	225.00	7844	316.00	834
69.00	98488	147.00	2684	226.00	943	317.00	117
70.00	549	148.00	6339	227.00	12406	321.00	366
71.00	86	149.00	1335	228.00	1644	322.00	212
73.00	576	150.00	355	229.00	2605	323.00	4323
74.00	9471	151.00	701	230.00	332	324.00	862
75.00	15766	152.00	525	231.00	1115	326.00	93
76.00	4997	153.00	1899	232.00	190	327.00	773
77.00	108632	154.00	1404	233.00	272	328.00	388
78.00	7198	155.00	3223	234.00	760	332.00	302
79.00	6895	156.00	5003	235.00	883	333.00	415
80.00	5378	157.00	972	236.00	565	334.00	2709
81.00	8221	158.00	1144	237.00	938	335.00	682

Date : 07-FEB-2010 13:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0702.d

Spectrum: Avg. Scans 210-212 (8.33), Background Scan 204

Location of Maximum: 198.00

Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y

82.00	2124	159.00	848	238.00	124	341.00	476
83.00	1802	160.00	1840	239.00	530	342.00	100
84.00	123	161.00	2733	240.00	395	346.00	738
85.00	1558	162.00	773	241.00	662	347.00	90
86.00	1991	163.00	228	242.00	1645	352.00	1165

87.00	992	164.00	336	243.00	1729	353.00	840
88.00	417	165.00	1960	244.00	24664	354.00	1147
89.00	160	166.00	1762	245.00	3343	355.00	289
91.00	1839	167.00	10568	246.00	4430	365.00	5061
92.00	1825	168.00	5052	247.00	933	366.00	700

93.00	11409	169.00	874	248.00	223	370.00	110
94.00	939	170.00	341	249.00	881	371.00	373
95.00	189	171.00	477	250.00	214	372.00	2179
96.00	602	172.00	1014	251.00	206	373.00	543
97.00	259	173.00	1320	252.00	239	383.00	521

98.00	8949	174.00	2471	253.00	472	384.00	132
99.00	7482	175.00	4682	254.00	843	390.00	254
100.00	644	176.00	1463	255.00	125536	391.00	223
101.00	4130	177.00	2108	256.00	18336	392.00	113
102.00	283	178.00	670	257.00	1485	401.00	116

103.00	1310	179.00	8161	258.00	6347	402.00	846
104.00	2737	180.00	5970	259.00	1090	403.00	1166
105.00	2636	181.00	2915	260.00	185	404.00	382
106.00	880	182.00	493	261.00	113	421.00	968
107.00	34216	183.00	293	264.00	169	422.00	952

108.00	5361	184.00	633	265.00	2374	423.00	7470
109.00	879	185.00	4024	266.00	272	424.00	1599
110.00	64664	186.00	33528	270.00	179	425.00	149
111.00	9559	187.00	9362	271.00	280	437.00	47
112.00	1129	188.00	959	272.00	339	438.00	126

113.00	390	189.00	1884	273.00	3582	439.00	152
115.00	168	190.00	310	274.00	9334	440.00	213
116.00	1723	191.00	1017	275.00	53728	441.00	22968
117.00	23688	192.00	2686	276.00	7260	442.00	159808
118.00	1768	193.00	3317	277.00	4170	443.00	30912

Date : 07-FEB-2010 13:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0702.d

Spectrum: Avg. Scans 210-212 (8.33), Background Scan 204

Location of Maximum: 198.00

Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	256	194.00	566	278.00	632	444.00	2789
120.00	442	195.00	454	279.00	154	445.00	132
121.00	108	196.00	7788	281.00	162		
122.00	2177	197.00	454	283.00	499		
123.00	3415	198.00	245248	284.00	427		

Data File: /chem/HSD6,i/s020810,b/s6b0801.d

Page 1

Date : 08-FEB-2010 13:50

Client ID: DFTPP

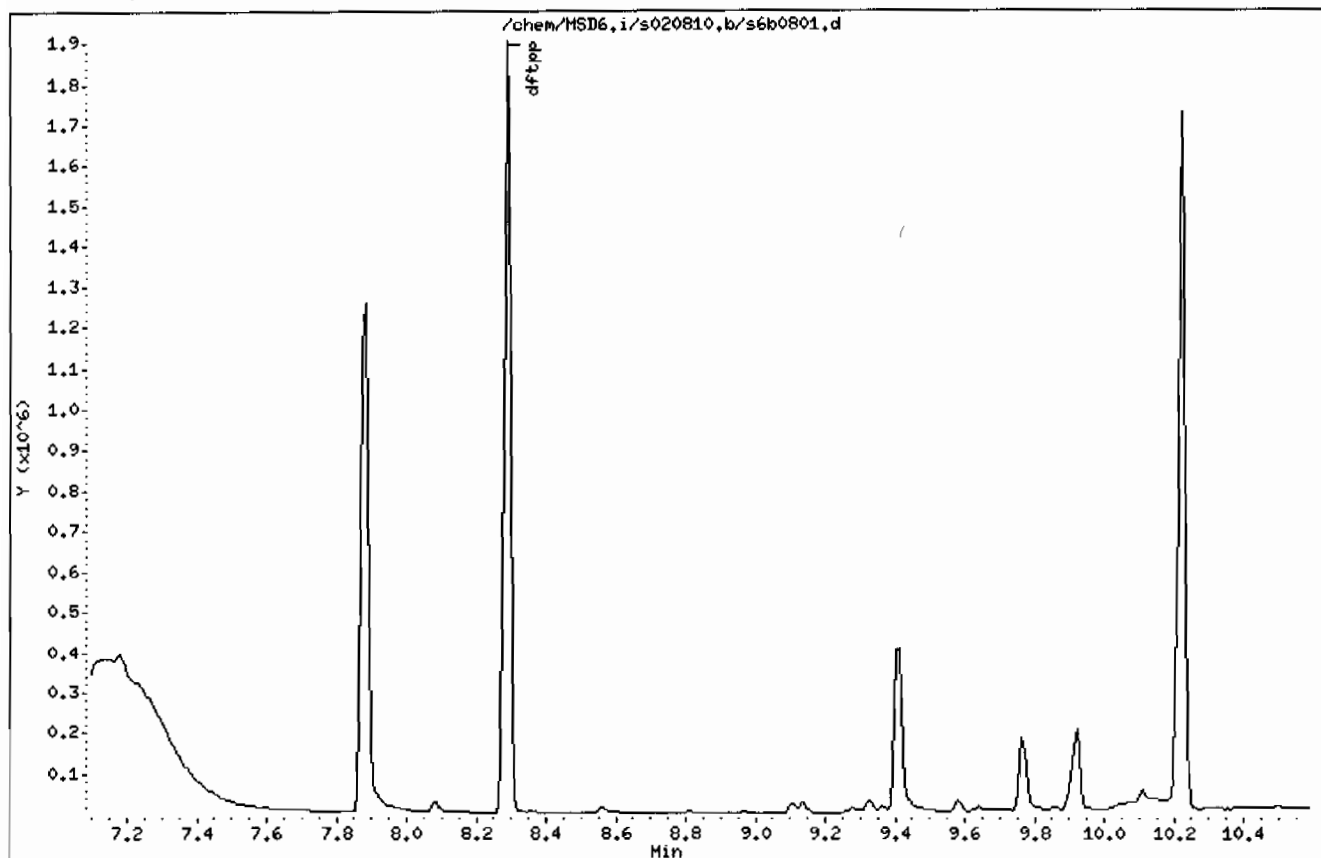
Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 08-FEB-2010 13:50

Client ID: DFTPP

Instrument: MSD6.i

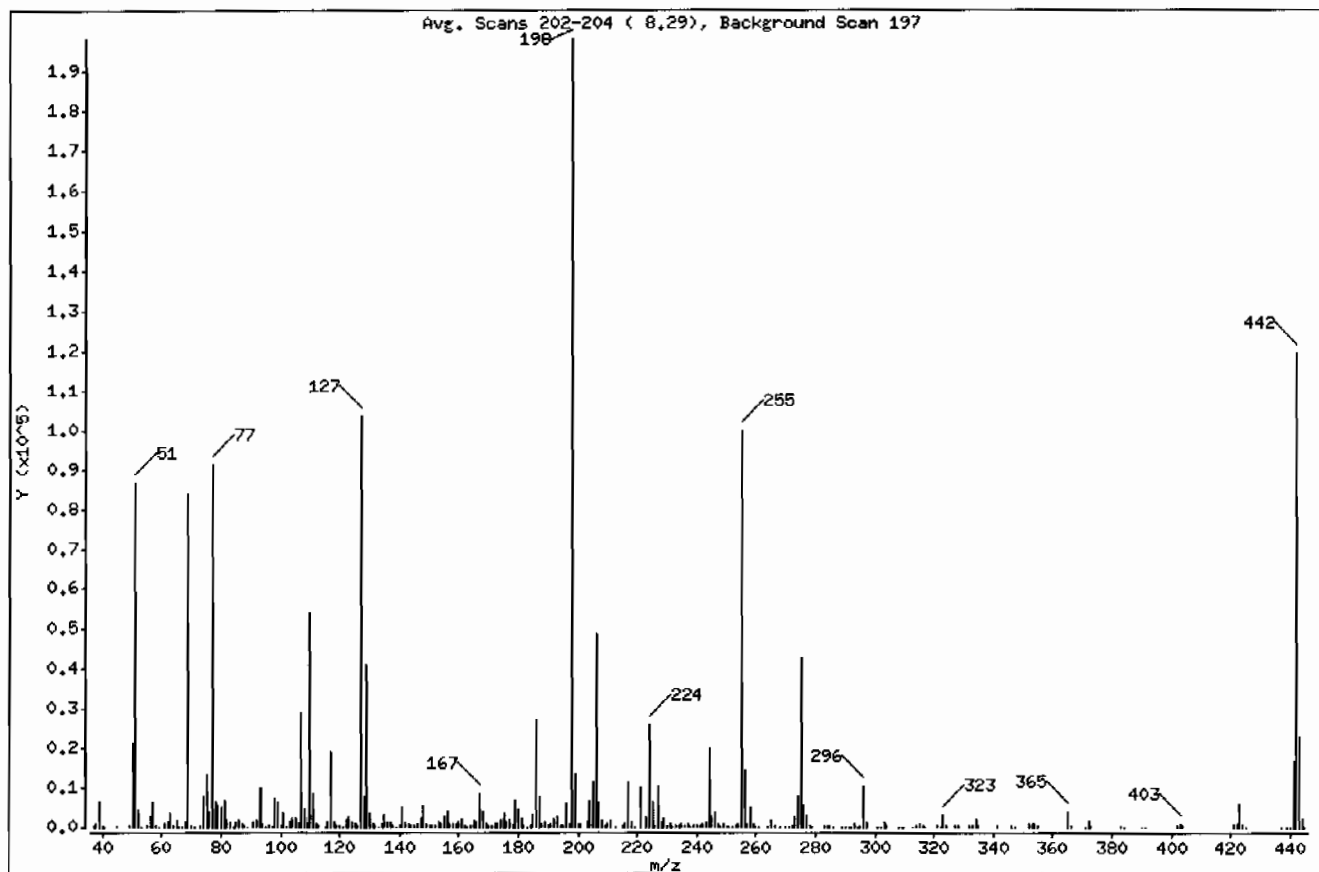
Sample Info: IWBNI00107-01|DFTPP11|SVMF11|DFTPP

Operator: nag1

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	43.58
68	Less than 2.00% of mass 69	0.71 (1.68)
69	Mass 69 relative abundance	42.36
70	Less than 2.00% of mass 69	0.23 (0.55)
127	40.00 - 60.00% of mass 198	52.22
197	Less than 1.00% of mass 198	0.47
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	21.52
365	Greater than 1.00% of mass 198	2.11
441	Present, but less than mass 443	8.56
442	Greater than 40.00% of mass 198	60.14
443	17.00 - 23.00% of mass 442	11.78 (19.58)

Date : 08-FEB-2010 13:50

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: I\BN100107-01\DFTPP11\SVHF11\DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0801.d

Spectrum: Avg. Scans 202-204 (8.29), Background Scan 197

Location of Maximum: 198.00

Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	356	121.00	207	194.00	511	276.00	5689
38.00	1030	122.00	1779	195.00	272	277.00	3249
39.00	6222	123.00	2795	196.00	5849	278.00	537
40.00	320	124.00	1193	197.00	931	279.00	44
41.00	121	125.00	1136	198.00	198400	283.00	430
45.00	233	126.00	453	199.00	13603	284.00	275
49.00	488	127.00	103616	200.00	1032	285.00	586
50.00	21232	128.00	7854	201.00	907	286.00	91
51.00	86456	129.00	40824	203.00	1265	289.00	129
52.00	4349	130.00	3446	204.00	6636	290.00	159
53.00	203	131.00	705	205.00	11194	291.00	83
55.00	314	132.00	354	206.00	48592	292.00	172
56.00	2555	133.00	73	207.00	6436	293.00	708
57.00	6268	134.00	1107	208.00	1669	294.00	213
58.00	304	135.00	3017	209.00	554	295.00	278
59.00	45	136.00	1204	210.00	755	296.00	10717
61.00	1031	137.00	1440	211.00	1846	297.00	1430
62.00	1220	138.00	370	213.00	118	301.00	97
63.00	3510	139.00	211	215.00	482	302.00	194
64.00	515	140.00	442	216.00	935	303.00	1226
65.00	1786	141.00	4793	217.00	11454	304.00	273
66.00	155	142.00	1538	218.00	1426	308.00	116
67.00	32	143.00	1134	219.00	120	309.00	91
68.00	1413	144.00	277	221.00	9827	310.00	108
69.00	84040	145.00	276	223.00	2623	313.00	85
70.00	465	146.00	831	224.00	25840	314.00	542
71.00	43	147.00	2373	225.00	6447	315.00	1086
73.00	454	148.00	5345	226.00	627	316.00	627
74.00	7898	149.00	1139	227.00	10265	317.00	97
75.00	13329	150.00	301	228.00	1489	321.00	361
76.00	4291	151.00	606	229.00	2182	322.00	120
77.00	91368	152.00	390	230.00	293	323.00	3354
78.00	6311	153.00	1449	231.00	898	324.00	678
79.00	5588	154.00	1120	232.00	134	327.00	669
80.00	4905	155.00	2533	233.00	234	328.00	341

Date : 08-FEB-2010 13:50

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0801.d

Spectrum: Avg. Scans 202-204 (8.29), Background Scan 197

Location of Maximum: 198.00

Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	6674	156.00	4275	234.00	582	332.00	279
82.00	1736	157.00	775	235.00	768	333.00	333
83.00	1571	158.00	907	236.00	484	334.00	2374
84.00	223	159.00	743	237.00	845	335.00	489
85.00	1186	160.00	1452	238.00	87	341.00	360
86.00	1746	161.00	2197	239.00	339	346.00	597
87.00	1006	162.00	580	240.00	299	347.00	91
88.00	324	163.00	218	241.00	600	352.00	998
89.00	196	164.00	261	242.00	1125	353.00	699
91.00	1464	165.00	1821	243.00	1366	354.00	1001
92.00	1719	166.00	1509	244.00	19872	355.00	231
93.00	9888	167.00	8746	245.00	2633	365.00	4196
94.00	822	168.00	4008	246.00	3769	366.00	607
95.00	167	169.00	770	247.00	740	371.00	213
96.00	486	170.00	317	248.00	160	372.00	1783
97.00	171	171.00	387	249.00	722	373.00	422
98.00	7482	172.00	764	250.00	44	383.00	449
99.00	6203	173.00	1088	251.00	164	384.00	102
100.00	531	174.00	1920	252.00	185	390.00	160
101.00	3555	175.00	3695	253.00	422	391.00	131
102.00	206	176.00	1150	254.00	766	402.00	648
103.00	1245	177.00	1784	255.00	99792	403.00	908
104.00	2278	178.00	641	256.00	14816	404.00	341
105.00	2272	179.00	6802	257.00	990	421.00	796
106.00	686	180.00	4738	258.00	5062	422.00	818
107.00	29000	181.00	2453	259.00	795	423.00	5750
108.00	4398	182.00	434	260.00	117	424.00	1119
109.00	842	183.00	178	261.00	145	425.00	44
110.00	54088	184.00	487	264.00	93	437.00	91
111.00	8518	185.00	3418	265.00	1983	439.00	150
112.00	959	186.00	27560	266.00	229	440.00	123
113.00	306	187.00	7882	268.00	8	441.00	16984
115.00	166	188.00	802	270.00	118	442.00	119328
116.00	1565	189.00	1546	271.00	212	443.00	23360
117.00	19368	190.00	292	272.00	262	444.00	2186

Date : 08-FEB-2010 13:50

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00107-01|DFTPP|1|SVHF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6b0801.d

Spectrum: Avg. Scans 202-204 (8.29), Background Scan 197

Location of Maximum: 198.00

Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1360	191.00	846	273.00	2852	445.00	104
119.00	262	192.00	2131	274.00	7752		
120.00	417	193.00	2595	275.00	42704		

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

SDG Number: 10-1510
Lab Sample ID: 1202033476

Client Sample: QC for batch 949131
Client ID: MB for batch 949131
Batch ID: 949132
Run Date: 02/07/2010 14:13
Prep Date: 02/04/2010 20:55
Data File: s6b0705-1.d

Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: SOIL
Project: QC
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	o-Nitroaniline	U	333	ug/kg	66.7	333
	3-Nitroaniline	U	333	ug/kg	66.7	333

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

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202033476

Client Sample: QC for batch 949131

Client: LANL010

Project: QC

Client ID: MB for batch 949131

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 949132

Inst: MSD6.1

Dilution: 1

Run Date: 02/07/2010 14:13

Analyst: NAGJ

Inj. Vol: .5 uL

Prep Date: 02/04/2010 20:55

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6b0705-1.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.47	383	ug/kg		JA

Data File: /chem/MSD6.i/s020710.b/s6b0705.d
Report Date: 08-Feb-2010 08:49

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Data file : /chem/MSD6.i/s020710.b/s6b0705.d
Lab Smp Id: 1202033476 Client Smp ID: SBLK01
Inj Date : 07-FEB-2010 14:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202033476|949132|1|SVM|1|MB
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.859	4.862 (1.000)	290565	40.0000	
* 29 Naphthalene-d8	136	6.136	6.141 (1.000)	1069716	40.0000	
* 46 Acenaphthene-d10	164	8.006	8.011 (1.000)	601024	40.0000	
* 67 Phenanthrene-d10	188	9.619	9.622 (1.000)	1044062	40.0000	
* 91 Chrysene-d12	240	12.636	12.646 (1.000)	745794	40.0000	
* 98 Perylene-d12	264	14.980	14.990 (1.000)	480805	40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697 (0.763)	518937	71.3178	2380
\$ 5 Phenol-d5	99	4.472	4.474 (0.920)	651881	70.9815	2370
\$ 20 Nitrobenzene-d5	82	5.397	5.404 (0.880)	301296	39.8165	1330
\$ 39 2-Fluorobiphenyl	172	7.262	7.265 (0.907)	579268	37.3990	1250
\$ 60 2,4,6-Tribromophenol	329	8.857	8.860 (1.106)	125737	71.6766	2390
\$ 81 p-Terphenyl-d14	244	11.324	11.324 (0.896)	566470	47.0992	1570

Data File: /chem/MSD6.i/s020710.b/s6b0705.d
 Report Date: 08-Feb-2010 08:49

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Data file : /chem/MSD6.i/s020710.b/s6b0705.d
 Lab Smp Id: 1202033476 Client Smp ID: SBLK01
 Inj Date : 07-FEB-2010 14:13
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |1202033476|949132|1|SVM|1|MB
 Misc Info : |MSD8270_S|WBN100122-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 4 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1510.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.859	1728279	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.473	496749	11.4969582	383	0		0	10

Data File: /chem/HSD6.i/s020710.b/s60705.d

Date: 07-FEB-2010 14:13

Client ID: SBLK01

Sample Info: 11202033476194913211SVN111HB

Volume Injected (uL): 0.5

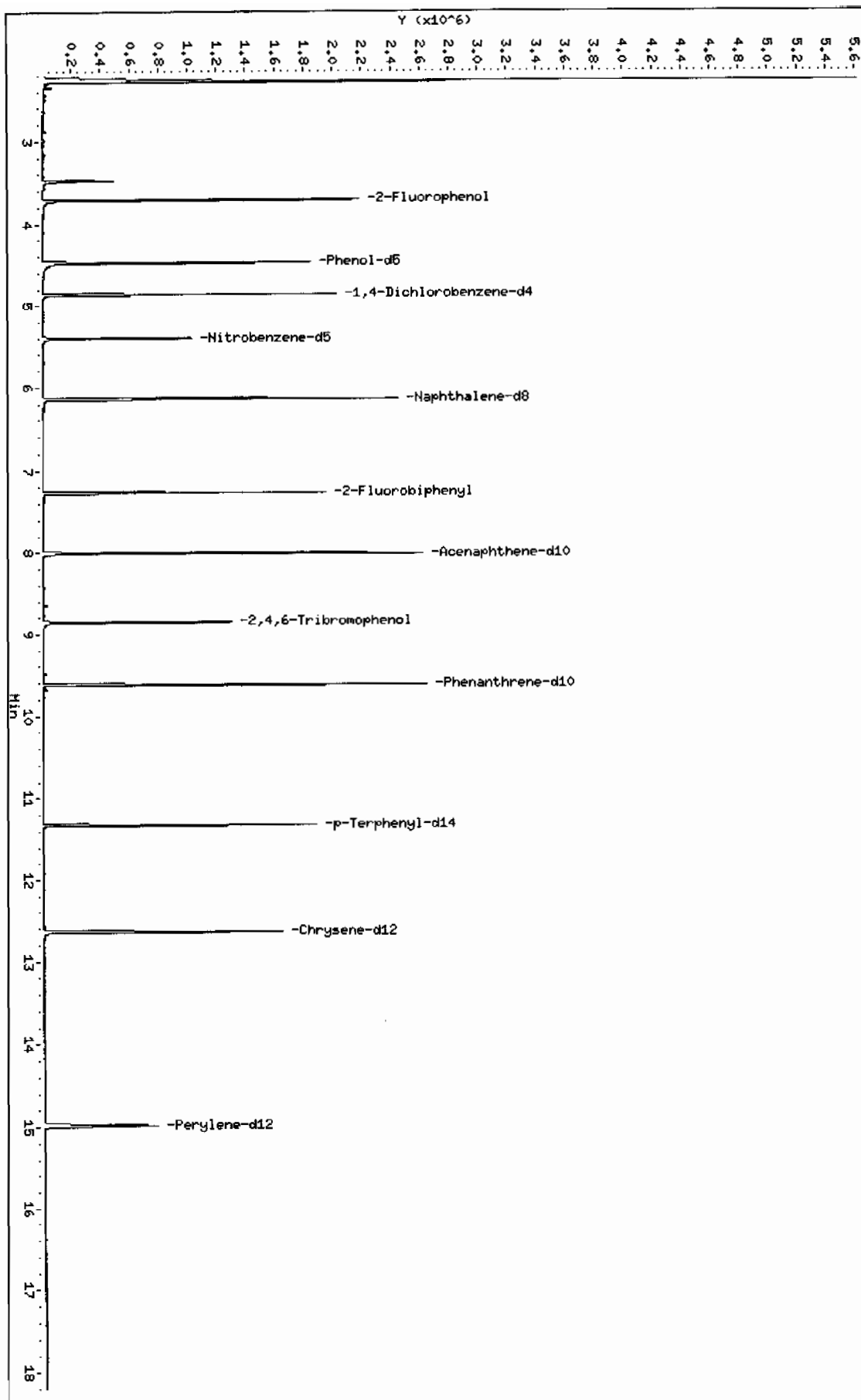
Column phase: J&W DB-5MS

Instrument: HSD6.i

Operator: nag1

Column diameter: 0.20

/chem/HSD6.i/s020710.b/s60705.d



Date : 07-FEB-2010 14:13

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202033476194913211ISVH11MB

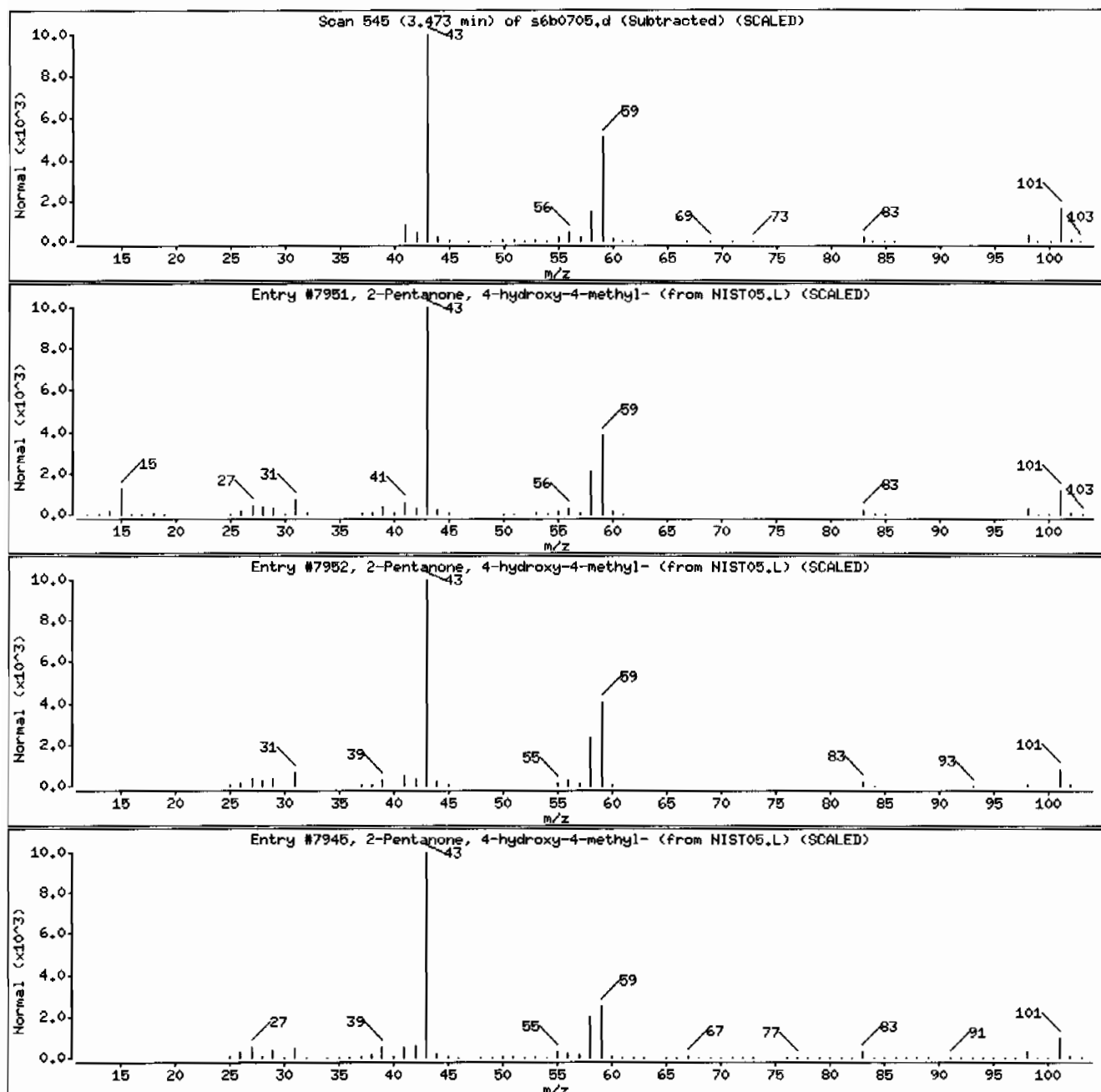
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116



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

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202033477

Client Sample: QC for batch 949131

Client: LANL010

Project: QC

Client ID: LCS for batch 949131

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 949132

Inst: MSD6.I

Dilution: 1

Run Date: 02/07/2010 14:41

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 02/04/2010 20:55

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6b0706-1.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		1010	ug/kg	66.7	333
108-95-2	Phenol		1240	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1220	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1320	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1300	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1420	ug/kg	66.7	333
83-32-9	Acenaphthene		1220	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1270	ug/kg	33.3	333
100-02-7	4-Nitrophenol		839	ug/kg	110	333
87-86-5	Pentachlorophenol		1190	ug/kg	83.3	333
129-00-0	Pyrene		1370	ug/kg	10.0	33.3
110-86-1	Pyridine		1170	ug/kg	66.7	333
62-53-3	Aniline		1040	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1150	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1320	ug/kg	66.7	333
100-51-6	Benzyl alcohol	J	291	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1350	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1240	ug/kg	66.7	333
95-48-7	o-Cresol		1220	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1440	ug/kg	100	333
67-72-1	Hexachloroethane		1330	ug/kg	66.7	333
98-95-3	Nitrobenzene		1260	ug/kg	66.7	333
78-59-1	Isophorone		1300	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1310	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1260	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1200	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1340	ug/kg	66.7	333
65-85-0	Benzoic acid		3250	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		902	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1460	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1380	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1240	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1280	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1240	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1350	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1140	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1130	ug/kg	66.7	333

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

SDG Number: 10-1510		Matrix: SOIL
Lab Sample ID: 1202033477		
Client Sample: QC for batch 949131	Client: LANL010	Project: QC
Client ID: LCS for batch 949131	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 949132	Inst: MSD6.I	Dilution: 1
Run Date: 02/07/2010 14:41	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 02/04/2010 20:55	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6b0706-1.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		1300	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1240	ug/kg	33.3	333
208-96-8	Acenaphthylene		1320	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1240	ug/kg	127	667
132-64-9	Dibenzofuran		1240	ug/kg	66.7	333
84-66-2	Diethylphthalate		1350	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1310	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1260	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1260	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1260	ug/kg	66.7	333
122-66-7	Azobenzene		1260	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1260	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1320	ug/kg	66.7	333
85-01-8	Phenanthrene		1300	ug/kg	10.0	33.3
120-12-7	Anthracene		1300	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1390	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1430	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1290	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1000	ug/kg	100	333
218-01-9	Chrysene		1290	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1310	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1590	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1500	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1480	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1510	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1270	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1260	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1260	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1400	ug/kg	66.7	333

Data File: /chem/MSD6.i/s020710.b/s6b0706.d
Report Date: 08-Feb-2010 08:50

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Data file : /chem/MSD6.i/s020710.b/s6b0706.d
Lab Smp Id: 1202033477 Client Smp ID: SBLK01LCS
Inj Date : 07-FEB-2010 14:41
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202033477|949132|1|SVM|1|LCS
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1510.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.862	4.862	(1.000)	291659	40.0000	
* 29 Naphthalene-d8	136	6.138	6.141	(1.000)	1160363	40.0000	
* 46 Acenaphthene-d10	164	8.009	8.011	(1.000)	628390	40.0000	
* 67 Phenanthrene-d10	188	9.622	9.622	(1.000)	1099347	40.0000	
* 91 Chrysene-d12	240	12.644	12.646	(1.000)	807941	40.0000	
* 98 Perylene-d12	264	14.988	14.990	(1.000)	536868	40.0000	
\$ 3 2-Fluorophenol	112	3.710	3.697	(0.763)	504435	69.0648	2300
\$ 5 Phenol-d5	99	4.480	4.474	(0.921)	643327	69.7873	2330
\$ 20 Nitrobenzene-d5	82	5.402	5.404	(0.880)	296983	36.1806	1210
\$ 39 2-Fluorobiphenyl	172	7.265	7.265	(0.907)	582720	35.9835	1200
\$ 60 2,4,6-Tribromophenol	329	8.862	8.860	(1.107)	130900	71.3702	2380
\$ 81 p-Terphenyl-d14	244	11.324	11.324	(0.896)	582495	44.7062	1490

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	4.492	4.490	(0.924)	344242	37.1395	1240 (Q)
8 2-Chlorophenol		128	4.666	4.665	(0.960)	271444	36.4586	1220
11 1,4-Dichlorobenzene		146	4.880	4.880	(1.004)	344304	39.6268	1320
17 N-Nitrosodipropylamine		70	5.234	5.239	(1.077)	201750	39.0449	1300 (Q)
28 1,2,4-Trichlorobenzene		180	6.070	6.072	(0.989)	295287	41.9559	1400
33 4-Chloro-3-methylphenol		107	6.704	6.691	(1.092)	247236	42.7064	1420
47 Acenaphthene		154	8.044	8.047	(1.004)	517209	36.5196	1220
50 2,4-Dinitrotoluene		165	8.205	8.207	(1.024)	185358	38.2312	1270
52 4-Nitrophenol		139	8.139	8.123	(1.016)	56653	25.1841	839
65 Pentachlorophenol		266	9.408	9.405	(0.978)	82809	35.6095	1190
79 Pyrene		202	11.186	11.186	(0.885)	912365	41.0558	1370
2 Pyridine		79	2.811	2.777	(0.578)	217844	35.2495	1170
4 Aniline		66	4.548	4.553	(0.936)	120207	31.2518	1040
7 bis(2-Chloroethyl) ether		63	4.589	4.589	(0.944)	217160	34.5986	1150
9 1,3-Dichlorobenzene		146	4.811	4.811	(0.990)	339164	39.5706	1320
12 Benzyl alcohol		108	4.979	4.976	(1.024)	40412	8.73690	291 (aR)
13 1,2-Dichlorobenzene		146	5.025	5.027	(1.034)	329273	40.5991	1350
14 bis(2-Chloroisopropyl) ether		45	5.091	5.096	(1.047)	519451	37.0694	1240
15 o-Cresol		107	5.068	5.063	(1.042)	221497	36.5384	1220
18 m,p-Cresols		107	5.216	5.218	(1.073)	331569	43.1659	1440
19 Hexachloroethane		117	5.356	5.359	(1.102)	134233	39.9342	1330
21 Nitrobenzene		77	5.422	5.425	(0.883)	312330	37.7524	1260
22 Isophorone		82	5.654	5.657	(0.921)	573949	39.1385	1300
23 2-Nitrophenol		139	5.736	5.738	(0.934)	150271	39.3793	1310
24 2,4-Dimethylphenol		122	5.754	5.754	(0.937)	238516	37.7244	1260
25 bis(2-Chloroethoxy) methane		93	5.851	5.853	(0.953)	310403	35.9680	1200
26 2,4-Dichlorophenol		162	5.986	5.983	(0.975)	230745	40.2368	1340
27 Benzoic acid		105	5.891	5.868	(0.960)	380951	97.6156	3250
30 Naphthalene		128	6.161	6.164	(1.004)	823930	35.5958	1190
31 4-Chloroaniline		127	6.205	6.205	(1.011)	201207	27.0454	902
32 Hexachlorobutadiene		225	6.266	6.268	(1.021)	161023	43.9352	1460
34 2-Methylnaphthalene		142	6.885	6.885	(1.122)	580169	41.5361	1380
36 Hexachlorocyclopentadiene		237	7.038	7.040	(0.879)	94766	37.3361	1240
37 2,4,6-Trichlorophenol		196	7.181	7.178	(0.897)	165163	38.5193	1280
38 2,4,5-Trichlorophenol		196	7.226	7.219	(0.902)	169540	37.1284	1240
40 2-Chloronaphthalene		162	7.410	7.410	(0.925)	572927	40.5973	1350
42 o-Nitroaniline		65	7.514	7.512	(0.938)	165339	34.2460	1140
41 m-Nitroaniline		138	7.958	7.958	(0.994)	120002	33.9542	1130
43 Dimethylphthalate		163	7.690	7.698	(0.960)	630070	39.0867	1300
44 2,6-Dinitrotoluene		165	7.769	7.772	(0.970)	142603	37.0886	1240
45 Acenaphthylene		152	7.858	7.861	(0.981)	897345	39.5465	1320
48 2,4-Dinitrophenol		184	8.072	8.072	(1.008)	46591	37.1817	1240
49 Dibenzofuran		168	8.228	8.230	(1.027)	712943	37.2936	1240
51 Diethylphthalate		149	8.447	8.447	(1.055)	658898	40.5885	1350
53 Fluorene		166	8.600	8.602	(1.074)	613074	39.0722	1300
54 4-Chlorophenylphenylether		204	8.582	8.584	(1.072)	290673	39.2072	1310
55 2-Methyl-4,6-dinitrophenol		198	8.651	8.653	(0.899)	91417	37.9450	1260

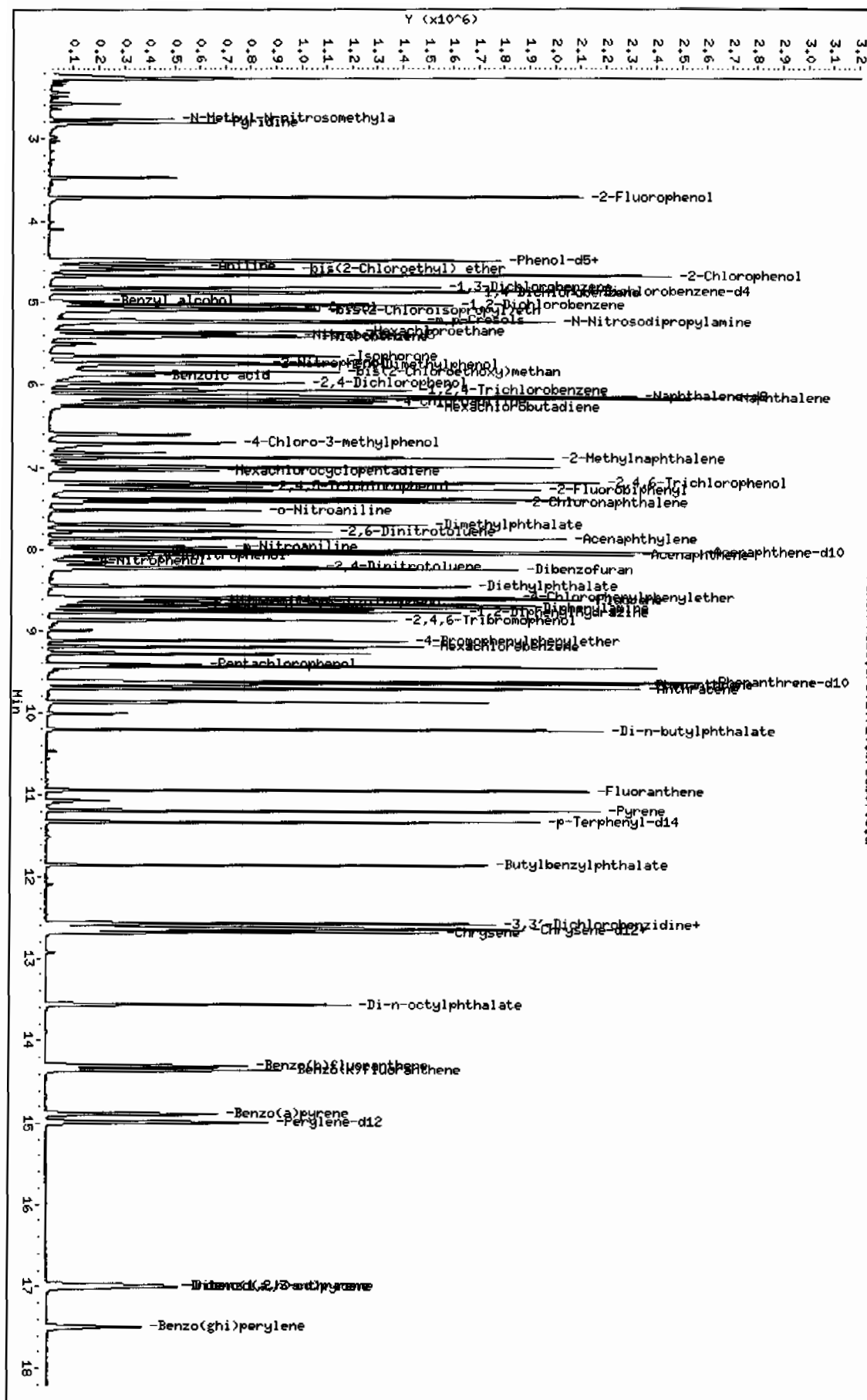
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline		138	8.623	8.620	(1.077)	122911	37.7300	1260
133 Diphenylamine		169	8.715	8.714	(0.906)	502722	37.9390	1260
58 1,2-Diphenylhydrazine		77	8.758	8.760	(0.910)	634908	37.6691	1260
61 4-Bromophenylphenylether		248	9.115	9.114	(0.947)	164215	37.8553	1260
63 Hexachlorobenzene		284	9.196	9.193	(0.956)	179691	39.5457	1320
68 Phenanthrene		178	9.650	9.650	(1.003)	887532	39.0383	1300
69 Anthracene		178	9.703	9.706	(1.008)	887758	39.0667	1300
72 Di-n-butylphthalate		149	10.205	10.203	(1.061)	1084571	41.5596	1380
76 Fluoranthene		202	10.937	10.936	(1.137)	889052	40.8223	1360
85 Butylbenzylphthalate		149	11.854	11.856	(0.938)	436910	42.9604	1430
89 Benzo(a)anthracene		228	12.623	12.626	(0.998)	676125	38.7876	1290
90 3,3'-Dichlorobenzidine		252	12.565	12.565	(0.994)	171698	30.0887	1000
92 Chrysene		228	12.679	12.682	(1.003)	648482	38.8263	1290
93 bis(2-Ethylhexyl)phthalate		149	12.578	12.577	(0.995)	548968	39.1830	1310
94 Di-n-octylphthalate		149	13.564	13.563	(0.905)	812020	47.5905	1590
95 Benzo(b)fluoranthene		252	14.305	14.305	(0.954)	533500	44.9104	1500
96 Benzo(k)fluoranthene		252	14.354	14.353	(0.958)	525039	44.4477	1480
97 Benzo(a)pyrene		252	14.884	14.886	(0.993)	465321	45.3510	1510
99 Indeno(1,2,3-cd)pyrene		276	16.983	16.983	(1.133)	370882	38.1182	1270
100 Dibenzo(a,h)anthracene		278	17.006	17.008	(1.135)	300236	37.8428	1260
101 Benzo(ghi)perylene		276	17.500	17.500	(1.168)	296472	37.8218	1260(Q)
1 N-Methyl-N-nitrosomethylamine		74	2.765	2.739	(0.569)	150385	30.2871	1010

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.1/s020710.b/sdb0706.d
 Date: 07-FEB-2010 14:41
 Client ID: SBLK01LCS
 Sample Info: 1120203347719493211SVN11LCS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD6.1
 Operator: nag1
 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: 949131 Verified by: _____
 Analyst: Alberto Velasco
 Method: SW846 3550B
 Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202033476 MB	04-FEB-2010 20:55:00	30	1	0.03333
1202033477 LCS	04-FEB-2010 20:55:00	30	1	0.03333
245959001	04-FEB-2010 20:55:00	30.07	1	0.03326
245959002	04-FEB-2010 20:55:00	30.11	1	0.03321
245959003	04-FEB-2010 20:55:00	30.11	1	0.03321
245959004	04-FEB-2010 20:55:00	30.08	1	0.03324
245959005	04-FEB-2010 20:55:00	30.18	1	0.03313
245959006	04-FEB-2010 20:55:00	30.18	1	0.03313
245959007	04-FEB-2010 20:55:00	30.03	1	0.0333
245959008	04-FEB-2010 20:55:00	30.03	1	0.0333
245959009	04-FEB-2010 20:55:00	30.19	1	0.03312
245959010	04-FEB-2010 20:55:00	30.07	1	0.03326
245959012	04-FEB-2010 20:55:00	30.05	1	0.03328
246058001	04-FEB-2010 20:55:00	30.01	1	0.03332
246058002	04-FEB-2010 20:55:00	30.18	1	0.03313
246058003	04-FEB-2010 20:55:00	30.01	1	0.03332
246060001	04-FEB-2010 20:55:00	30.15	1	0.03317
246060002	04-FEB-2010 20:55:00	30.12	1	0.0332
246062001	04-FEB-2010 20:55:00	30.06	1	0.03327
1202033478 MS (246062001)	04-FEB-2010 20:55:00	30.03	1	0.0333
1202033479 MSD (246062001)	04-FEB-2010 20:55:00	30.02	1	0.03331
246062002	04-FEB-2010 20:55:00	30.19	1	0.03312

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202033477	BNA LCS w/o Benzidine 50ppm	UE100127-12	1	mL	Verified By: AJS
LCS	1202033477	BENZIDINE LCS	UE100203-22	1	mL	Final Solvent: CH2Cl2
MS	1202033478	BNA LCS w/o Benzidine 50ppm	UE100127-12	1	mL	
MS	1202033478	BENZIDINE LCS	UE100203-22	1	mL	
MSD	1202033479	BNA LCS w/o Benzidine 50ppm	UE100127-12	1	mL	
MSD	1202033479	BENZIDINE LCS	UE100203-22	1	mL	
SURR	All	BNA for all Surrogate	UE100203-10	1	mL	
REGNT	All	Methylene Chloride	1262945-D	150	mL	
REGNT	All	Acetone	1264558	150	mL	
SOURC	All	SODIUM SULFATE	1265308	30	g	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 11/09/2009

METHOD: See raw data

OPERATOR: JMB3

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1198658-D

Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10

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. 22

Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	150 PPM	s110909	1.0 DFTPP	DUSE	
s6k0902.d	Inst Blk	JMB3	09-NOV-2009 11:35	-----	s110909	1.0 INST BLK	DUSE	
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	11 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	120 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	140 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	150 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	180 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0 MEGAICAL	DUSE	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	150 PPM	s110909	1.0 DFTPP		
s6k0912.d	WBN091101-01	JMB3	09-NOV-2009 18:00	150 PPM	s110909	1.0 DFTPP		
s6k0912.d	Inst Blk	JMB3	09-NOV-2009 18:15	-----	s110909	1.0 INST BLK		
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	11 PPM	s110909	1.0 MEGAICAL		
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	110 PPM	s110909	1.0 MEGAICAL		
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	120 PPM	s110909	1.0 MEGAICAL		
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	140 PPM	s110909	1.0 MEGAICAL		
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	150 PPM	s110909	1.0 MEGAICAL		
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	180 PPM	s110909	1.0 MEGAICAL		

1s6k0919.d	1WBNO91106-02	JMB3	09-NOV-2009 22:39	100 PPM	1s110909	1	1.0 MEGAICAL	1
1s6k0920.d	1WBNO91106-01	JMB3	09-NOV-2009 23:16	120 PPM	1s110909	1	1.0 MEGAICAL	1
1s6k0921-D.d	1WBNO91101-01	JMB3	10-NOV-2009 11:07	150 PPM	1s110909	1	1.0 DFTTP	1
1s6k0921.d	1WBNO91101-01	JMB3	10-NOV-2009 11:07	150 PPM	1s110909	1	1.0 DFTTP	1
1s6k0922.d	1inst blk	JMB3	10-NOV-2009 11:21	-----1s110909	1.0 INST BLK	1		1
1s6k0923.d	1WBNO91016-01	JMB3	10-NOV-2009 11:59	10 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0924.d	1WBNO91016-02	JMB3	10-NOV-2009 12:36	20 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0925.c	1WBNO91016-03	JMB3	10-NOV-2009 13:13	40 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0926.d	1WBNO91016-04	JMB3	10-NOV-2009 13:51	150 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0927.d	1WBNO91016-05	JMB3	10-NOV-2009 14:30	180 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0928.d	1WBNO91016-06	JMB3	10-NOV-2009 15:06	100 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0929.d	1WBNO91016-07	JMB3	10-NOV-2009 15:43	120 PPM	1s110909	1	1.0 AP12ICAL	1
1s6k0930.d	1WBNO91029-25	JMB3	10-NOV-2009 16:20	10 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0931.d	1WBNO91029-24	JMB3	10-NOV-2009 16:56	20 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0932.d	1WBNO91029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0933.d	1WBNO91029-22	JMB3	10-NOV-2009 18:09	50 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0934.d	1WBNO91029-21	JMB3	10-NOV-2009 18:45	180 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0935.d	1WBNO91029-20	JMB3	10-NOV-2009 19:21	100 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0936.d	1WBNO91029-19	JMB3	10-NOV-2009 19:58	120 PPM	1s110909	1	1.0 PESTICAL	1
1s6k0937-D.d	1WBNO91106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	1s110909	1	1.0 MEGAICV	FAILED SC 8270D
1s6k0937.d	1WBNO91106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	1s110909	1	1.0 MEGAICV	1
1s6k0938-D.d	1WBNO91016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	1s110909	1	1.0 AP12ICV	1
1s6k0938.d	1WBNO91016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	1s110909	1	1.0 AP12ICV	1
1s6k0939-D.d	1WBNO91029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	1s110909	1	1.0 PESTICV	1
1s6k0939.d	1WBNO91029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	1s110909	1	1.0 PESTICV	1
1s6k0940-D.d	1WBNO91101-01	JMB3	10-NOV-2009 22:12	150 PPM	1s110909	1	1.0 DFTTP	1
1s6k0940.d	1WBNO91101-01	JMB3	10-NOV-2009 22:12	150 PPM	1s110909	1	1.0 DFTTP	1

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	1000 PPM	1.0 HEXICAL	
s6k0942.d	WBND091016-16	JMB3	10-NOV-2009 22:55	500 PPM	1.0 HEXICAL	
s6k0943.d	WBND091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	1.0 HEXICAL	
s6k0944.d	WBND091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	1.0 HEXICAL	
s6k0945.d	WBND091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	1.0 HEXICAL	
s6k0946.d	WBND091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	1.0 HEXICAL	
s6k0947.d	WBND090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	1.0 HEXICAL	
s6k0948.d	WBND090924-01	JMB3	11-NOV-2009 01:47	10 PPM	1.0 NEVICAL	
s6k0949.d	WBND090924-02	JMB3	11-NOV-2009 02:16	20 PPM	1.0 NEVICAL	
s6k0950.d	WBND090924-03	JMB3	11-NOV-2009 02:44	140 PPM	1.0 NEVICAL	
s6k0951.d	WBND090924-04	JMB3	11-NOV-2009 03:12	150 PPM	1.0 NEVICAL	DOSE - disabled
s6k0952.d	WBND090924-05	JMB3	11-NOV-2009 03:41	180 PPM	1.0 NEVICAL	
s6k0953.d	WBND090924-06	JMB3	11-NOV-2009 04:10	100 PPM	1.0 NEVICAL	
s6k0954.d	WBND090924-07	JMB3	11-NOV-2009 04:38	120 PPM	1.0 NEVICAL	DOSE - disabled
s6k0955-D.d	WBND091016-10.1	JMB3	11-NOV-2009 05:07	11250 PPM	1.0 HEXICV	DOSE - failed >70%-130%
s6k0955.d	WBND091016-10.1	JMB3	11-NOV-2009 05:07	11250 PPM	1.0 HEXICV	

Instrument Batch: /chem/MSD6.i/s110909.b

Page: 2

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 02/07/2010 METHOD: See raw data OPERATOR: nagl
 HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D
 Multiplier Voltage: 1529 Emv Extr. Injection Volume: 0.5, 1.0 ul
 DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100122-01
 CALIBRATION & QC INFORMATION:
 Initial Calibration Dates: See Calibration History and Standard Logbook.
 Initial Calibration Std ID's: See Calibration History and Standard Logbook.

REVIEWED BY: _____
 DATE: _____

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD6.i/s020710.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
ts6b0701.d	WBN100107-01	nagl	07-FEB-2010 12:22	DFTPP	is020710	1.0	DFTPP	IDUSE
ts6b0702.d	WBN100107-01	nagl	07-FEB-2010 13:00	DFTPP	is020710	1.0	DFTPP	
ts6b0703.d	WBN100121-17.4	nagl	07-FEB-2010 13:14	CCV	is020710	1.0	MEGACVS	1283821
ts6b0704.d	WBN100120-03.2	nagl	07-FEB-2010 13:45	CCV	is020710	1.0	APCVS	
ts6b0705.d	1202033476	nagl	07-FEB-2010 14:13	949132	10-1510	1.0	MB	
ts6b0706.d	1202033477	nagl	07-FEB-2010 14:41	949132	10-1510	1.0	ICS	failed <5%
ts6b0707.d	1245959001	nagl	07-FEB-2010 15:09	949132	10-1510	1.0	LANL	
ts6b0708.d	1245959002	nagl	07-FEB-2010 15:37	949132	10-1510	1.0	LANL	
ts6b0709.d	1245959003	nagl	07-FEB-2010 16:05	949132	10-1510	1.0	LANL	
ts6b0710.d	1245959004	nagl	07-FEB-2010 16:32	949132	10-1510	1.0	LANL	
ts6b0711.d	1245959005	nagl	07-FEB-2010 17:00	949132	10-1510	1.0	LANL	
ts6b0712.d	1245959006	nagl	07-FEB-2010 17:28	949132	10-1510	1.0	LANL	
ts6b0713.d	1245959007	nagl	07-FEB-2010 17:55	949132	10-1510	1.0	LANL	
ts6b0714.d	1245959008	nagl	07-FEB-2010 18:23	949132	10-1510	1.0	LANC	
ts6b0715.d	1245959009	nagl	07-FEB-2010 18:50	949132	10-1510	1.0	LANL	
ts6b0716.d	1245959010	nagl	07-FEB-2010 19:17	949132	10-1510	1.0	LANL	IDUSE - failed IS - rx - see s6b0808
ts6b0717.d	1245959012	nagl	07-FEB-2010 19:44	949132	10-1510	1.0	LANL	
ts6b0718.d	1246058001	nagl	07-FEB-2010 20:12	949132	10-1530	1.0	LANL	
ts6b0719.d	1246058002	nagl	07-FEB-2010 20:39	949132	10-1530	1.0	LANL	

s6b0720.d	1246058003	inag1	07-FEB-2010 21:06	949132	10-1530	1.0 LANL	
s6b0721.d	1246060001	inag1	07-FEB-2010 21:33	949132	10-1531	1.0 LANL	
s6b0722.d	1246060002	inag1	07-FEB-2010 22:00	949132	10-1531	1.0 LANL	
s6b0723.d	1246062001	inag1	07-FEB-2010 22:27	949132	10-1532	1.0 LANL	
s6b0724.d	11202033478	inag1	07-FEB-2010 22:54	949132	10-1532	1.0 MS	DOSE - failed surr/spike - rr - see s6b0806
s6b0725.d	11202033479	inag1	07-FEB-2010 23:21	949132	10-1532	1.0 MSD	DOSE - failed spike - rr - see s6b0807
s6b0726.d	1246062002	inag1	07-FEB-2010 23:48	949132	10-1532	1.0 LANL	
s6b0727.d	1245679006	inag1	08-FEB-2010 00:15	947953	10-1449	1.0 LANL	DOSE - rr of s6b0522 - failed IS
s6b0728.d	1245679009	inag1	08-FEB-2010 00:43	947953	10-1449	1.0 LANL	DOSE - rr of s6b0525 - failed IS
s6b0729.d	1245679010	inag1	08-FEB-2010 01:10	947953	10-1449	1.0 LANL	DOSE - rr of s6b0526 - outside TUNE window
s6b0730.d	1245679011	inag1	08-FEB-2010 01:37	947953	10-1449	1.0 LANL	DOSE - rr of s6b0528- outside TUNE window

Instrument Batch: /chem/MSD6.i/s020710.b

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 02/08/2010 METHOD: See raw data OPERATOR: nagl REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D

Multiplier Voltage: 1529 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100205-01

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/MSD6.i/s020810.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6b0801.d	WBN100107-01	nagl	08-FEB-2010 13:50	CCV	s020810	1.0	DFTPP	
s6b0802.d	WBN100121-17.4	nagl	08-FEB-2010 14:04	CCV	s020810	1.0	MEGACVS	245875
s6b0803.d	WBN100120-03.4	nagl	08-FEB-2010 14:37	CCV	s020810	1.0	APCVS	
s6b0804.d	1202032302	nagl	08-FEB-2010 15:09	948647	10-1492	1.0	SBLK01	
s6b0805.d	1202032303	nagl	08-FEB-2010 15:36	948647	10-1492	1.0	SBLK01LCS	
s6b0806.d	1202033478	nagl	08-FEB-2010 16:04	949132	10-1532	1.0	MS	USE - rr of s6b0724
s6b0807.d	1202033479	nagl	08-FEB-2010 16:32	949132	10-1532	1.0	MSD	USE - rr of s6b0725
s6b0808.d	1245959010	nagl	08-FEB-2010 17:00	949132	10-1510	1.0	LANL	USE - rr of s6b0716
s6b0809.d	1245916001	nagl	08-FEB-2010 17:28	948647	10-1492	1.0	LANL	
s6b0810.d	1245916002	nagl	08-FEB-2010 17:56	948647	10-1492	1.0	LANL	
s6b0811.d	1245916003	nagl	08-FEB-2010 18:24	948647	10-1492	1.0	LANL	
s6b0812.d	1245916004	nagl	08-FEB-2010 18:51	948647	10-1492	1.0	LANL	
s6b0813.d	1245916005	nagl	08-FEB-2010 19:19	948647	10-1492	1.0	LANL	
s6b0814.d	1245935001	nagl	08-FEB-2010 19:47	948647	10-1505	1.0	LANL	
s6b0815.d	1202032304	nagl	08-FEB-2010 20:15	948647	10-1505	1.0	MS	failed spike
s6b0816.d	1202032305	nagl	08-FEB-2010 20:43	948647	10-1505	1.0	MSD	failed spike - manual
s6b0817.d	1245935002	nagl	08-FEB-2010 21:11	948647	10-1505	1.0	LANL	
s6b0818.d	1245935003	nagl	08-FEB-2010 21:39	948647	10-1505	1.0	LANL	
s6b0819.d	1245935004	nagl	08-FEB-2010 22:06	948647	10-1505	1.0	LANL	

1s6b0820.d	1245935005	1nag1	08-FEB-2010 22:34	1948647	10-1505	1.0	LANL	DUSE - failed IS - rr - see s6b1422
1s6b0821.d	1245935006	1nag1	08-FEB-2010 23:01	1948647	10-1505	1.0	LANL	
1s6b0822.d	1245935008	1nag1	08-FEB-2010 23:28	1948647	10-1505	1.0	LANL	
1s6b0823.d	1245935009	1nag1	08-FEB-2010 23:56	1948647	10-1505	1.0	LANL	DUSE - failed IS - rr - see s6b1423
1s6b0824.d	1245679010	1nag1	09-FEB-2010 00:24	1947953	10-1449	1.0	LANL	USE - rr of s6b0526
1s6b0825.d	1245679011	1nag1	09-FEB-2010 00:51	1947953	10-1449	1.0	LANL	DUSE - failed IS - rr of s6b0528

Instrument Batch: /chem/MSD6.i/s020810.b

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DATA EXCEPTION REPORT

Mo. Day Yr. 09-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEMIVOA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 949132	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245959(10-1510),246058(10-1530),246060(10-1531),246062(10-1532)			
Application Issues: Failed RPD for MS/MSD, or PS/PSD Failed Recovery for LCS/LCSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. The LCS failed recovery for Benzyl alcohol. Please see the spike recovery report for the specific failures. 2. The MS/MSD failed RPD for Benzoic acid and bis(2-Chloroethoxy)methane. Please see the spike recovery report for the specific failures.		1. The failure represented less than 5% of the requested spike analyte list. That satisfied the clients acceptance criteria and the data were reported. 2. The MS and MSD pair passed recoveries for all analytes. Therefore, the data were reported un-qualified for the RPD value failure.	

Originator's Name:

Nathan Greene 09-FEB-10

Data Validator/Group Leader:

Daniel Beacham 12-FEB-10

Data File: /chem/MSD6.i/s020710.b/s6b0724.d
Report Date: 08-Feb-2010 09:38

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0724.d
Lab Smp Id: 1202033478 Client Smp ID: RE52-10-12020MS
Inj Date : 07-FEB-2010 22:54
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202033478|949132|1|SVM|1|MS
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1532.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	888800.00000	% 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	4.862	4.862	(1.000)	292020	40.0000	
* 29 Naphthalene-d8	136	6.141	6.141	(1.000)	1123847	40.0000	
* 46 Acenaphthene-d10	164	8.009	8.011	(1.000)	648742	40.0000	
* 67 Phenanthrene-d10	188	9.622	9.622	(1.000)	1128543	40.0000	
* 91 Chrysene-d12	240	12.641	12.646	(1.000)	696114	40.0000	
* 98 Perylene-d12	264	14.980	14.990	(1.000)	395588	40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697	(0.763)	417790	57.1310	57.1
\$ 5 Phenol-d5	99	4.479	4.474	(0.921)	511439	55.4117	55.4
\$ 20 Nitrobenzene-d5	82	5.399	5.404	(0.879)	284116	35.7377	35.7
\$ 39 2-Fluorobiphenyl	172	7.265	7.265	(0.907)	587666	35.1504	35.2
\$ 60 2,4,6-Tribromophenol	329	8.865	8.860	(1.107)	42472	22.4304	22.4 (R)
\$ 81 p-Terphenyl-d14	244	11.324	11.324	(0.896)	614253	54.7170	54.7

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	4.495	4.490	(0.925)	256935	27.6859	27.7 (Q)
8 2-Chlorophenol		128	4.668	4.665	(0.960)	258550	34.6839	34.7
11 1,4-Dichlorobenzene		146	4.877	4.880	(1.003)	314490	36.1507	36.2
17 N-Nitrosodipropylamine		70	5.234	5.239	(1.077)	199250	38.5134	38.5 (Q)
28 1,2,4-Trichlorobenzene		180	6.072	6.072	(0.989)	280919	41.2114	41.2
47 Acenaphthene		154	8.044	8.047	(1.004)	543637	37.1814	37.2
50 2,4-Dinitrotoluene		165	8.207	8.207	(1.025)	202077	40.3720	40.4
79 Pyrene		202	11.186	11.186	(0.885)	953545	49.8020	49.8
2 Pyridine		79	2.808	2.777	(0.578)	148067	23.9292	23.9
4 Aniline		66	4.548	4.553	(0.936)	149574	38.8387	38.8 (Q)
7 bis(2-Chloroethyl) ether		63	4.586	4.589	(0.943)	205861	32.7578	32.8
9 1,3-Dichlorobenzene		146	4.811	4.811	(0.990)	314104	36.6015	36.6
13 1,2-Dichlorobenzene		146	5.025	5.027	(1.034)	307547	37.8734	37.9
14 bis(2-Chloroisopropyl)ether		45	5.091	5.096	(1.047)	487363	34.7366	34.7
15 o-Cresol		107	5.078	5.063	(1.045)	136115	22.4259	22.4 (Q)
18 m,p-Cresols		107	5.218	5.218	(1.073)	209736	27.2711	27.3 (Q)
19 Hexachloroethane		117	5.356	5.359	(1.102)	113311	33.6683	33.7
21 Nitrobenzene		77	5.422	5.425	(0.883)	295584	36.8891	36.9
22 Isophorone		82	5.654	5.657	(0.921)	569551	40.1006	40.1
23 2-Nitrophenol		139	5.738	5.738	(0.934)	142993	38.6896	38.7
24 2,4-Dimethylphenol		122	5.759	5.754	(0.938)	86555	14.1346	14.1
25 bis(2-Chloroethoxy)methane		93	5.850	5.853	(0.953)	312541	37.3925	37.4
26 2,4-Dichlorophenol		162	5.998	5.983	(0.977)	250078	45.0250	45.0
27 Benzoic acid		105	5.896	5.868	(0.960)	302676	80.0783	80.1
30 Naphthalene		128	6.161	6.164	(1.003)	814325	36.3240	36.3
31 4-Chloroaniline		127	6.205	6.205	(1.010)	257809	35.7796	35.8
32 Hexachlorobutadiene		225	6.266	6.268	(1.020)	152880	43.0688	43.1
34 2-Methylnaphthalene		142	6.885	6.885	(1.121)	616506	45.5717	45.6
36 Hexachlorocyclopentadiene		237	7.038	7.040	(0.879)	43779	16.7070	16.7
37 2,4,6-Trichlorophenol		196	7.186	7.178	(0.897)	78692	17.7768	17.8 (Q)
40 2-Chloronaphthalene		162	7.412	7.410	(0.926)	592711	40.6816	40.7
42 o-Nitroaniline		65	7.514	7.512	(0.938)	190004	38.1201	38.1
41 m-Nitroaniline		138	7.960	7.958	(0.994)	151437	41.5044	41.5
43 Dimethylphthalate		163	7.693	7.698	(0.961)	682463	41.0088	41.0
44 2,6-Dinitrotoluene		165	7.772	7.772	(0.970)	154212	38.8497	38.8
45 Acenaphthylene		152	7.858	7.861	(0.981)	939834	40.1197	40.1
48 2,4-Dinitrophenol		184	8.077	8.072	(1.009)	9887	19.1640	19.2 (aQ)
49 Dibenzofuran		168	8.228	8.230	(1.027)	784942	39.7718	39.8
51 Diethylphthalate		149	8.444	8.447	(1.054)	710611	42.4008	42.4
53 Fluorene		166	8.600	8.602	(1.074)	668119	41.2445	41.2
54 4-Chlorophenylphenylether		204	8.584	8.584	(1.072)	318445	41.6057	41.6
55 2-Methyl-4,6-dinitrophenol		198	8.651	8.653	(0.899)	53349	24.6299	24.6
56 p-Nitroaniline		138	8.625	8.620	(1.077)	146381	42.4398	42.4
133 Diphenylamine		169	8.714	8.714	(0.906)	570748	41.9584	42.0
58 1,2-Diphenylhydrazine		77	8.758	8.760	(0.910)	694052	40.1128	40.1
61 4-Bromophenylphenylether		248	9.117	9.114	(0.948)	180940	40.6317	40.6
63 Hexachlorobenzene		284	9.196	9.193	(0.956)	198654	42.5880	42.6

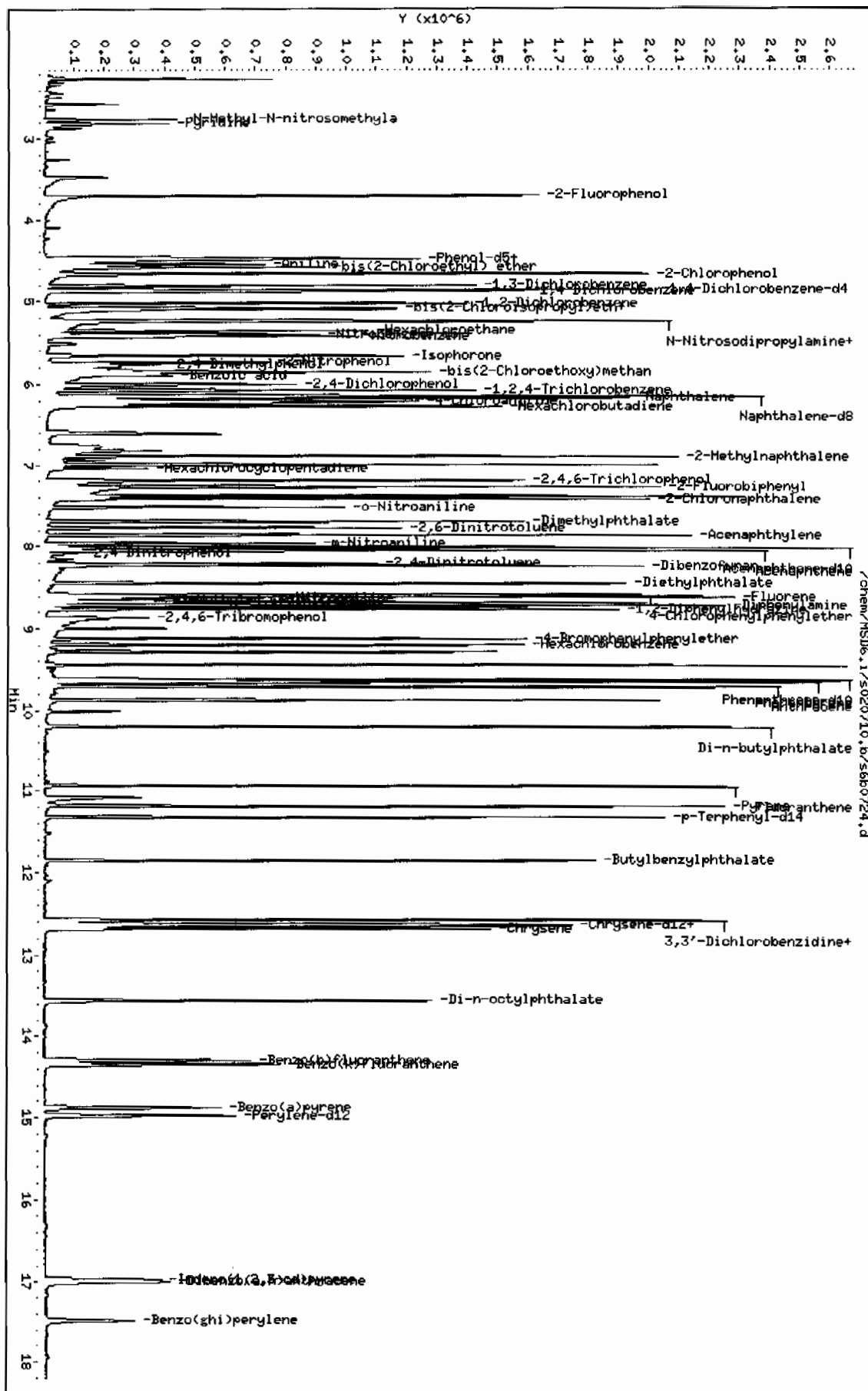
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
68 Phenanthrene	178	9.650	9.650	(1.003)	977852	41.8984	41.9
69 Anthracene	178	9.706	9.706	(1.009)	985409	42.2421	42.2
72 Di-n-butylphthalate	149	10.203	10.203	(1.060)	1180774	44.0755	44.1
76 Fluoranthene	202	10.936	10.936	(1.137)	951720	42.5693	42.6
85 Butylbenzylphthalate	149	11.854	11.856	(0.938)	466200	53.2045	53.2
89 Benzo(a)anthracene	228	12.623	12.626	(0.999)	656610	43.7193	43.7
90 3,3'-Dichlorobenzidine	252	12.570	12.565	(0.994)	178788	36.3644	36.4
92 Chrysene	228	12.677	12.682	(1.003)	624271	43.3811	43.4
93 bis(2-Ethylhexyl)phthalate	149	12.575	12.577	(0.995)	603286	49.8651	49.9
94 Di-n-octylphthalate	149	13.558	13.563	(0.905)	889774	70.7714	70.8
95 Benzo(b)fluoranthene	252	14.300	14.305	(0.955)	456879	52.1961	52.2
96 Benzo(k)fluoranthene	252	14.346	14.353	(0.958)	461993	53.0783	53.1
97 Benzo(a)pyrene	252	14.878	14.886	(0.993)	389003	51.4531	51.4
99 Indeno(1,2,3-cd)pyrene	276	16.975	16.983	(1.133)	284262	39.5276	39.5
100 Dibenzo(a,h)anthracene	278	17.001	17.008	(1.135)	240316	40.8745	40.9
101 Benzo(ghi)perylene	276	17.488	17.500	(1.167)	221458	38.3420	38.3(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.762	2.739	(0.568)	135862	27.3284	27.3

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/s020710.b/s60724.d
 Date : 07-FEB-2010 22:54
 Client ID: RES2-10-12020MS
 Sample Info: 11202034781949132111SM111MS
 Volume Injected (uL): 0.5
 Column phase: JSM DB-SHS

Instrument: MSD6.i
 Operator: nag1
 Column diameter: 0.20



Data File: /chem/MSD6.i/s020710.b/s6b0725.d
Report Date: 08-Feb-2010 09:39

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020710.b/s6b0725.d
Lab Smp Id: 1202033479 Client Smp ID: RE52-10-12020MSD
Inj Date : 07-FEB-2010 23:21
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202033479|949132|1|SVM|1|MS
Misc Info : |MSD8270_S|WBN100122-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s020710.b/MSD6-M8270C-AQA-110909.m
Meth Date : 08-Feb-2010 08:45 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1532.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	888800.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.857	4.862	(1.000)	309939		40.0000	
* 29 Naphthalene-d8	136	6.138	6.141	(1.000)	1189860		40.0000	
* 46 Acenaphthene-d10	164	8.009	8.011	(1.000)	674731		40.0000	
* 67 Phenanthrene-d10	188	9.621	9.622	(1.000)	1173409		40.0000	
* 91 Chrysene-d12	240	12.641	12.646	(1.000)	698055		40.0000	
* 98 Perylene-d12	264	14.980	14.990	(1.000)	371329		40.0000	
\$ 3 2-Fluorophenol	112	3.707	3.697	(0.763)	431880		55.6434	55.6
\$ 5 Phenol-d5	99	4.479	4.474	(0.922)	556791		56.8377	56.8
\$ 20 Nitrobenzene-d5	82	5.399	5.404	(0.880)	262519		31.1891	31.2
\$ 39 2-Fluorobiphenyl	172	7.264	7.265	(0.907)	558115		32.0971	32.1
\$ 60 2,4,6-Tribromophenol	329	8.862	8.860	(1.107)	112441		57.0953	57.1
\$ 81 p-Terphenyl-d14	244	11.324	11.324	(0.896)	606749		53.8983	53.9

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	4.490	4.490	(0.924)	270296	27.4417	27.4 (Q)
8 2-Chlorophenol		128	4.663	4.665	(0.960)	229553	29.0136	29.0
11 1,4-Dichlorobenzene		146	4.872	4.880	(1.003)	282499	30.5959	30.6
17 N-Nitrosodipropylamine		70	5.231	5.239	(1.077)	185635	33.8073	33.8 (Q)
28 1,2,4-Trichlorobenzene		180	6.069	6.072	(0.989)	258245	35.7832	35.8
33 4-Chloro-3-methylphenol		107	6.712	6.691	(1.093)	134331	22.6285	22.6
47 Acenaphthene		154	8.044	8.047	(1.004)	525774	34.5746	34.6
50 2,4-Dinitrotoluene		165	8.207	8.207	(1.025)	197940	38.0223	38.0
52 4-Nitrophenol		139	8.164	8.123	(1.019)	21704	13.6704	13.7 (Q)
65 Pentachlorophenol		266	9.410	9.405	(0.978)	37615	18.2395	18.2
79 Pyrene		202	11.186	11.186	(0.885)	937534	48.8296	48.8
2 Pyridine		79	2.821	2.777	(0.581)	147227	22.4179	22.4
4 Aniline		66	4.546	4.553	(0.936)	148259	36.2715	36.3 (Q)
7 bis(2-Chloroethyl) ether		63	4.581	4.589	(0.943)	184703	27.6918	27.7
9 1,3-Dichlorobenzene		146	4.806	4.811	(0.990)	279116	30.6441	30.6
13 1,2-Dichlorobenzene		146	5.020	5.027	(1.034)	278473	32.3104	32.3
14 bis(2-Chloroisopropyl) ether		45	5.088	5.096	(1.048)	447178	30.0297	30.0
15 o-Cresol		107	5.068	5.063	(1.044)	199004	30.8918	30.9
18 m,p-Cresols		107	5.213	5.218	(1.073)	281604	34.4989	34.5
19 Hexachloroethane		117	5.351	5.359	(1.102)	101644	28.4556	28.4
21 Nitrobenzene		77	5.417	5.425	(0.883)	268740	31.6782	31.7
22 Isophorone		82	5.652	5.657	(0.921)	542312	36.0644	36.1
23 2-Nitrophenol		139	5.736	5.738	(0.934)	133692	34.1661	34.2
24 2,4-Dimethylphenol		122	5.766	5.754	(0.939)	138097	21.3004	21.3
25 bis(2-Chloroethoxy) methane		93	5.850	5.853	(0.953)	292501	33.0534	33.0
26 2,4-Dichlorophenol		162	5.996	5.983	(0.977)	233013	39.6250	39.6
27 Benzoic acid		105	5.891	5.868	(0.960)	346834	86.6702	86.7
30 Naphthalene		128	6.161	6.164	(1.004)	747801	31.5060	31.5
31 4-Chloroaniline		127	6.204	6.205	(1.011)	312294	40.9366	40.9
32 Hexachlorobutadiene		225	6.266	6.268	(1.021)	139163	37.0294	37.0
34 2-Methylnaphthalene		142	6.882	6.885	(1.121)	561745	39.2201	39.2
36 Hexachlorocyclopentadiene		237	7.038	7.040	(0.879)	38253	14.0359	14.0
37 2,4,6-Trichlorophenol		196	7.180	7.178	(0.897)	153240	33.2841	33.3
38 2,4,5-Trichlorophenol		196	7.231	7.219	(0.903)	155533	31.7216	31.7
40 2-Chloronaphthalene		162	7.410	7.410	(0.925)	566364	37.3760	37.4
42 o-Nitroaniline		65	7.514	7.512	(0.938)	185957	35.8712	35.9
41 m-Nitroaniline		138	7.958	7.958	(0.994)	157576	41.5234	41.5
43 Dimethylphthalate		163	7.690	7.698	(0.960)	658639	38.0528	38.0
44 2,6-Dinitrotoluene		165	7.769	7.772	(0.970)	148759	36.0325	36.0
45 Acenaphthylene		152	7.858	7.861	(0.981)	910430	37.3675	37.4
48 2,4-Dinitrophenol		184	8.077	8.072	(1.009)	20178	23.6498	23.6
49 Dibenzofuran		168	8.228	8.230	(1.027)	760247	37.0368	37.0
51 Diethylphthalate		149	8.447	8.447	(1.055)	685158	39.3074	39.3
53 Fluorene		166	8.600	8.602	(1.074)	649346	38.5416	38.5
54 4-Chlorophenylphenylether		204	8.582	8.584	(1.072)	310334	38.9842	39.0
55 2-Methyl-4,6-dinitrophenol		198	8.651	8.653	(0.899)	52193	23.5936	23.6
56 p-Nitroaniline		138	8.625	8.620	(1.077)	146883	41.1939	41.2

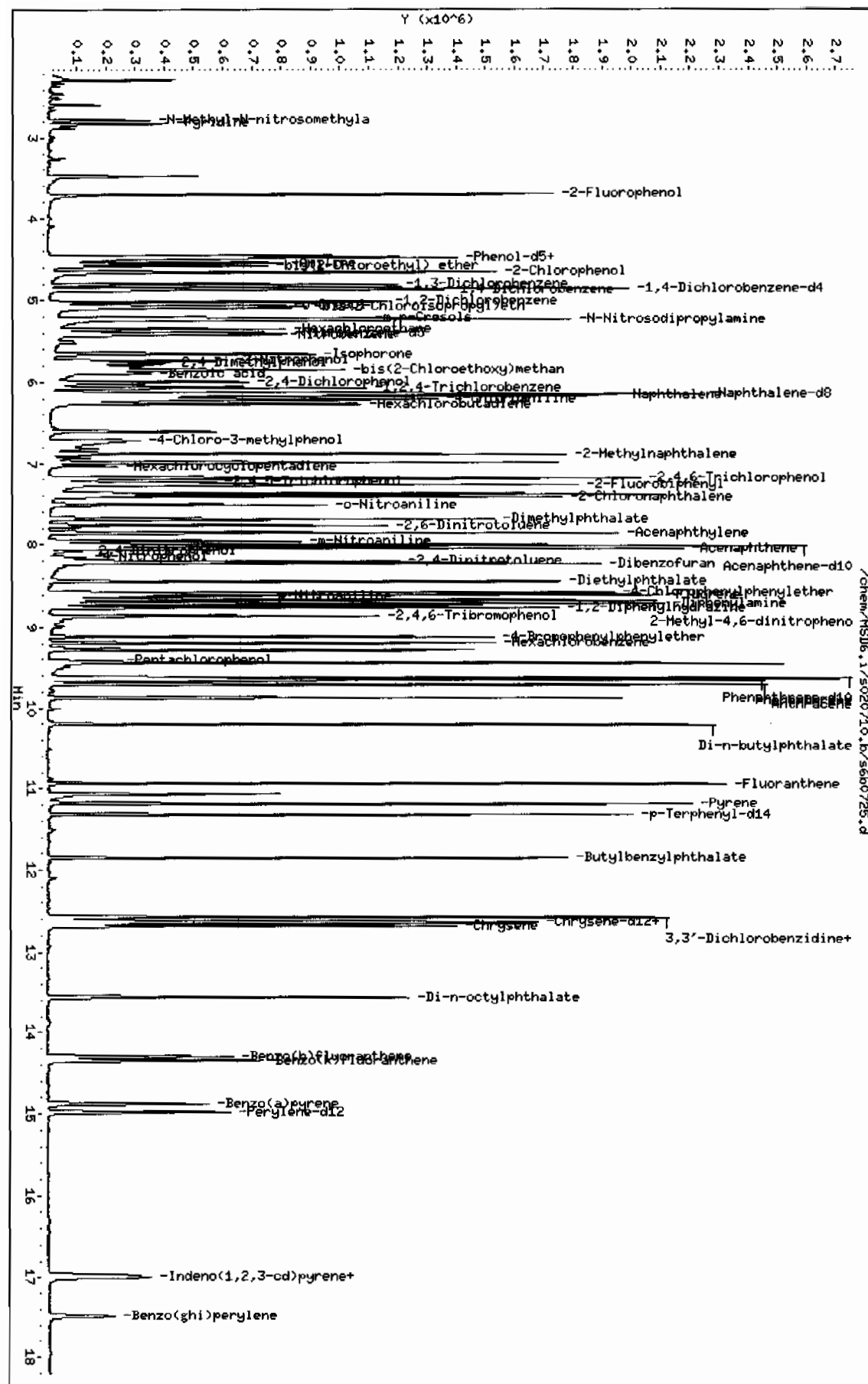
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
133 Diphenylamine	169	8.714	8.714	(0.906)	555842	39.3001	39.3
58 1,2-Diphenylhydrazine	77	8.758	8.760	(0.910)	683752	38.0066	38.0
61 4-Bromophenylphenylether	248	9.114	9.114	(0.947)	177135	38.2563	38.2
63 Hexachlorobenzene	284	9.193	9.193	(0.956)	193230	39.8413	39.8
68 Phenanthrene	178	9.650	9.650	(1.003)	967599	39.8738	39.9
69 Anthracene	178	9.703	9.706	(1.008)	965604	39.8104	39.8
72 Di-n-butylphthalate	149	10.202	10.203	(1.060)	1172792	42.1037	42.1
76 Fluoranthene	202	10.936	10.936	(1.137)	945491	40.6736	40.7
85 Butylbenzylphthalate	149	11.854	11.856	(0.938)	453592	51.6216	51.6
89 Benzo(a)anthracene	228	12.621	12.626	(0.998)	627777	41.6833	41.7
90 3,3'-Dichlorobenzidine	252	12.565	12.565	(0.994)	190222	38.5824	38.6
92 Chrysene	228	12.677	12.682	(1.003)	599964	41.5761	41.6
93 bis(2-Ethylhexyl)phthalate	149	12.575	12.577	(0.995)	595067	49.0557	49.0
94 Di-n-octylphthalate	149	13.561	13.563	(0.905)	866657	73.4361	73.4(R)
95 Benzo(b)fluoranthene	252	14.300	14.305	(0.955)	417965	50.8699	50.9
96 Benzo(k)fluoranthene	252	14.348	14.353	(0.958)	420050	51.4123	51.4
97 Benzo(a)pyrene	252	14.878	14.886	(0.993)	349186	49.2039	49.2
99 Indeno(1,2,3-cd)pyrene	276	16.975	16.983	(1.133)	243048	36.2753	36.3
100 Dibenzo(a,h)anthracene	278	16.998	17.008	(1.135)	202554	36.9788	37.0
101 Benzo(ghi)perylene	276	17.490	17.500	(1.168)	184686	34.0645	34.1(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.775	2.739	(0.571)	126493	23.9728	24.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/5020710.b/560725.d
 Date : 07-FEB-2010 23:21
 Client ID: RES2-10-12020MSD
 Sample Info: 1202033479194913211.SVN11.INS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD6.i
 Operator: nag1
 Column diameter: 0.20



LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1510**

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: 948572

Prep Batch Number: 948571

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
245959001	RE15-10-7309
245959002	RE15-10-7308
245959003	RE15-10-7315
245959004	RE15-10-7317
245959005	RE15-10-7319
245959006	RE15-10-7312
245959007	RE15-10-7313
245959008	RE15-10-7314
245959009	RE15-10-7316
245959010	RE15-10-7318
245959012	RE15-10-7324
1202032097	Method Blank (MB)
1202032098	Laboratory Control Sample (LCS)
1202032099	245959001(RE15-10-7309) Matrix Spike (MS)
1202032100	245959001(RE15-10-7309) Matrix Spike Duplicate (MSD)

10-1510-EXPLCMS

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Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 245959001 (RE15-10-7309) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for RDX was 46.3%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 793093.

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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

Samples 1202032097 (MB), 1202032098 (LCS), 245959001 (RE15-10-7309), 1202032099 (RE15-10-7309MS), 1202032100 (RE15-10-7309MSD) and 245959002 (RE15-10-7308) were re-analyzed due to failing acceptance criteria. The re-analysis passed acceptance criteria and is reported.

Secondary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

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.

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QC Sample Designation

Sample 245959001 (RE15-10-7309) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

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

Data exception report 793093 was generated for this SDG.

The MS/MSD RPD for RDX was 46.3%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported.

Manual Integrations

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

Flagging Convention

The samples were not originally analyzed using SW-846 Method 8330.

Additional Comments

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert M. Mauer

Date: 02/24/10

SAMPLE DATA SUMMARY

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216085a

Date Analyzed: 18-FEB-10 10:37

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140124.wiff

Date Analyzed: 15-FEB-10 22:30

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: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216088a

Date Analyzed: 18-FEB-10 12:06

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140127.wiff

Date Analyzed: 15-FEB-10 23:17

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: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216092a

Date Analyzed: 18-FEB-10 14:04

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140128.wiff

Date Analyzed: 15-FEB-10 23:32

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216093a

Date Analyzed: 18-FEB-10 14:34

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140129.wiff

Date Analyzed: 15-FEB-10 23:48

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216094a

Date Analyzed: 18-FEB-10 15:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140133.wiff

Date Analyzed: 16-FEB-10 00:51

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: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216095a

Date Analyzed: 18-FEB-10 15:33

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140134.wiff

Date Analyzed: 16-FEB-10 01:07

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216096a

Date Analyzed: 18-FEB-10 16:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140135.wiff

Date Analyzed: 16-FEB-10 01:22

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216097a

Date Analyzed: 18-FEB-10 16:32

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140136.wiff

Date Analyzed: 16-FEB-10 01:38

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: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216098a

Date Analyzed: 18-FEB-10 17:02

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140137.wiff

Date Analyzed: 16-FEB-10 01:54

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216099a

Date Analyzed: 18-FEB-10 17:32

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140138.wiff

Date Analyzed: 16-FEB-10 02:09

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: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216100a

Date Analyzed: 18-FEB-10 18:01

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: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140139.wiff

Date Analyzed: 16-FEB-10 02:25

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245959001	RE15-10-7309	121	70 - 144	
245959001	RE15-10-7309	119	70 - 144	
245959002	RE15-10-7308	109	70 - 144	
245959002	RE15-10-7308	122	70 - 144	
245959003	RE15-10-7315	114	70 - 144	
245959003	RE15-10-7315	114	70 - 144	
245959004	RE15-10-7317	117	70 - 144	
245959004	RE15-10-7317	123	70 - 144	
245959005	RE15-10-7319	121	70 - 144	
245959005	RE15-10-7319	112	70 - 144	
245959006	RE15-10-7312	98.3	70 - 144	
245959006	RE15-10-7312	111	70 - 144	
245959007	RE15-10-7313	101	70 - 144	
245959007	RE15-10-7313	114	70 - 144	
245959008	RE15-10-7314	112	70 - 144	
245959008	RE15-10-7314	113	70 - 144	
245959009	RE15-10-7316	94.3	70 - 144	
245959009	RE15-10-7316	114	70 - 144	
245959010	RE15-10-7318	106	70 - 144	
245959010	RE15-10-7318	126	70 - 144	
245959012	RE15-10-7324	114	70 - 144	
245959012	RE15-10-7324	115	70 - 144	
1202032097	MB for batch 948571	110	70 - 144	
1202032097	MB for batch 948571	122	70 - 144	
1202032098	LCS for batch 948571	107	70 - 144	
1202032098	LCS for batch 948571	121	70 - 144	
1202032099	RE15-10-7309(245959001MS)	95.2	70 - 144	
1202032099	RE15-10-7309(245959001MS)	118	70 - 144	
1202032100	RE15-10-7309(245959001MSD)	104	70 - 144	
1202032100	RE15-10-7309(245959001MSD)	112	70 - 144	

DNT = 3,4-Dinitrotoluene

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1510

Extract Batch Code: 948571

Date Extracted: 10-FEB-10

GEL LCS ID: 1202032098

GEL LCSDUP ID:

Analysis Date/Time: 18-FEB-10 09:09

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	4040	80.9					69 - 126
2,4,6-Trinitrotoluene	5000	4940	98.7					73 - 149
2,4-Dinitrotoluene	5000	5160	103					87 - 137
2,6-Dinitrotoluene	5000	4890	97.9					89 - 120
2-Amino-4,6-dinitrotoluene	5000	5150	103					90 - 130
4-Amino-2,6-dinitrotoluene	5000	4630	92.7					84 - 130
HMX	5000	4400	88					58 - 138
Nitrobenzene	5000	4280	85.6					71 - 122
PETN	5000	6050	121					64 - 137
RDX	5000	5220	104					81 - 137
Tetryl	5000	2570	51.5					51 - 112
m-Dinitrobenzene	5000	4810	96.2					83 - 122
m-Nitrotoluene	5000	4610	92.3					73 - 118
o-Nitrotoluene	5000	4930	98.7					72 - 119
p-Nitrotoluene	5000	4850	97					67 - 131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1510

Extract Batch Code: 948571

Date Extracted: 10-FEB-10

GEL LCS ID: 1202032098

GEL LCSDUP ID:

Analysis Date/Time: 15-FEB-10 21:43

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,6-Diamino-4-nitrotoluene	5000	4340	86.8					64 - 122
3,5-Dinitroaniline	5000	5060	101					70 - 127
TATB	7500	7510	100					28 - 162
2,4-Diamino-6-nitrotoluene	5000	3530	70.6					52 - 114
tris(o-cresyl) phosphate	5000	4950	99					84 - 119

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Extract Batch Code: 948571

Date Extracted: 10-FEB-10

GEL Spike ID: 1202032099

GEL SpikeDup ID: 1202032100

Analysis Date/Time: 18-FEB-10 11:07

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
m-Dinitrobenzene	5000	0	4970	99.4	5240	105	5.21	30	85 - 118
2,4,6-Trinitrotoluene	5000	0	4480	89.7	5690	114	23.7	30	76 - 144
2,6-Dinitrotoluene	5000	0	4910	98.2	4960	99.2	1.02	30	90 - 118
4-Amino-2,6-dinitrotoluene	5000	0	4190	83.8	5260	105	22.5	30	72 - 143
RDX	5000	0	3690	73.8	5910	118	46.3 *	30	59 - 152
PETN	5000	0	5760	115	6800	136	16.5	30	60 - 140
Nitrobenzene	5000	0	4170	83.4	4210	84.2	.93	30	70 - 122
HMX	5000	0	4120	82.4	3660	73.1	12	30	51 - 144
2-Amino-4,6-dinitrotoluene	5000	0	4830	96.5	5460	109	12.4	30	85 - 137
2,4-Dinitrotoluene	5000	0	4420	88.5	4640	92.9	4.86	30	86 - 135
1,3,5-Trinitrobenzene	5000	0	4770	95.4	5000	99.9	4.59	30	50 - 140
m-Nitrotoluene	5000	0	4410	88.2	4540	90.8	2.81	30	70 - 120
o-Nitrotoluene	5000	0	4740	94.9	4860	97.3	2.5	30	69 - 123
Tetryl	5000	0	3300	65.9	3380	67.6	2.55	30	36 - 124
p-Nitrotoluene	5000	0	4800	96	5000	100	4.12	30	65 - 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Extract Batch Code: 948571

Date Extracted:10-FEB-10

GEL Spike ID: 1202032099

GEL SpikeDup ID:1202032100

Analysis Date/Time: 15-FEB-10 22:45

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	4200	84	3740	74.8	11.6	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	4120	82.4	4140	82.8	.484	30	55 - 130
TATB	7500	0	6980	93.1	7470	99.6	6.78	30	29 - 155
tris(o-cresyl) phosphate	5000	0	4890	97.8	4870	97.4	.41	30	72 - 127
3,5-Dinitroaniline	5000	0	5130	103	5100	102	.587	30	73 - 129

#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): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 17:07

GEL Data File: EXP0216001a

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	509.816
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	531.163
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\021610expa.mdb, Time: Wed Feb 17 09:19:04 2010

Calibration: Untitled, Time: Wed Feb 17 10:00:06 2010

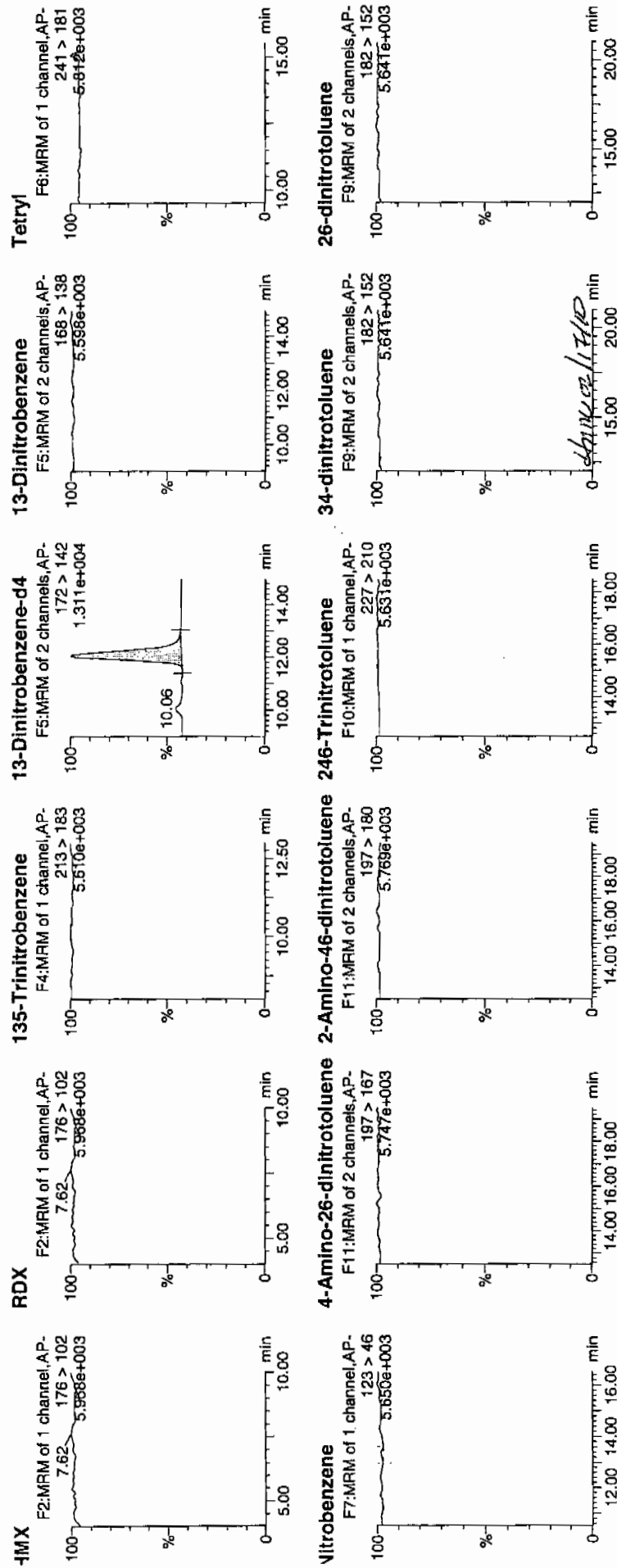
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216001a

Date: 16-Feb-2010

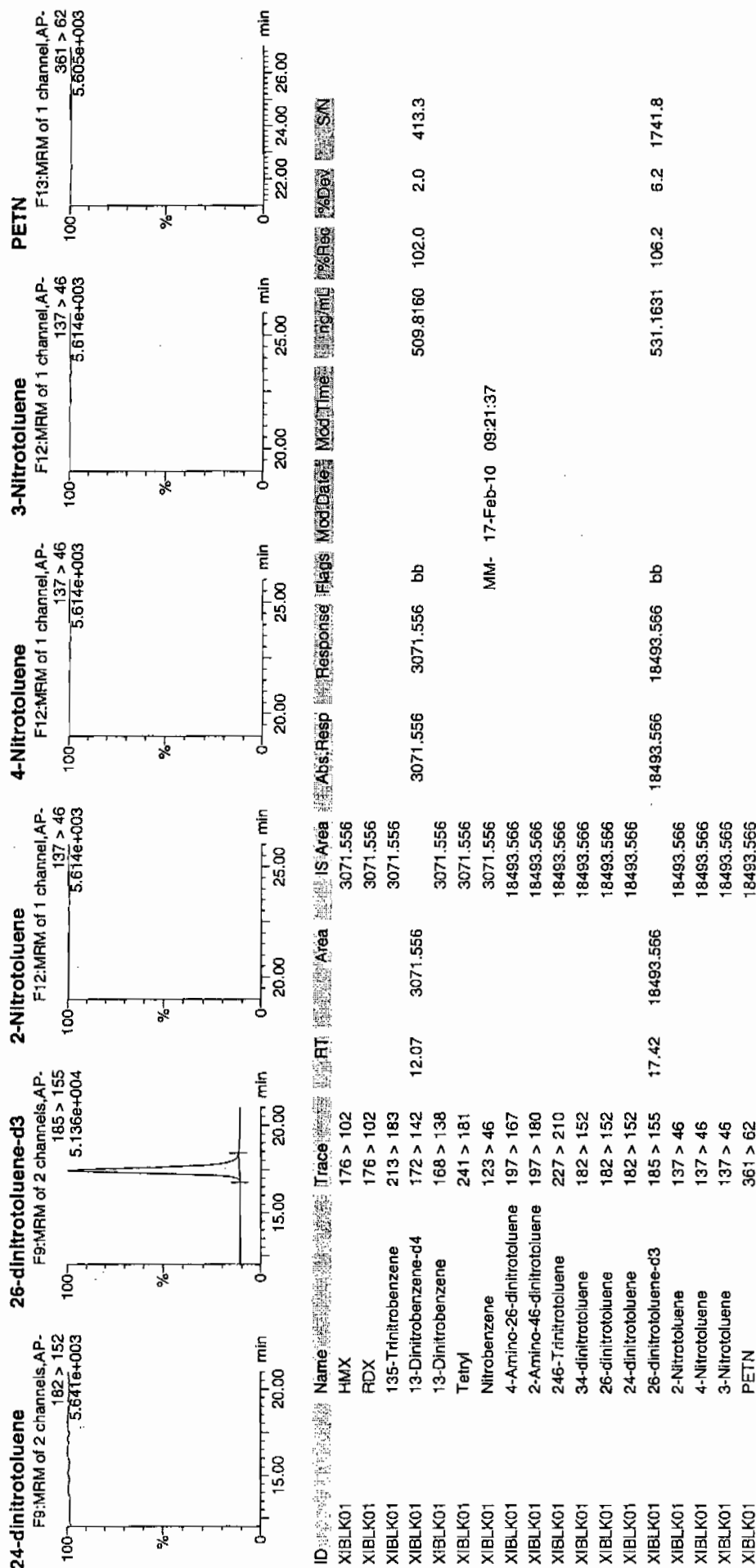
Time: 17:07:38

D: XIBLK01

Vial: 1:1,A



Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qid, Time: Wed Feb 17 10:00:06 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 17:37

GEL Data File: EXP0216002a

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	540.968
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	530.887
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: Wed Feb 17 10:00:54 2010, Page 3 of 59

Quantify Sample Report
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0216002a

Date: 16-Feb-2010

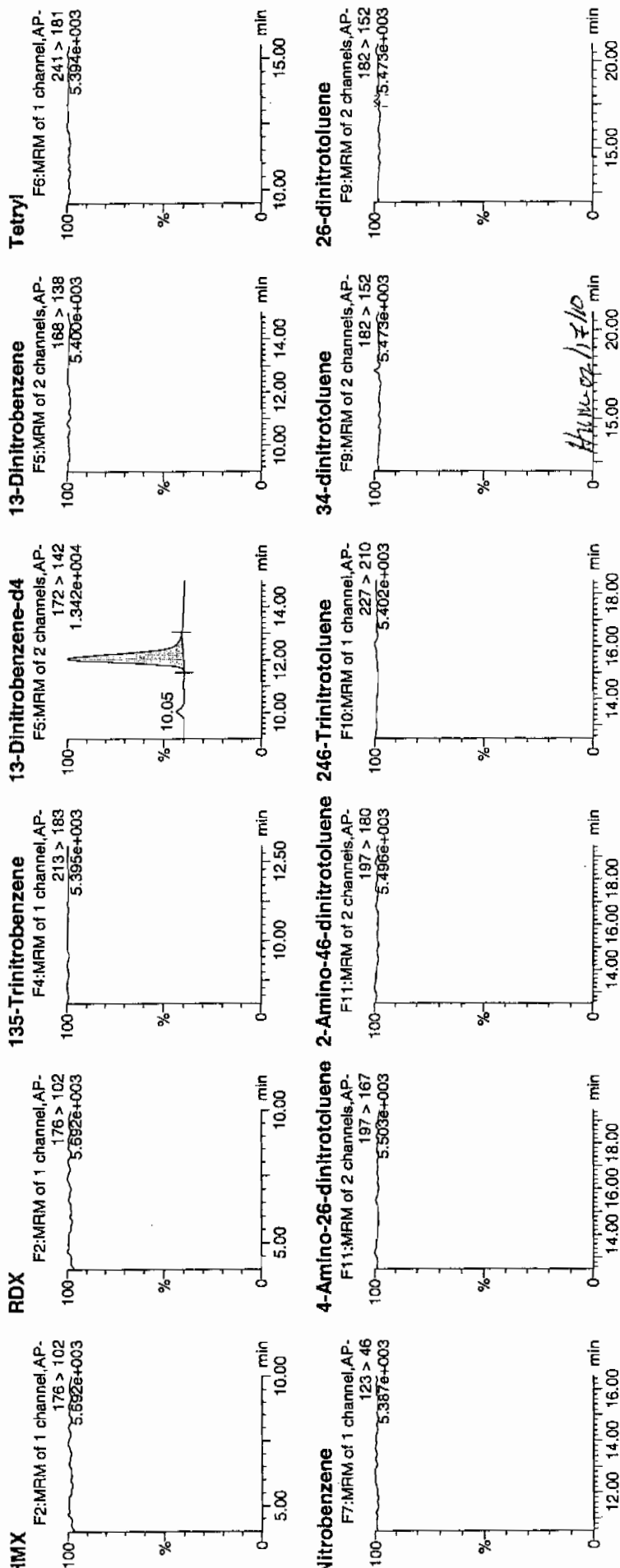
Time: 17:37:26

D: XIBLK01

/al: 1:1,A

1/17/10

Page 616 of 1179

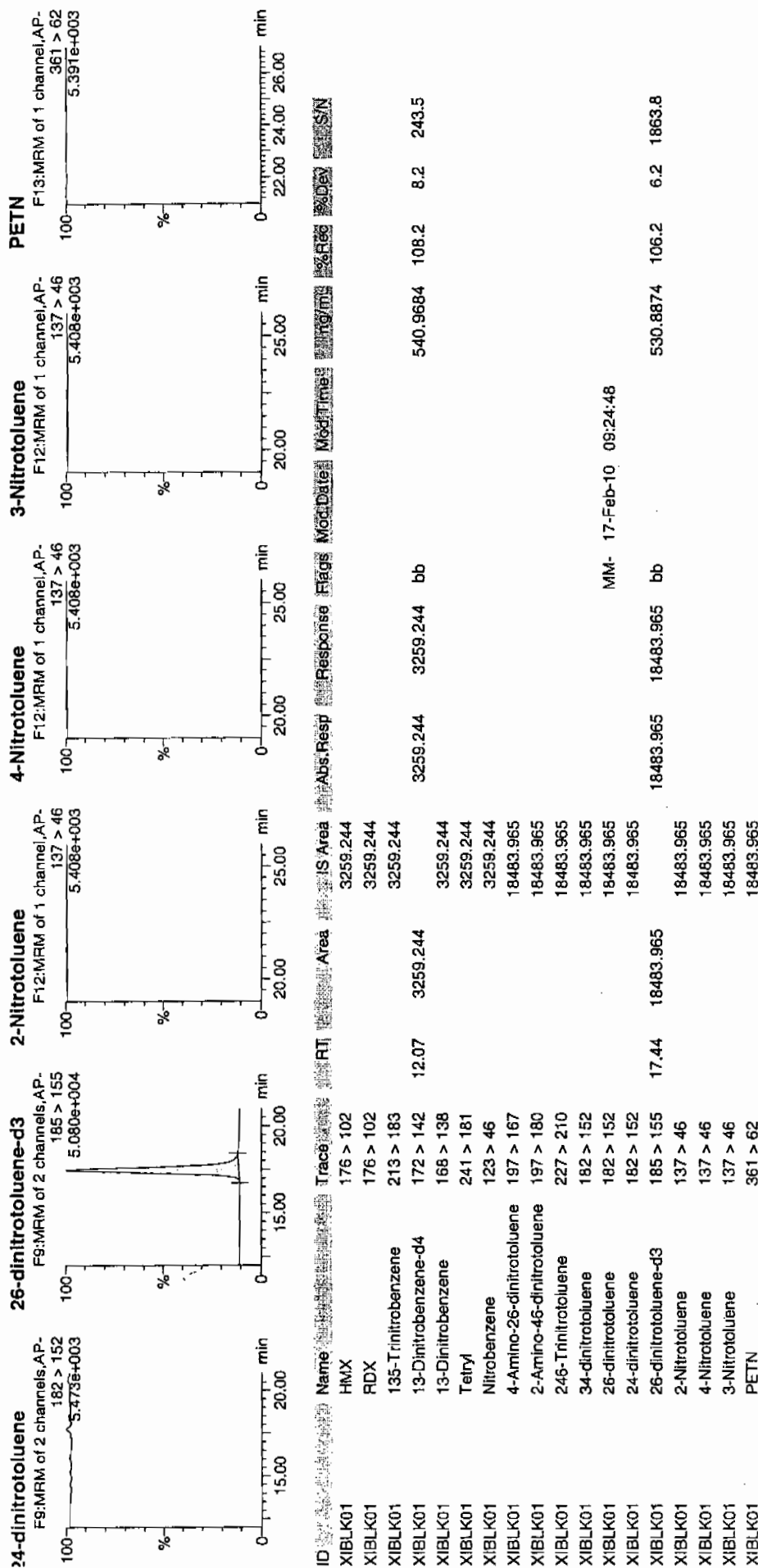


Quantify Sample Report

3EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 4 of 59

Dataset: C:\MASSLYNX\New_Exp\PRO021610expA.qld, Time: Wed Feb 17 10:00:06 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:17

GEL Data File: EXS02140001.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	.28
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

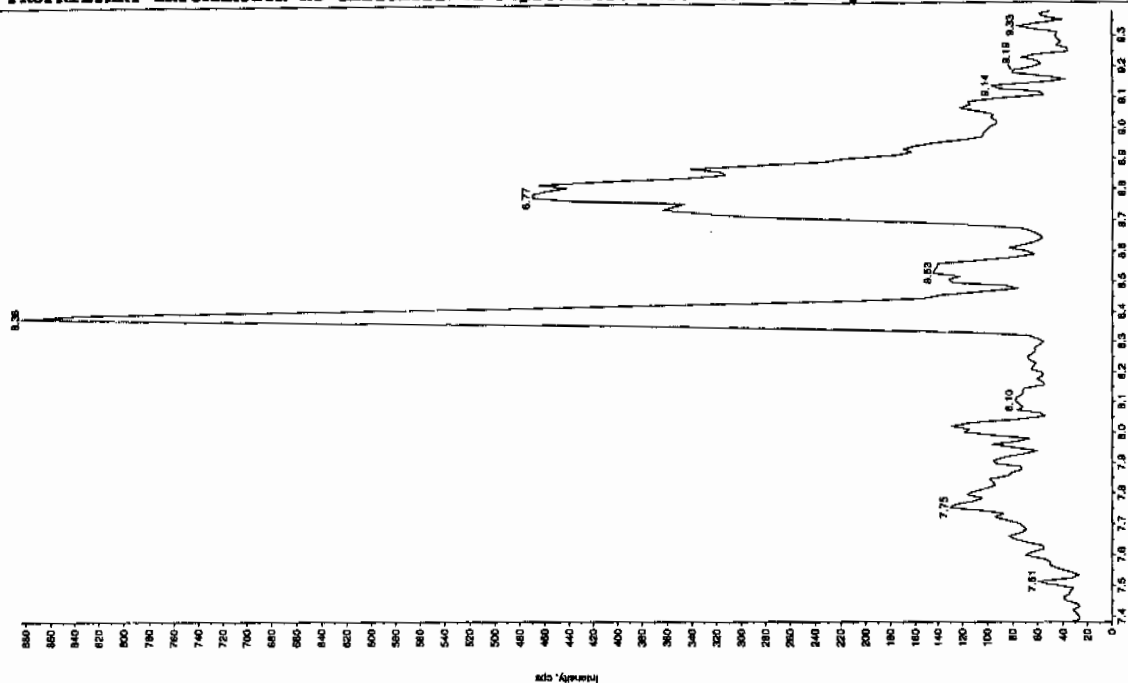
Run 2/16/10

Sample Name: "XBLK01" Sample ID: "1111ER" File: "EX502140001.wif"

Peak Name: "3S-Dichloroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Acq. Date: 2/14/2010
Acq. Time: 2:17:17 PM
Modified: No



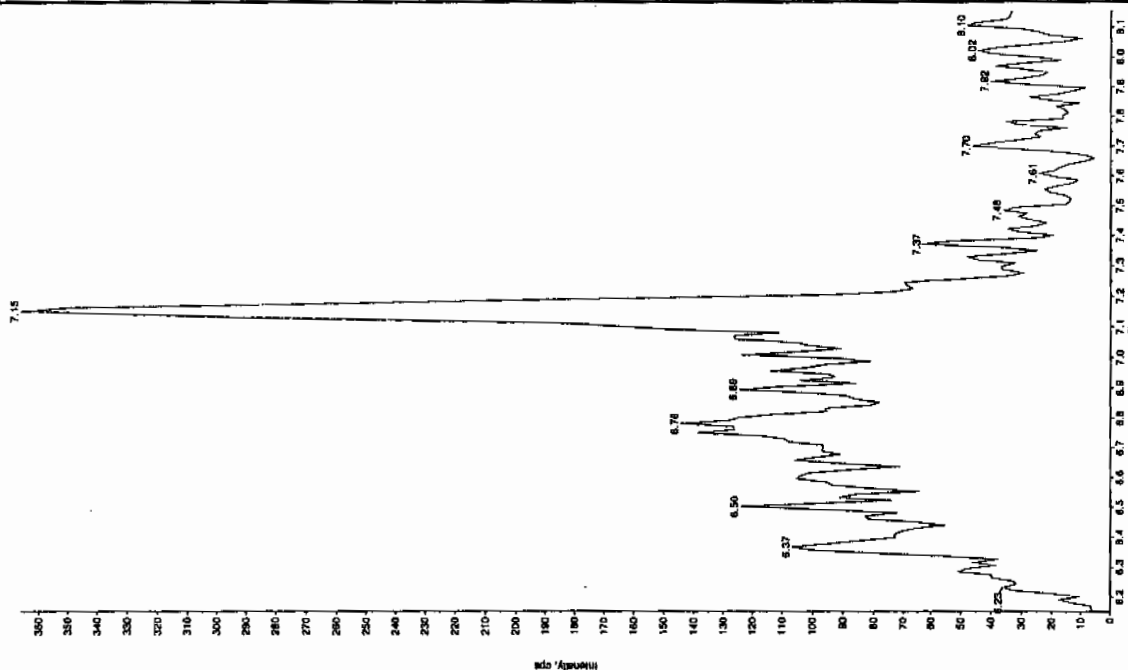
Run 02/17/10

Sample Name: "XBLK01" Sample ID: "1111ER" File: "EX502140001.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

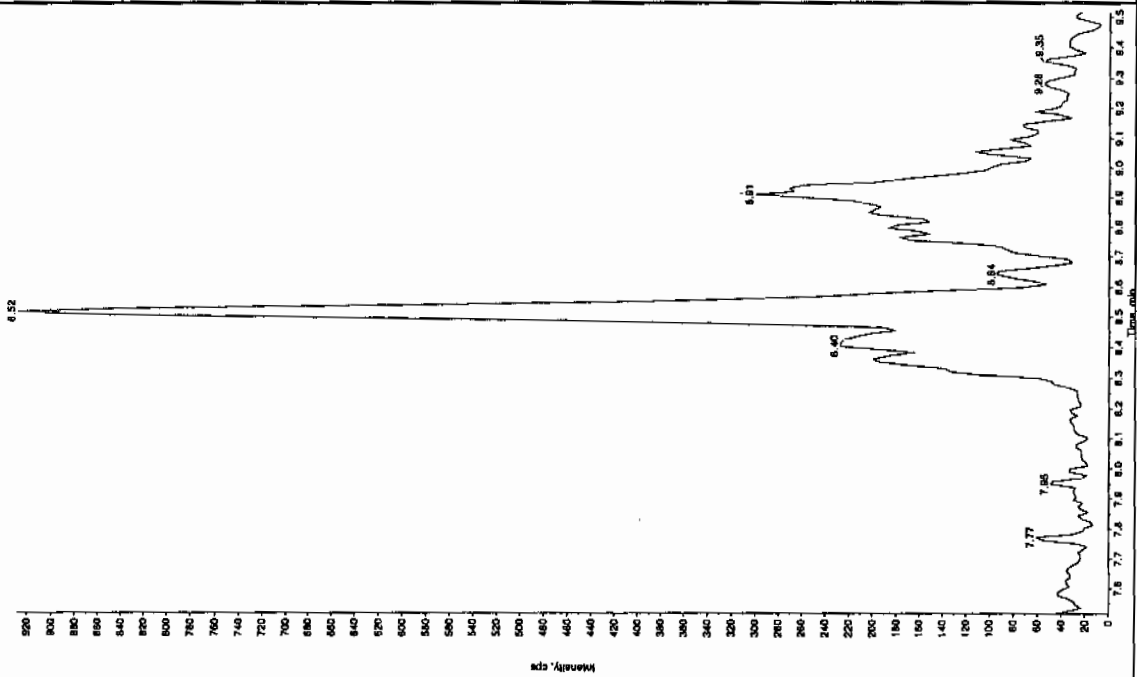
Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Acq. Date: 2/14/2010
Acq. Time: 2:17:17 PM
Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

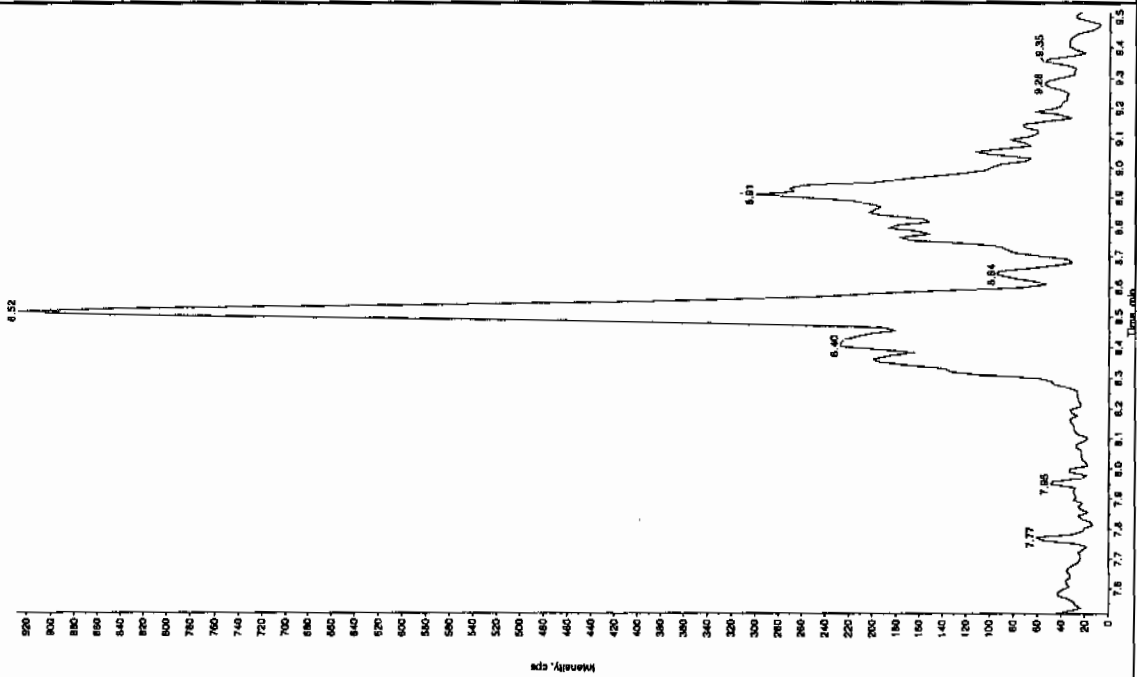
Sample Name: "XIBLX01" Sample ID: "11LER" File: "EX502140001.will"
 Peak Name: "26-Dianing-4-nitrotoluene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_B" Annotation: "

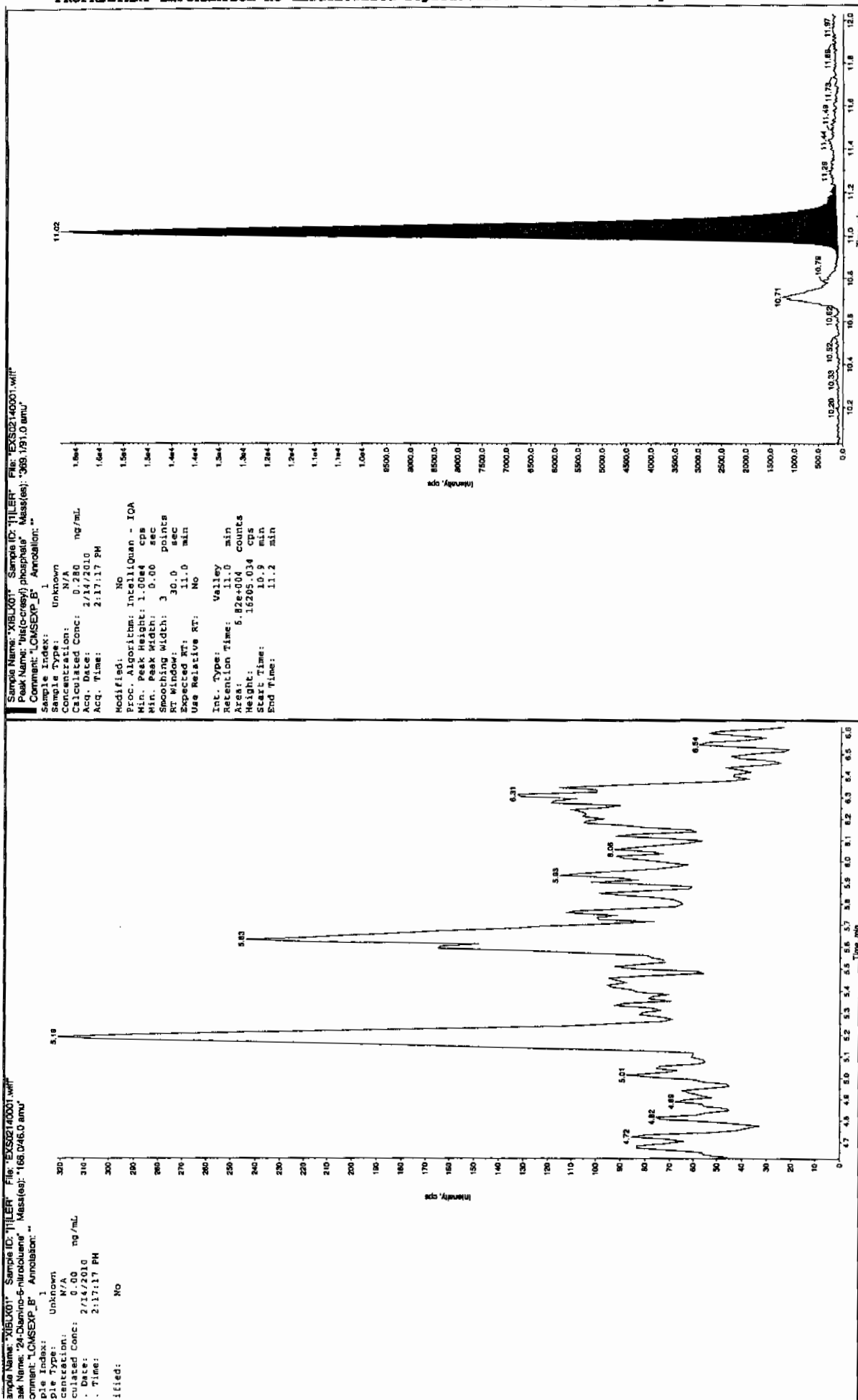
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 2:17:17 PM
 Modified: No



Sample Name: "XIBLX01" Sample ID: "11LER" File: "EX502140001.will"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1519 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 2:17:17 PM
 Modified: No





EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:33

GEL Data File: EXS02140002.wiff

Instrument ID: LCMSMS

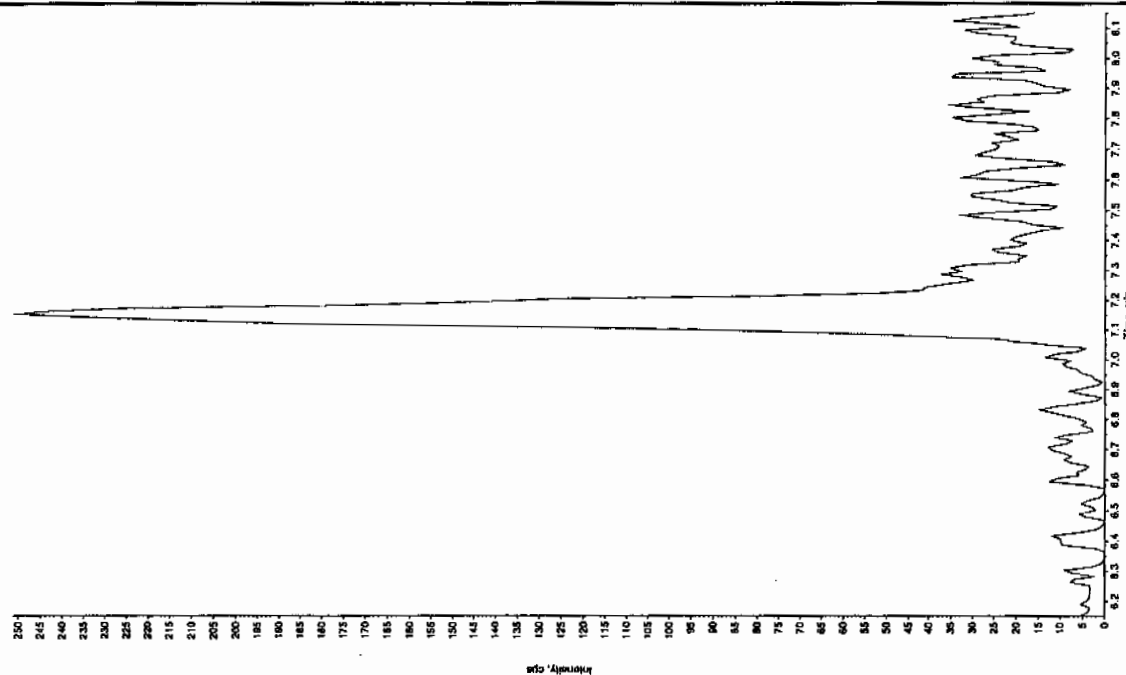
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
3,4-Dinitrotoluene	0	0

Jan 2/16/10

Sample Name: "XBLU01" Sample ID: "111ER" File: "EX02140002.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "162.045.0 amu"
 Comment: "LONSEXP_B" Annotation: "

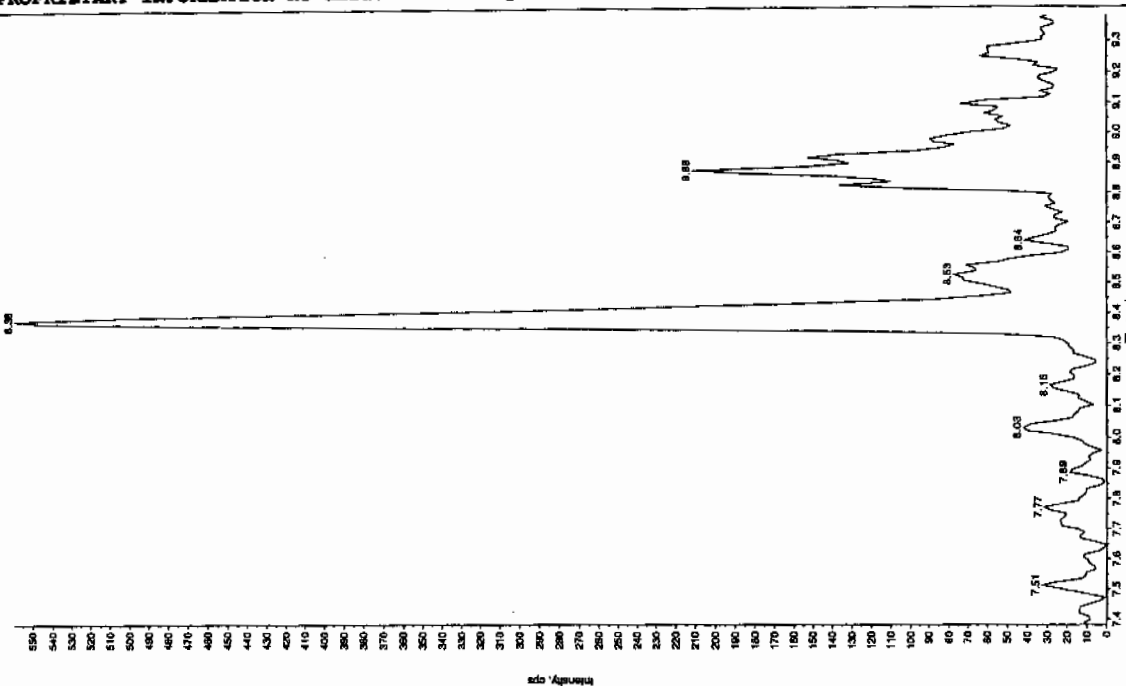
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/14/2010
 Acq. Date: 2/14/2010
 Acq. Time: 2:33:05 PM
 Modified: No

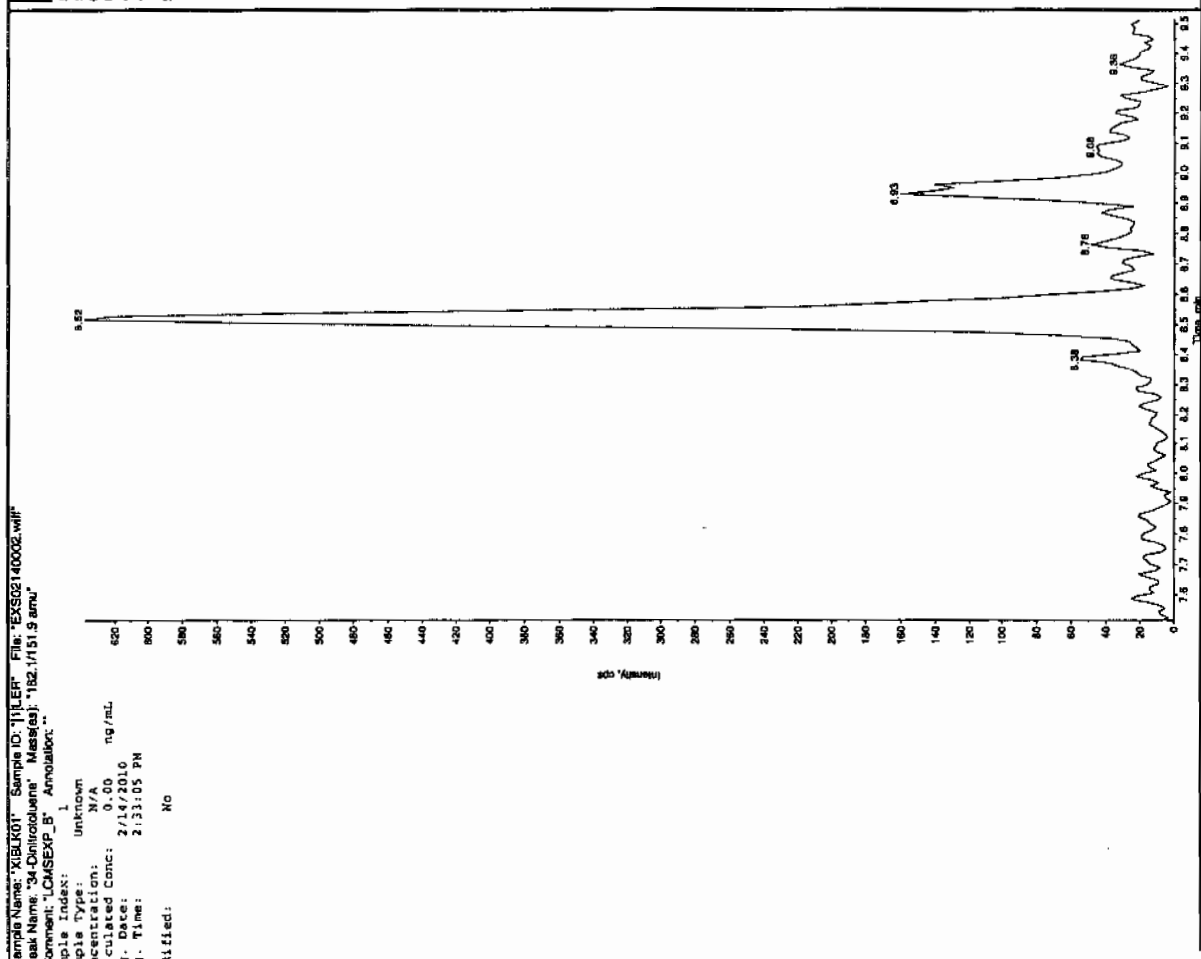
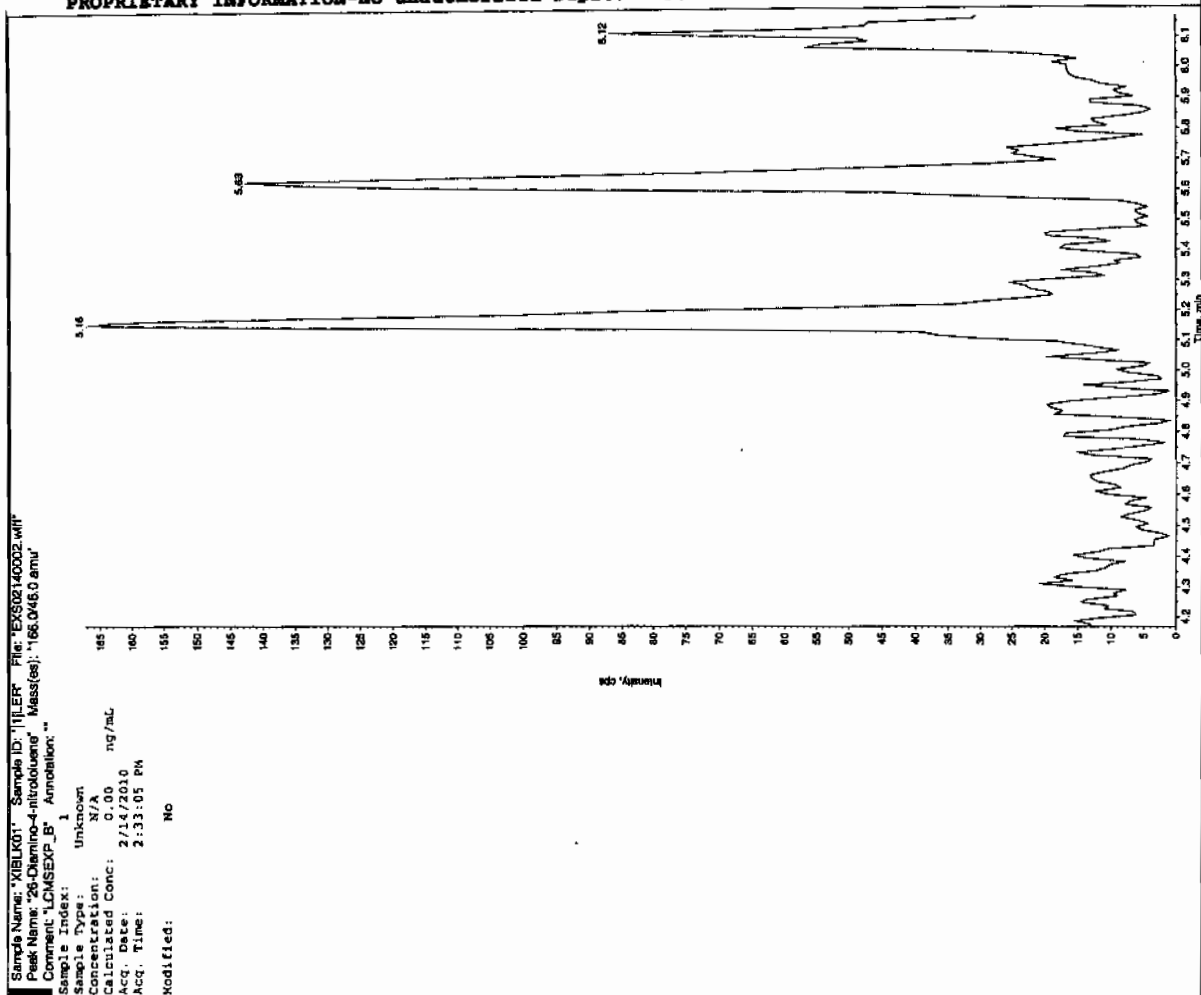


Sample Name: "XBLU01" Sample ID: "111ER" File: "EX02140002.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "162.045.0 amu"
 Comment: "LONSEXP_B" Annotation: "

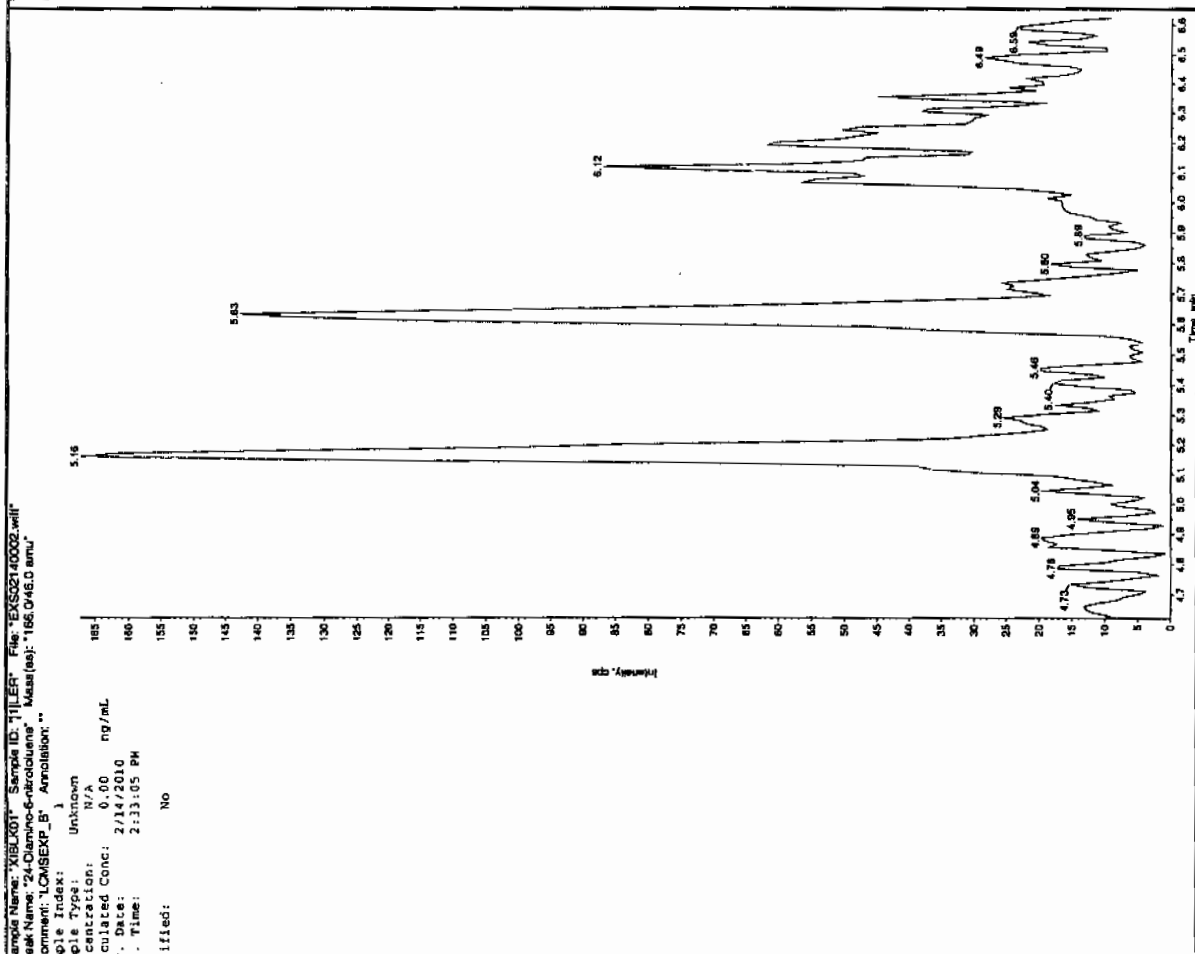
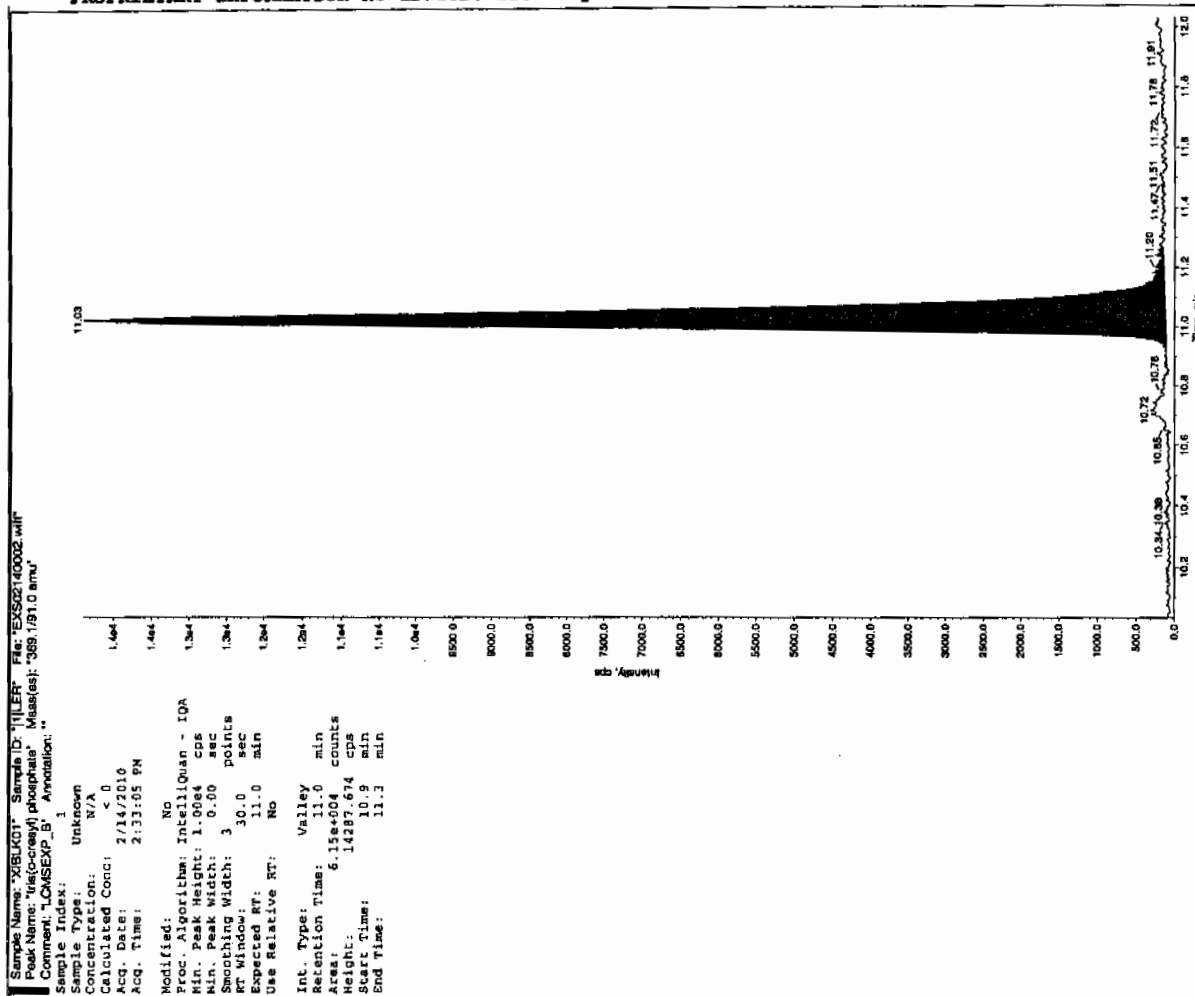
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/14/2010
 Acq. Date: 2/14/2010
 Acq. Time: 2:33:05 PM
 Modified: No

Jan 2/17/10





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 16-FEB-10 21:04

GEL Data File: EXP0216009a

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	570.463
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	494.232
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
 JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

James: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0216009a

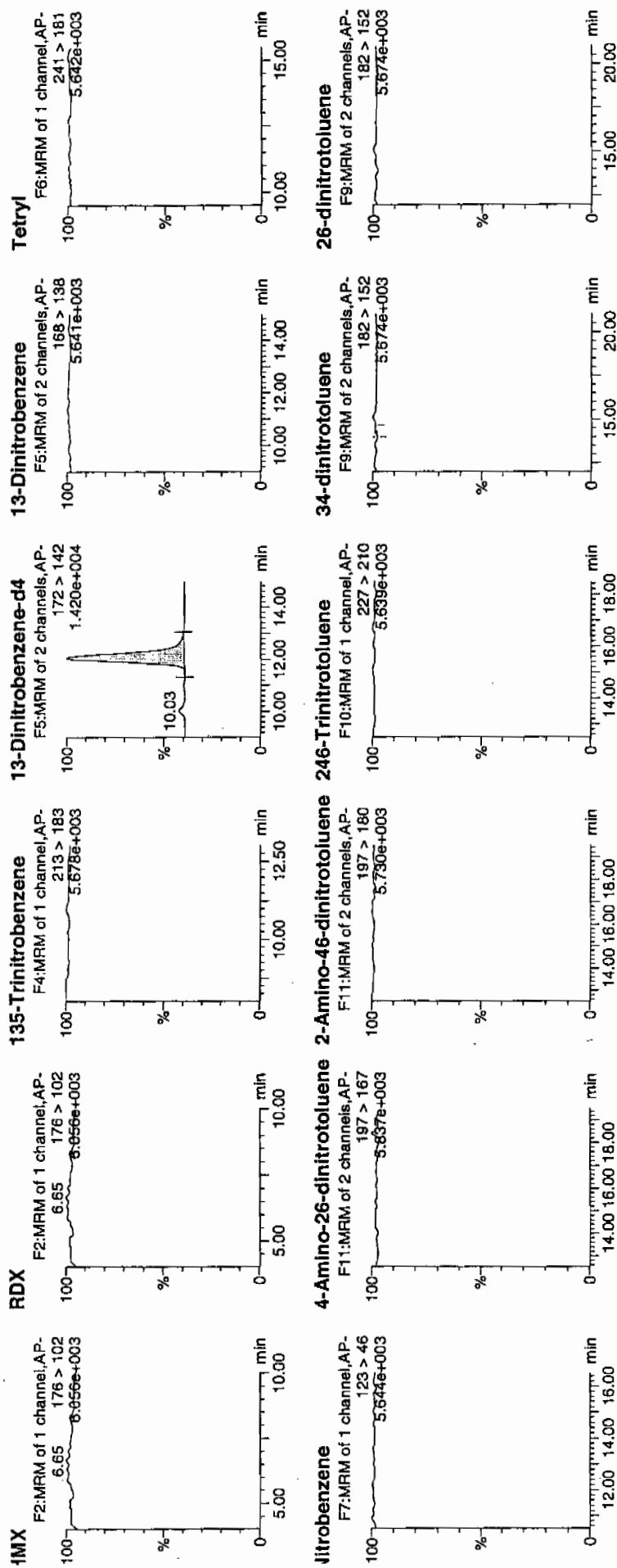
Date: 16-Feb-2010

Time: 21:04:59

D: XIBLK02

/lat: 1:1,A

10/17
 2/17/10

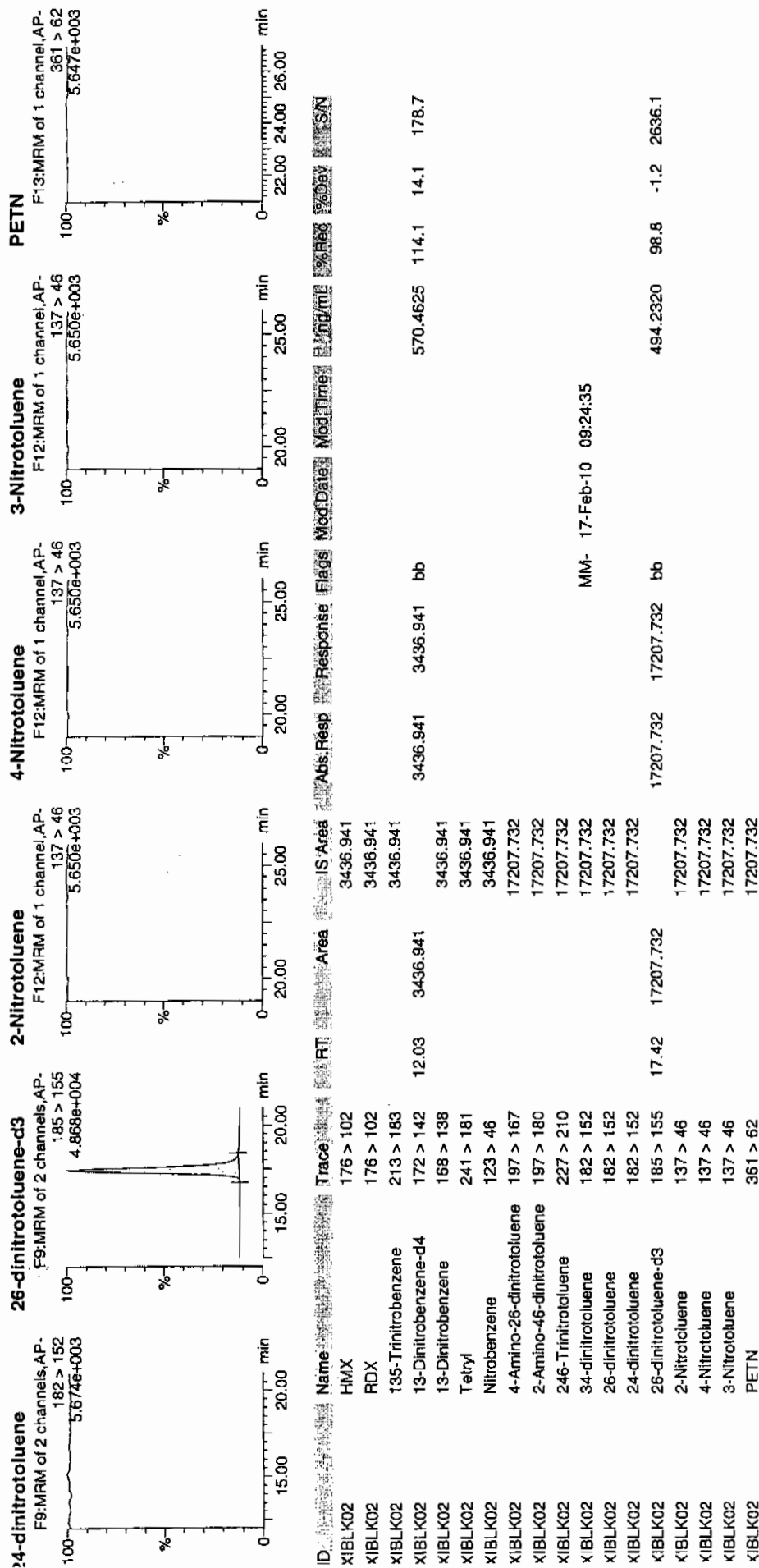


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Printed: Wed Feb 17 10:00:54 2010, Page 18 of 59

Quantify Sample Report
 JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 16-FEB-10 22:04

GEL Data File: EXP0216011a

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	445.165
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	575.243
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\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216011a

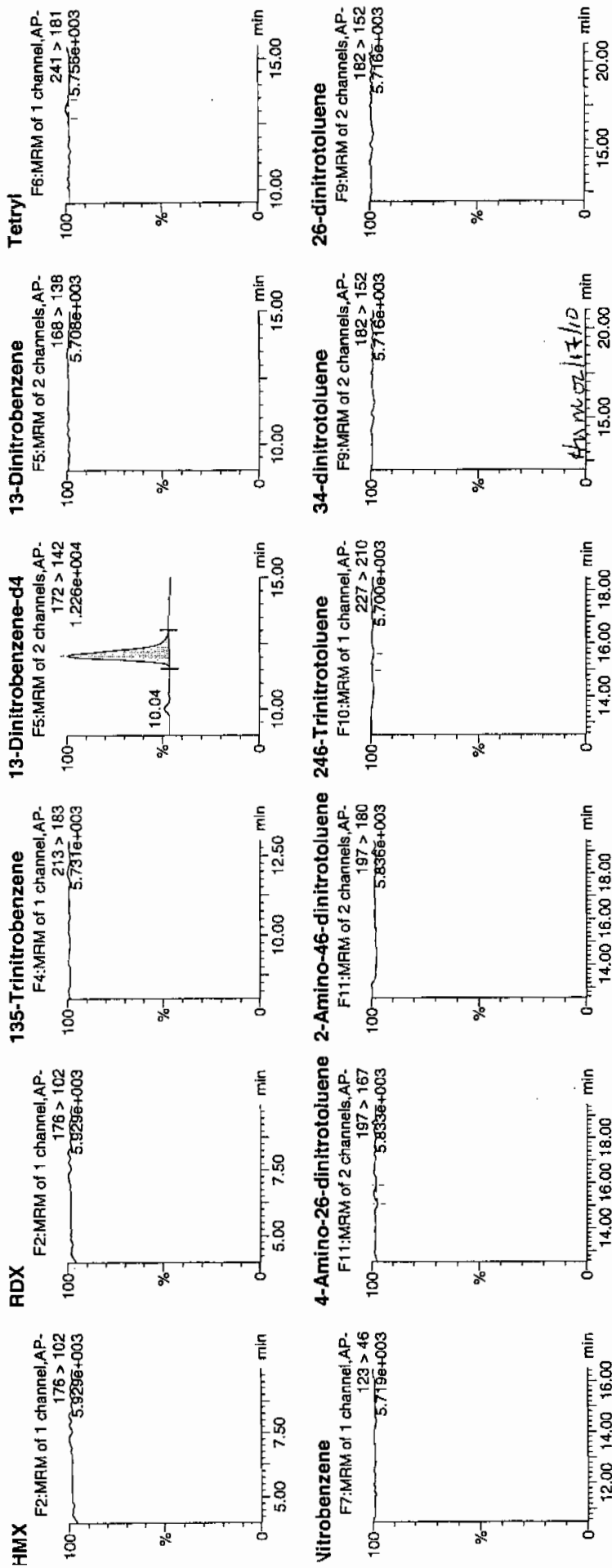
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Time: 22:04:12

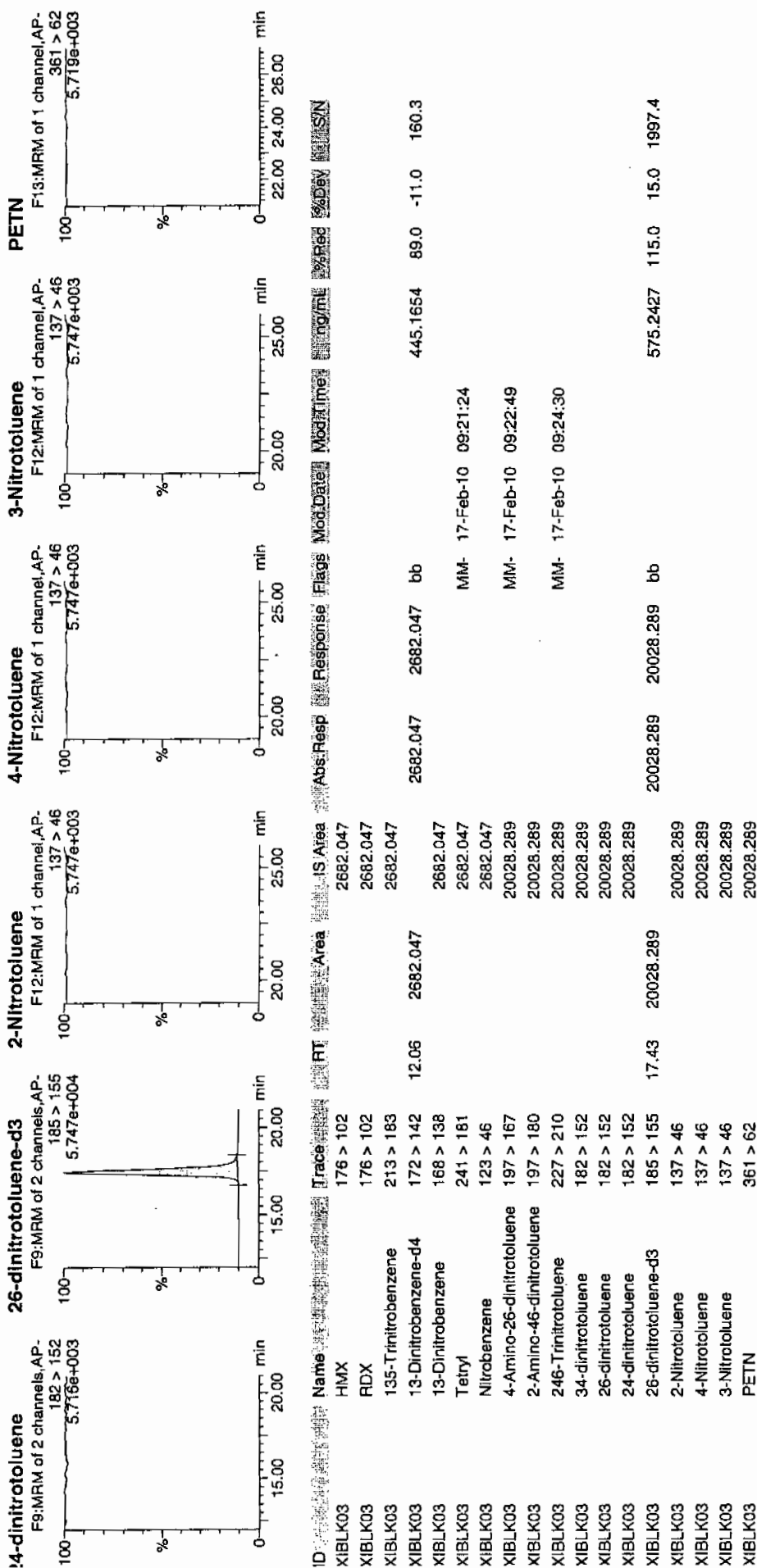
ID: XIBLK03

Vial: 1:1,A

WAT
2/17/10



Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 17-FEB-10 03:30

GEL Data File: EXP0216022a

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	470.843
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	468.456
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\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216022a

Date: 17-Feb-2010

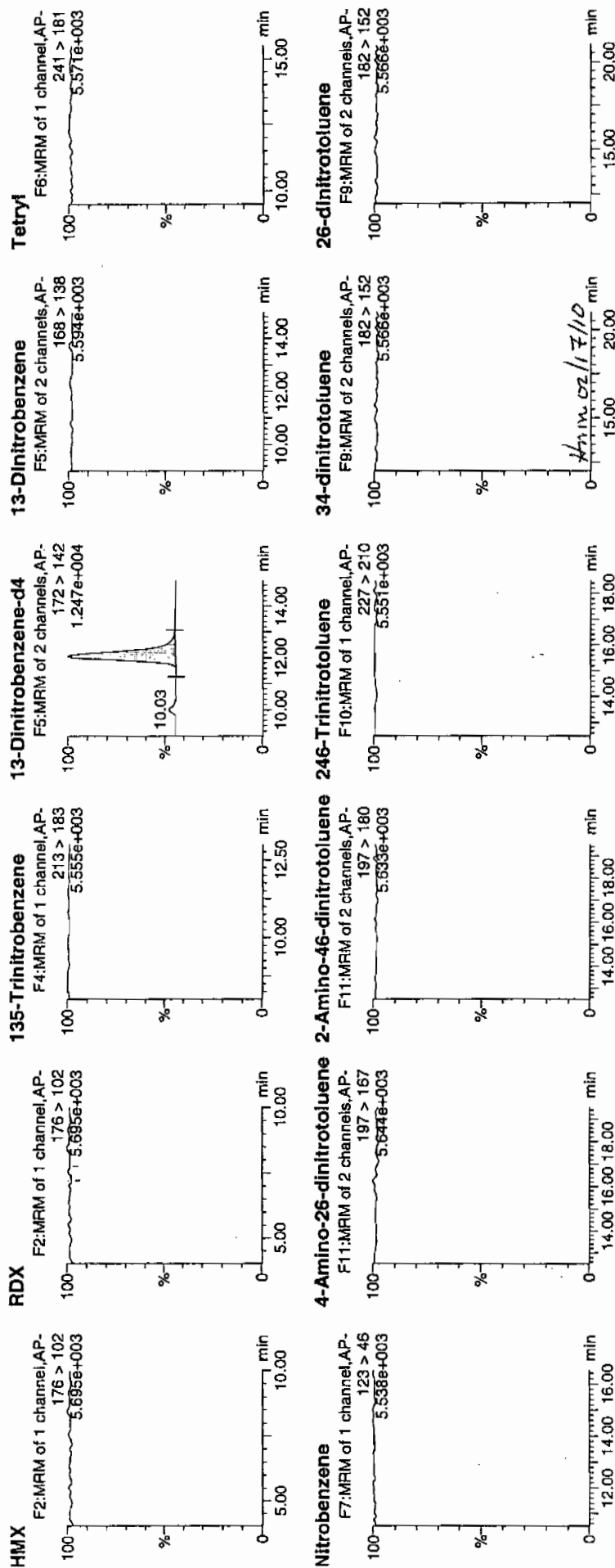
Time: 03:30:28

ID: XIBLK04

Vial: 1:1A

3/17/10

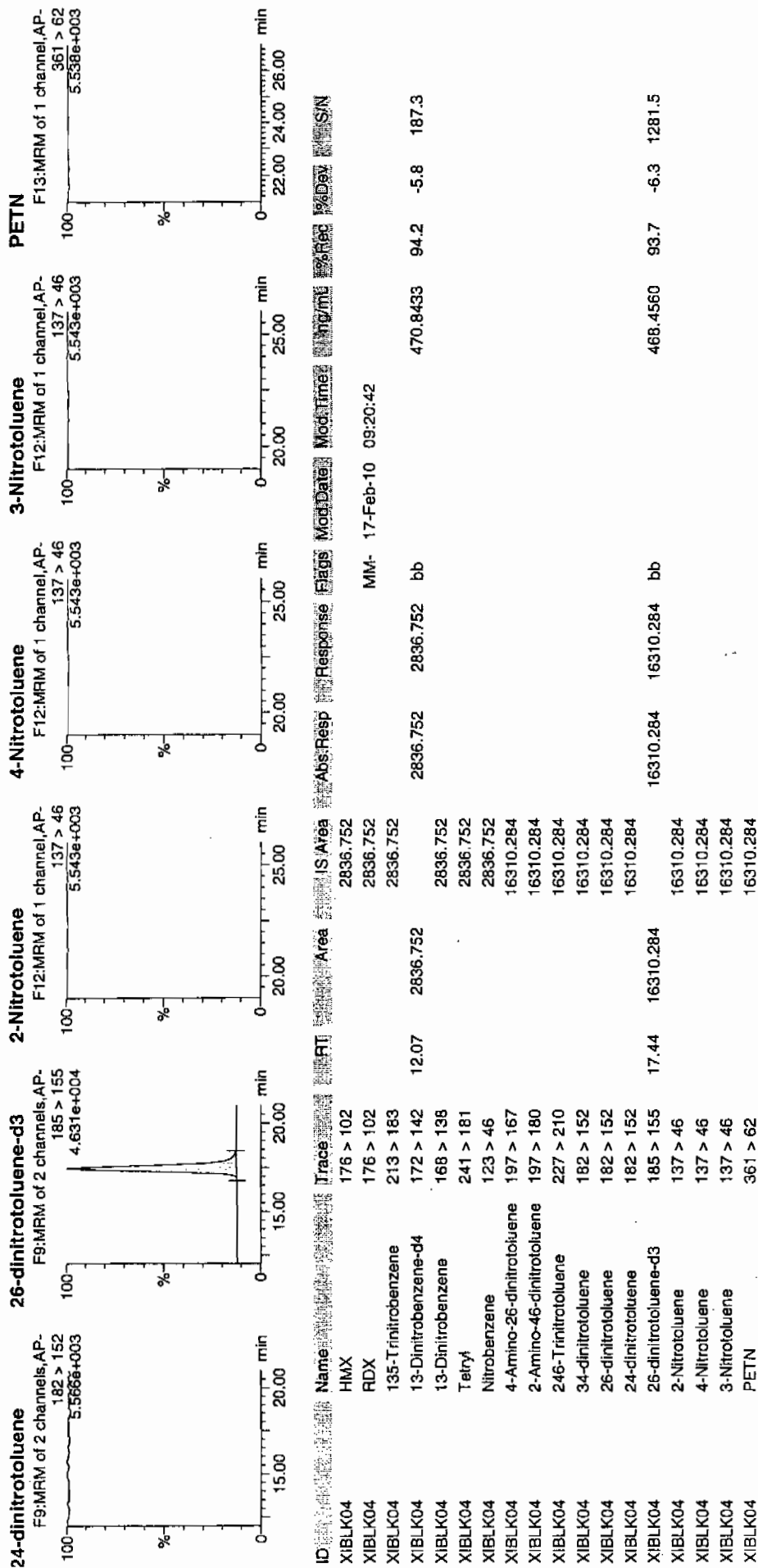
Page 633 of 1179



Printed: Wed Feb 17 10:00:54 2010, Page 44 of 59

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 17-FEB-10 06:28

GEL Data File: EXP0216028a

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	443.214
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	440.83
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\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0216028a

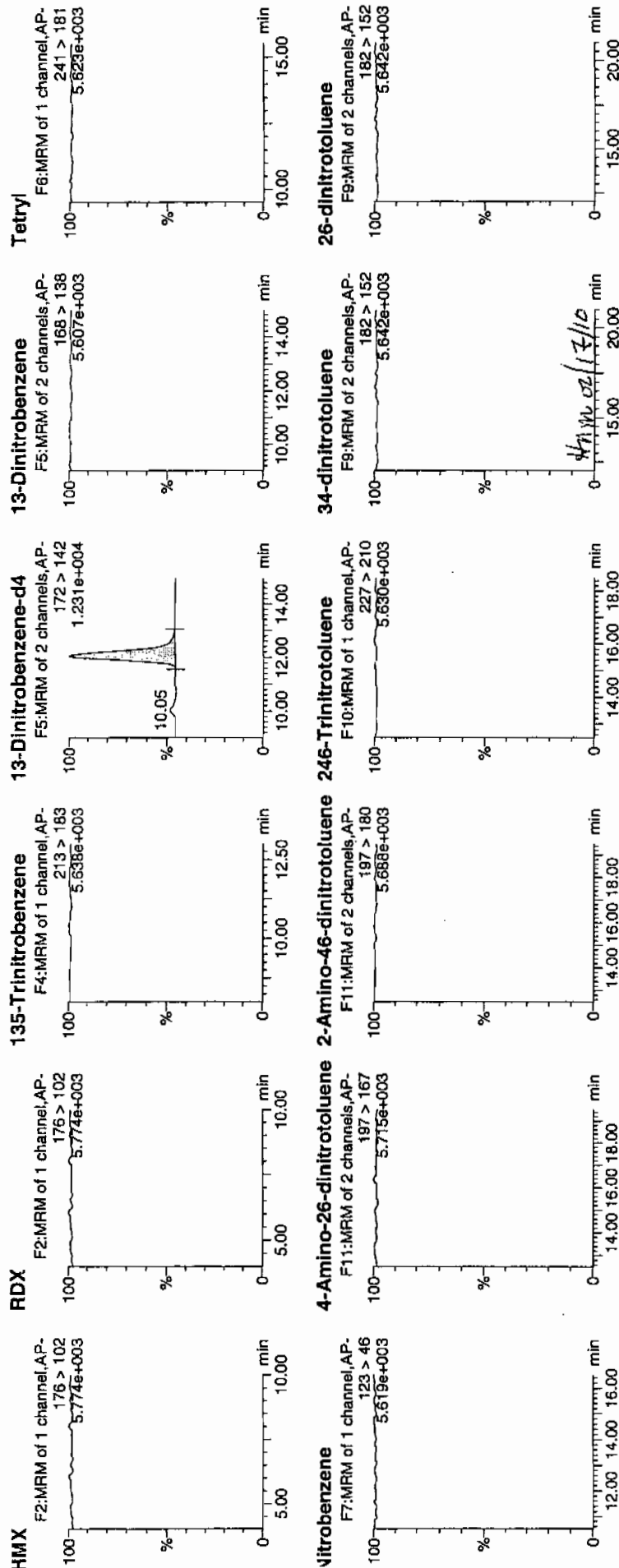
Date: 17-Feb-2010

Time: 06:28:06

ID: XIBLK05

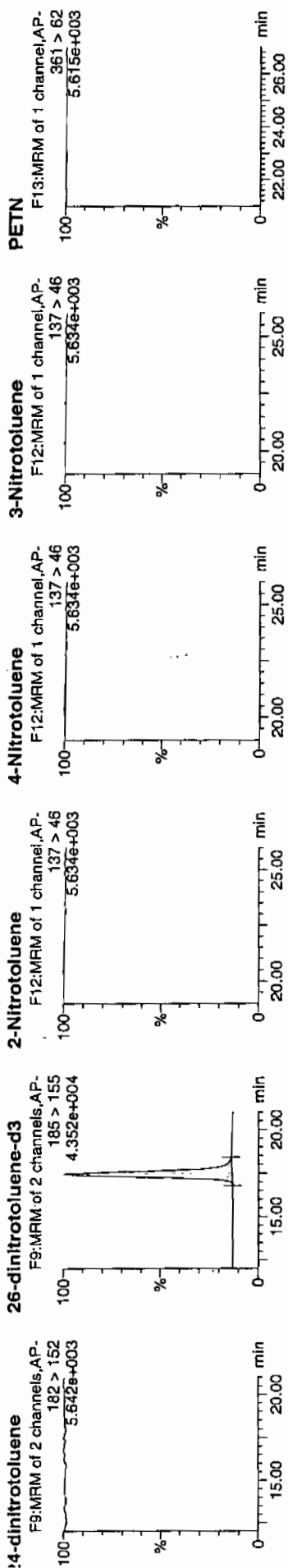
Vial: 1:1,A

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Quantify Sample Report
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod	Date	Mod	Time	%Rec	%Dev	S/N
XIBLK05	HMx	176 > 102		2670.289										
XIBLK05	RDX	176 > 102		2670.289										
XIBLK05	135-Trinitrobenzene	213 > 183		2670.289										
XIBLK05	13-Dinitrobenzene-d4	172 > 142	12.07	2670.289		2670.289	bb					443.2139	88.6	-11.4
XIBLK05	13-Dinitrobenzene	168 > 138		2670.289										203.6
XIBLK05	Tetryl	241 > 181		2670.289										
XIBLK05	Nitrobenzene	123 > 46		2670.289										
XIBLK05	4-Amino-26-dinitrotoluene	197 > 167		15348.437										
XIBLK05	2-Amino-46-dinitrotoluene	197 > 180		15348.437										
XIBLK05	246-Trinitrotoluene	227 > 210		15348.437										
XIBLK05	34-dinitrotoluene	182 > 152		15348.437										
XIBLK05	26-dinitrotoluene	182 > 152		15348.437										
XIBLK05	24-dinitrotoluene	182 > 152		15348.437										
XIBLK05	26-dinitrotoluene-d3	185 > 155	17.44	15348.437		15348.437	bb					440.8303	88.2	-11.8
XIBLK05	2-Nitrotoluene	137 > 46		15348.437										1328.0
XIBLK05	4-Nitrotoluene	137 > 46		15348.437										
XIBLK05	3-Nitrotoluene	137 > 46		15348.437										
XIBLK05	PETN	361 > 62		15348.437										

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 17-FEB-10 12:24

GEL Data File: EXP0216040a

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	431.007
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	413.713
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: Thu Feb 18 08:53:51 2010, Page 21 of 103

Quantify Sample Report
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216040a

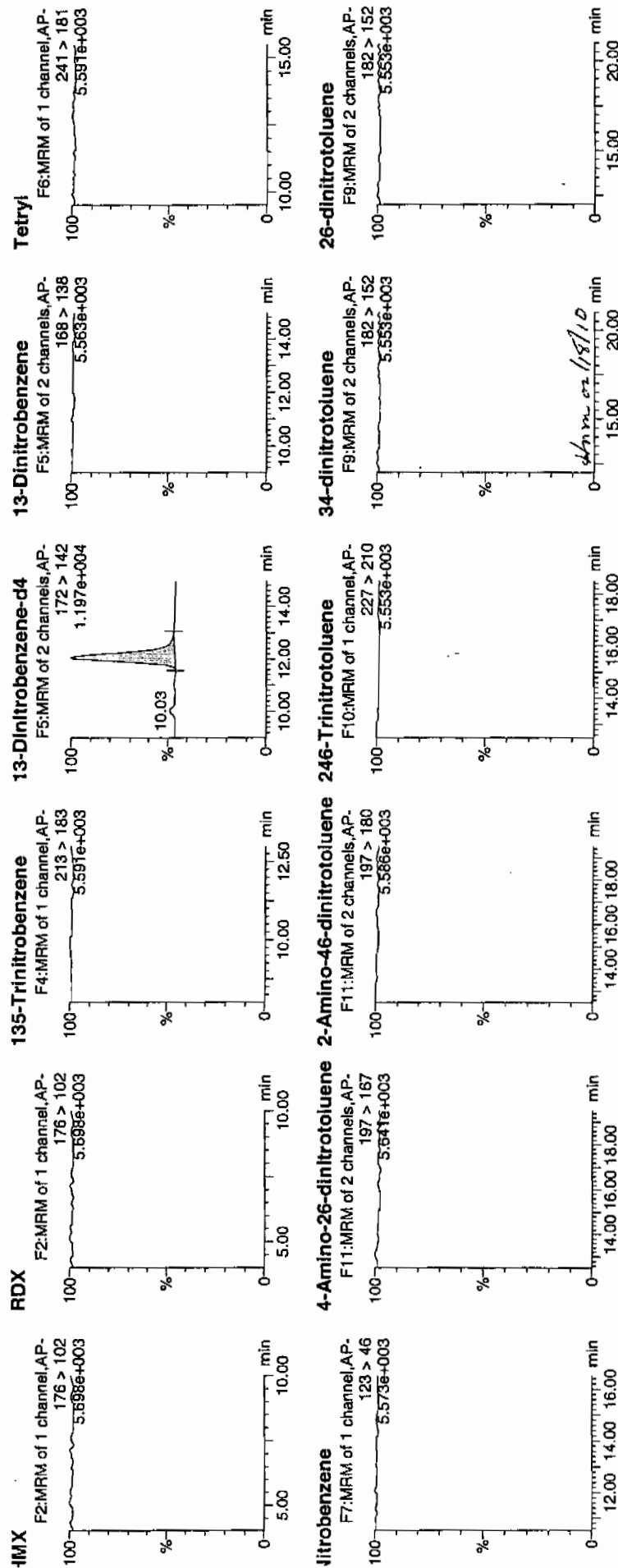
Date: 17-Feb-2010

Time: 12:24:42

D: XIBLK06

/al: 1:1,A

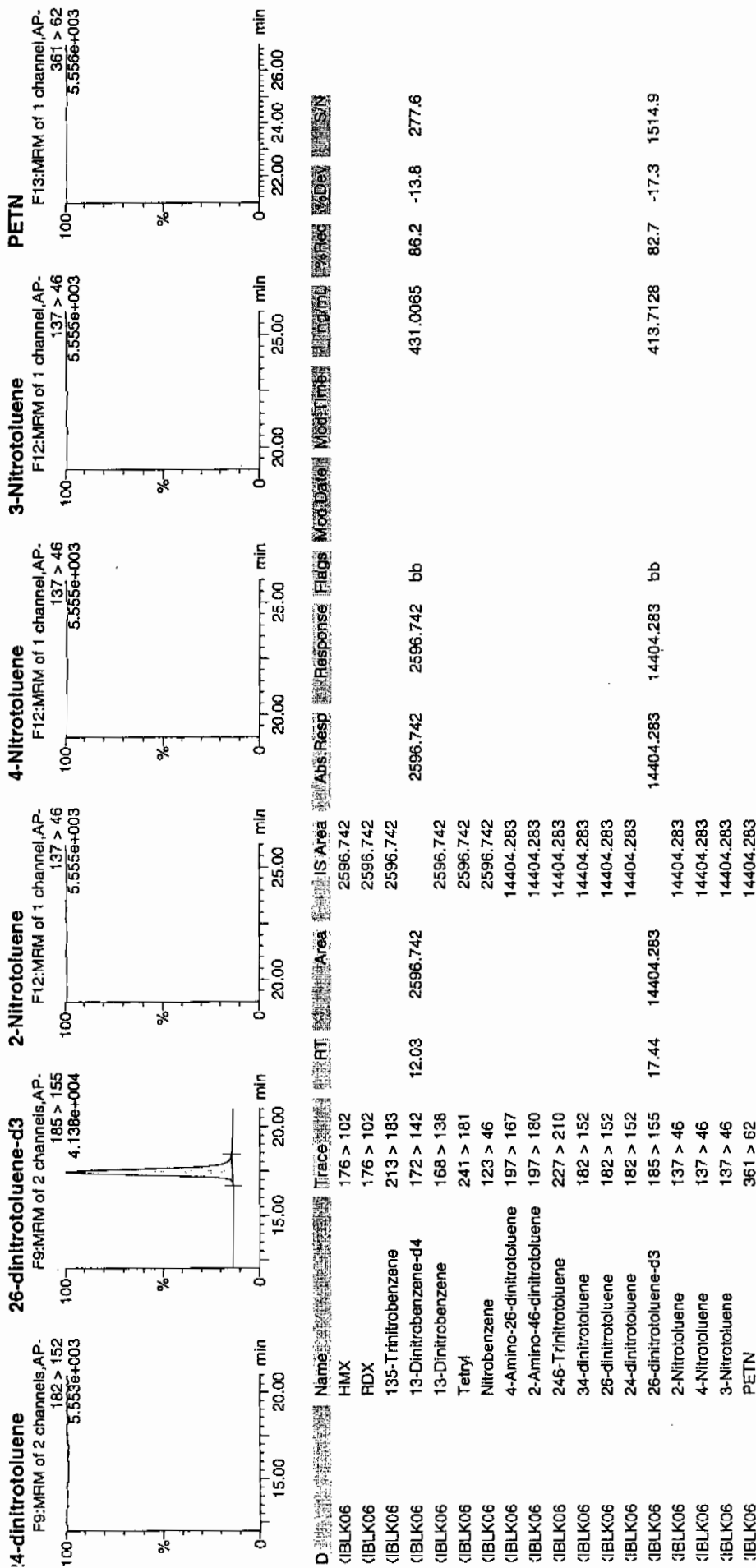
Handwritten: 2/18/10



Printed: Thu Feb 18 08:53:51 2010, Page 22 of 103

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 17-FEB-10 18:50

GEL Data File: EXP0216053a

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	517.203
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	500.527
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: Thu Feb 18 08:53:51 2010, Page 47 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216053a

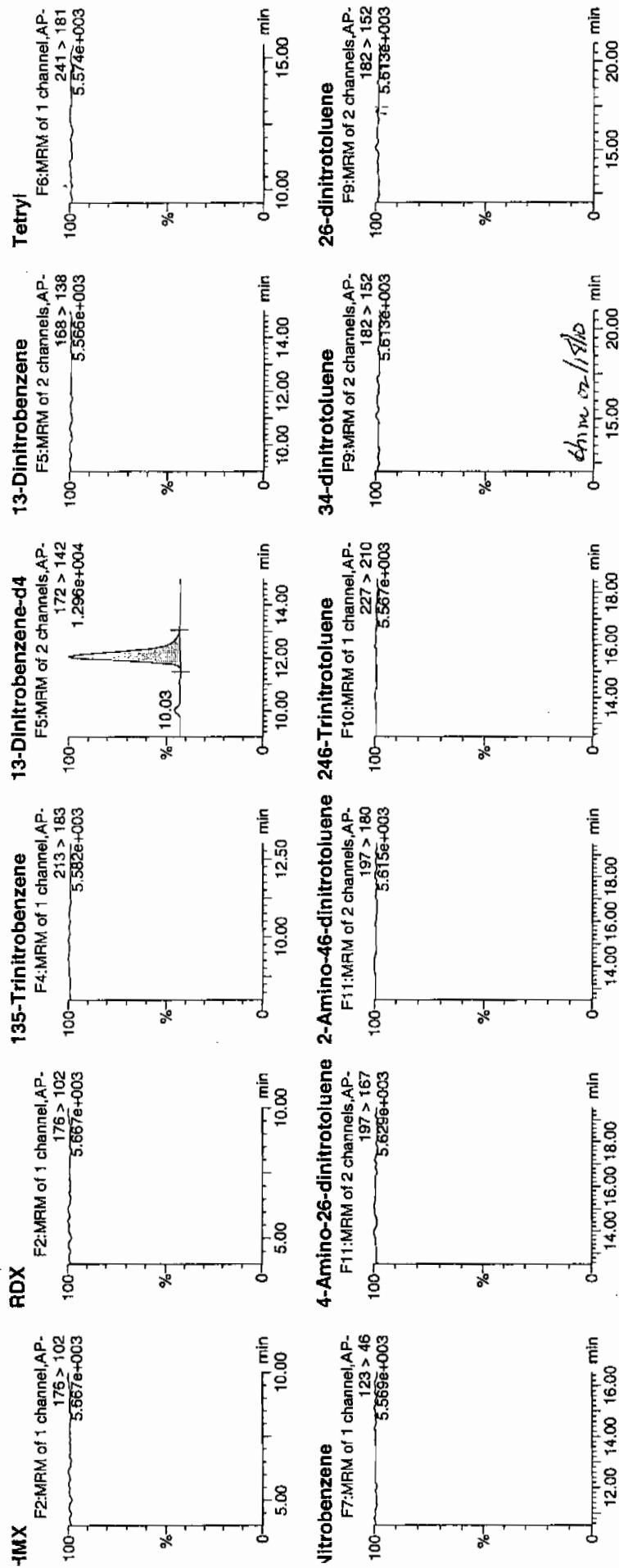
Date: 17-Feb-2010

Time: 18:50:03

D: XIBLK07

Vial: 1:1,A

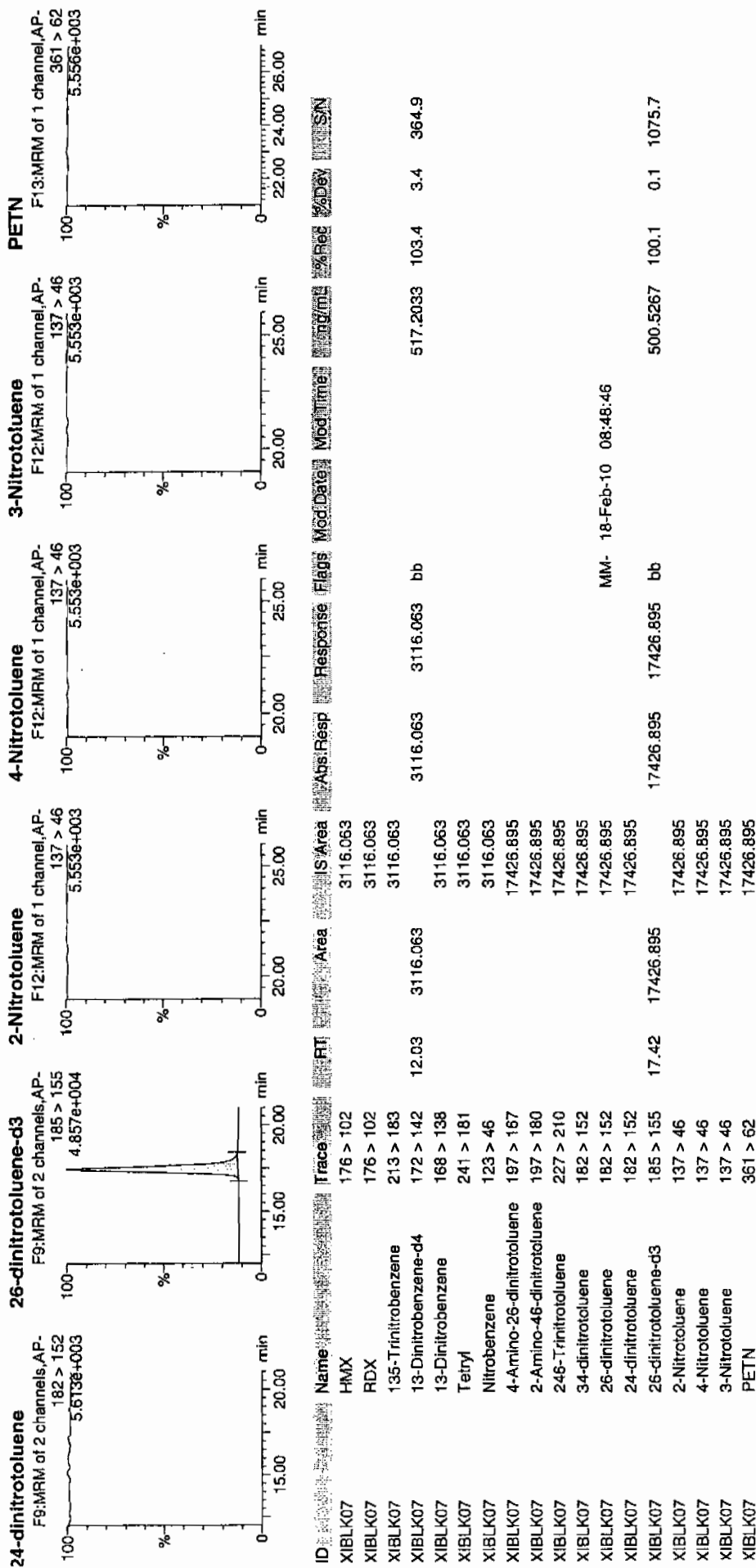
MRM
2/18/10



Printed: Thu Feb 18 08:53:51 2010, Page 48 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 18-FEB-10 01:14

GEL Data File: EXP0216066a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	555.508
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	477.827
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\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216066a

Date: 18-Feb-2010

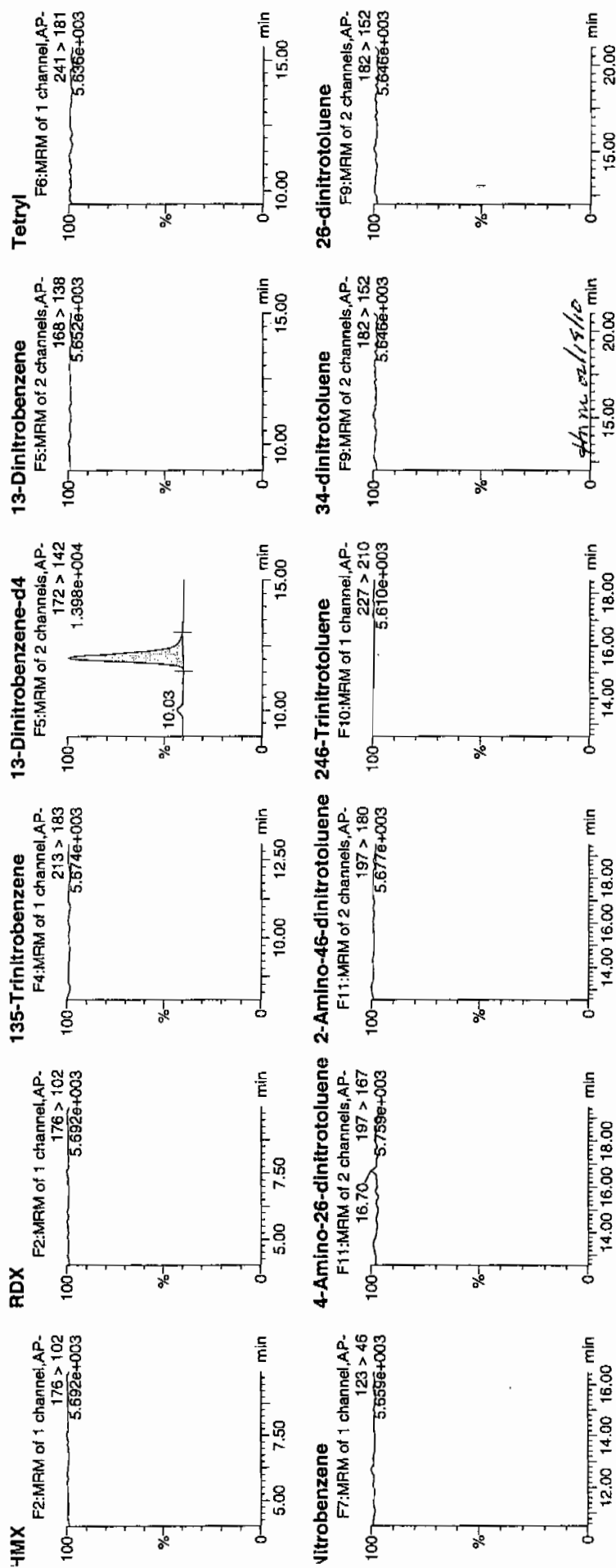
Time: 01:14:55

ID: XIBLK08

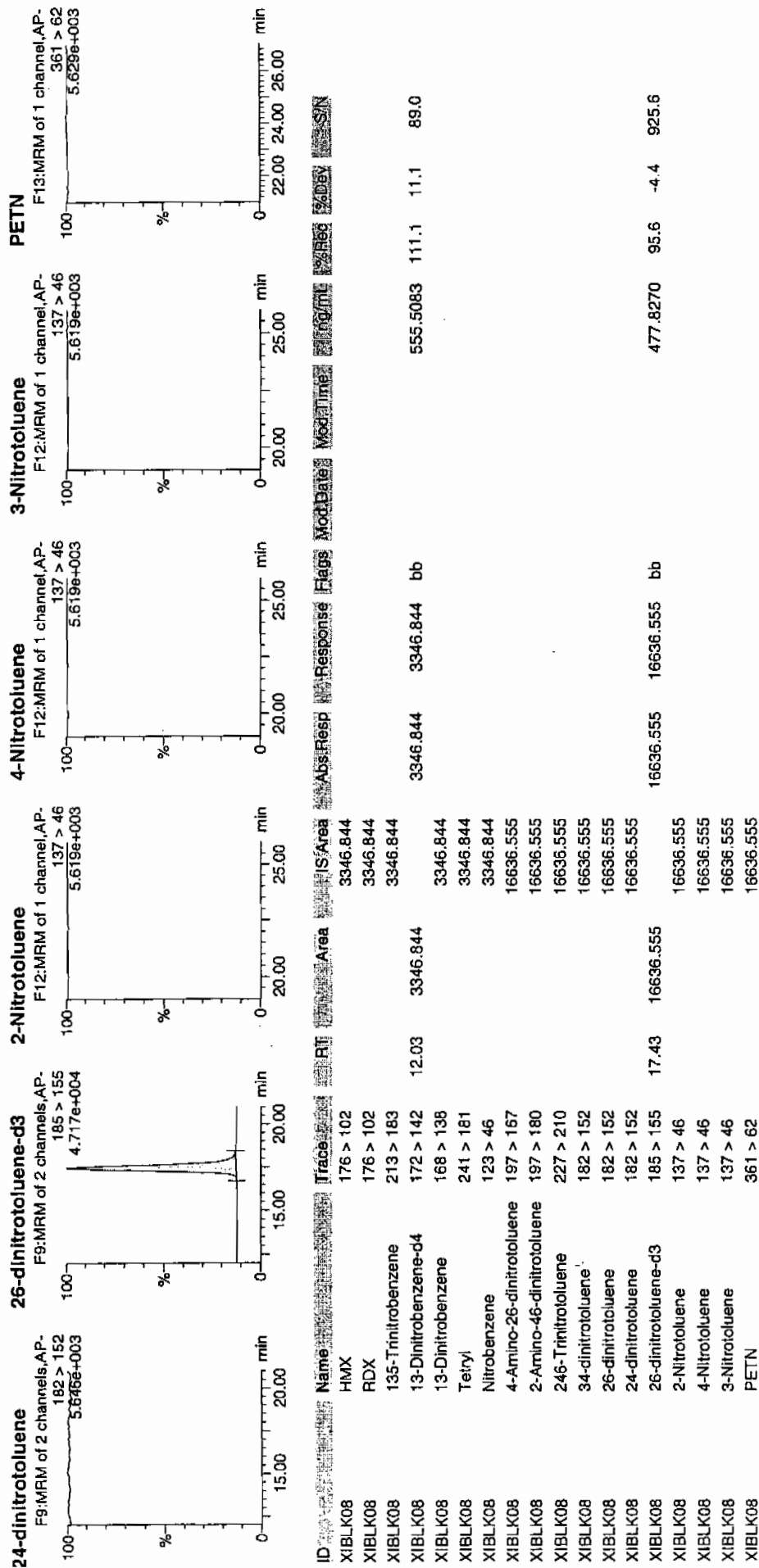
Vial: 1:1,A

2/18/10
 MJP

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Dataset: C:\MASSLYN\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 18-FEB-10 02:43

GEL Data File: EXP0216069a

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	533.187
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	509.45
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\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0216069a

Date: 18-Feb-2010

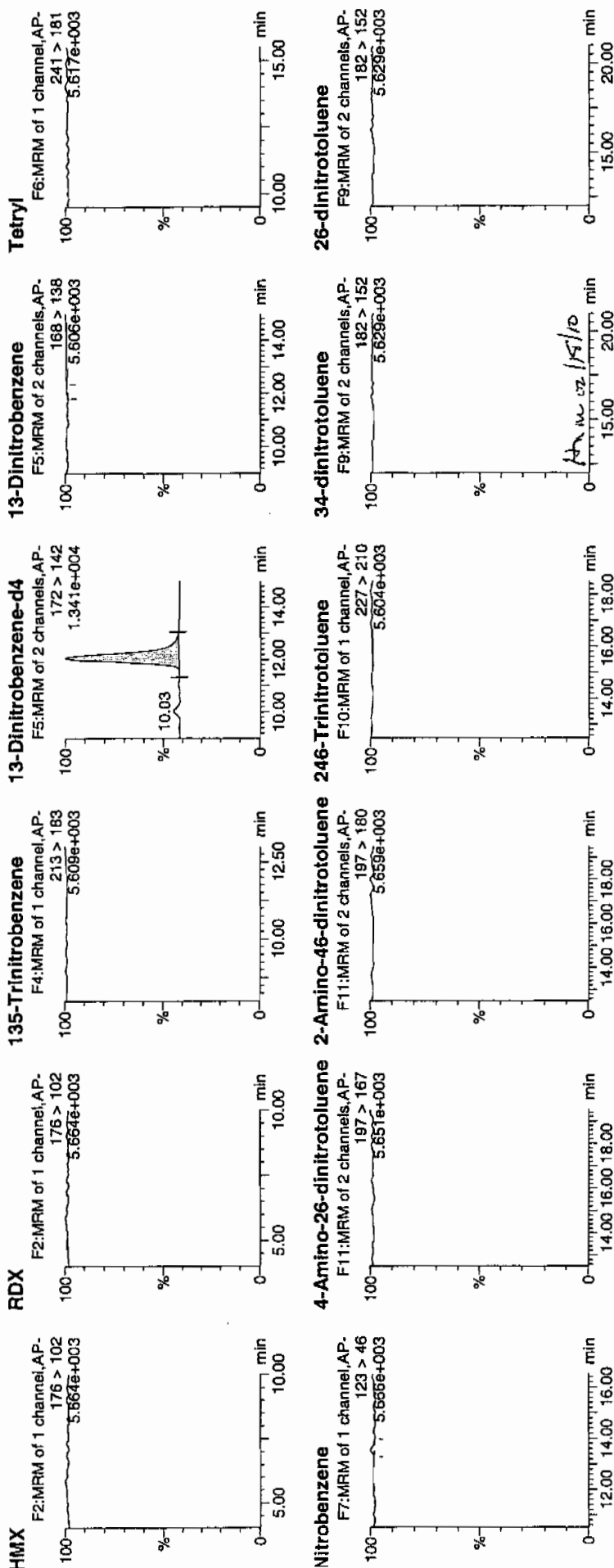
Time: 02:43:41

ID: XIBLK09

Vial: 1:1,F

10/10/10

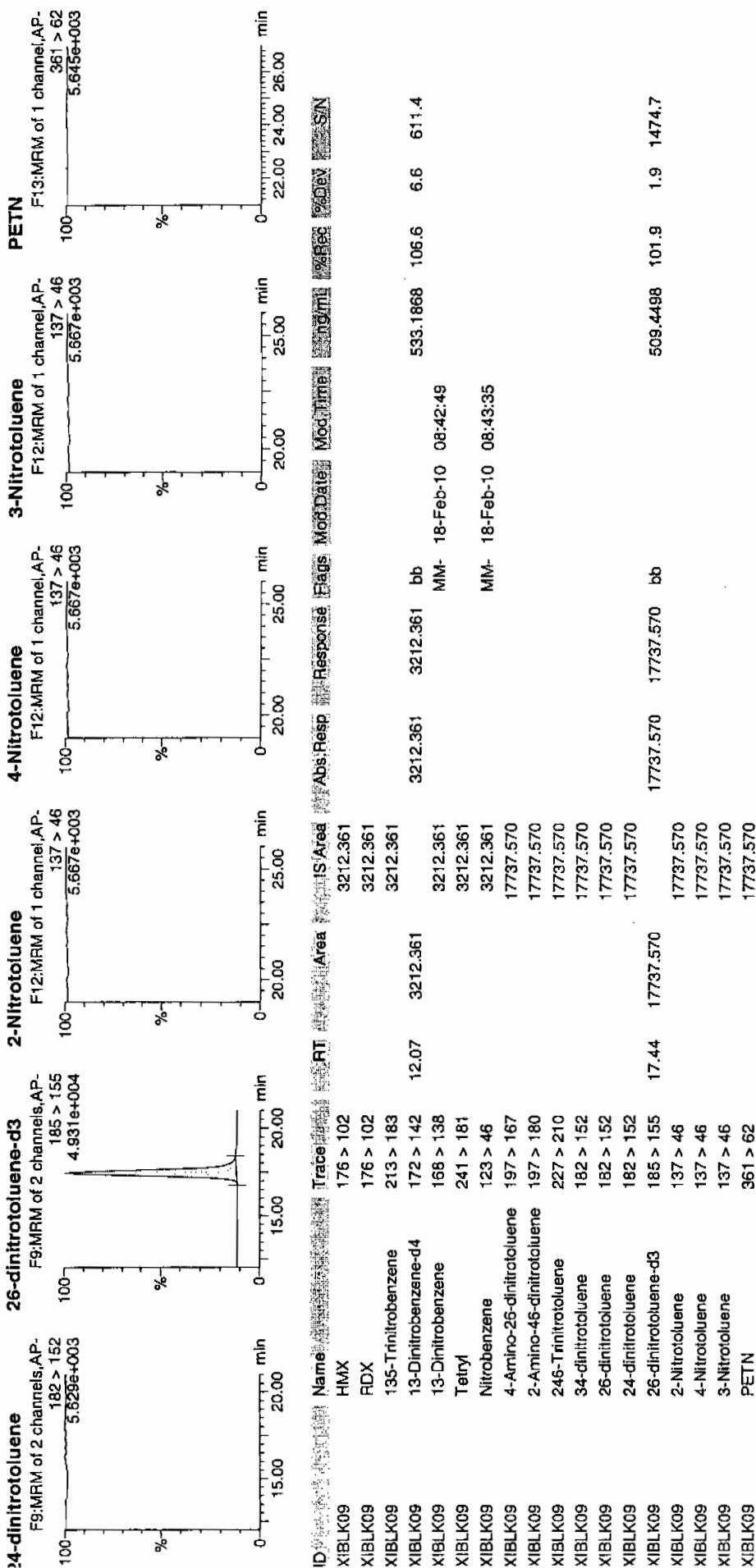
Page 648 of 1179



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Quantify Sample Report
 JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 18-FEB-10 07:40

GEL Data File: EXP0216079a

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	480.33
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	458.446
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

3EL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216079a

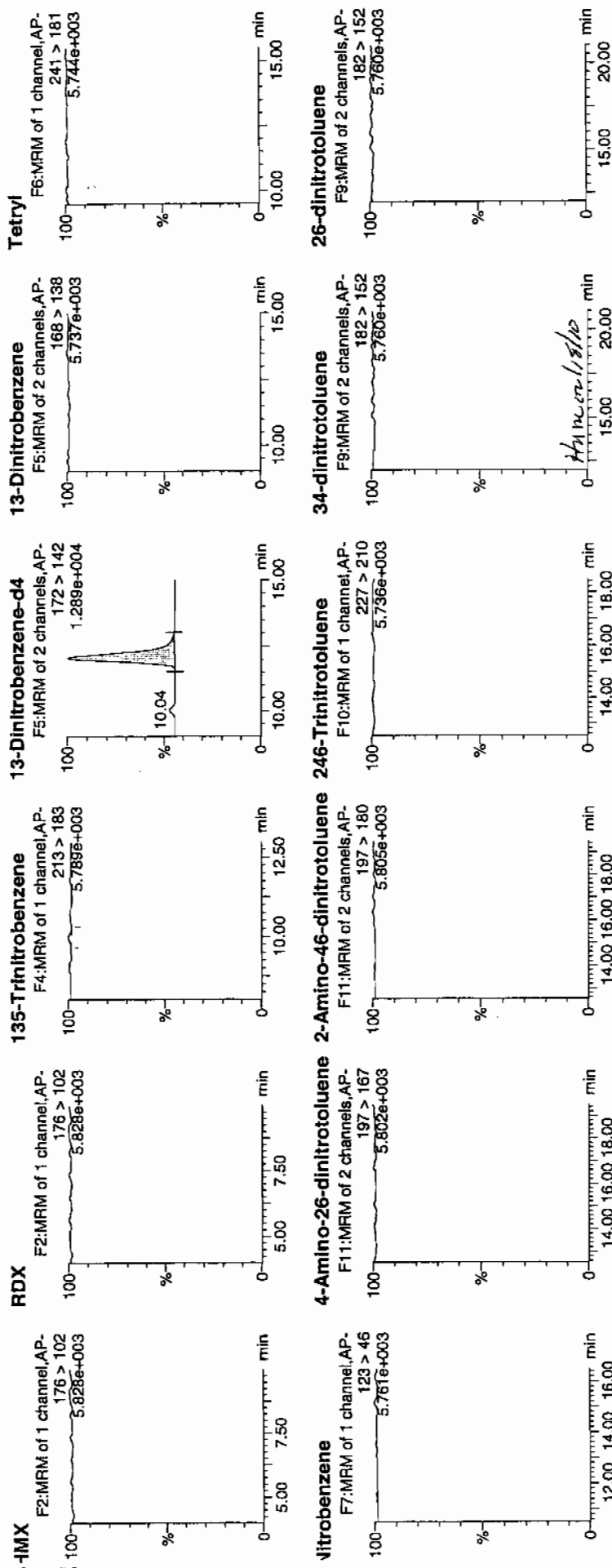
Date: 18-Feb-2010

Time: 07:40:00

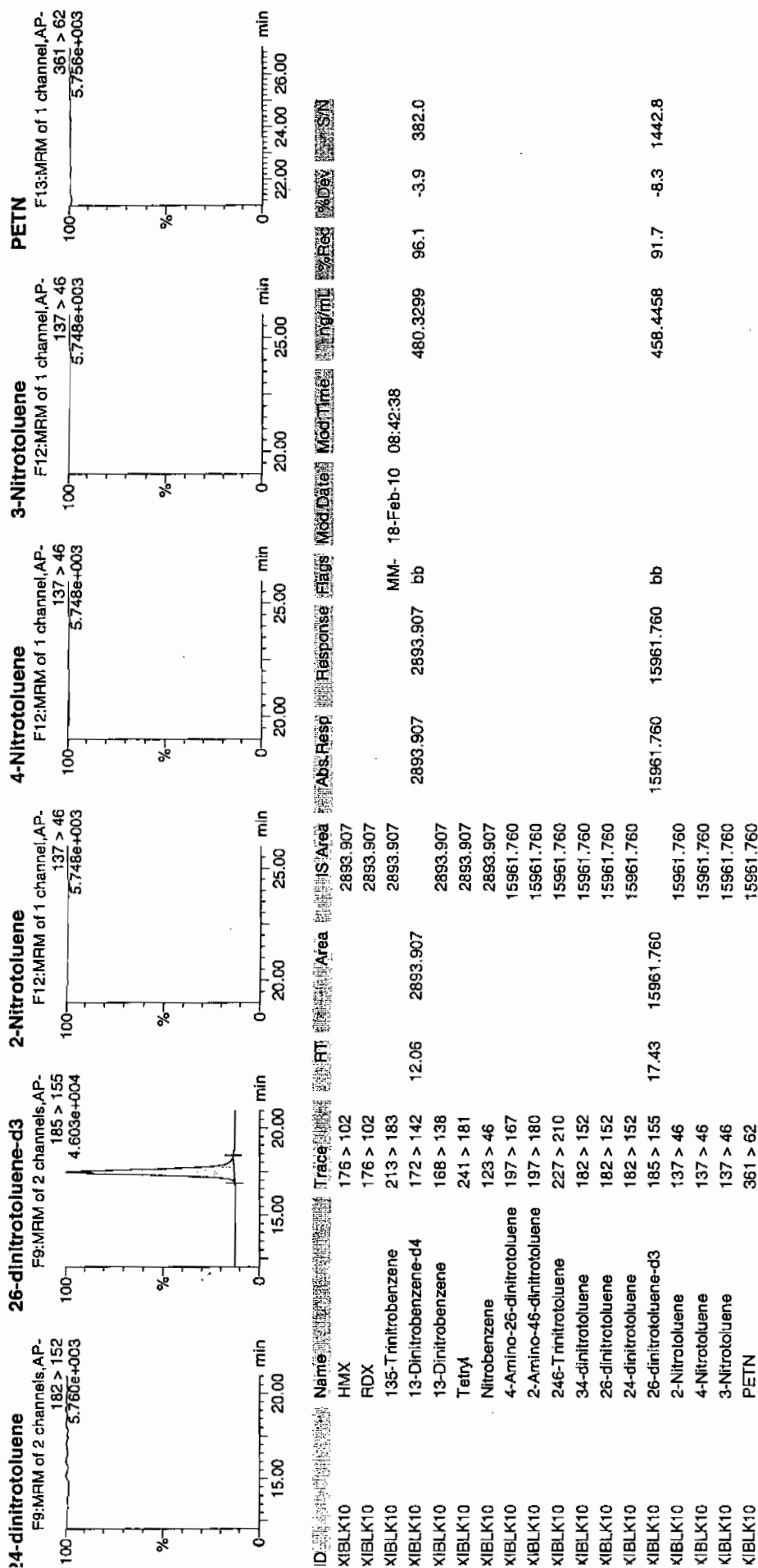
D: XIBLK10

Vial: 1:1,A

NR
2/18/10



Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 18-FEB-10 13:05

GEL Data File: EXP0216090a

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	455.405
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	434.95
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216090a

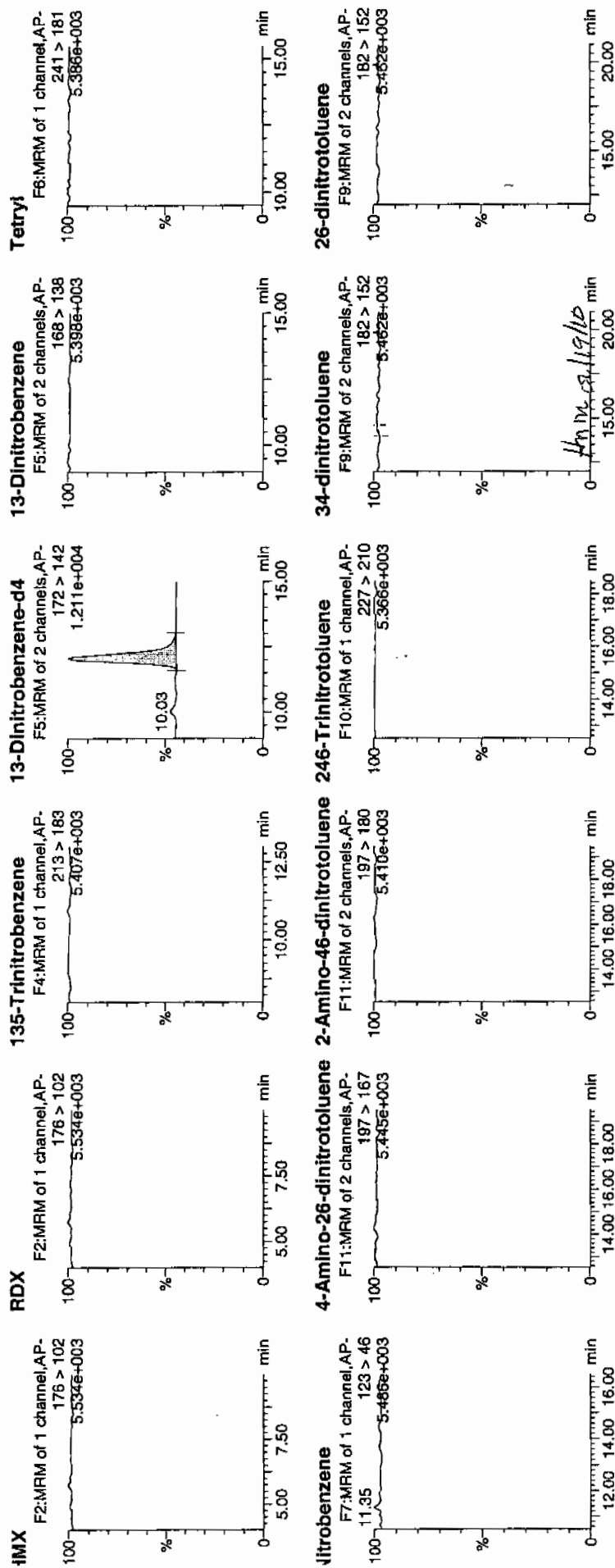
Date: 18-Feb-2010

Time: 13:05:54

ID: XIBLK11

/Inlet: 1:1,A

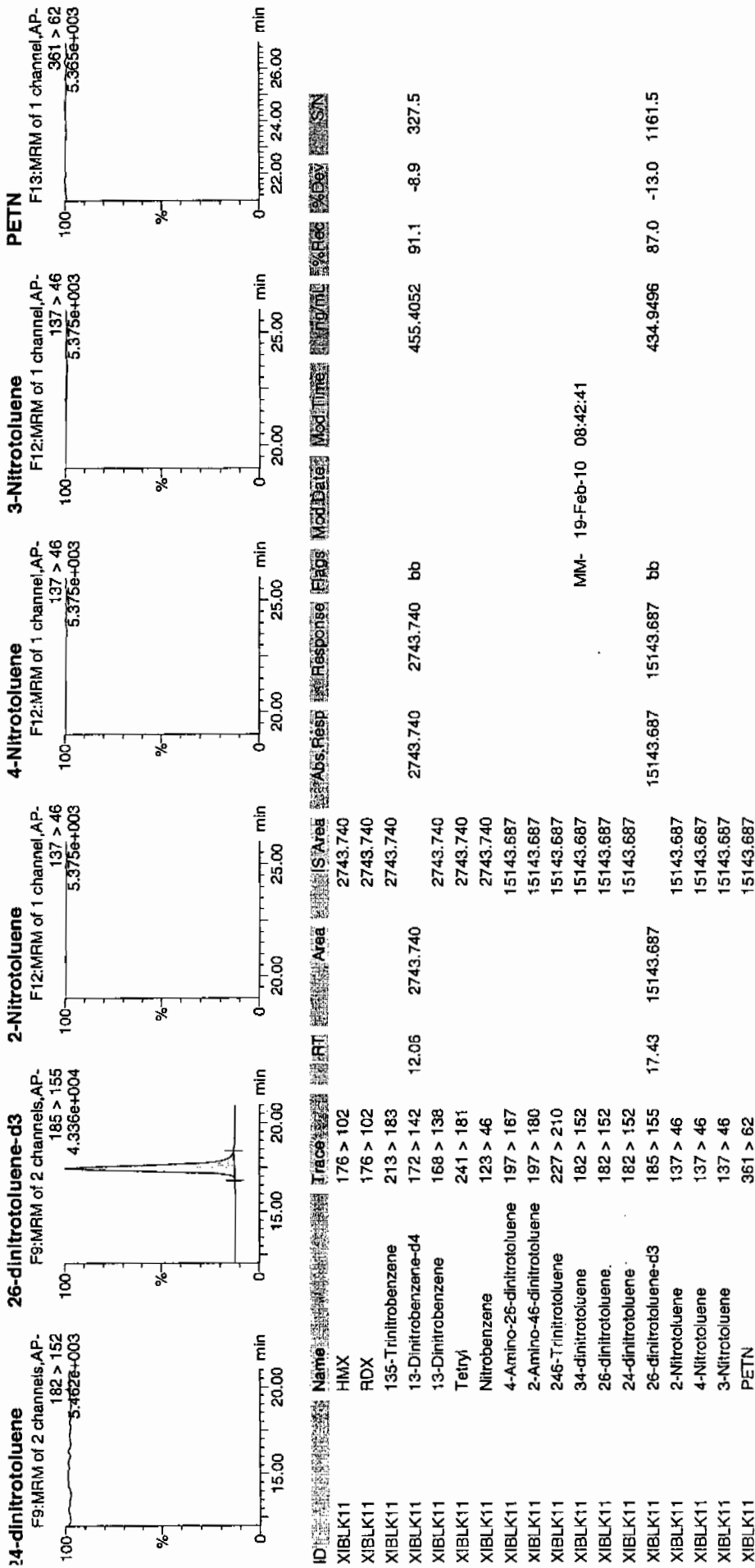
Page 654 of 1179



Printed: Fri Feb 19 08:50:21 2010, Page 20 of 97

Quantify Sample Report
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 18-FEB-10 19:00

GEL Data File: EXP0216102a

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	463.109
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	440.854
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: Fri Feb 19 08:50:21 2010, Page 43 of 97

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216102a

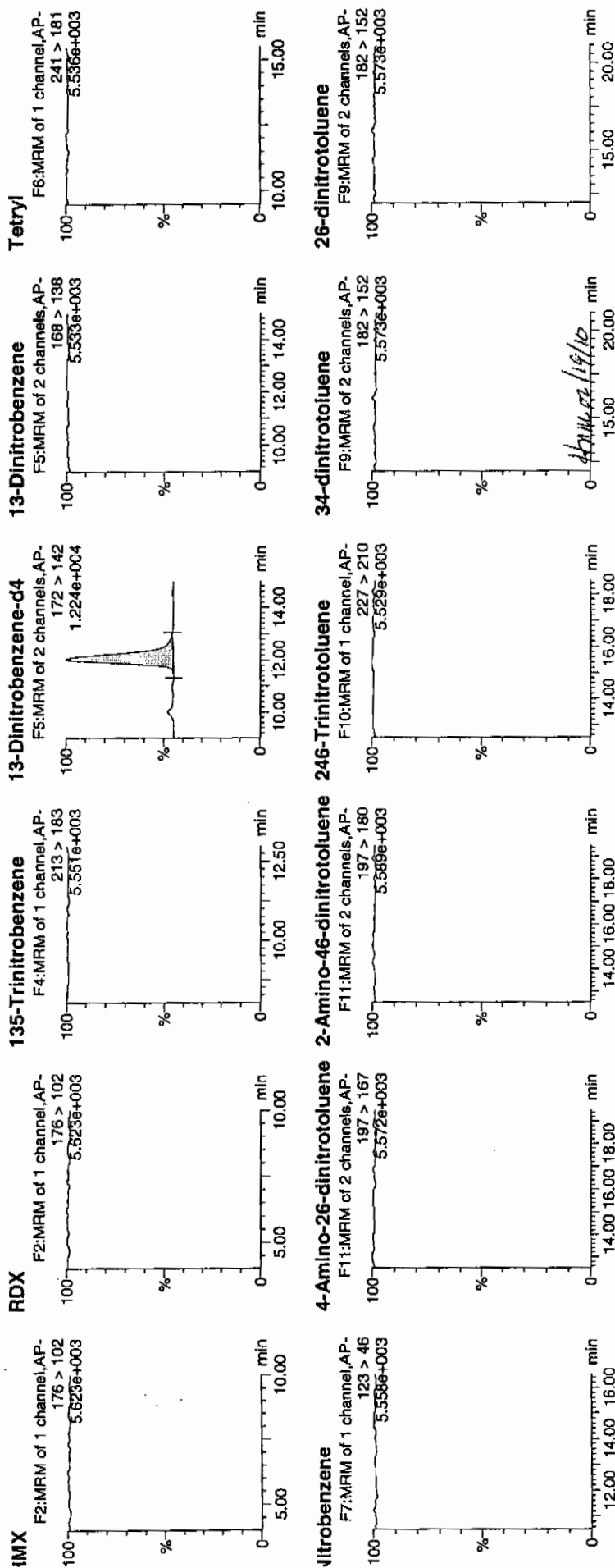
Date: 18-Feb-2010

Time: 19:00:50

Job: XIBLK12

Ratio: 1:1,A

1/19/10

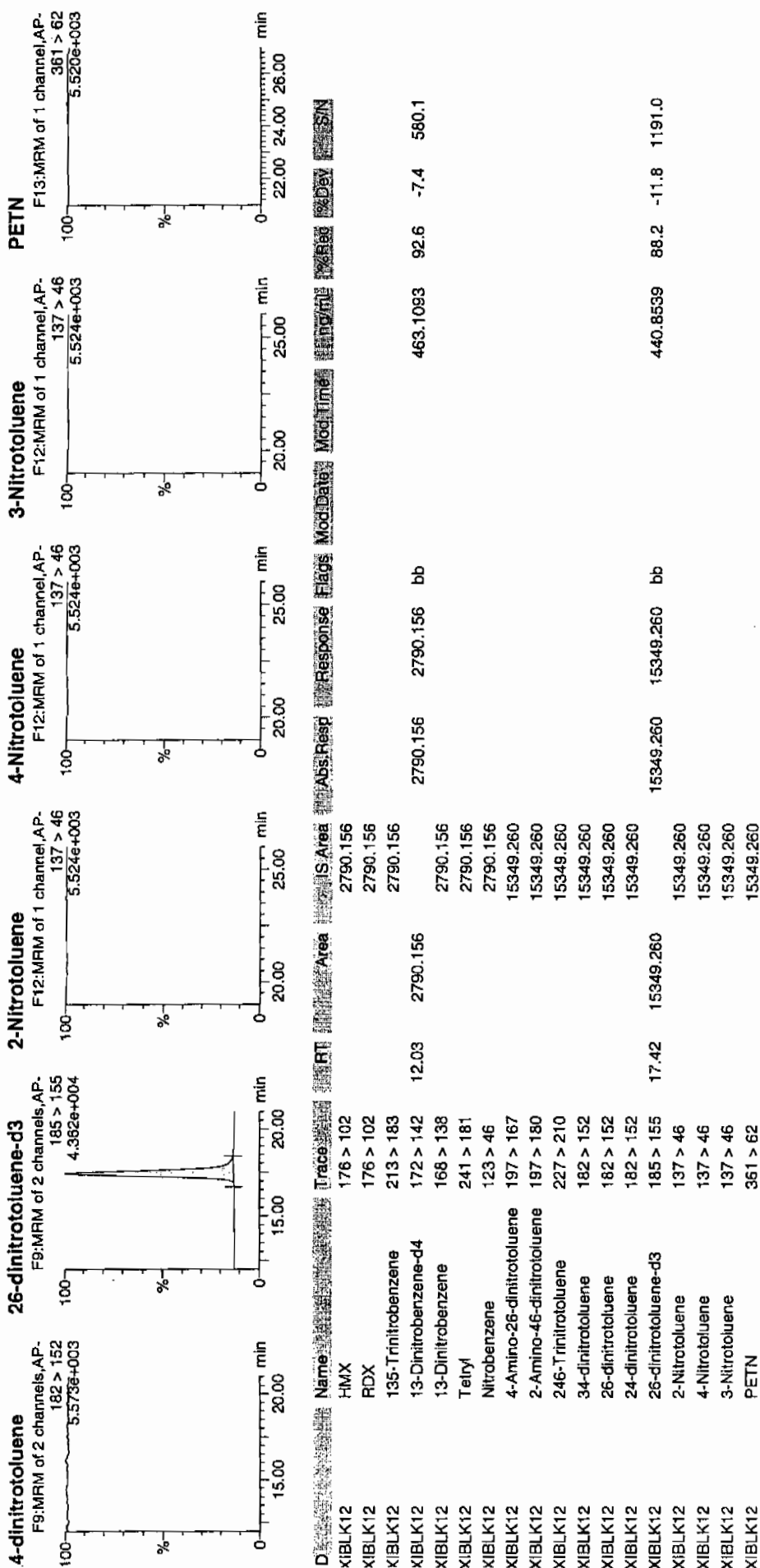


Quantify Sample Report

iEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 19 08:50:21 2010, Page 44 of 97

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 14-FEB-10 16:38

GEL Data File: EXS02140010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	4.37
tris(o-cresyl) phosphate	0	8.68
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 2/16/10

Sample Name: 'XIBLK02' Sample ID: '11111' File: 'EX502140010.will'

Peak Name: 'TATB' Mass(es): '257.2204.5 amu'

Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1

Sample Type: Unknown

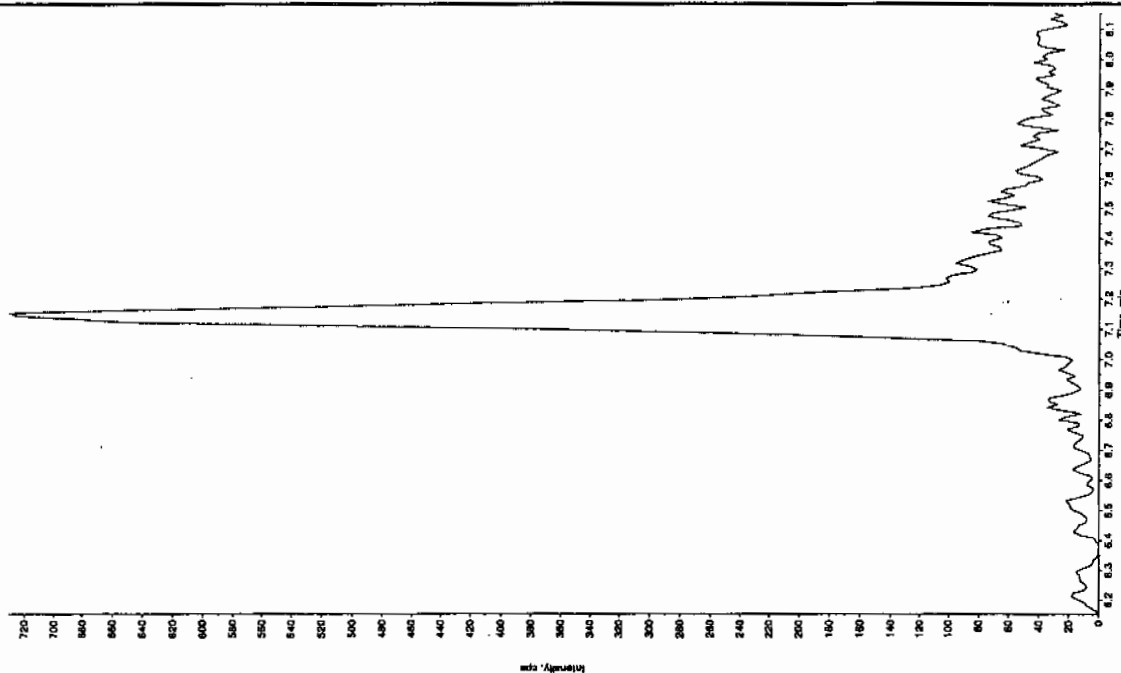
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/14/2010

Acq. Time: 4:38:38 PM

Modified: No



Sample Name: 'XIBLK02' Sample ID: '11111' File: 'EX502140010.will'

Peak Name: '35-Dinitroanisole' Mass(es): '162.0461.0 amu'

Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1

Sample Type: Unknown

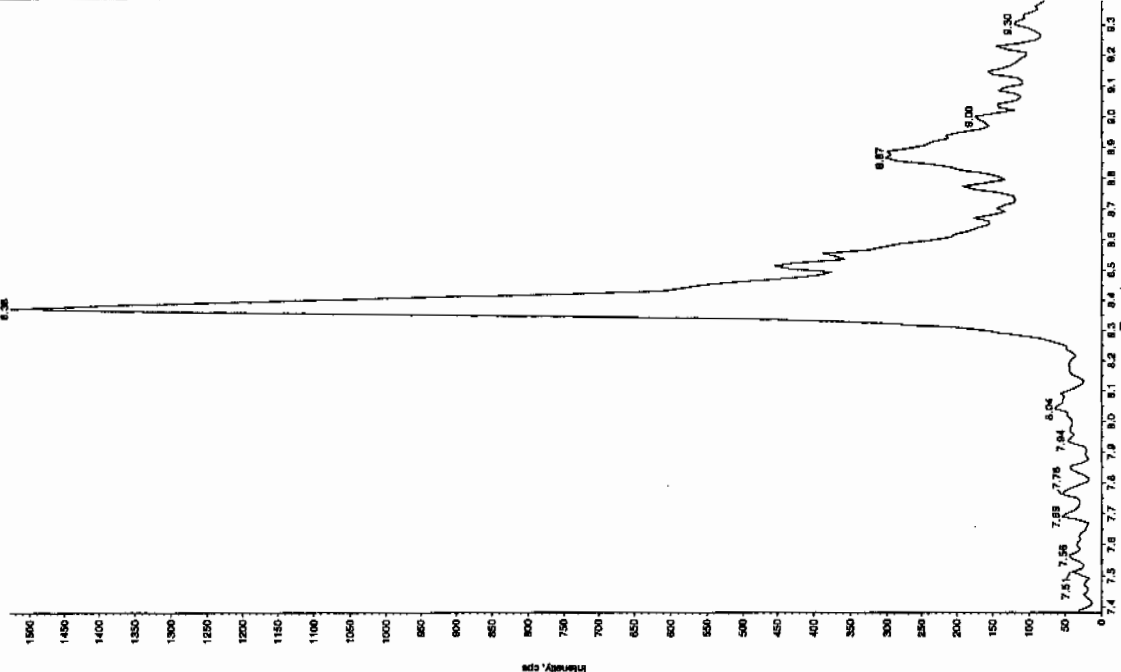
Concentration: N/A

Calculated Conc: 0.00 ng/mL

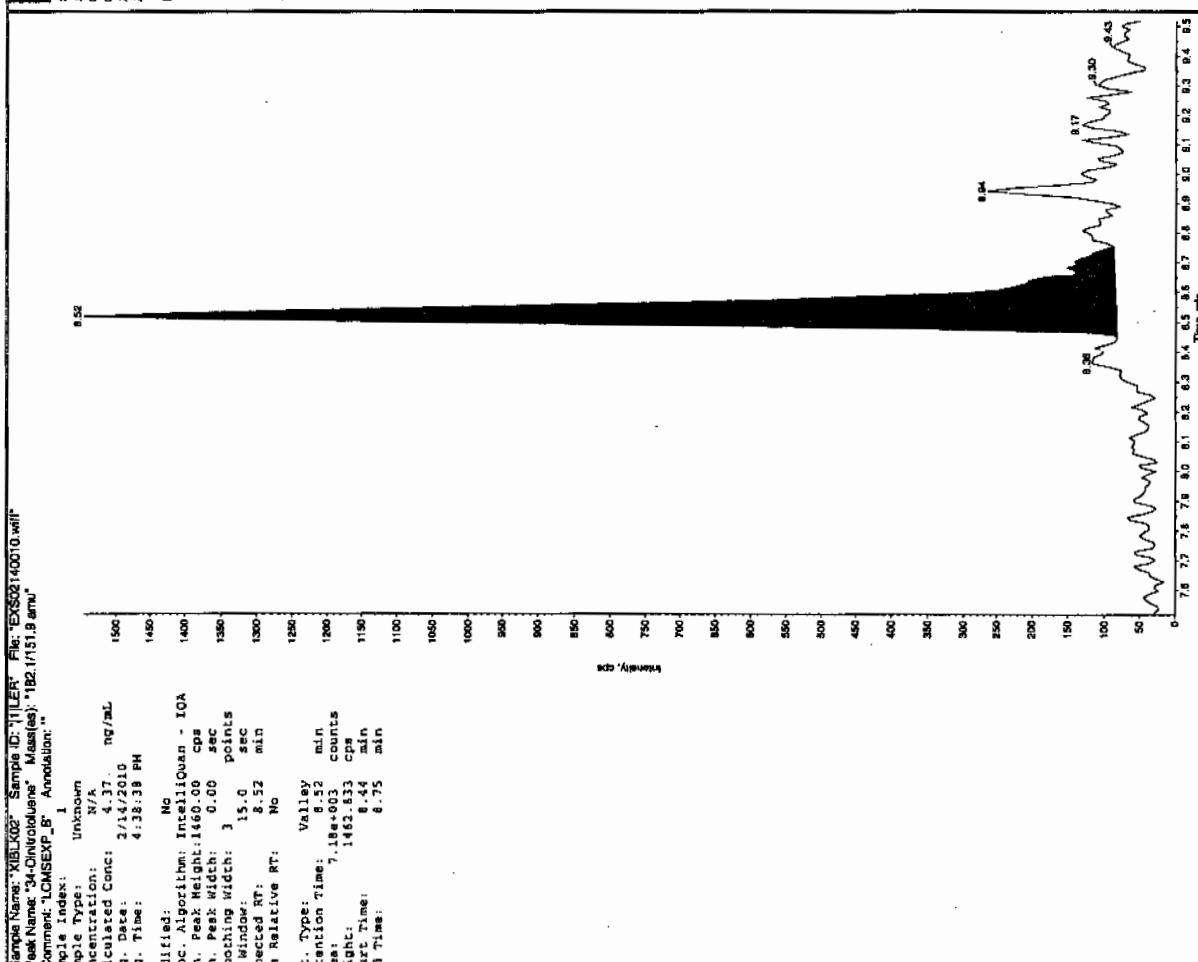
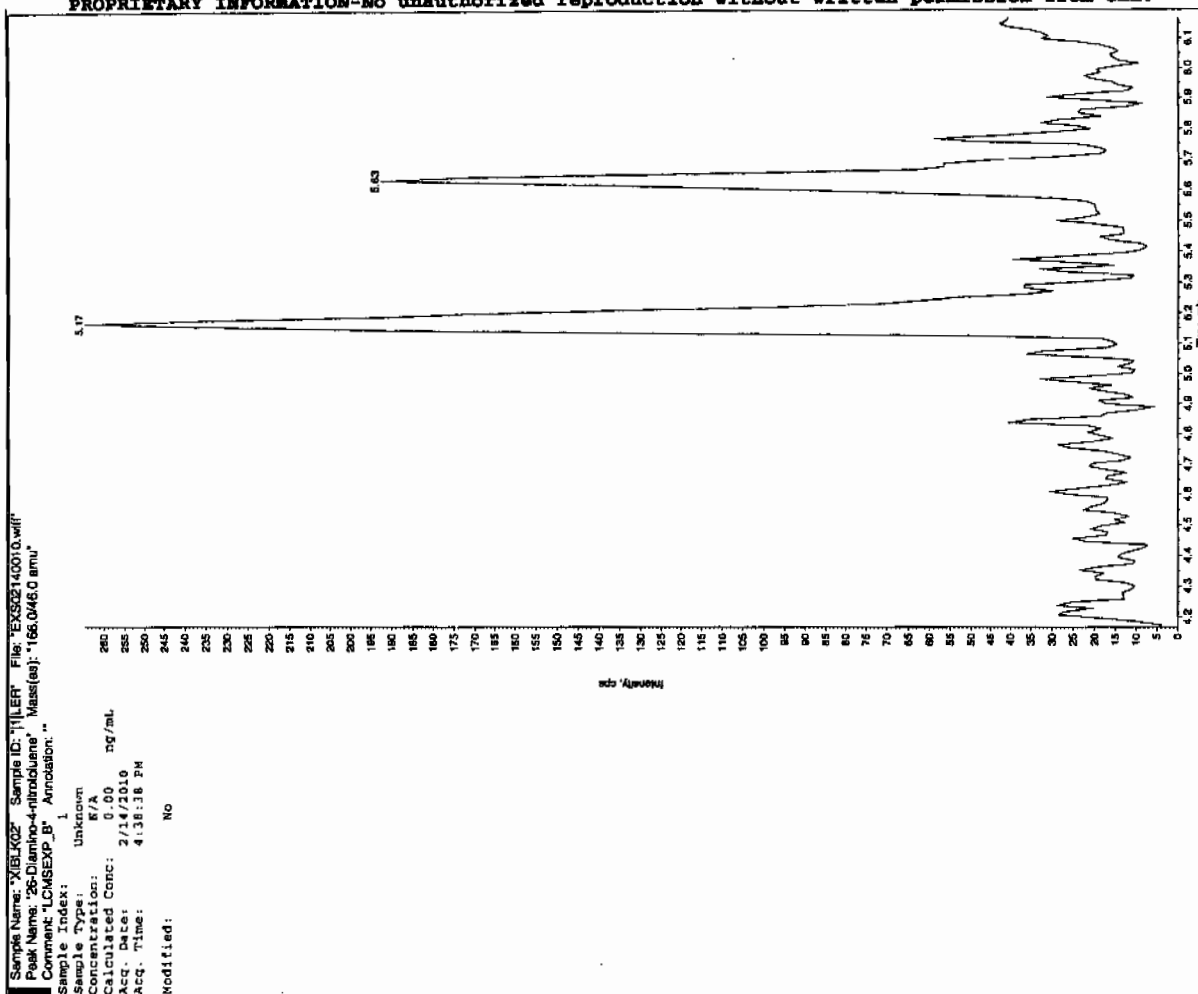
Acq. Date: 2/14/2010

Acq. Time: 4:38:38 PM

Modified: No



Run 02/17/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 14-FEB-10 17:10

GEL Data File: EXS02140012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.62
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 2/16/10

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Sample Name: 'XBLK03' Sample ID: 'JILLER' File: 'EXS02140012.wif'

Peak Name: '35-Orthocoupling' 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: 2/14/2010

Acq. Time: 5:10:02 PM

Modified: No

Sample Name: 'XBLK03' Sample ID: 'JILLER' File: 'EXS02140012.wif'

Peak Name: 'TATB' Mass(es): '257.2204.9 amu'

Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1

Sample Type: Unknown

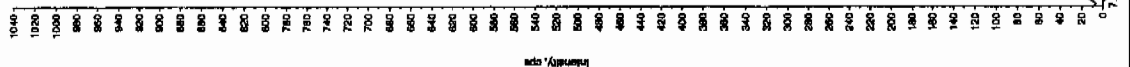
Concentration: N/A

Calculated Conc: 0.00 ng/mL

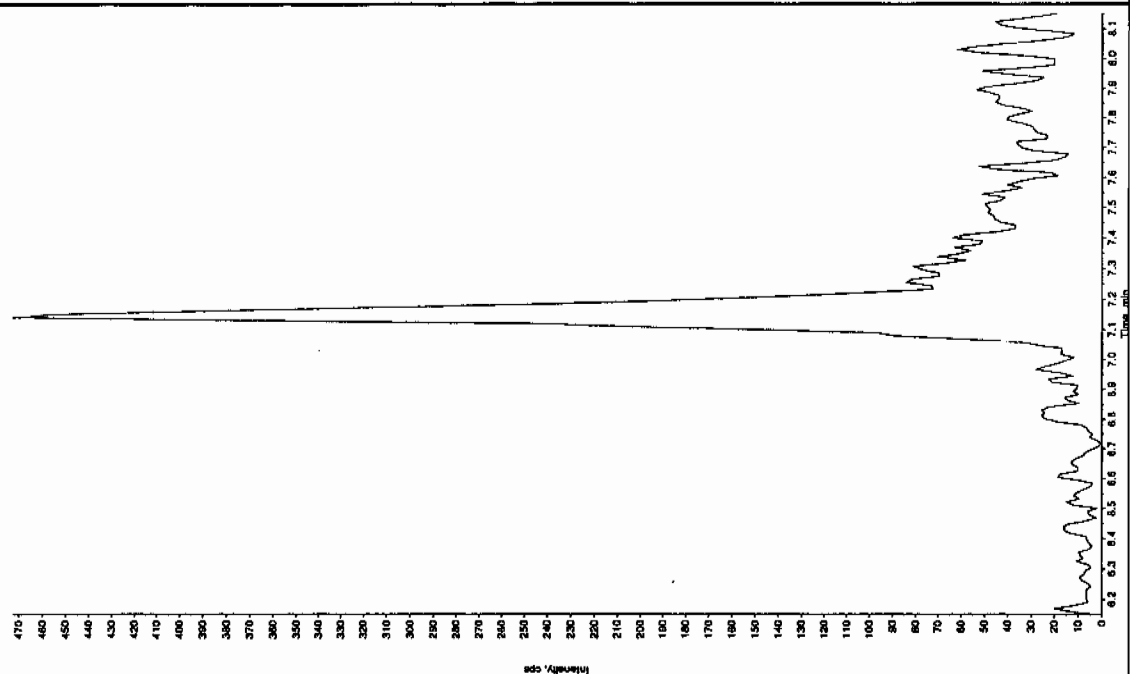
Acq. Date: 2/14/2010

Acq. Time: 5:10:02 PM

Modified: No



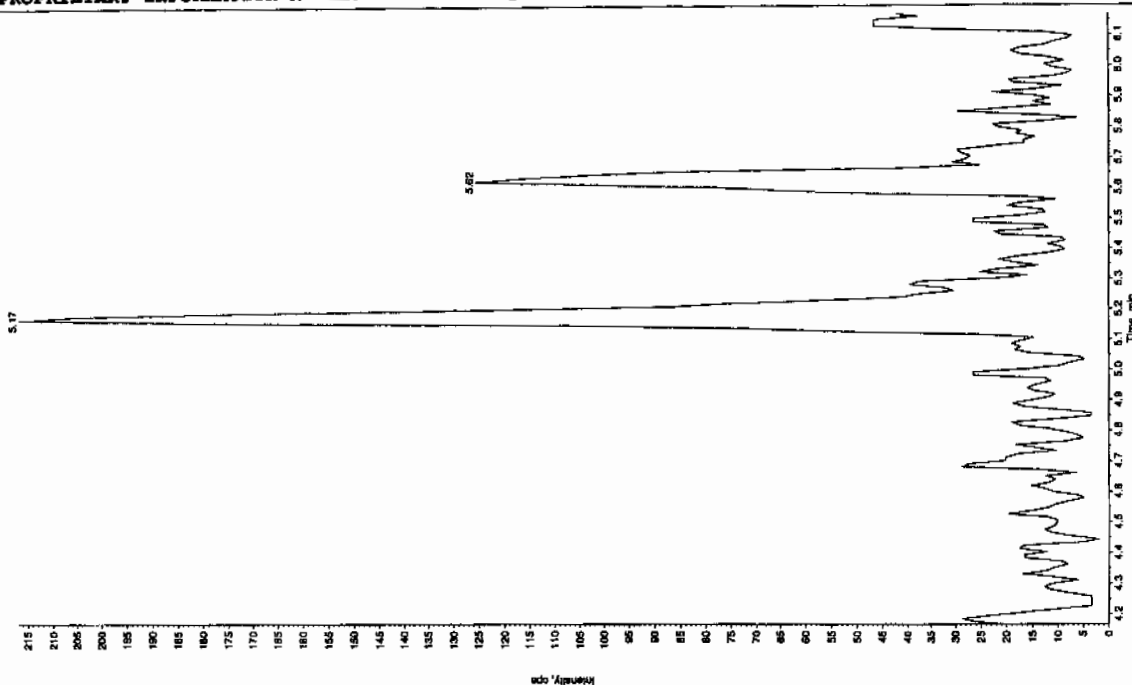
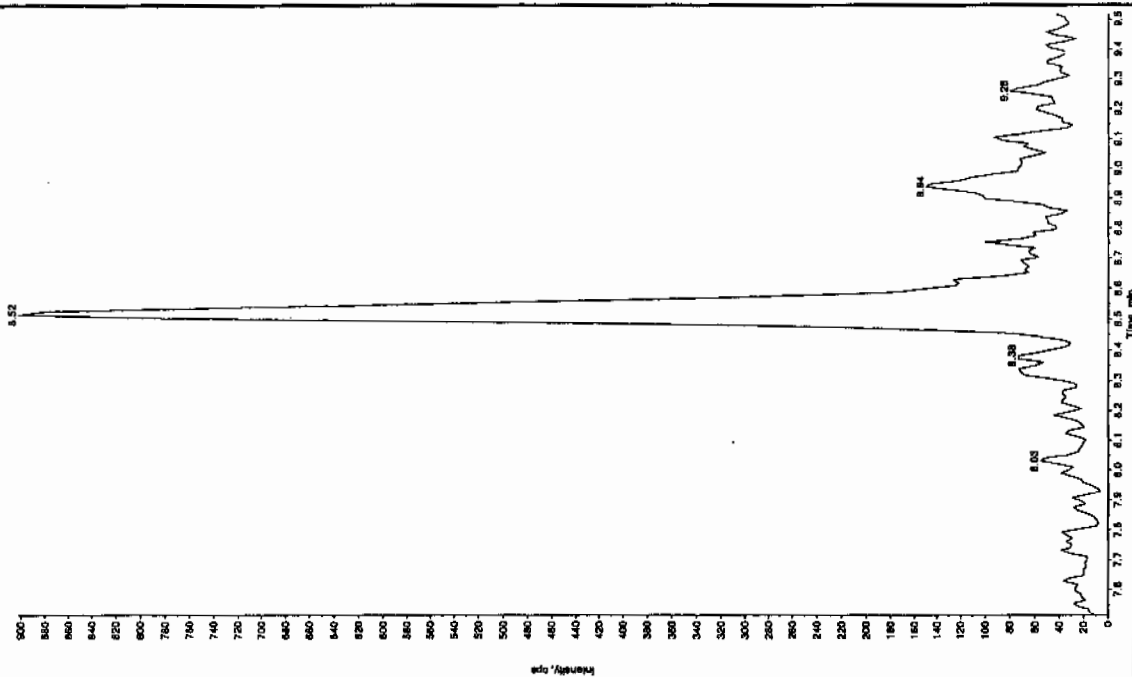
Run 02/17/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "YBLK03" Sample ID: "YBLK03" File: "EXS02140012.wif" Peak Name: "26-Dichloro-4-nitrofluorene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMS-EXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 5:10:02 PM
 Acq. Time: 5:10:02 PM
 Modified: No



Sample Name: "XBLX03" Sample ID: "HLEP" File: "EX502140012.wif"
 Peak Name: "24-Diamino-6-nitroindane" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 2/14/2010
 Time: 5:10:02 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: 10.0 sec

Expected RT: 11.0 min

Use Relative RT: No

Int. Type: Valley

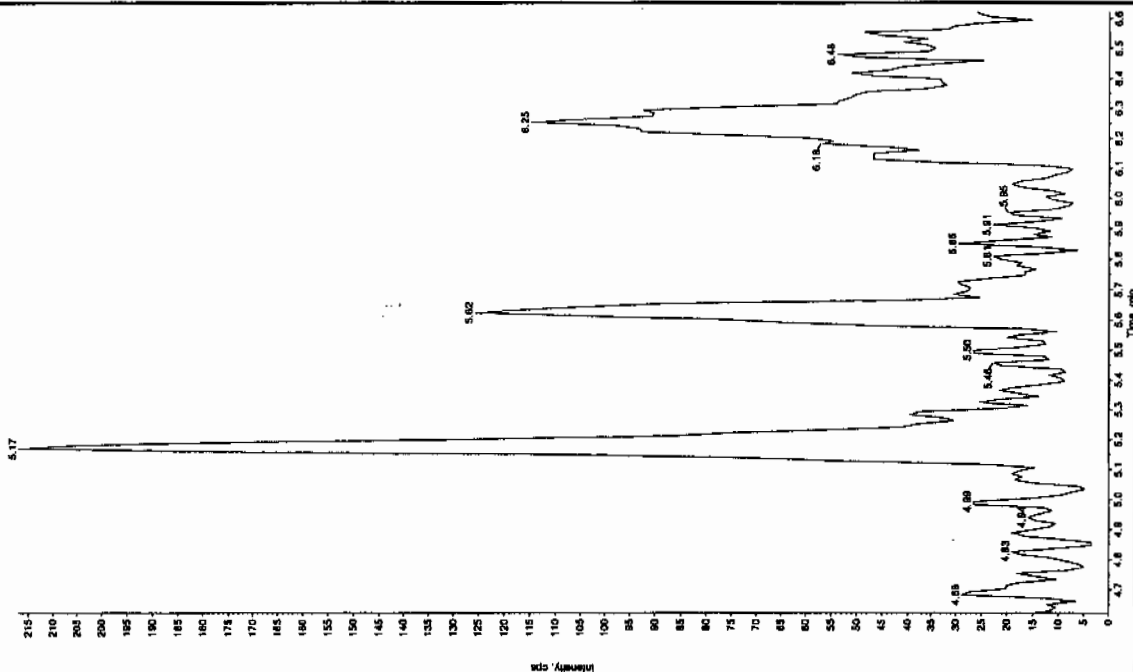
Retention Time: 11.1 min

Area: 1.47e+005 counts

Height: 33661.640 cps

Start Time: 10.9 min

End Time: 11.3 min



Sample Name: "XBLX03" Sample ID: "HLEP" File: "EX502140012.wif"
 Peak Name: "10-(O-cresyl) phosphite" Mass(es): "359.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 3.62 ng/mL
 Date: 2/14/2010
 Time: 5:10:02 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: 10.0 sec

Expected RT: 11.0 min

Use Relative RT: No

Int. Type: Valley

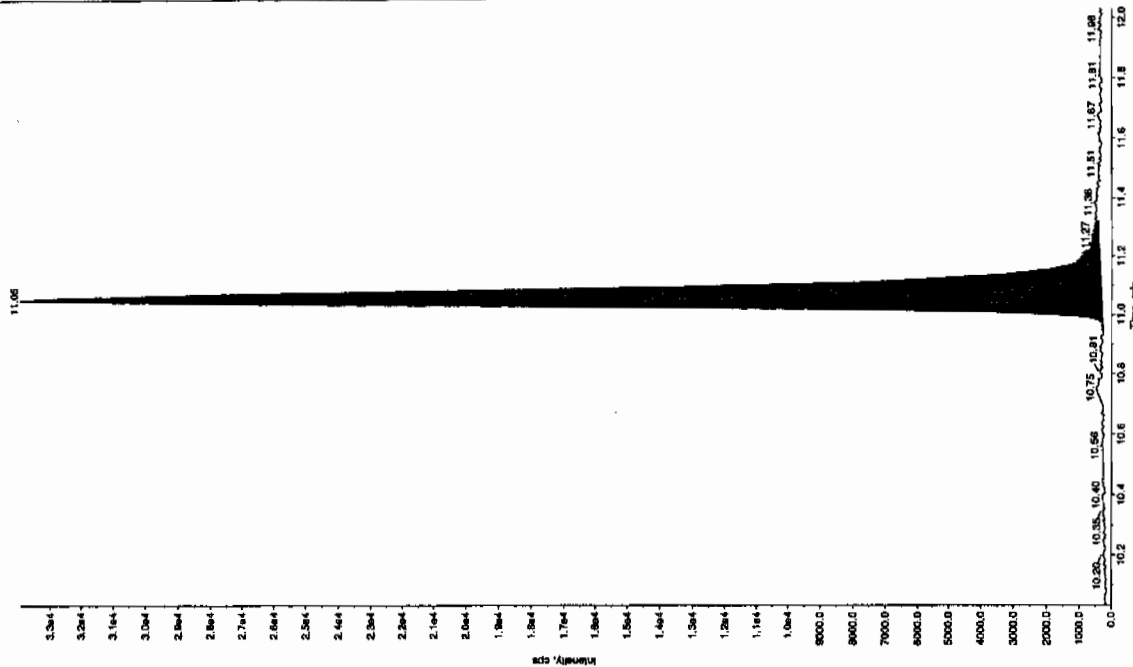
Retention Time: 11.1 min

Area: 1.47e+005 counts

Height: 33661.640 cps

Start Time: 10.9 min

End Time: 11.3 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 14-FEB-10 18:44

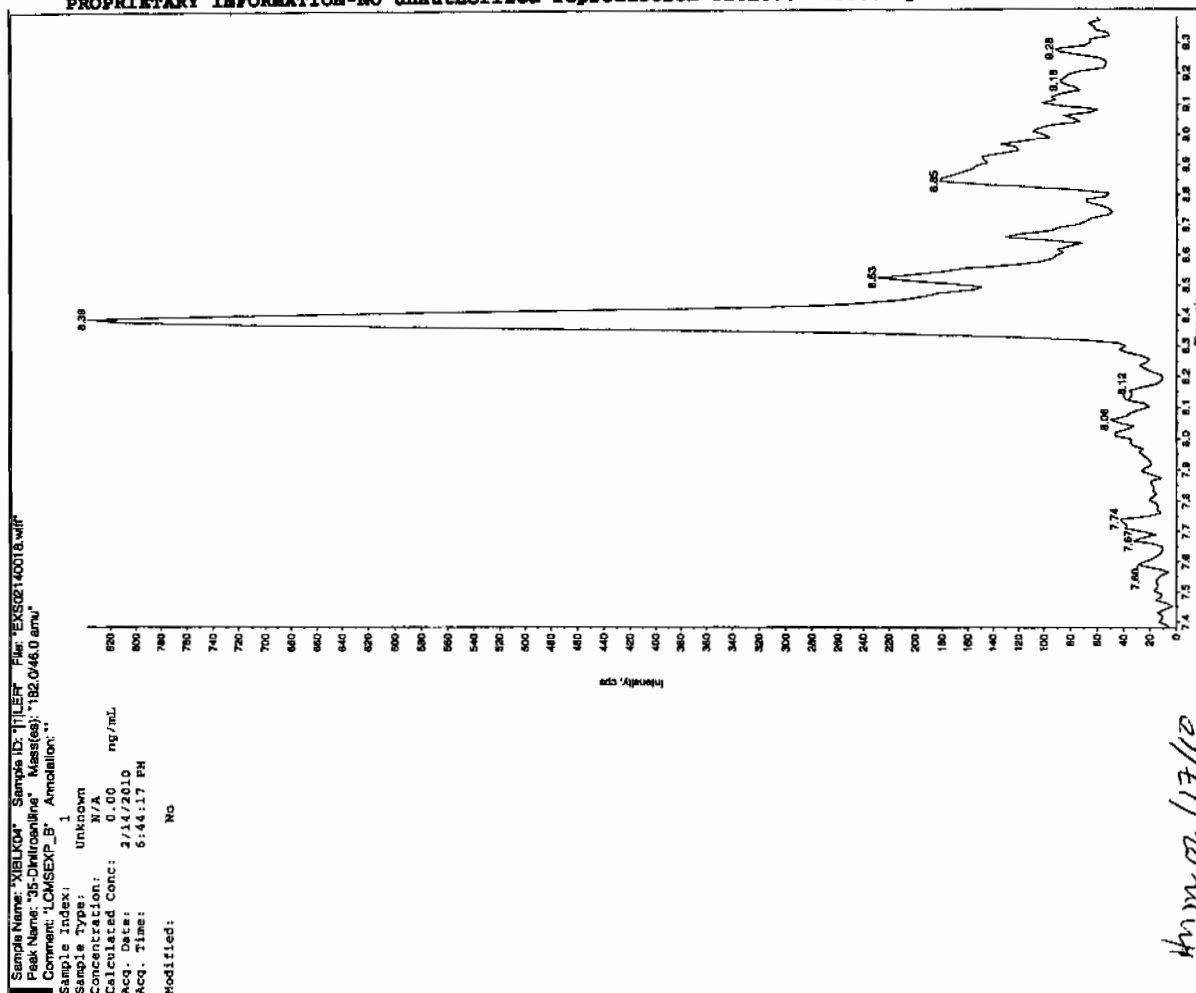
GEL Data File: EXS02140018.wiff

Instrument ID: LCMSMS

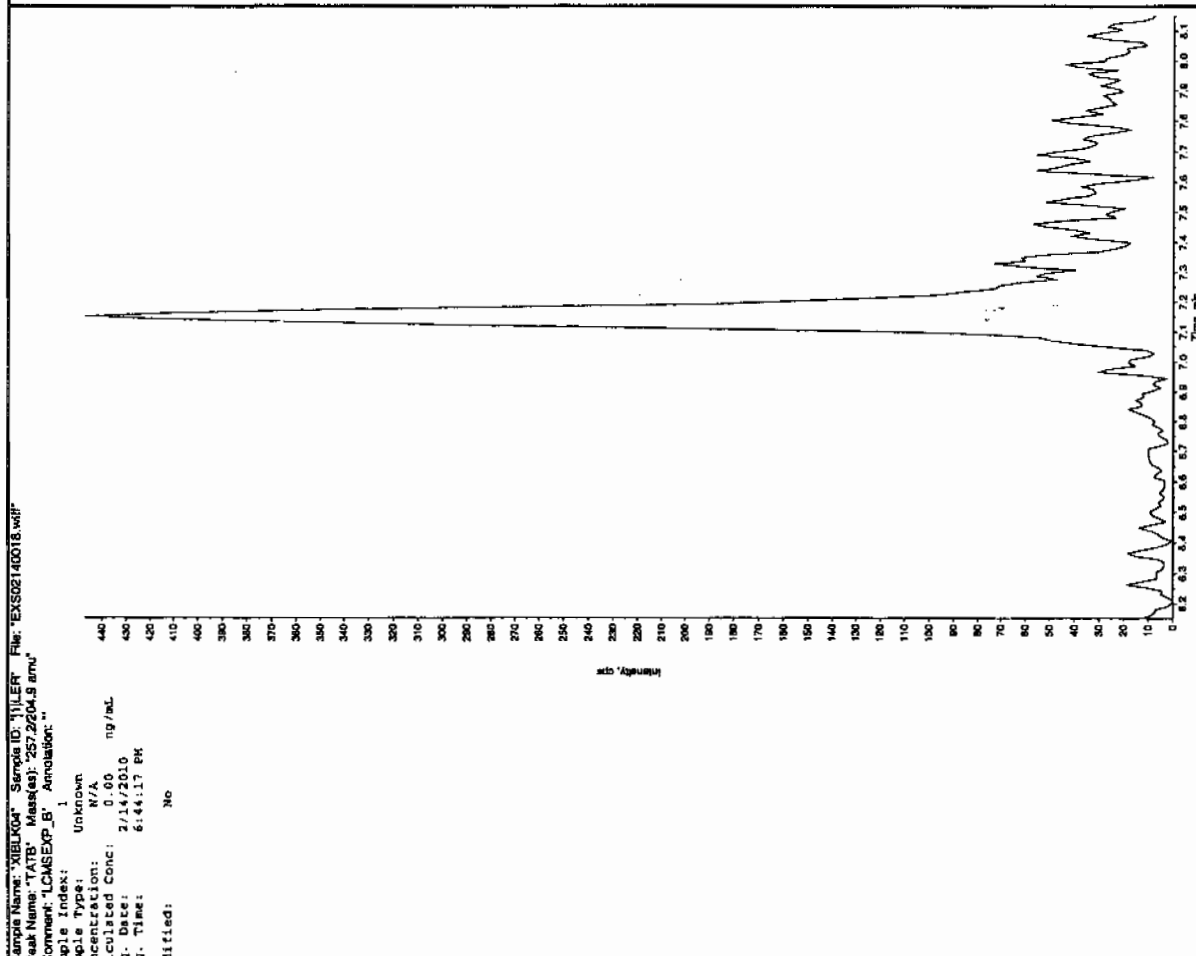
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.11
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0

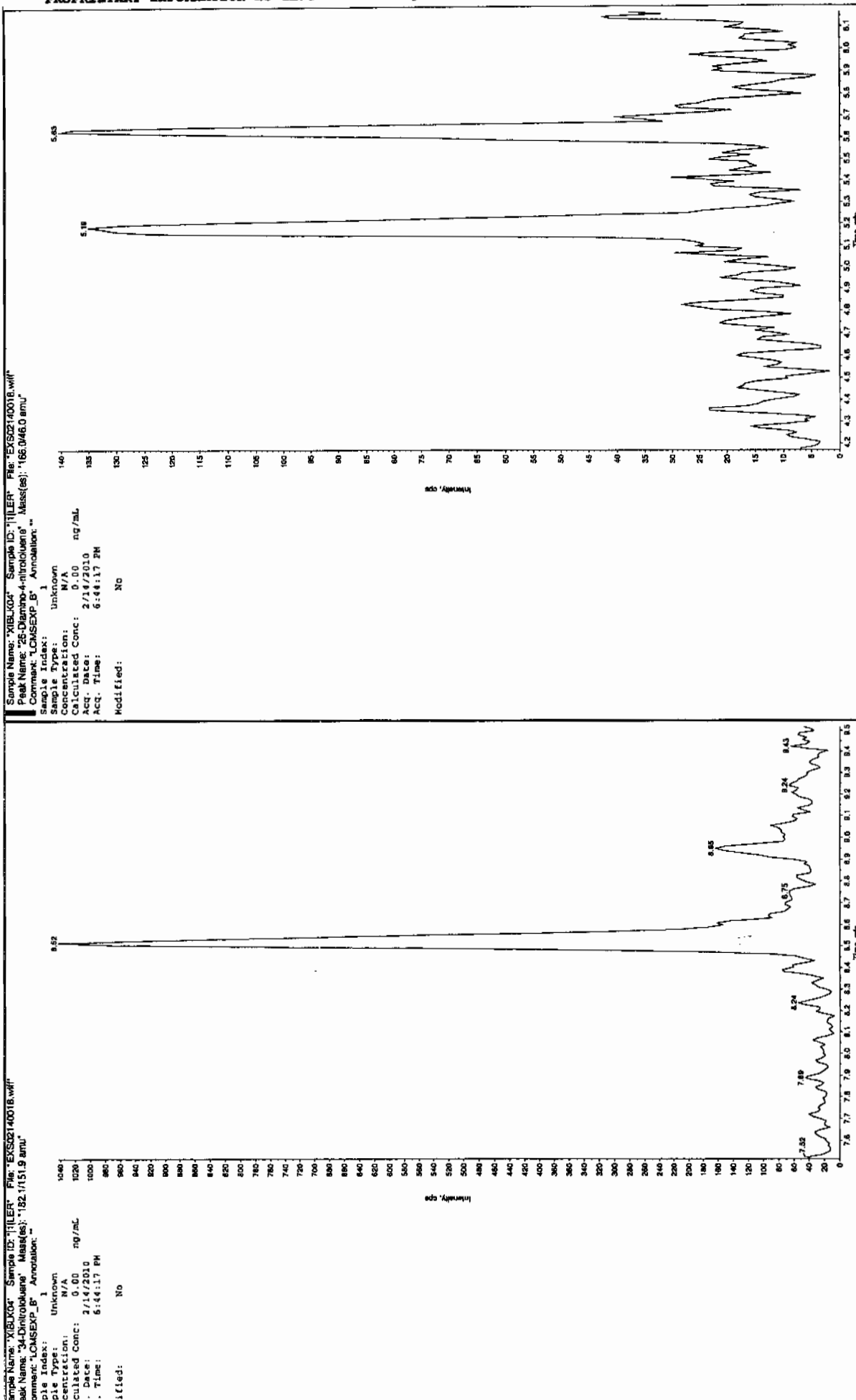
2/17/10



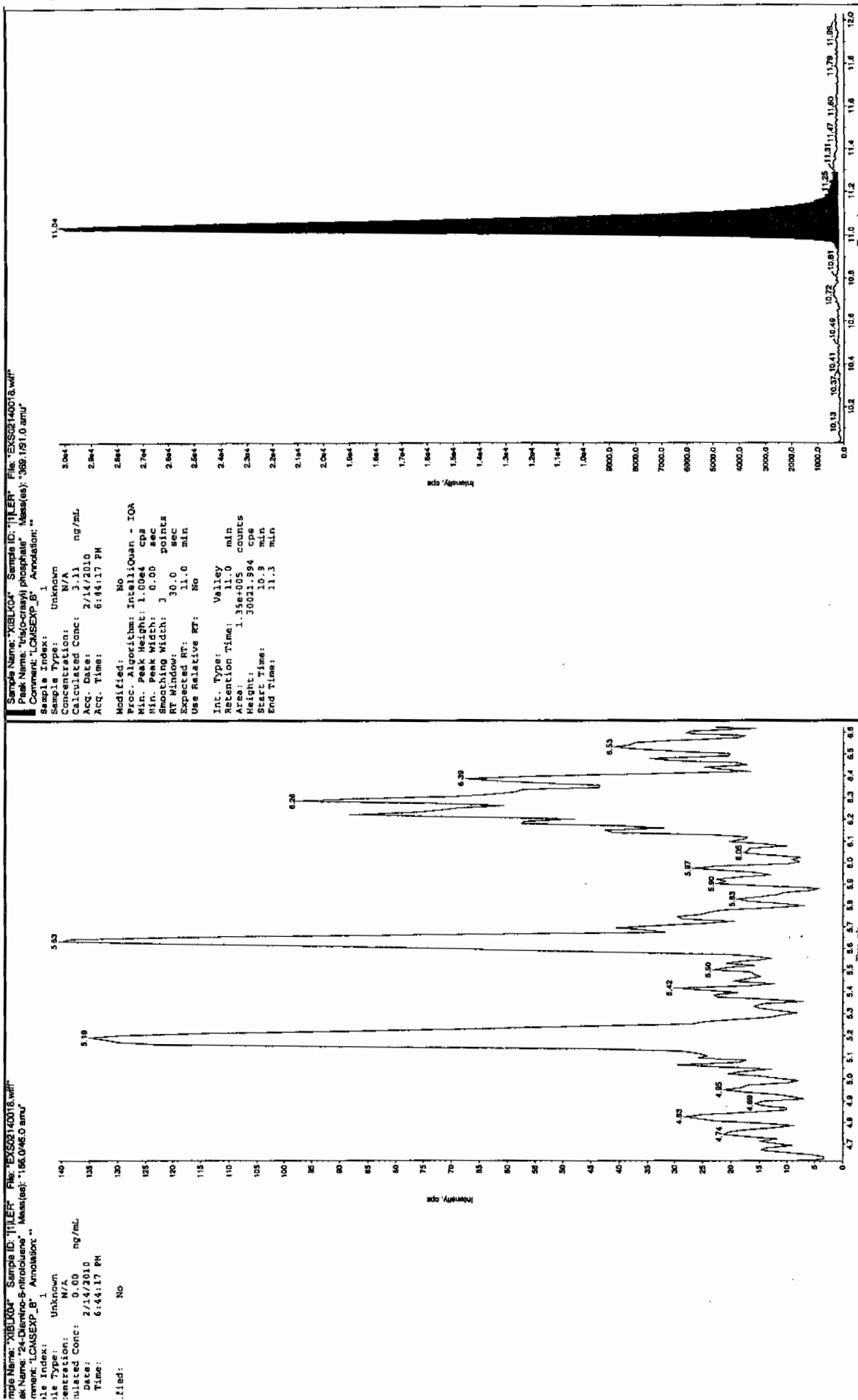
4/11/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 14-FEB-10 22:08

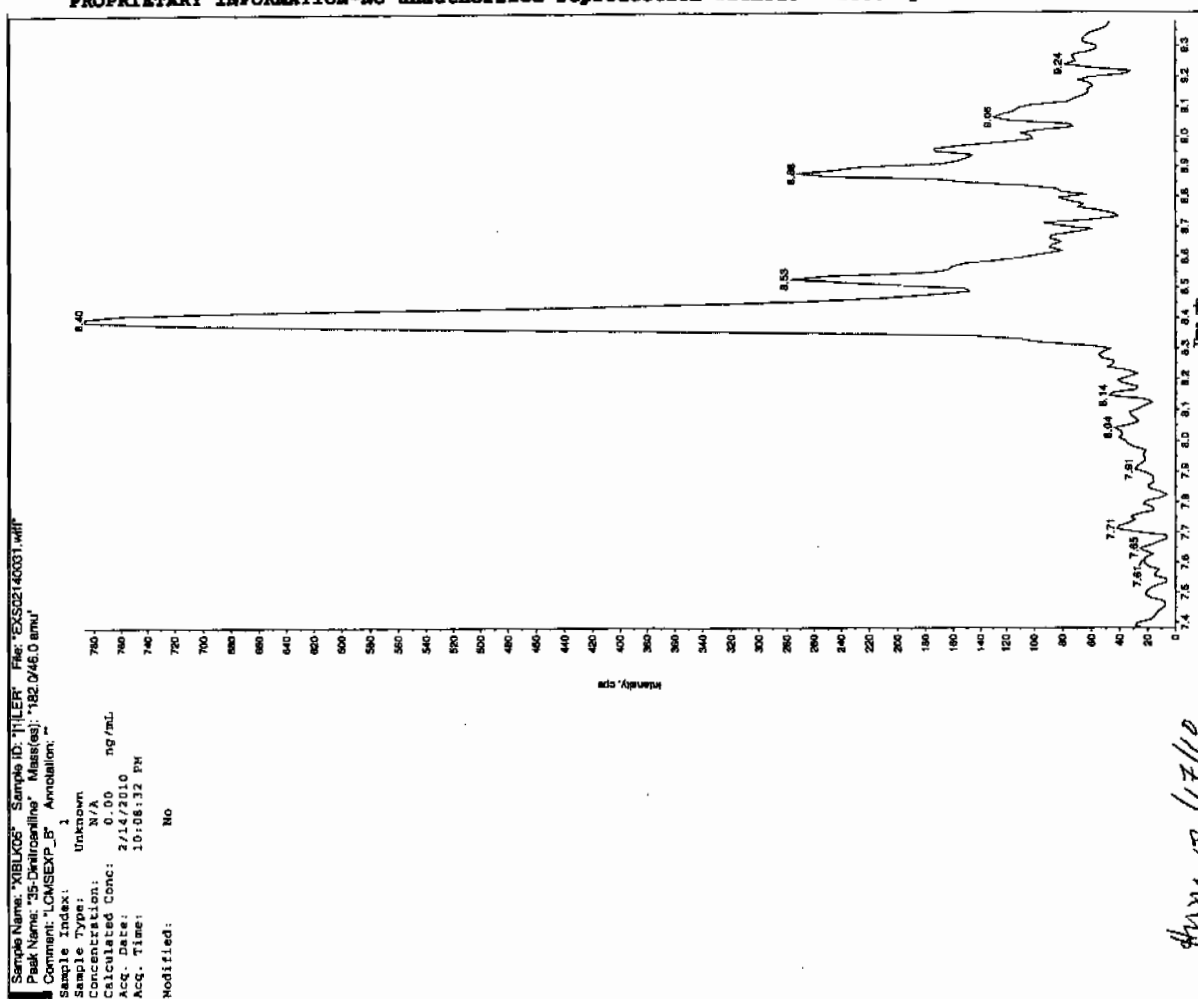
GEL Data File: EXS02140031.wiff

Instrument ID: LCMSMS

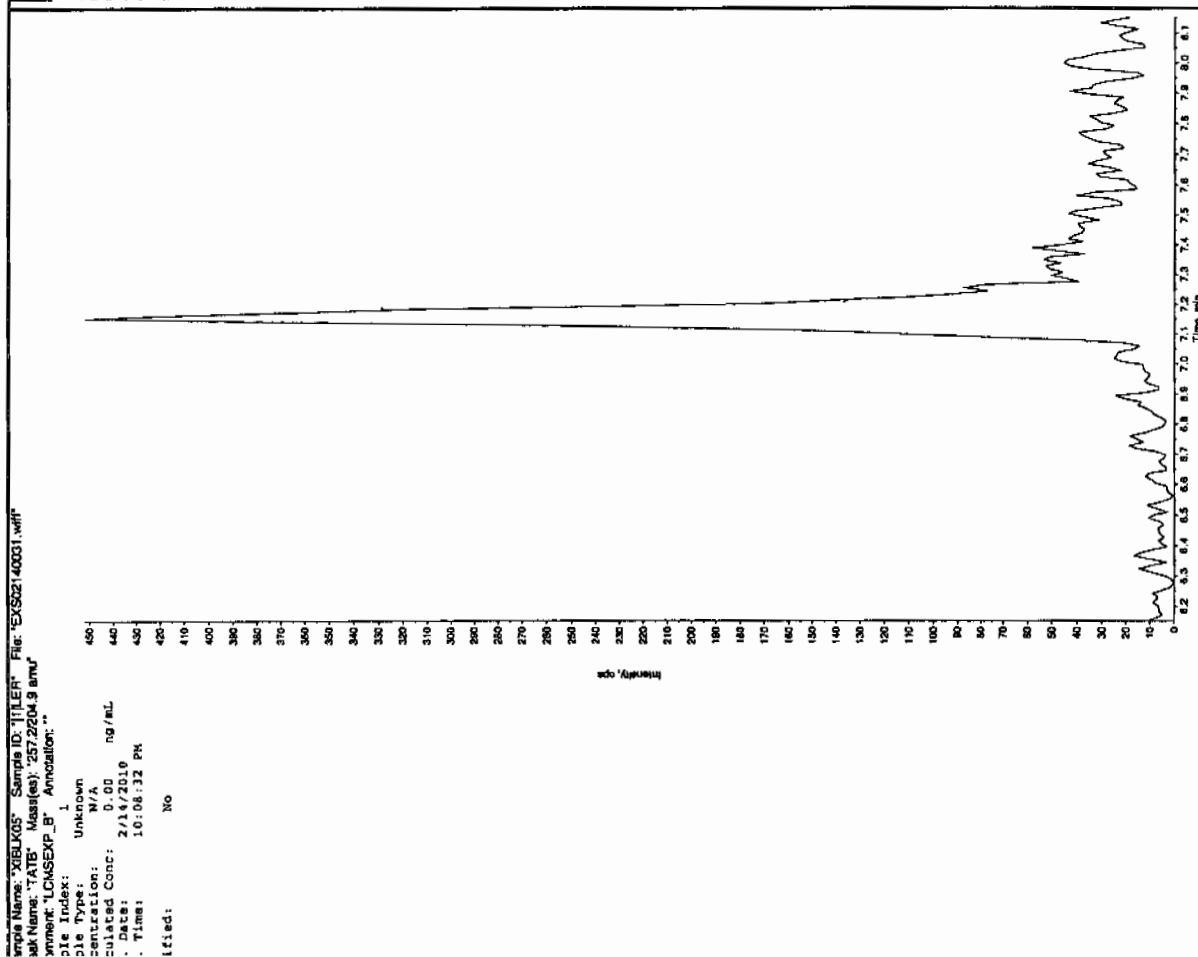
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.87
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

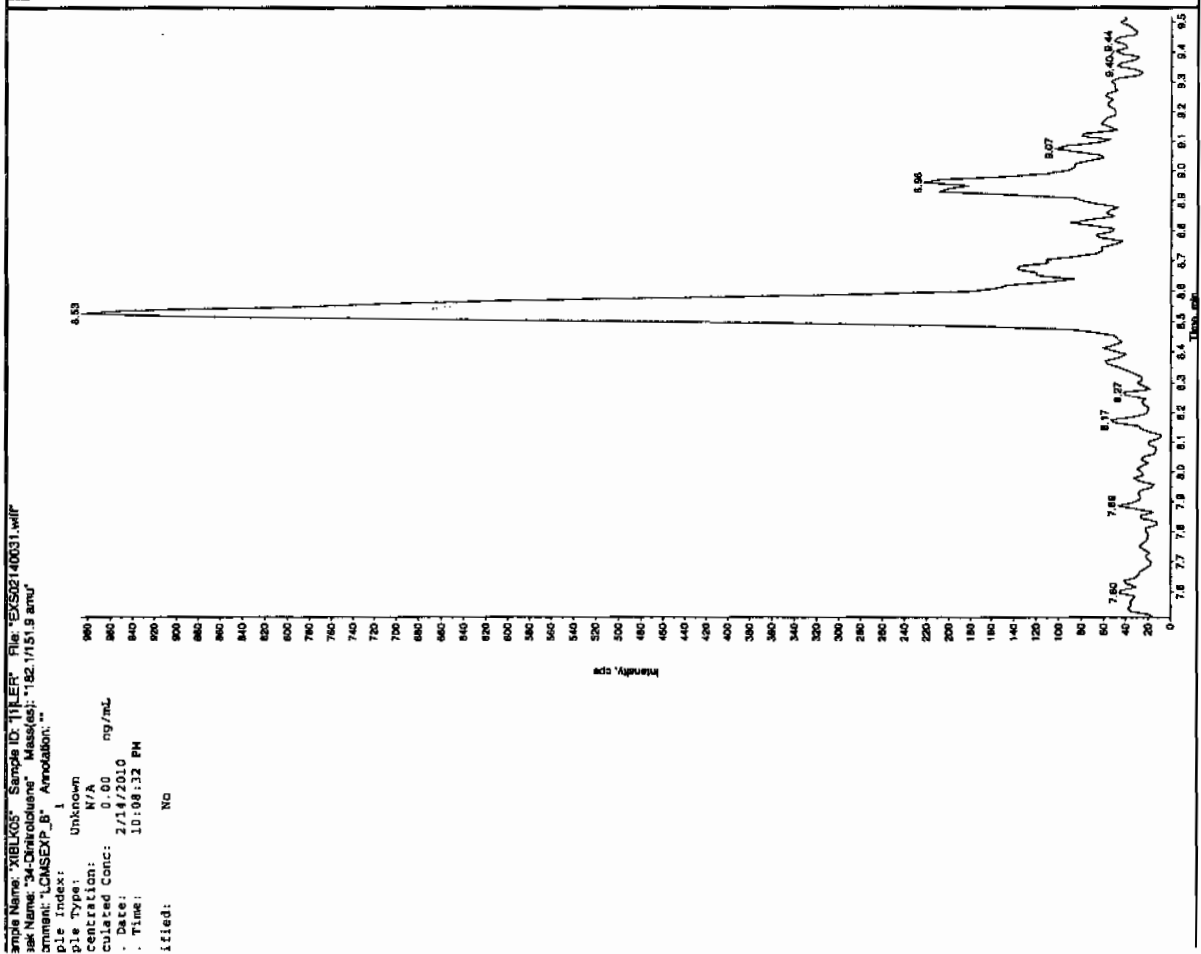
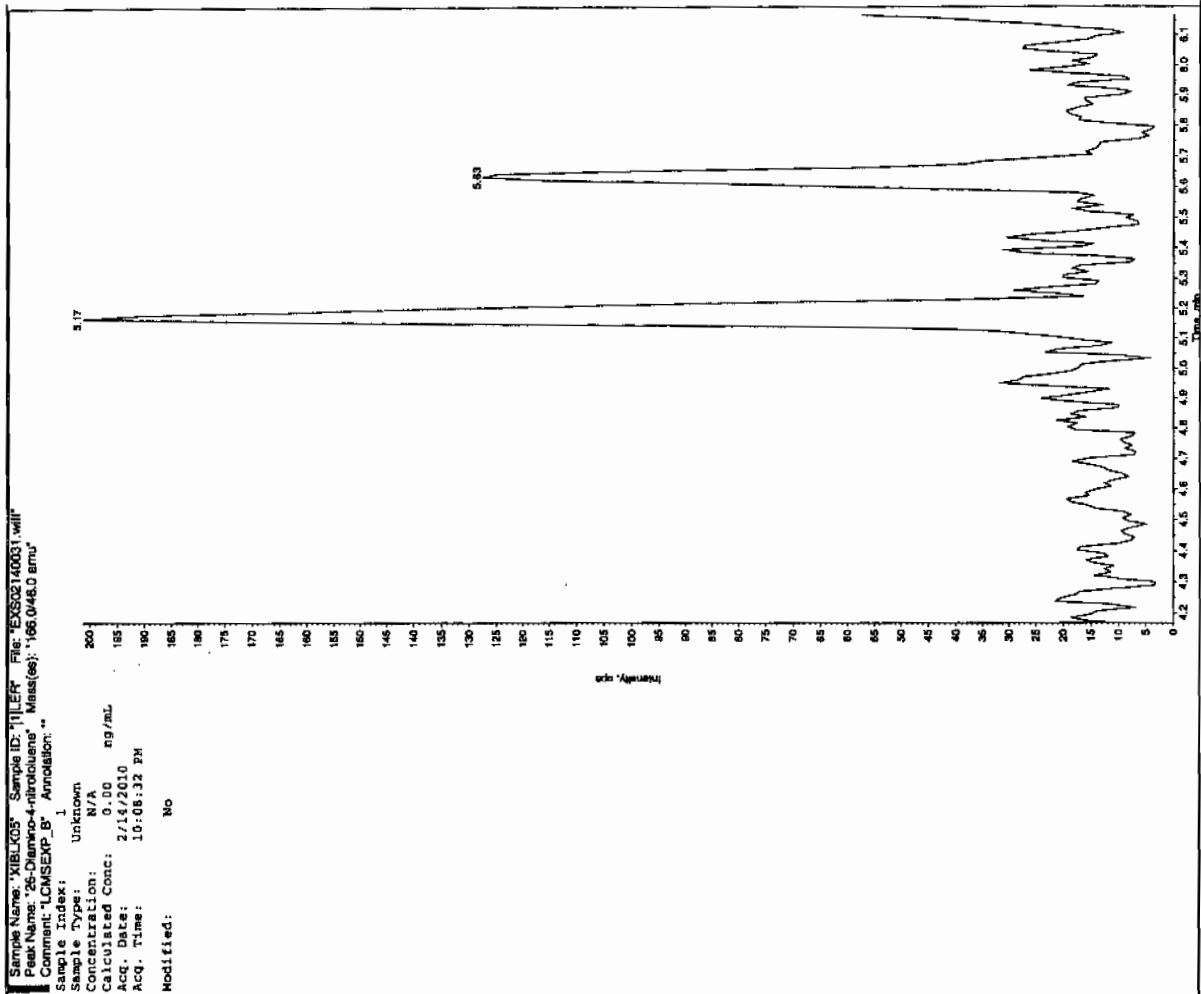
Dec 21/17/10



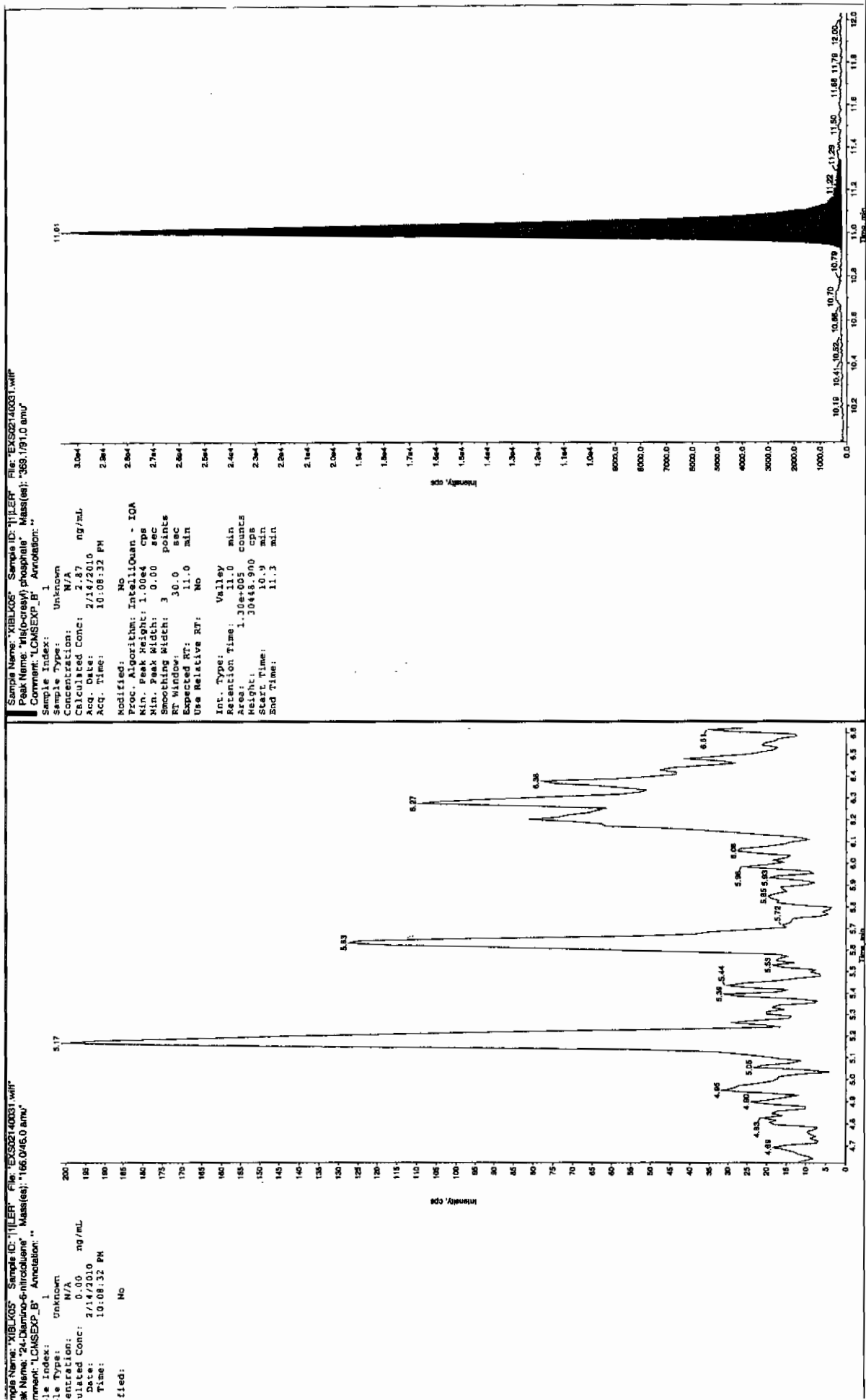
Dec 21/17/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 15-FEB-10 01:32

GEL Data File: EXS02140044.wiff

Instrument ID: LCMSMS

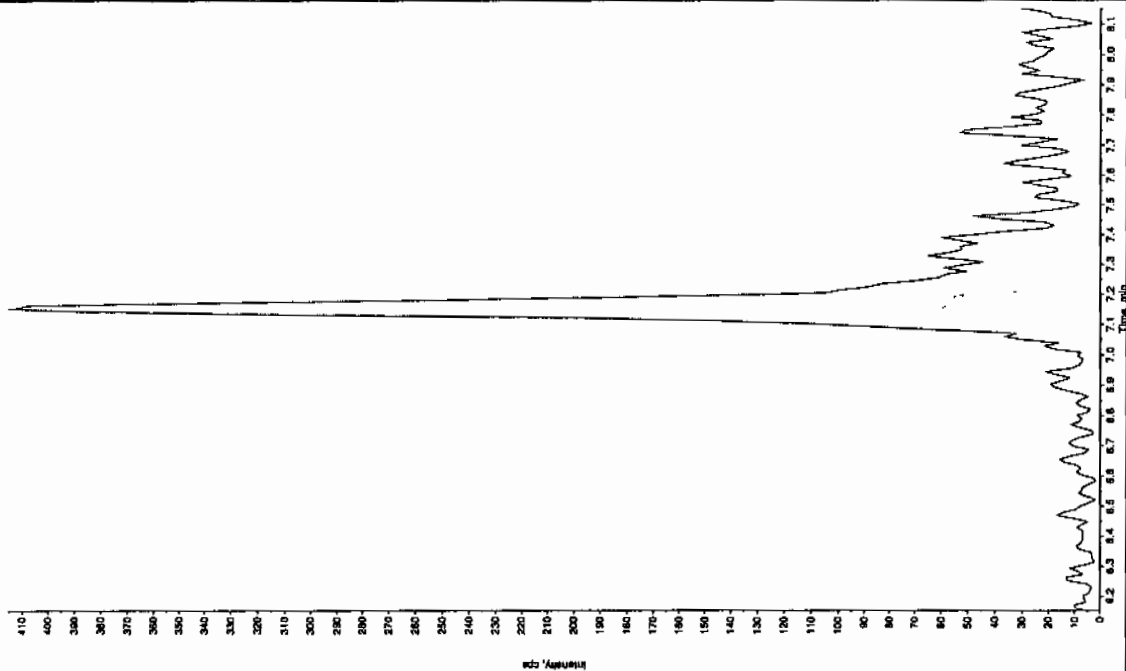
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.4
TATB	0	0
3,5-Dinitroaniline	0	0

See 2/17/10

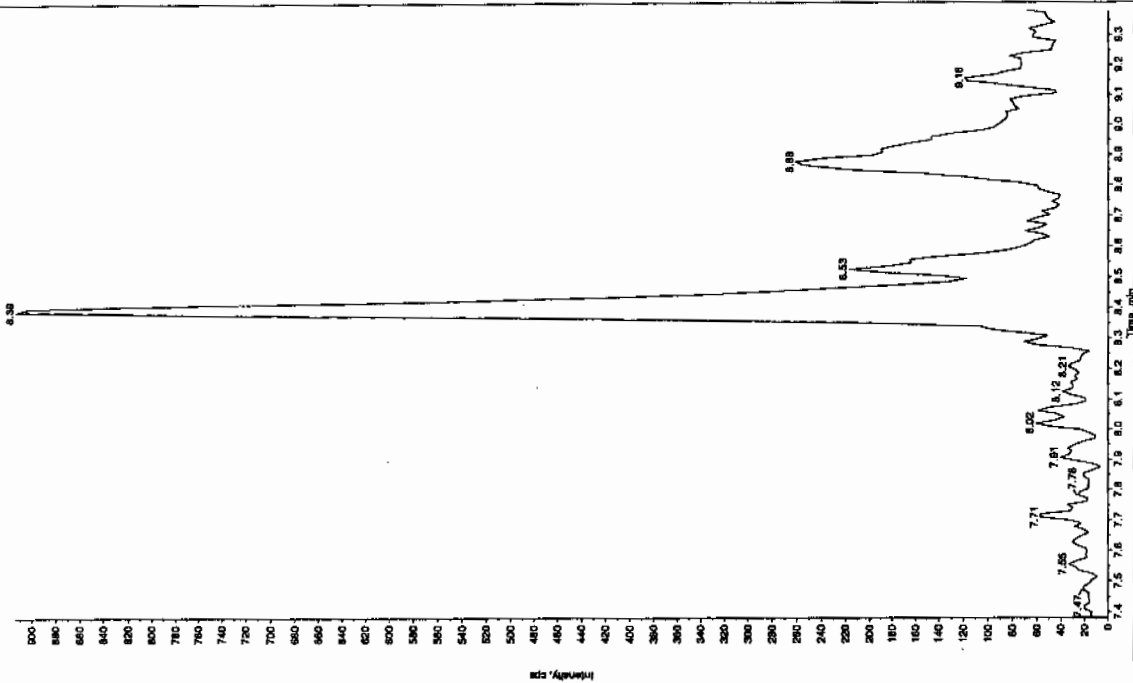
Sample Name: "XIBUK06" Sample ID: "HILF" File: "EX502140044.will"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:32:40 AM
 Modified: No



Sample Name: "XIBUK06" Sample ID: "HILF" File: "EX502140044.will"
 Peak Name: "35-Dinitroaniline" 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: 2/15/2010
 Acq. Time: 1:32:40 AM
 Modified: No

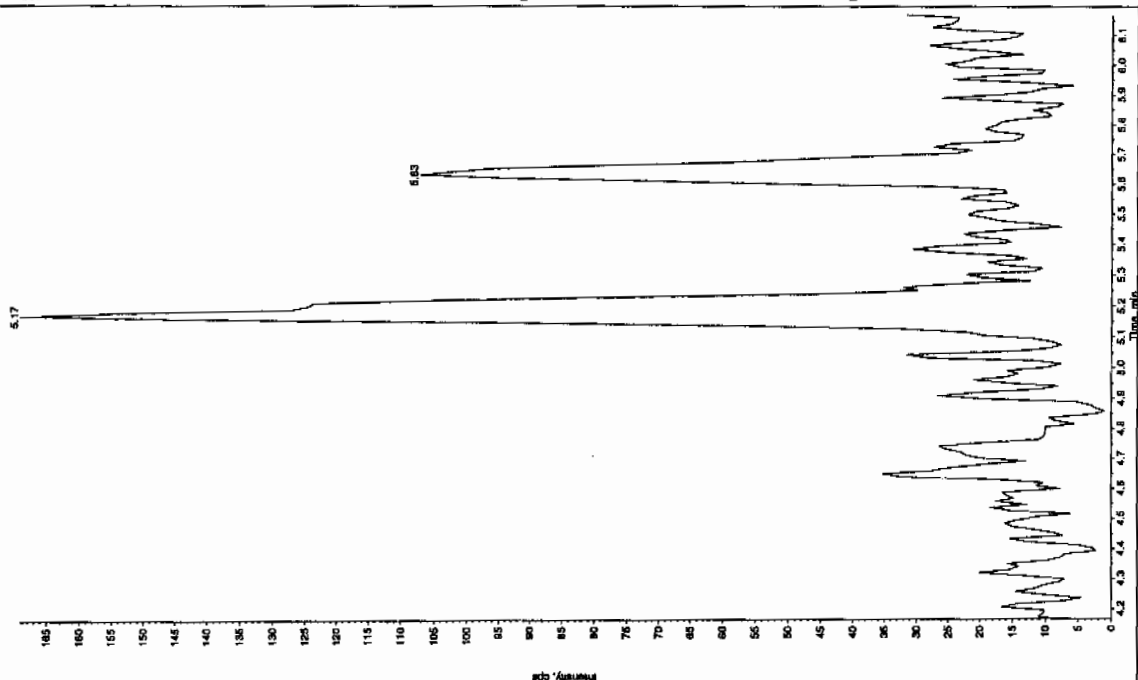


4/11/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

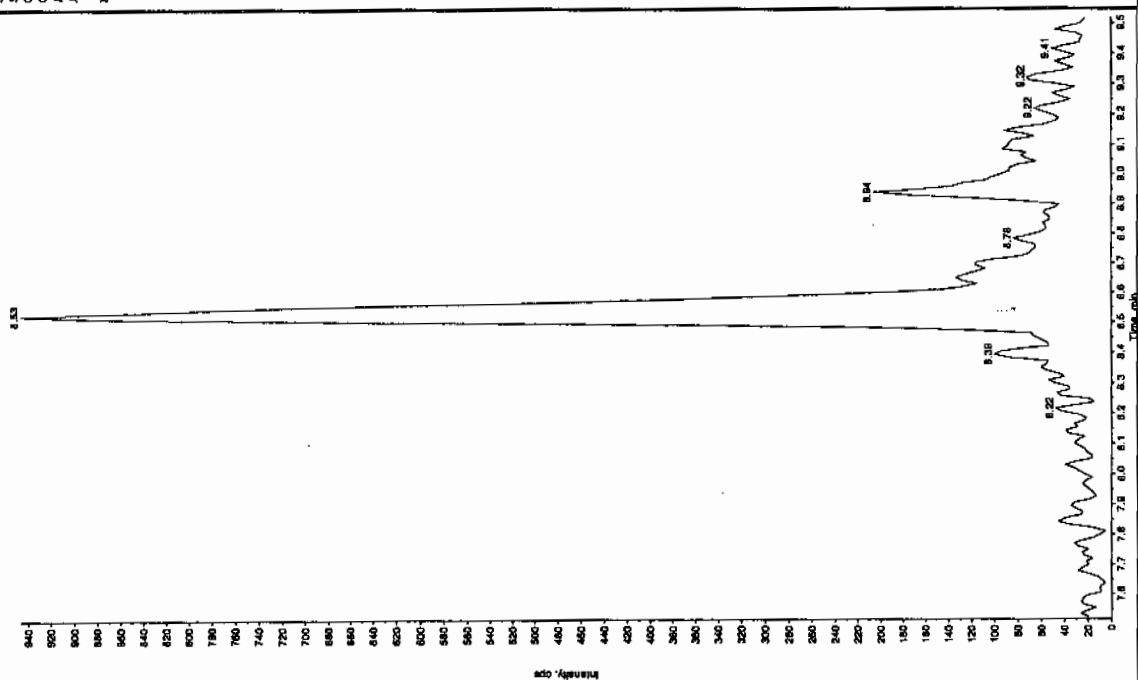
Sample Name: "XBL005" Sample ID: "11LEF" File: "EX02140044.wif"
 Peak Name: "26-Diethyl-4-nitrobenzoate" Mass(es): "185.046.0 amu"
 Comment: "LCMSXP_B" Annotation: --

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:32:40 AM
 Modified: No

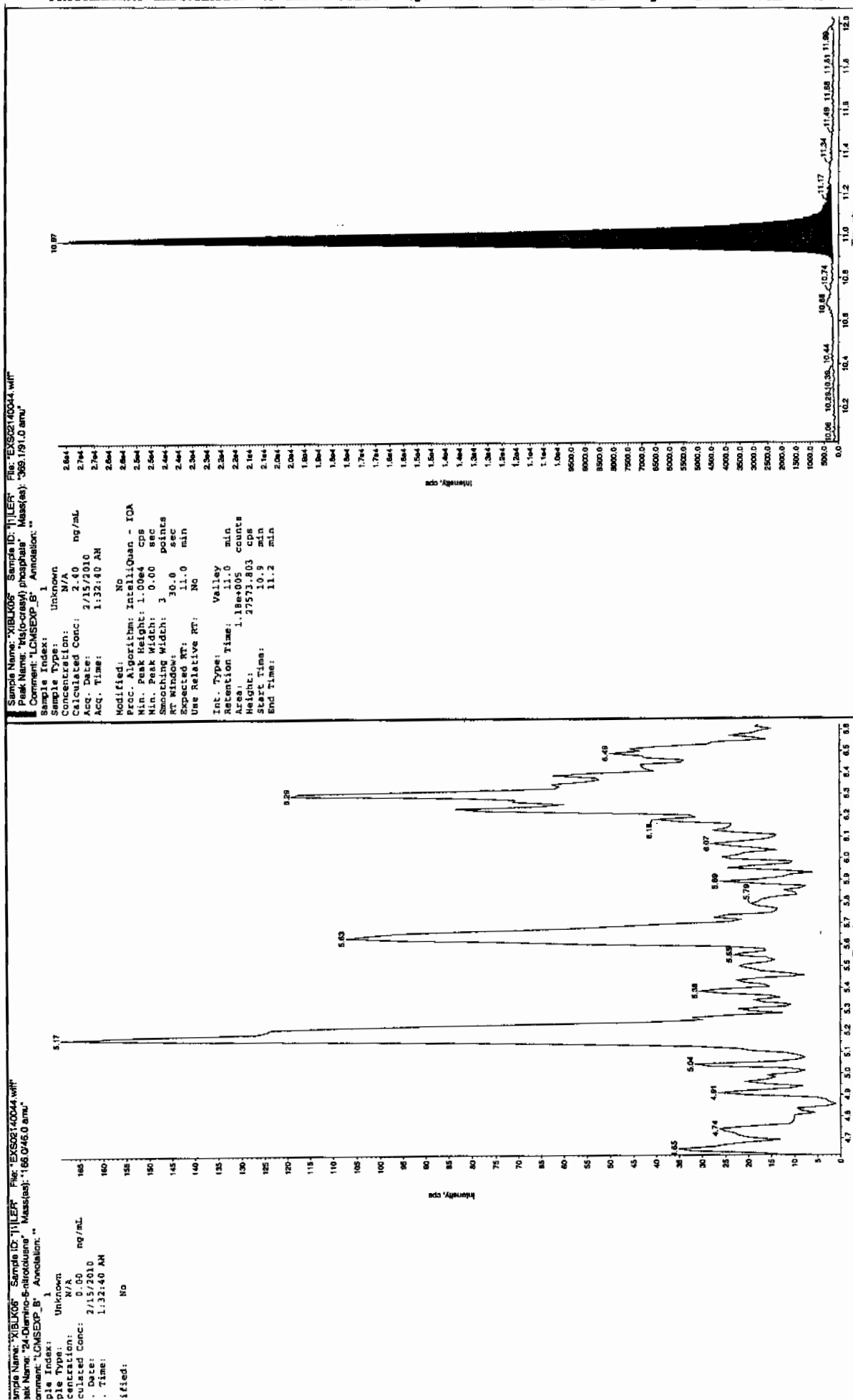


Sample Name: "XBL005" Sample ID: "11LEF" File: "EX02140044.wif"
 Peak Name: "34-Dinitrobenzoate" Mass(es): "182.051.9 amu"
 Comment: "LCMSXP_B" Annotation: --

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:32:40 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 15-FEB--10 02:35

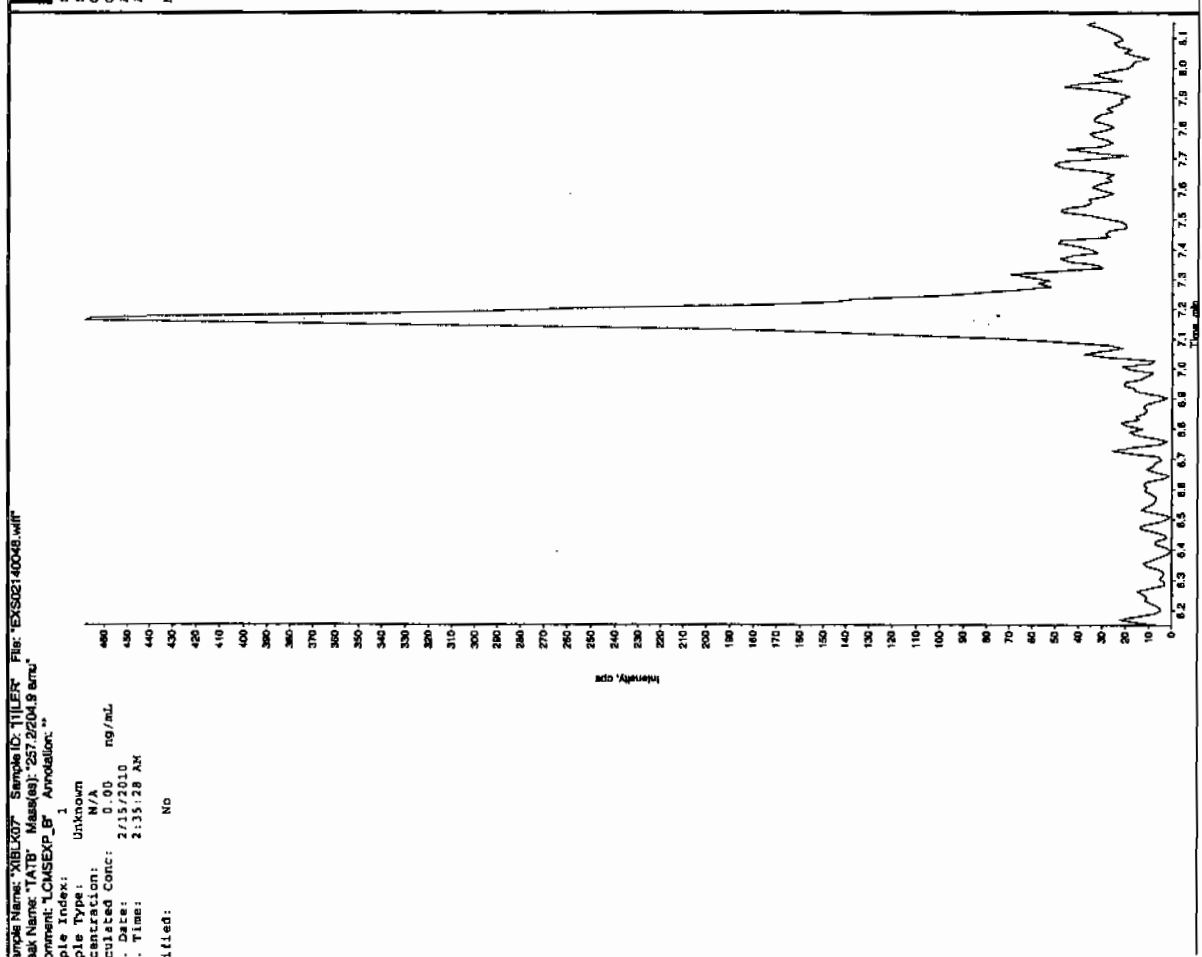
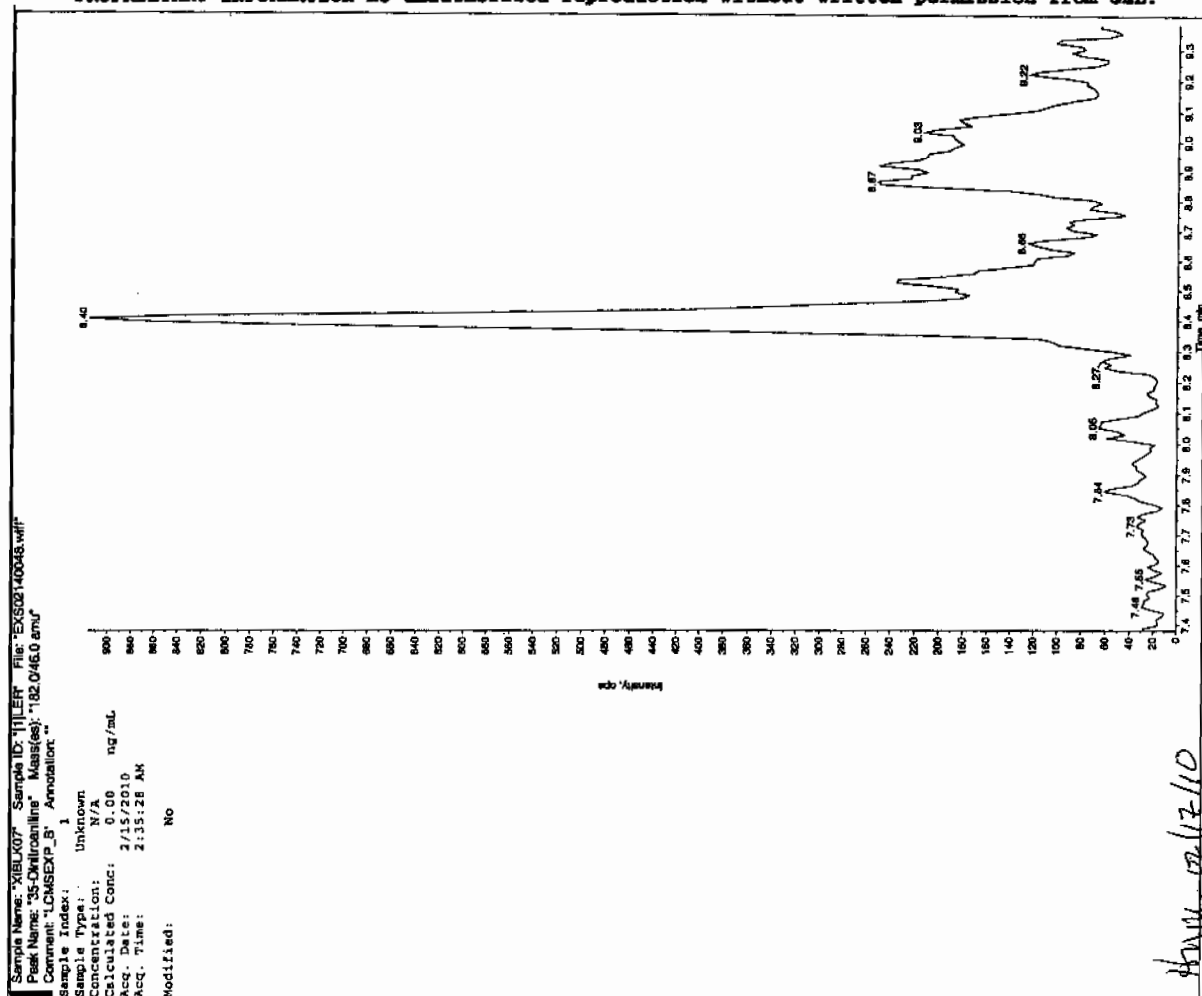
GEL Data File: EXS02140048.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.58
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

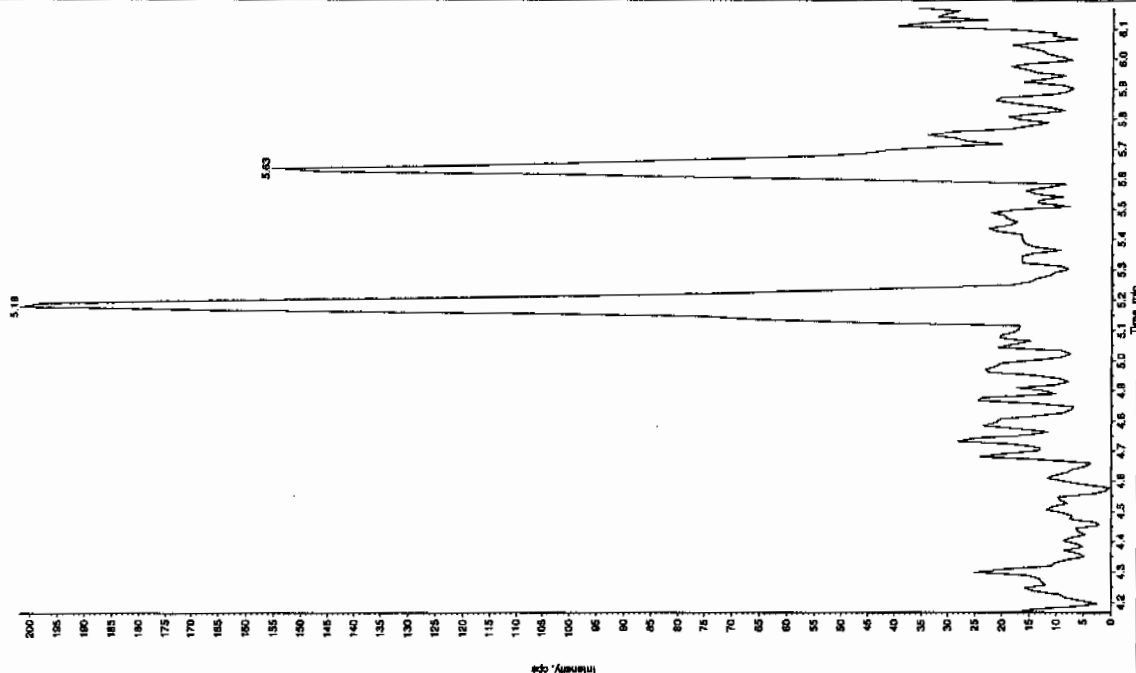
See 2/17/10



See 2/17/10

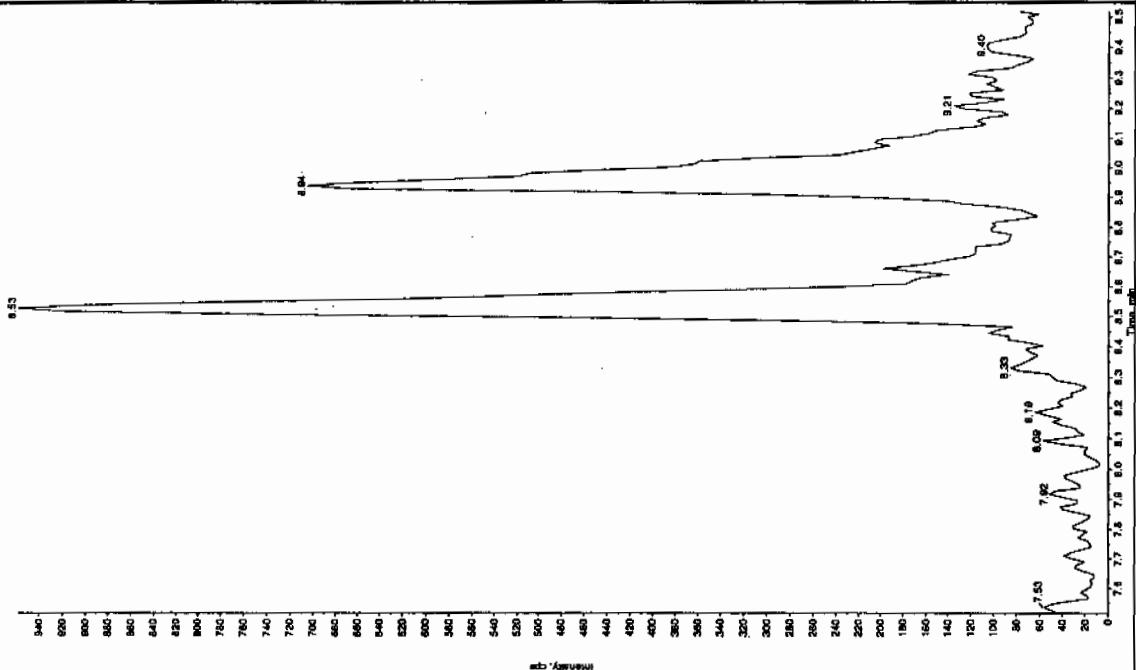
Sample Name: "XIBLK07" Sample ID: "1111ER" File: "EX502140048.wif"
 Peak Name: "25-Dinitro-4-nitrofluorene" Mass(es): "169.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

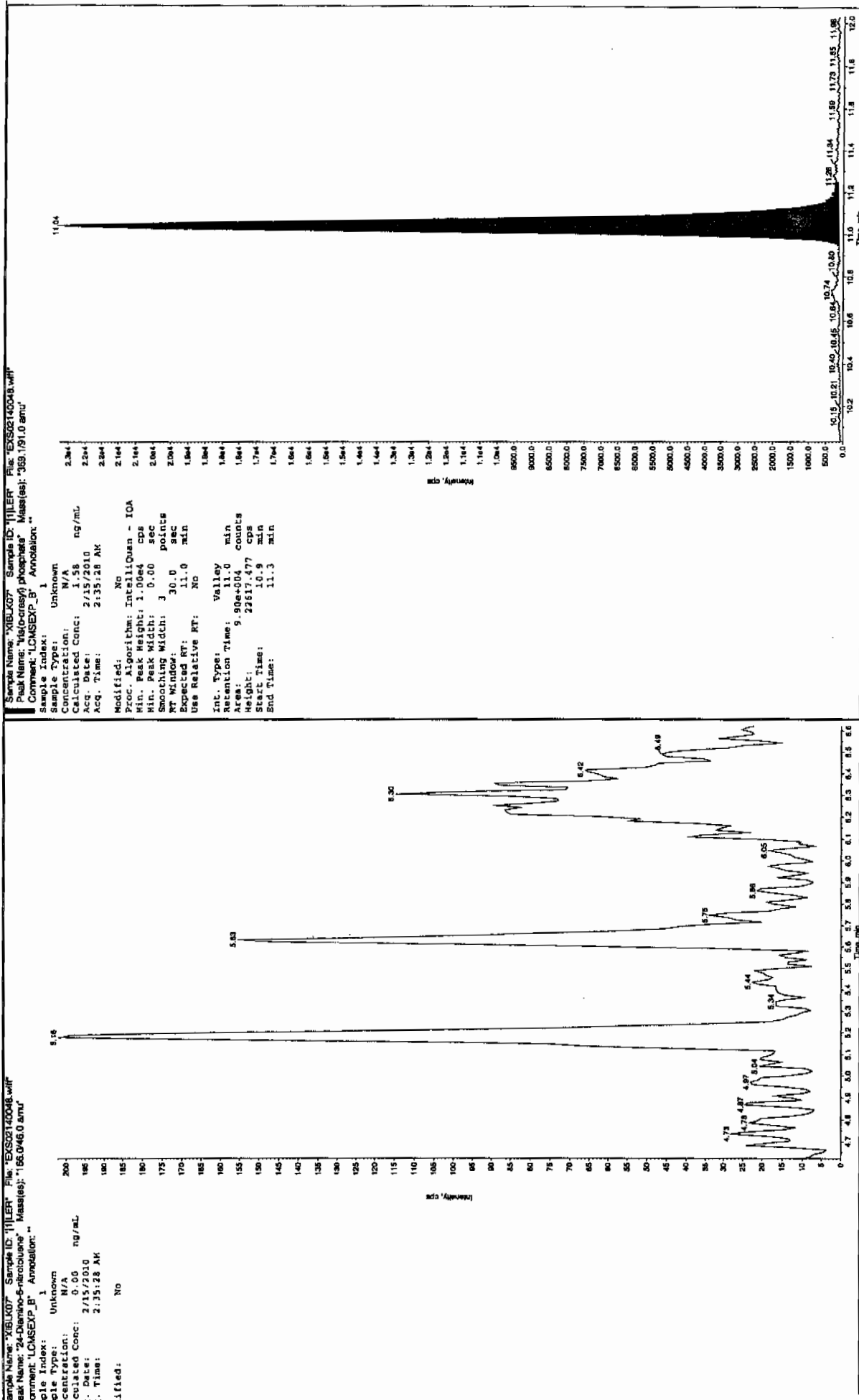
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 2:35:28 AM
 Modified: NO



Sample Name: "XIBLK07" Sample ID: "1111ER" File: "EX502140048.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 2:35:28 AM
 Modified: NO





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 15-FEB-10 04:56

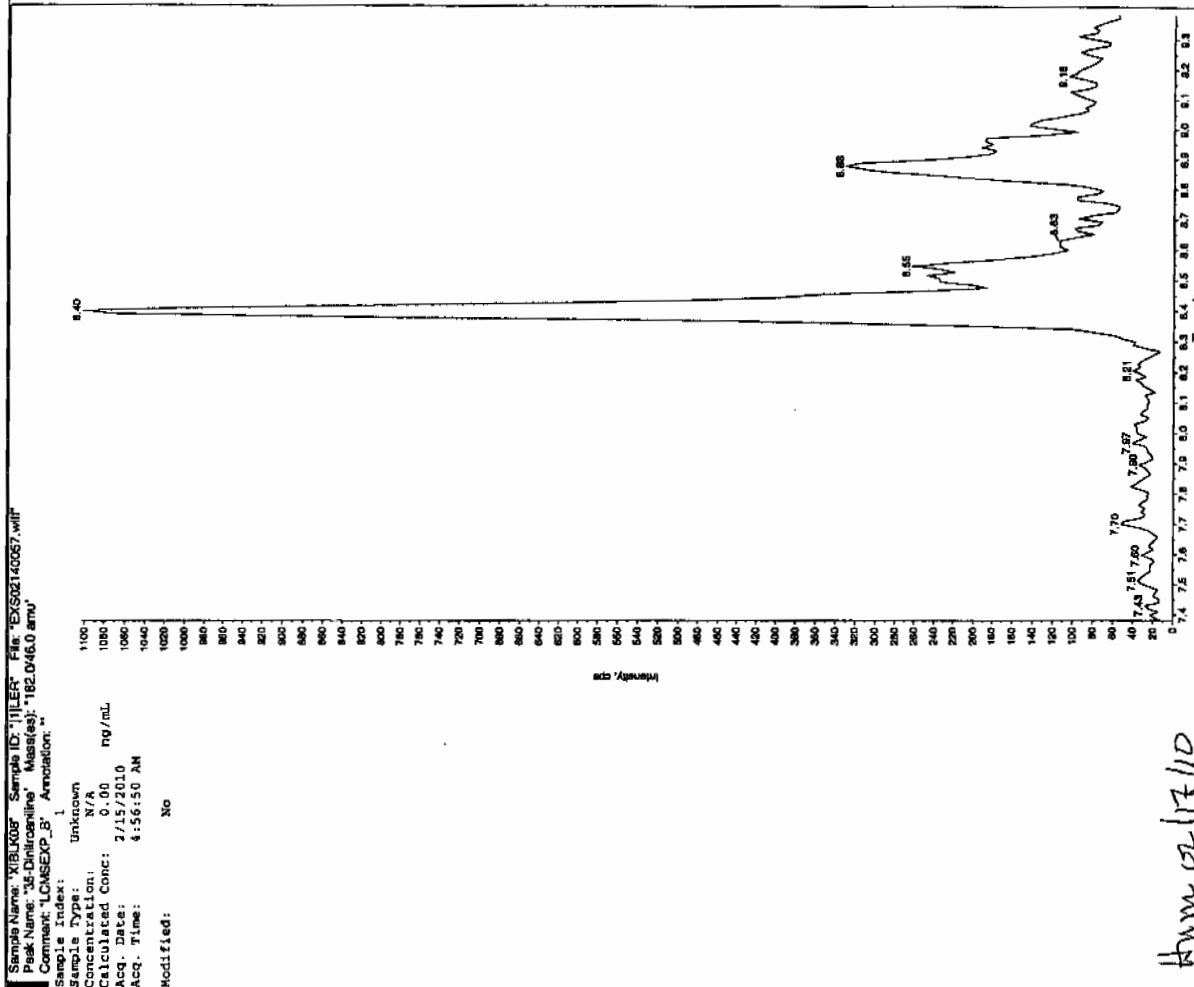
GEL Data File: EXS02140057.wiff

Instrument ID: LCMSMS

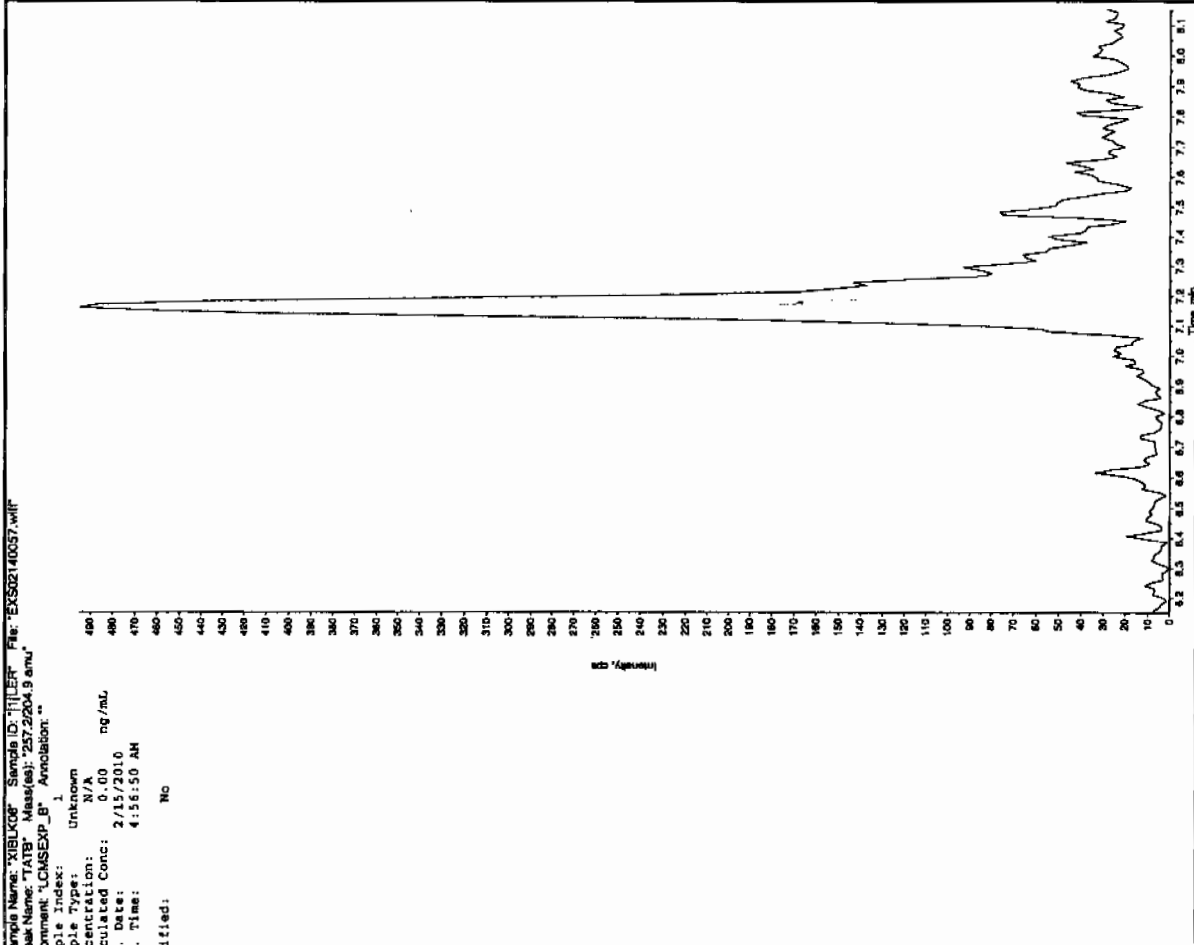
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.01
TATB	0	0

See 2/17/10



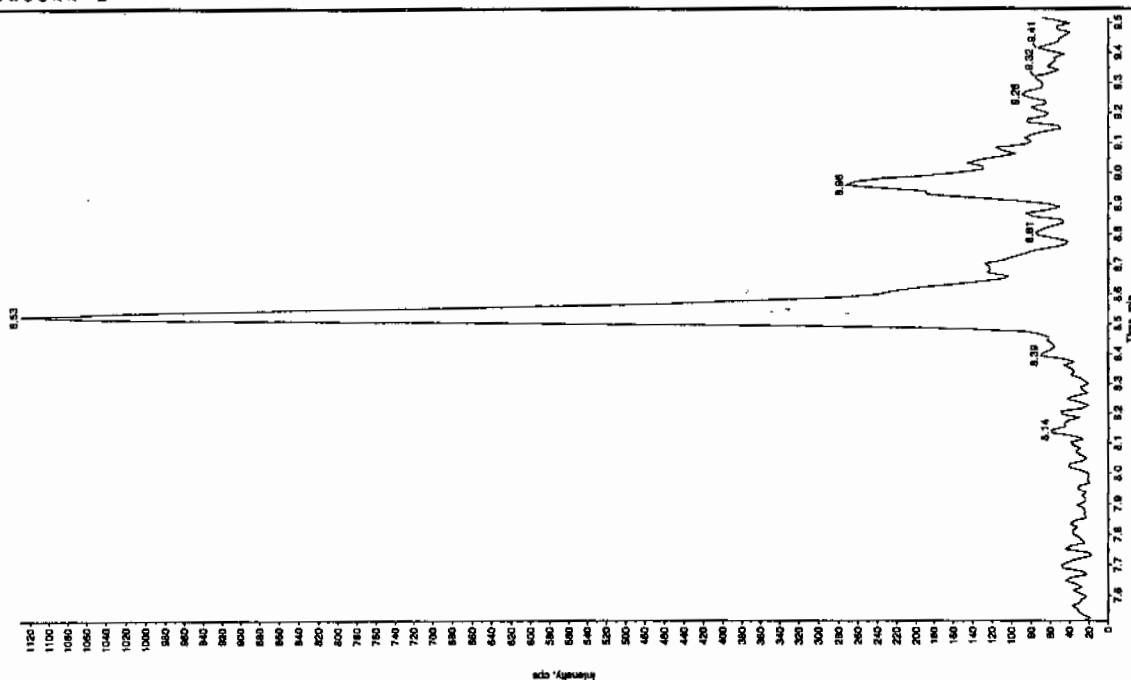
Run 02/17/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

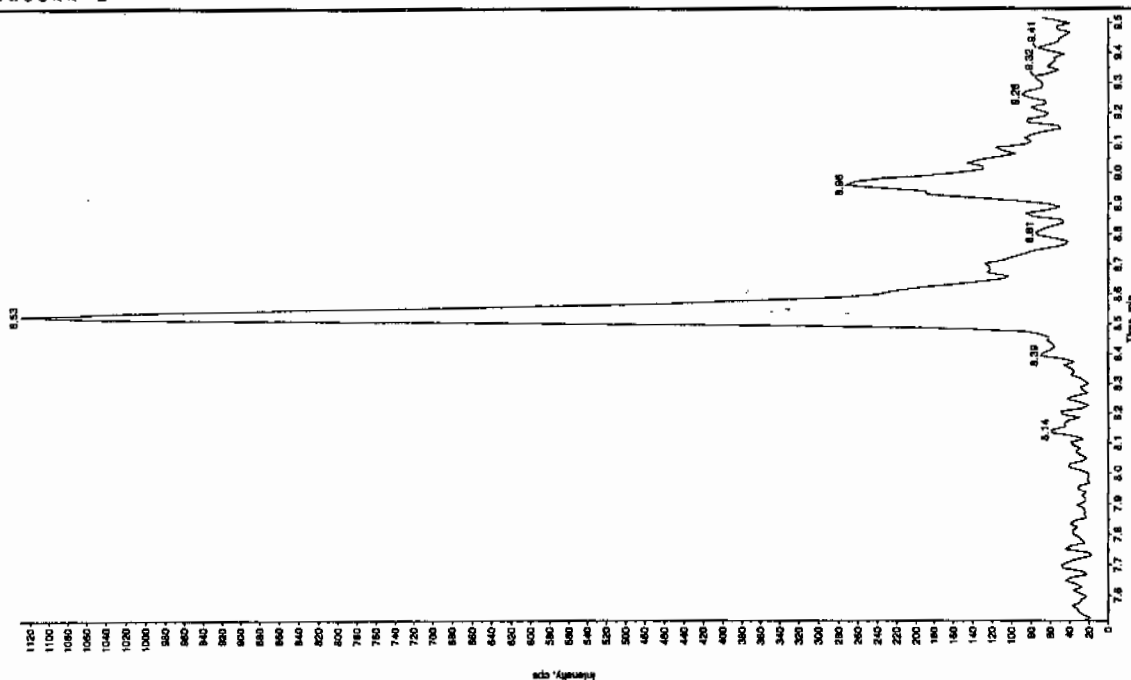
Sample Name: "XIBLX08" Sample ID: "11LER" File: "EXS02140057.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/181.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Date: 4/15/10 AM
 Acq. Time: 4:56:50 AM
 Modified: No



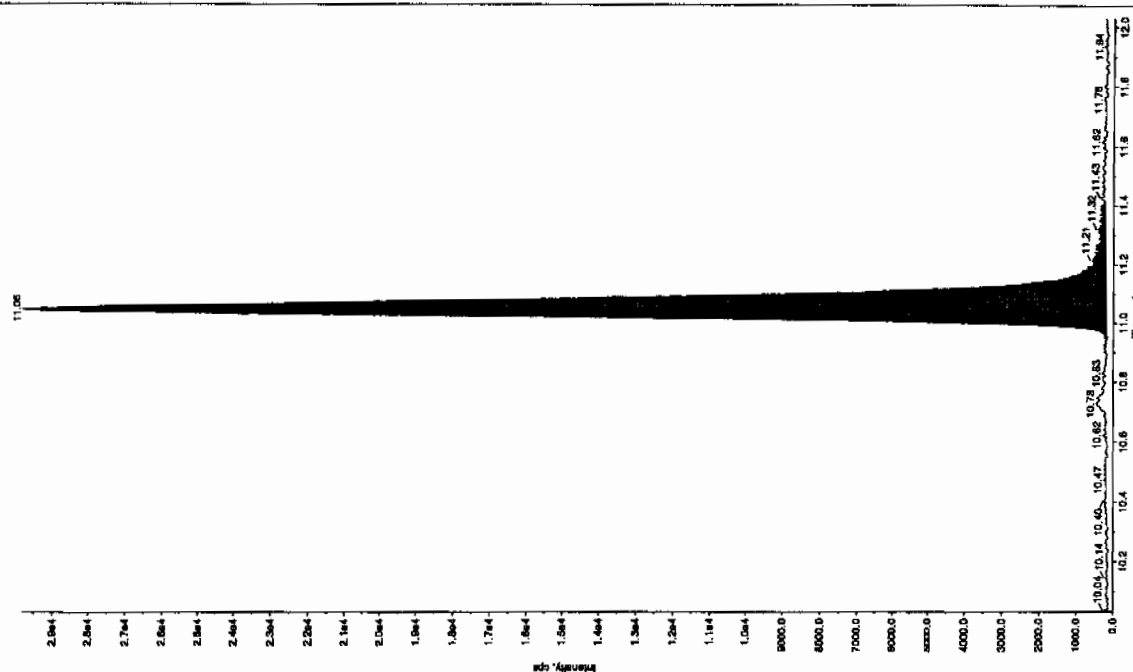
Sample Name: "XIBLX08" Sample ID: "11LER" File: "EXS02140057.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/181.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Date: 4/15/10 AM
 Acq. Time: 4:56:50 AM
 Modified: No



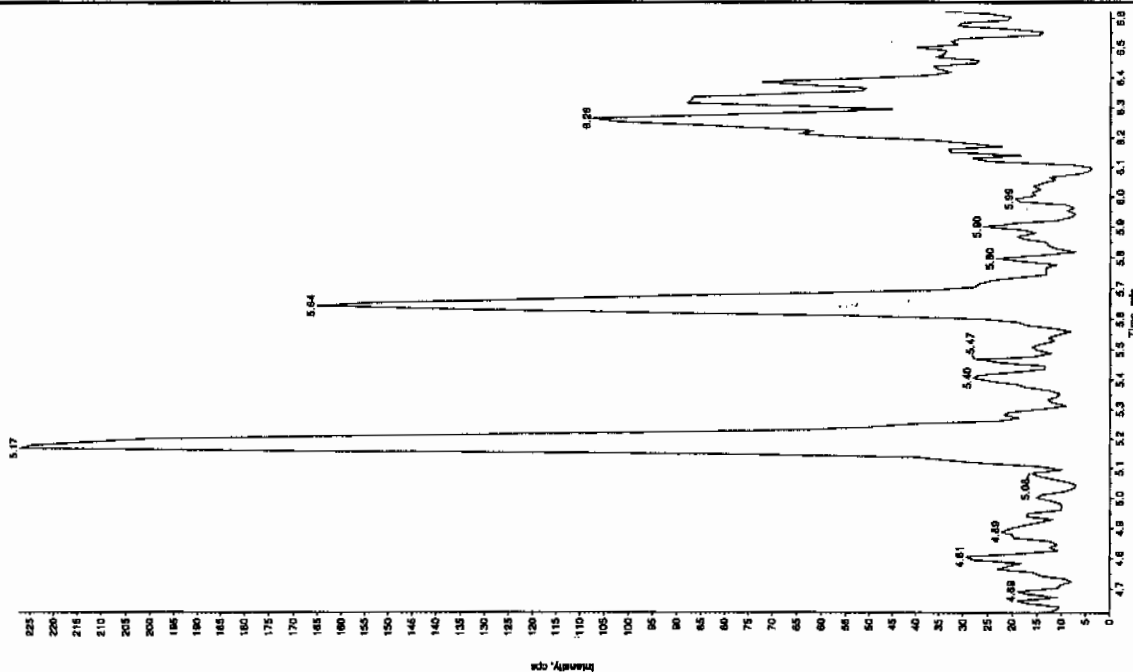
Sample Name: "XIBLK08" Sample ID: "111ER" File: "EXS02140057.wiff"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.01 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 4:56:50 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Min/Max: 11.0 min
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 1.33e+005 counts
 Height: 23666.075 cps
 Start Time: 10.9 min
 End Time: 11.4 min



Sample Name: "24-Dimino-6-nitrodduene" Sample ID: "111ER" File: "EXS02140057.wiff"
 Peak Name: "24-Dimino-6-nitrodduene" 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: 2/15/2010
 Acq. Time: 4:56:50 AM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 15-FEB-10 06:31

GEL Data File: EXS02140063.wiff

Instrument ID: LCMSMS

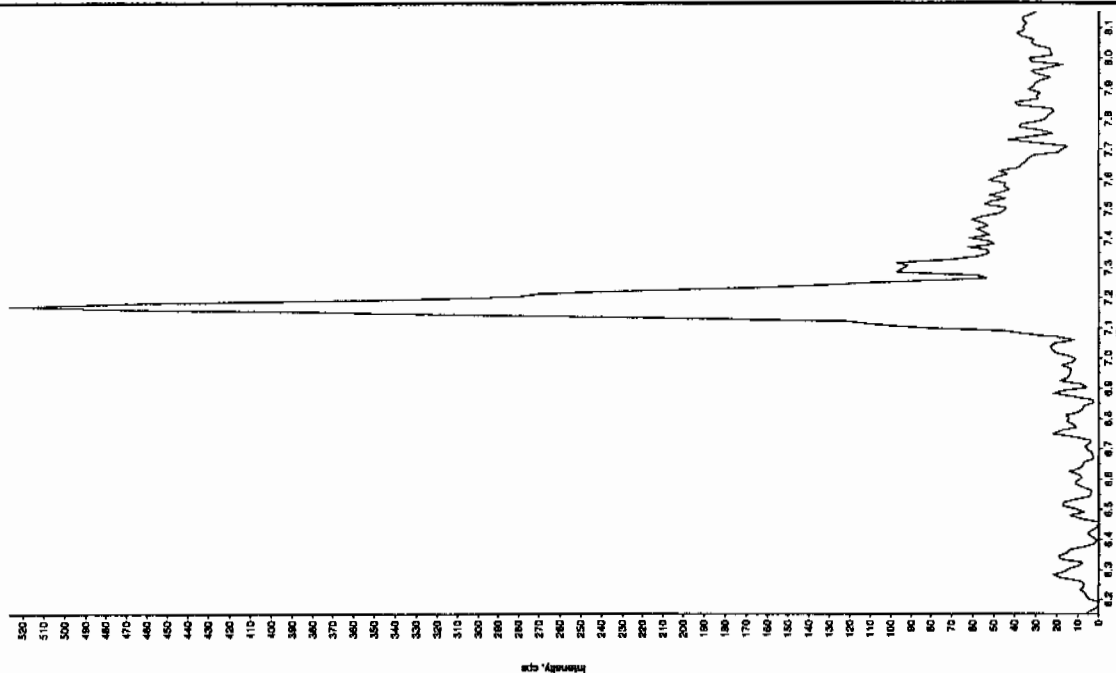
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.25
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Plan 2/17/10

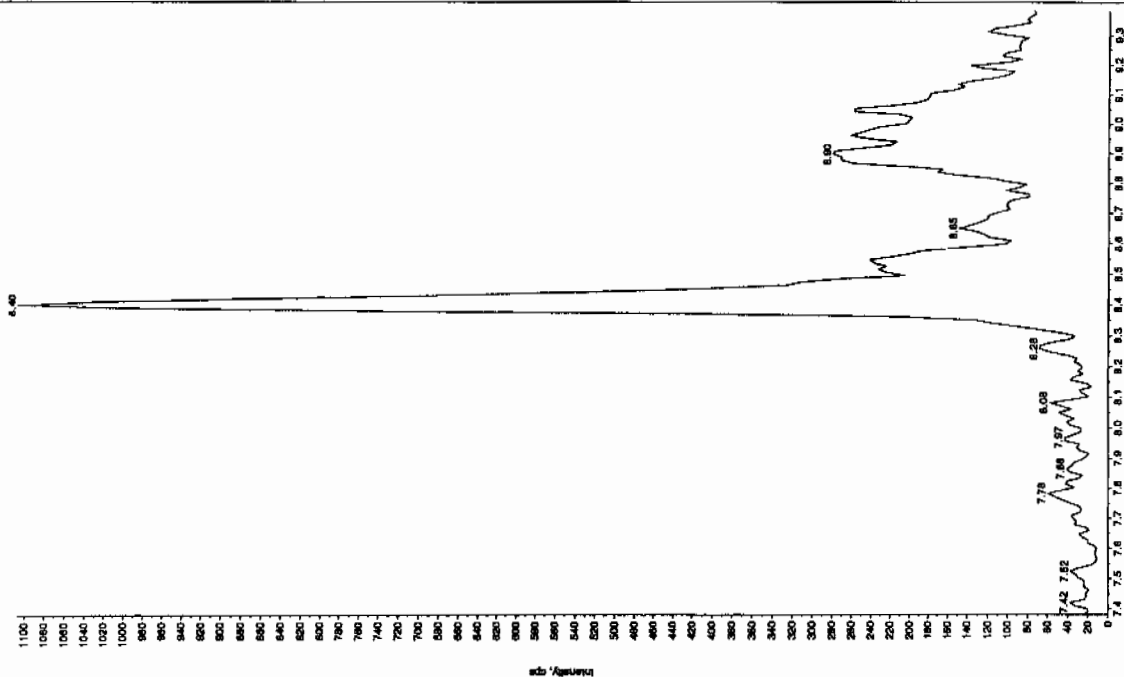
Sample Name: "YIELK09" Sample ID: "JILLER" File: "EXS02140063.wiff"
 Peak Name: "TATB" Mass(es): "267.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Acq. Time: 6:31:02 AM
 Modified: No



Sample Name: "YIELK09" Sample ID: "JILLER" File: "EXS02140063.wiff"
 Peak Name: "35-Dinitroresorcinol" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

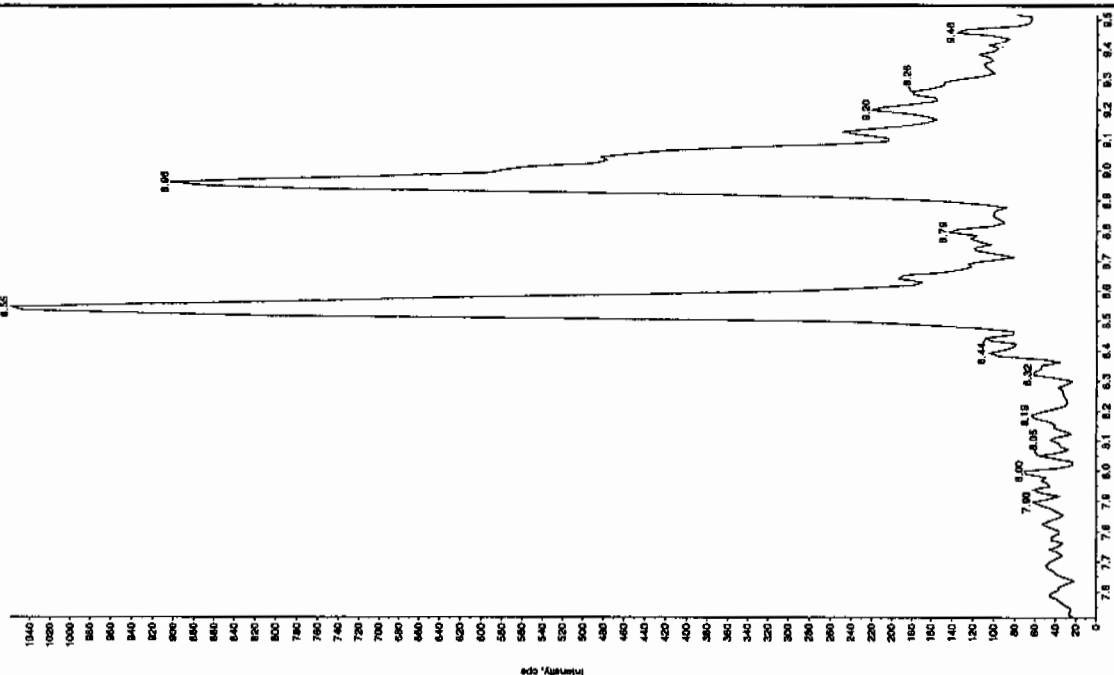
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Acq. Time: 6:31:02 AM
 Modified: No



Plan 02/17/10

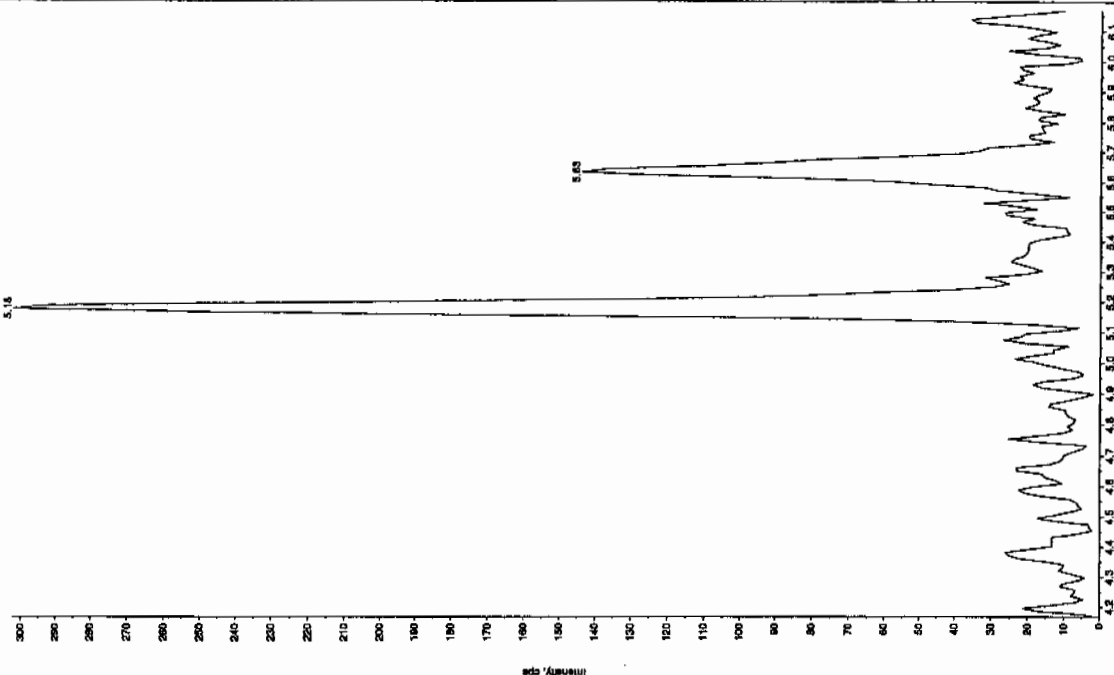
Sample Name: "XBLK09" Sample ID: "111ER" File: "EX502140063.will"
 Peak Name: "24-Dinitro-4-nitrofluorene" Mass(es): "182.115.3 amu"
 Comment: "CONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 6:31:02 AM
 Modified: No



Sample Name: "XBLK09" Sample ID: "111ER" File: "EX502140063.will"
 Peak Name: "24-Dinitro-4-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "CONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 6:31:02 AM
 Modified: No



Sample Name: "XIBLK09" Sample ID: "111LFR" File: "EX502140063.wif"
 Peak Name: "24-Diarno-6-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
 Date: 2/13/2010
 Time: 6:31:02 AM
 Modified: NO

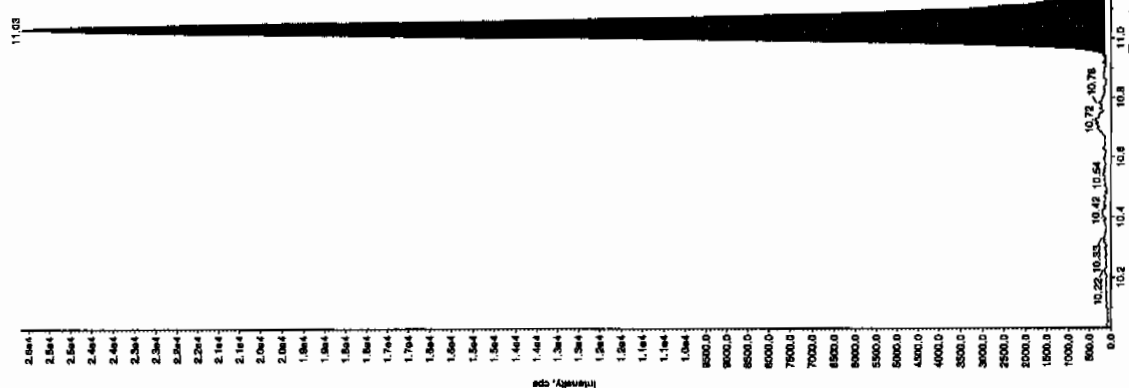
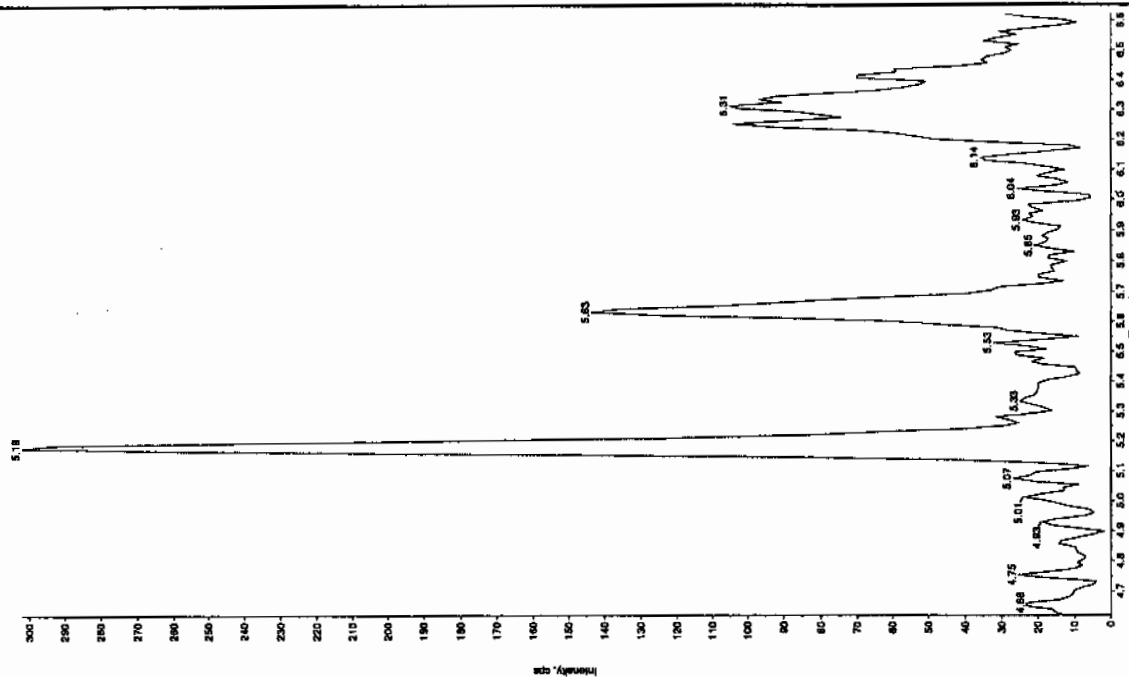
Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RF Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 11.0 min
 Area: 1.15e+005 counts
 Height: 23551.392 cps
 Start Time: 10.8 min
 End Time: 11.4 min

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/13/2010
 Date: 6:31:02 AM
 Modified: NO

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RF Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 11.0 min
 Area: 1.15e+005 counts
 Height: 23551.392 cps
 Start Time: 10.8 min
 End Time: 11.4 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 15-FEB-10 08:21

GEL Data File: EXS02140070.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.13

See 2/17/10

Sample Name: "XIBLK10" Sample ID: "T1LER" File: "EX502140070.wiff"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

File Index: 1

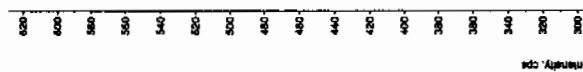
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 2/15/2010

Acq. Time: 8:21:01 AM

Modified: No



Sample Name: "XIBLK10" Sample ID: "T1LER" File: "EX502140070.wiff"

Peak Name: "35-Diviridin" Mass(es): "192.0/160 amu"

Comment: "LCMSEXP_B" Annotation: "

File Index: 1

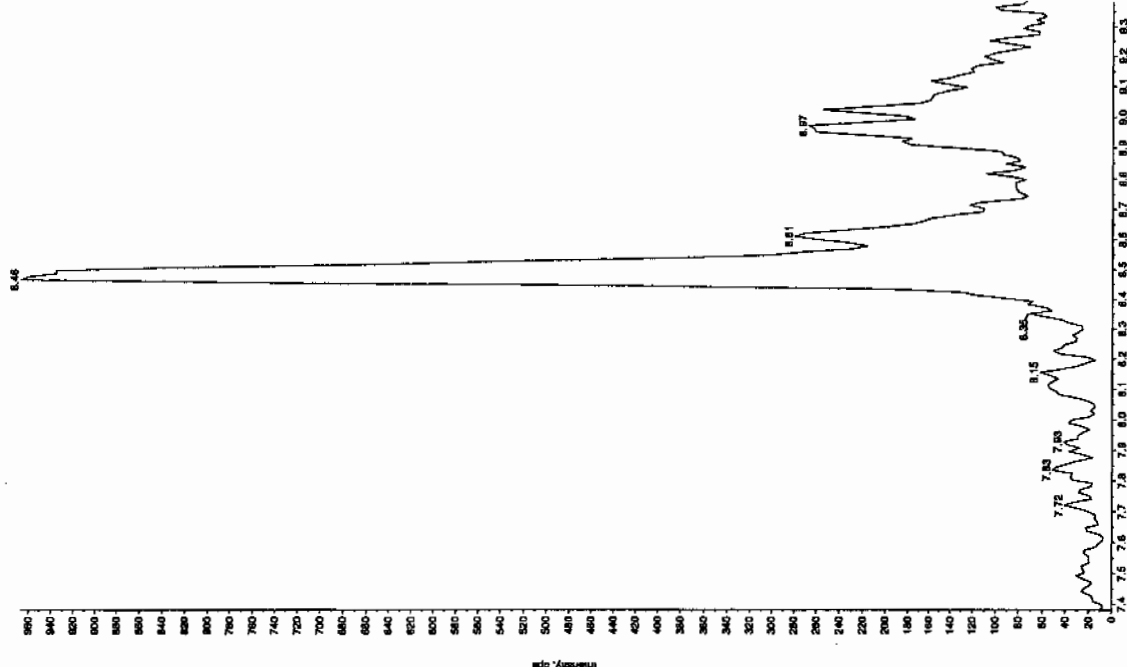
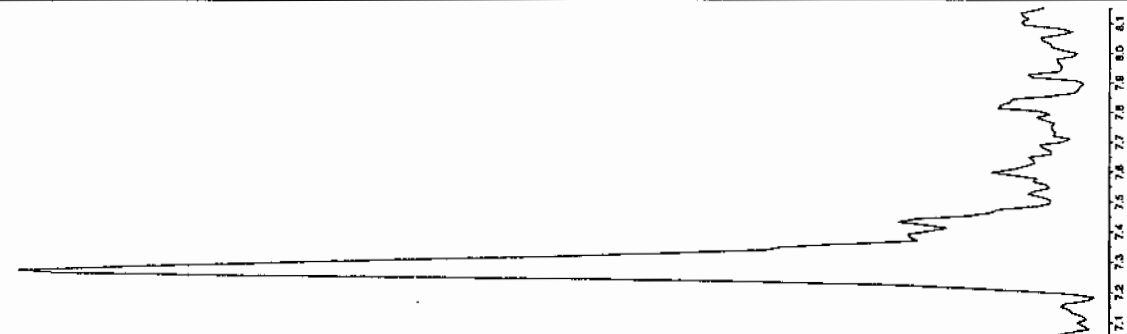
Sample Type: Unknown

Concentration: 0.00 ng/mL

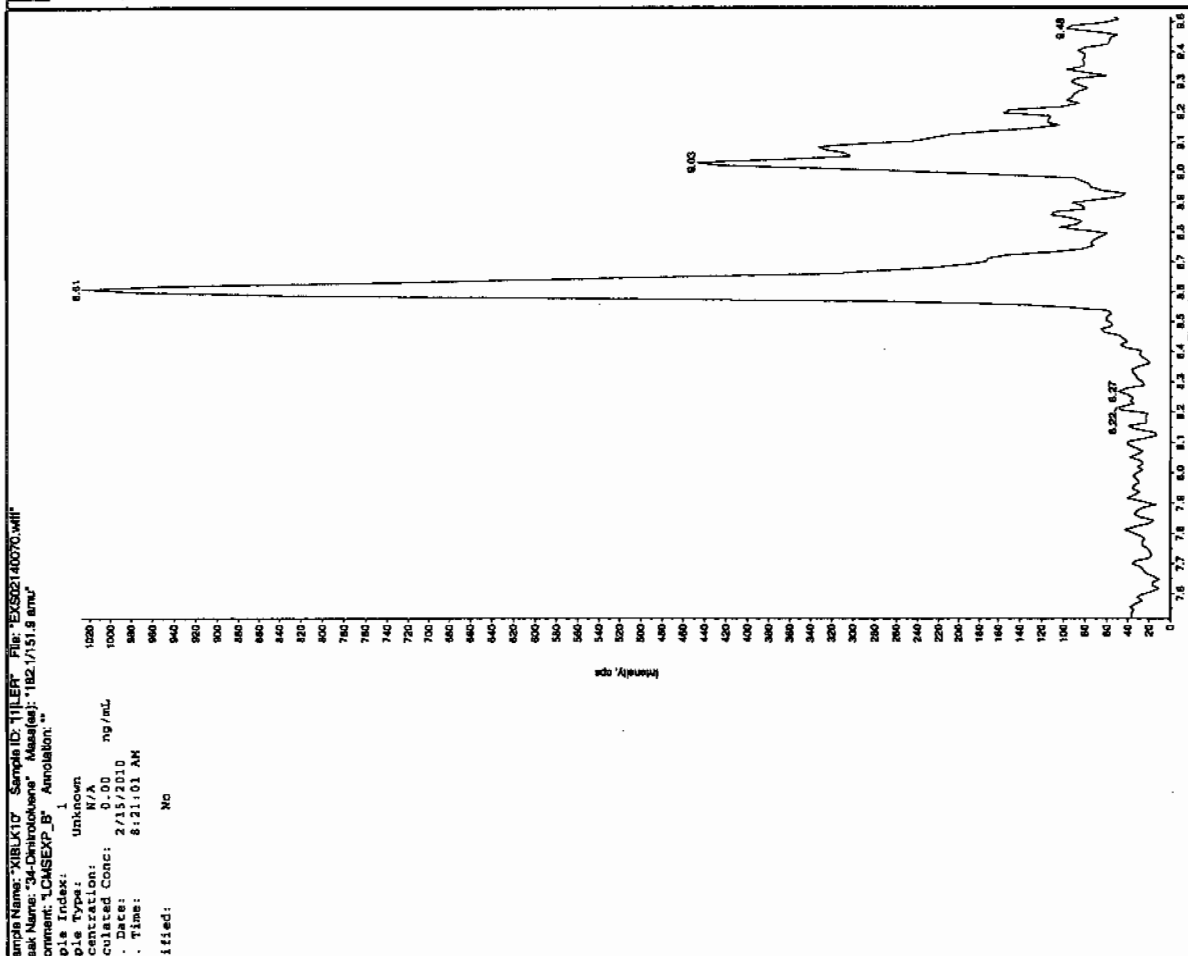
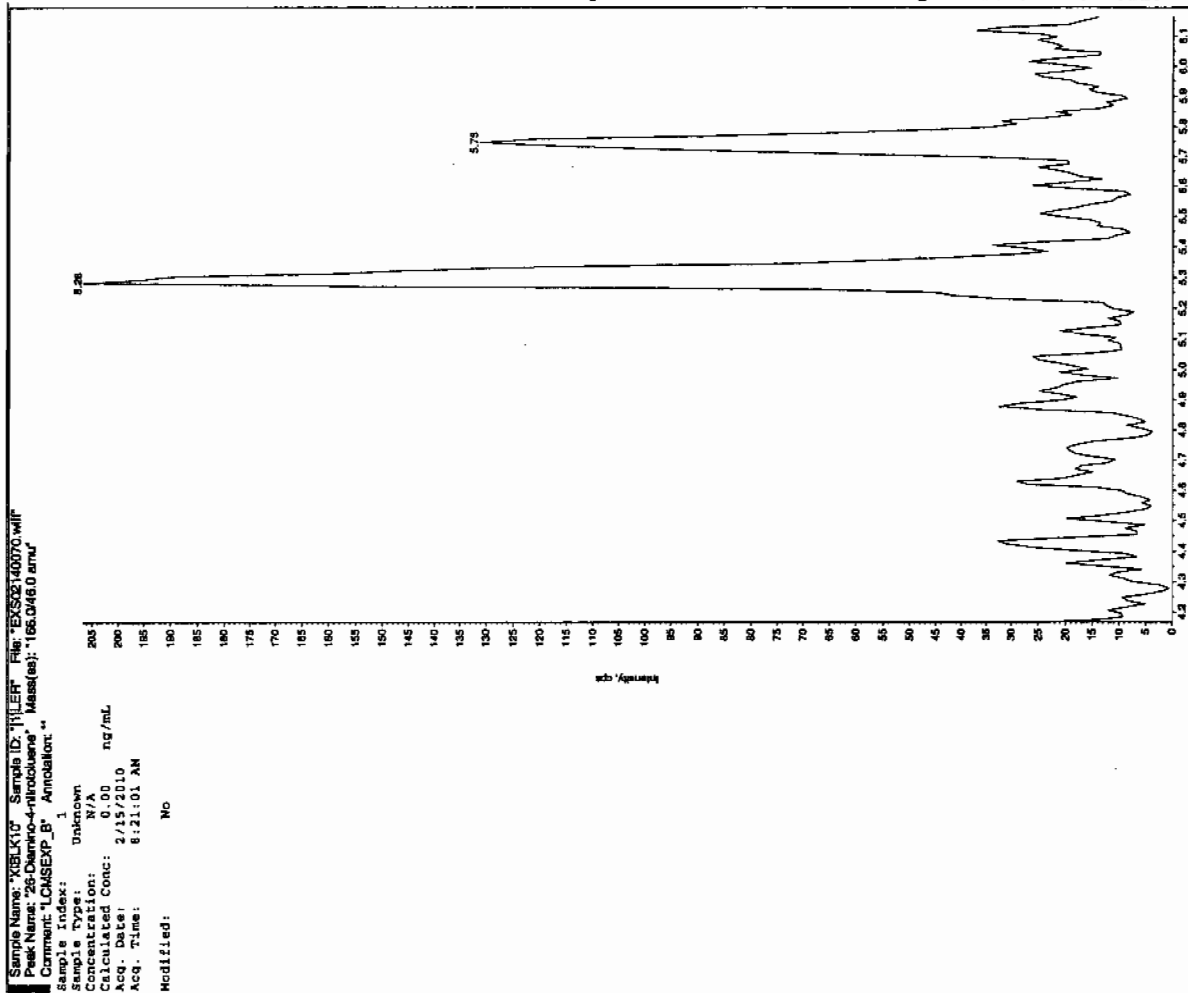
Acq. Date: 2/15/2010

Acq. Time: 8:21:01 AM

Modified: No



See 2/17/10

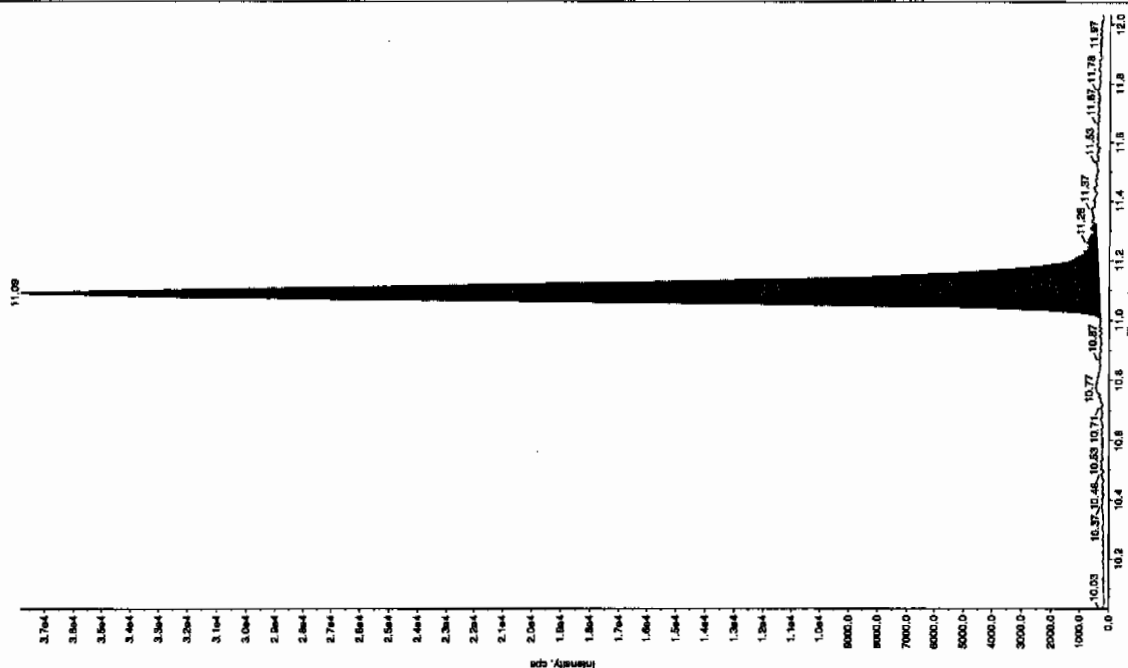
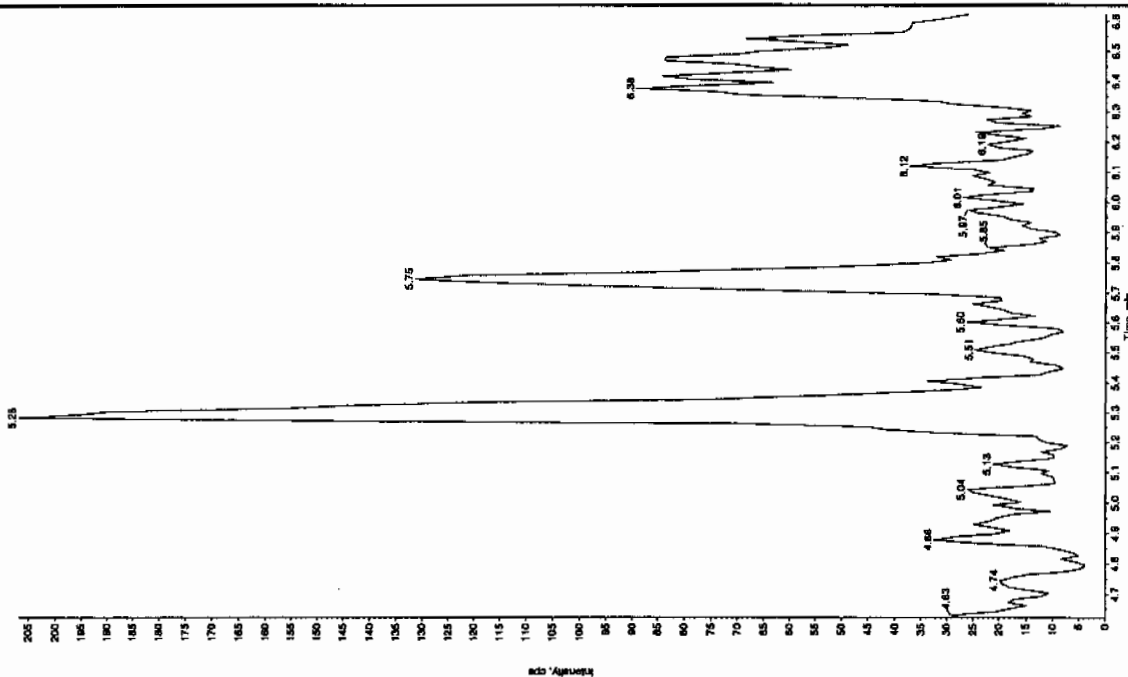


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK10" Sample ID: "111ER" File: "EX502140070.wif"
 Peak Name: "24-Diamino-6-nitroquinoxaline" Mass(es): 162.0745.0 amu
 Comment: "LONSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:21:01 AM
 Modified: No

Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.1 min
 Area: 1.59e05 counts
 Height: 3751136 cps
 Start Time: 11.0 min
 End Time: 11.3 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 15-FEB-10 11:46

GEL Data File: EXS02140083.wiff

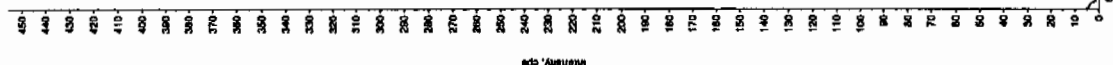
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.17
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 24/7/10

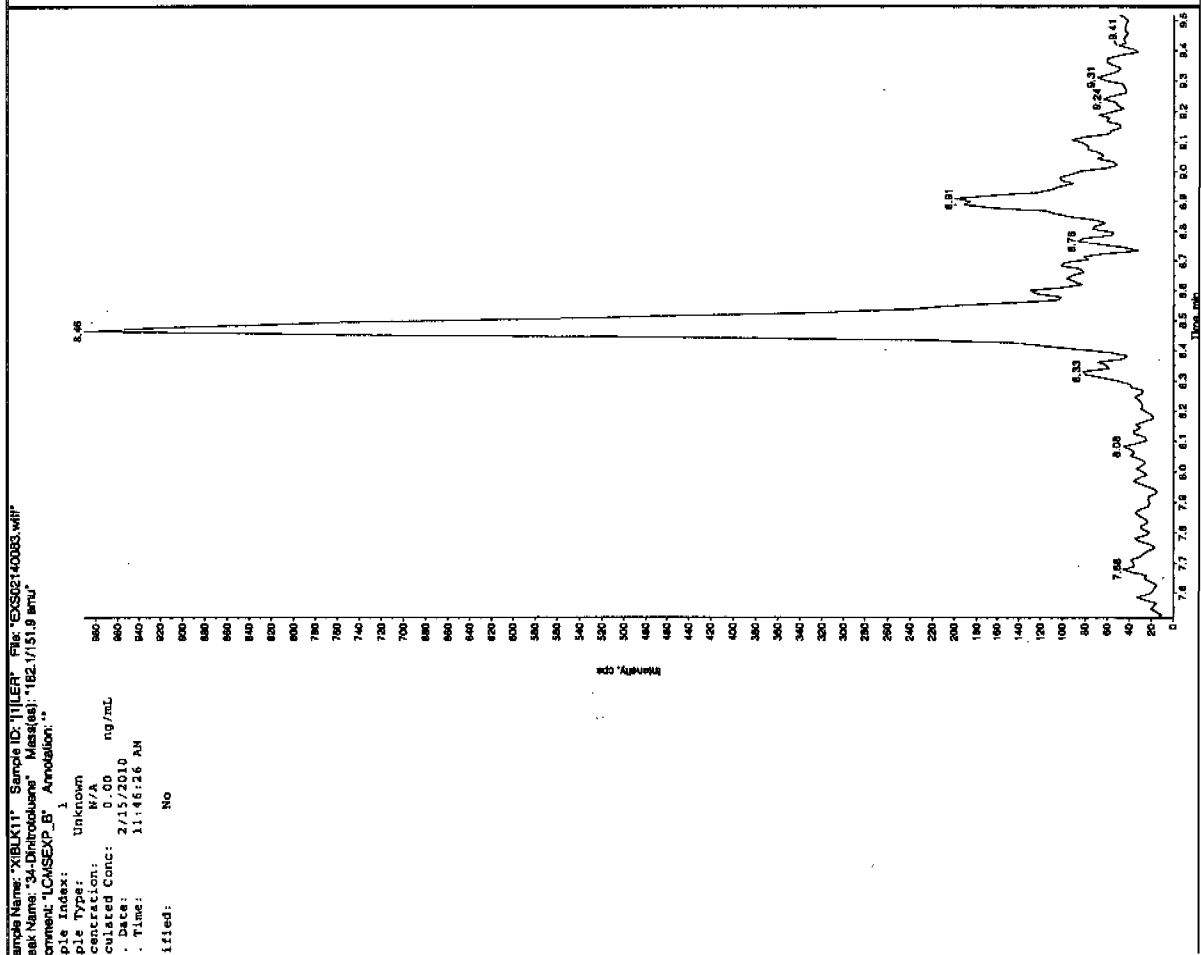
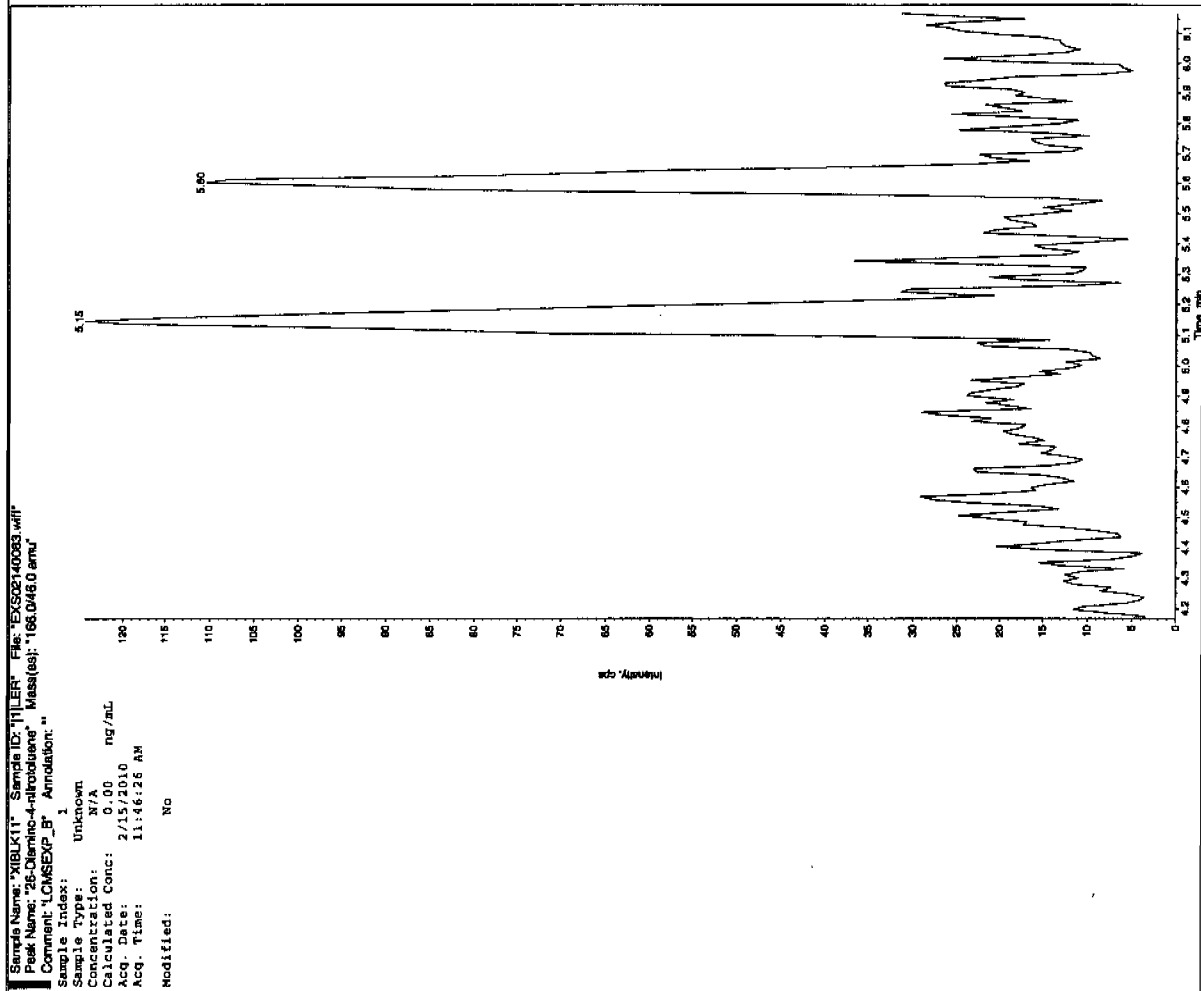
Sample Name: "YIBUK11" Sample ID: "YIBUK11" File: "EXS02140083.wiff"
 Peak Name: "YIBUK11" Mass(es): "237.22043 amu"
 Concentration: "0.00 ng/mL"
 Sample Index: "1" Annotation: ""
 Sample Type: "Unknown"
 Calculated Conc: "0.00 ng/mL"
 Acq. Date: "2/15/2010"
 Acq. Time: "11:46:26 AM"
 Modified: "No"



Sample Name: "YIBUK11" Sample ID: "YIBUK11" File: "EXS02140083.wiff"
 Peak Name: "YIBUK11" Mass(es): "182.0480 amu"
 Concentration: "0.00 ng/mL"
 Sample Index: "1" Annotation: ""
 Sample Type: "Unknown"
 Calculated Conc: "0.00 ng/mL"
 Acq. Date: "2/15/2010"
 Acq. Time: "11:46:26 AM"
 Modified: "No"



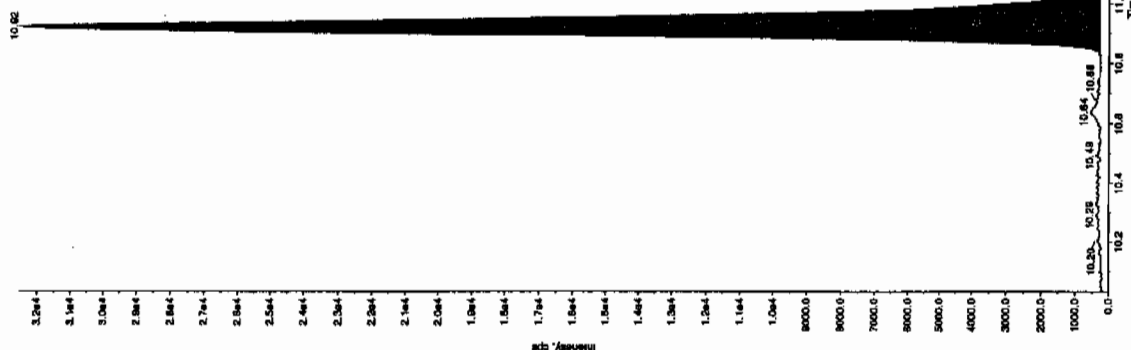
Jan 24/7/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

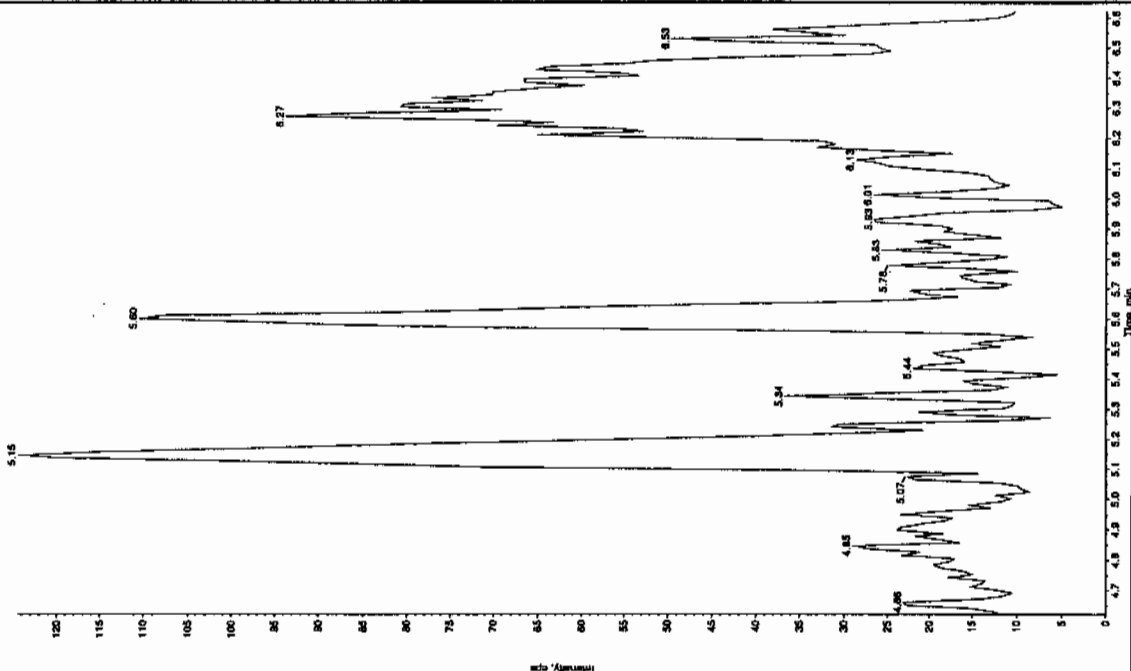
Sample Name: "XBLK11" Sample ID: "1111" File: "EXS02140083.wif"
 Peak Name: "1111" Retention Time: 11.10 min
 Comment: "LCMSXP_B" Annotation: "1111"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.17 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:46:26 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: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.37e+005 counts
 Height: 3223.282 cps
 Start Time: 10.9 min
 End Time: 11.2 min



Sample Name: "XBLK11" Sample ID: "1111" File: "EXS02140083.wif"
 Peak Name: "24-Chloro-5-nitrofluorene" Retention Time: 5.15 min
 Comment: "LCMSXP_B" Annotation: "1111"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.70 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:46:26 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 15-FEB-10 13:20

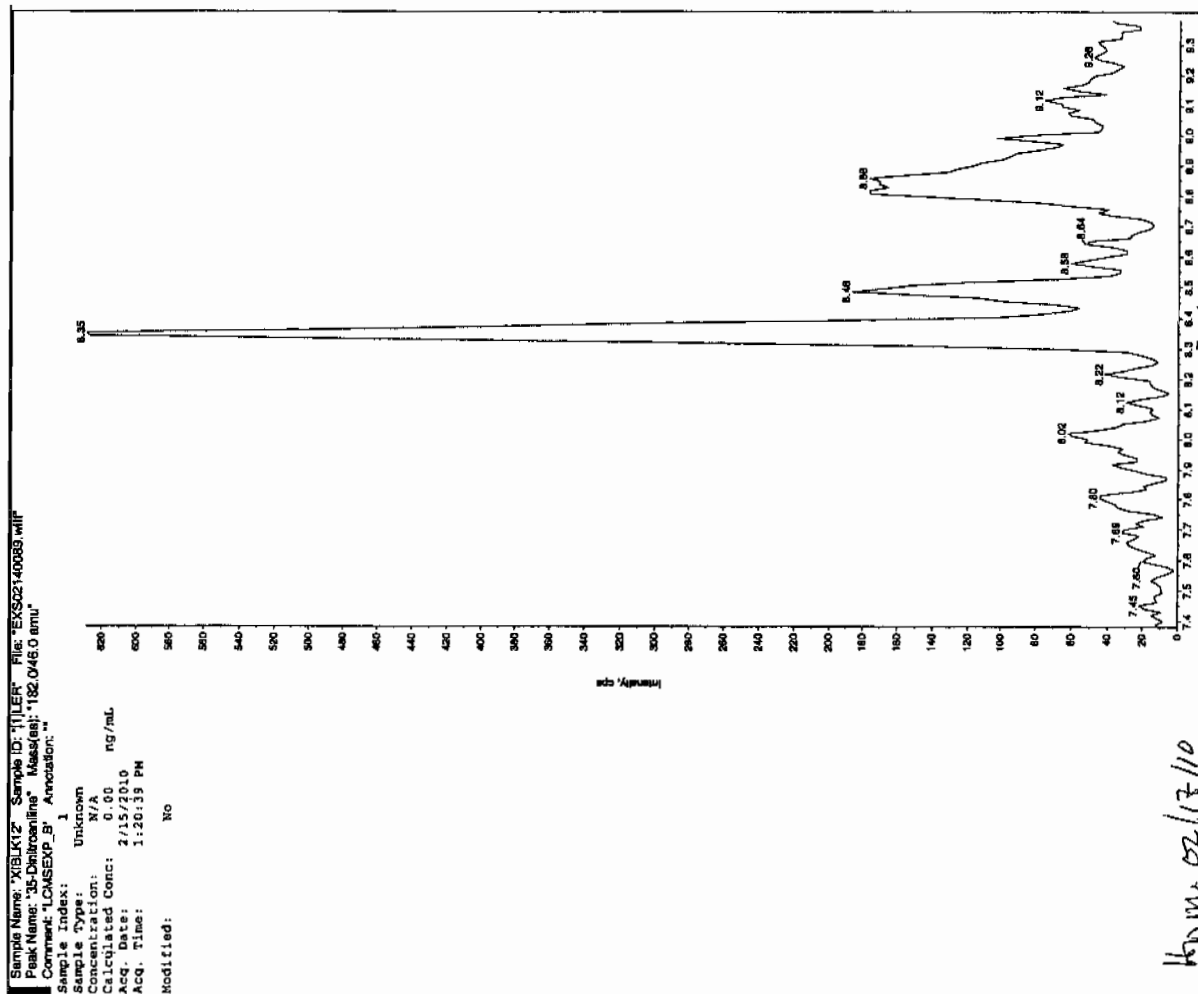
GEL Data File: EXS02140089.wiff

Instrument ID: LCMSMS

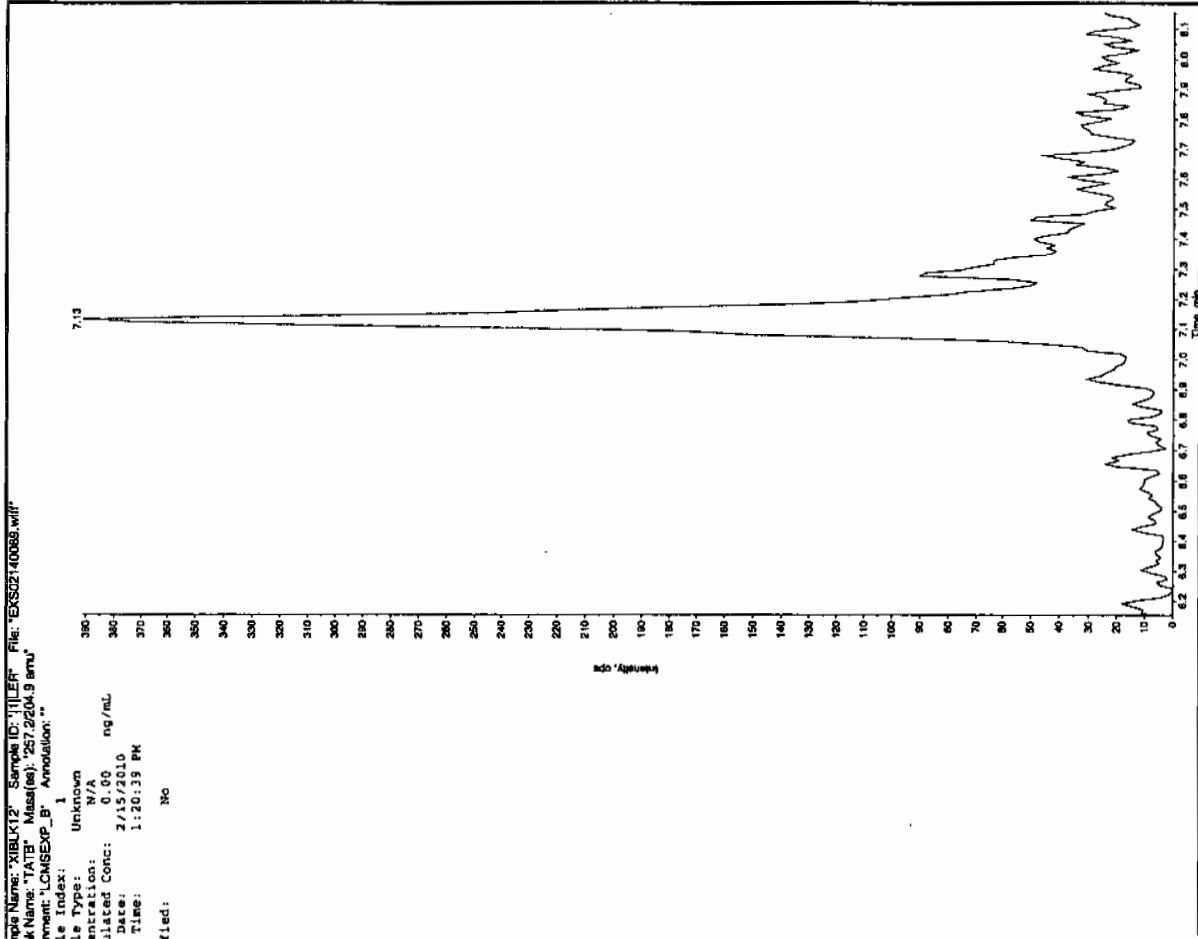
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
tris(o-cresyl) phosphate	0	1.15
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0

See 2/17/10



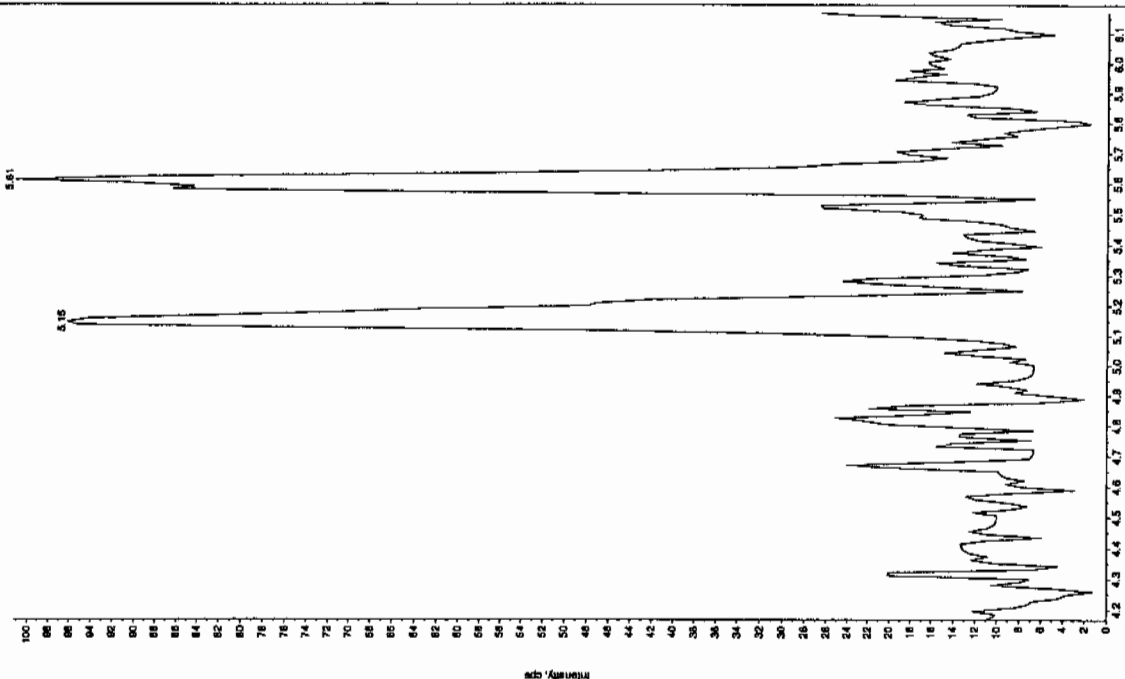
See 02/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

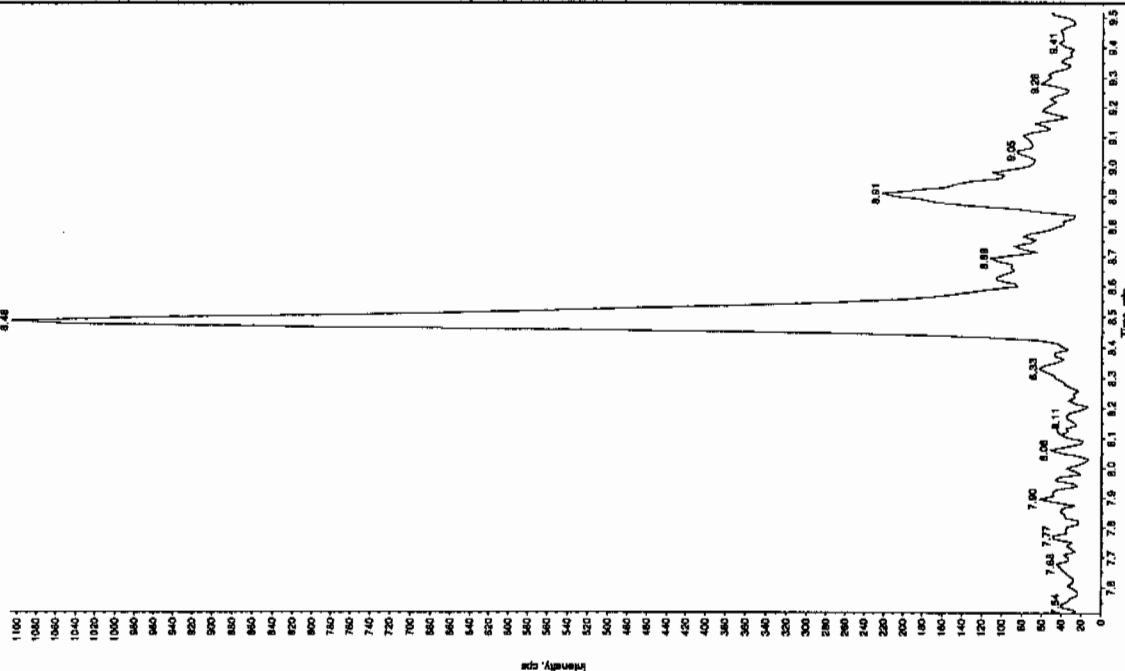
Sample Name: "XBLK12" Sample ID: "11111" File: "EXS02140088.wif"
 Peak Name: "26-Dimethyl-4-phenyl-1,3-butadiene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: M/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:20:39 PM
 Modified: No



Sample Name: "XBLK12" Sample ID: "11111" File: "EXS02140088.wif"
 Peak Name: "34-Dehydro-1,3-butadiene" Mass(es): "182.17519 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:20:39 PM
 Modified: No



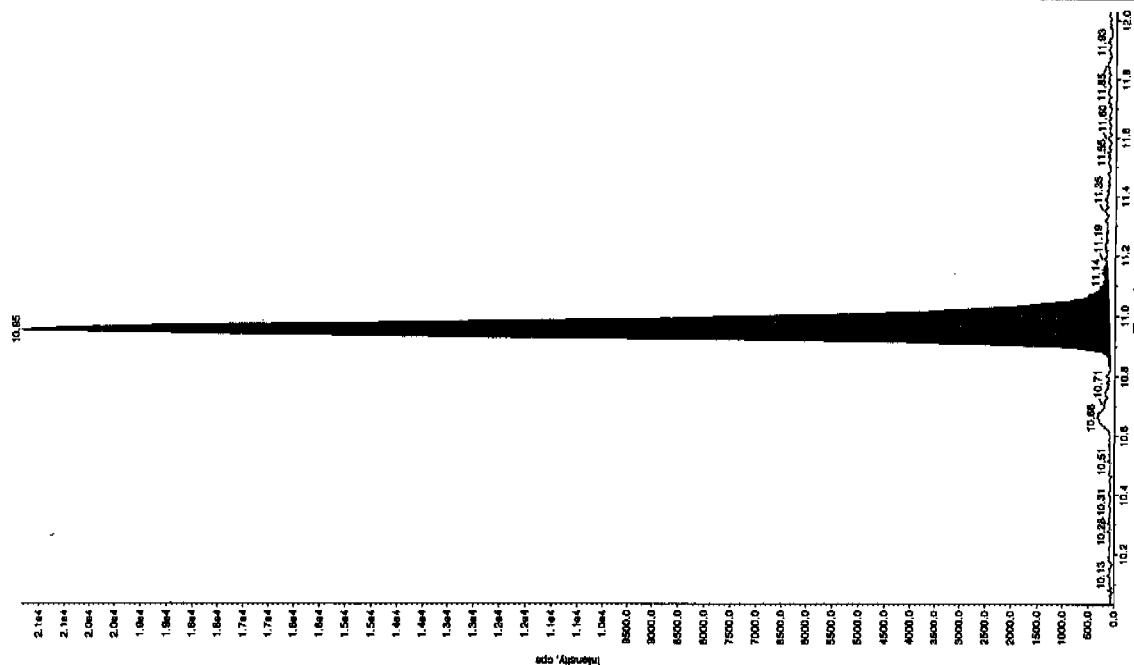
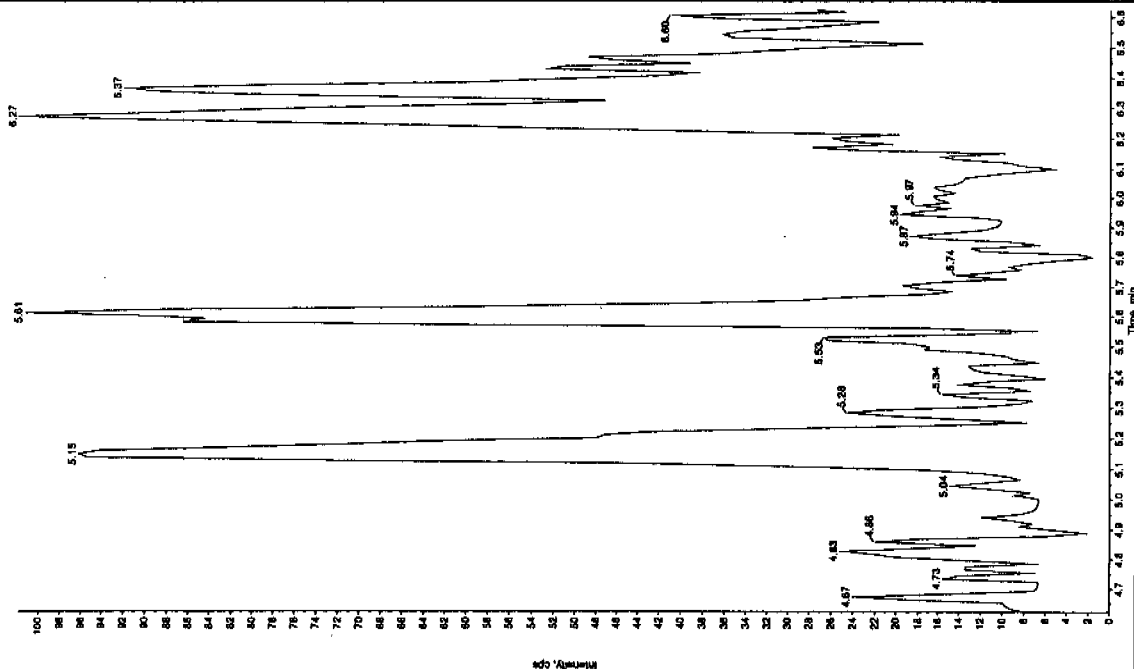
LCM SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLUK12" Sample ID: "JLIER" File: "XS02140089.wif"
Peak Name: "tris(o-crasyl) phosphole" Mass(es): "369.1791.0 amu"
Comment: "LCMSEXP 5" Annotation: ""

Sample Name: "XIBLK12" Sample ID: "11LE"
 Mark Name: "24-Diamino-6-nitrotoluene" Mark
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	2
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Date:	2/15/2010
Time:	1:20:39 PM
Printed:	No

Sample Index: Sample Type: Concentration: Calculated Conc: Acq. Date: Acq. Time:	1 Unknown WFA 1.15 2/15/2010 11:20:39 PM
Modified: NO	
Proc. Algorithm: IntelliQuan - IQA	
Min. Peak Height: Min. Peak Width: Smoother Width: RT Window: Expected RT:	 1.064 cps 0.00 sec 3.0 points 30.0 sec 11.0 min
Use Relative RT: NO	
Int. Type: Retention Time: Area: Height: Scan Time: End Time:	 Valley 11.0 min 8.89e+04 counts 21230.675 cps 10.8 min 11.2 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 15-FEB-10 15:10

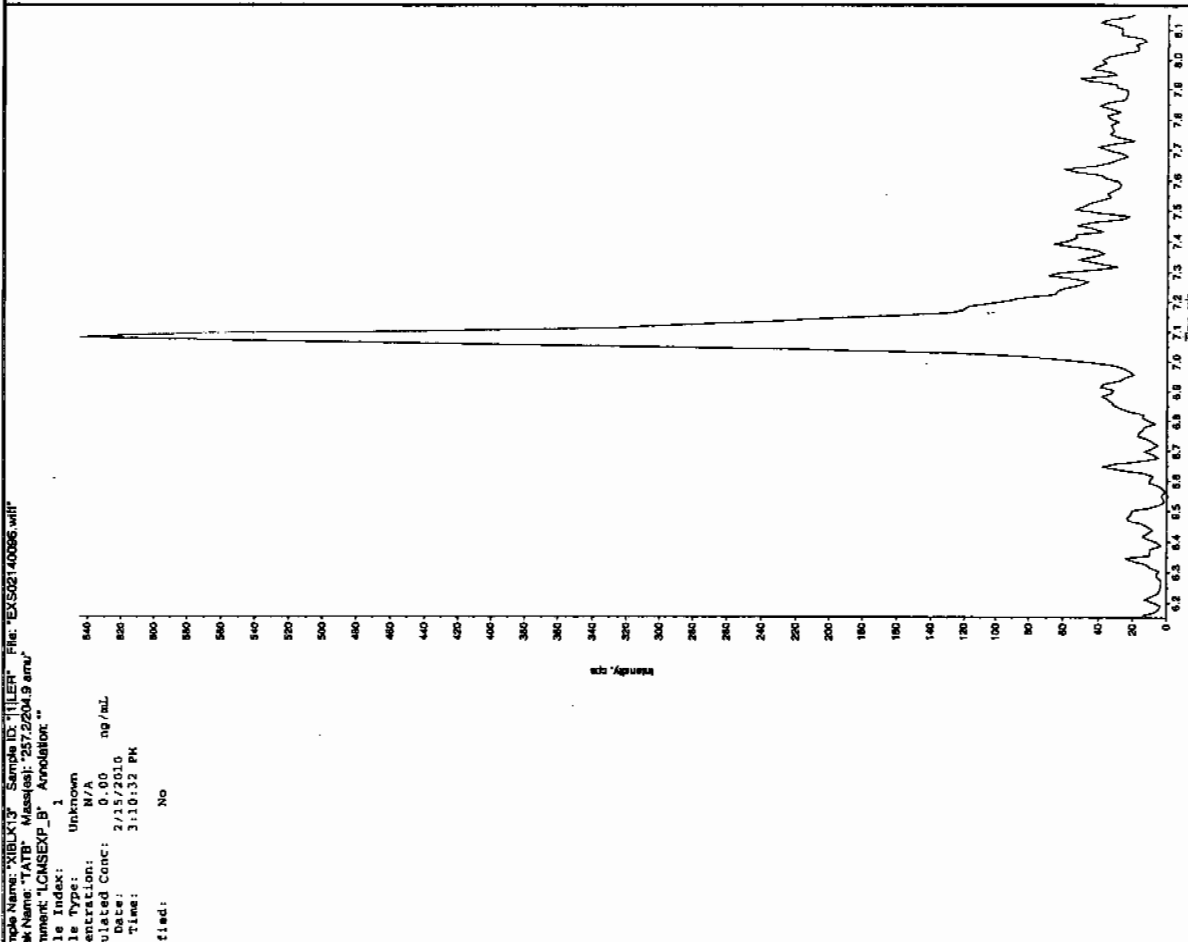
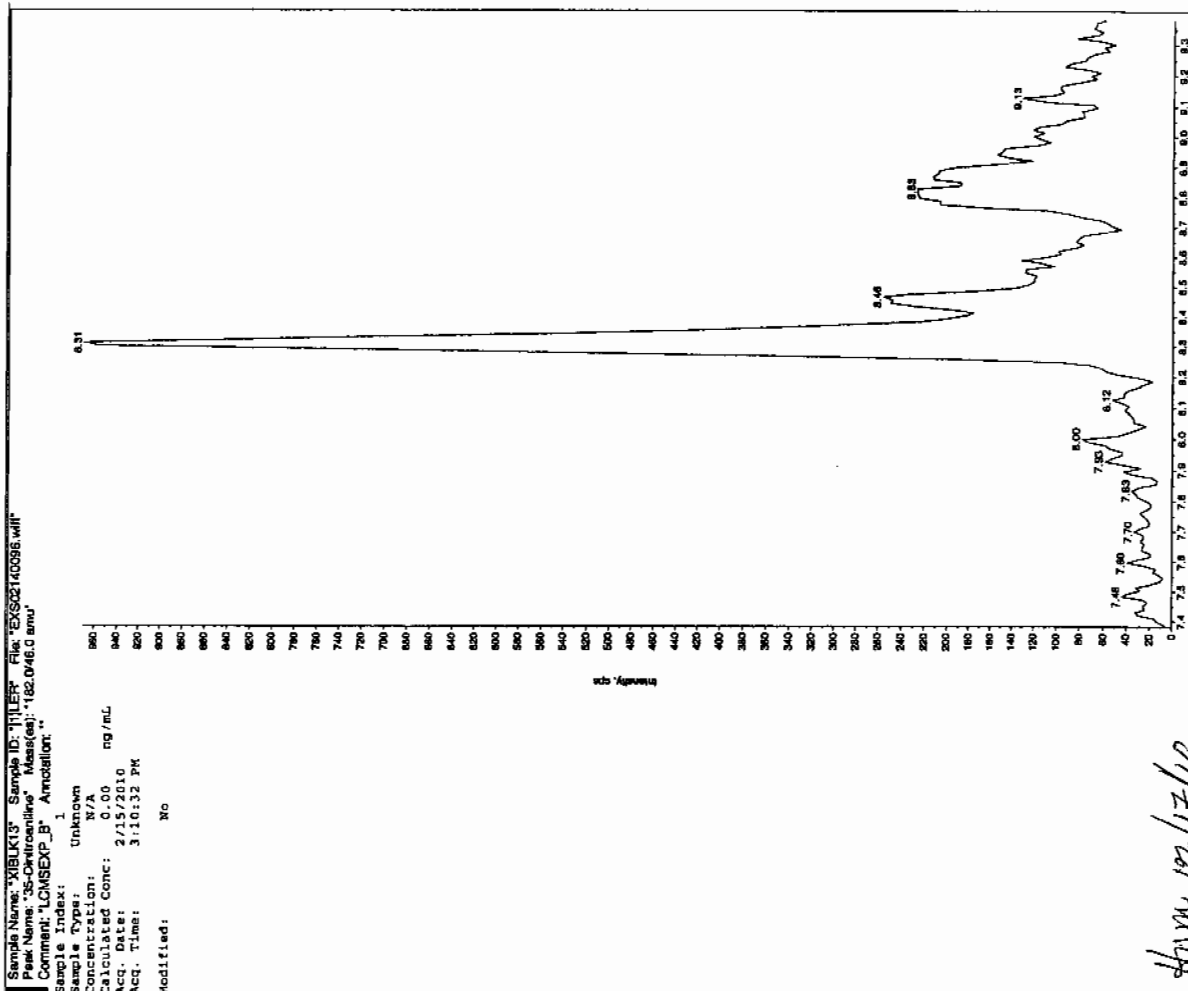
GEL Data File: EXS02140096.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.82
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

for 2/17/10

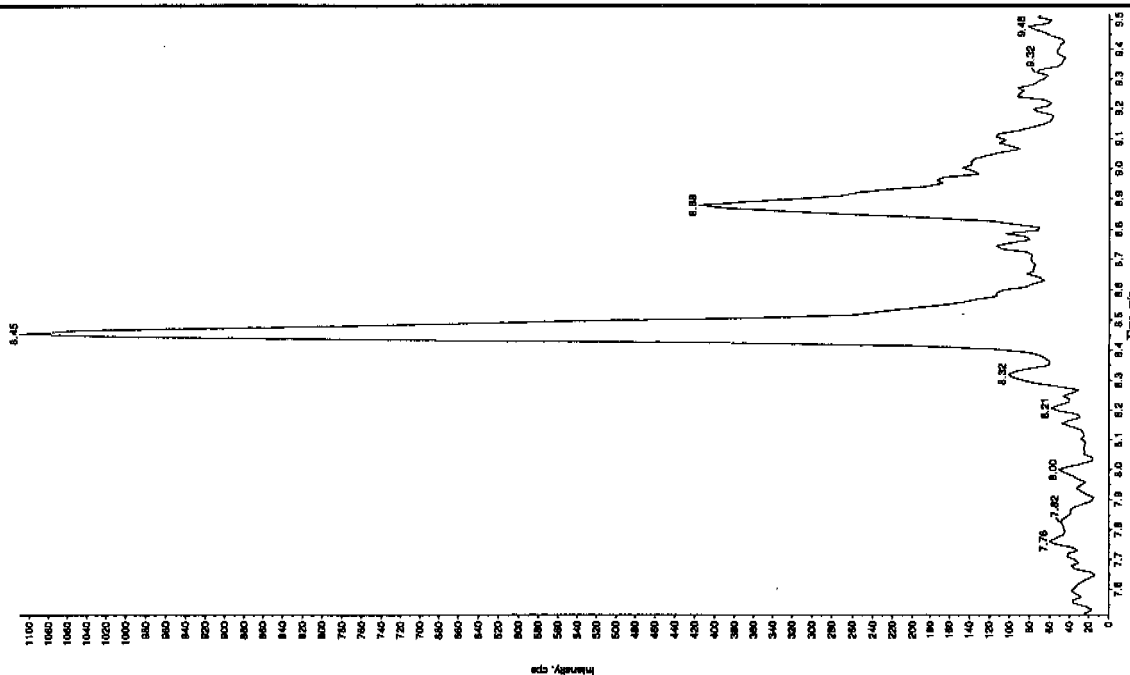


ARM 102/17/10

IL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

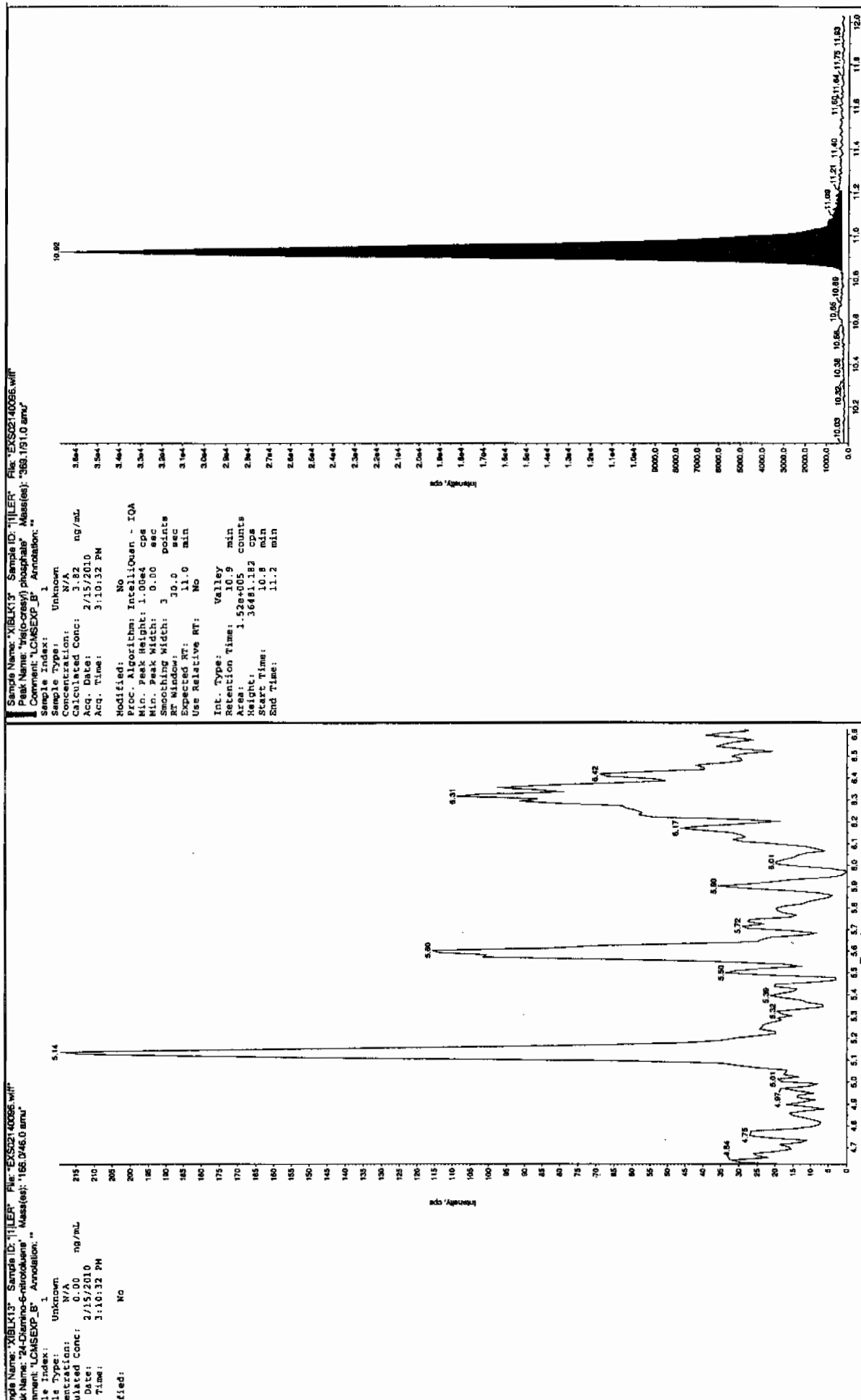
Sample Name: "XBLK13" Sample ID: "11111" File: "EX502140066.wif"
 Peak Name: "29-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 3:10:32 PM
 Modified: No



Sample Name: "XBLK13" Sample ID: "11111" File: "EX502140066.wif"
 Peak Name: "29-Diamino-4-nitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 3:10:32 PM
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK14

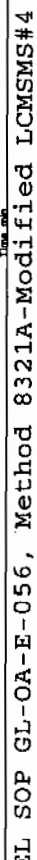
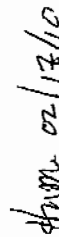
Analysis Date: 15-FEB-10 18:34

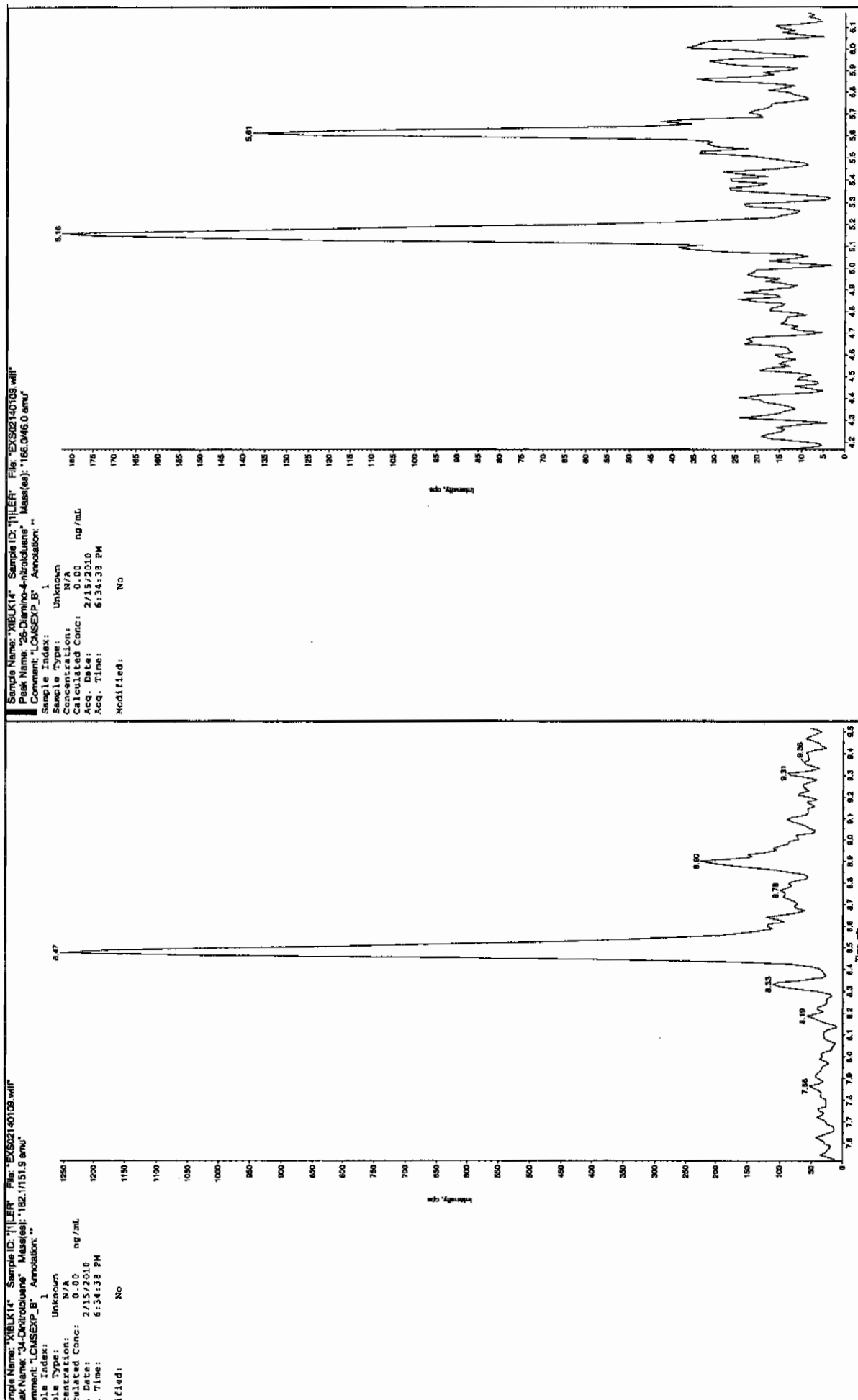
GEL Data File: EXS02140109.wiff

Instrument ID: LCMSMS

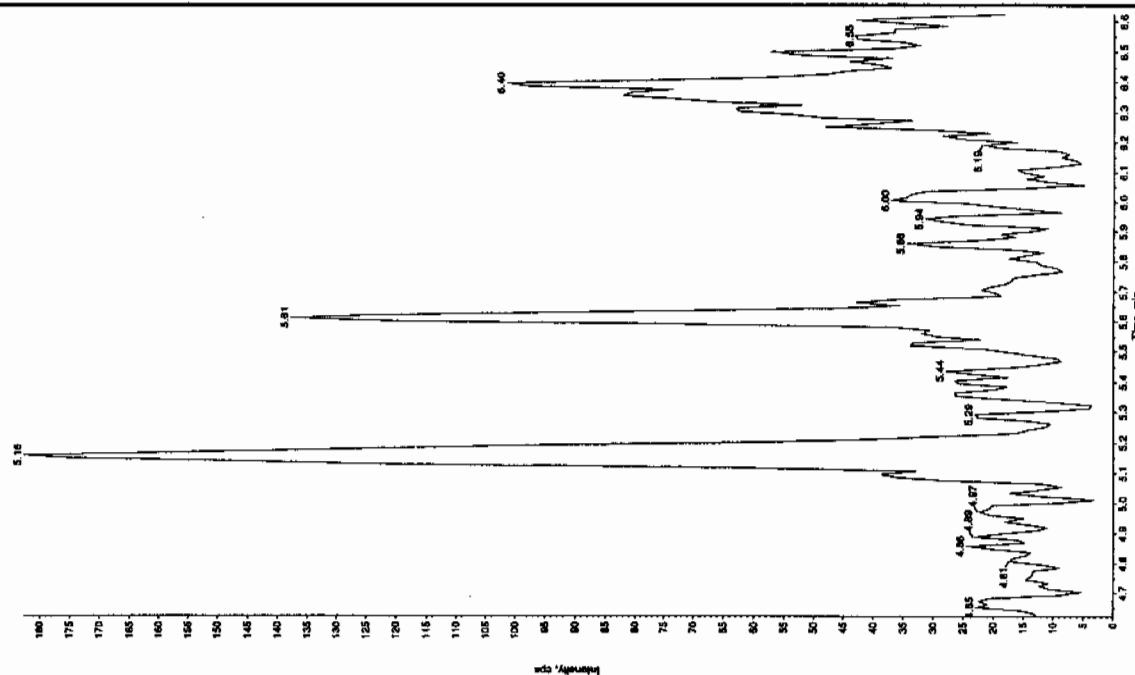
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.48
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

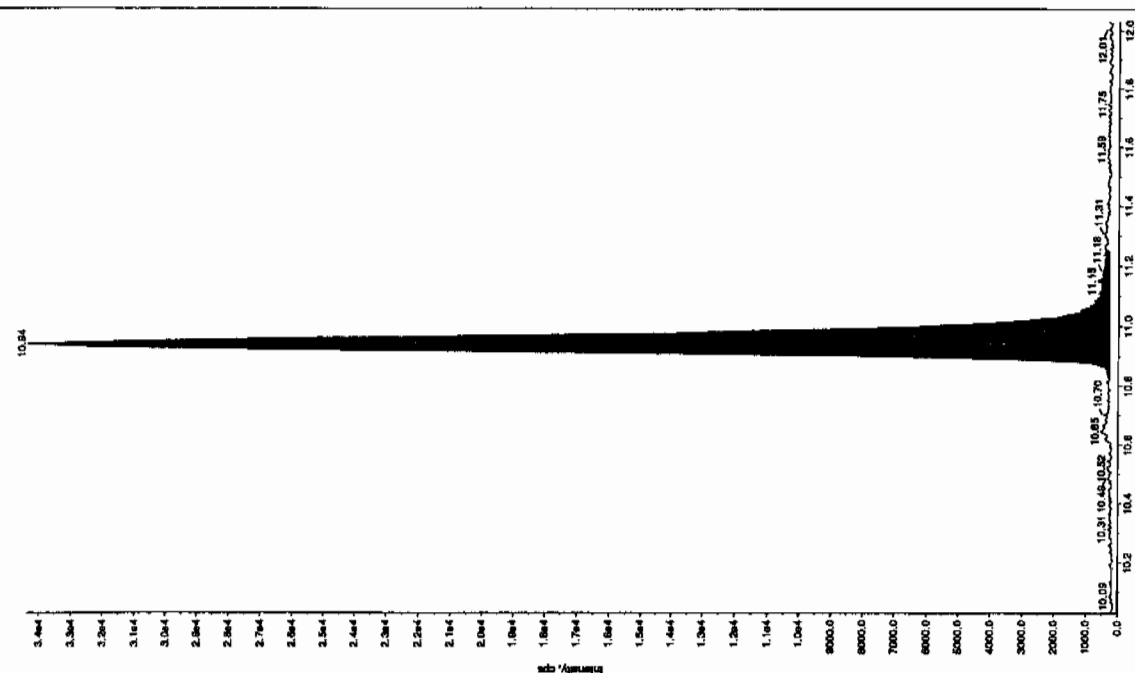




GL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XIBLK14" Sample ID: "1JLER" File: "EXS02140109.wif"
Peak Name: "1/2(o-cresyl) phosphate" Mass(es): "359.191.0 amu"
Comment: "LCMSEXP B" Annotation: "



Sample Index:	1	Unknown
Concentration:	N/A	
Calculated Conc:	2/15/2010	ng/mL
QC4:	6:34:18 PM	
QC4 Time:		
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1.00E4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	30.0	points
Run Window:	30.0	sec
Expected RT:	11.0	min
Use Relative RT:	No	
Inst. Type:	Valley	
Acquisition Time:	1:59	min
Area:	1.44E+005	counts
Height:	34091.606	Cps
Start Time:	10.8	min
End Time:	11.3	min

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 15-FEB-10 19:53

GEL Data File: EXS02140114.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.72
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/17/10

Sample Name: "XBLK15" Sample ID: "JILLER" File: "EXS02140114.wif"

Peak Name: "TATP" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: ""

File Index: 1

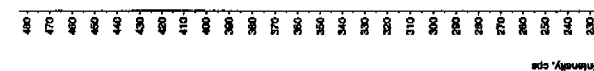
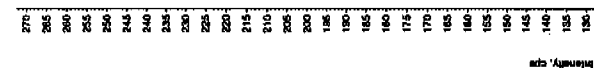
Sample Type: Unknown

Calculated Conc: 0.00 ng/mL

Date: 2/15/2010

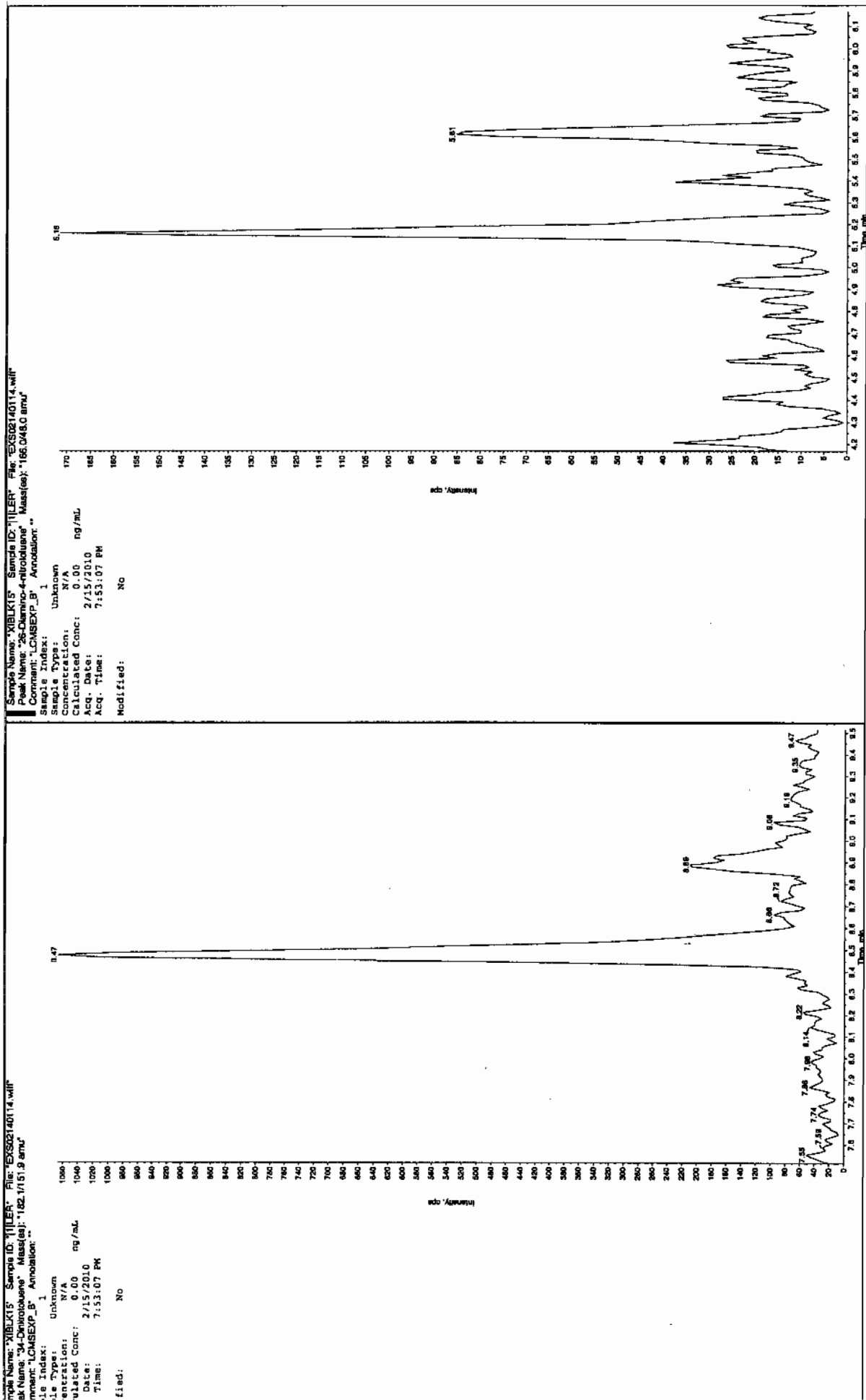
Time: 7:53:07 PM

Modified: No

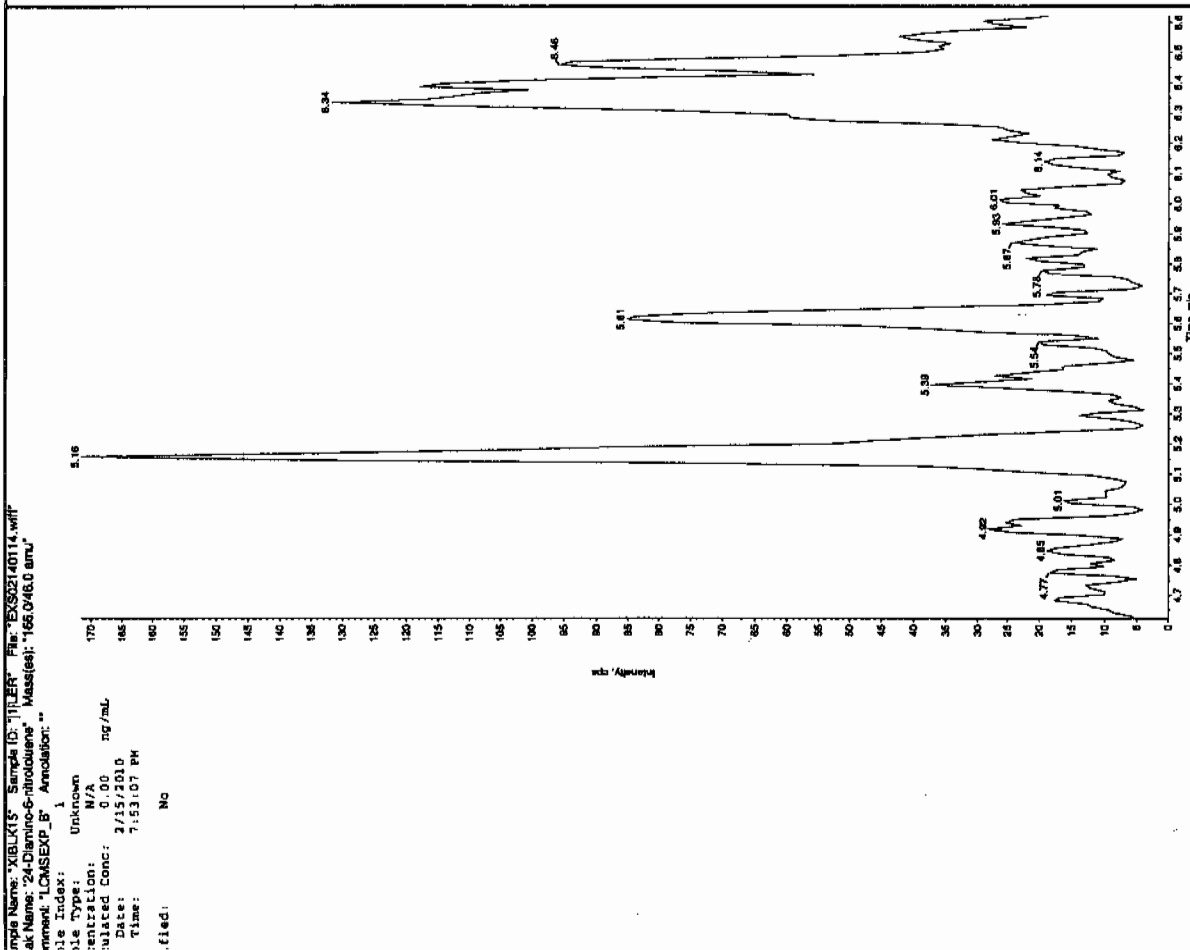
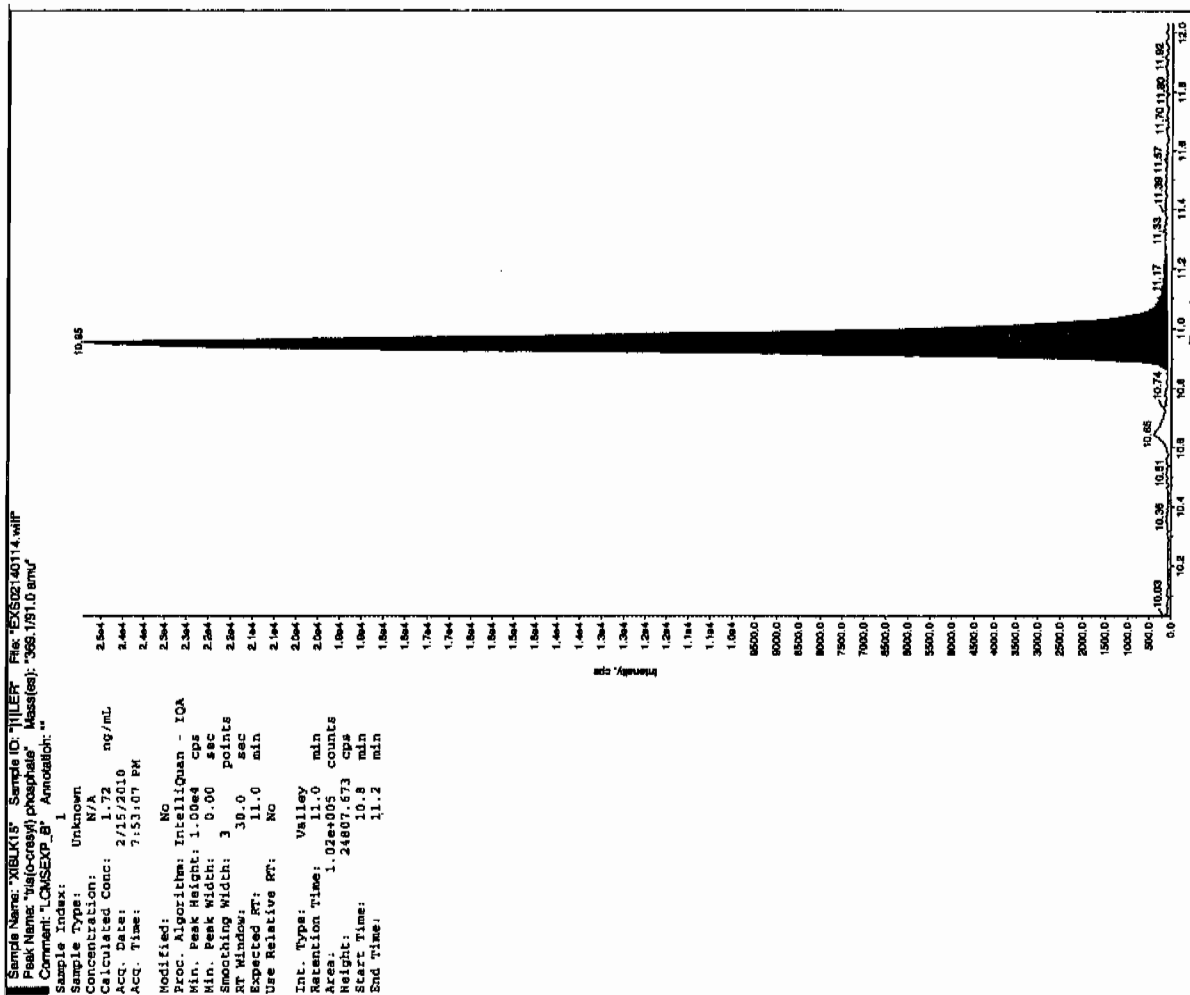


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

hmm 02/12/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 15-FEB-10 20:55

GEL Data File: EXS02140118.wiff

Instrument ID: LCMSMS

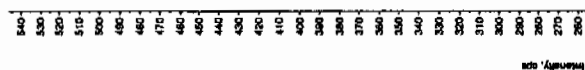
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.66
TATB	0	0
3,5-Dinitroaniline	0	0

OK 2/17/10

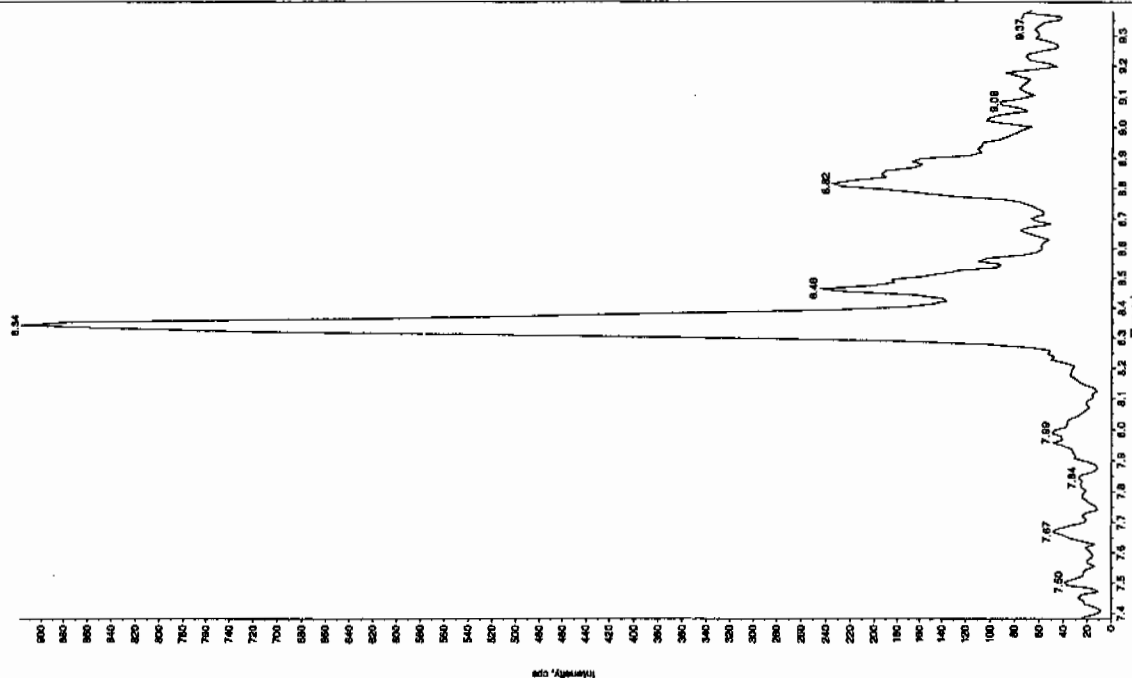
Sample Name: "XBLK16" Sample ID: "1111" File: "EXS02140118.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:55:57 PM
 Modified: No

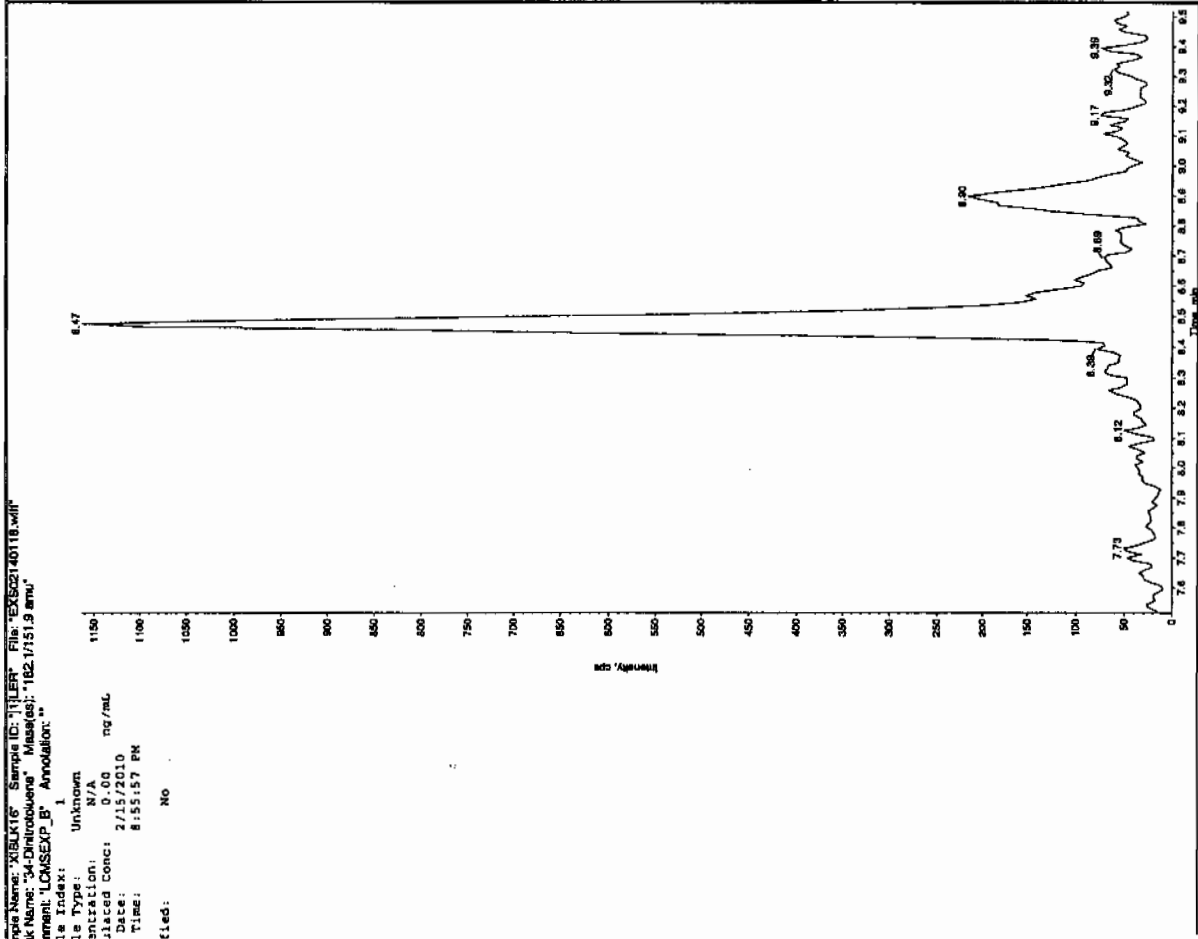
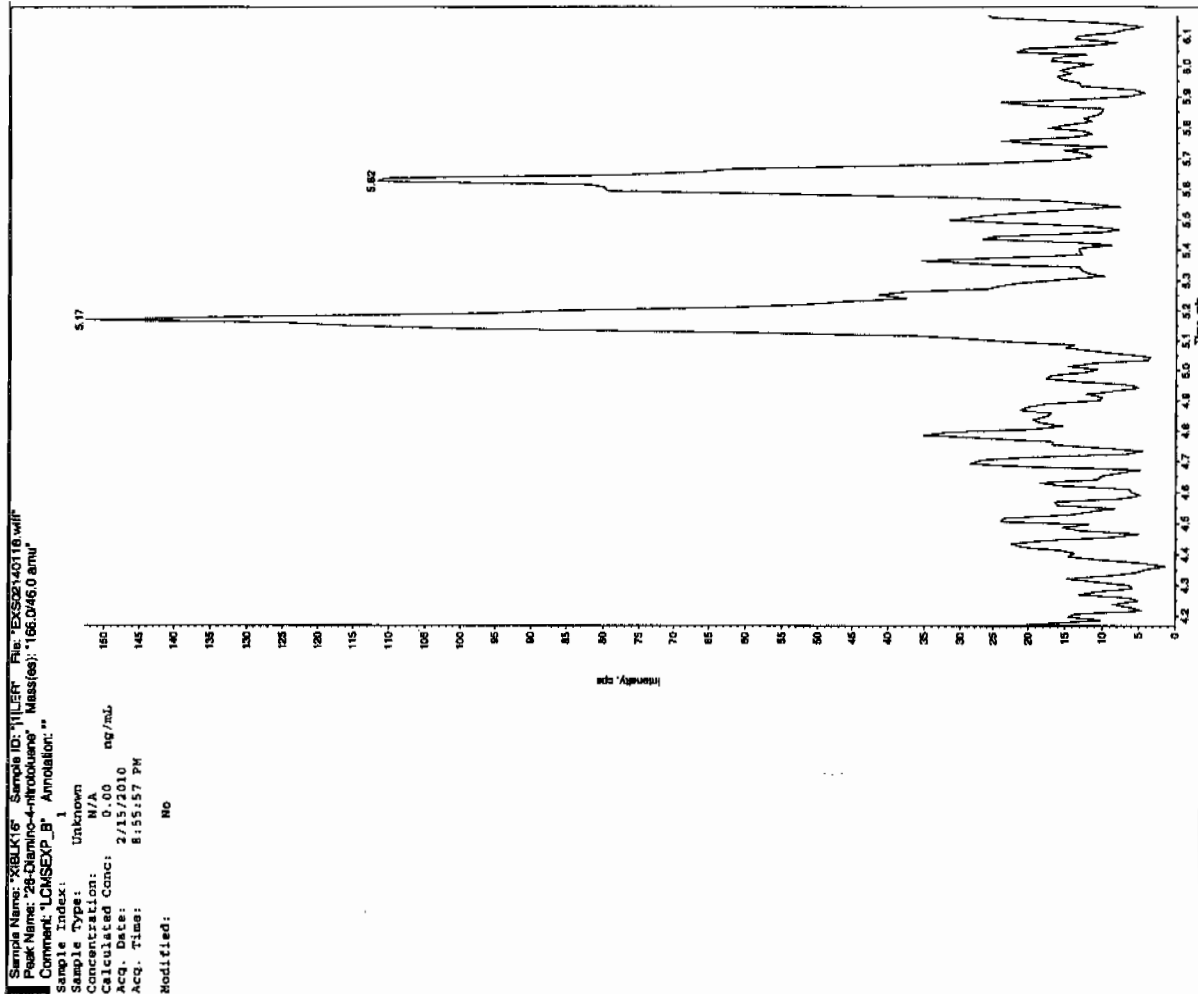


Sample Name: "XBLK16" Sample ID: "1111" File: "EXS02140118.wif"
 Peak Name: "35-Dihydroquinone" Mass(es): "162.0460 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:55:57 PM
 Modified: No



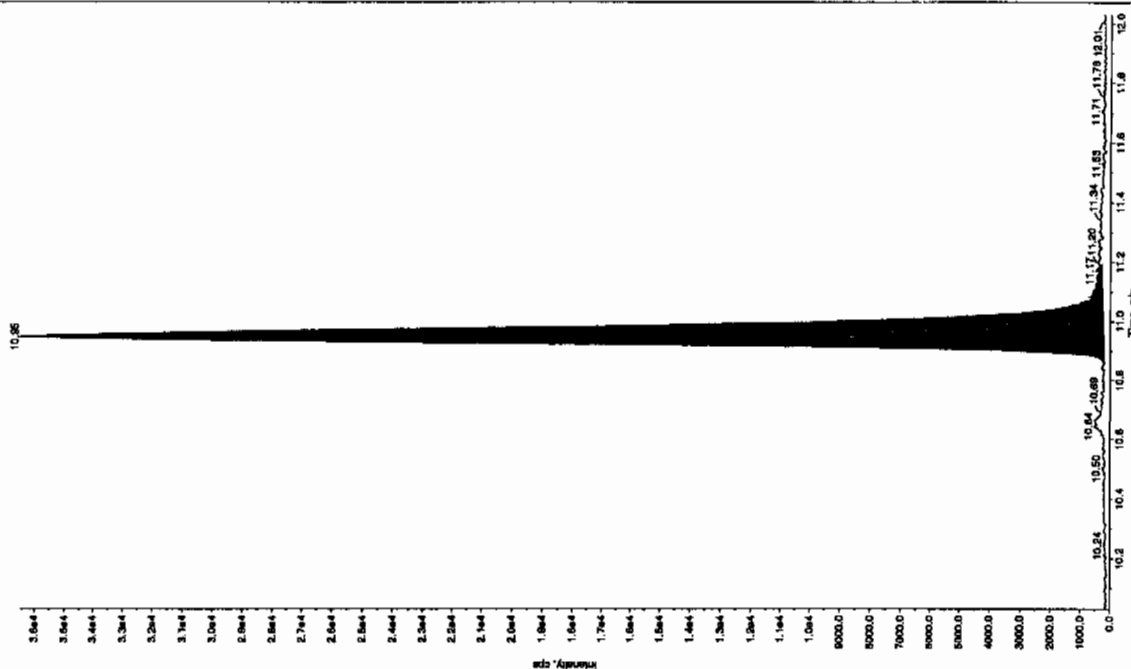
OK 2/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

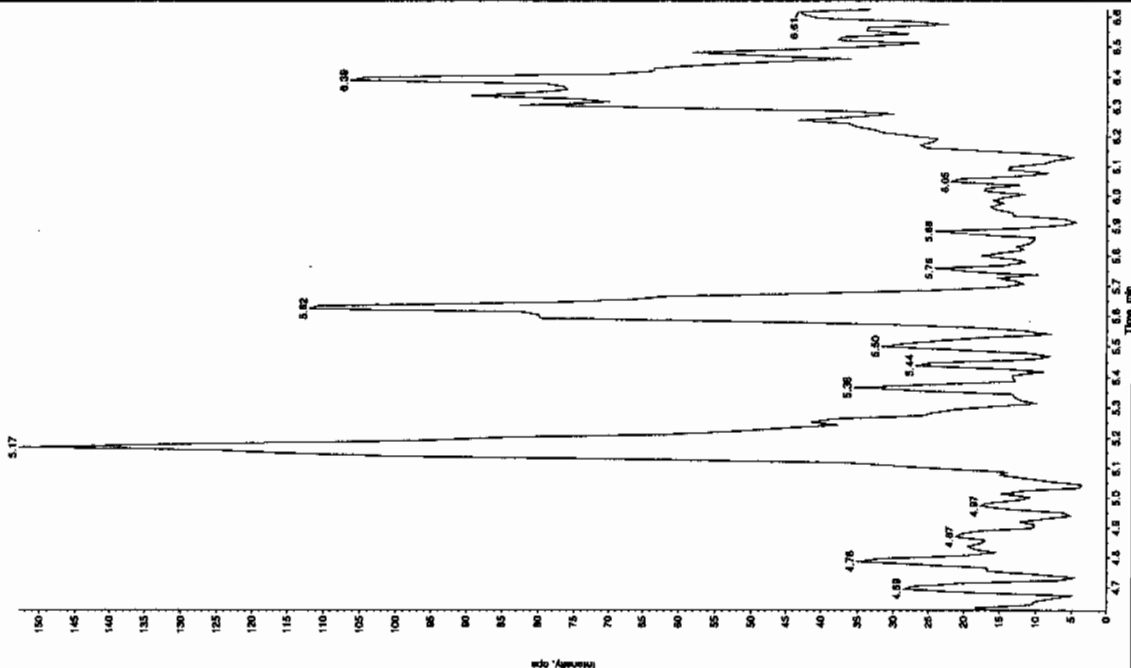
Sample Name: XIBLK18 Sample ID: 111818 File: EXS02140118.wif
 Peak Name: Tri(o-cresyl) phosphate* Mass(es): 359.151.0 amu
 Comment: LCMSEXP_B Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.56 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 8:55:57 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: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.48e+005 counts
 Height: 35222.885 cps
 Start Time: 10.9 min
 End Time: 11.2 min



Sample Name: XIBLK18 Sample ID: 111818 File: EXS02140118.wif
 Peak Name: 24-Diamino-6-nitroloane* Mass(es): 163.045.0 amu
 Comment: LCMSEXP_B Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 8:55:57 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 16-FEB-10 00:19

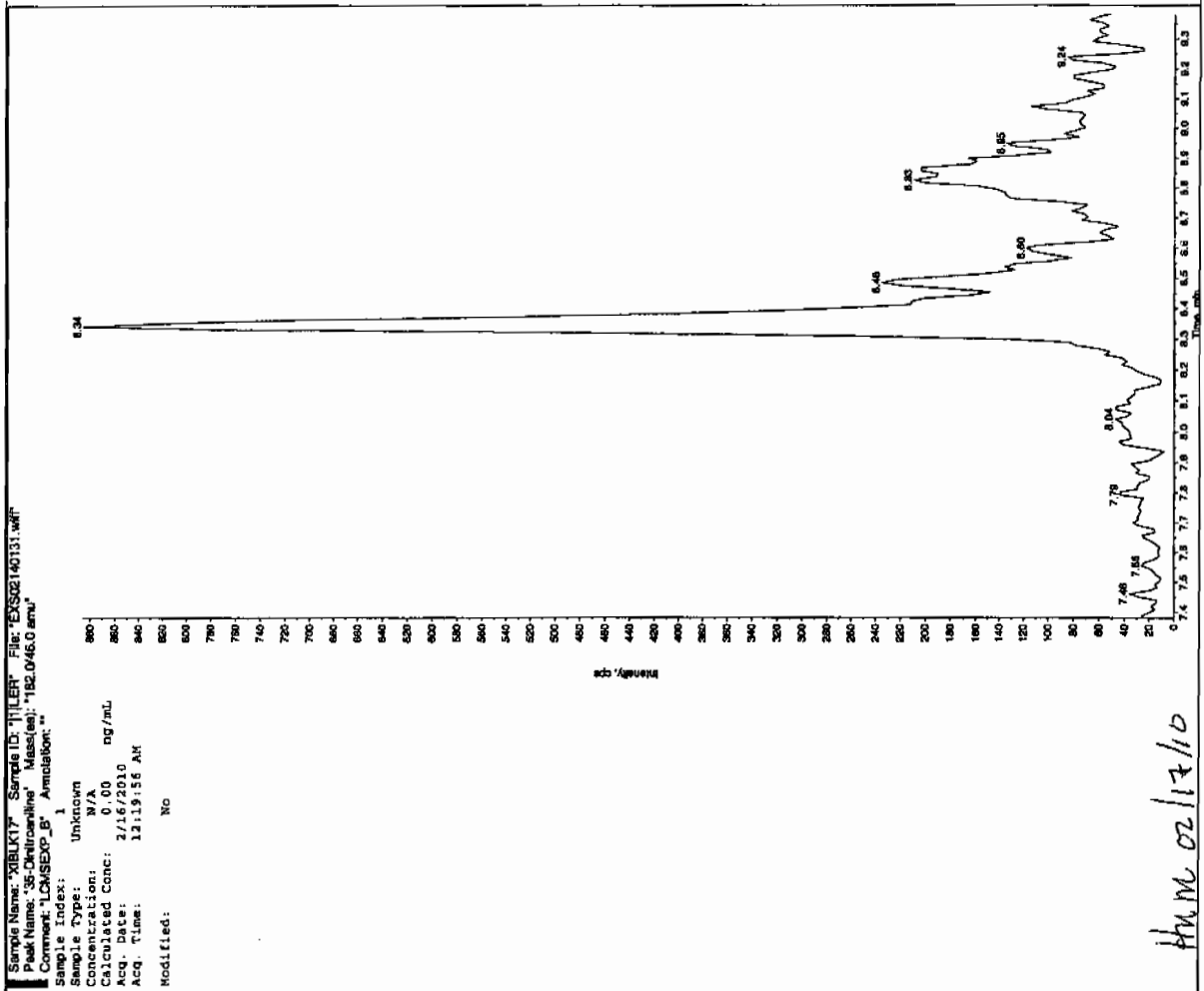
GEL Data File: EXS02140131.wiff

Instrument ID: LCMSMS

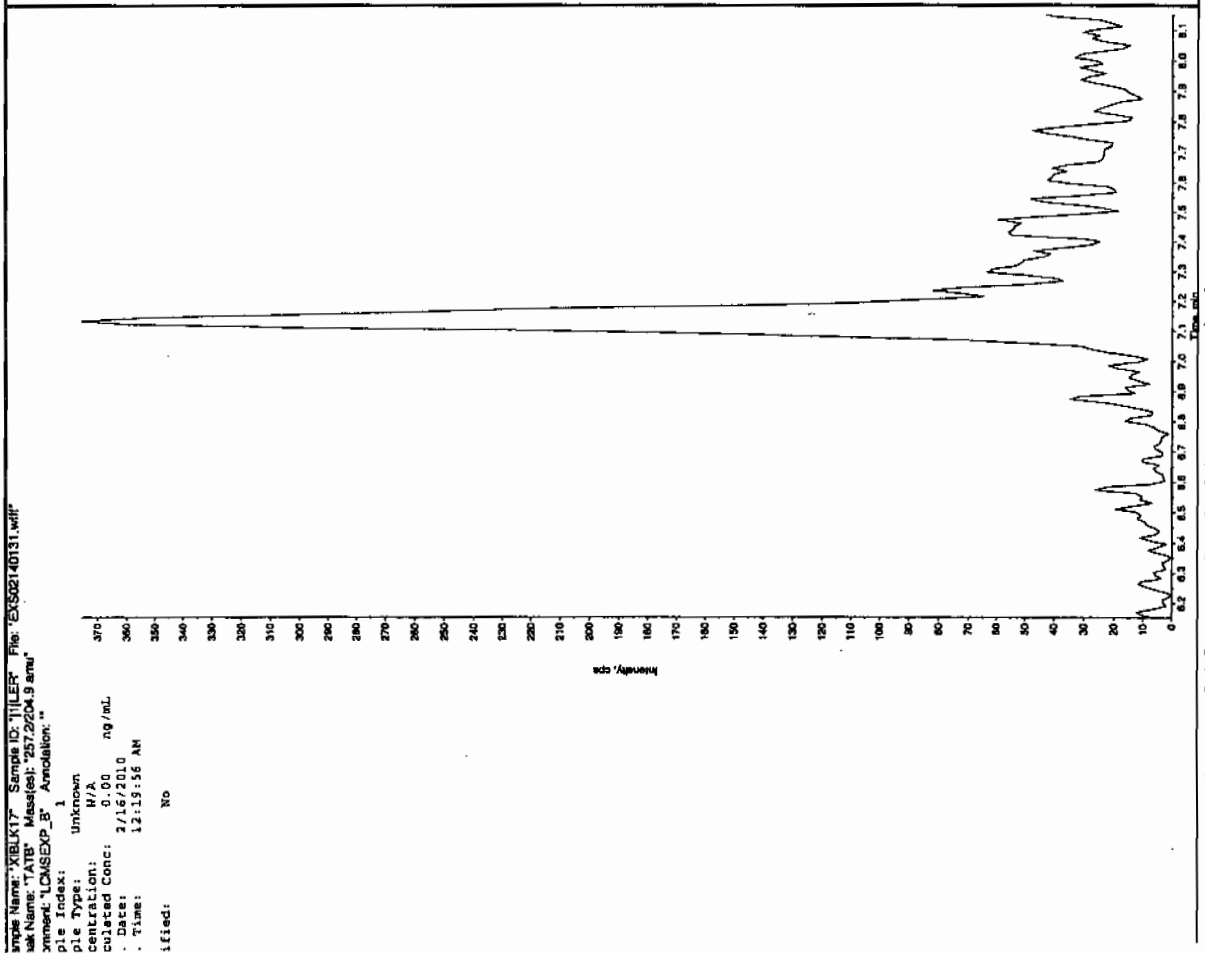
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.11
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

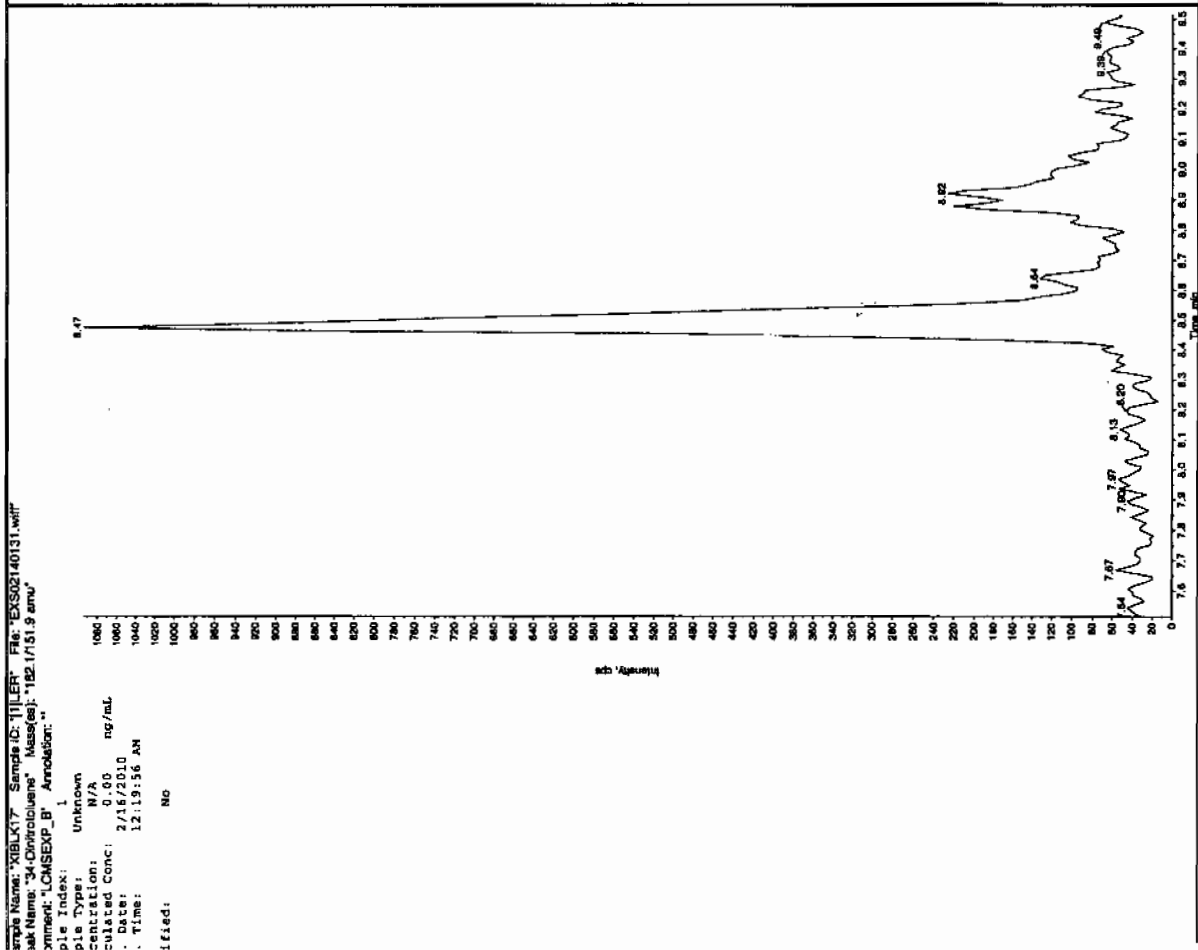
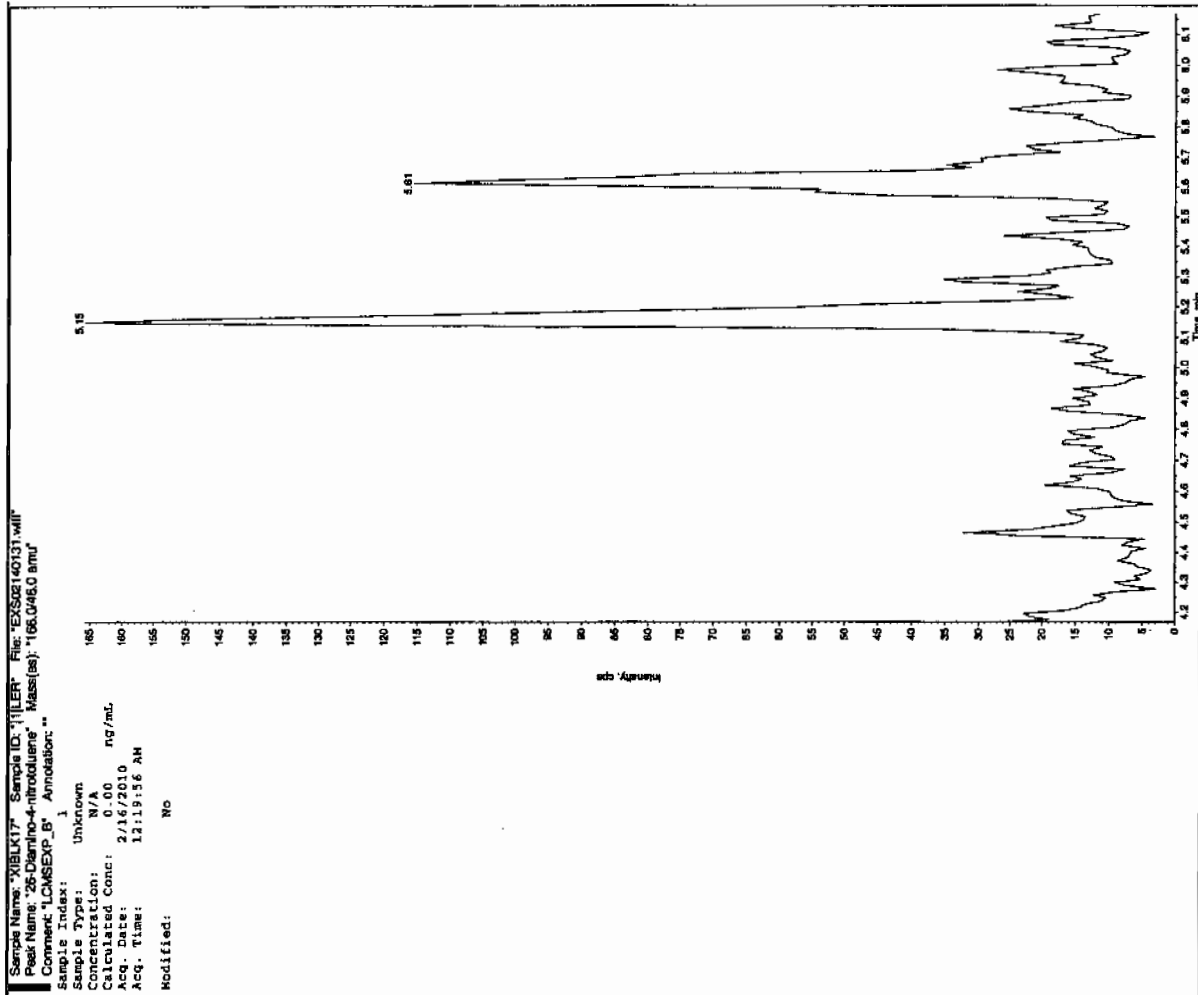
See 2/17/10



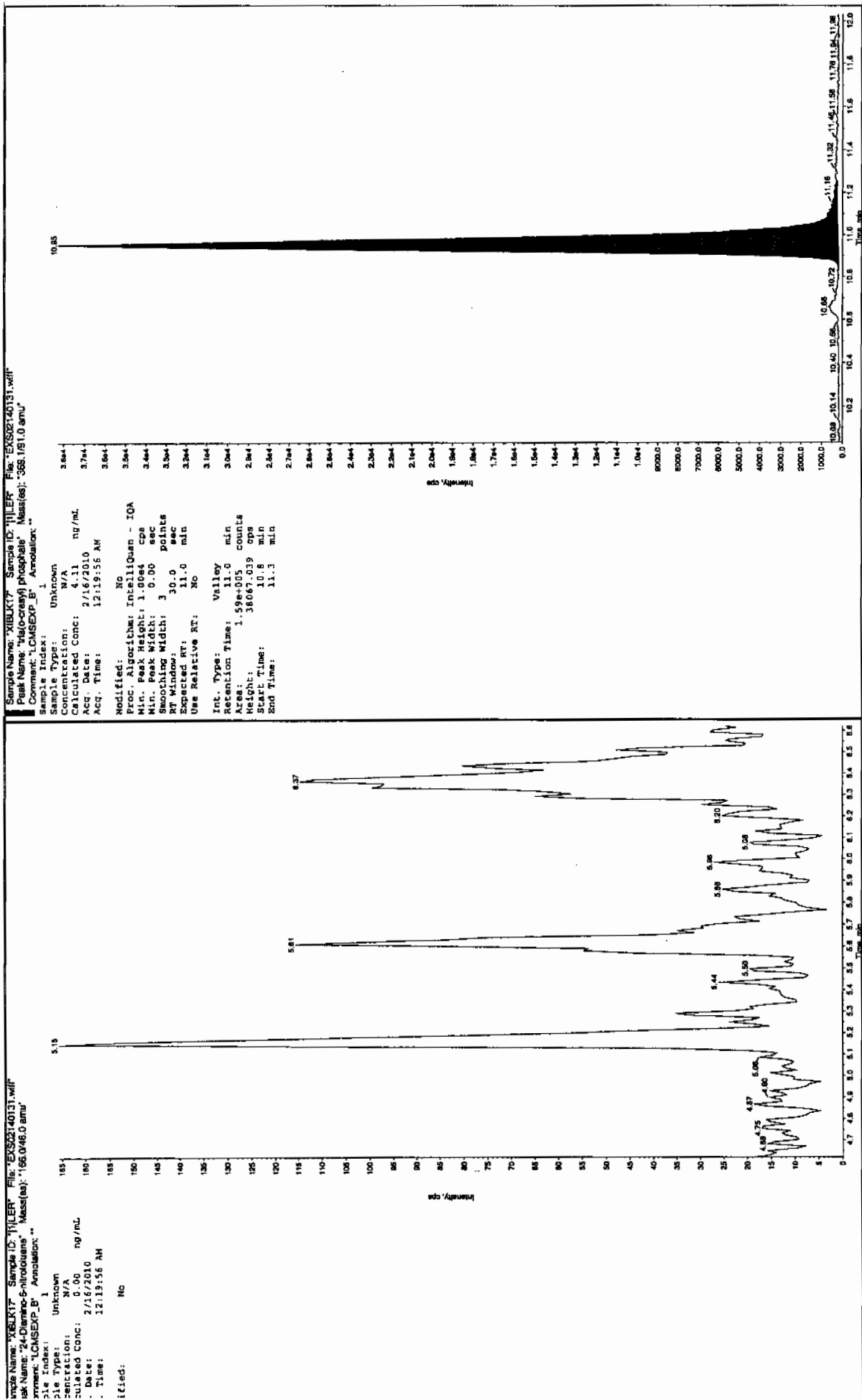
Hum 02/17/10



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1510

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 16-FEB-10 02:56

GEL Data File: EXS02140141.wiff

Instrument ID: LCMSMS

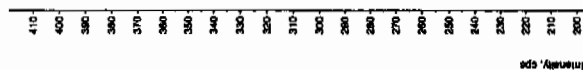
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.79
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 2/17/10

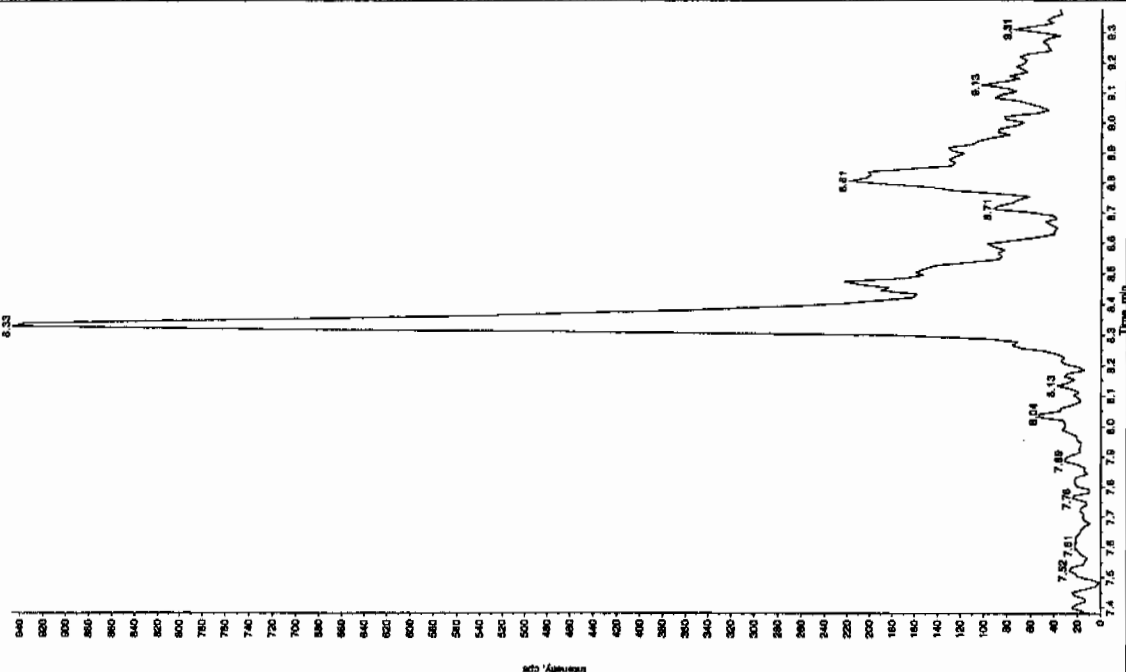
Sample Name: "XBLK18" Sample ID: "1111ER" File: "EX502140141.will"
 Peak Name: "XBLK18" Mass(es): "237.22045 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 I. Date: 2/16/2010
 I. Time: 2:56:55 AM
 Modified: No



Sample Name: "XBLK18" Sample ID: "1111ER" File: "EX502140141.will"
 Peak Name: "XBLK18" Mass(es): "182.0450 amu"
 Comment: "LCMS EXP_B" Annotation: "

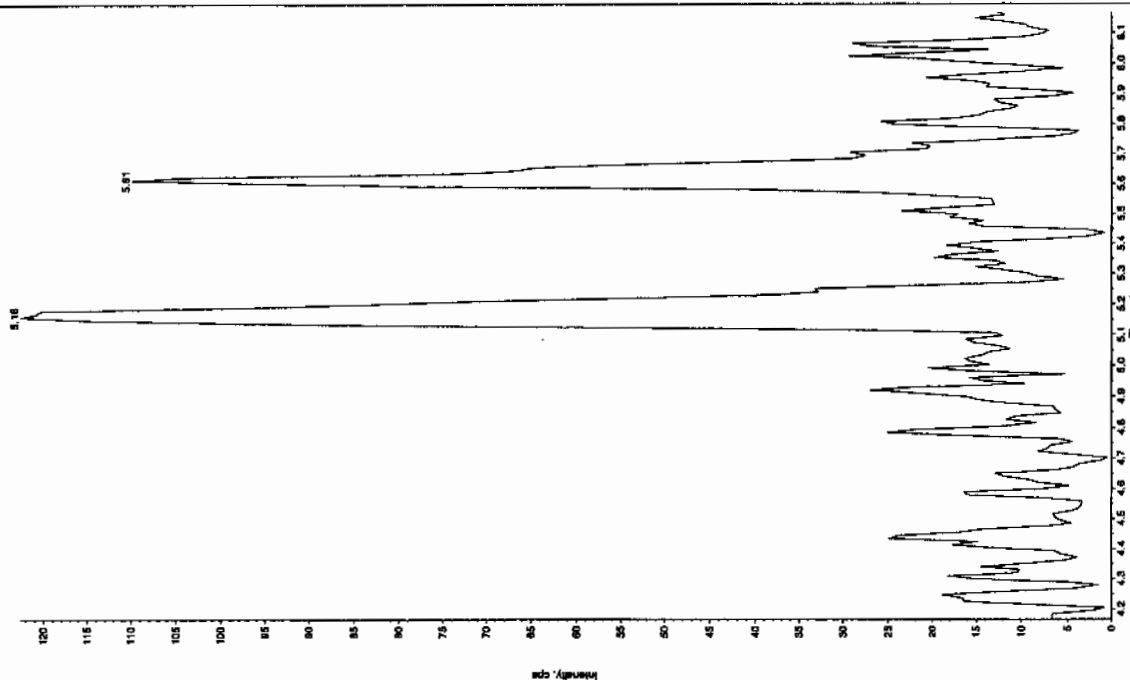
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 I. Date: 2/16/2010
 I. Time: 2:56:55 AM
 Modified: No



Jan 2/17/10

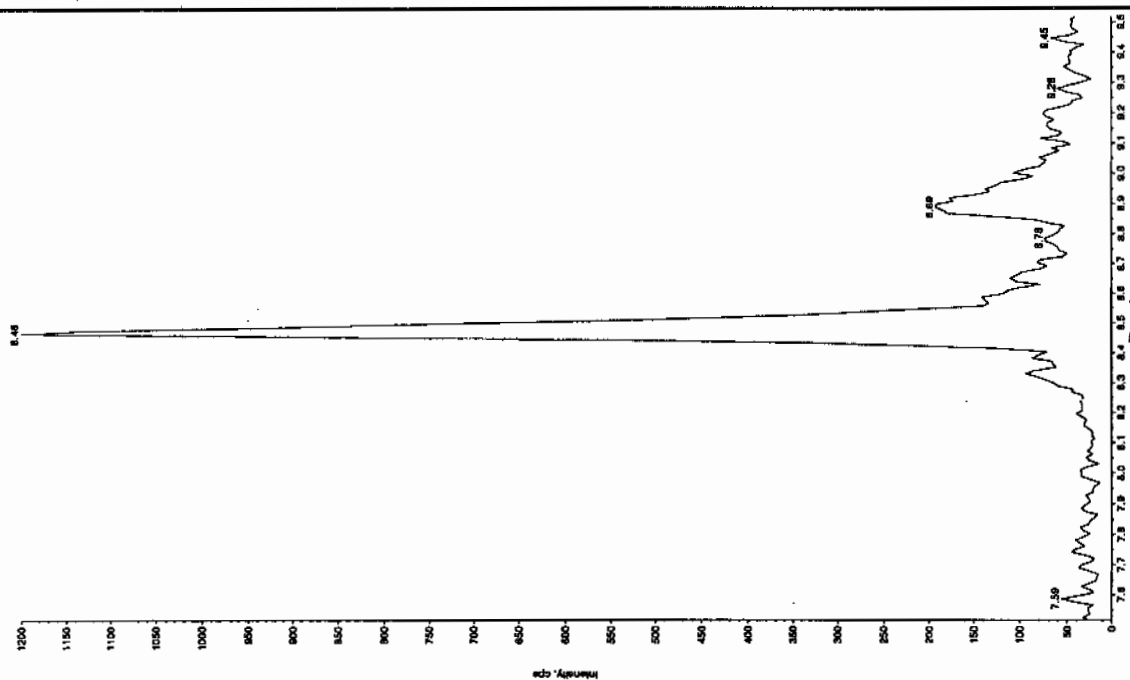
Sample Name: "XIBLK18" Sample ID: "TJLER" File: "EXS02140141.wif"
 Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "189.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

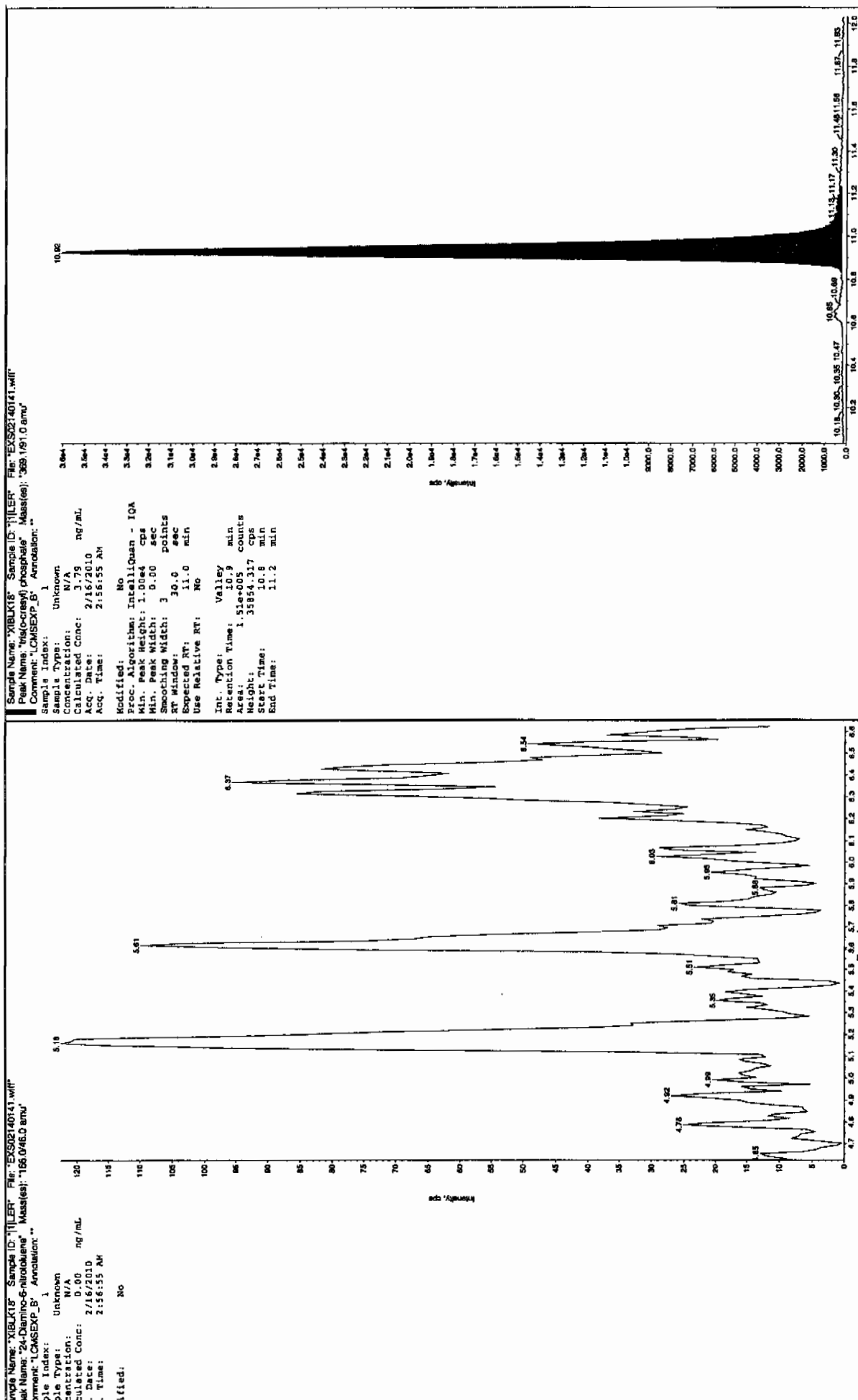
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 2:56:55 AM
 Modified: No



Sample Name: "XIBLK18" Sample ID: "TJLER" File: "EXS02140141.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 2:56:55 AM
 Modified: No





EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

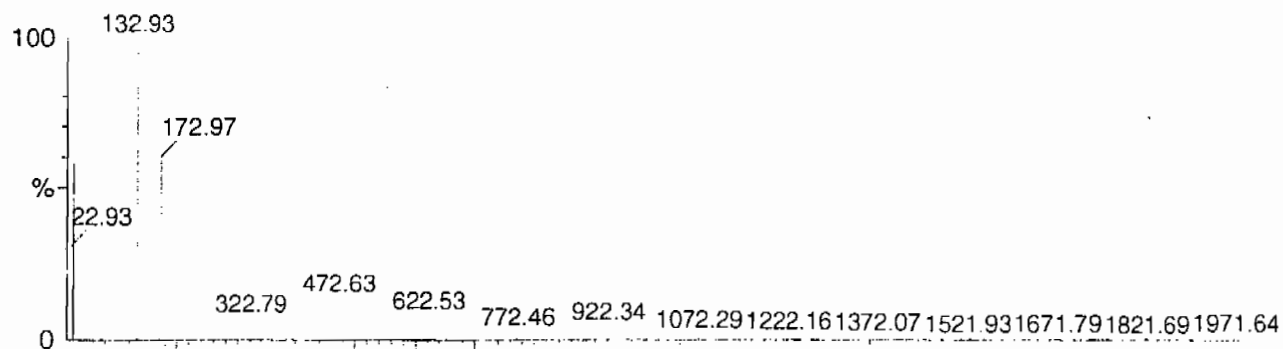
Calibration Report - MS1 Static

Page 1 of 1

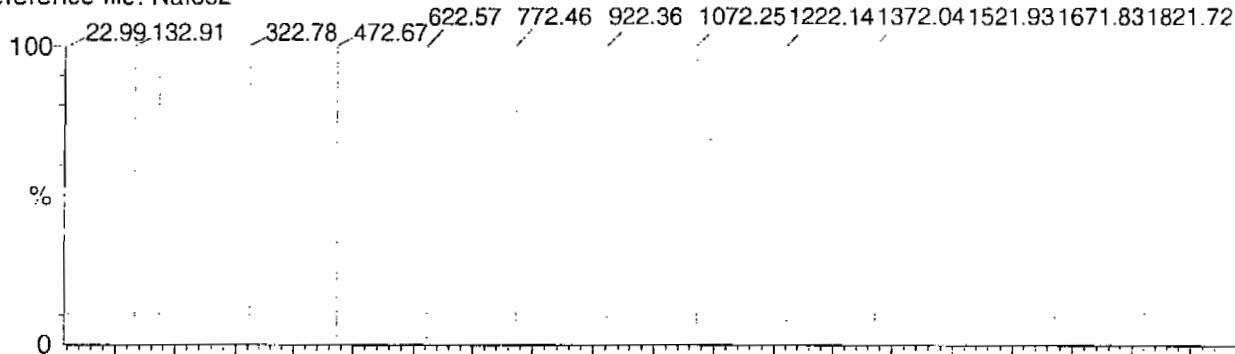
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

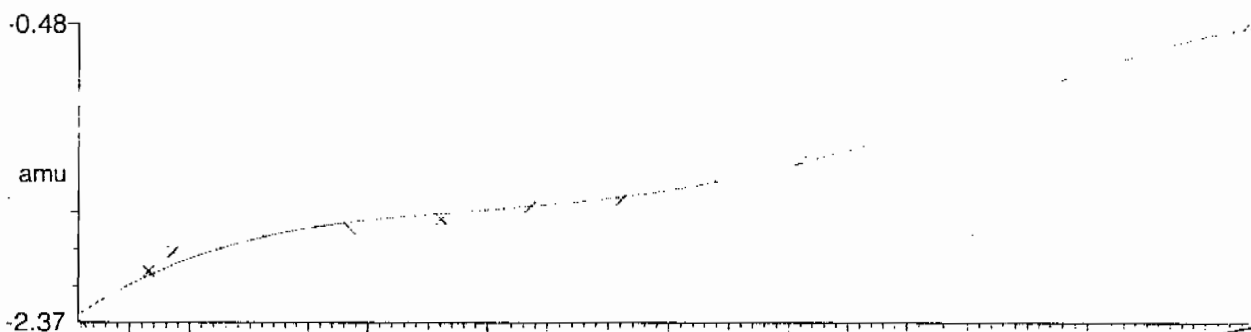
15 matches of 15 tested references



Reference file: Naics2

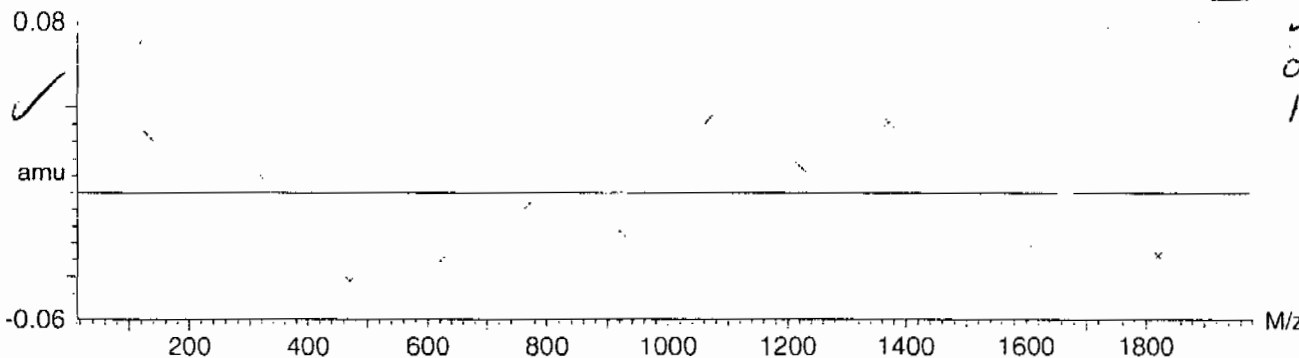


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$

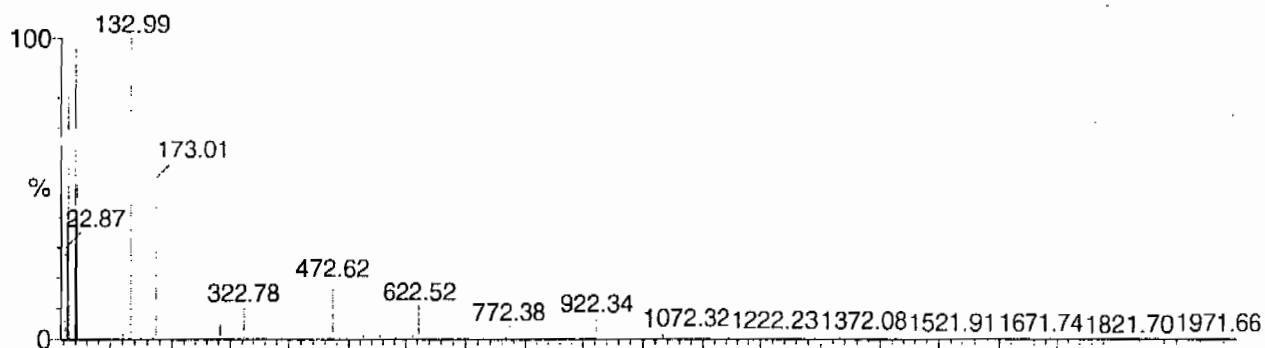


Calibration Report - MS1 Scanning

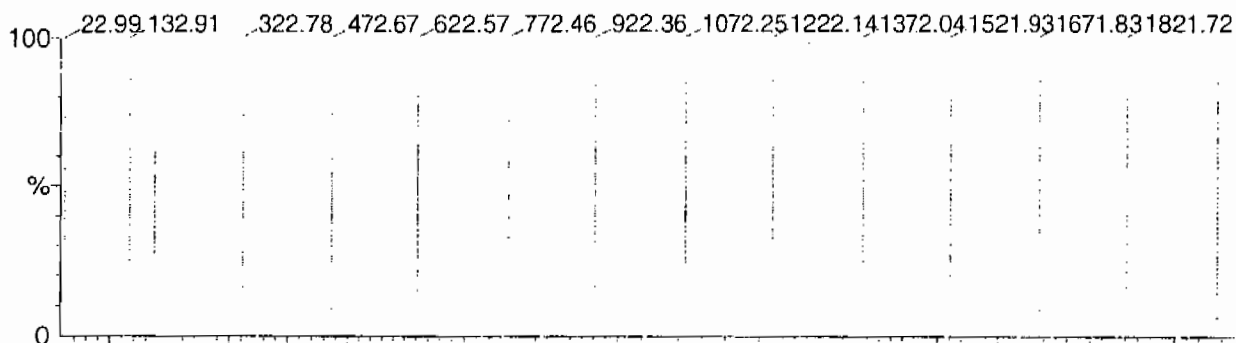
Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006

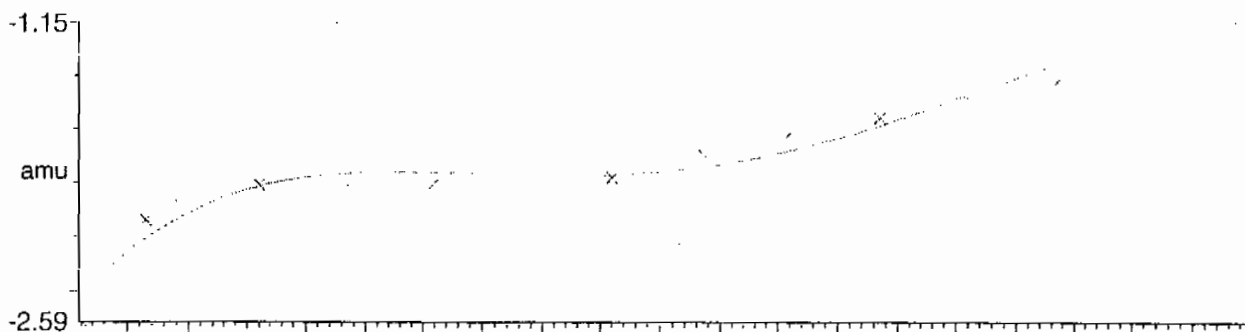
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



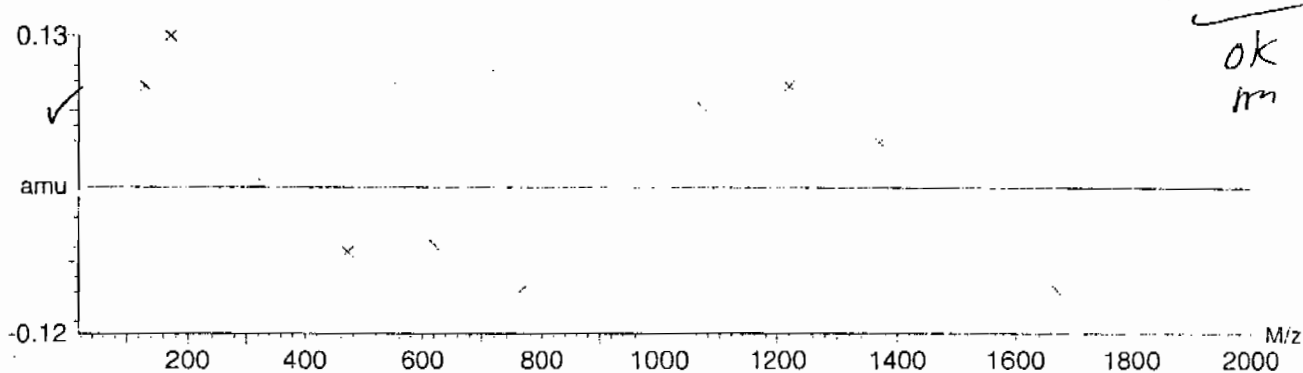
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



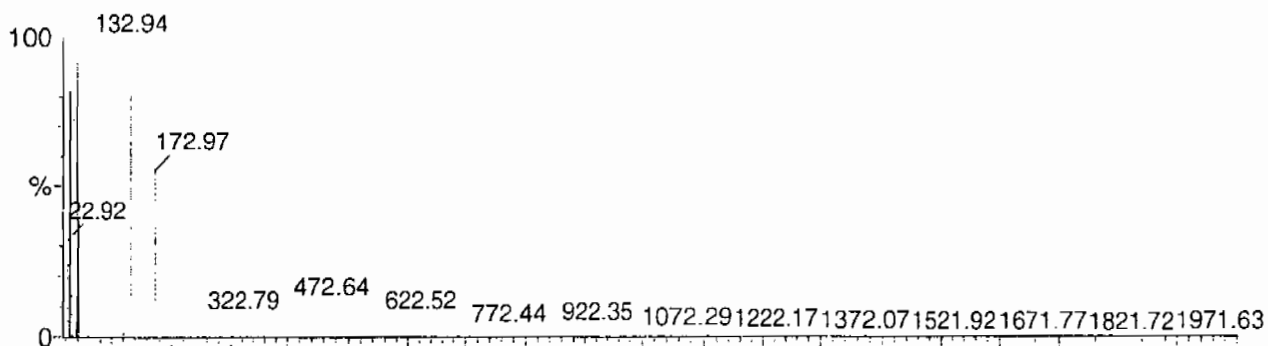
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

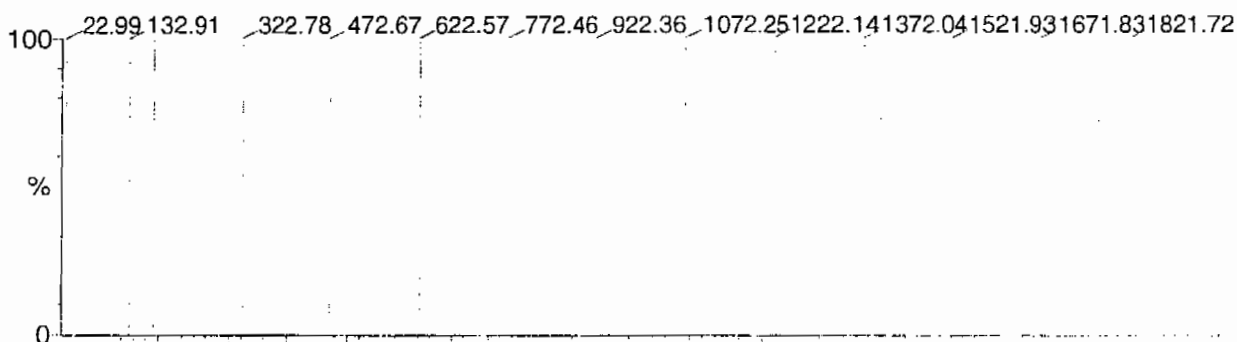
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

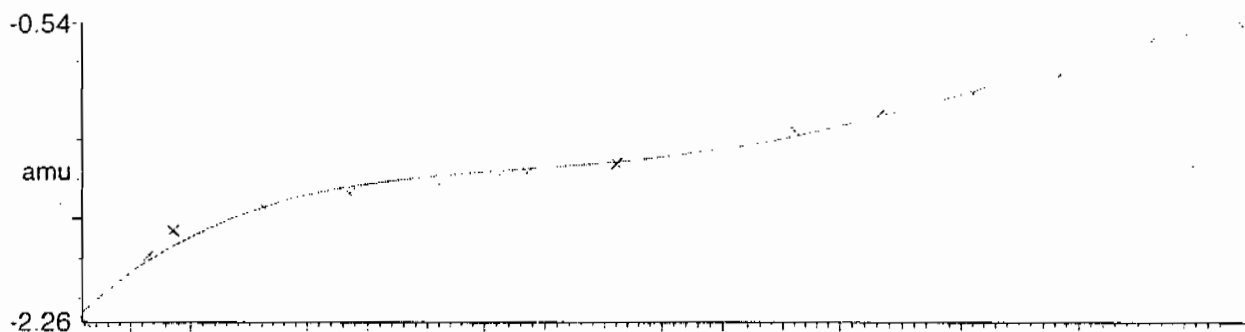
15 matches of 15 tested references



Reference file: Naics2

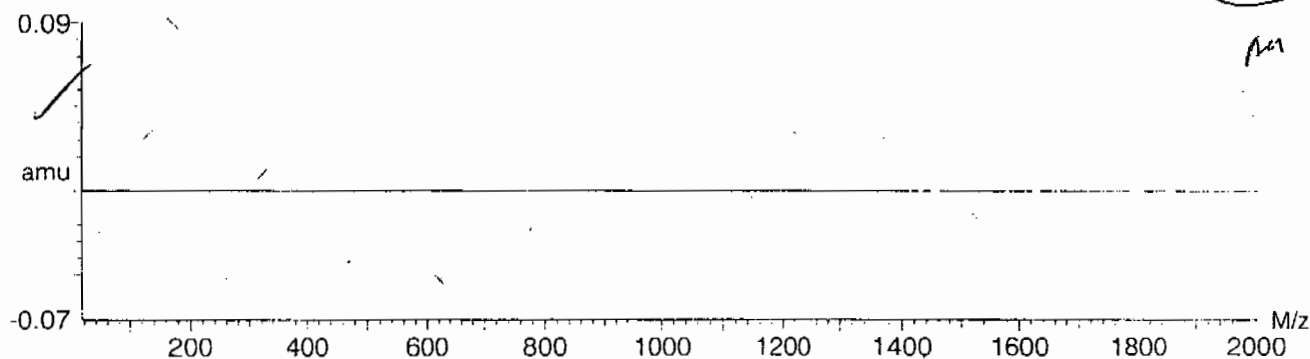


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639 \times 10^{-9} \pm 0.040487$



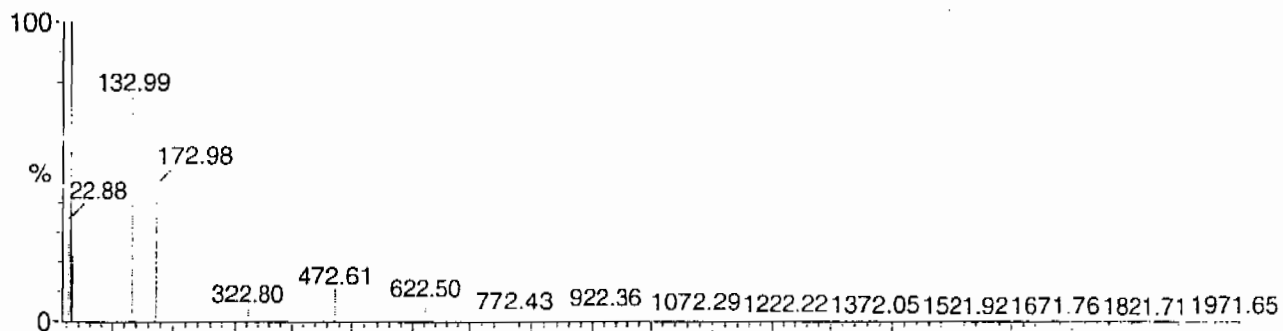
Calibration Report - MS2 Static

Page 1 of 1

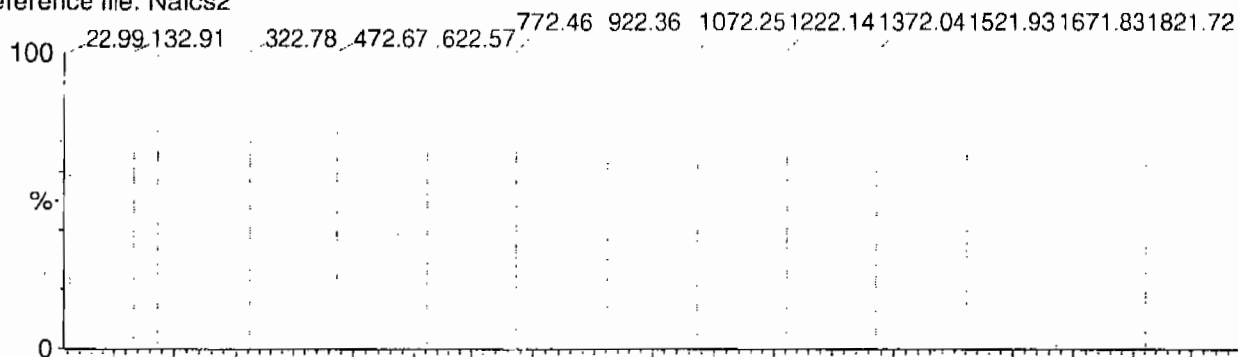
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

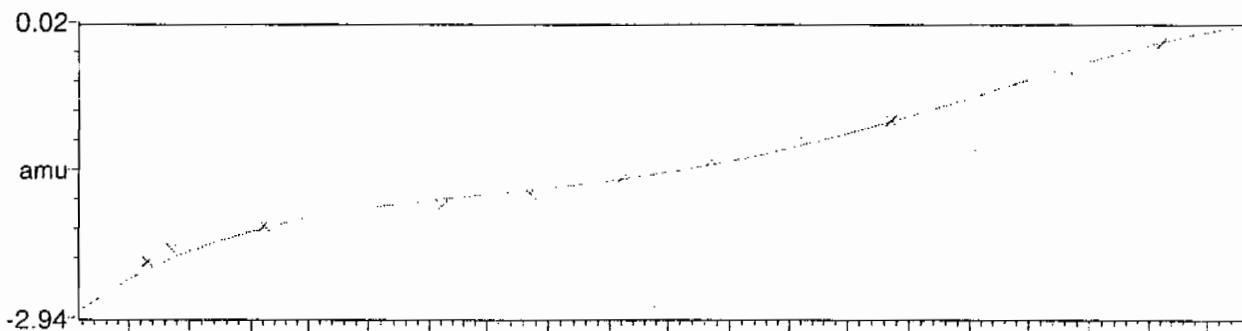
15 matches of 15 tested references



Reference file: Naics2

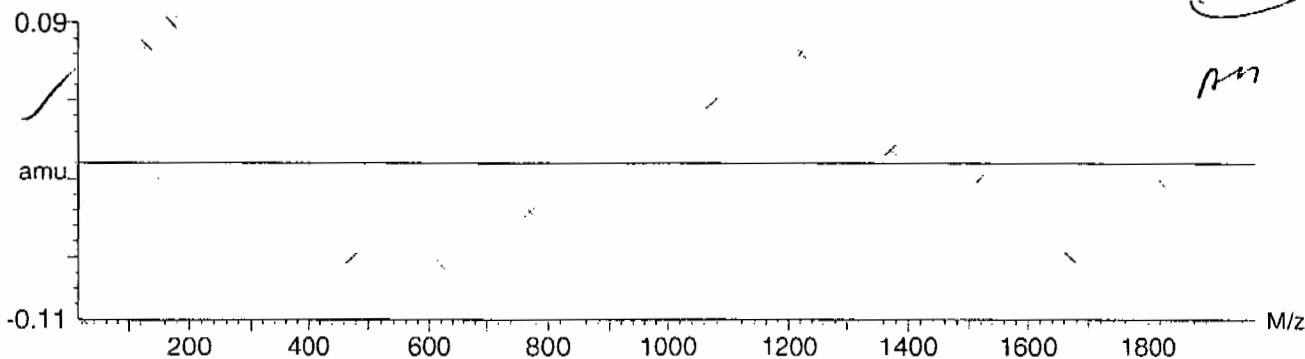


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



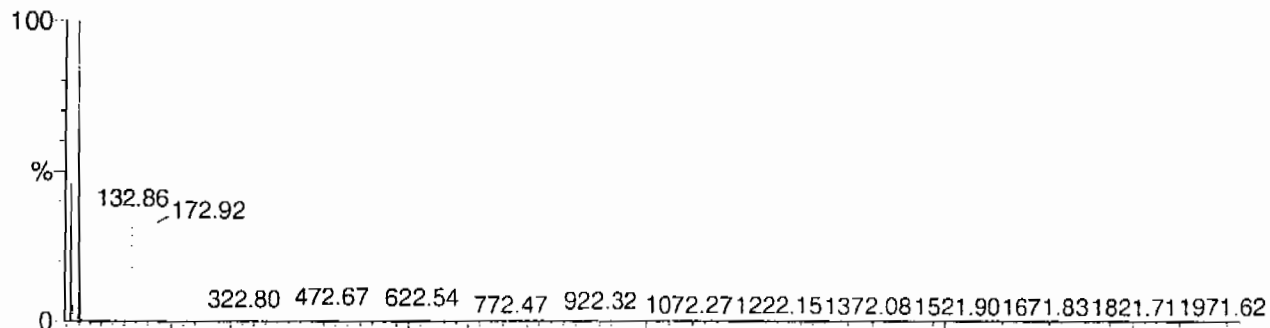
Calibration Report - MS2 Scanning

Page 1 of 1

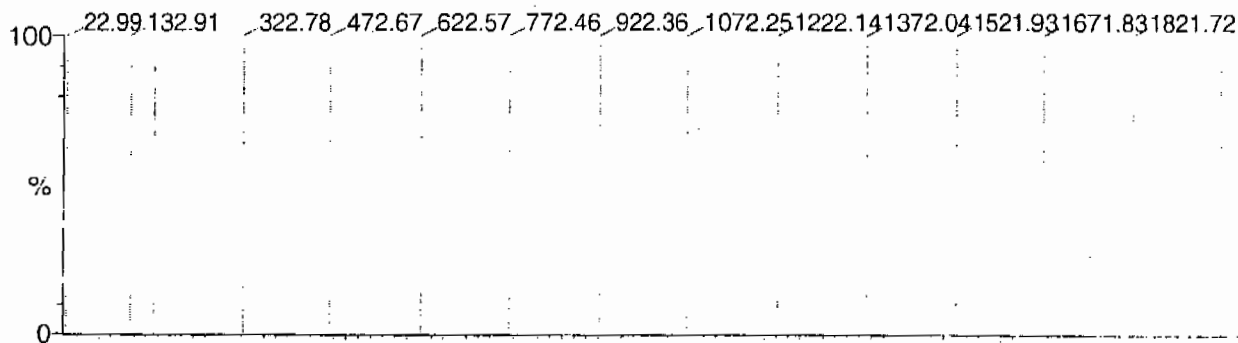
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

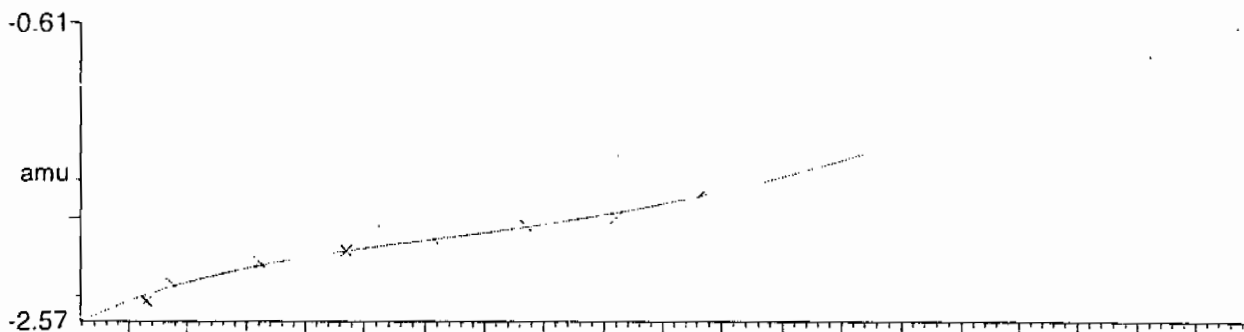
14 matches of 15 tested references



Reference file: Naics2

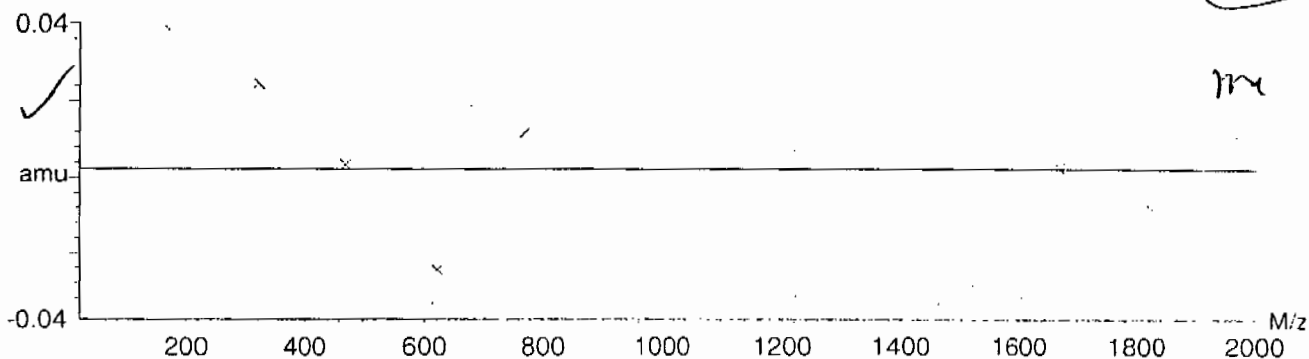


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502e-9 \pm 0.025622$



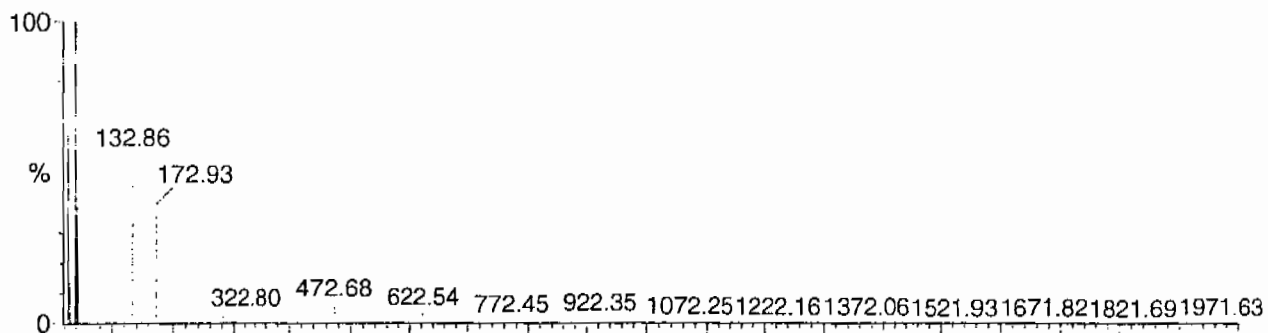
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

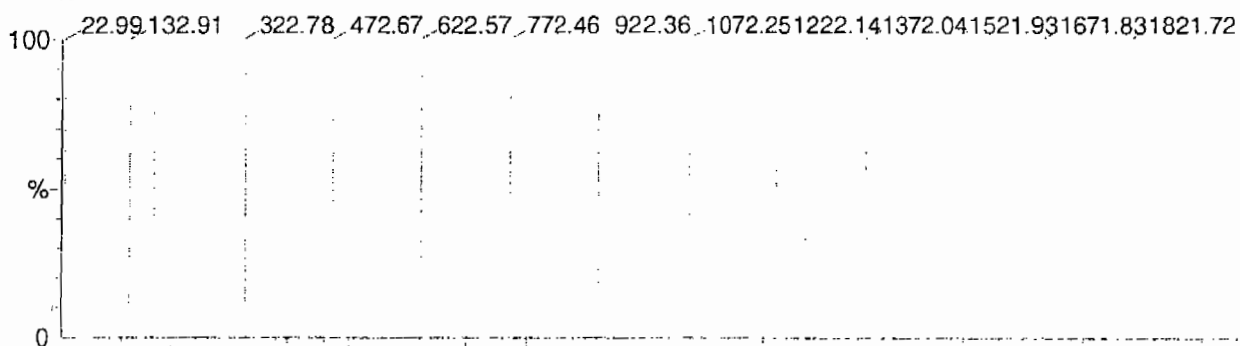
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

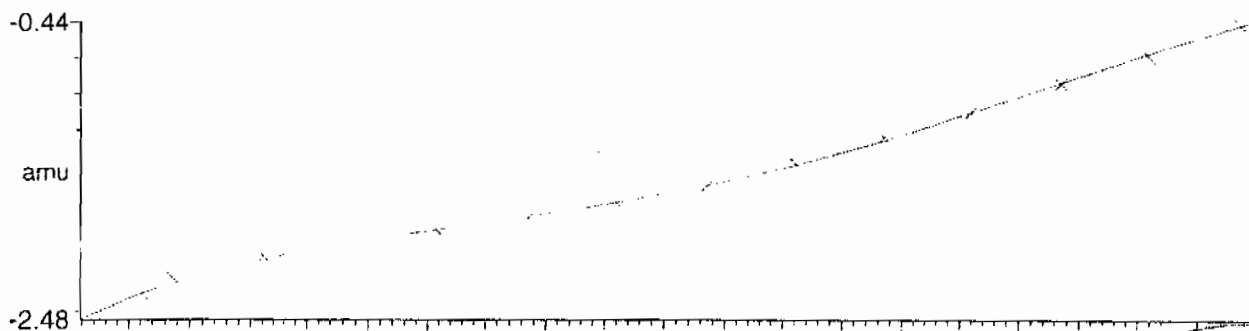
14 matches of 15 tested references



Reference file: Naics2

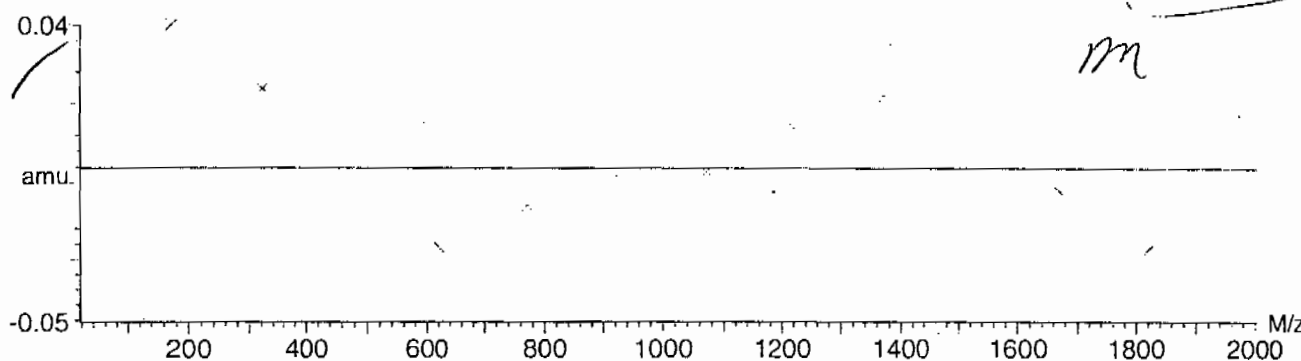


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

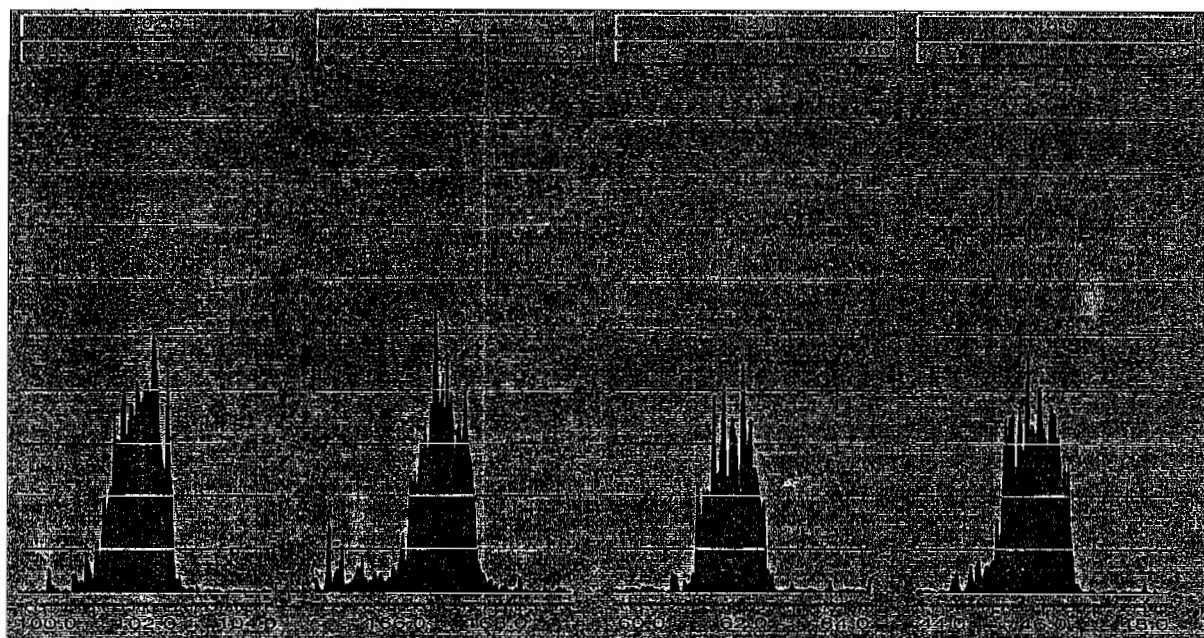


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Tue Feb 16 13:37:41 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

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) #
			3012.417	12.049	17408.567	17.428
Upper Limit			3916.1421	12.549	22631.1371	17.928
Lower Limit			2108.6919	11.549	12185.9969	16.928
MB for batch 948571	18-feb-10 08:39	EXP0216081a	2950.81	12.067	16299.5	17.422
LCS for batch 948571	18-feb-10 09:09	EXP0216082a	3438.84	12.064	19340.9	17.433
RE15-10-7309	18-feb-10 10:37	EXP0216085a	3763.55	12.067	17737.9	17.444
RE15-10-7309(245959001MS)	18-feb-10 11:07	EXP0216086a	3837.57	12.032	19410.3	17.444
RE15-10-7309(245959001MSD)	18-feb-10 11:36	EXP0216087a	3325.71	12.067	17062.5	17.444
RE15-10-7308	18-feb-10 12:06	EXP0216088a	3272.01	12.067	20230.5	17.444
RE15-10-7315	18-feb-10 14:04	EXP0216092a	3539.16	12.065	19876.5	17.434
RE15-10-7317	18-feb-10 14:34	EXP0216093a	3258.56	12.067	16497.4	17.422
RE15-10-7319	18-feb-10 15:03	EXP0216094a	3453.03	12.067	15458.2	17.423
RE15-10-7312	18-feb-10 15:33	EXP0216095a	2483.61	12.032	18433	17.422
RE15-10-7313	18-feb-10 16:03	EXP0216096a	3182.1	12.033	16679	17.422
RE15-10-7314	18-feb-10 16:32	EXP0216097a	2639.34	12.032	14875.8	17.422
RE15-10-7316	18-feb-10 17:02	EXP0216098a	2572.21	12.03	18481.3	17.411
RE15-10-7318	18-feb-10 17:32	EXP0216099a	2597.74	12.064	19528.1	17.433
RE15-10-7324	18-feb-10 18:01	EXP0216100a	3289.97	12.033	18809	17.422

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: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216085a

Date Analyzed: 18-FEB-10 10:37

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216085a

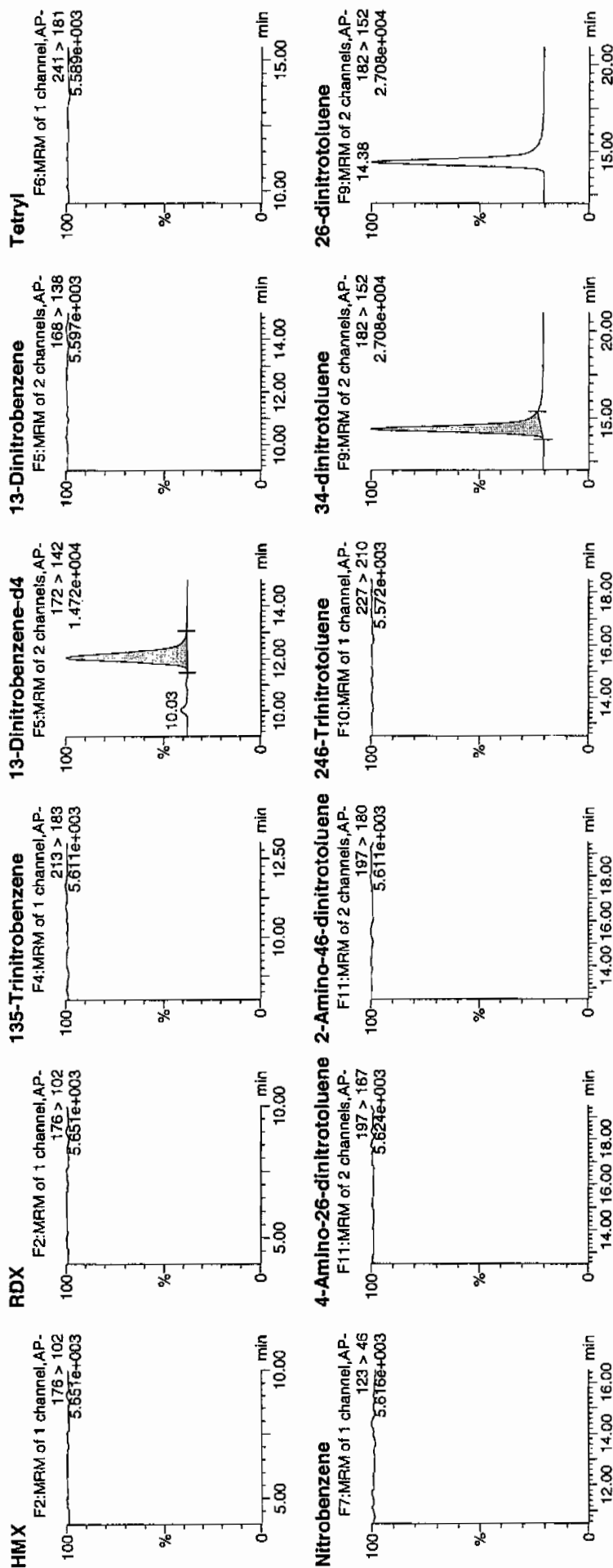
Date: 18-Feb-2010

Time: 10:37:58

ID: 245959001

Vial: 2:5.E

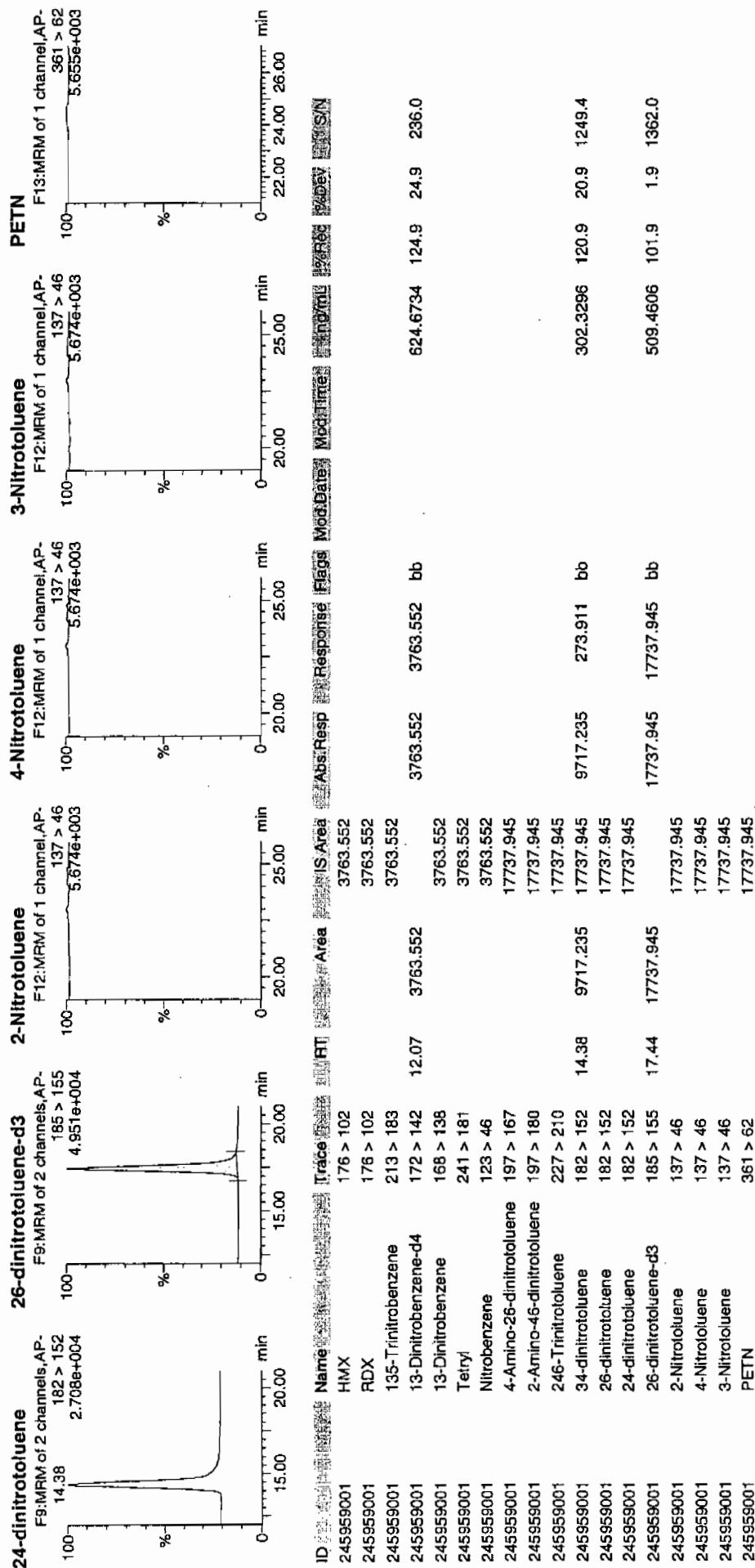
Handwritten: LAW 1948572 / 2022 / 2 / 19 / 10



Handwritten: 2/19/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959001

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140124.wiff

Date Analyzed: 15-FEB-10 22:30

Units: ug/kg

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

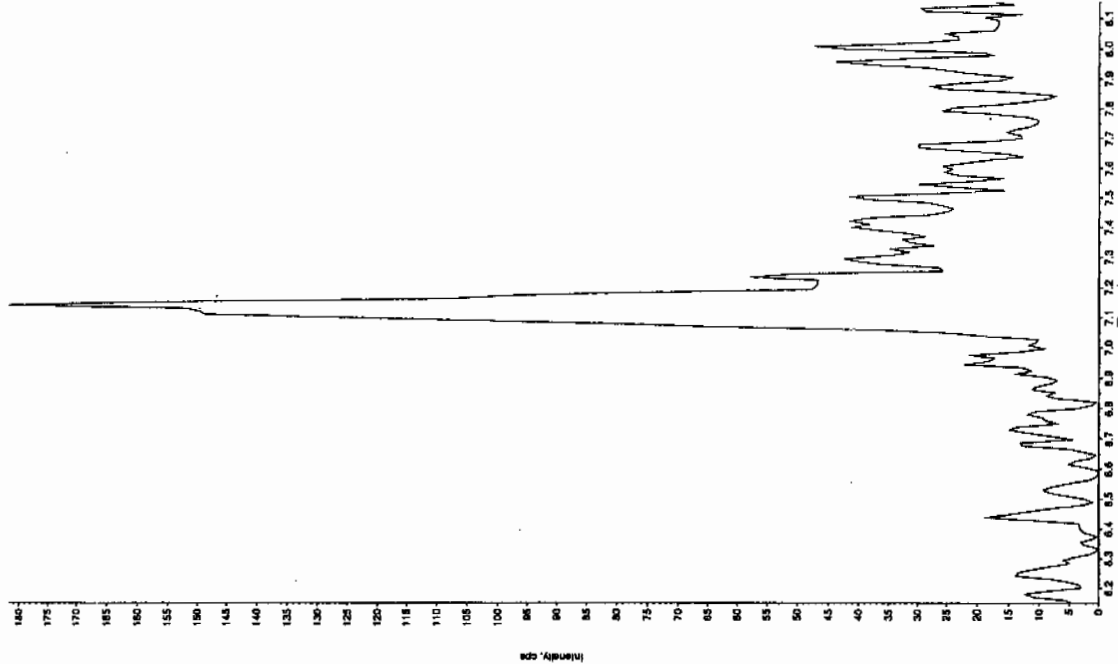
*Concentration =

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

See 2/17/10

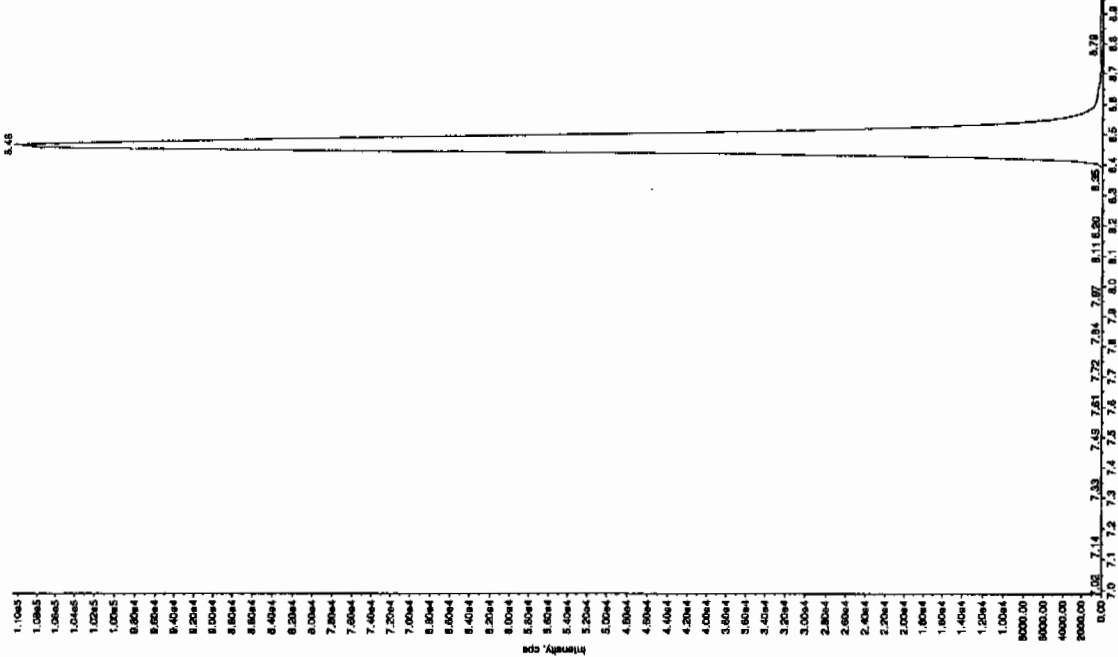
Sample Name: "245959001" Sample ID: "9485721LER" File: "EX502140124.wif"
Peak Name: "TATE" Mass(es): "257.2204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 10:30:07 PM
Modified: No



Sample Name: "245959001" Sample ID: "9485721LER" File: "EX502140124.wif"
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
Comment: "LCX83212S" Annotation: ""

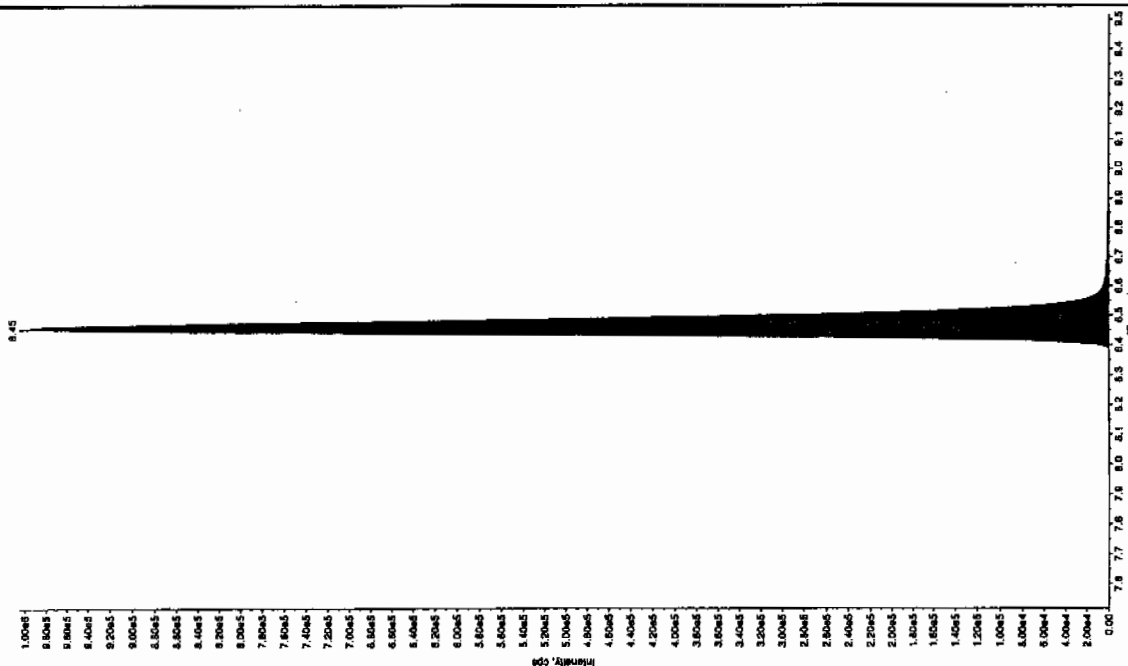
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 2/15/2010
Acq. Date: 2/15/2010
Acq. Time: 10:30:07 PM
Modified: Yes



See 2/17/10

Sample Name: "245595001" Sample ID: "948572121" File: "EXS02140124.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"
 Comment: "LCX832125" Annotation: "

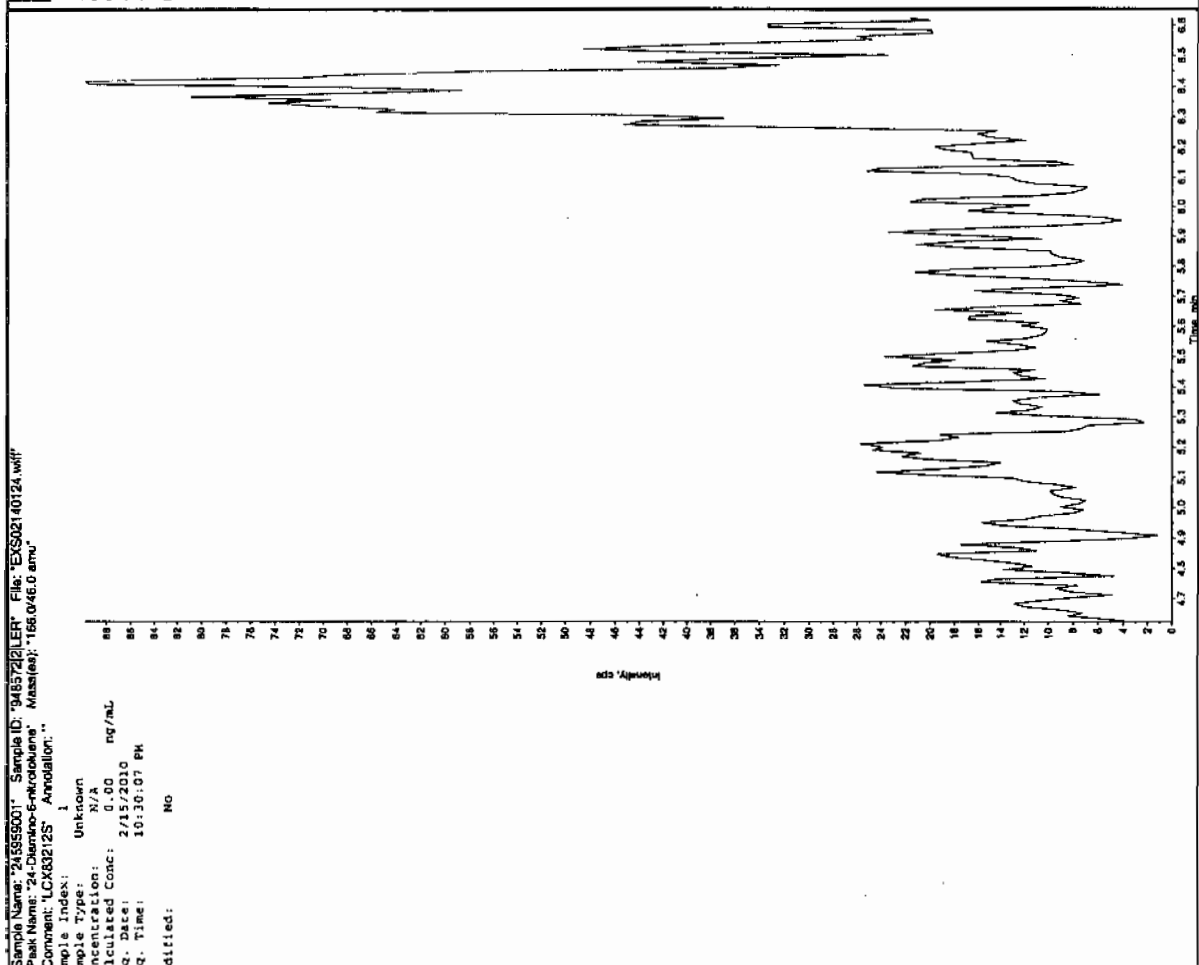
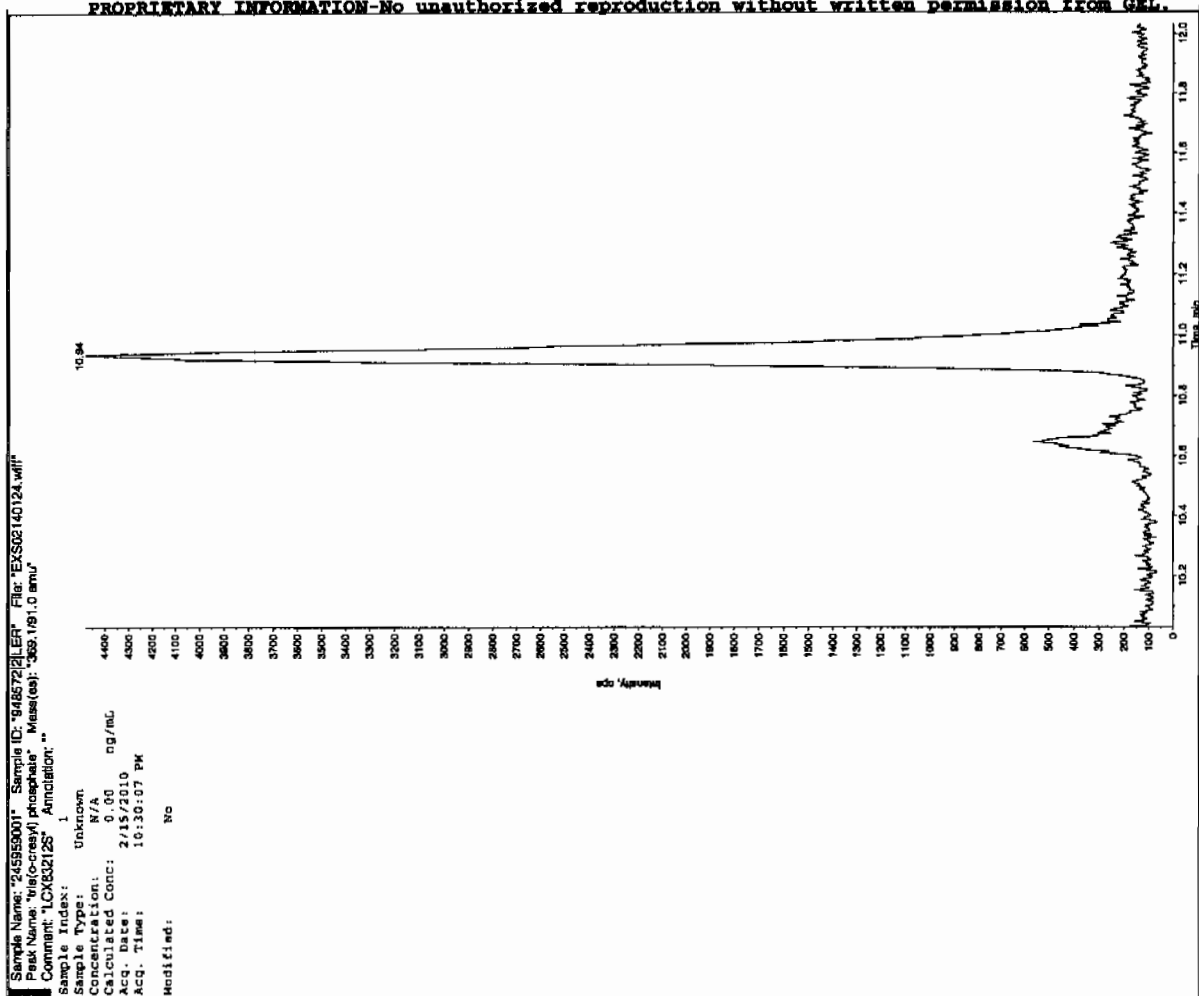
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2.713010 ng/mL
 Acq. Date: 7/15/2010
 Acq. Time: 10:30:07 PM
 Modified: No



Sample Name: "245595001" Sample ID: "948572121" File: "EXS02140124.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2.713010 ng/mL
 Acq. Date: 7/15/2010
 Acq. Time: 10:30:07 PM
 Modified: No
 Acquisition: IntelliQuan - ICA
 Peak Height: 1440.00 cps
 Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Selected RT: 8.52 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.45 min
 Height: 3.88e+006 counts
 Weight: 1005592.896 cps
 Wrt Time: 8.34 min
 I Time: 8.63 min

IEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216088a

Date Analyzed: 18-FEB-10 12:06

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYN\NEW_EXP.PRO\Data\EXP0216088a

Date: 18-Feb-2010

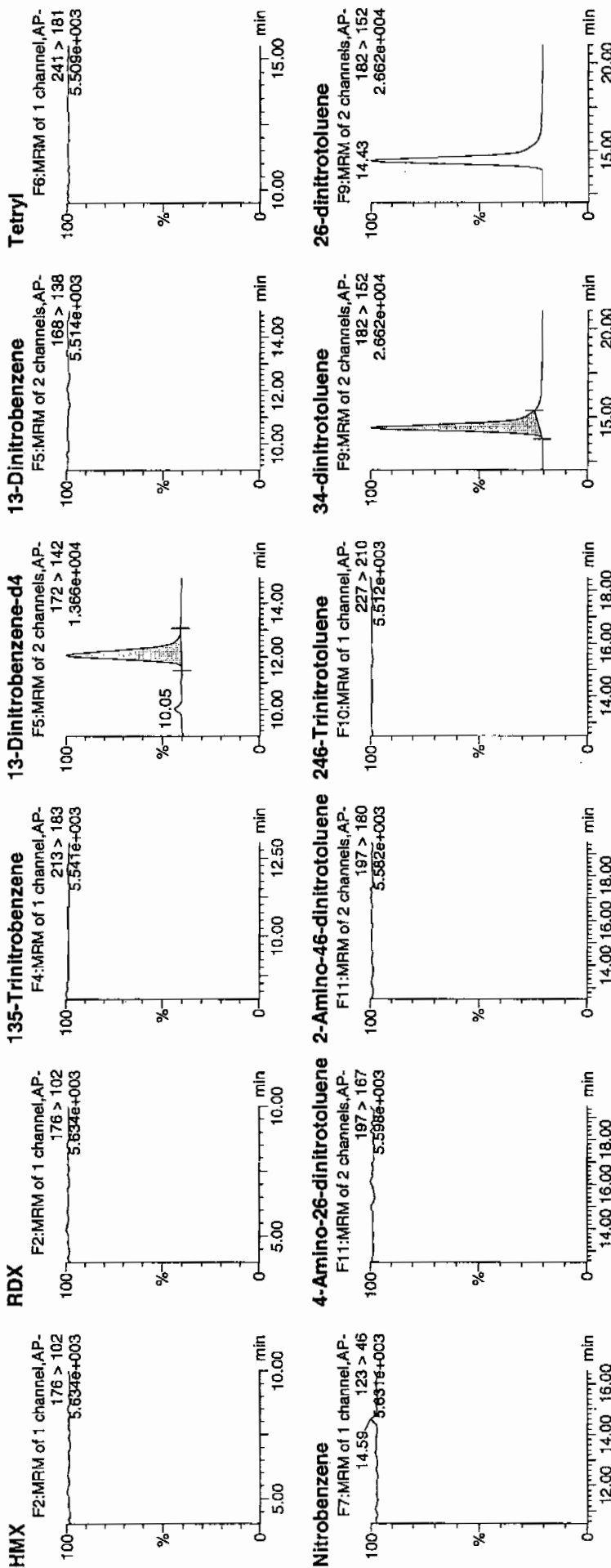
Time: 12:06:40

ID: 245959002

Vial: 2:6,B

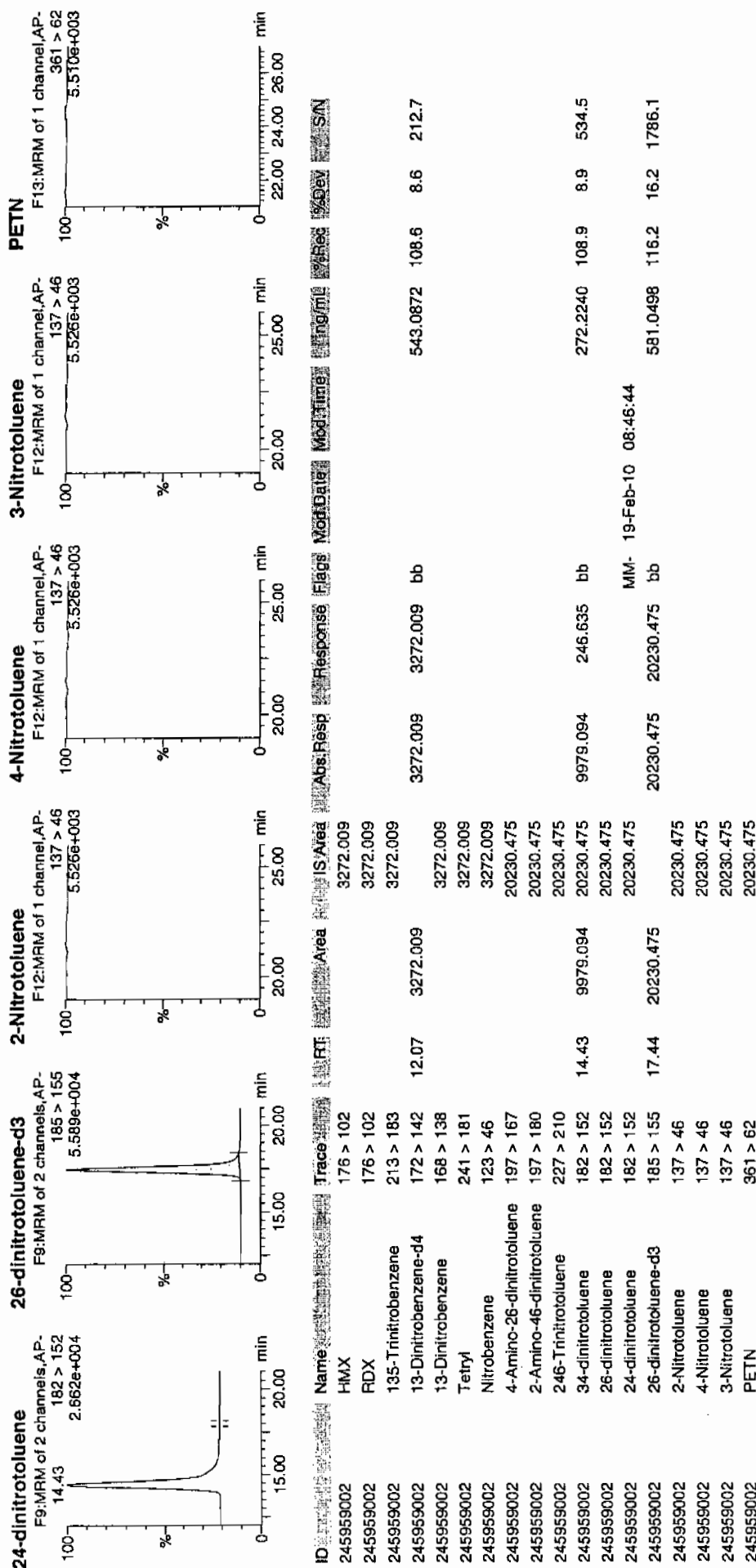
not
4/9/10

WAVE 194572 / 5022 / 2 /



Ames/2/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7308

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959002

Sample Amount 2

Moisture: 22.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140127.wiff

Date Analyzed: 15-FEB-10 23:17

Units: ug/kg

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

*Concentration =

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

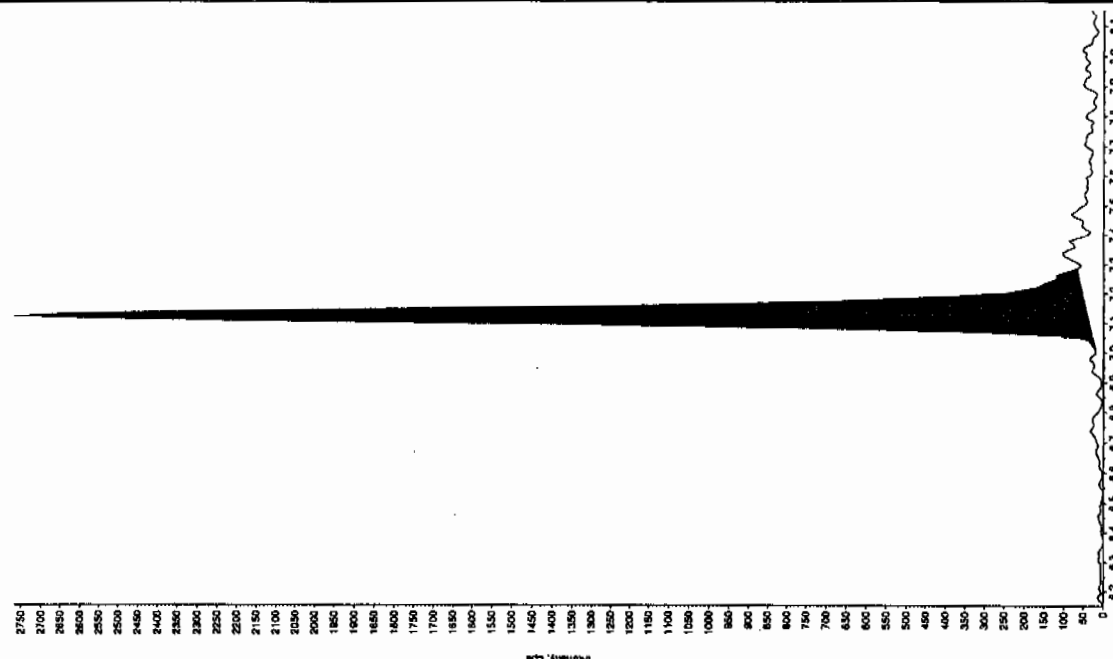
Jan 2/17/10

Sample Name: 24355002 Sample ID: 945572121ER File: EX502140127.will

Peak Name: 3C-Dimethylamine Mass(es): 102.046.0 amu

Comment: L032125 Annotation:

Sample Index: 1
Sample Type: Unknown
Sample Location: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 11:17:11 PM
Modified: Yes



Sample Name: 24355002 Sample ID: 945572121ER File: EX502140127.will

Peak Name: 1B Mass(es): 237.2604.9 and

Comment: L032125 Annotation:

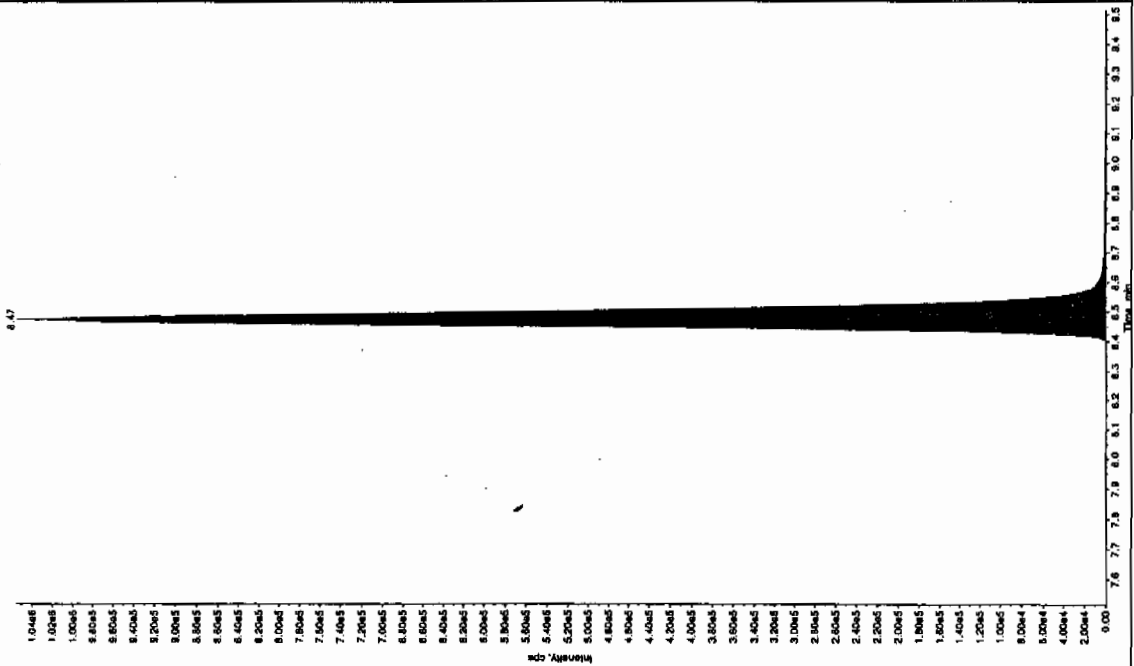
Sample Index: 1
Sample Type: Unknown
Sample Location: N/A
Calculated Conc: 11.6 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 11:17:11 PM
Modified: No

3C. Algorithm: IntelliQuan - IQA
1. Peak Height: 2500.00 cps
2. Peak Width: 0.00 sec
3. Peak Width: 30.0 points
4. Peak Width: 30.0 sec
5. Peak Width: 7.15 min
6. Relative RT: No
7. Type: Valley
8. Retention Time: 7.15 min
9. Height: 1.19e+004 counts
10. RT: 2723.445 cps
11. RT Time: 7.01 min
12. RT Time: 7.29 min

Jan 2/17/10

Sample Name: 24595902 Sample ID: 94657201ER File: EX502140127.wif
 Peak Name: 25-Dinitro-4-nitrofluorene Mass(es): 166.046.0 amu
 Comment: LCX83212S Annotation:

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:17:11 PM
 Modified: No



Sample Name: 24595902 Sample ID: 94657201ER File: EX502140127.wif
 Peak Name: 34-Dinitrofluorene Mass(es): 182.17513 amu
 Comment: LCX83212S Annotation:

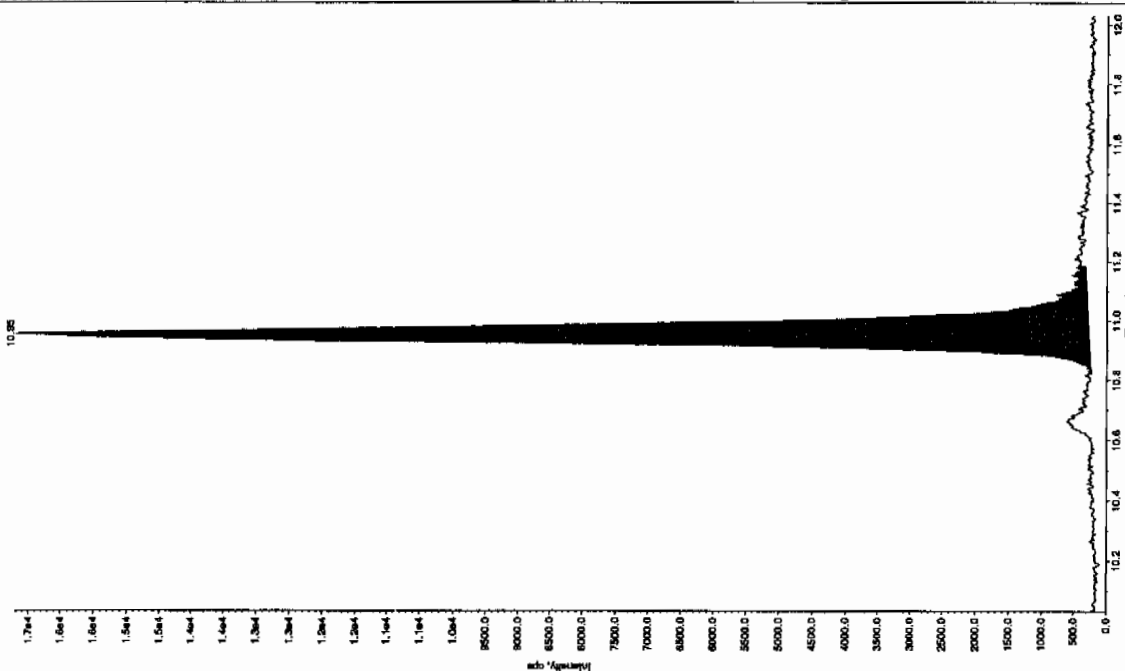
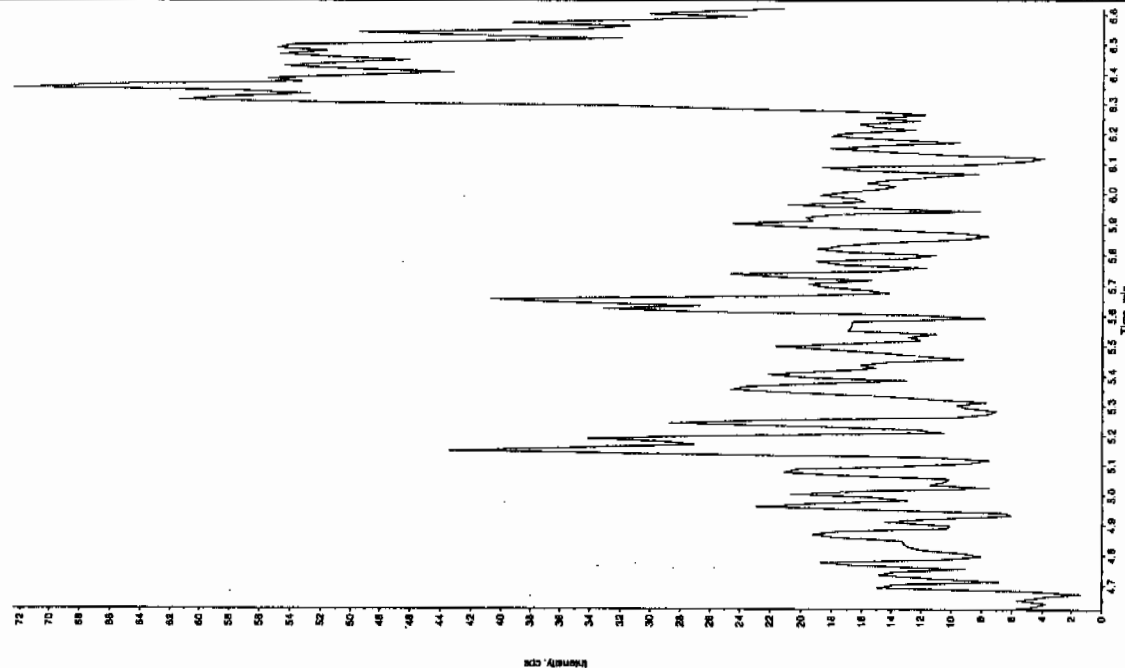
Sample Index: 1
 Sample Type: Unknown
 Concentration: 304 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 11:17:11 PM
 Acq. Time: 11:17:11 PM
 Modified: No
 Algorithm: IntelliQuan - IOA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Window Width: 3 points
 Window: 15.0 sec
 Retention Time: 8.52 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.47 min
 Area: 3.94e+005 counts
 RT: 1054673.462 cps
 RT Time: 8.37 min
 RT Time: 8.84 min

Sample Name: "245959002" Sample ID: "948572121.ER" File: "EXS02140127.will"
 Peak Name: "24-Dienko-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:17:11 PM

Modified: No

Proc. Algorithm: IntelliQuen - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 7.36e+004 counts
 Height: 16450.483 cps
 Start Time: 10.5 min
 End Time: 11.2 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216092a

Date Analyzed: 18-FEB-10 14:04

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216092a

Date: 18-Feb-2010

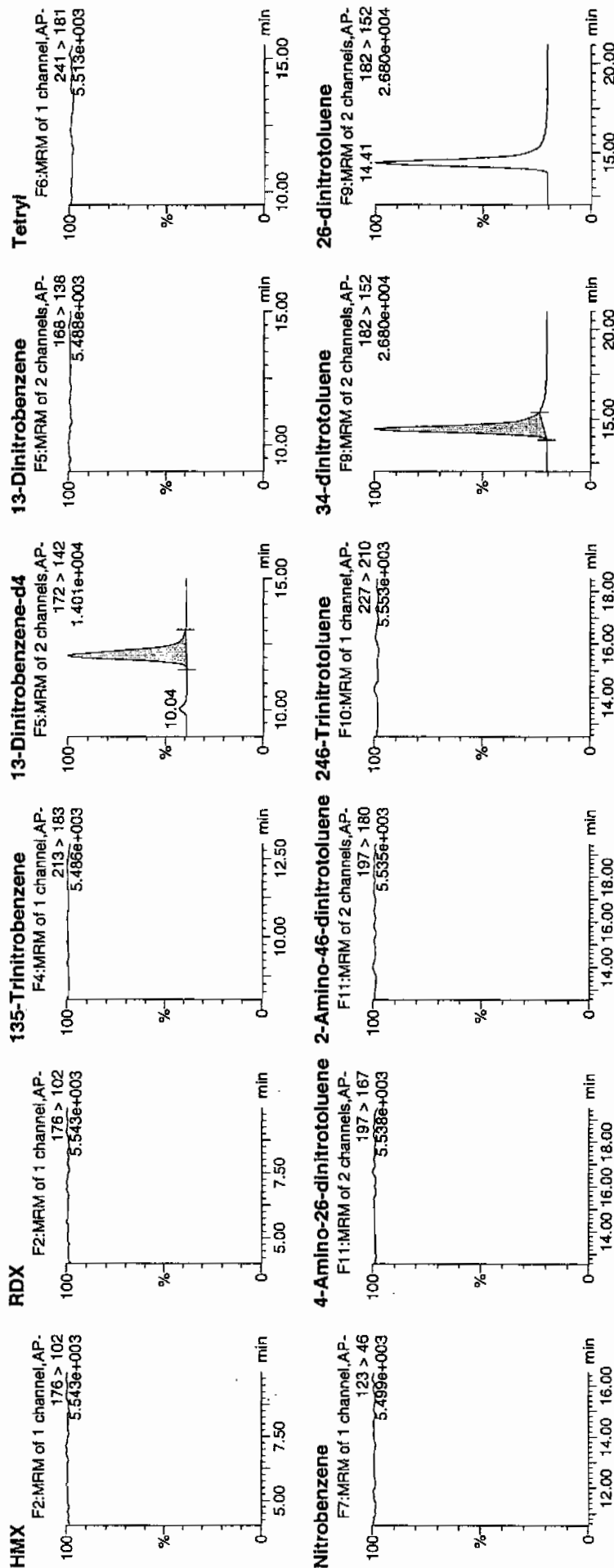
Time: 14:04:51

ID: 245959003

Vial: 2:6,C

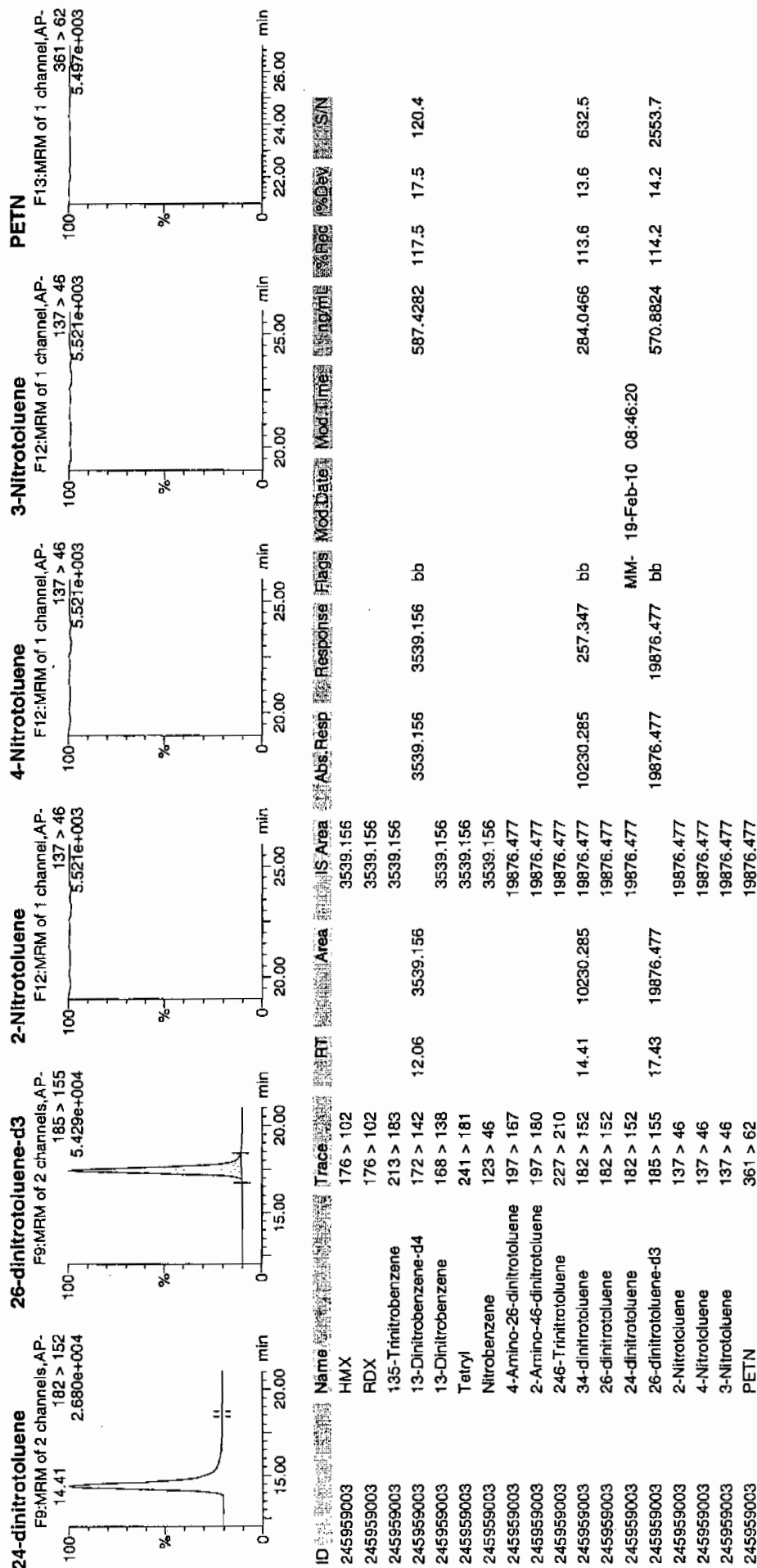
not
4/9/10

WAL-1948572 / SOL-121



Ames 2/11/10

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7315

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959003

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140128.wiff

Date Analyzed: 15-FEB-10 23:32

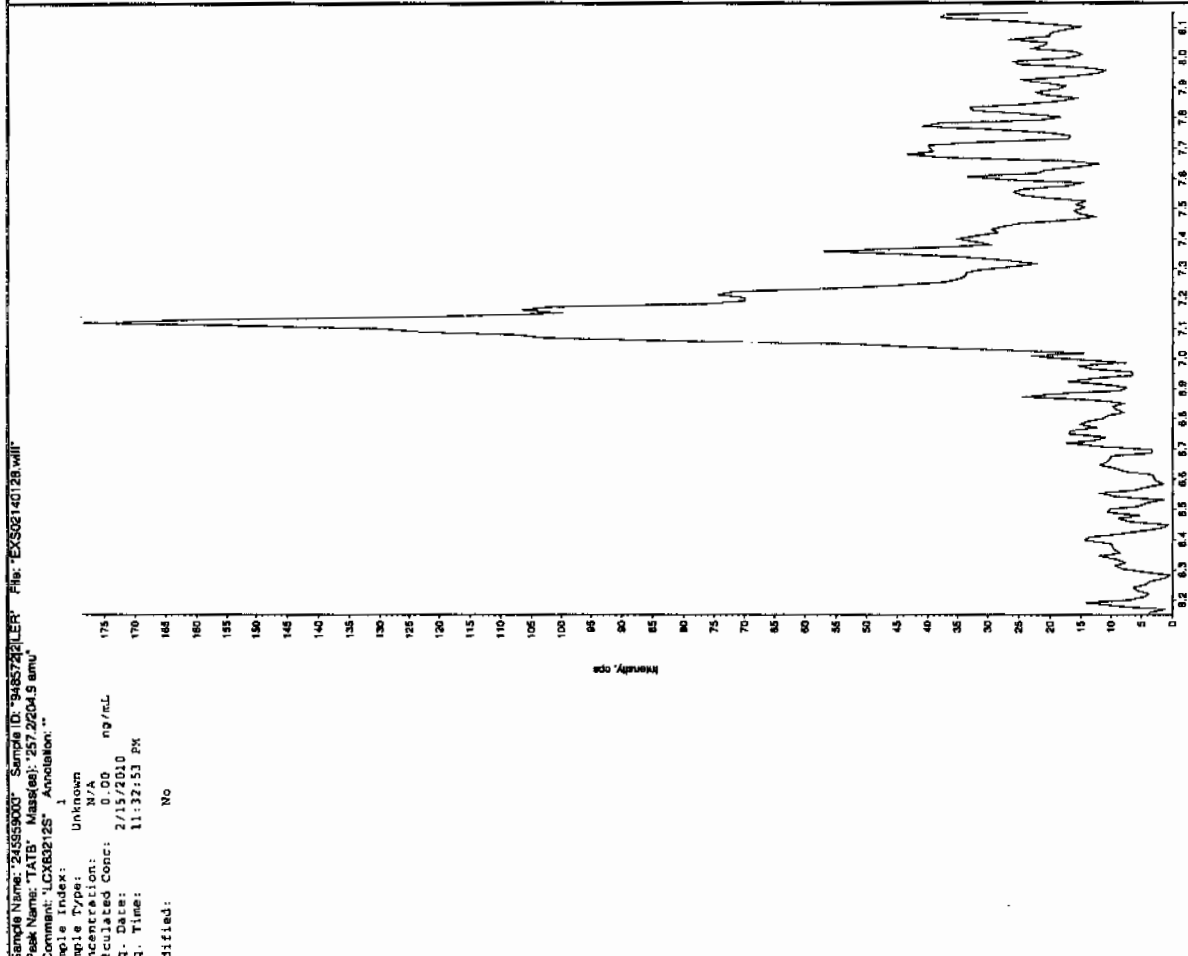
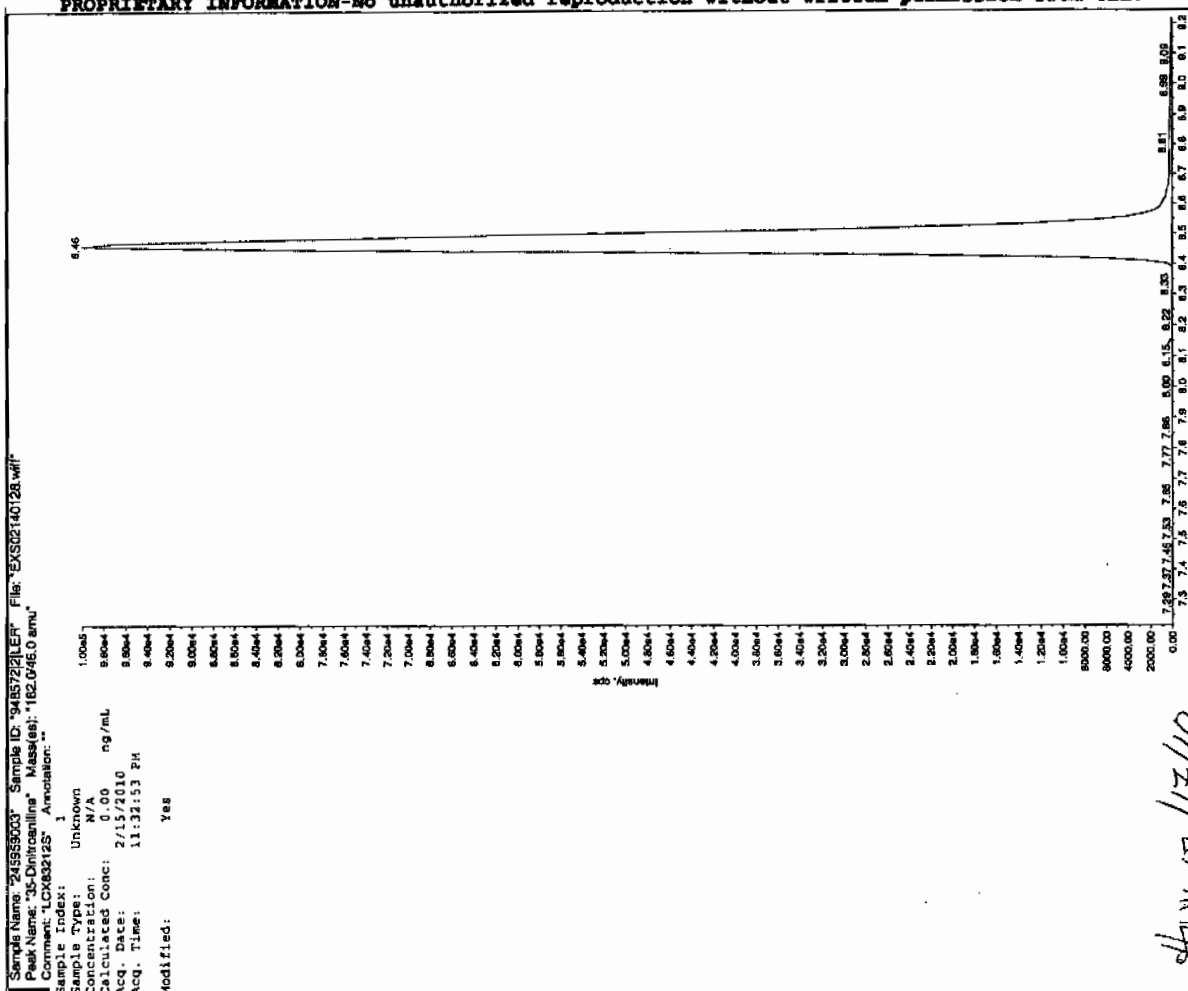
Units: ug/kg

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

*Concentration =

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

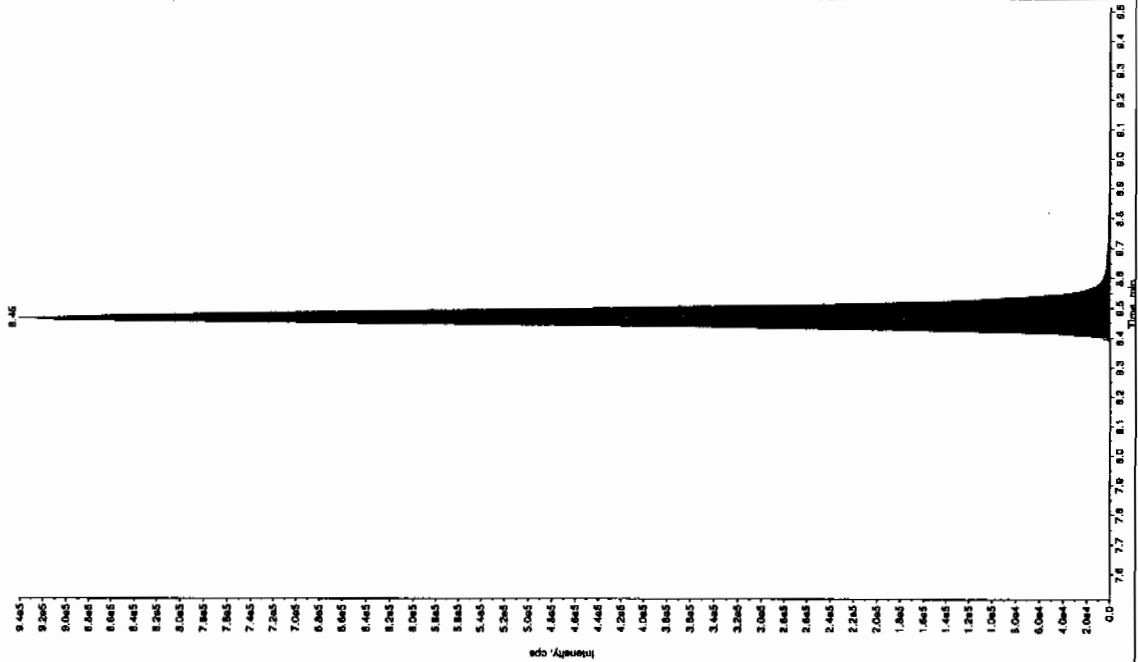
See 2/17/10



See 2/17/10

Sample Name: "24555003" Sample ID: "94857221" File: "EX502140128.wif"
 Peak Name: "24-Diamino-4-nitroethane" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 11:32:53 PM
 Acq. Time: 11:32:53 PM
 Modified: No

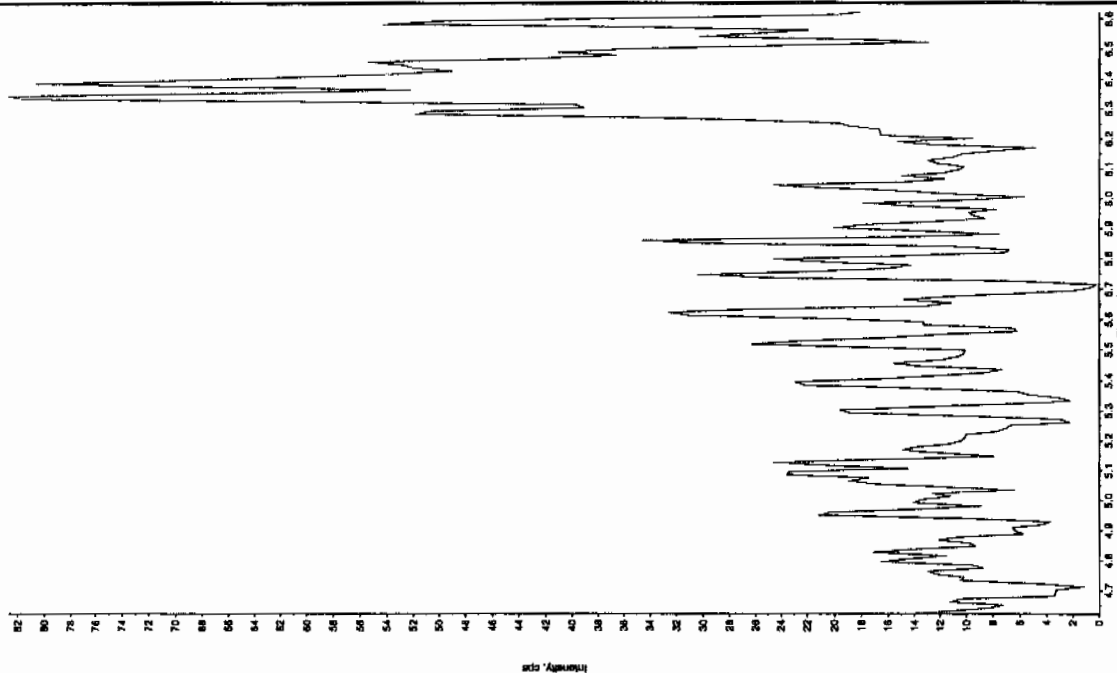


oc. Algorithm: IntelliQuan - IOA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Width: 3.00 points
 Window: 15.0 sec
 Peak RT: 8.52 min
 Relative RT: No
 t. Type: Valley
 Cention Time: 8.46 min
 ss: 3.73e-006 counts
 lght: 942204.834 cps
 att Time: 8.36 min
 j Time: 8.77 min

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

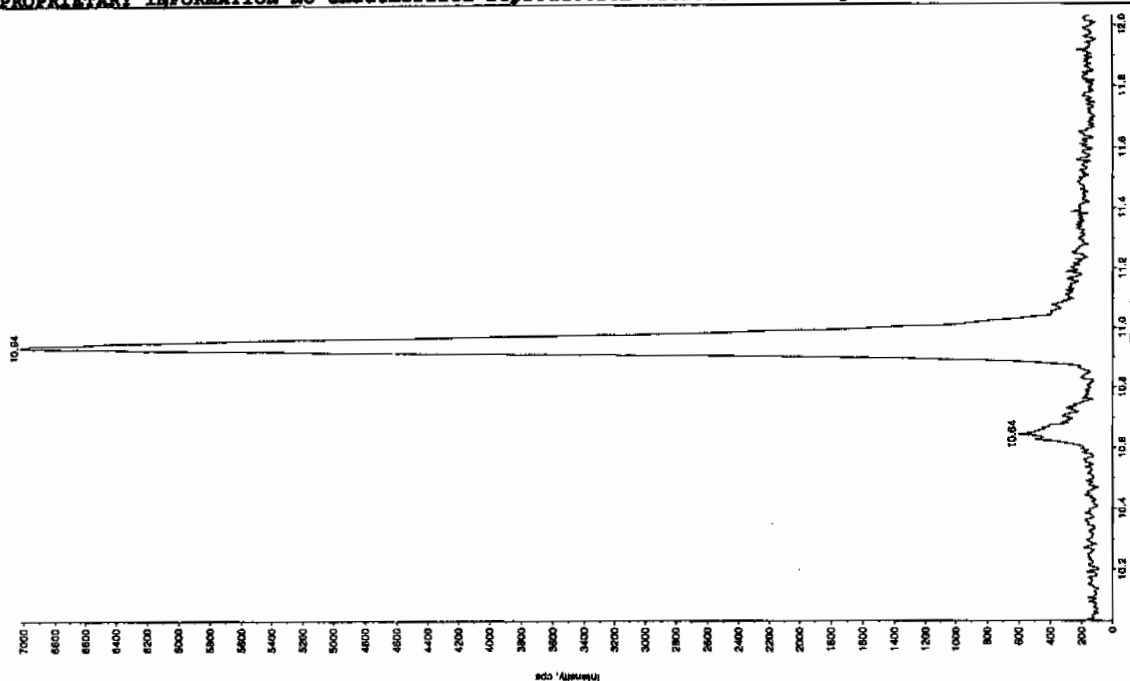
Sample Name: "245559003" Sample ID: "948572121" File: "EX502140126.will"
 Peak Name: "24-Diamino-6-nitrocholine" Mass(es): "155.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:32:53 PM
 Modified: No



Sample Name: "245559003" Sample ID: "948572121" File: "EX502140126.will"
 Peak Name: "tris(2-oxo-3-oxoethyl) phosphite" Mass(es): "365.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 11:32:53 PM
 Modified: No



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216093a

Date Analyzed: 18-FEB-10 14:34

Units: ug/kg

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

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216093a

Date: 18-Feb-2010

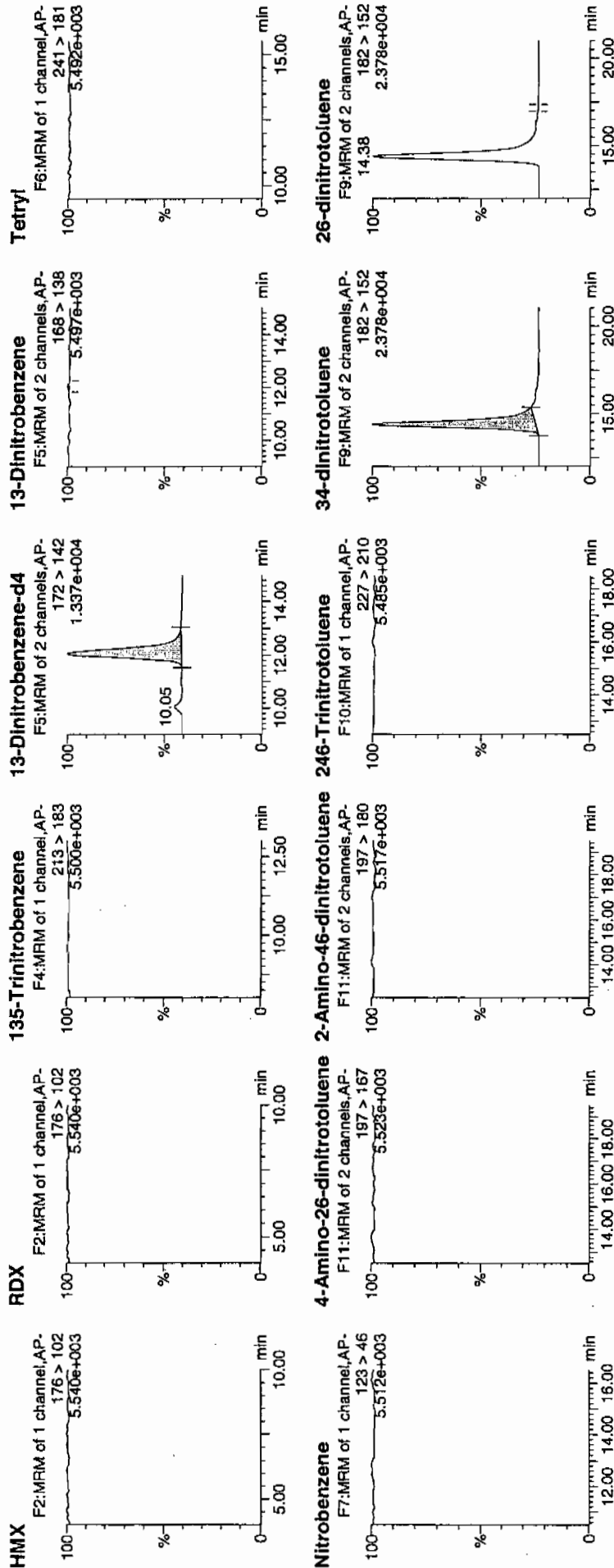
Time: 14:34:24

ID: 245959004

Vial: 2:6,D

2/19/10

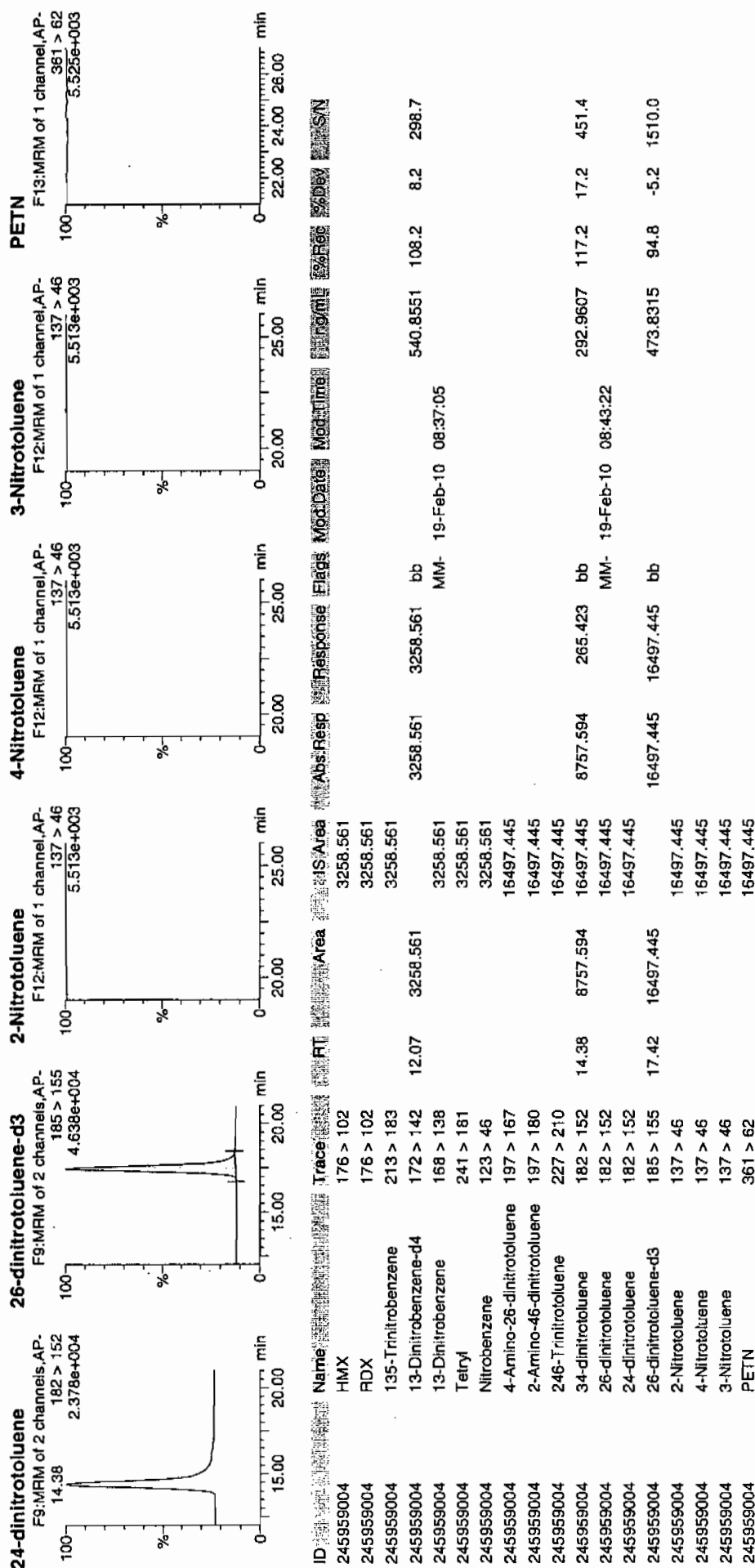
WAV/948572/8032/2/



2/19/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7317

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959004

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140129.wiff

Date Analyzed: 15-FEB-10 23:48

Units: ug/kg

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

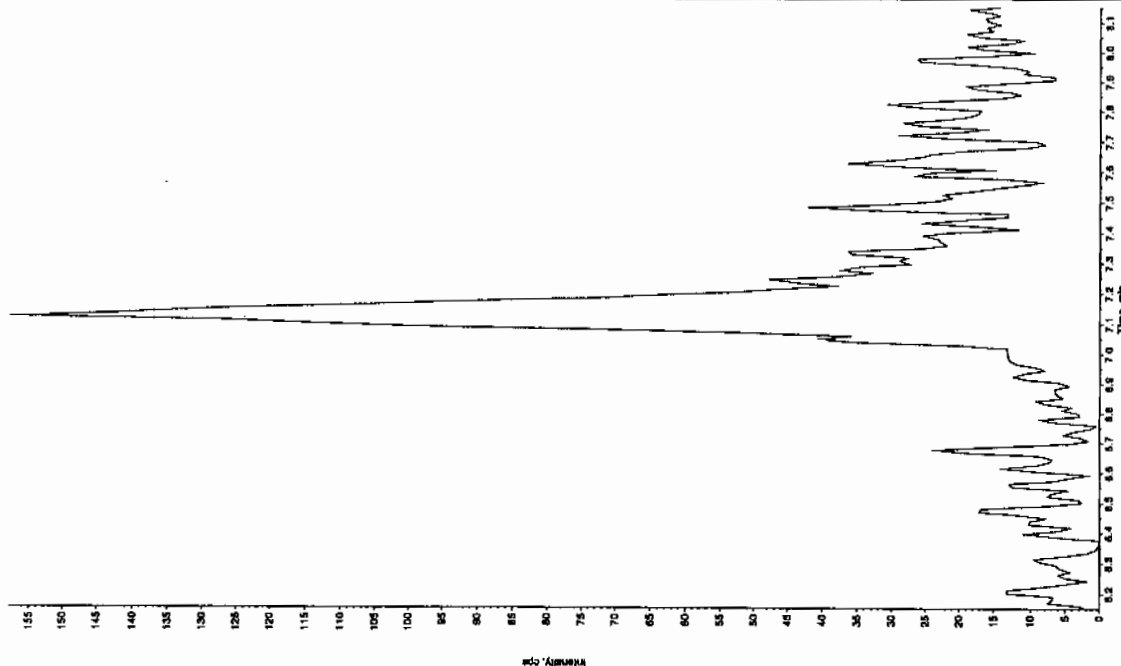
*Concentration =

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

2/17/10

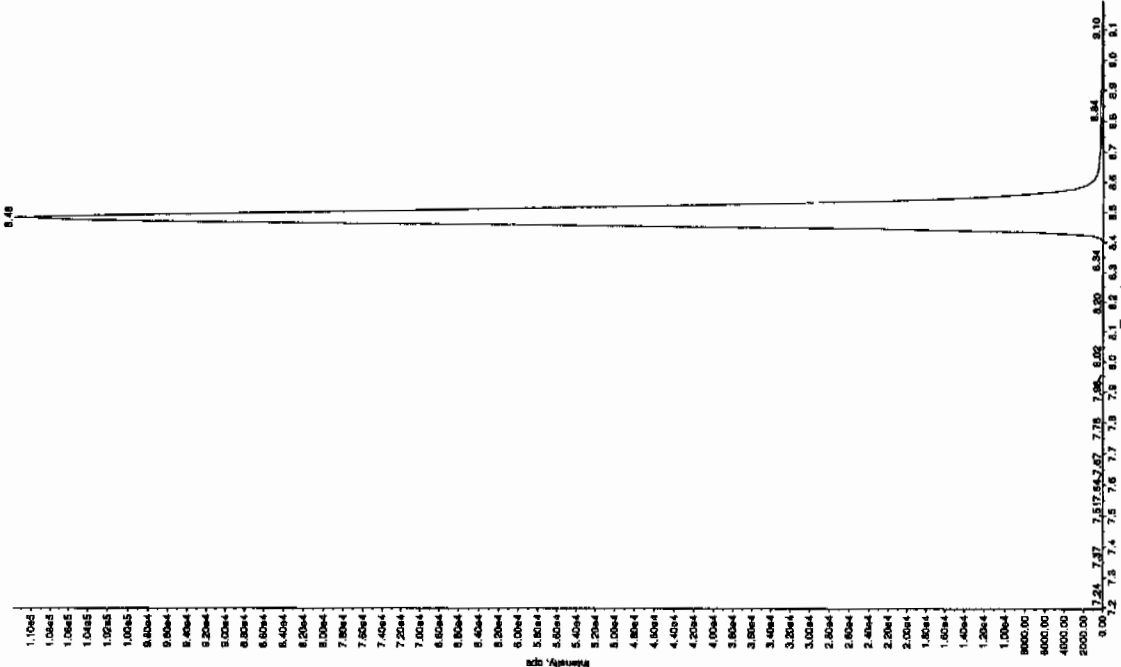
Sample Name: "245959004" Sample ID: "94857221ER" File: "EXS02140128.wif"
Peak Name: "TATB" Mass(es): "257.2204.9 and"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Calculated Conc: 2/15/2010
Acq. Date: 11:48:34 PM
Acq. Time: 11:48:34 PM
Modified: No

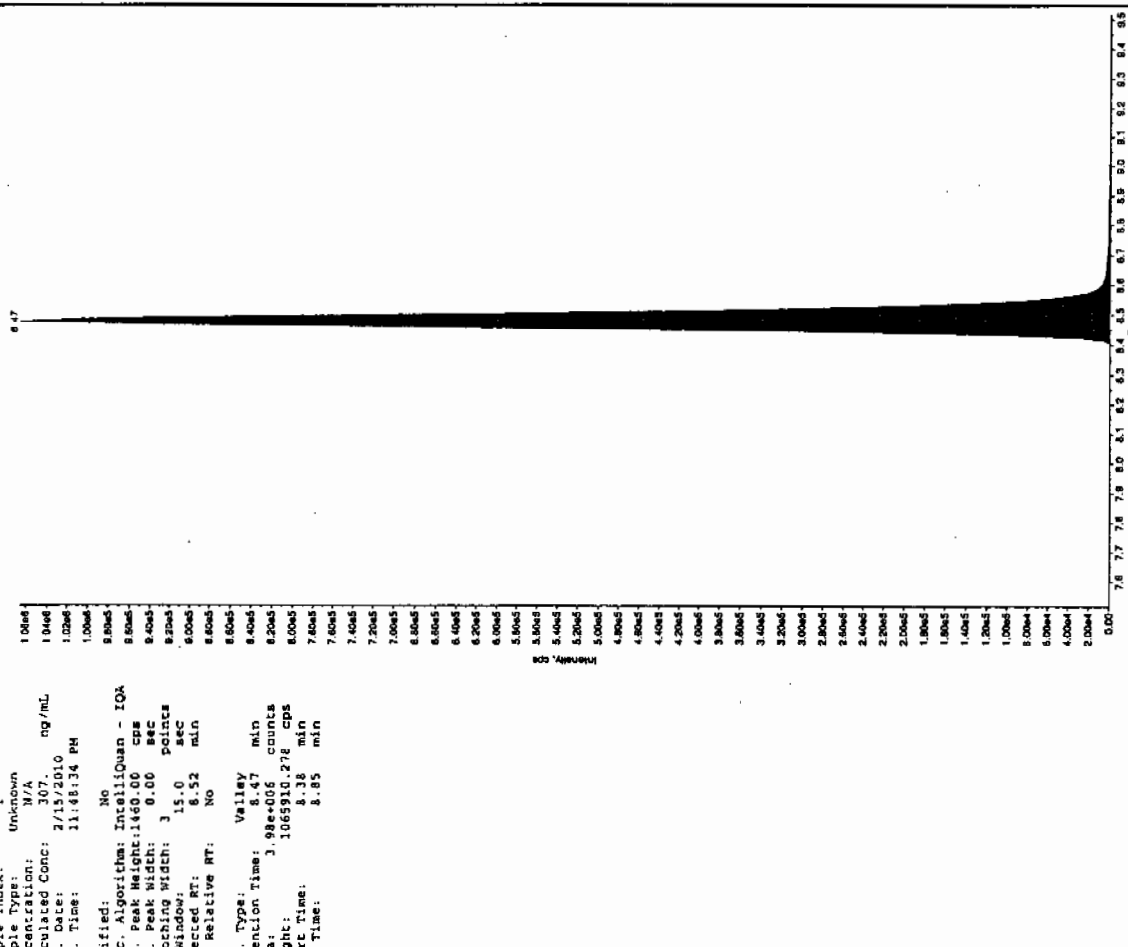


Sample Name: "245959004" Sample ID: "94857221ER" File: "EXS02140128.wif"
Peak Name: "3C-Dinitroaniline" Mass(es): "182.046.0 amu"
Comment: "LCX83212S" Annotation: ""

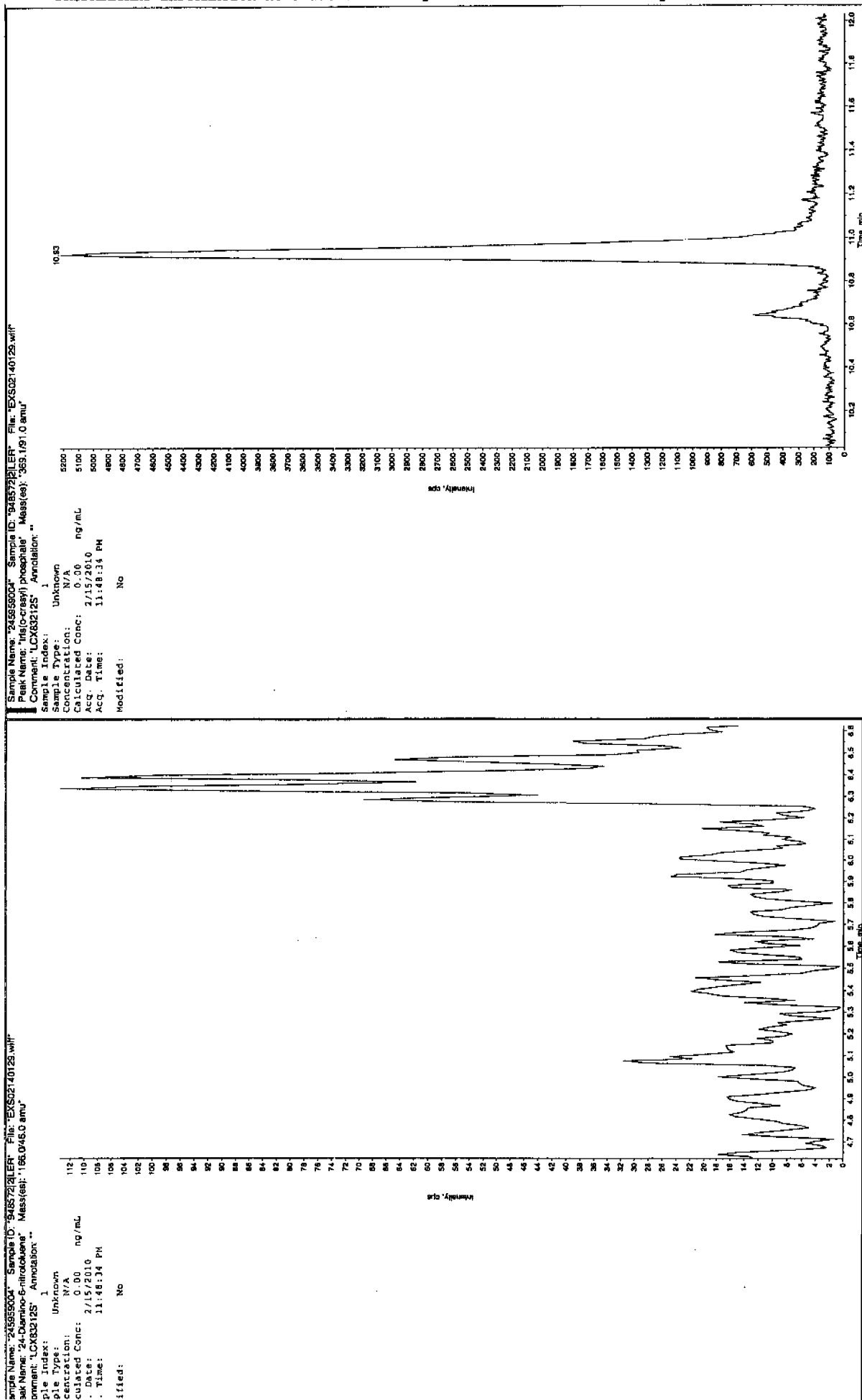
Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Calculated Conc: 2/15/2010
Acq. Date: 11:48:34 PM
Acq. Time: 11:48:34 PM
Modified: Yes



2/17/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216094a

Date Analyzed: 18-FEB-10 15:03

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0216094a

Date: 18-Feb-2010

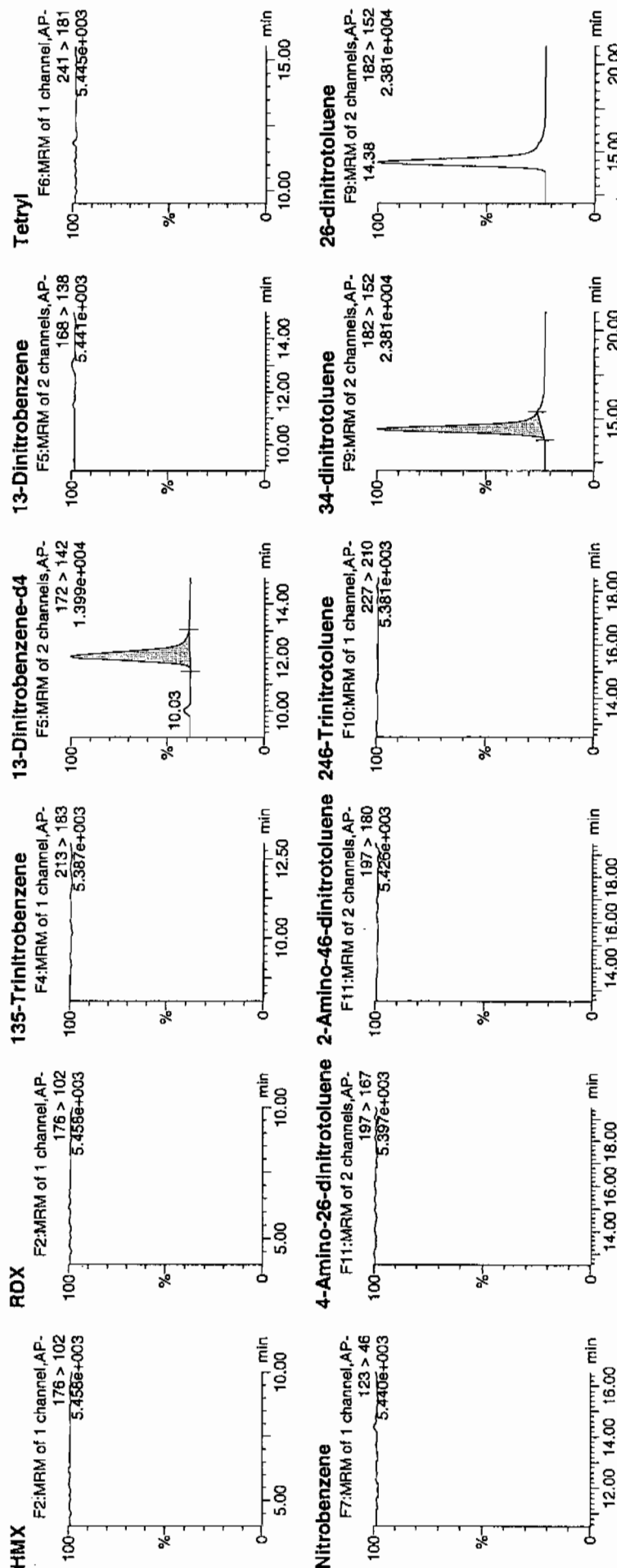
Time: 15:03:54

ID: 245959005

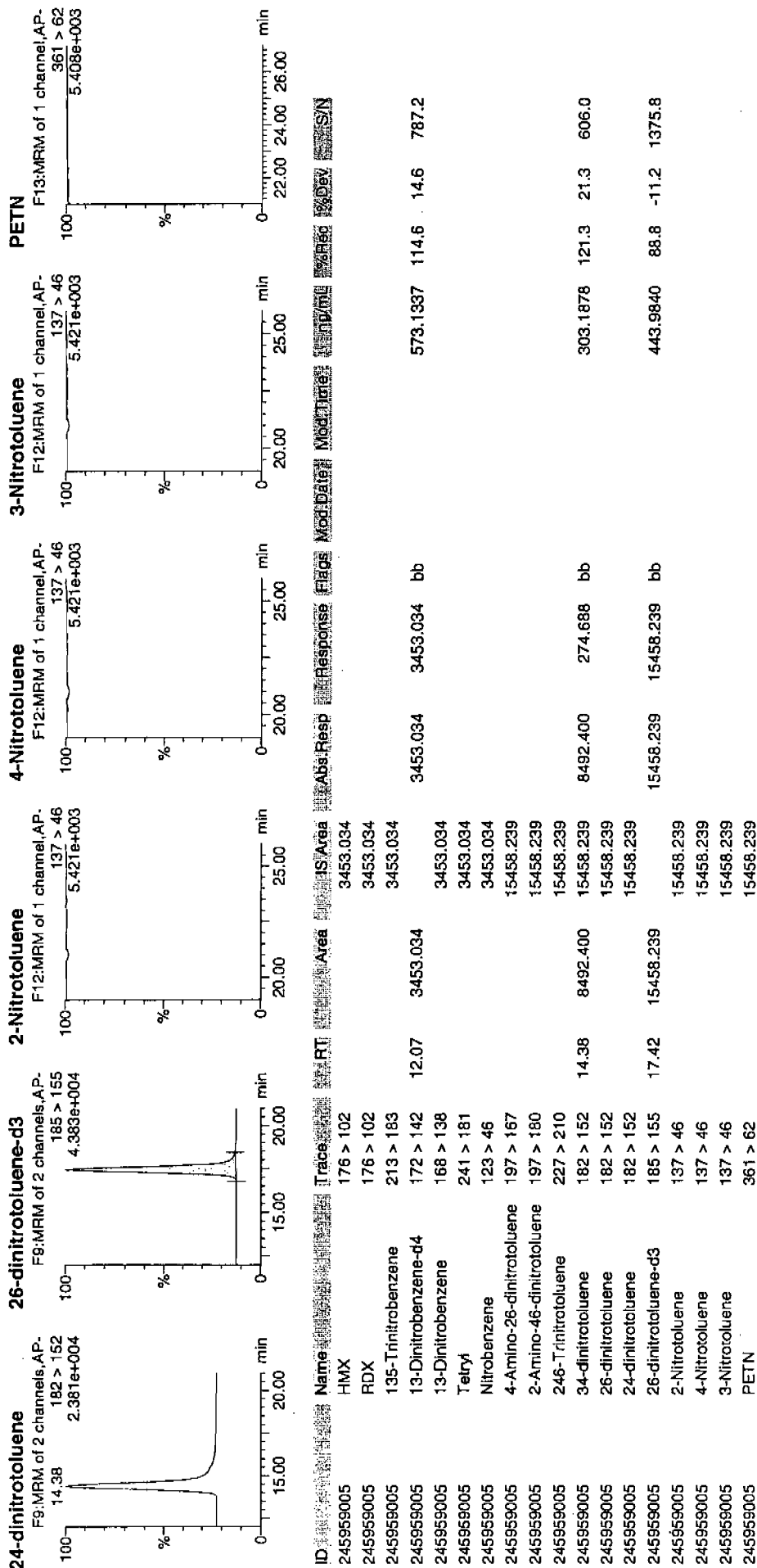
Vial: 2:6,E

4/19/10

1948572 / 8022 / 21



Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7319

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959005

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140133.wiff

Date Analyzed: 16-FEB-10 00:51

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

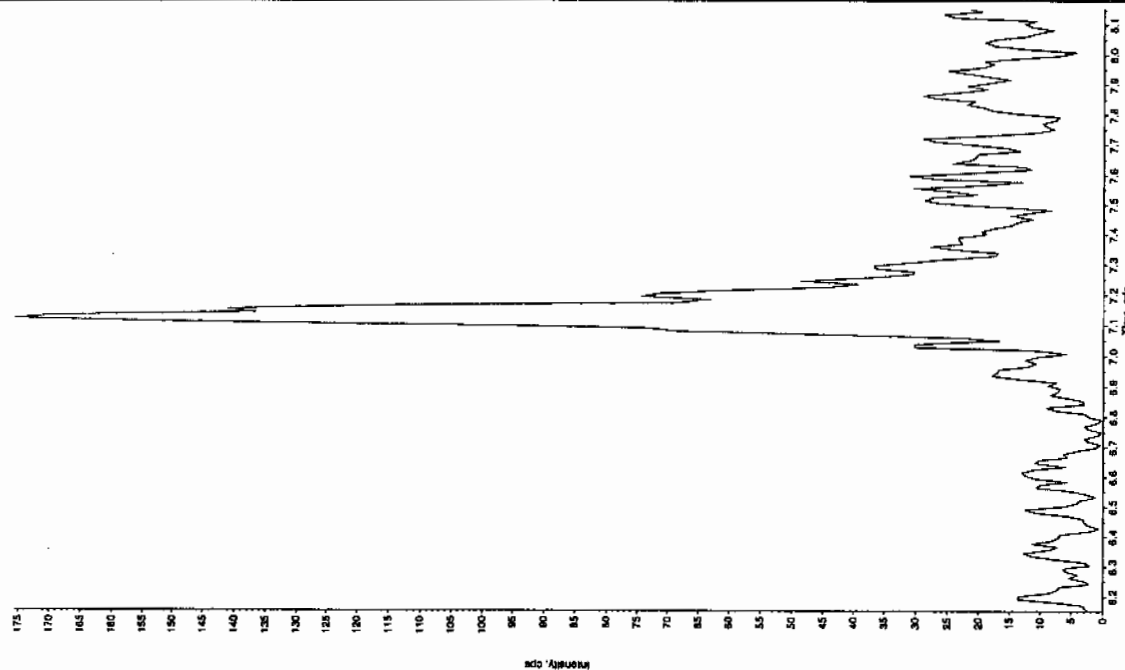
*Concentration =

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

Per 2/17/10

Sample Name: "24555005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "TATB" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Acquisition: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 12:51:22 AM
 Acq. Time: 12:51:22 AM
 Modified: Yes



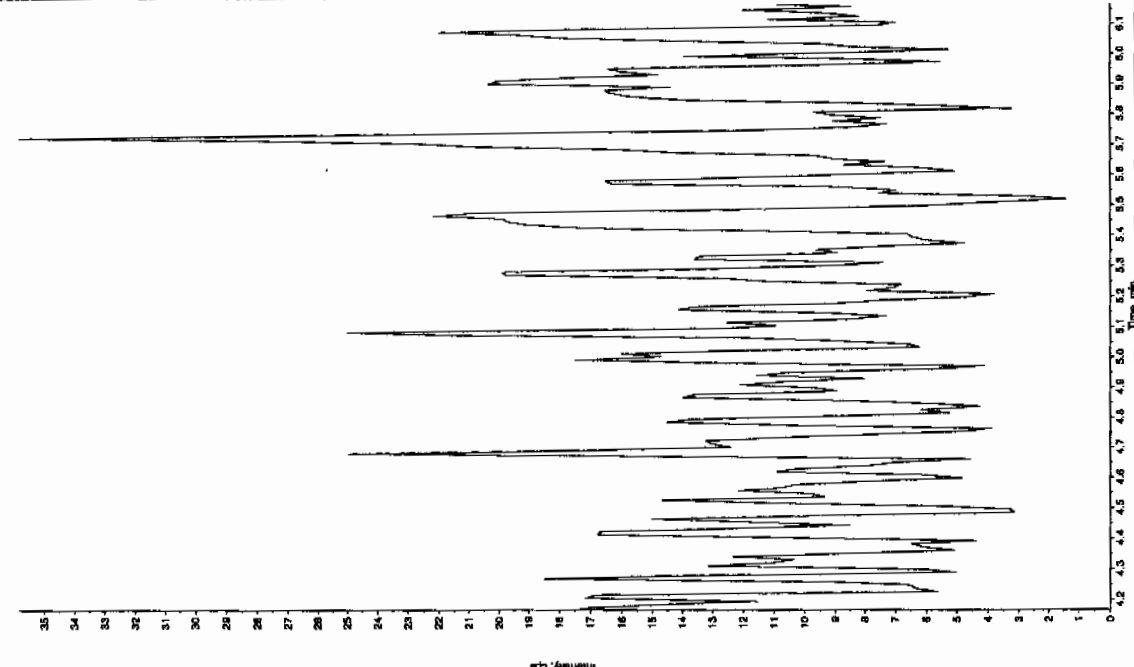
Amc 02/17/10

Sample Name: "24555005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Acquisition: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 12:51:22 AM
 Acq. Time: 12:51:22 AM
 Modified: No

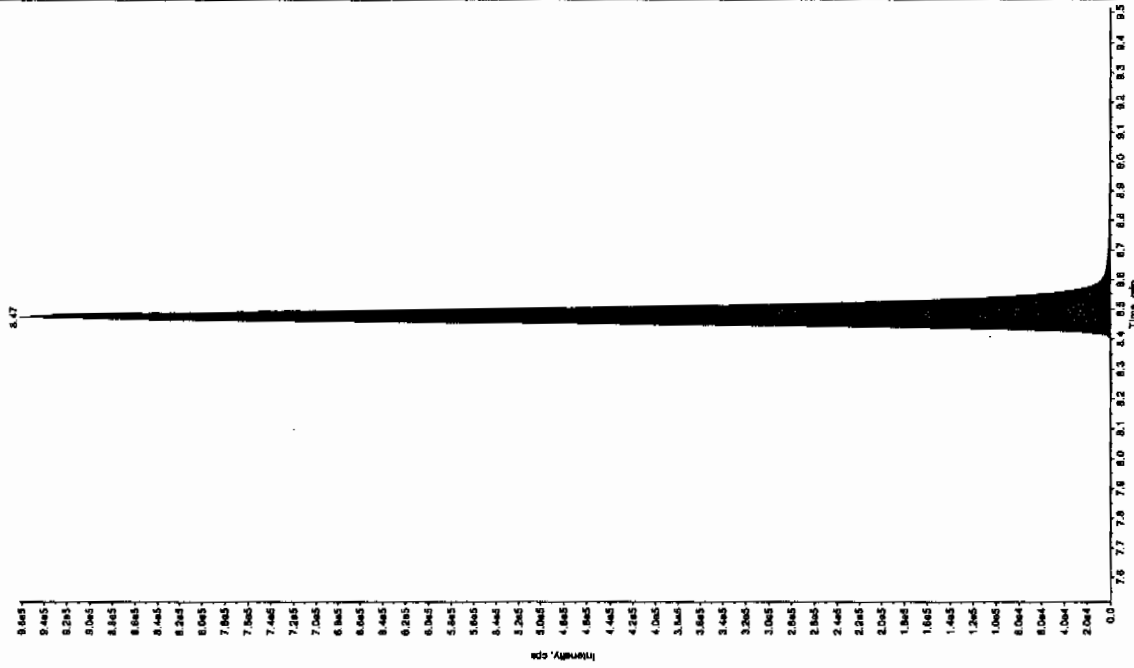
Sample Name: "24595005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "28-Dinitro-4-nitrofluorene" Mass(es): "188.0460 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 12:51:22 AM
 Modified: No



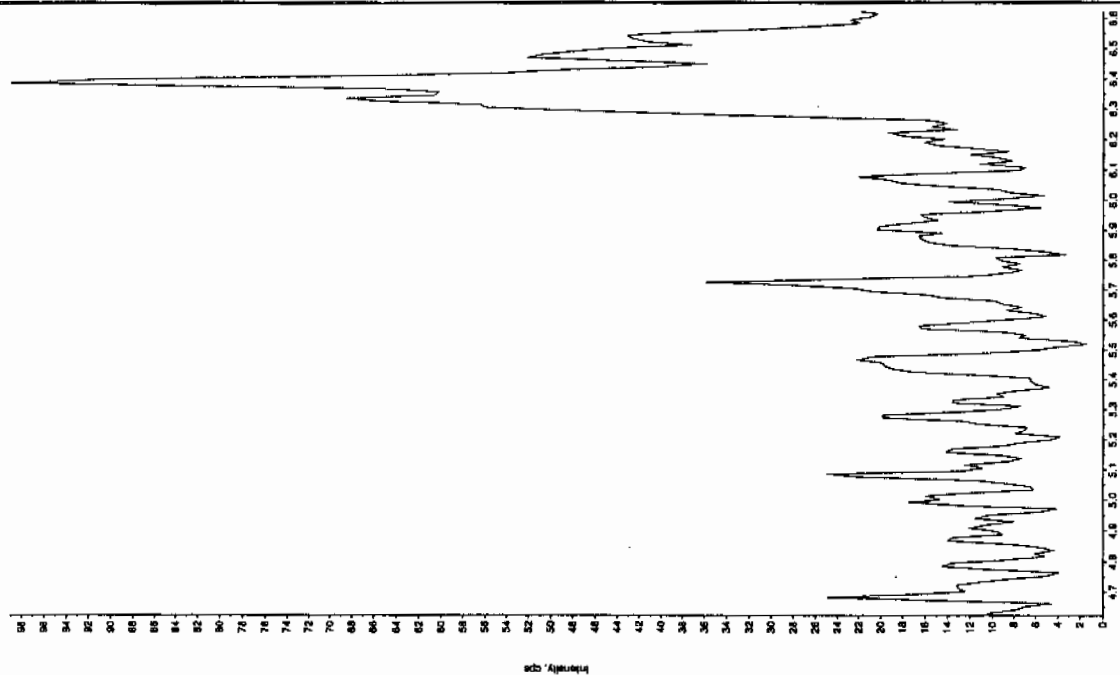
Sample Name: "24595005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1519 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 281 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 12:51:22 AM
 Modified: No
 Ac. Algorithm: IntelliQuan - IQA
 n. Peak Height: 1480.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Area: 15.0 points
 n. Peak Area: 8.52 min
 n. Relative RT: No
 t. Type: Valley
 Retention Time: 8.47 min
 ea: 3.67e+006 counts
 Iqhc: 962139.099 cps
 ac Time: 8.38 min
 d Time: 8.88 min



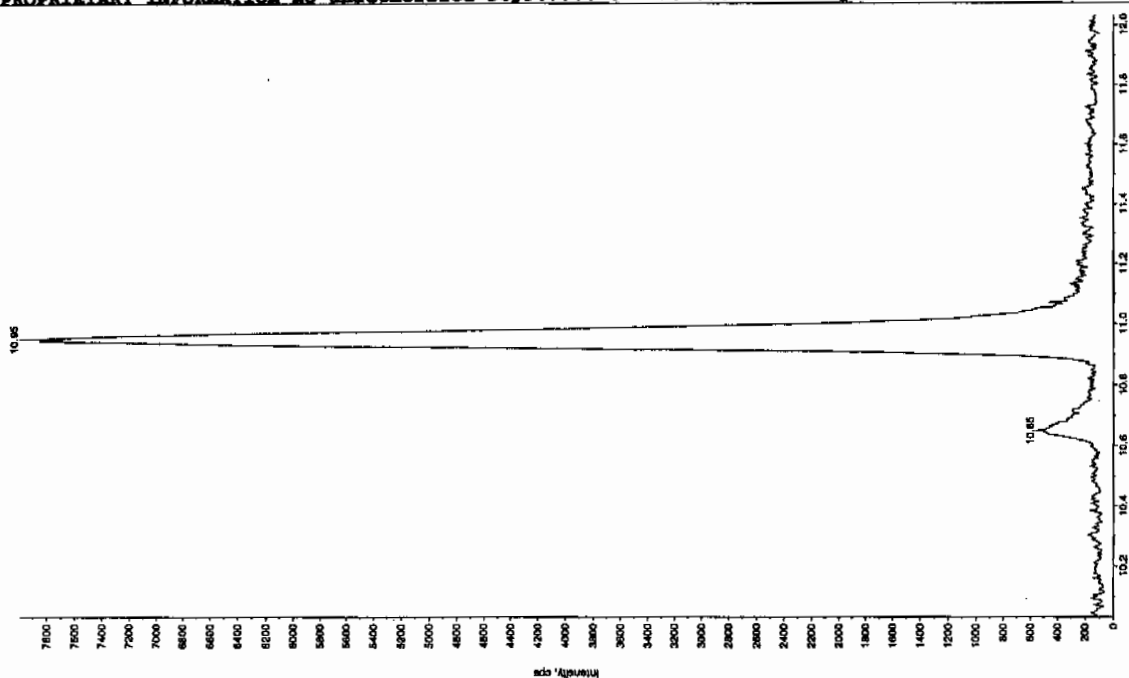
Sample Name: "245959005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 12:51:22 AM
 Modified: No



Sample Name: "245959005" Sample ID: "948572121" File: "EXS02140133.wif"
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "366.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 12:51:22 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216095a

Date Analyzed: 18-FEB-10 15:33

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216095a

Date: 18-Feb-2010

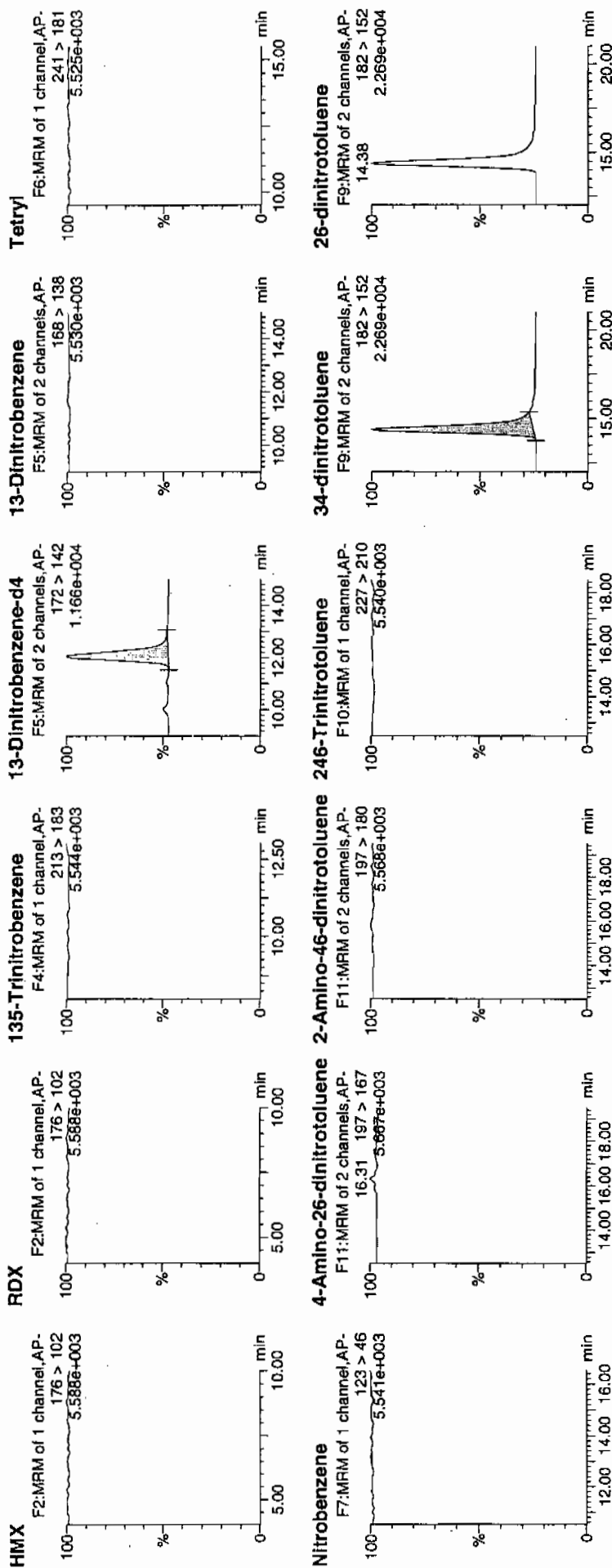
Time: 15:33:31

ID: 245959006

Vial: 2:6.F

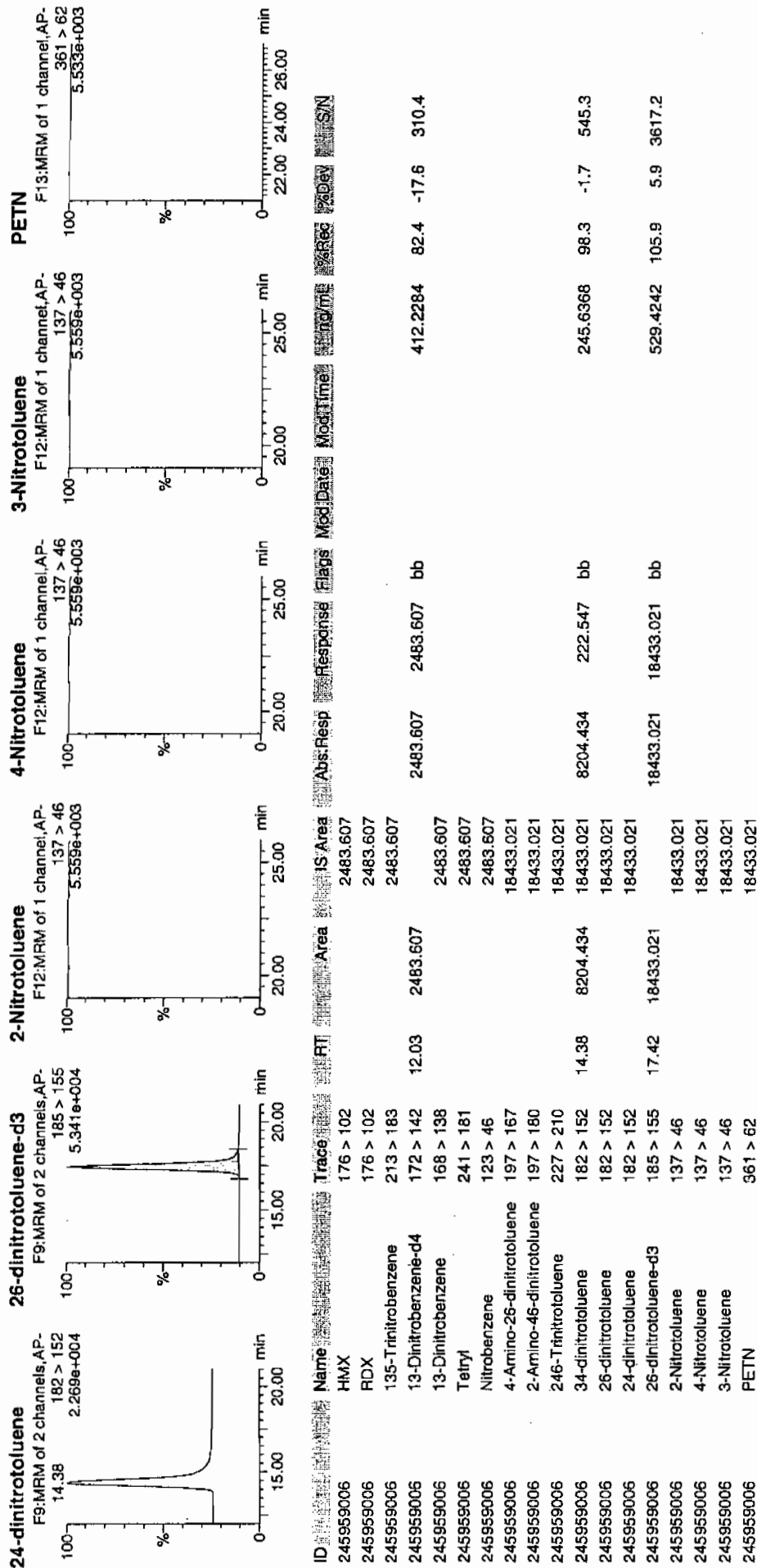
not
4/9/10

LANC 943572 / 8033 / 21



4/12/2010

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7312

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959006

Sample Amount 2

Moisture: 29.4

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140134.wiff

Date Analyzed: 16-FEB-10 01:07

Units: ug/kg

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

*Concentration =

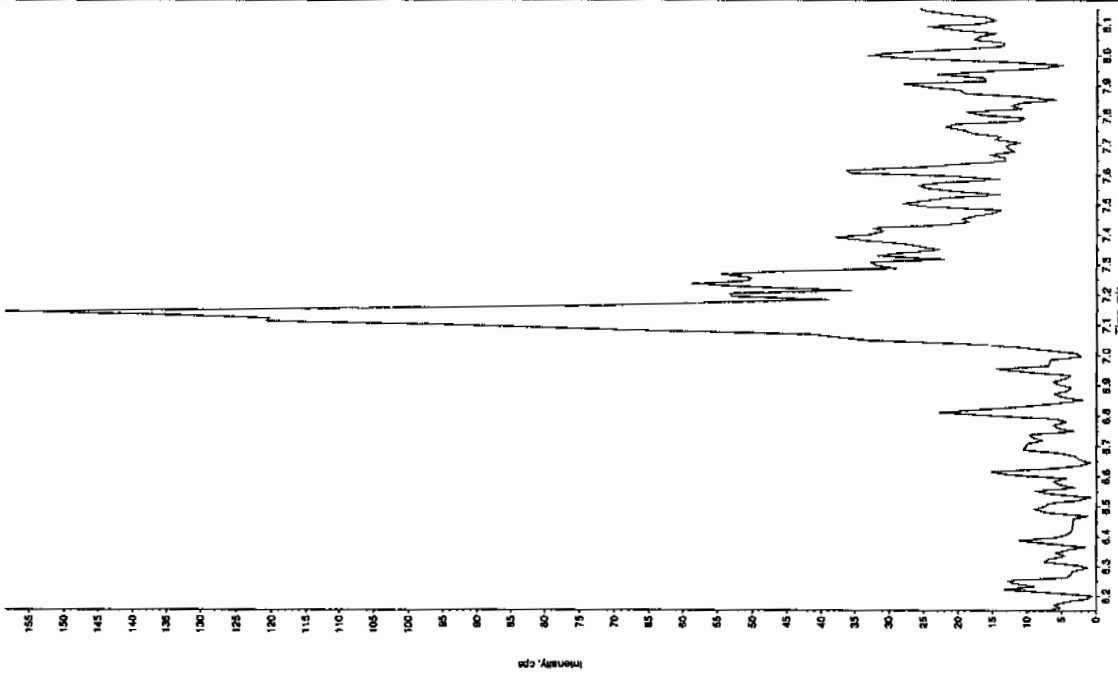
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Sample Name: "24595006" Sample ID: "948572121ER" File: "EX302140134.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0468 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:07:05 AM
 Acq. Time: 1:07:05 AM
 Modified: Yes

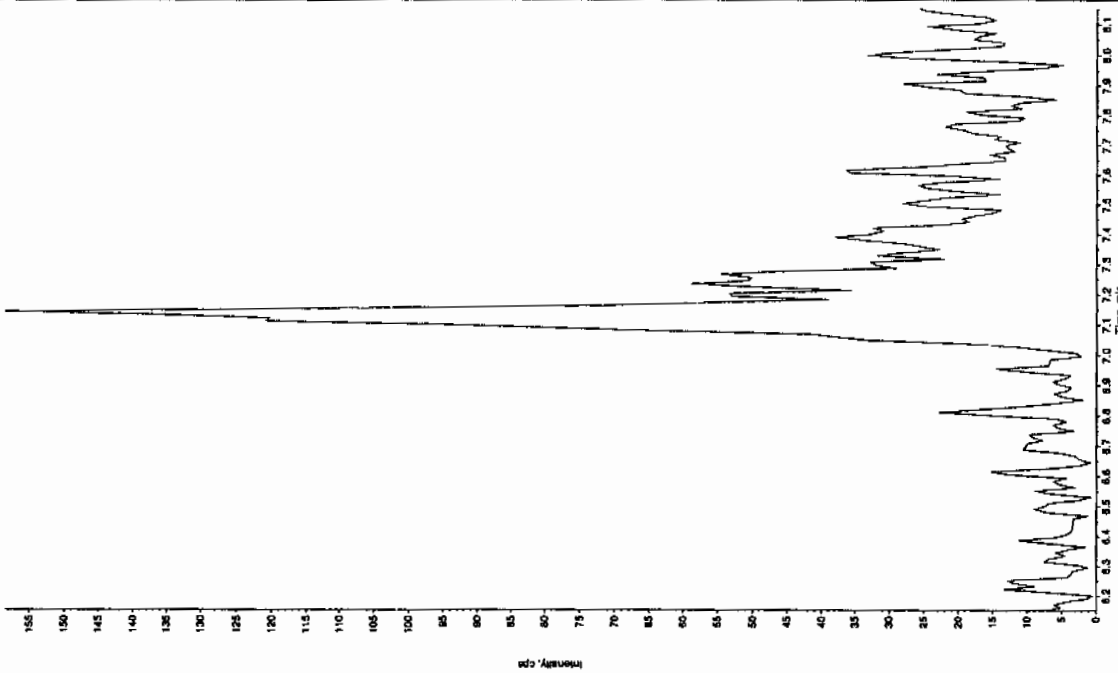


Sample Name: "24595006" Sample ID: "948572121ER" File: "EX302140134.wif"

Peak Name: "TAIB" Mass(es): "257.22048 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:07:05 AM
 Acq. Time: 1:07:05 AM
 Modified: No

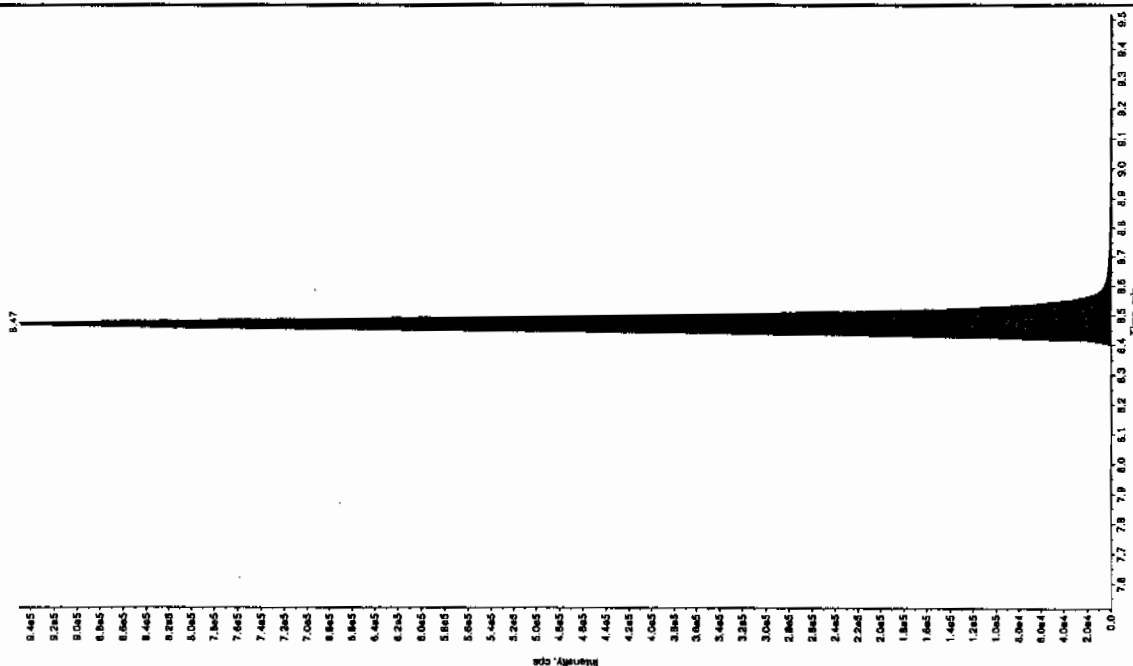


Jan 2/17/10

Jan 02/17/10

Sample Name: "24595006" Sample ID: "94857221ER" File: "EXS02140134.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:07:05 AM
 Acq. Time: 1:07:05 AM
 Modified: No

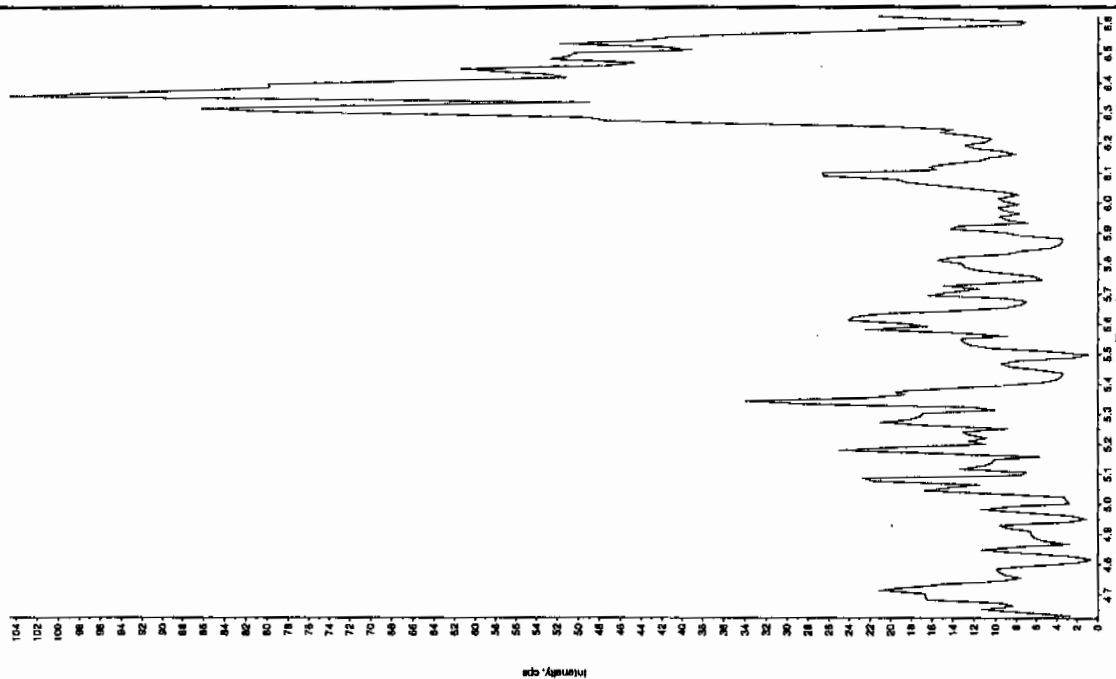


Sample Name: "24595006" Sample ID: "94857221ER" File: "EXS02140134.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:07:05 AM
 Acq. Time: 1:07:05 AM
 Modified: No
 OC Algorithm: InCellScan - IOA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 Working Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.52 min
 e Relative RT: No
 t. Type: Valley
 Retention Time: 8.47 min
 ea: 3.62e-006 counts
 ight: 949914.246 cps
 arc Time: 8.32 min
 d Time: 8.78 min

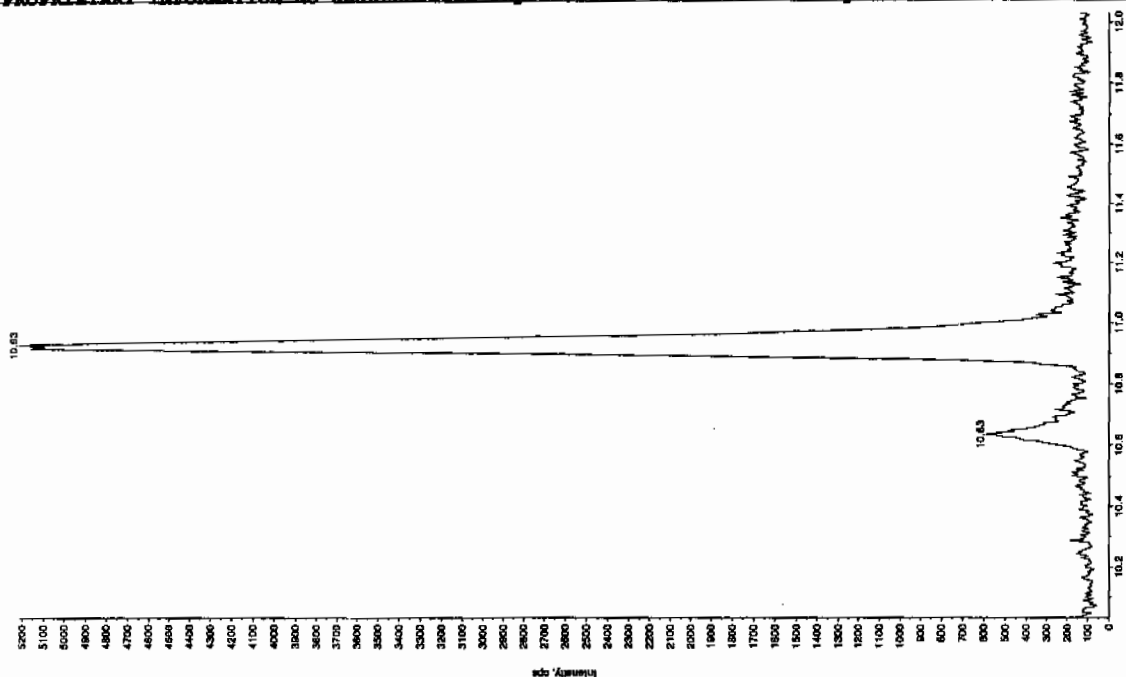
Sample Name: "24595006" Sample ID: "9485721" File: "EX502140134.wif"
 Peak Name: "24-Diamino-6-methoxyphenol" Mass(es): "166.046.0 amu"
 Comment: "LCX502125" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 1:07:05 AM
 Modified: No



Sample Name: "24595006" Sample ID: "9485721" File: "EX502140134.wif"
 Peak Name: "24-Diamino-6-methoxyphenol" Mass(es): "339.191.0 amu"
 Comment: "LCX502125" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/16/2010
 Acq. Time: 1:07:05 AM
 Modified: No



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216096a

Date Analyzed: 18-FEB-10 16:03

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216096a

Date: 18-Feb-2010

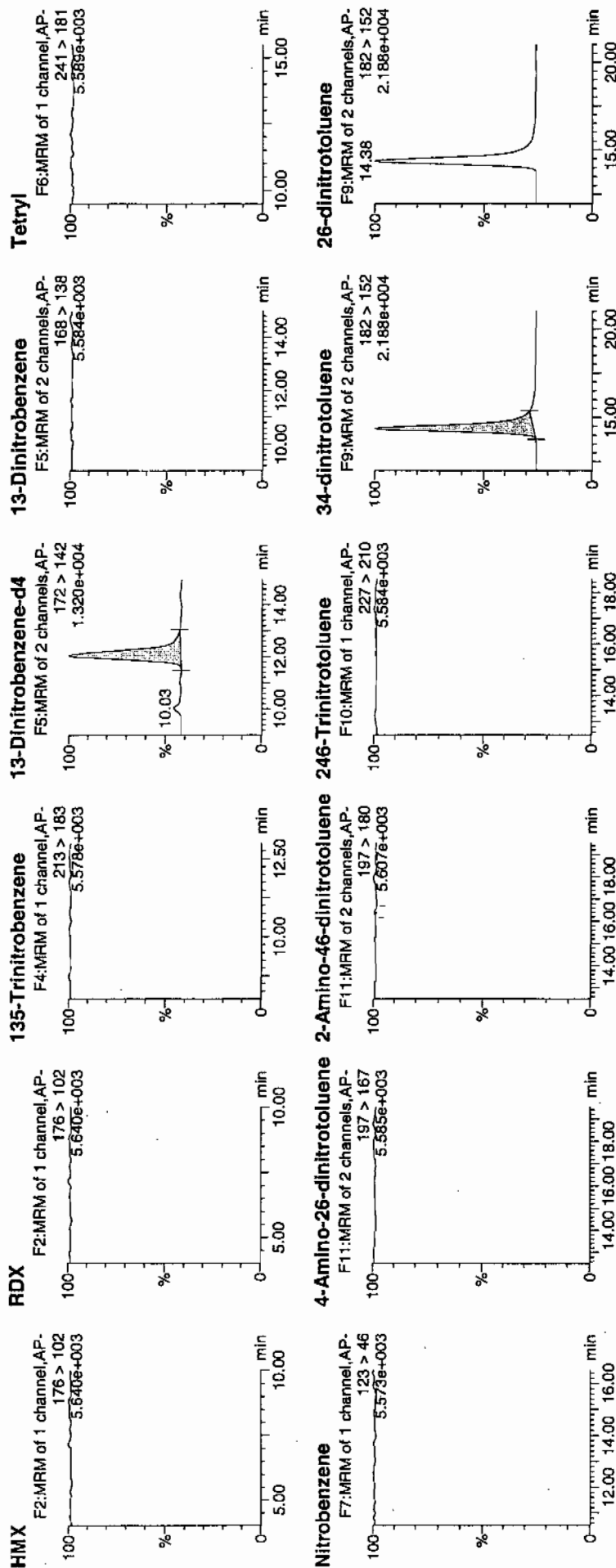
Time: 16:03:00

ID: 245959007

Vial: 2:7A

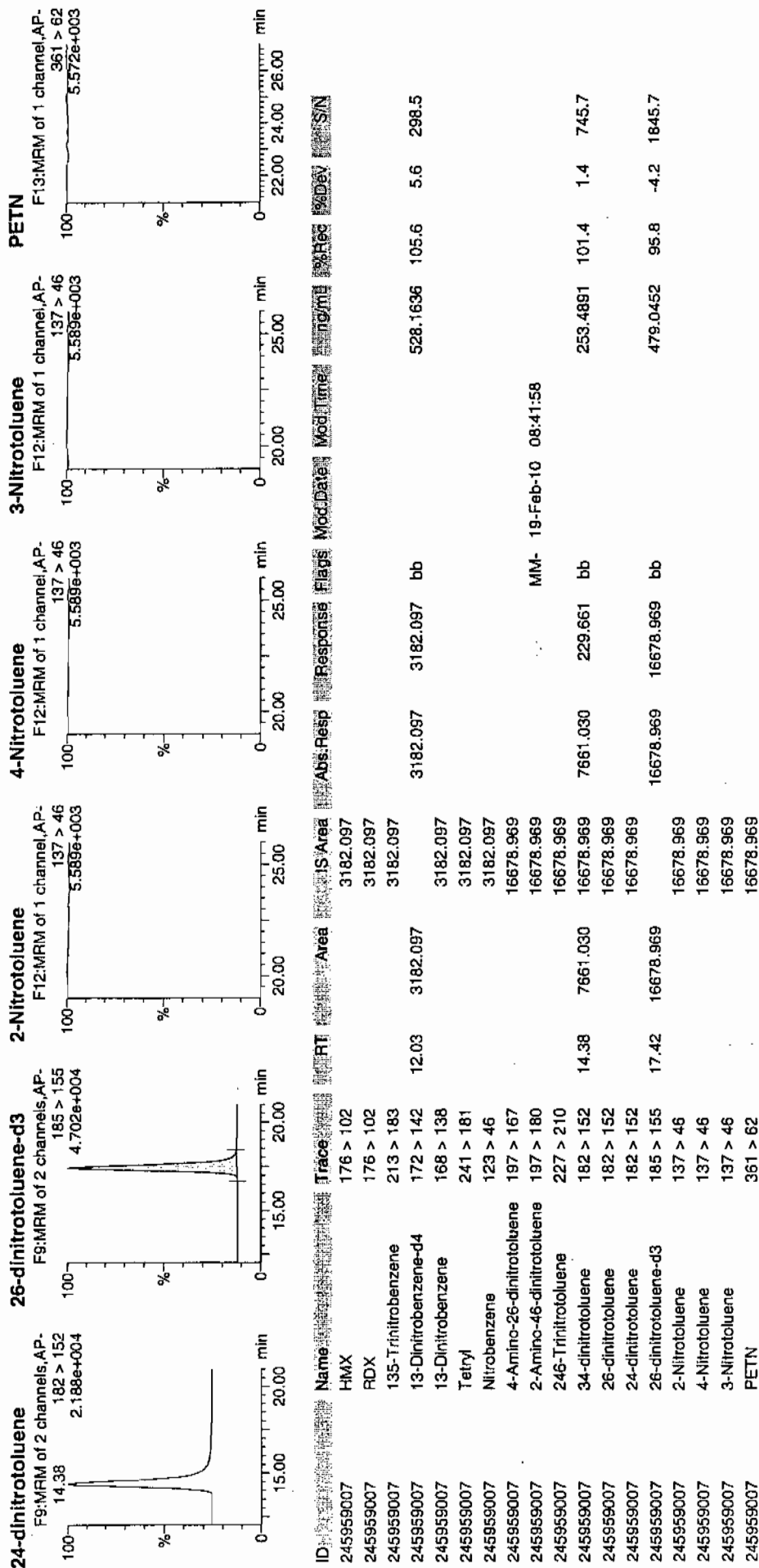
4/19/10

WAV 940572 | Sars | 2/



4/19/10

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7313

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959007

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140135.wiff

Date Analyzed: 16-FEB-10 01:22

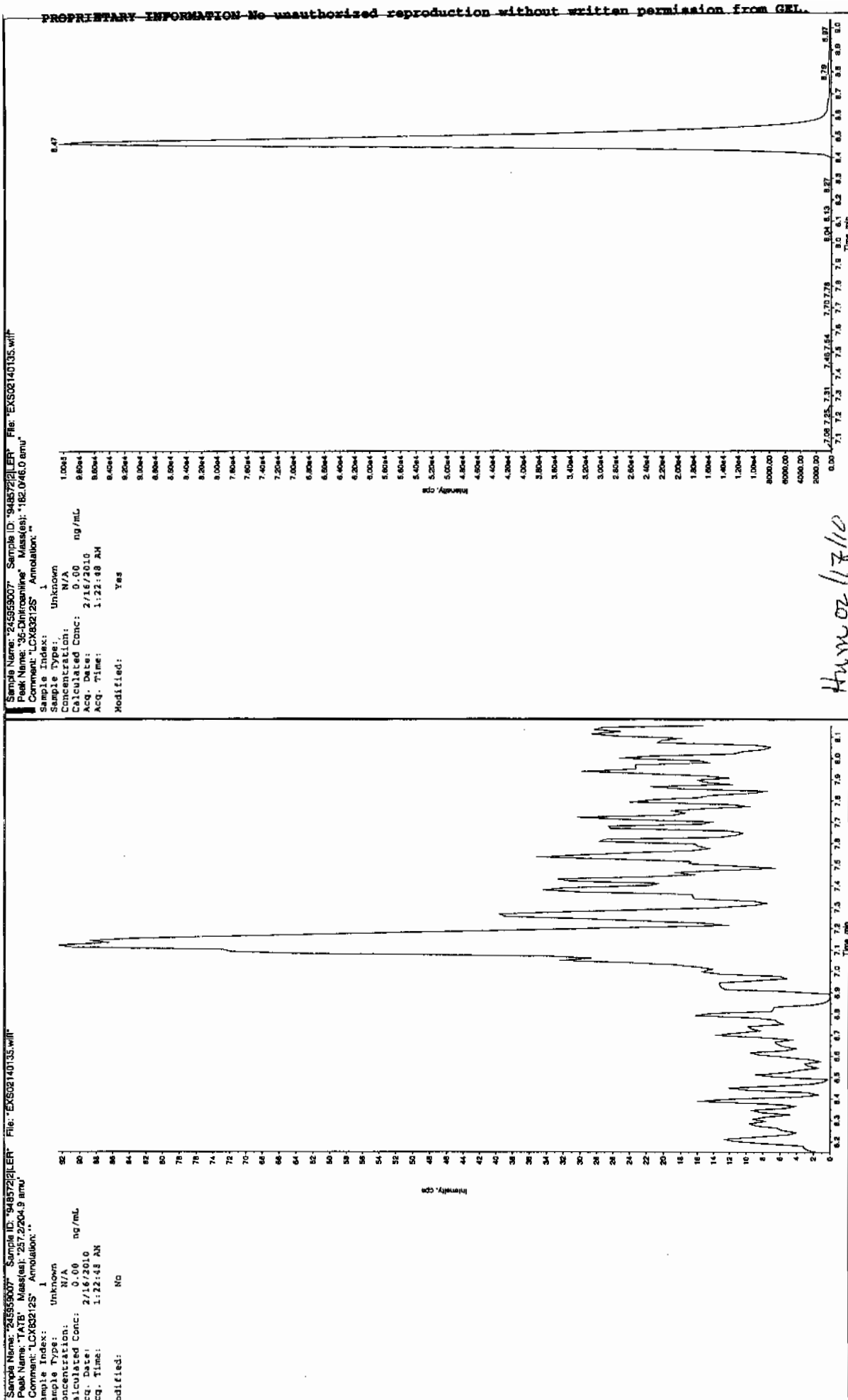
Units: ug/kg

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

*Concentration =

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

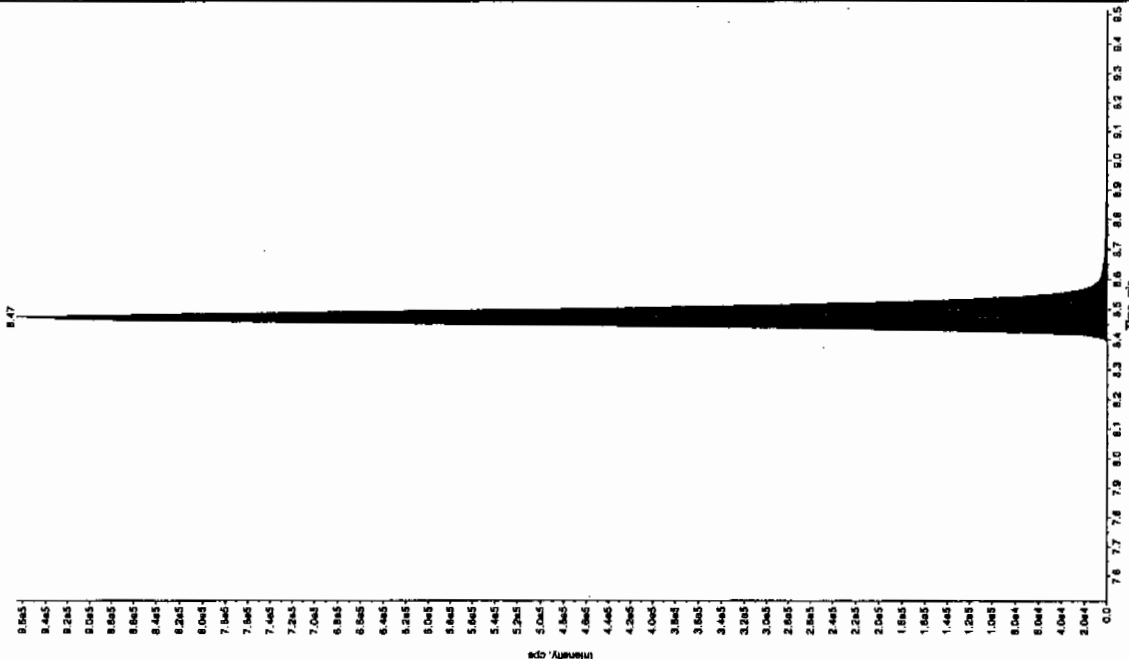
See 2/17/10



Hum 02/17/10

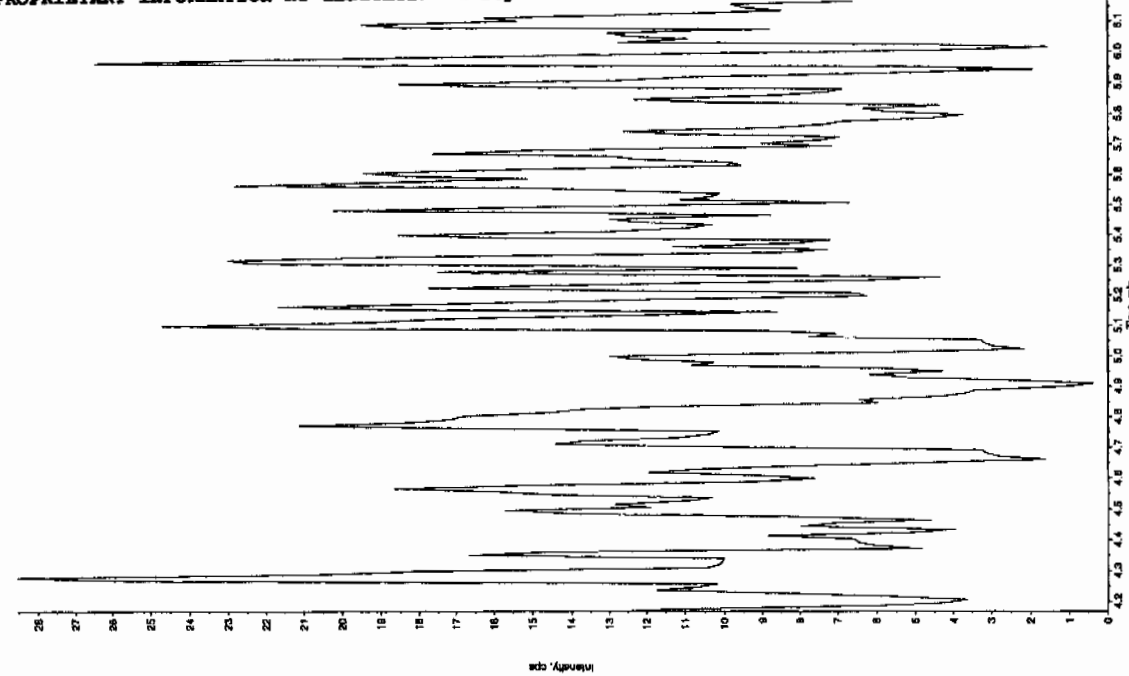
Sample Name: "245959007" Sample ID: "948572JLER" File: "EX502140135.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
Comment: "LCX832125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 2/182010
Acq. Time: 1:22:48 AM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
In. Peak Height: 1460.00 cps
In. Peak Width: 0.00 sec
Smoothing Width: 3 points
T Window: 15.0 sec
Expected RT: 8.52 min
See Relative RT: No
nt. Type: Valley
Retention Time: 8.47 min
Height: 3.72e+006 counts
Width: 96515.618 cps
Acq. Time: 8.38 min
Mod Time: 8.88 min



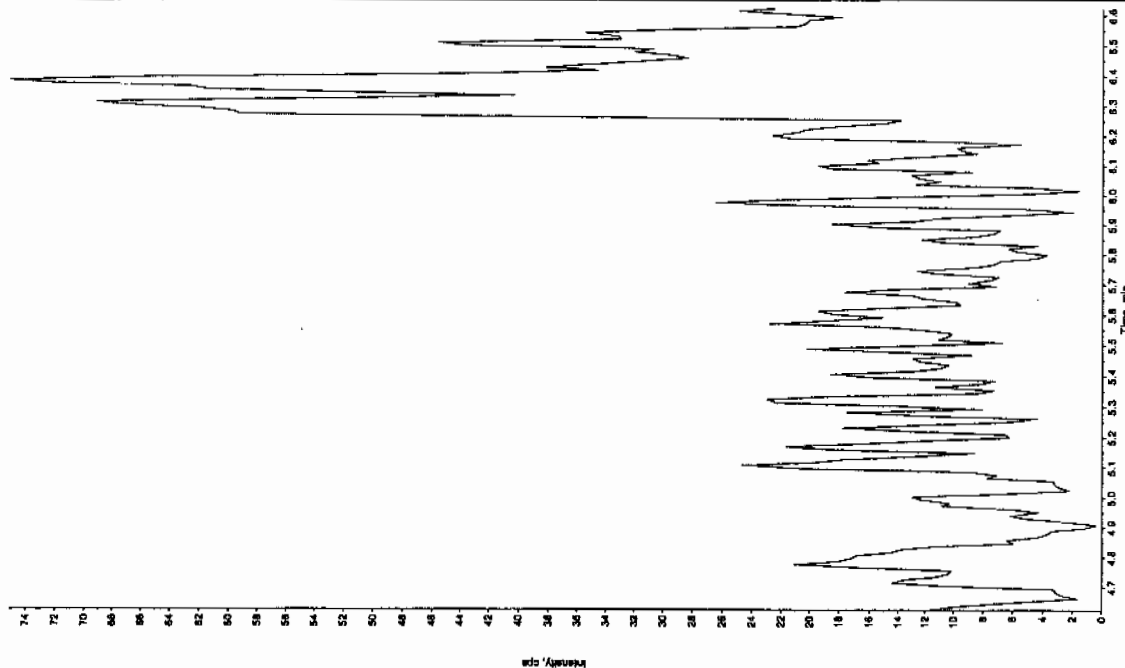
Sample Name: "245959007" Sample ID: "948572JLER" File: "EX502140135.wif"
Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "186.0/46.0 amu"
Comment: "LCX832125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 2/182010
Acq. Time: 1:22:48 AM
Modified: No



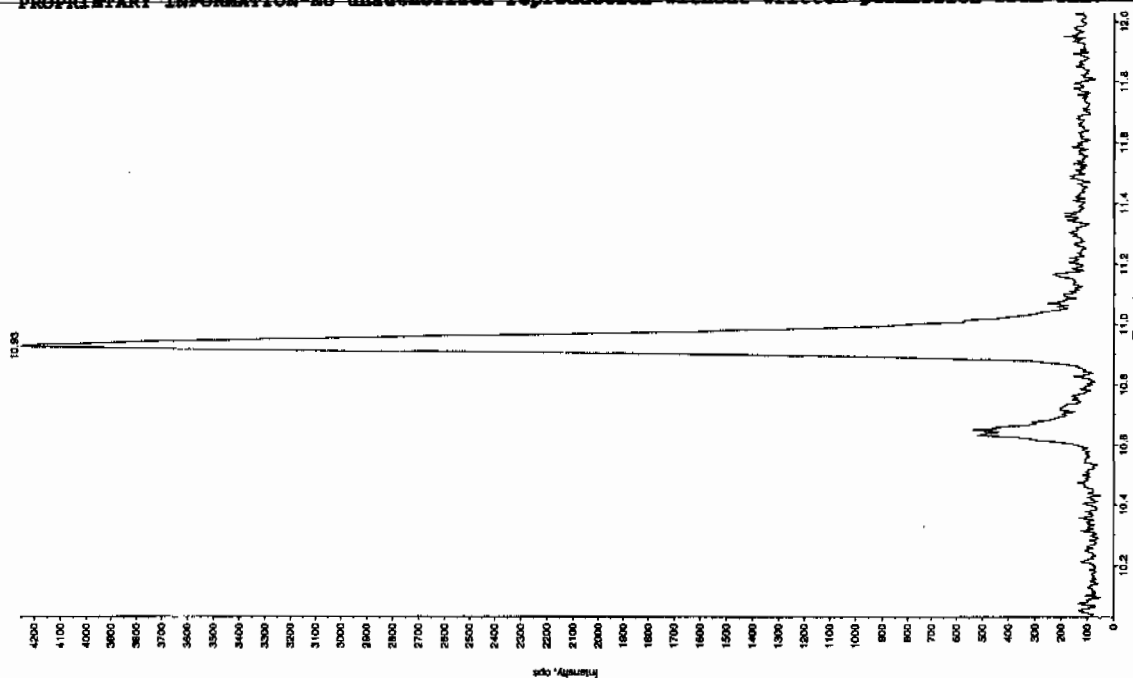
Sample Name: "24559007" Sample ID: "948572121" File: "EX502140135.will"
 Peak Name: "24-Dienio-6-nitrofluorene" Mass(es): "156.045.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:22:48 AM
 Acq. Time: 1:22:48 AM
 Modified: No



Sample Name: "24559007" Sample ID: "948572121" File: "EX502140135.will"
 Peak Name: "16(O-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:22:48 AM
 Acq. Time: 1:22:48 AM
 Modified: No



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216097a

Date Analyzed: 18-FEB-10 16:32

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216097a

Date: 18-Feb-2010

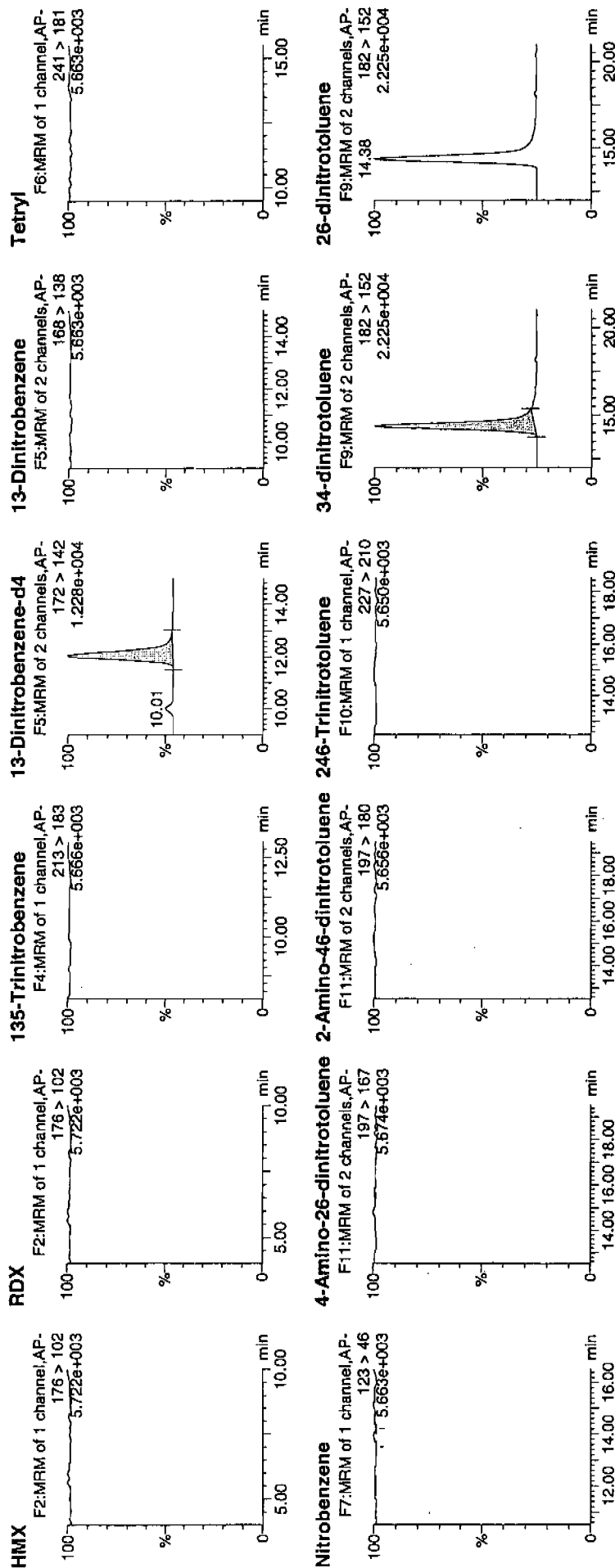
Time: 16:32:45

ID: 245959008

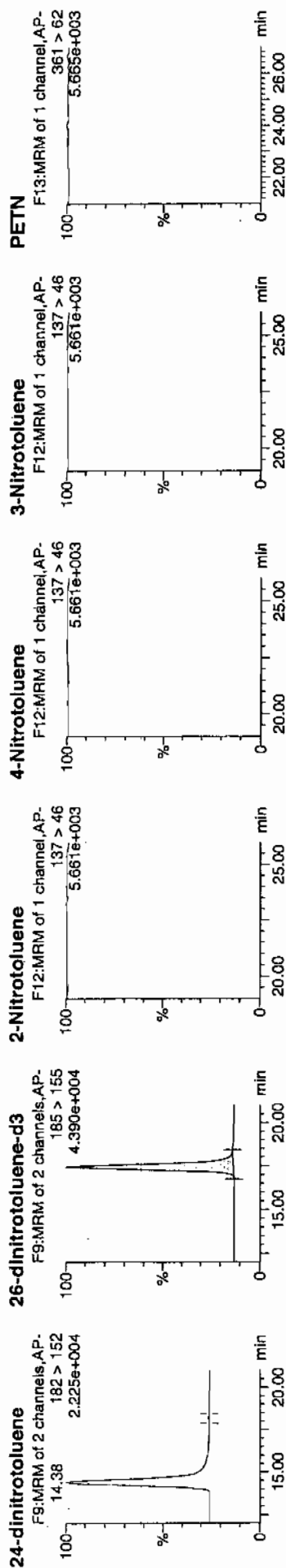
Vial: 2:7,B

uap
4/9/10

uap
948572 / *Solids* / *21*



uap
4/9/10



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod/Date	Mod/Time	Inj/mL	%Rec	%Dev	SN
245959008	HMX	176 > 102			2639.335									
245959008	RDX	176 > 102			2639.335									
245959008	135-Trinitrobenzene	213 > 183			2639.335									
245959008	13-Dinitrobenzene-d4	172 > 142	12.03	2639.335		2639.335	2639.335	bb			438.0761	87.6	-12.4	512.7
245959008	13-Dinitrobenzene	168 > 138												
245959008	Tetryl	241 > 181			2639.335									
245959008	Nitrobenzene	123 > 46			2639.335									
245959008	4-Amino-26-dinitrotoluene	197 > 167			2639.335			MM-	19-Feb-10	08:38:03				
245959008	2-Amino-46-dinitrotoluene	197 > 180			14875.780									
245959008	246-Trinitrotoluene	227 > 210			14875.780									
245959008	34-dinitrotoluene	182 > 152	14.38	7571.647	14875.780	7571.647	254.496	bb			280.9001	112.4	12.4	603.3
245959008	26-dinitrotoluene	182 > 152			14875.780									
245959008	24-dinitrotoluene	182 > 152			14875.780									
245959008	26-dinitrotoluene-d3	185 > 155	17.42	14875.780		14875.780	14875.780	bb	MM-	19-Feb-10	08:48:13			
245959008	2-Nitrotoluene	137 > 46			14875.780						427.2549	85.5	-14.5	1090.0
245959008	4-Nitrotoluene	137 > 46			14875.780									
245959008	3-Nitrotoluene	137 > 46			14875.780									
245959008	PETN	361 > 62			14875.780									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7314

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959008

Sample Amount 2

Moisture: 32.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140136.wiff

Date Analyzed: 16-FEB-10 01:38

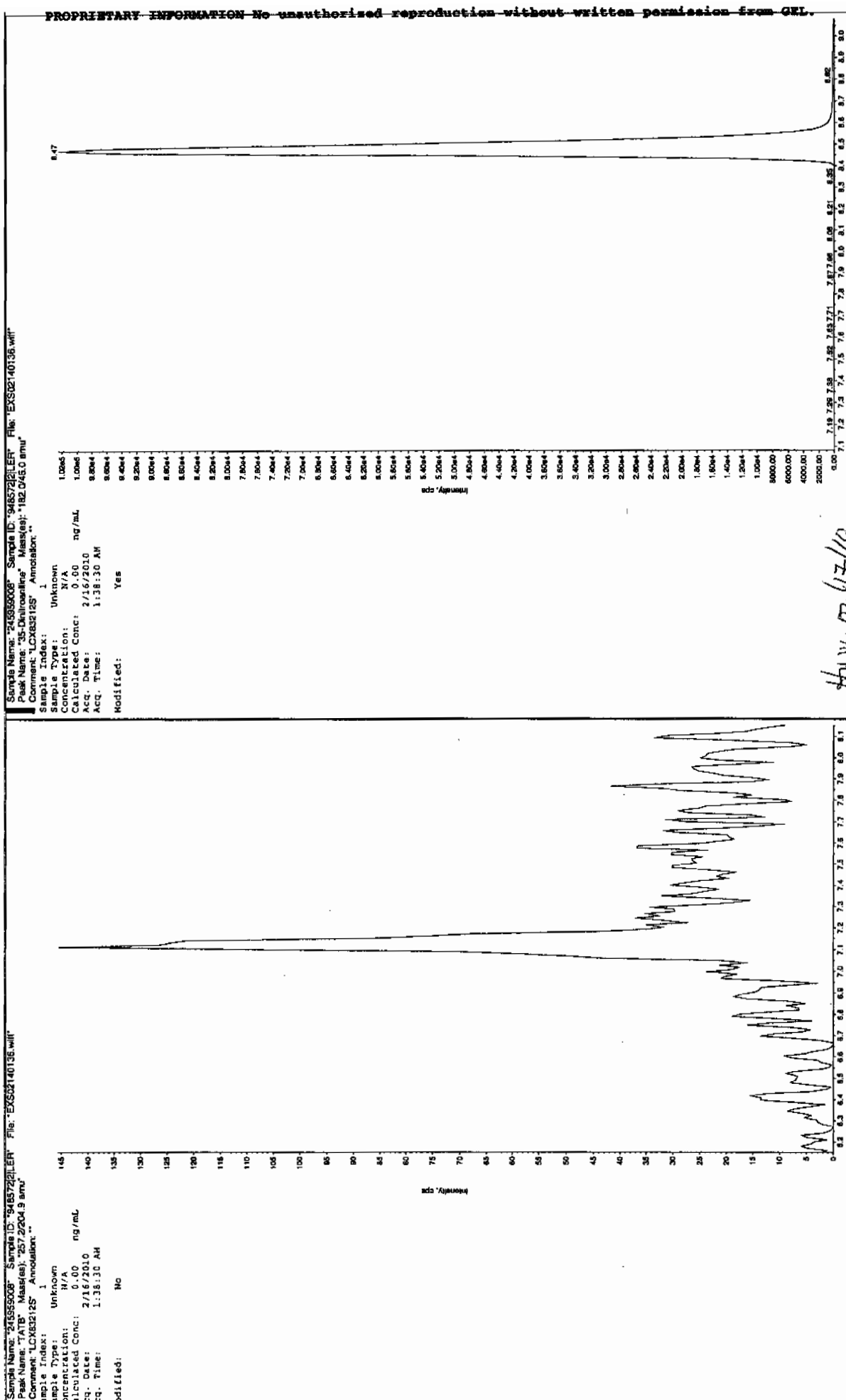
Units: ug/kg

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

*Concentration =

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

Jan 2/17/10



Jan 2/17/10

Sample Name: '245959008'	Sample ID: '948572 2 LER'	File: 'EX502140136.will'
Peak Name: '26-Diamino-4-nitrotoluene'	Mass (dal): '198.0465.0 amu'	

Peak Name: '26-Diamino-4-nitrotoluene'
 Sample Name: 243555008
 Sample ID: 5488/243555008
 Mass(es): *158.046.0 amu*

Comment: "LCX83212S" Annotation: "

sample Index: 1

Sample Type: Unknown

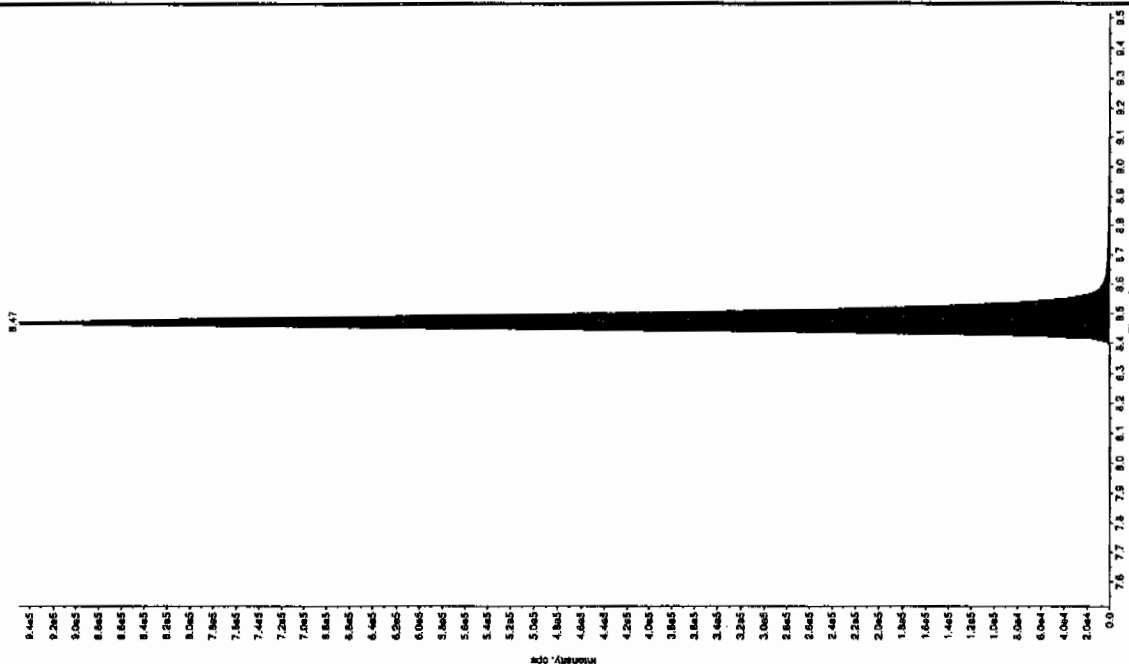
concentration: N/A

Calculated Conc:	ng/mL
0.00	0.00

ccq. Date: 2/16/2010

sq. Time: 1:38:30 AM

ON
-participo



Sample Name: "245959008" Sample ID: "9480"
Peak Name: "34-Dinitrotoluene" Mass(es): "182"

Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type:	Unknown
--------------	---------

concentration: N/A

levulated Conc:	283.	ng/mL
-----------------	------	-------

Q. Date: 2/16/2010

Q. Time: 1:38:30 AM

Added.

Modified: No

oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps

```

n. peak height: 1460.00 cps
n. peak width: 0.00 sec

```

Q. Peak width: 0.00 sec
Smoothing width: 3 point

Window: 15.0 sec

ected RT: 8.52 min

Relative RT:	No
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
30	1
31	1
32	1
33	1
34	1
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87	1
88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

100

U. Type:	Valley	ft
U. Type:	Valley	ft

Attention Time: 8.47 min

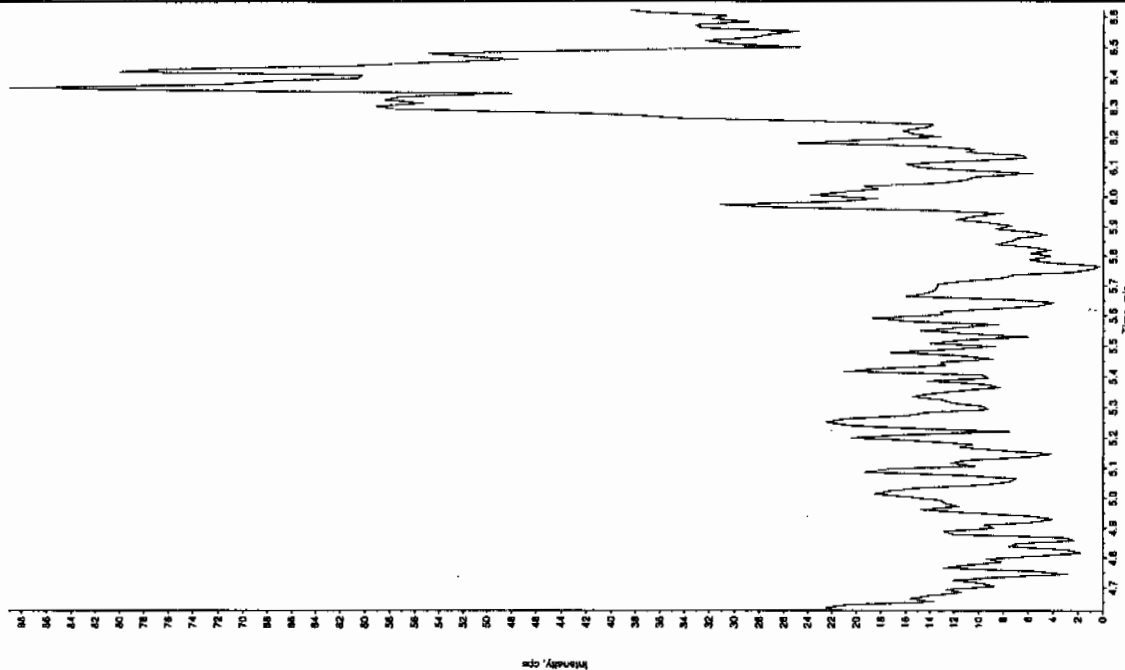
ed: 3.69e+006 count
light: 049535.889 count

Flight: 949535.889 cps
Start Time: 8.37 min

```
arc time: 8.37 min
end time: 8.83 min
```

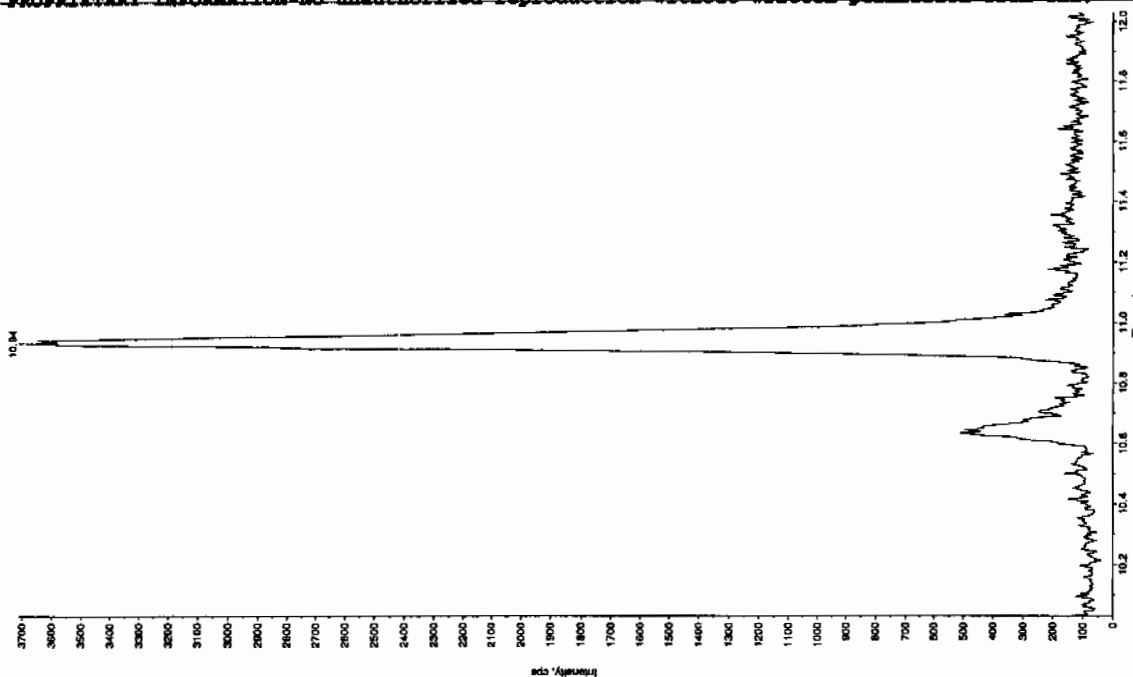
Sample Name: 245555038 Sample ID: 94857201ER File: EXS02140136.will
 Peak Name: 24-Diamino-5-microbians Mass (u): 185.0460 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 1:38:30 AM
 Acq. Time: 1:38:30 AM
 Modified: No



Sample Name: 245555038 Sample ID: 94857201ER File: EXS02140136.will
 Peak Name: 185.0460 amu Mass (u): 185.0460 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 1:38:30 AM
 Acq. Time: 1:38:30 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216098a

Date Analyzed: 18-FEB-10 17:02

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 19 08:50:21 2010, Page 35 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216098a

Date: 18-Feb-2010

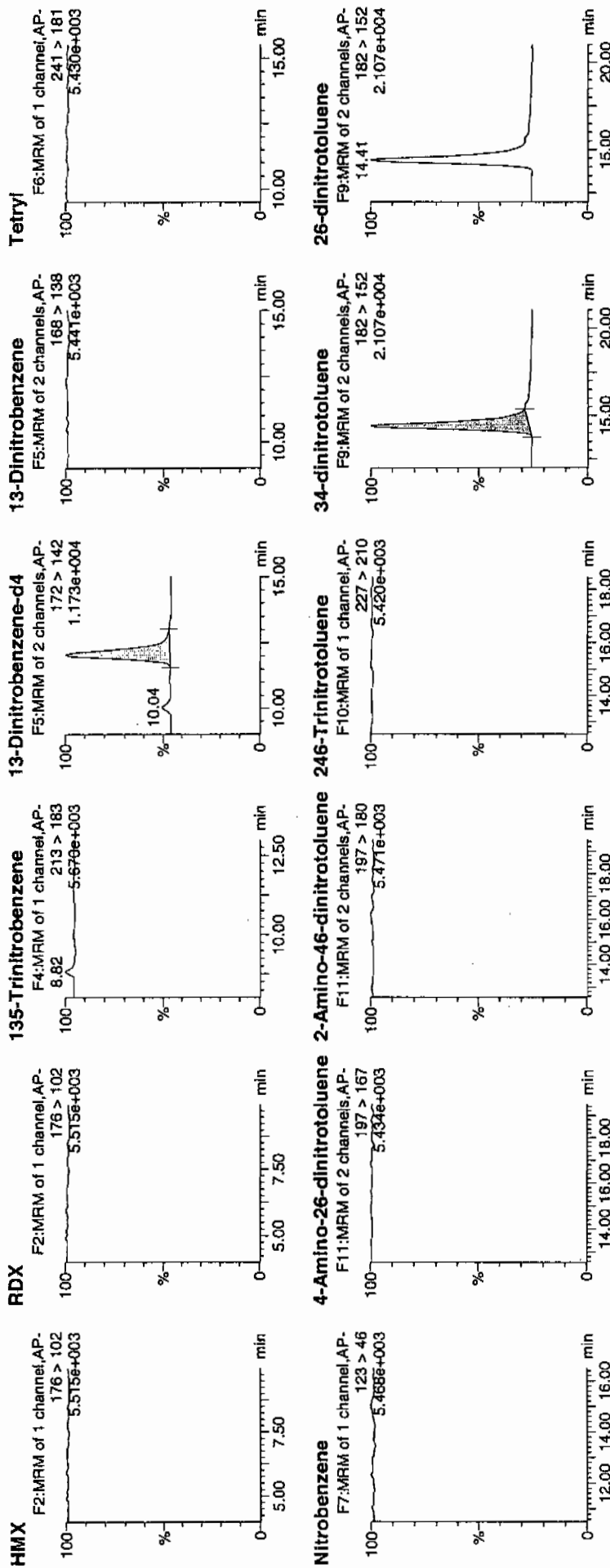
Time: 17:02:31

ID: 245959009

Vial: 2:7,C

WAVIC 940572 / 8000 / 2

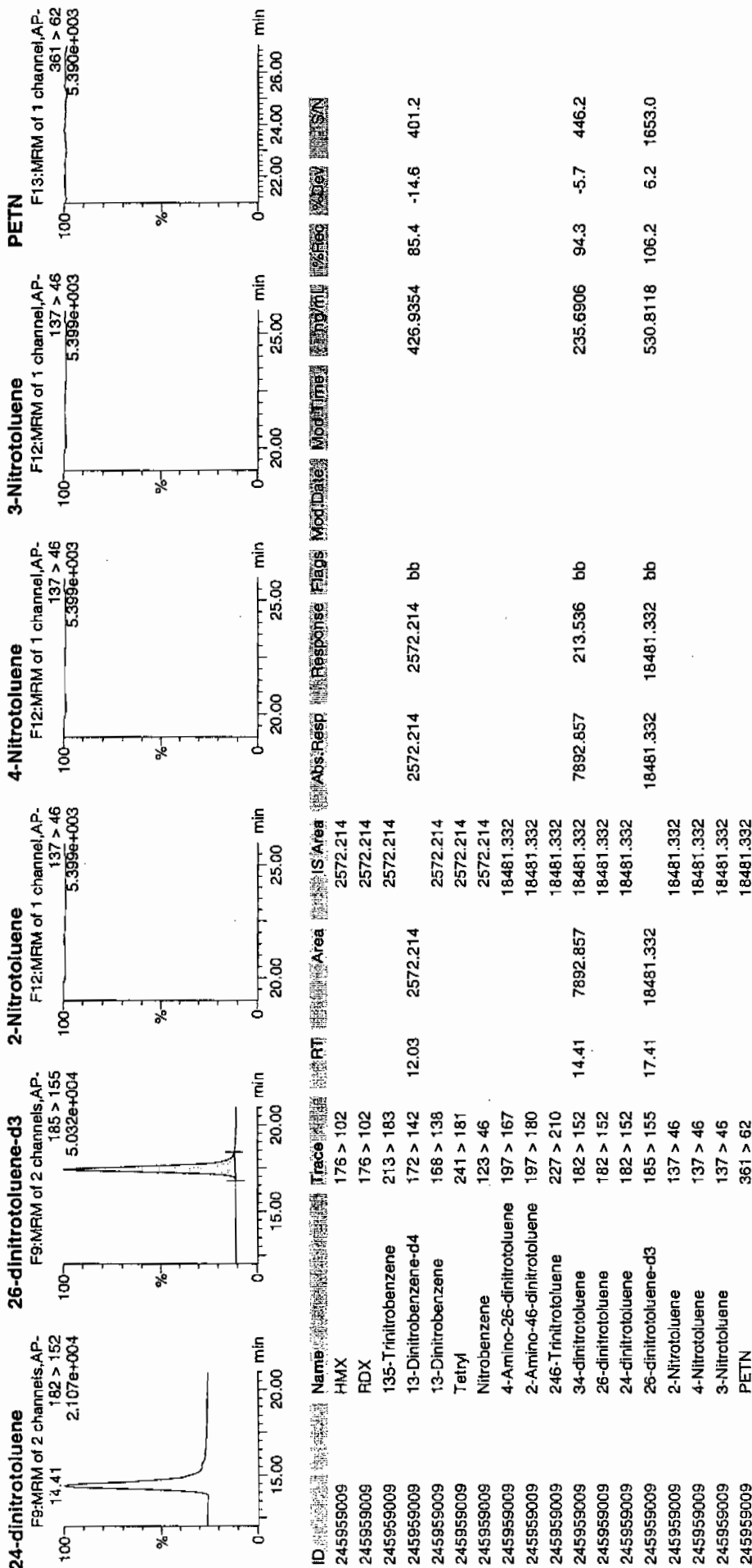
147P
2/19/10



Amc 02/19/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7316

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959009

Sample Amount 2

Moisture: 35.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140137.wiff

Date Analyzed: 16-FEB-10 01:54

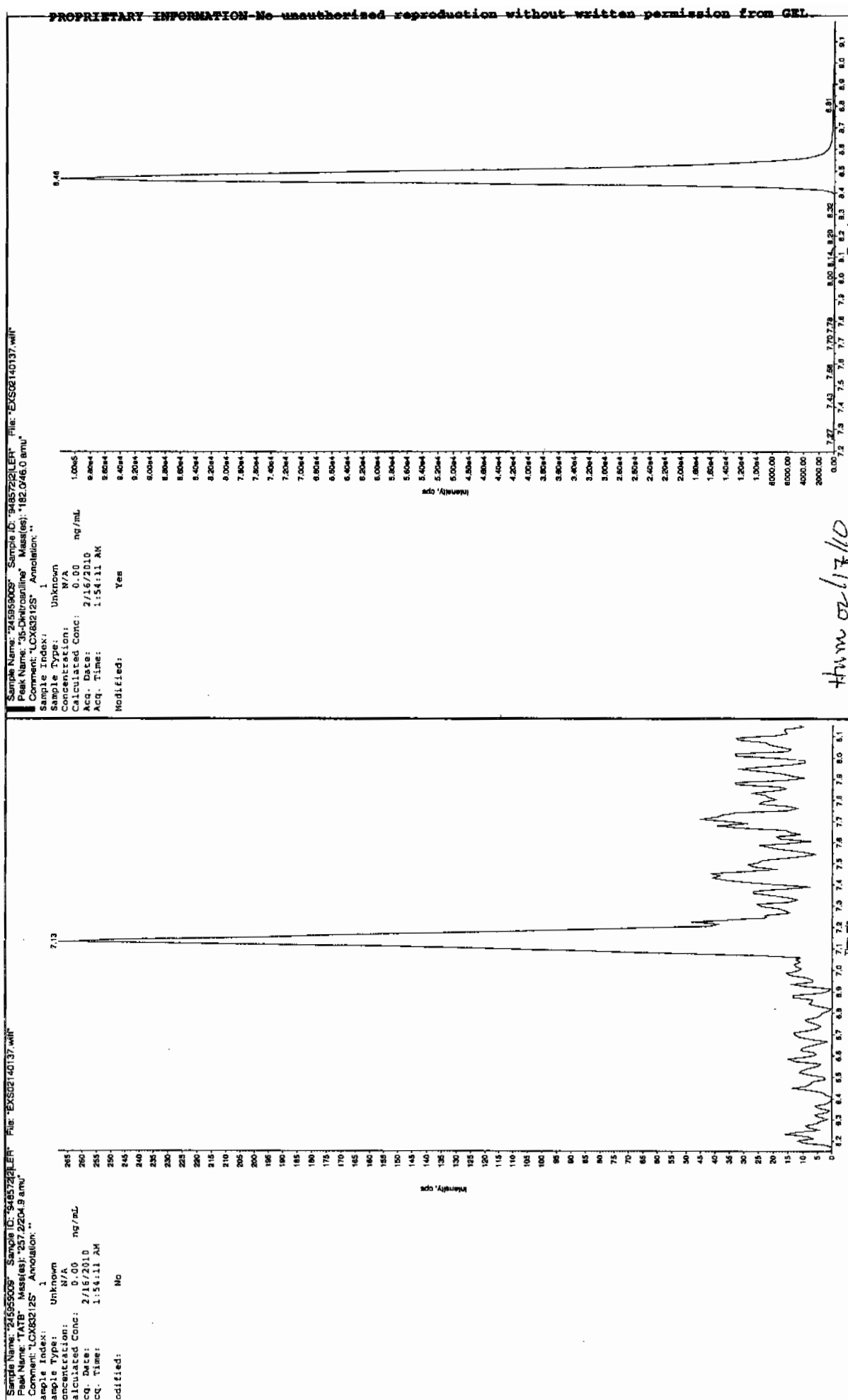
Units: ug/kg

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

*Concentration =

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

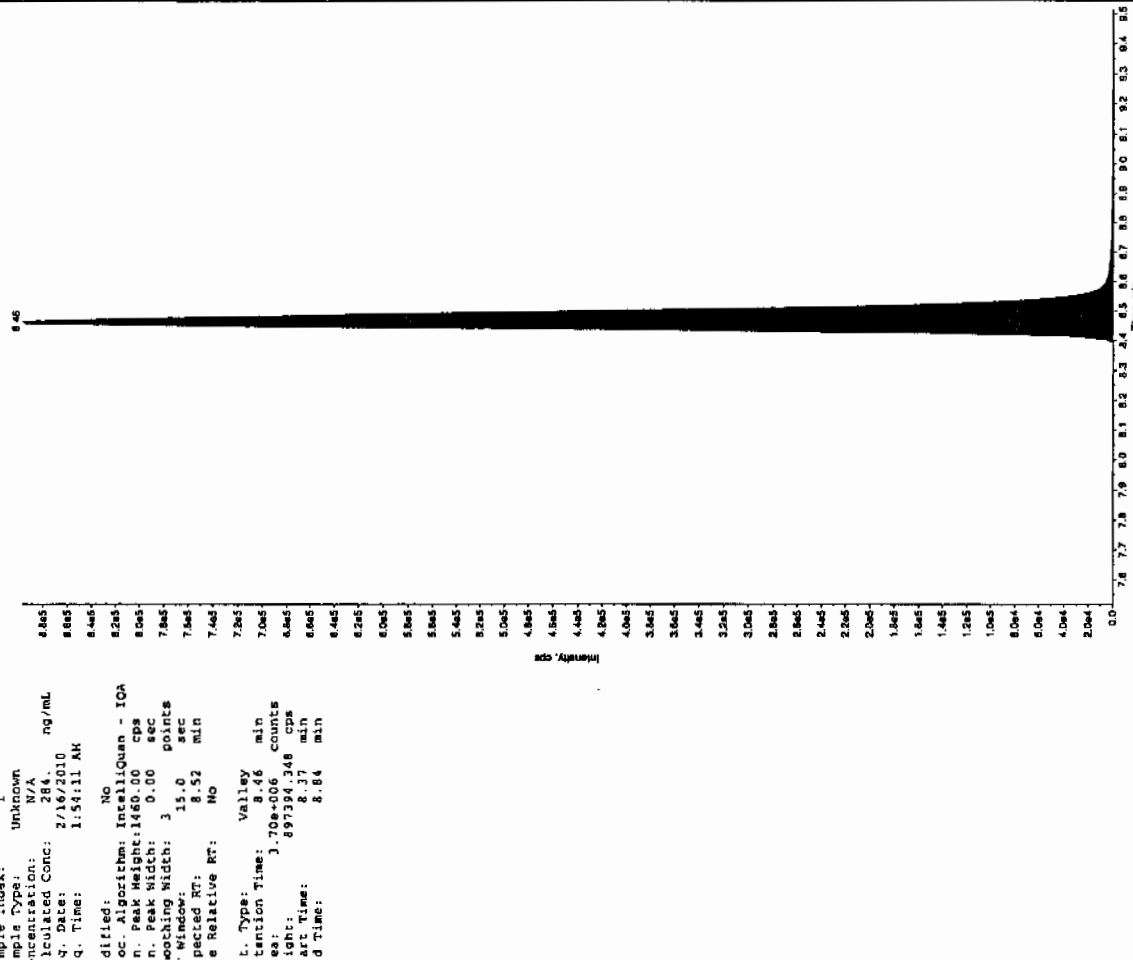
Dec 2/17/10



Hum 02/17/10

Sample Name: "24555009" Sample ID: "94857212" File: "EX502140137.wif"
 Peak Name: "25-Dinitro-4-nitrotoluene" Mass(es): "186.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:54:11 AM
 Acq. Time:
 Modified: No



Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/16/2010
 Acq. Date: 1:54:11 AM
 Acq. Time:
 Modified: No

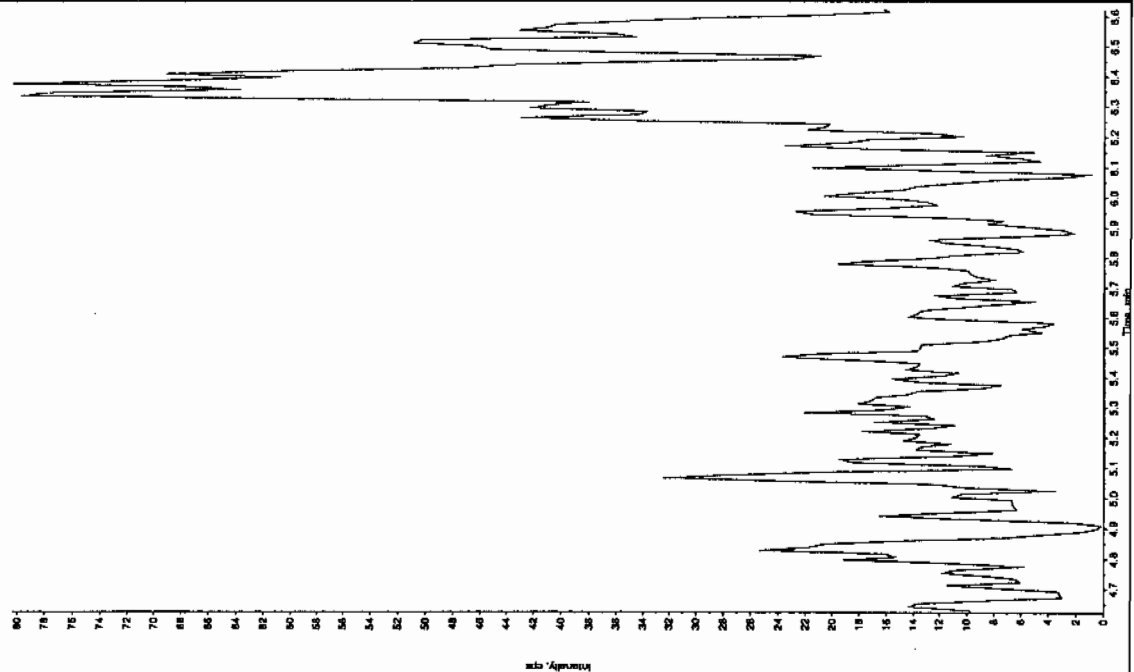
oc. Algorithm: IntelliQuan - IOA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 smoothing Width: 3 points
 Window: 15.0 sec
 detected RT: 8.52 min
 e Relative RT: No

L. Type: Valley
 Retention Time: 8.46 min
 Height: 3.70e+006 counts
 Width: 89732.148 cps
 Time: 8.17 min
 d Time: 8.84 min

SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

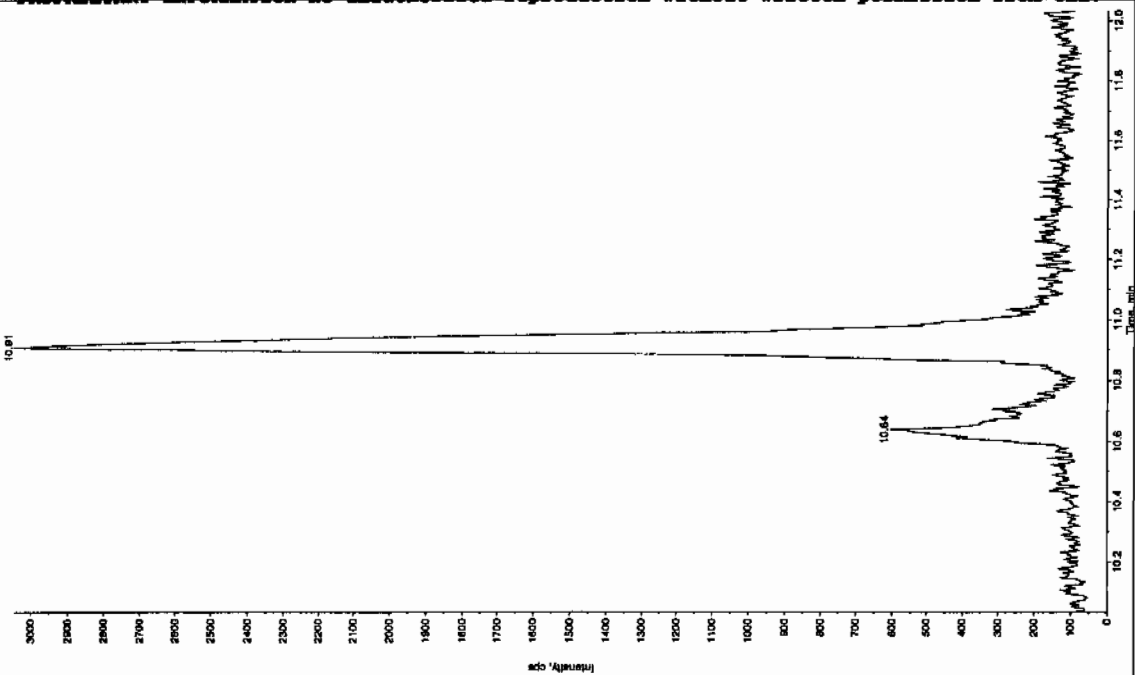
Sample Name: "245959009" Sample ID: "948572121" File: "EXS02140137.will"
Peak Name: "24-Diamino-6-nitrochloride" Mass(es): "196.048.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 2/16/2010
Acq. Time: 1:54:11 AM
Modified: No



Sample Name: "245959009" Sample ID: "948572121" File: "EXS02140137.will"
Peak Name: "196(c-creyl) phosphate" Mass(es): "368.191.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 2/16/2010
Acq. Time: 1:54:11 AM
Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216099a

Date Analyzed: 18-FEB-10 17:32

Units: ug/kg

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

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216099a

Date: 18-Feb-2010

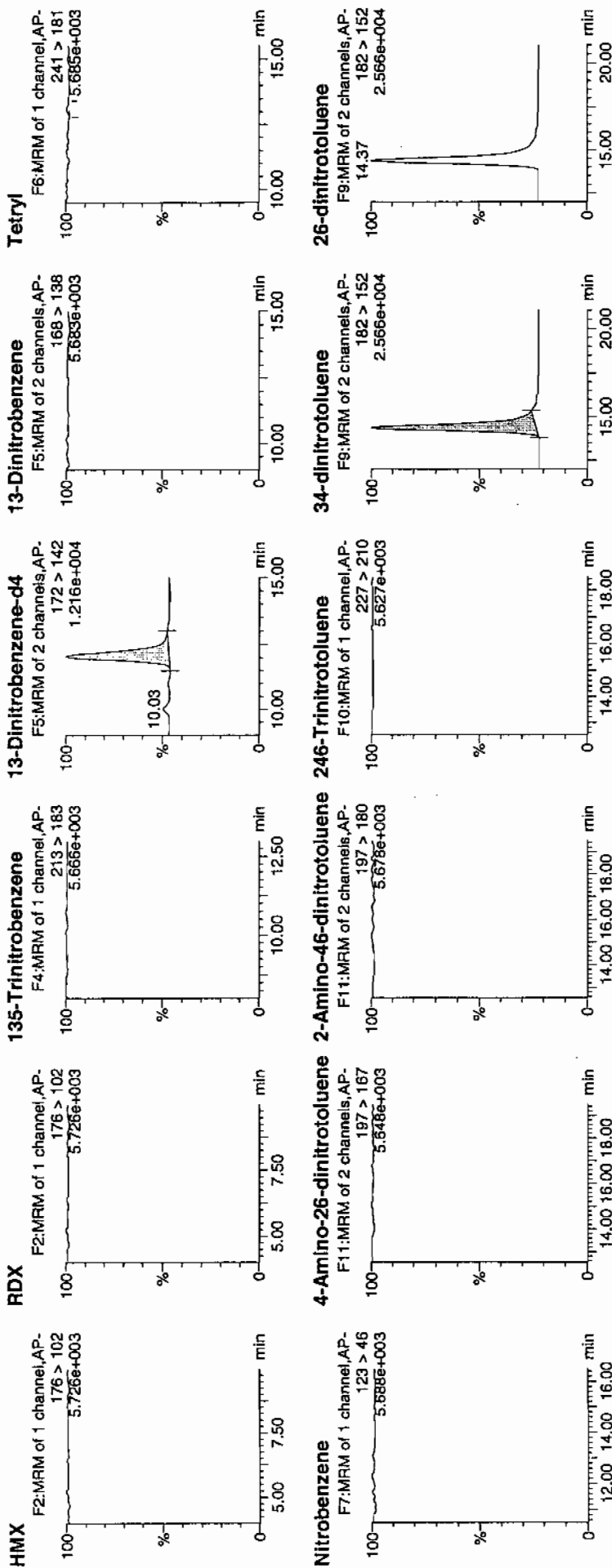
Time: 17:32:01

ID: 245959010

Vial: 2:7,D

4/10

WAV/943572/Sa22/21

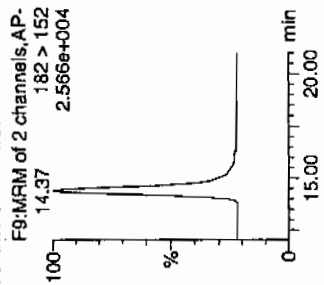


4/10

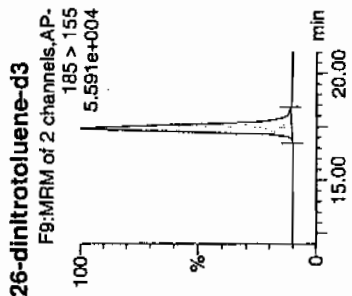
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

2,4-dinitrotoluene

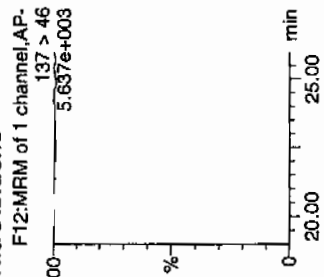


2,4-dinitrotoluene
F9:MRM of 2 channels,AP.



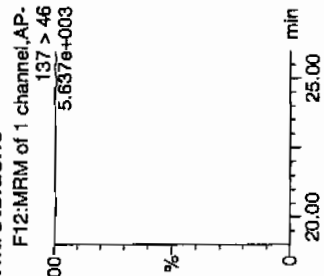
2,6-dinitrotoluene-d3
F9:MRM of 2 channels.AP.

2-Nitrotoluene



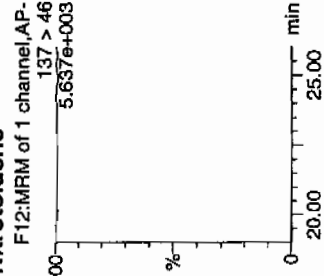
Nitrotoluene
F12:MRM of 1 channel.AP-

4-Nitrotoluene



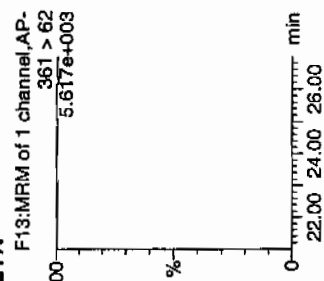
Nitrotoluene
F12:MRM of 1 channel/AP.

3-Nitrotoluene



Nitrotoluene
F12:MBM of 1 channel/AP.

PETN



PETN
E13:MBM of 1 channel AP-

Name	D	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod.Date	Mod.Time	Imp/mL	%Rec	%Dev	SYN
HMX	245959010	176 > 102			2597.738									
RDX	245959010	176 > 102			2597.738									
135-Trinitrobenzene	245959010	213 > 183			2597.738									
13-Dinitrobenzene-d4	245959010	172 > 142	12.06	2597.738		2597.738	2597.738	bb			431.1719	86.2	-13.8	138.3
13-Dinitrobenzene	245959010	168 > 138			2597.738									
Tetryl	245959010	241 > 181			2597.738			MM-	19-Feb-10	08:37:17				
Nitrobenzene	245959010	123 > 46			2597.738									
4-Amino-26-dinitrotoluene	245959010	197 > 167			19528.068									
2-Amino-46-dinitrotoluene	245959010	197 > 180			19528.068									
246-Trinitrotoluene	245959010	227 > 210			19528.068									
34-dinitrotoluene	245959010	182 > 152	14.37	9380.629	19528.068	9380.629	240.183	bb			265.1026	106.0	6.0	532.6
26-dinitrotoluene	245959010	182 > 152			19528.068									
24-dinitrotoluene	245959010	182 > 152			19528.068									
26-dinitrotoluene-d3	245959010	185 > 155	17.43	19528.068		19528.068	19528.068	bb			560.8756	112.2	12.2	2055.5
2-Nitrotoluene	245959010	137 > 46			19528.068									
4-Nitrotoluene	245959010	137 > 46			19528.068									
3-Nitrotoluene	245959010	137 > 46			19528.068									
PETN	245959010	361 > 62			19528.068									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7318

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959010

Sample Amount 2

Moisture: 14.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140138.wiff

Date Analyzed: 16-FEB-10 02:09

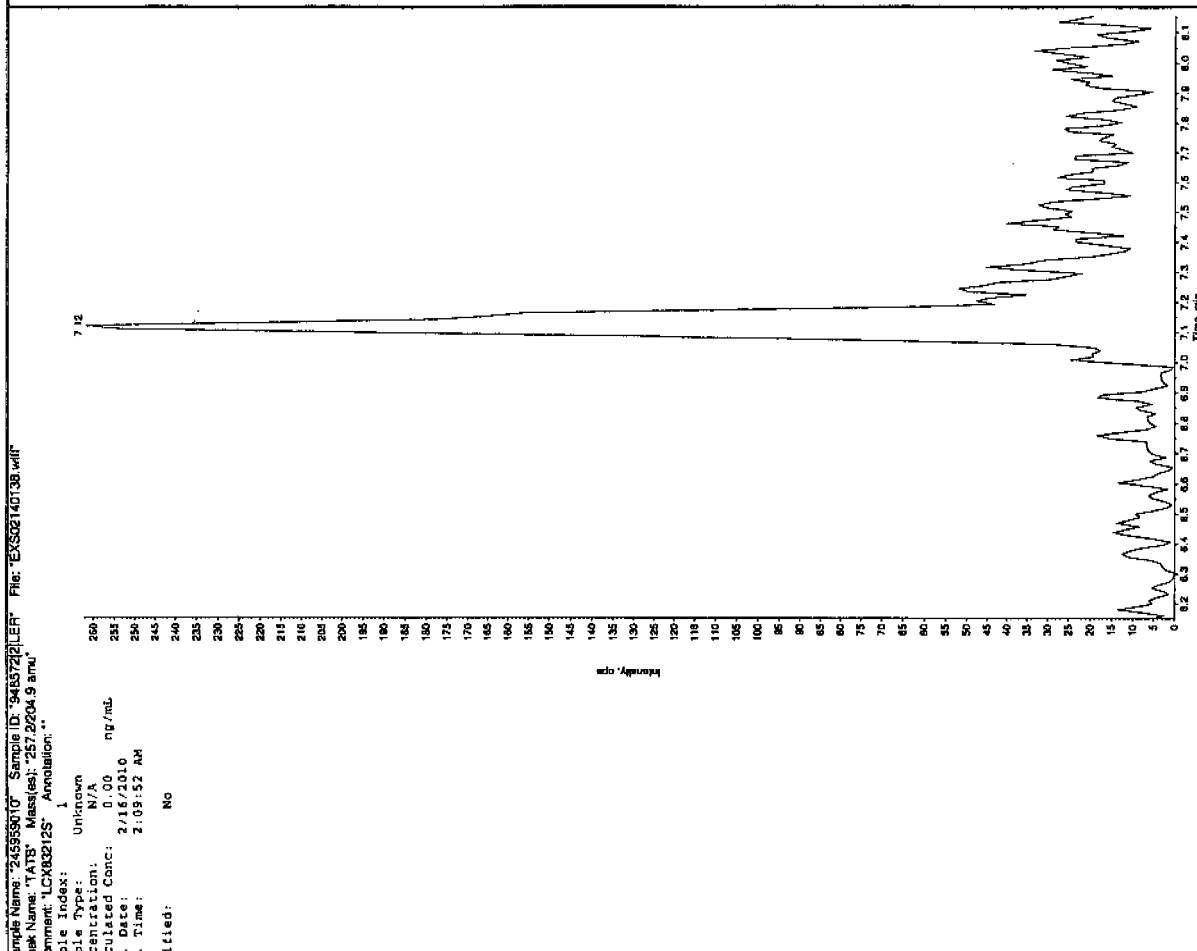
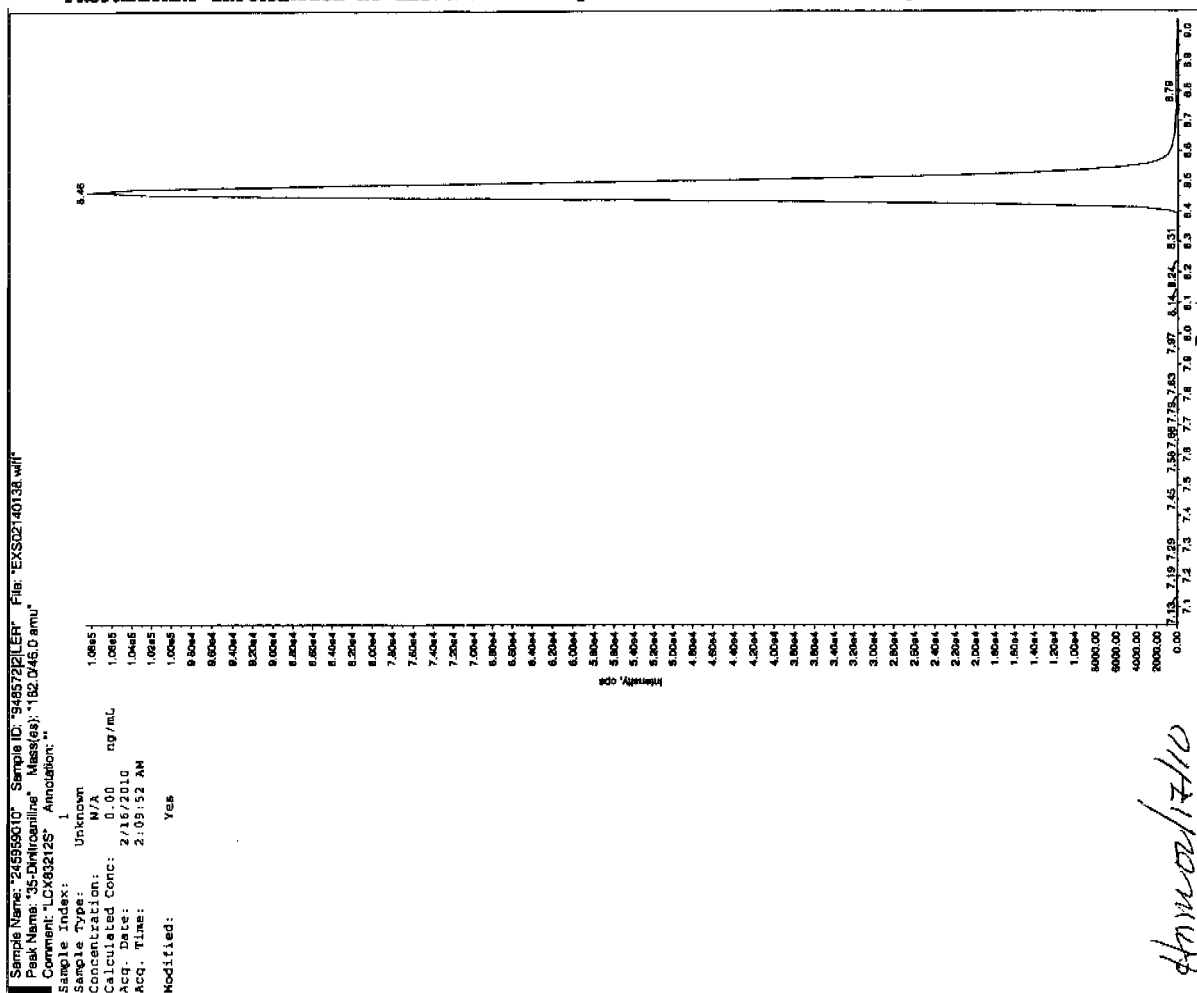
Units: ug/kg

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

*Concentration =

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

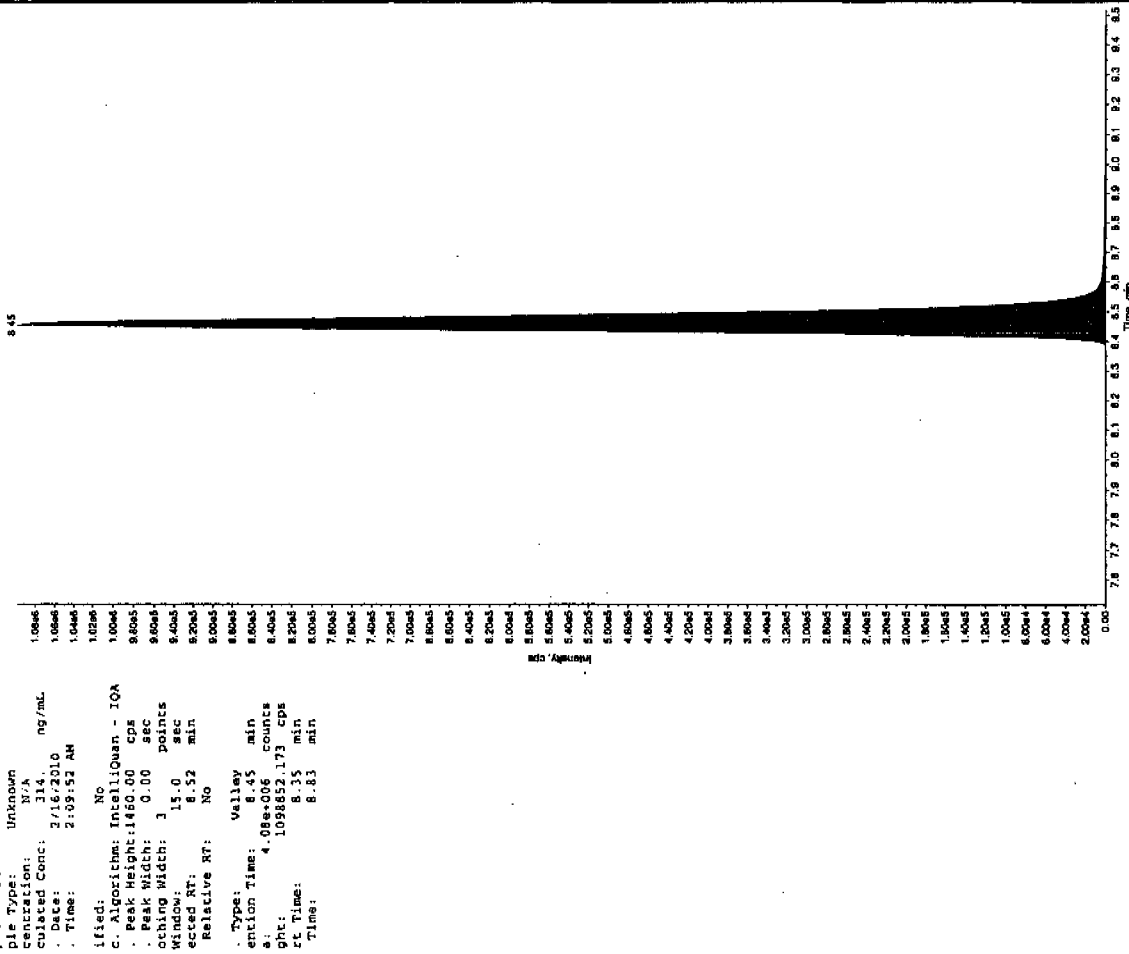
Jan 2/17/10



Jan 2/17/10

Sample Name: "245959010" Sample ID: "948572121" File: "EX502140138.will"
 Peak Name: "25-Diamino-4-nitrodiene" Mass(es): "166.046.0 emu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/18/2010
 Acq. Time: 2:09:52 AM
 Modified: No



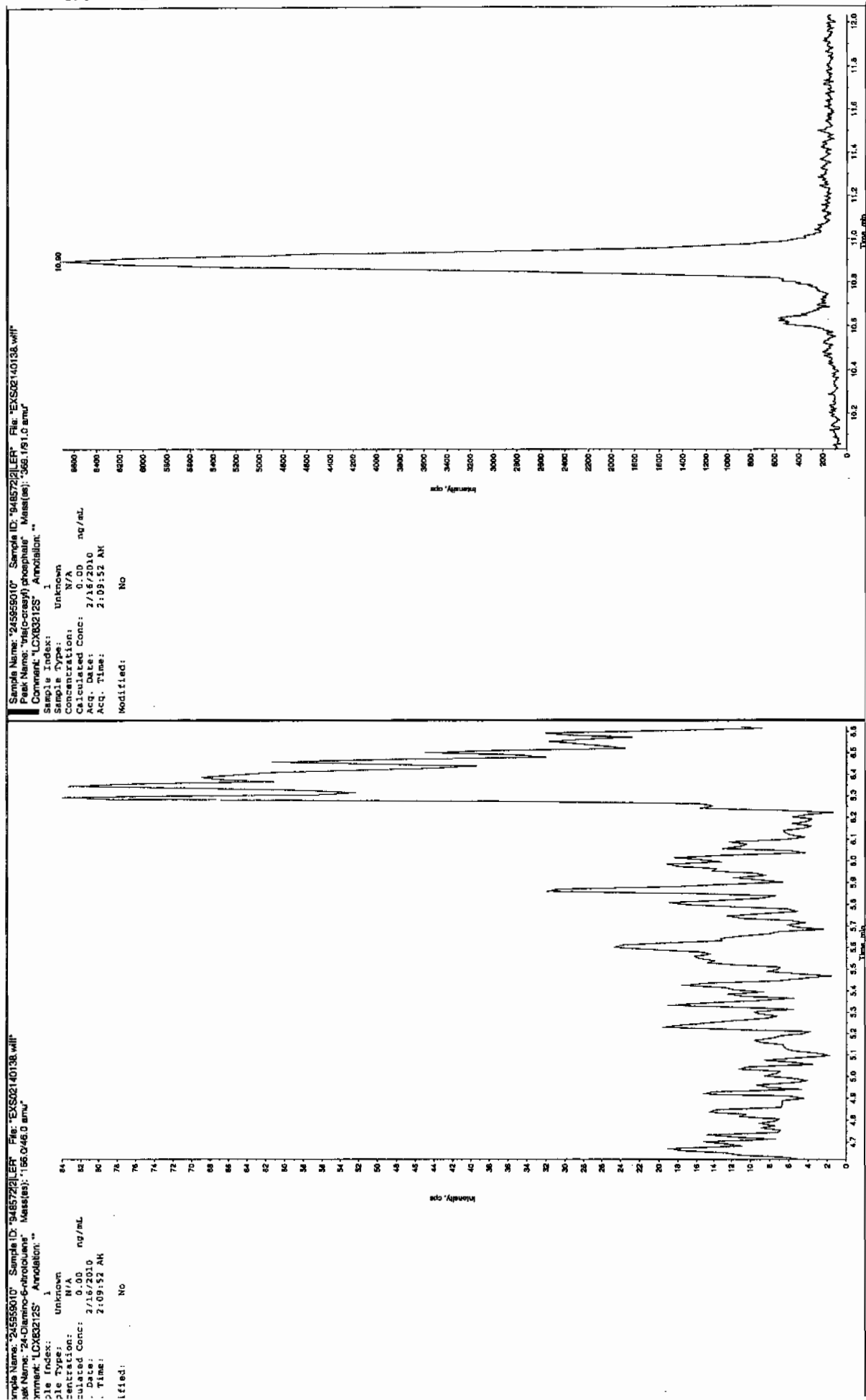
Sample Name: "245959010" Sample ID: "948572121" File: "EX502140138.will"
 Peak Name: "34-Dinitrodiene" Mass(es): "182.1151.9 emu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/18/2010
 Acq. Date: 2:09:52 AM
 Acq. Time: 2:09:52 AM
 Modified: No

c. Algorithm: IntelliQuan - IOA
 . Peak Height: 1450.00 cps
 . Peak Width: 0.00 sec
 . Peak Width: 3 points
 . Window: 15.0 sec
 . Window: 8.00 min
 . Window: 8.52 min
 . Relative RT: No

. Type: Valley
 . Retention Time: 8.45 min
 . Retention Time: 4.08e006 counts
 . Retention Time: 109882.173 cps
 . Retention Time: 8.35 min
 . Retention Time: 8.83 min

3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216100a

Date Analyzed: 18-FEB-10 18:01

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216100a

Date: 18-Feb-2010

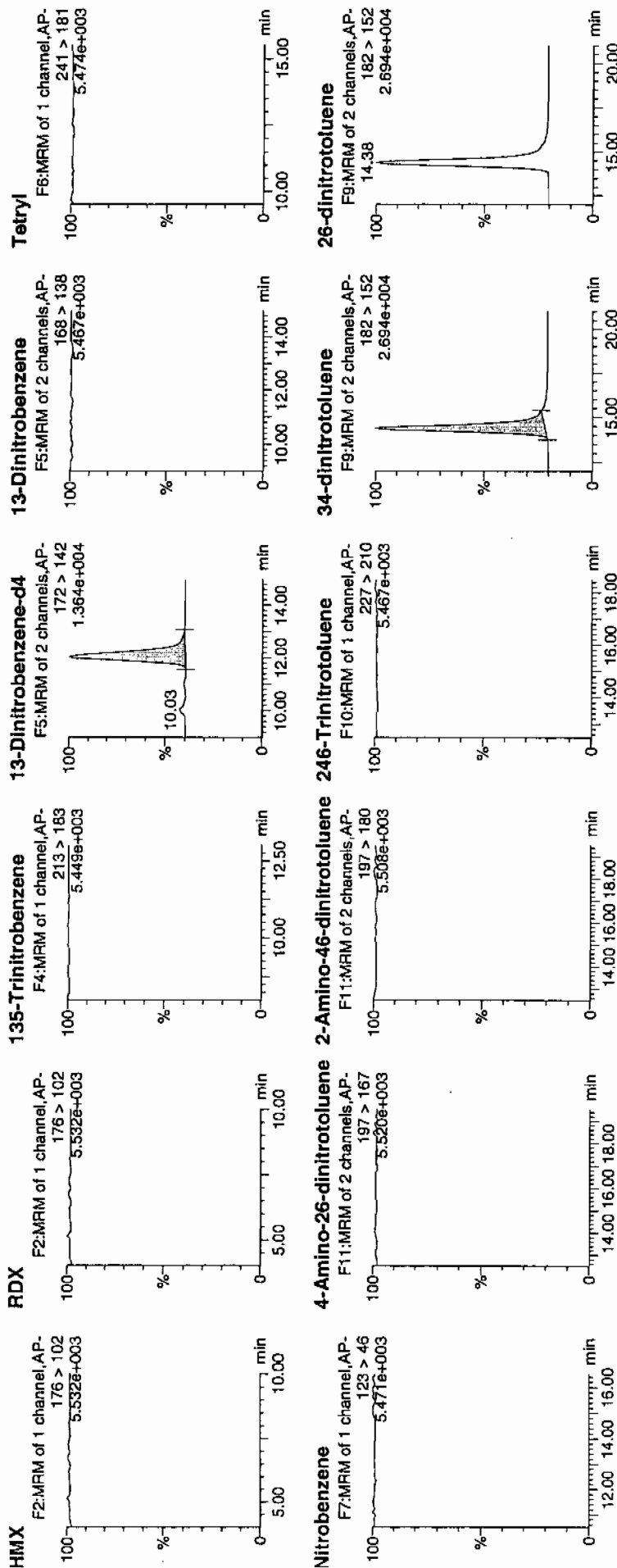
Time: 18:01:31

ID: 245959012

Vial: 2:7.E

uAP
2/19/10

WAL | *948572* | *Saxa* | *21*



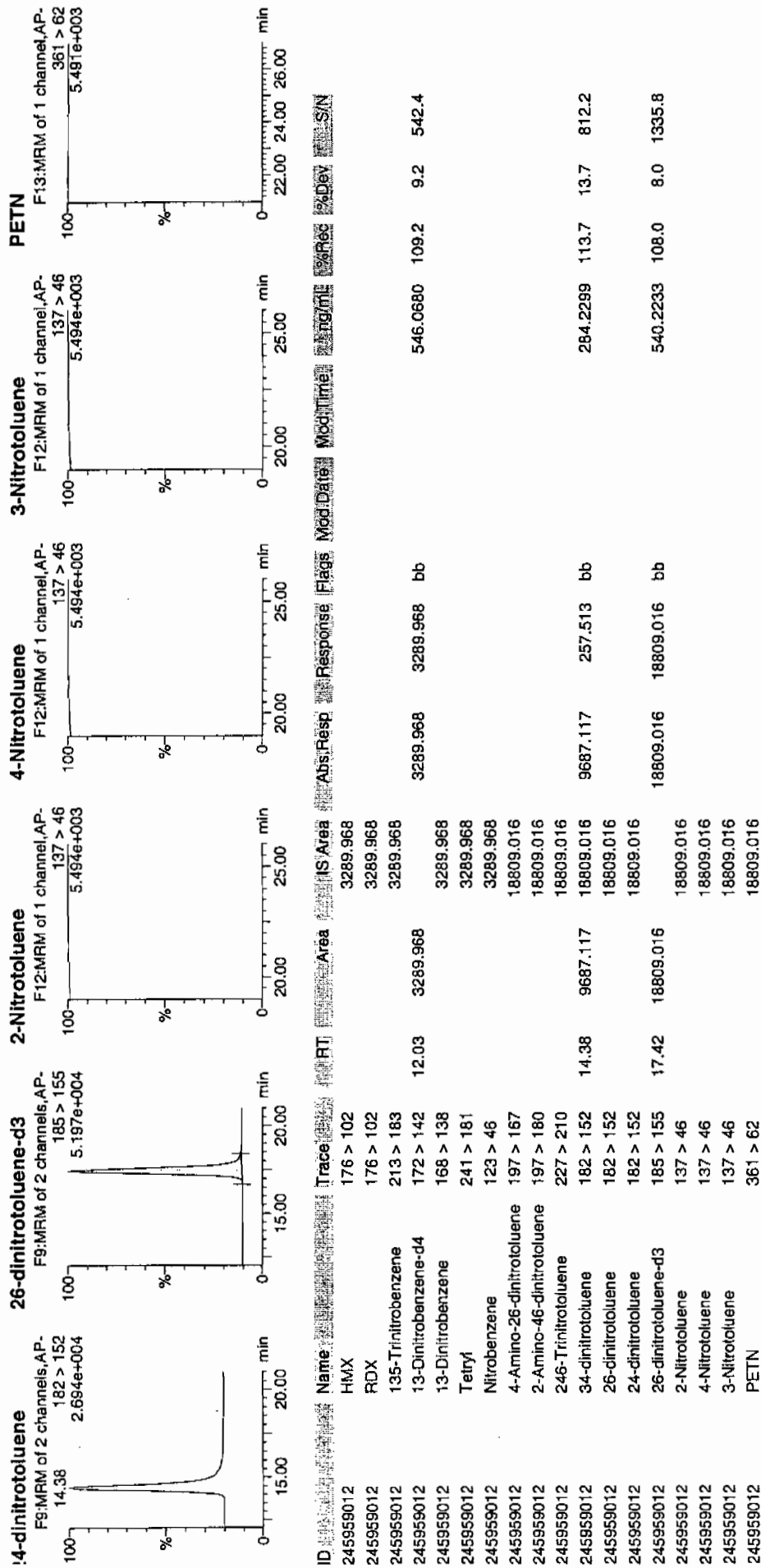
Amc
2/21/10

Quantity Sample Report

SEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 19 08:50:21 2010, Page 40 of 97

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7324

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 245959012

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140139.wiff

Date Analyzed: 16-FEB-10 02:25

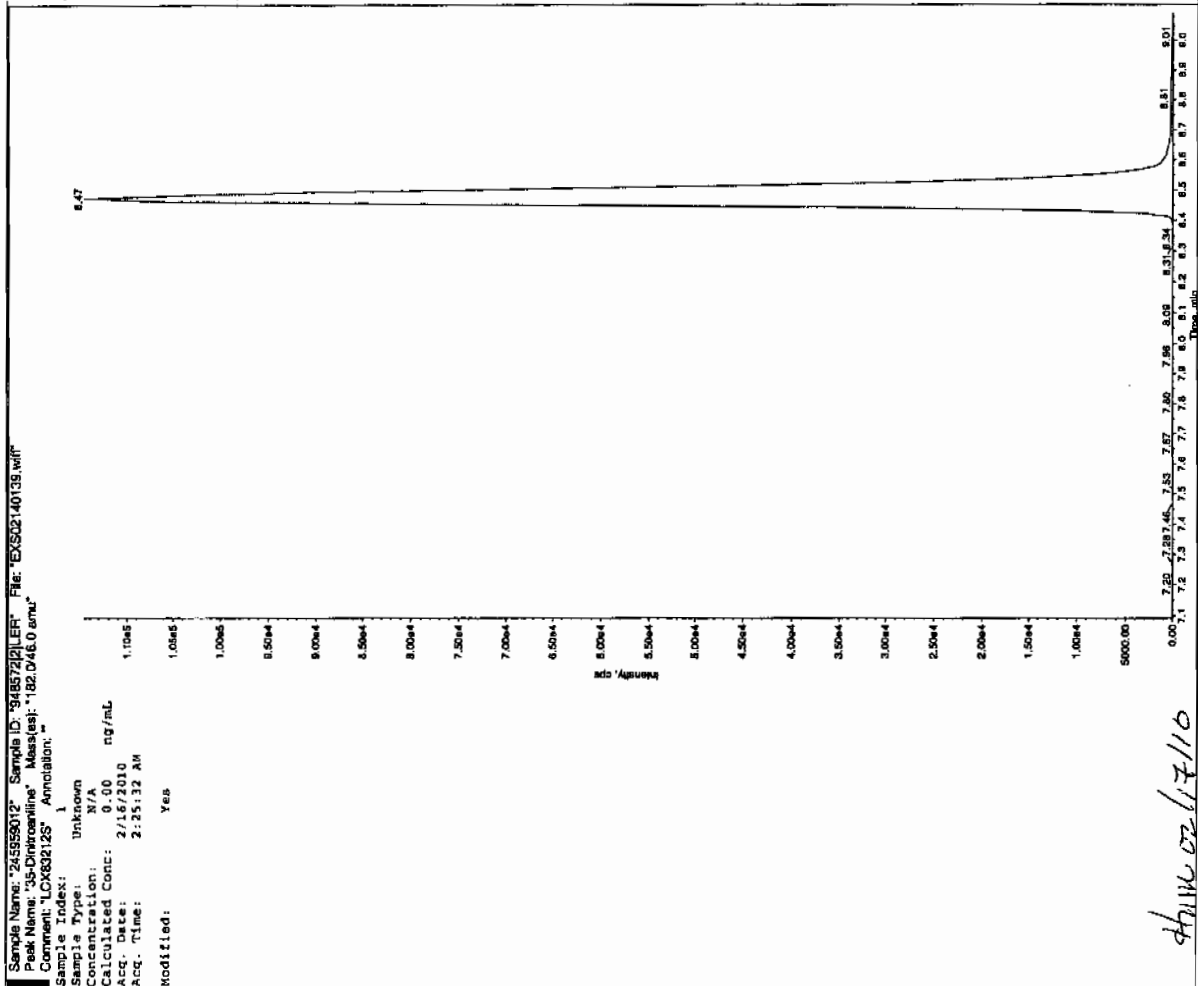
Units: ug/kg

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

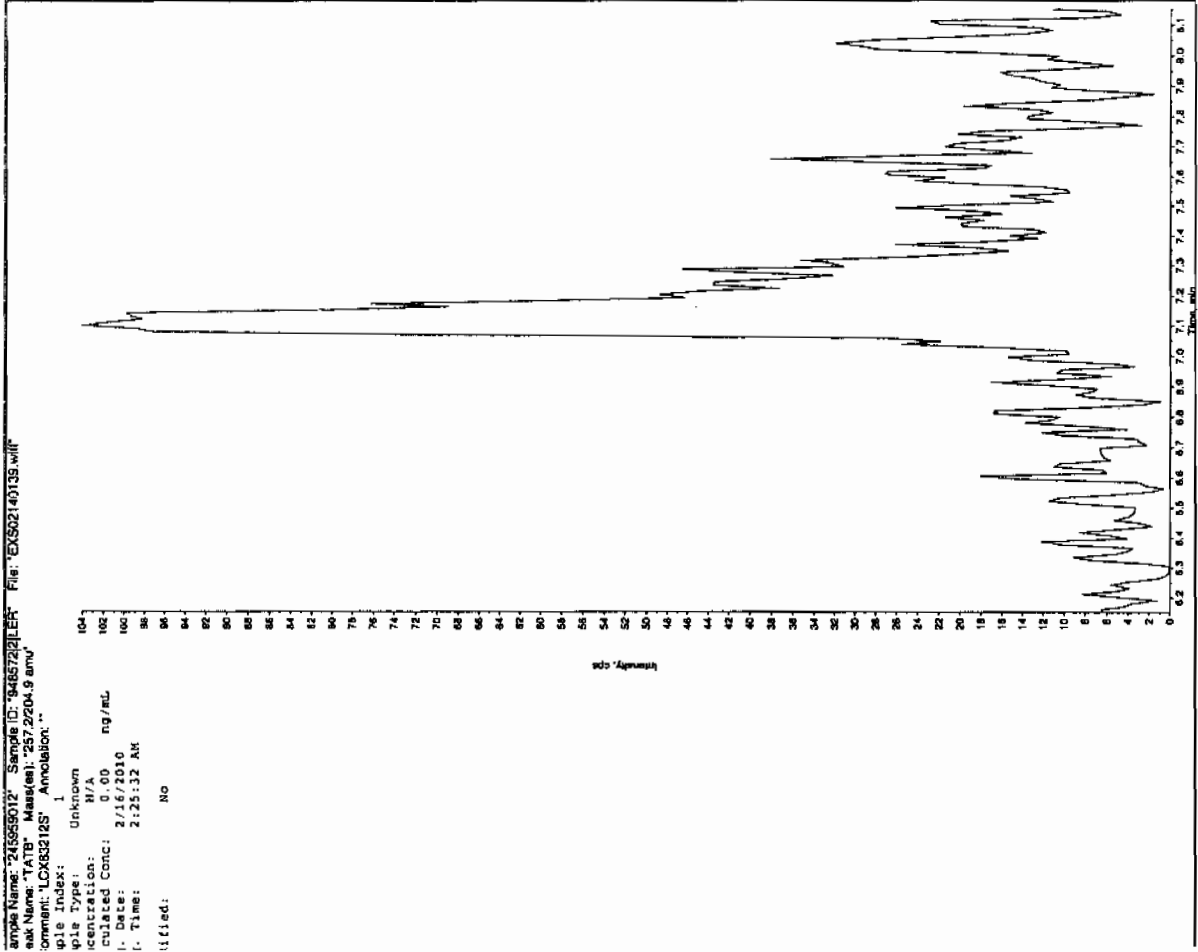
*Concentration =

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

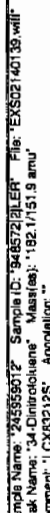
for 2/17/10



4/11/10 02:17:10

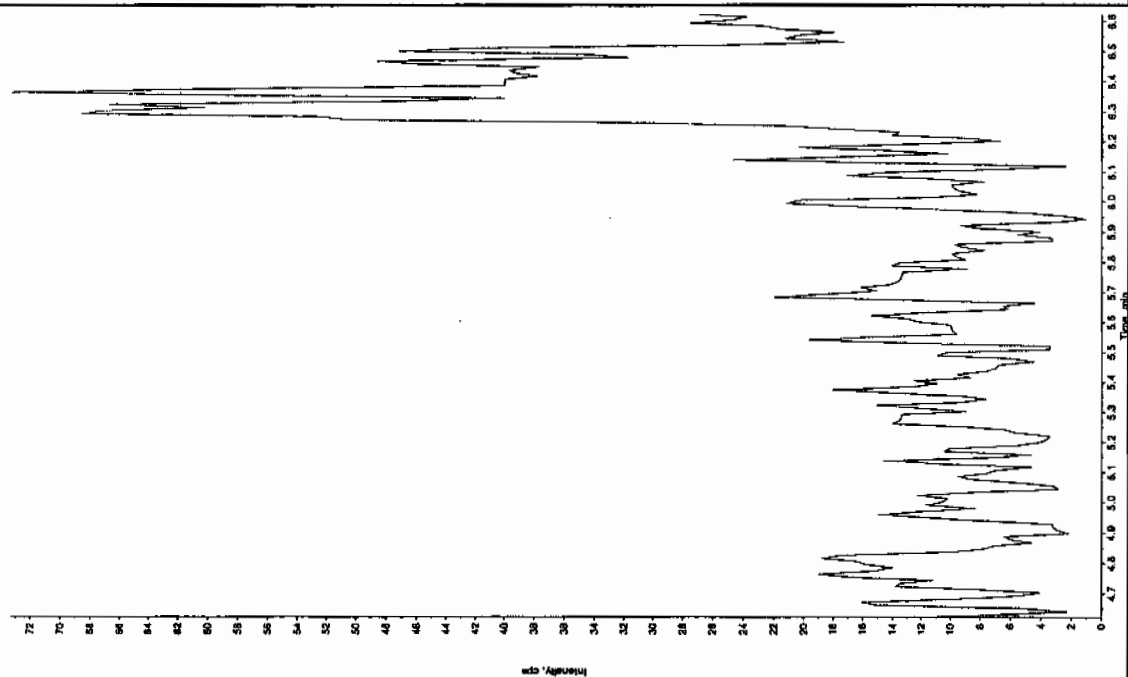


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



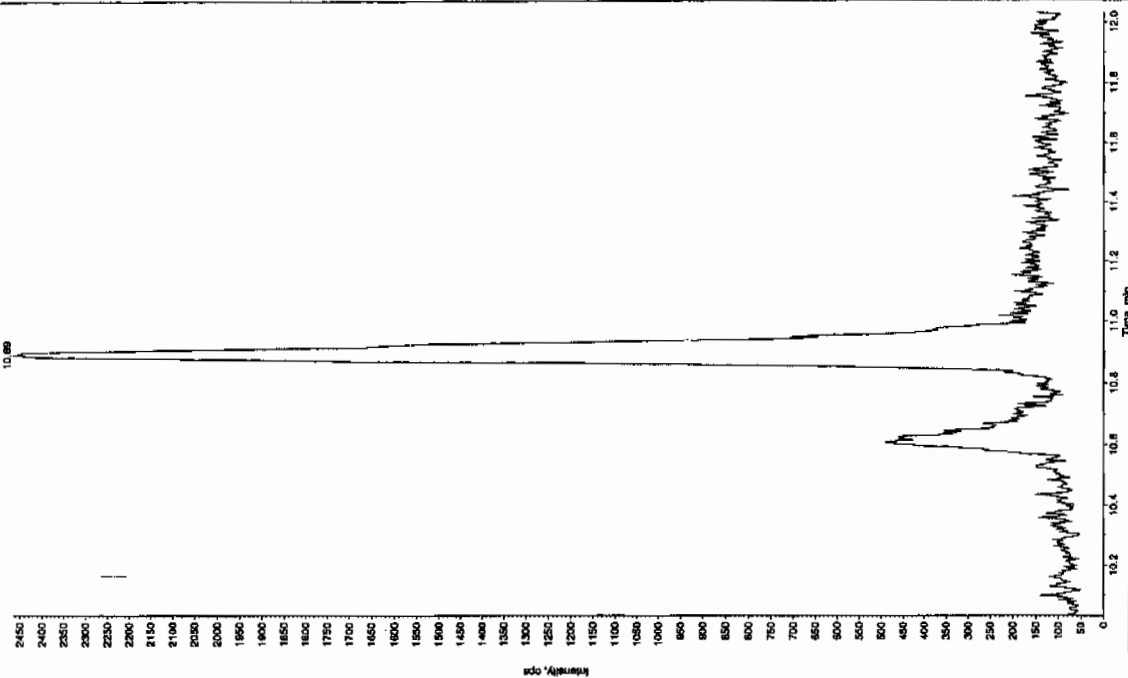
Sample Name: "245959012" Sample ID: "948572121ER" File: "EXS02140138.wif"
 Peak Name: "24-Diethoxy-B-nitrobenzene" Mass(es): "165.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/18/2010
 Acq. Time: 2:25:32 AM
 Modified: No



Sample Name: "245959012" Sample ID: "948572121ER" File: "EXS02140139.wif"
 Peak Name: "Visto(cresyl) phosphate" Mass(es): "389.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/18/2010
 Acq. Time: 2:25:32 AM
 Modified: No



STANDARDS DATA

SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1510

Lab Code: GEL

Run Date: 14-FEB-10.16-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Paraname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0216003a	EXP0216004a	EXP0216005a	EXP0216006a	EXP0216007a	EXP0216008a			
Data File:									
1,3,5-Trinitrobenzene	3.974	4.275	3.998	3.443	3.801	3.743	3.872	7.253	
1,3-Dinitrobenzene-d4	6.479	6.269	6.407	6.397	5.489	5.109	6.025	9.613	
2,4,6-Trinitrotoluene	.311	.331	.325	.38	.335	.329	0.335	7.003	
2,4-Dinitrotoluene	.22	.247	.233	.258	.258	.262	0.246	6.788	
2,6-Dinitrotoluene	.926	1.085	1.036	1.071	1.113	1.126	1.060	6.868	
2,6-Dinitrotoluene-d3	37.517	35.811	37.549	35.639	32.457	29.93	34.817	8.699	
2-Amino-4,6-dinitrotoluene	.4	.452	.421	.427	.458	.435	0.432	4.923	
3,4-Dinitrotoluene	.812	.944	.904	1.008	.893	.876	0.906	7.276	
4-Amino-2,6-dinitrotoluene	.35	.323	.285	.352	.298	.312	0.320	8.491	
HMX	3.59	3.564	3.729	3.903	4.47	3.894	3.858	8.619	
Nitrobenzene	.831	.943	.785	.911	.849	.831	0.858	6.765	
RDX	2.28	2.16	2.79	2.593	3.02	2.717	2.593	12.46	
Tetryl	1.117	1.386	1.084	1.014	.989	.952	1.090	14.415	
m-Dinitrobenzene	.991	1.315	1.169	1.17	1.25	1.236	1.189	9.364	
m-Nitrotoluene	.078	.09	.083	.1	.095	.091	0.090	8.99	
o-Nitrotoluene	.139	.156	.146	.153	.159	.159	0.152	5.121	
p-Nitrotoluene	.072	.072	.076	.082	.083	.076	0.077	6.293	

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: 10-1510
 Lab Code: GEL Run Date: 14-FEB-10.16-FEB-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:	EXP0216003a	EXP0216004a	EXP0216005a	EXP0216006a	EXP0216007a	EXP0216008a					
Parname:											
PETN	2110.32	4458.8	14532.6	25000.7	38622.3	42985.8	1.84	-.0004443	26.645	.9992	

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

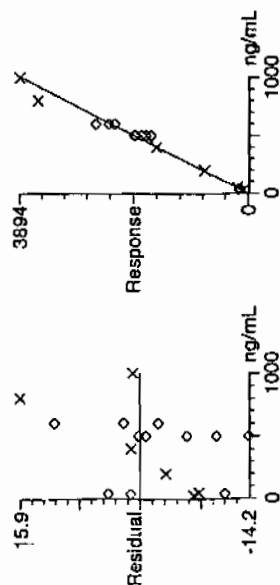
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

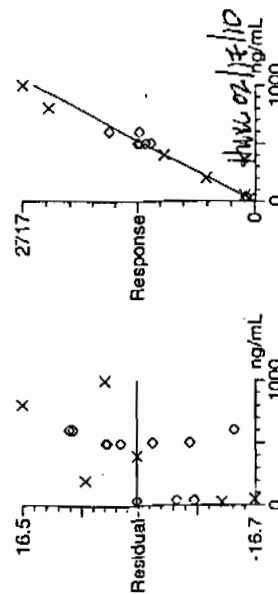
Method: C:\MASSLYNX\New_Exp.PRO\MethDB\021610expa.mdb, Time: Wed Feb 17 09:19:04 2010
Calibration: Untitled, Time: Wed Feb 17 10:00:06 2010

Page 818 of 1179

Compound name: HMX
Response Factor: 3.85837
RRF SD: 0.33256, % Relative SD: 8.61918
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: RDX
Response Factor: 2.59344
RRF SD: 0.323138, % Relative SD: 12.4598
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Justify Calibration Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

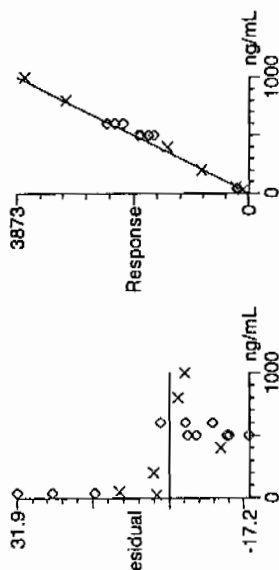
Compound name: 135-Trinitrobenzene

Response Factor: 3.87255

RF SD: 0.280856, % Relative SD: 7.2525

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF



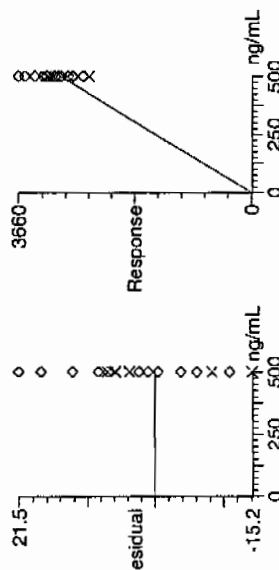
Compound name: 13-Dinitrobenzene-d4

Response Factor: 6.02483

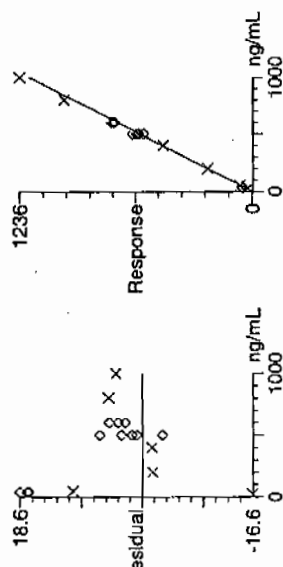
RF SD: 0.579171, % Relative SD: 9.61306

Response type: External Std, Area

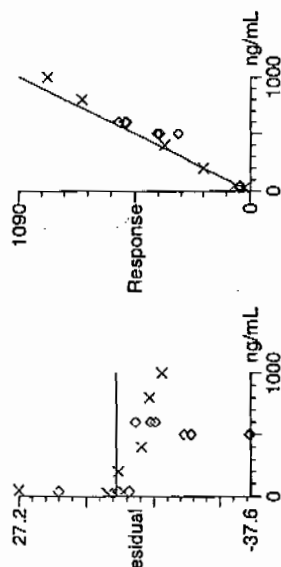
Curve type: RF



Compound name: 13-Dinitrobenzene
Response Factor: 1.18852
RF SD: 0.111292, % Relative SD: 9.36391
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



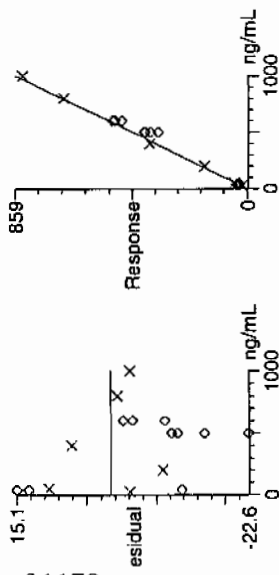
Compound name: Tetral
Response Factor: 1.09023
RF SD: 0.157158, % Relative SD: 14.4151
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



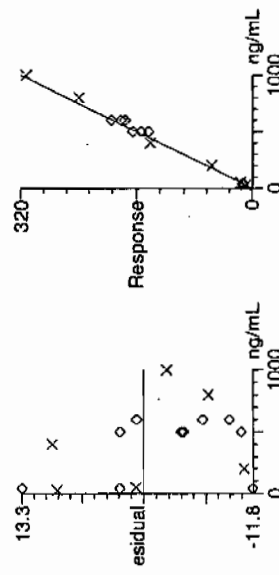
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: Nitrobenzene
Response Factor: 0.858509
RF SD: 0.0580797, % Relative SD: 6.76517
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



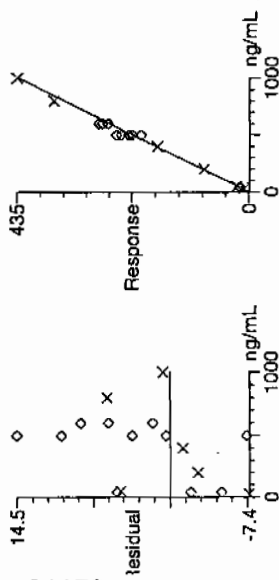
Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.320217
RF SD: 0.0271885, % Relative SD: 8.49063
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



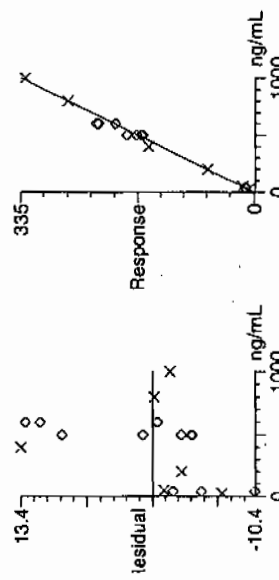
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

compound name: 2-Amino-46-dinitrotoluene
response factor: 0.432055
RF SD: 0.0212718, % Relative SD: 4.9234
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



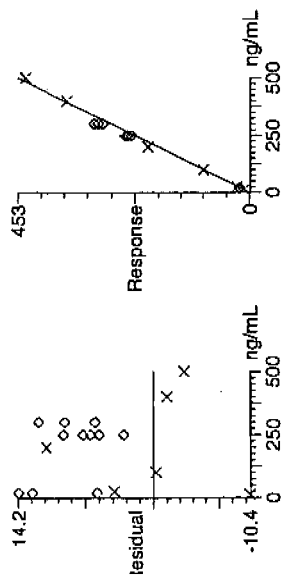
compound name: 246-Trinitrotoluene
response factor: 0.335255
RF SD: 0.0234791, % Relative SD: 7.00337
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



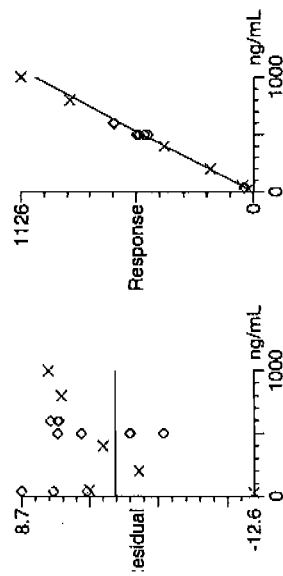
Quantify Calibration Report
 iEL Laboratories, LLC / Analyst : Michael A. Penny

atlaset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 34-dinitrotoluene
 Response Factor: 0.906001
 RF SD: 0.0659248, % Relative SD: 7.27646
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



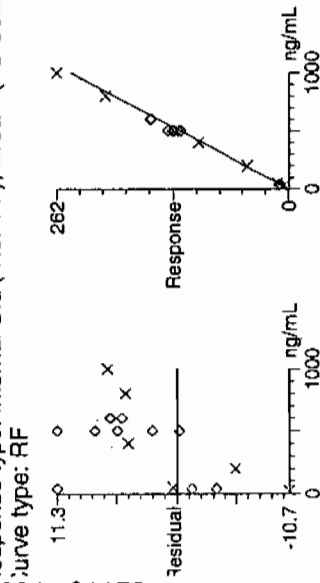
Compound name: 26-dinitrotoluene
 Response Factor: 1.05944
 RF SD: 0.0727574, % Relative SD: 6.86754
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



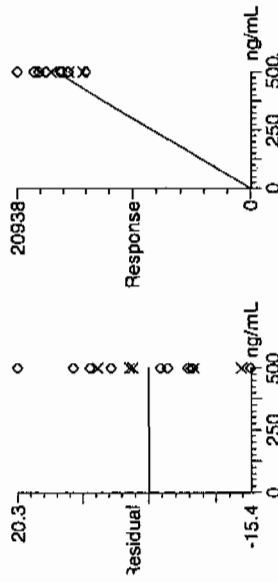
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp\PRO1021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.24651
IRF SD: 0.0167341, % Relative SD: 6.78841
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



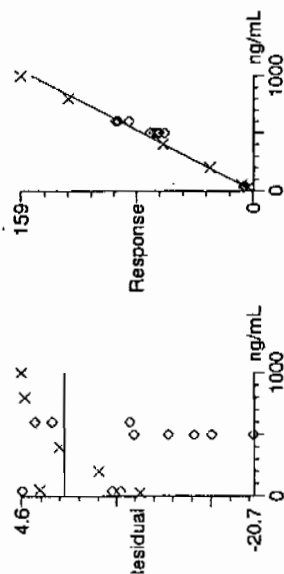
Compound name: 26-dinitrotoluene-d3
Response Factor: 34.8171
IRF SD: 3.02888, % Relative SD: 8.6994
Response type: External Std, Area
Curve type: RF



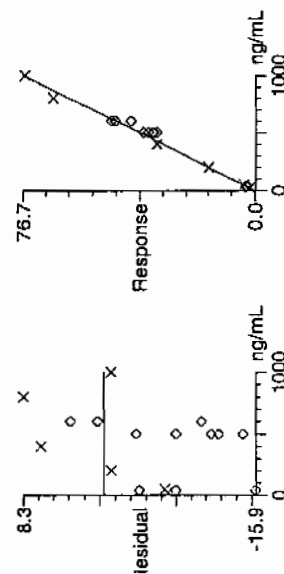
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

ompound name: 2-Nitrotoluene
esponse Factor: 0.152194
RF SD: 0.0077939, % Relative SD: 5.12103
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



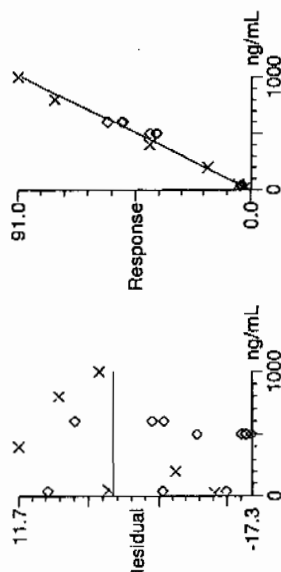
ompound name: 4-Nitrotoluene
esponse Factor: 0.0766512
RF SD: 0.00482394, % Relative SD: 6.29336
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



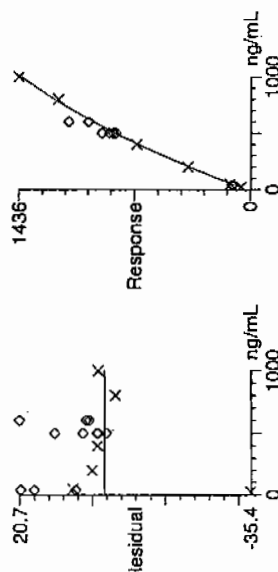
uantify Calibration Report EL Laboratories, LLC / Analyst : Michael A. Penny

alaset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

ompond name: 3-Nitrotoluene
esponse Factor: 0.0894891
RF SD: 0.0080453, % Relative SD: 8.99027
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



ompond name: PETN
oefficient of Determination: 0.999195
alibration curve: $-0.000444334 \cdot x^2 + 1.84022 \cdot x + 26.6447$
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0216010a

Analysis Date: 16-FEB-10 21:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	620.215	103	
1,3,5-Trinitrobenzene	600	544.138	91	
1,3-Dinitrobenzene-d4	500	505.15	101	
2,4,6-Trinitrotoluene	600	596.996	99	
2,4-Dinitrotoluene	600	637.037	106	
2,6-Dinitrotoluene	600	631.497	105	
2,6-Dinitrotoluene-d3	500	470.813	94	
2-Amino-4,6-dinitrotoluene	600	609.733	102	
3,4-Dinitrotoluene	300	318.405	106	
4-Amino-2,6-dinitrotoluene	600	544.592	91	
HMX	600	667.211	111	
Nitrobenzene	600	546.753	91	
PETN	600	622.003	104	
RDX	600	517.279	86	
Tetryl	600	535.085	89	
m-Dinitrobenzene	600	615.667	103	
m-Nitrotoluene	600	571.306	95	
o-Nitrotoluene	600	619.132	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

Printed: Wed Feb 17 10:00:54 2010, Page 19 of 59

Quantify Sample Report
IEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Filename: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216010a

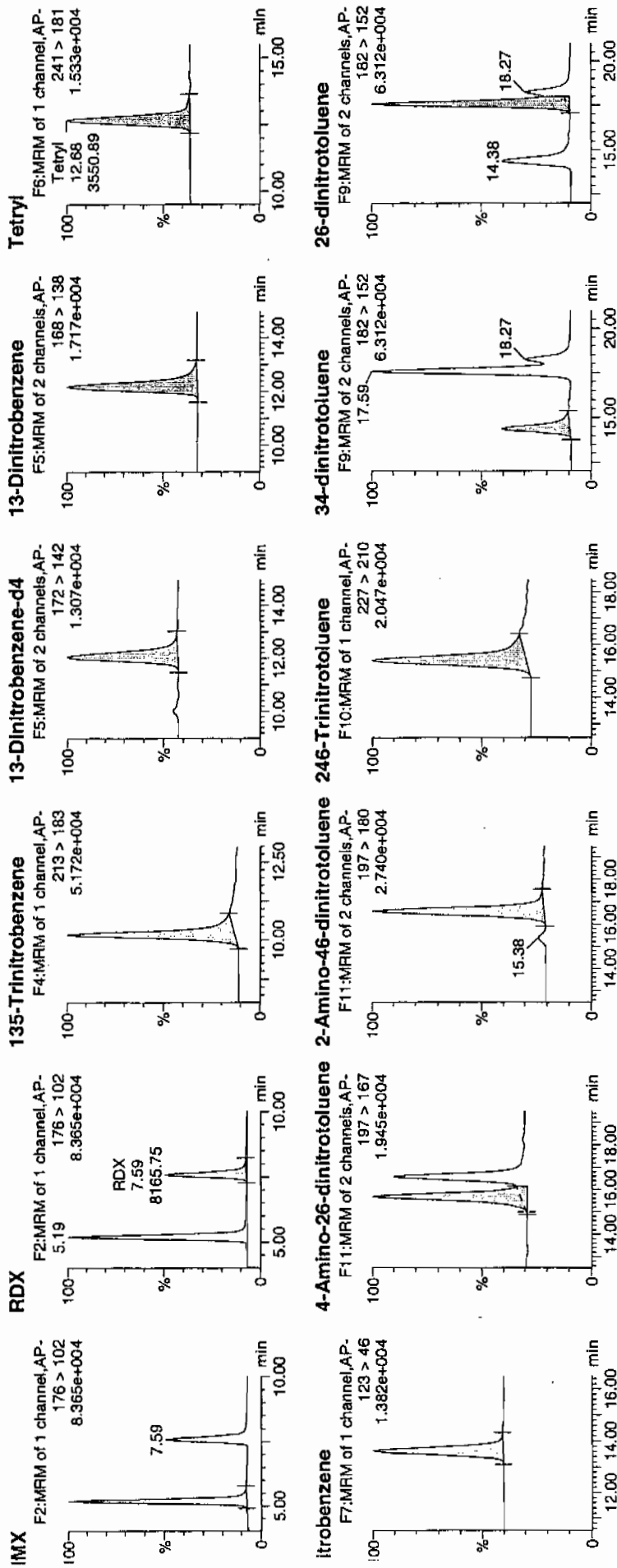
Date: 16-Feb-2010

Time: 21:34:44

Job: WXX100216-07ICV

Ratio: 1:1,B

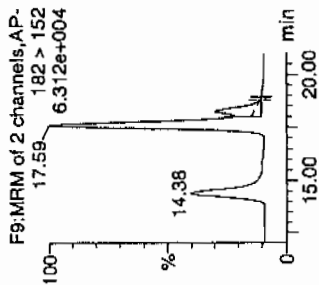
WXX
2/17/10



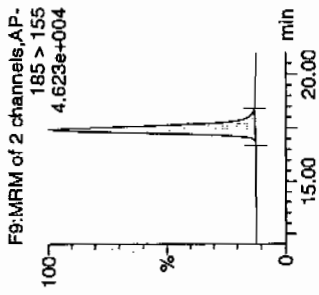
Handwritten signature/initials

Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

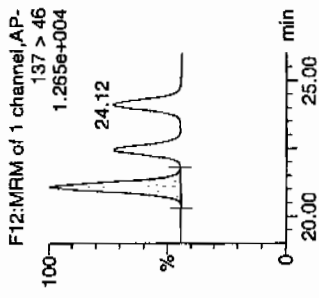
4-dinitrotoluene



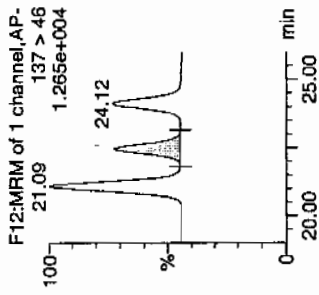
26-dinitrotoluene-d3



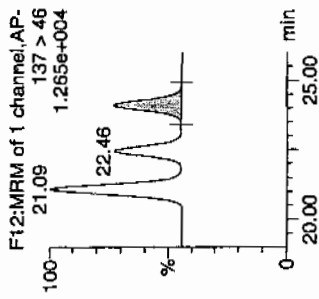
2-Nitrotoluene



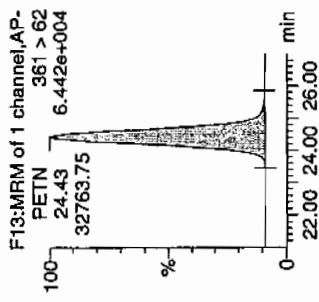
4-Nitrotoluene



3-Nitrotoluene



PETN



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Norm	% Rec	% Dev	ISN
VXX100216-07ICV	HMX	176 > 102	5.19	15669.772	3043.441	15669.772	2574.351	db			667.2113	111.2	11.2	1616.5
VXX100216-07ICV	RDX	176 > 102	7.59	8165.754	3043.441	8165.754	1341.533	bb			517.2788	86.2	-13.8	736.8
VXX100216-07ICV	135-Trinitrobenzene	213 > 183	10.16	12826.263	3043.441	12826.263	2107.198	bb			544.1376	90.7	-9.3	1038.4
VXX100216-07ICV	13-Dinitrobenzene-d4	172 > 142	12.07	3043.441	3043.441	3043.441	3043.441	bb			505.1495	101.0	1.0	83.9
VXX100216-07ICV	13-Dinitrobenzene	168 > 138	12.17	4453.971	3043.441	4453.971	731.733	bb			615.6672	102.6	2.6	397.6
VXX100216-07ICV	Tetryl	241 > 181	12.68	3550.885	3043.441	3550.885	583.367	bb			535.0850	89.2	-10.8	465.9
VXX100216-07ICV	Nitrobenzene	123 > 46	13.62	2857.135	3043.441	2857.135	469.392	bb			546.7525	91.1	-8.9	251.4
VXX100216-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.67	5717.246	16392.348	5717.246	174.388	MM	17-Feb-10	09:22:45	544.5918	90.8	-9.2	292.7
VXX100216-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.57	8636.743	16392.348	8636.743	263.438	bb			609.7334	101.6	1.6	597.0
VXX100216-07ICV	246-Trinitrotoluene	227 > 210	15.41	6561.721	16392.348	6561.721	200.146	bb			596.9963	99.5	-0.5	153.4
VXX100216-07ICV	34-dinitrotoluene	182 > 152	14.38	9457.581	16392.348	9457.581	288.475	bb			318.4052	106.1	6.1	368.9
VXX100216-07ICV	26-dinitrotoluene	182 > 152	17.59	21934.039	16392.348	21934.039	669.033	MM	17-Feb-10	09:25:41	631.4965	105.2	5.2	1072.7
VXX100216-07ICV	24-dinitrotoluene	182 > 152	18.27	5148.389	16392.348	5148.389	157.036	MM	17-Feb-10	09:54:19	637.0375	106.2	6.2	230.6
VXX100216-07ICV	26-dinitrotoluene-d3	185 > 155	17.42	16392.348	16392.348	16392.348	16392.348	bb			470.8130	94.2	-5.8	1428.4
VXX100216-07ICV	2-Nitrotoluene	137 > 46	21.09	3089.247	16392.348	3089.247	94.228	bb			619.1324	103.2	3.2	357.3
VXX100216-07ICV	4-Nitrotoluene	137 > 46	22.46	1558.593	16392.348	1558.593	47.540	bb			520.2153	103.4	3.4	179.8
VXX100216-07ICV	3-Nitrotoluene	137 > 46	24.12	1676.139	16392.348	1676.139	51.126	bb			571.3062	95.2	-4.8	182.7
VXX100216-07ICV	PETN	361 > 62	24.43	32763.752	16392.348	32763.752	999.361	bb			622.0025	103.7	3.7	5170.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/16/10
 Time of Injection: 2134
 Standard Number: WXX100216-07ICV
 Data File: EXP0216010a

HMX	111.2
RDX	86.2
135-TNB	90.7
13-DNB	102.6
Tetryl	89.2
Nitrobenzene	91.1
4A-26-DNT	90.8
2A-46-DNT	101.6
246-TNT	99.5
34-DNT(surr)	106.1
26-DNT	105.2
24-DNT	106.2
2-NT	103.2
4-NT	103.4
3-NT	95.2
PETN	103.7

Total 1585.9

Average 99.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*WXX
2/17/10*

WXX 02/17/10

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1510

Lab Code: GEL

Run Date: 14-FEB-10.16-FEB-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:	EXS02140003.wif	EXS02140004.wif	EXS02140005.wif	EXS02140006.wif	EXS02140007.wif	EXS02140008.wif	EXS02140009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	96700	195000	467000	994000	1380000	1900000	3740000	4600	1900	-.018	.9998	
2,6-Diamino-4-nitrotoluene	158000	309000	718000	1470000	2150000	2900000	6070000	29800	2750	.136	1	
3,4-Dinitrotoluene	338000	640000	1510000	3190000	4510000	6140000	11400000	-53500	13900	-2.42	.9993	
3,5-Dinitroaniline	340000	650000	1620000	3310000	4740000	6350000	11500000	-28100	6880	-.557	.9999	
TATB	71000	140000	338000	700000	1050000	1390000	2740000	-3590	1410	-.022	1	
tris(o-cresyl) phosphate	1250000	2440000	5720000	10800000	15500000	19900000	31700000	61600	23700	-3.92	1	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

021410ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.59e+003			
a1	1.41e+003			
a2	-0.022			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.81e+004			
a1	6.88e+003			
a2	-0.557			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.35e+004			
a1	1.39e+004			
a2	-2.42			
Correlation coefficient 0.9993				
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	2.98e+004			
a1	2.75e+003			
a2	0.136			
Correlation coefficient 1.0000				
Use Area				

Don 2/16/10

2/17/10

021410ICAL

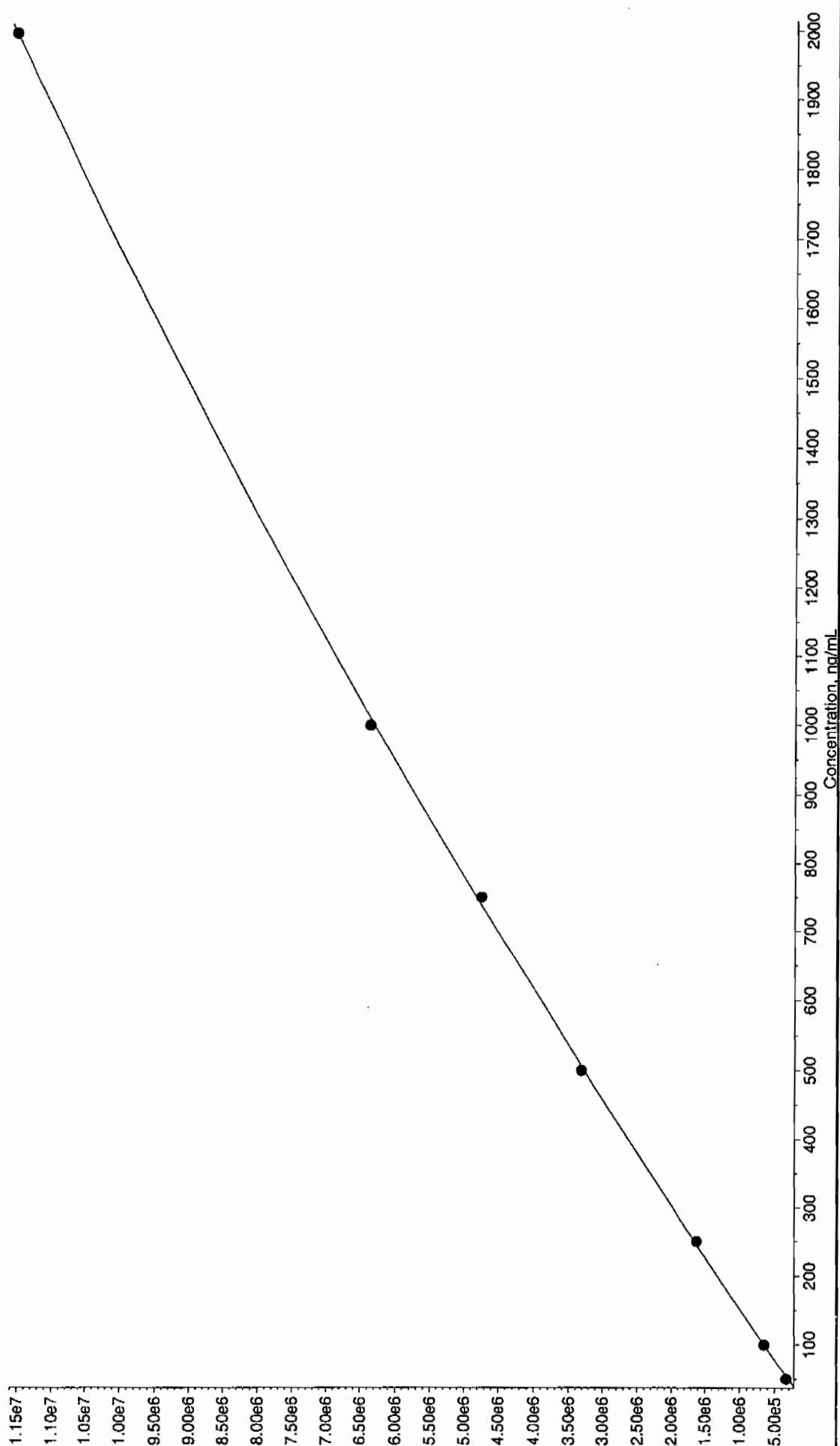
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	weighting	None	Iterate No
a0	4.6e+003			
a1	1.9e+003			
a2	-0.0179			
Correlation coefficient 0.9998				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

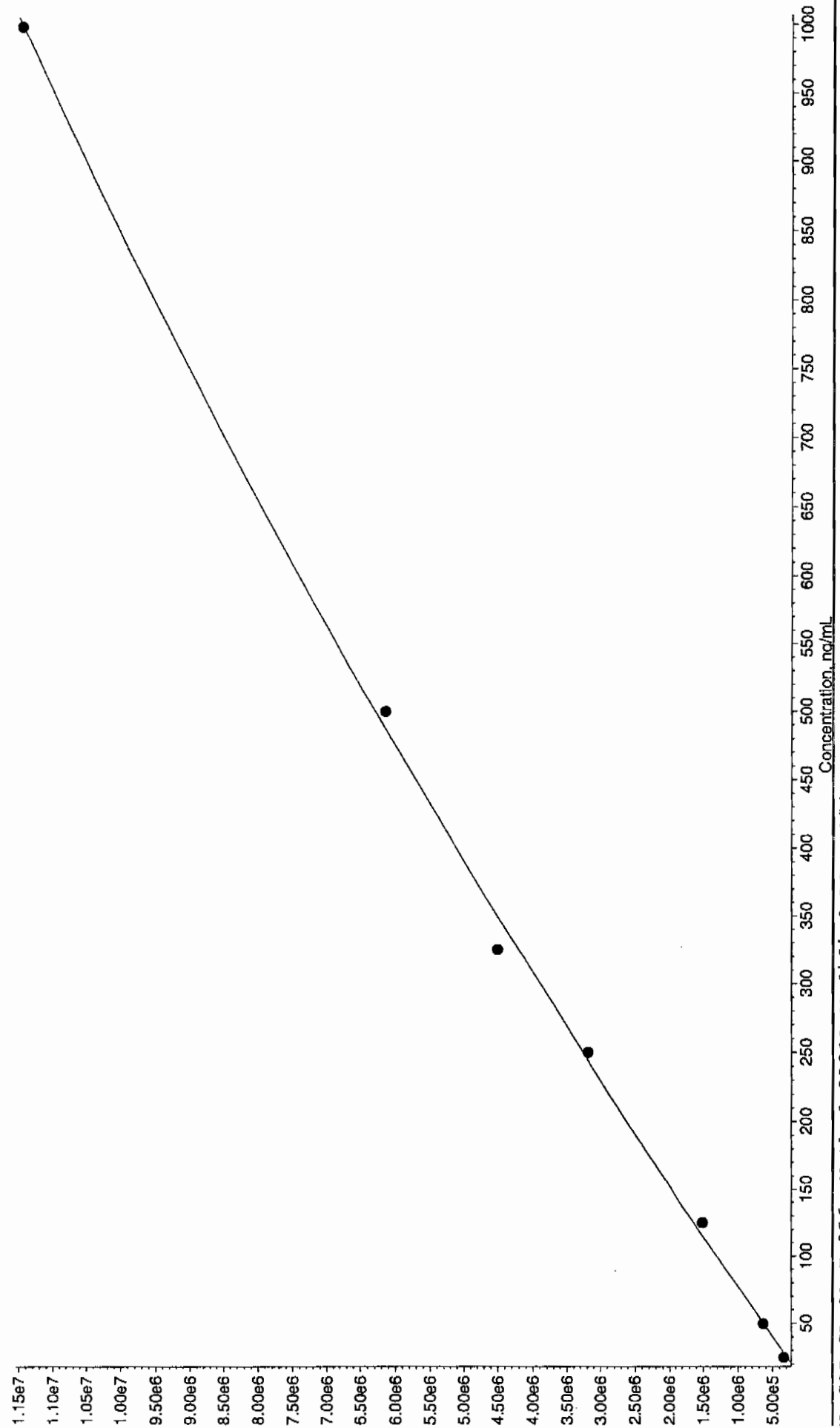
Fit	Quadratic	weighting	None	Iterate No
a0	6.16e+004			
a1	2.37e+004			
a2	-3.92			
Correlation coefficient 1.0000				
Use Area				

021410.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.557 x^2 + 6.88e+003 x + -2.81e+004$ ($r = 0.9999$)



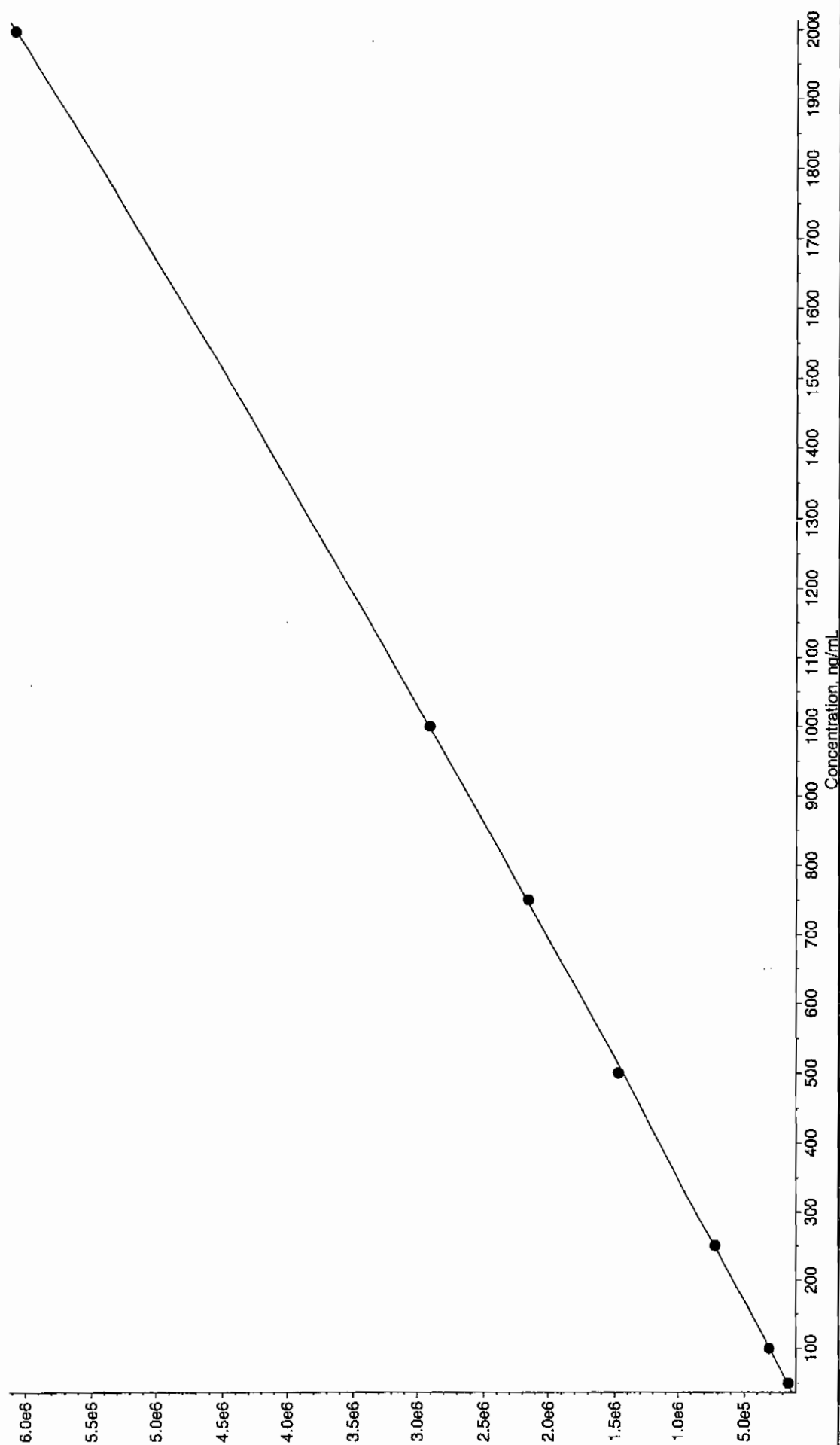
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.42 x^2 + 1.39e+004 x + -5.35e+004$ ($r = 0.9993$)



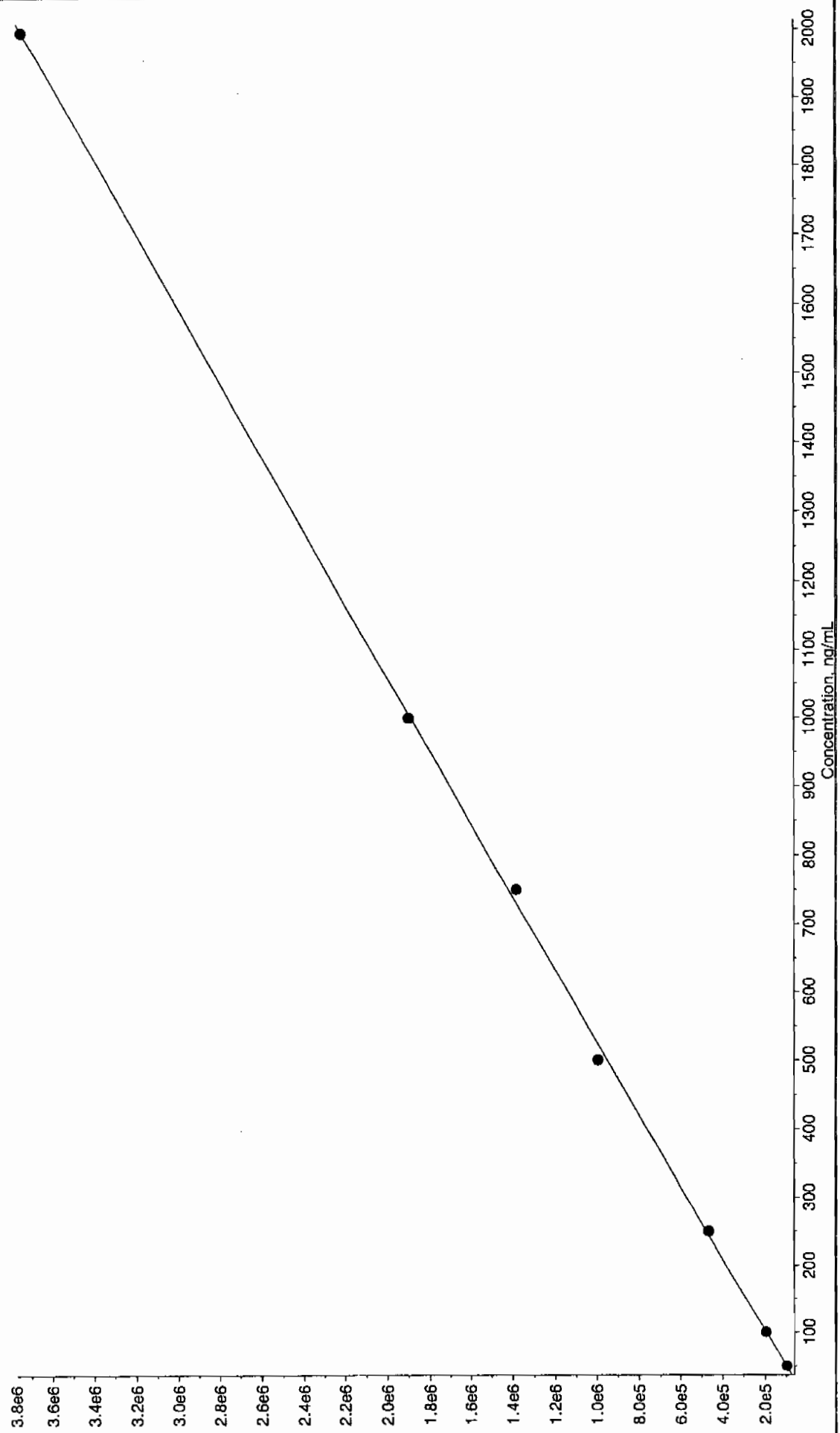
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.136 x^2 + 2.75e+003 x + 2.98e+004$ ($r = 1.0000$)



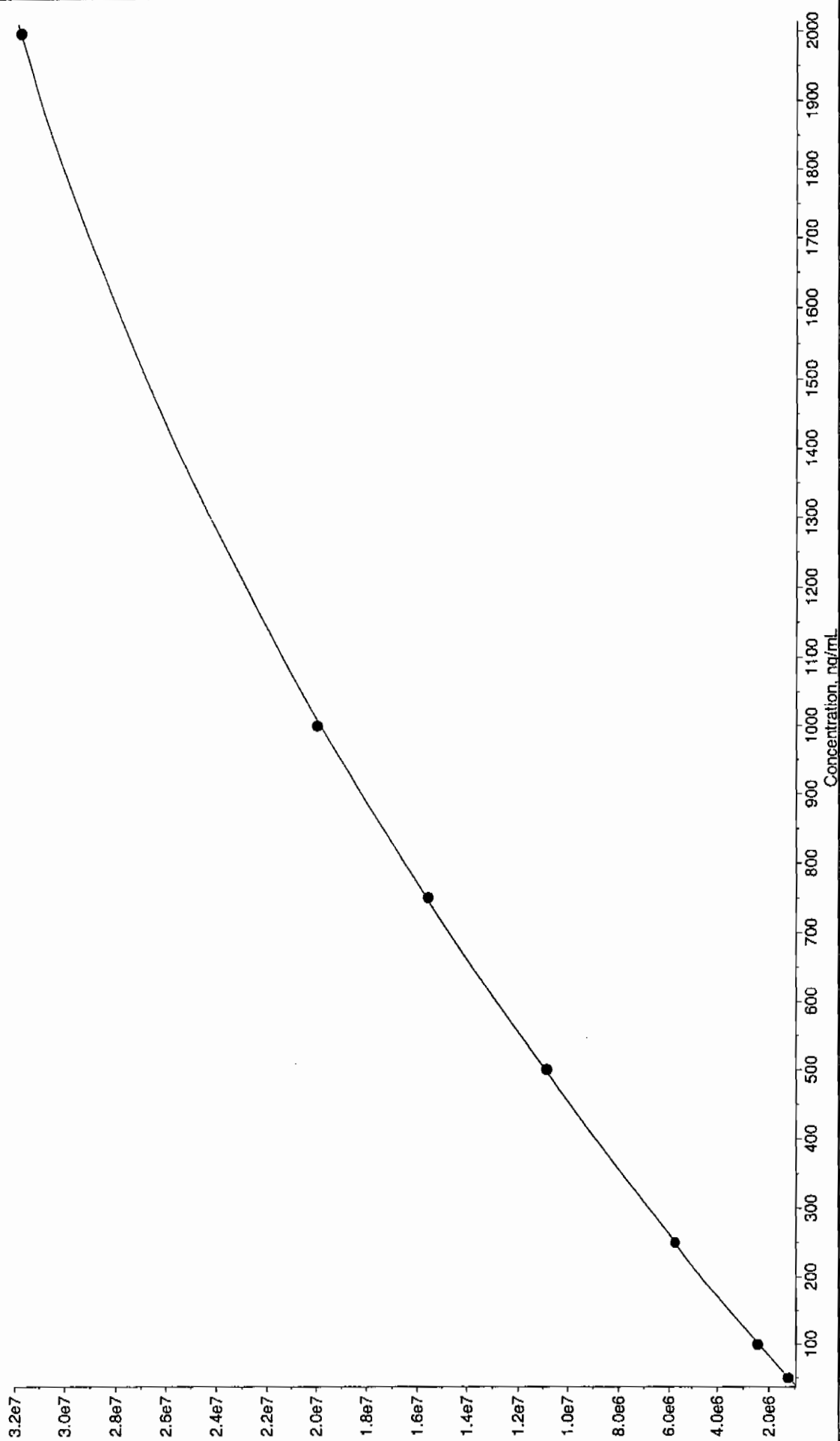
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0179 x^2 + 1.9e+003 x + 4.6e+003$ ($r = 0.9998$)



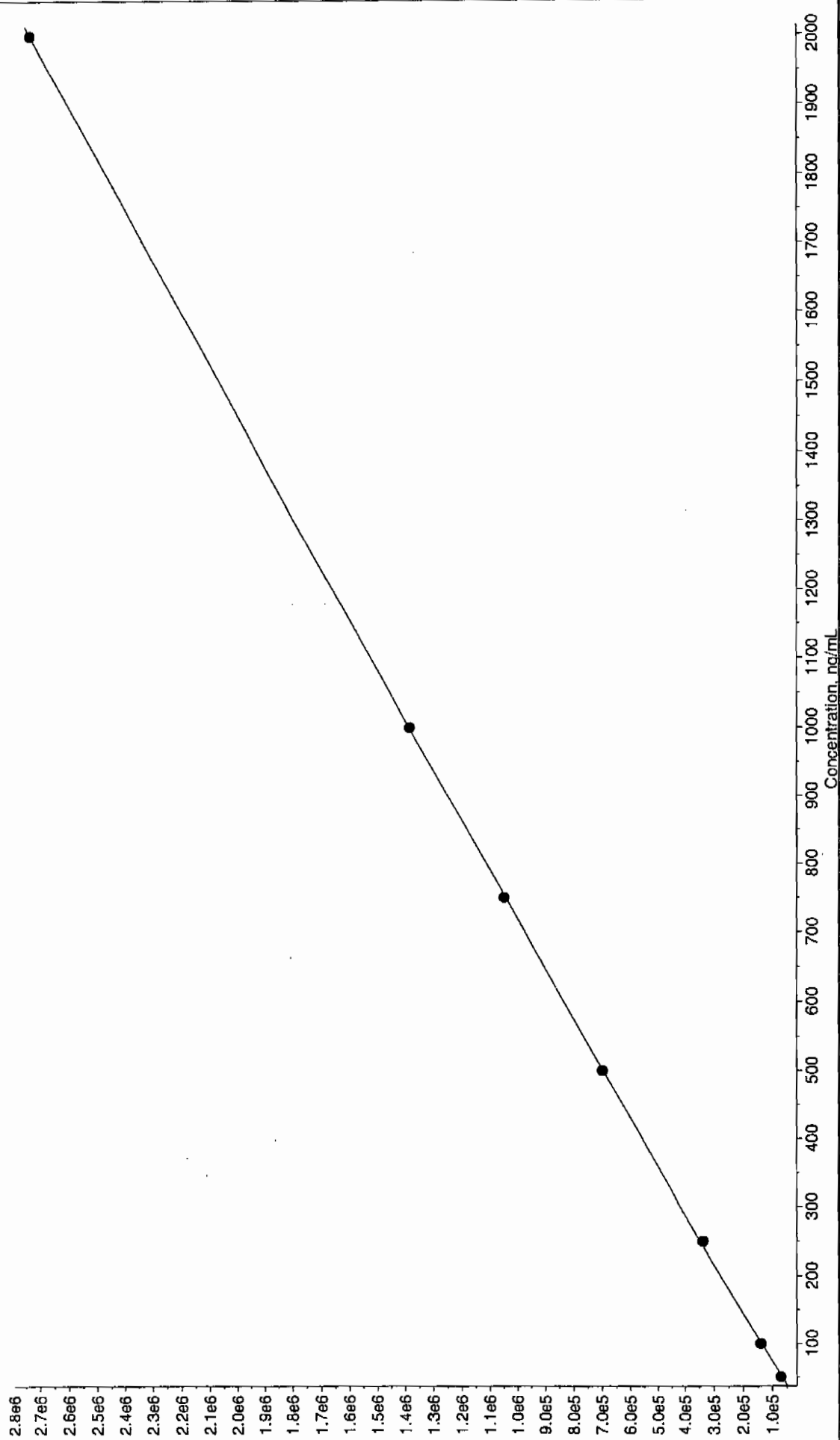
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

321410.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.92 x^2 + 2.37e+004 x + 6.16e+004$ ($r = 1.0000$)



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

21410.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.022 x^2 + 1.41e+003 x + -3.59e+003$ ($r = 1.0000$)



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02140011.wiff

Analysis Date: 14-FEB-10 16:54

LCMSMS ID: 1358

Column ID JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	535	107	
3,4-Dinitrotoluene	250	215	86	
3,5-Dinitroaniline	500	495	99	
TATB	500	501	100	
tris(o-cresyl) phosphate	500	493	99	

Recovery Limits:

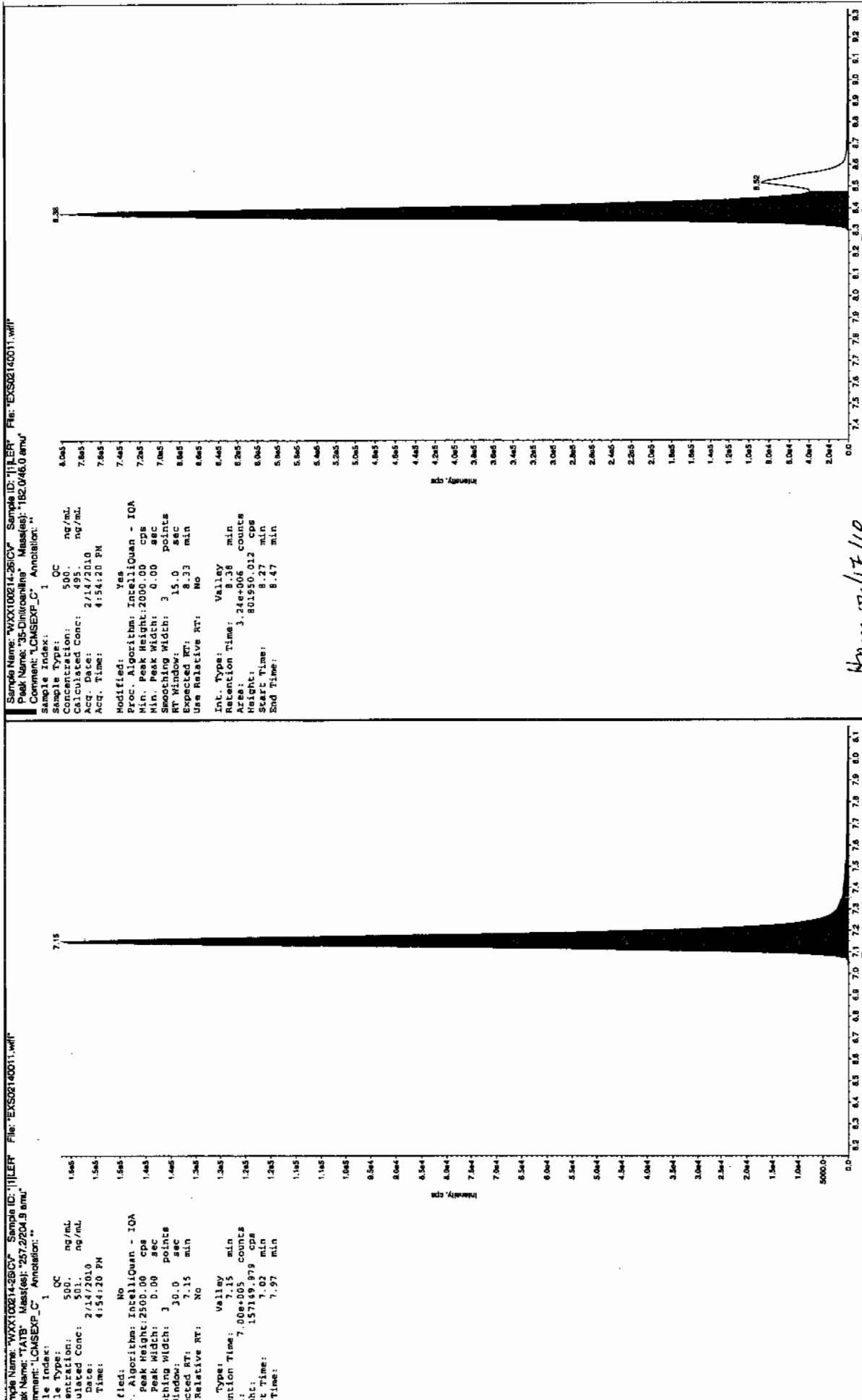
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

OtherTarget Analytes 80-120%

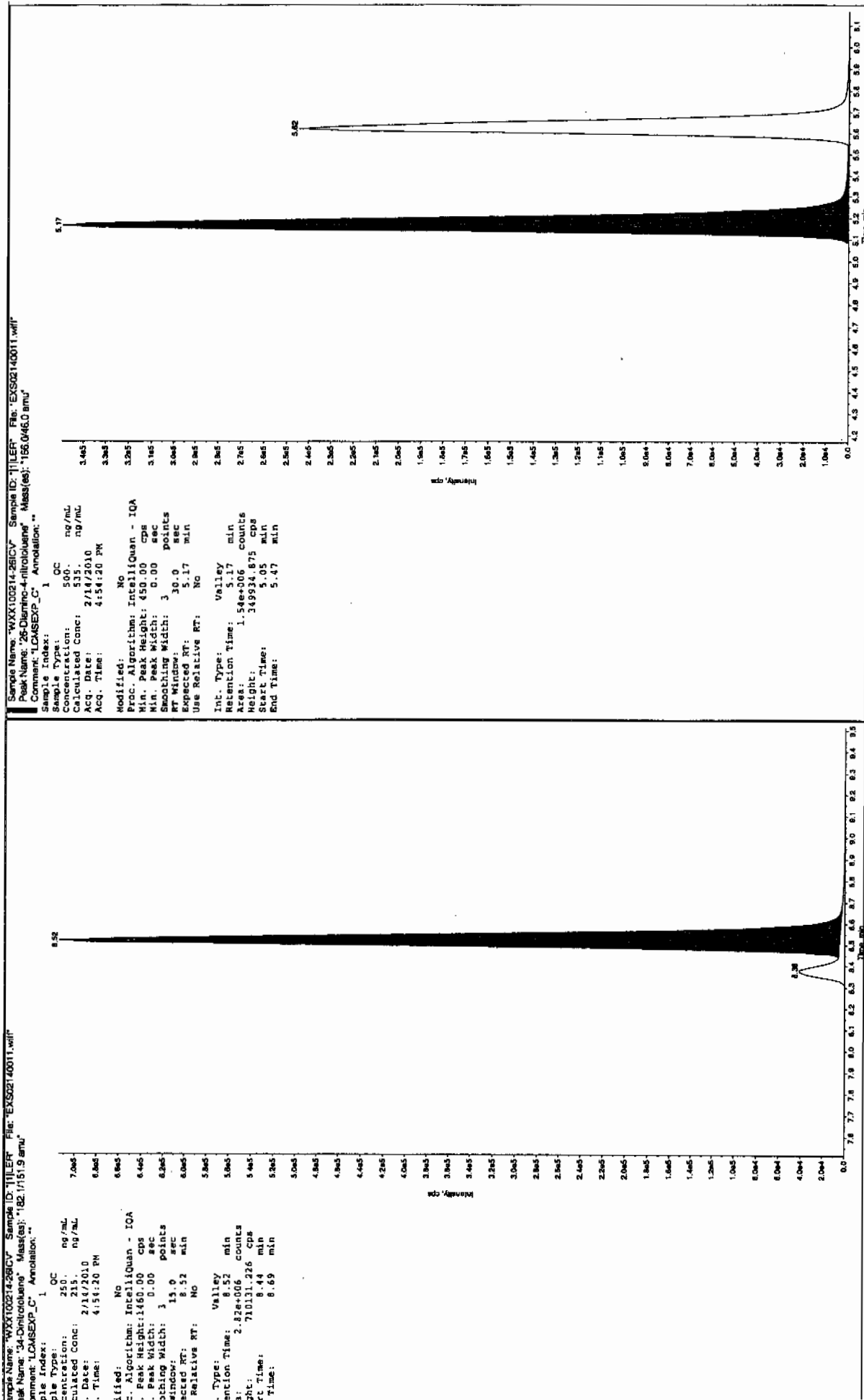
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

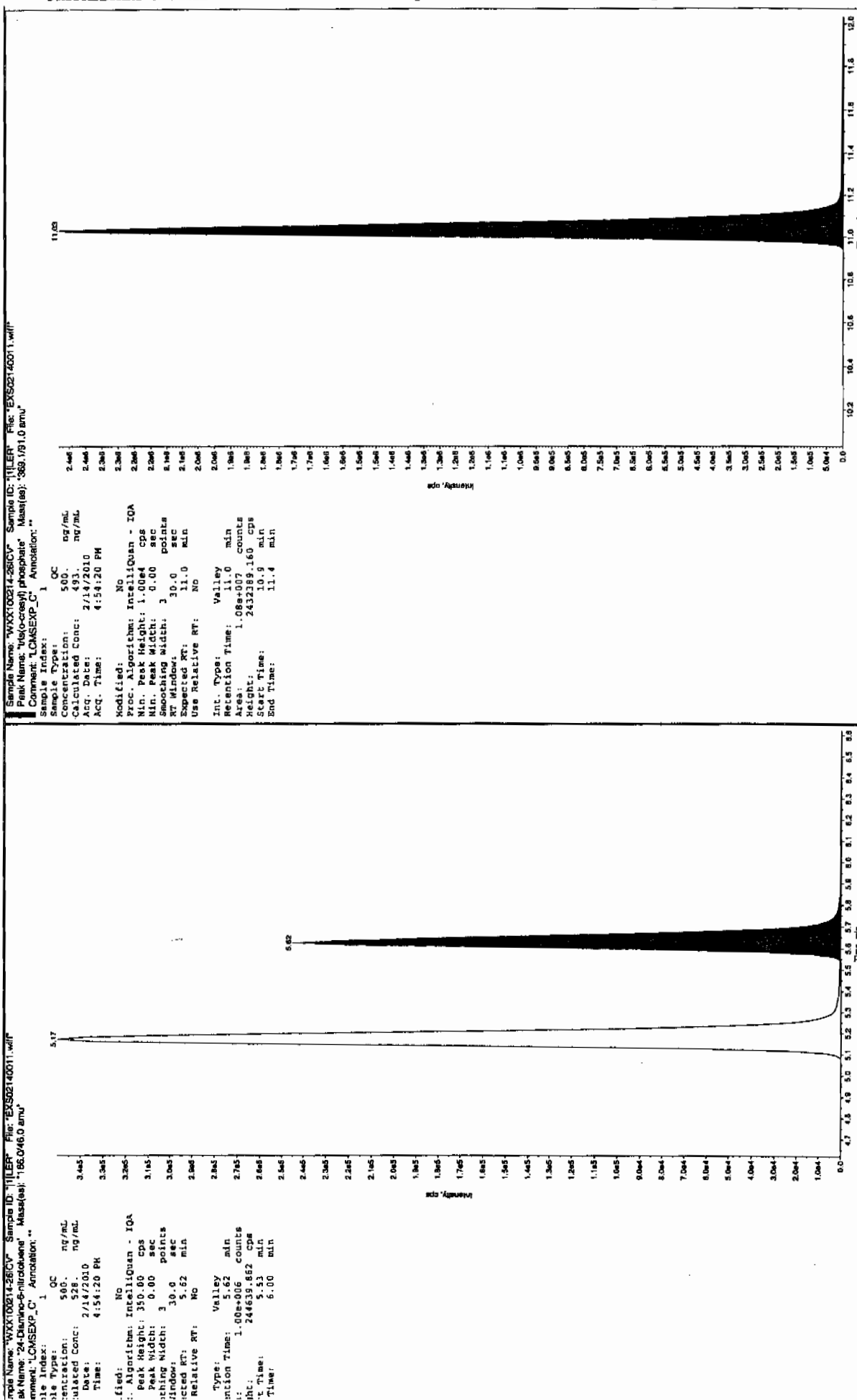
GLW 2/16/10



Ammonia 11/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216012a

Analysis Date: 16-FEB-10 22:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	40	46.913	117	
m-Nitrotoluene	40	43.185	108	
o-Nitrotoluene	40	41.818	105	
p-Nitrotoluene	40	36.985	92	
1,3,5-Trinitrobenzene	40	52.773	132	*
1,3-Dinitrobenzene-d4	500	467.275	93	
2,4,6-Trinitrotoluene	40	39.143	98	
2,4-Dinitrotoluene	40	38.529	96	
2,6-Dinitrotoluene	40	43.494	109	
2,6-Dinitrotoluene-d3	500	466.982	93	
2-Amino-4,6-dinitrotoluene	40	39.227	98	
3,4-Dinitrotoluene	20	22.552	113	
4-Amino-2,6-dinitrotoluene	40	41.012	103	
HMX	40	41.651	104	
Nitrobenzene	40	45.259	113	
PETN	40	42.843	107	
RDX	40	36.749	92	
Tetryl	40	39.776	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216012a

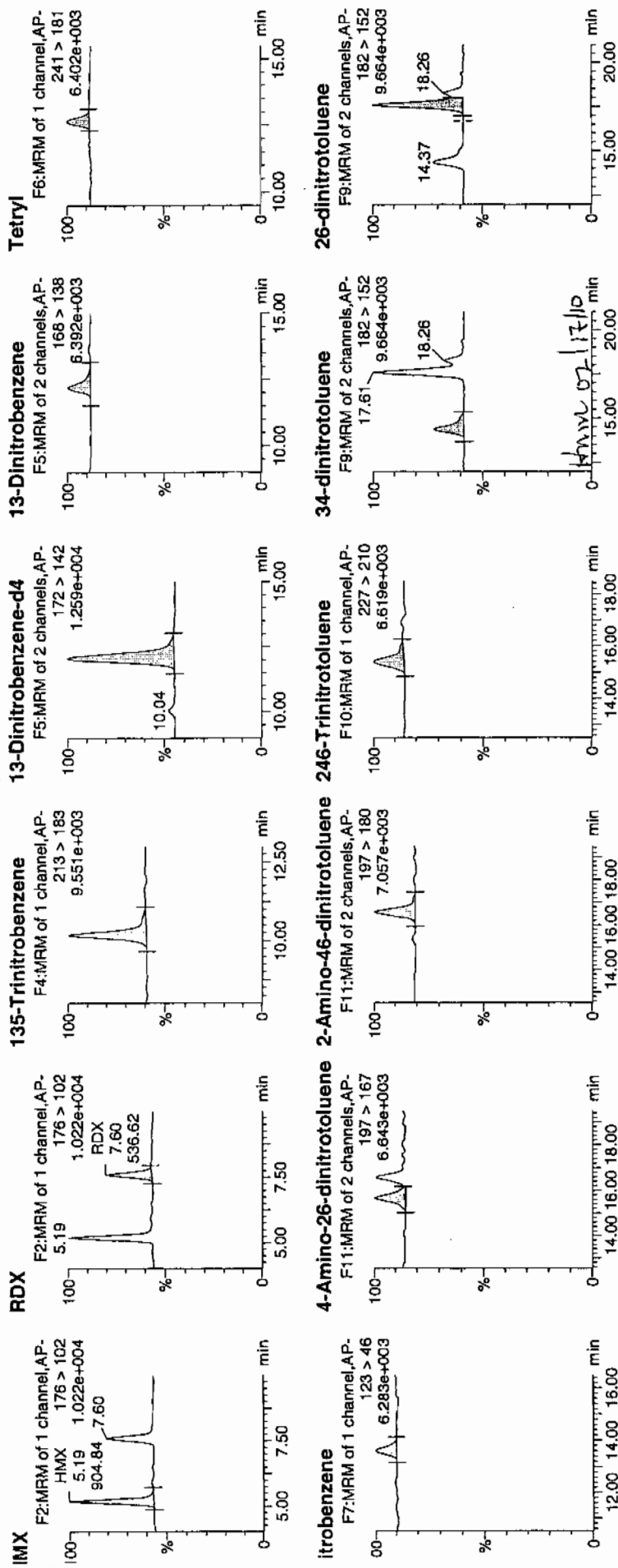
Plate: 16-Feb-2010

Time: 22:33:56

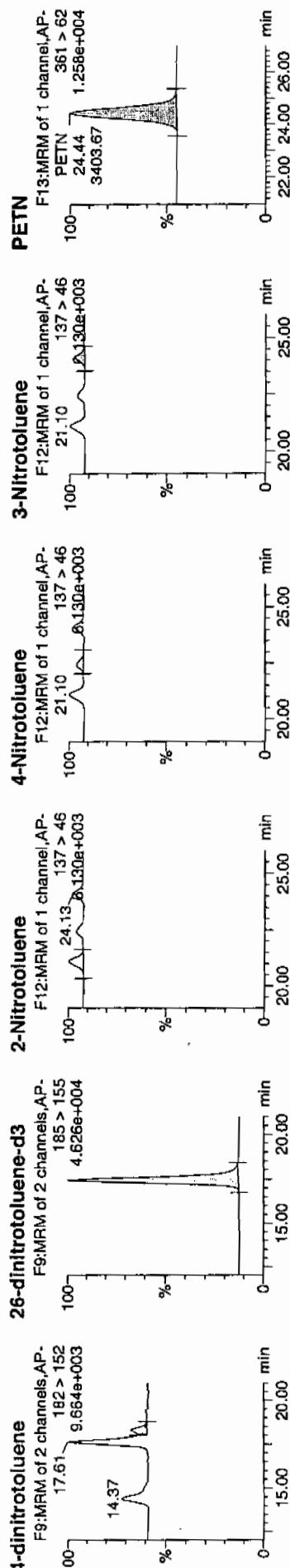
Job: WXX100216-08CRI

Ratio: 1:1,C

17/10
17/10



atset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int (mV)	% Rec	% Dev	SN
/XX100216-08CRI	HMX	176 > 102	5.19	904.843	2815.255	904.843	160.704	bb		41.6506	104.1	4.1	146.1
/XX100216-08CRI	RDX	176 > 102	7.60	536.624	2815.255	536.624	95.306	bb		36.7490	91.9	-8.1	78.6
/XX100216-08CRI	135-Trinitrobenzene	213 > 183	10.18	1150.692	2815.255	1150.692	204.367	bb		52.7734	131.9	31.9	153.3
/XX100216-08CRI	13-Dinitrobenzene-d4	172 > 142	12.06	2815.255	2815.255	2815.255	2815.255	bb		467.2753	93.5	-6.5	116.9
/XX100216-08CRI	13-Dinitrobenzene	168 > 138	12.20	313.940	2815.255	313.940	55.757	bb		46.9129	117.3	17.3	56.5
/XX100216-08CRI	Tetryl	241 > 181	12.66	244.166	2815.255	244.166	43.365	bb		39.7758	99.4	-0.6	26.2
/XX100216-08CRI	Nitrobenzene	123 > 46	13.61	218.774	2815.255	218.774	38.855	bb		45.2588	113.1	13.1	13.8
/XX100216-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.67	427.054	16258.972	427.054	13.133	MM	17-Feb-10 09:22:56	41.0124	102.5	2.5	29.2
/XX100216-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.57	551.120	16258.972	551.120	16.948	bb		39.2269	98.1	-1.9	56.9
/XX100216-08CRI	246-Trinitrotoluene	227 > 210	15.40	426.730	16258.972	426.730	13.123	bb		39.1431	97.9	-2.1	30.4
/XX100216-08CRI	34-dinitrotoluene	182 > 152	14.37	664.397	16258.972	664.397	20.432	bb		22.5515	112.8	12.8	21.1
/XX100216-08CRI	26-dinitrotoluene	182 > 152	17.61	1498.403	16258.972	1498.403	46.079	MM	17-Feb-10 09:25:53	43.4940	108.7	8.7	65.6
/XX100216-08CRI	24-dinitrotoluene	182 > 152	18.26	308.850	16258.972	308.850	9.498	MM	17-Feb-10 09:54:26	38.5291	96.3	-3.7	13.0
/XX100216-08CRI	26-dinitrotoluene-d3	185 > 155	17.43	16258.972	16258.972	16258.972	16258.972	bb		466.9822	93.4	-6.6	1321.7
/XX100216-08CRI	2-Nitrotoluene	137 > 46	21.10	206.957	16258.972	206.957	6.364	bb		41.8176	104.5	4.5	61.3
/XX100216-08CRI	4-Nitrotoluene	137 > 46	22.41	92.186	16258.972	92.186	2.835	bb		36.9848	92.5	-7.5	27.2
/XX100216-08CRI	3-Nitrotoluene	137 > 46	24.13	125.667	16258.972	125.667	3.865	bb		43.1845	108.0	8.0	39.5
/XX100216-08CRI	PETN	361 > 62	24.44	3403.665	16258.972	3403.665	104.670	bb		42.8433	107.1	7.1	656.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/16/10
 Time of Injection 2233
 Standard Number WXX100216-08CRI
 Data File EXP0216012a

HMX	104.1
RDX	91.9
135-TNB	131.9
13-DNB	117.3
Tetryl	99.4
Nitrobenzene	113.1
4A-26-DNT	102.5
2A-46-DNT	98.1
246-TNT	97.9
34-DNT(surr)	112.8
26-DNT	108.7
24-DNT	96.3
2-NT	104.5
4-NT	92.5
3-NT	108.0
PETN	107.1

*MTT
2/17/10*

Total 1686.1

Average 105.4

Sum 12/17/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216021a

Analysis Date: 17-FEB-10 03:00

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	579.243	97	
1,3-Dinitrobenzene-d4	500	497.509	100	
2,4,6-Trinitrotoluene	600	668.453	111	
2,4-Dinitrotoluene	600	630.739	105	
2,6-Dinitrotoluene	600	632.433	105	
2,6-Dinitrotoluene-d3	500	485.976	97	
2-Amino-4,6-dinitrotoluene	600	634.785	106	
3,4-Dinitrotoluene	300	327.796	109	
4-Amino-2,6-dinitrotoluene	600	562.441	94	
HMX	600	585.906	98	
Nitrobenzene	600	587.781	98	
PETN	600	627.186	105	
RDX	600	656.37	109	
Tetryl	600	543.324	91	
m-Dinitrobenzene	600	630.615	105	
m-Nitrotoluene	600	562.285	94	
o-Nitrotoluene	600	556.59	93	
p-Nitrotoluene	600	538.033	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

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

File: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0216021a

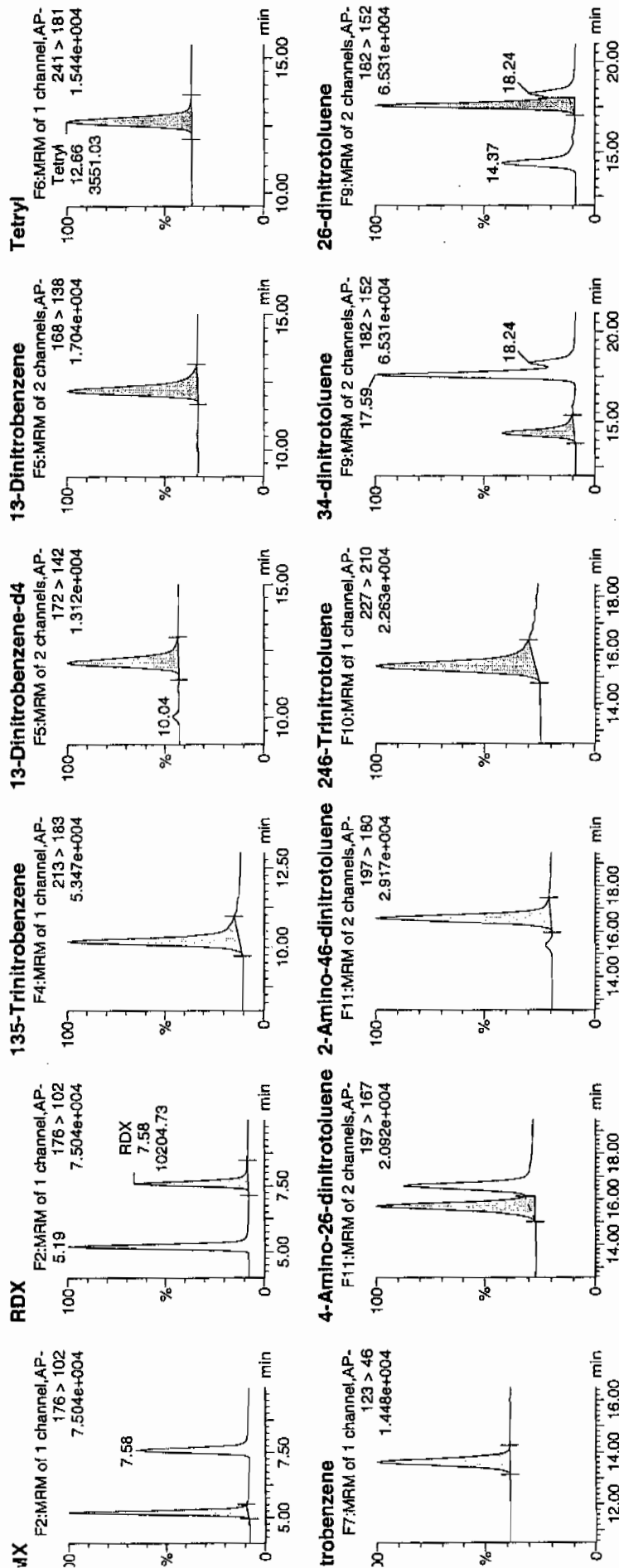
Date: 17-Feb-2010

Time: 03:00:59

File: WXX100216-07CCV

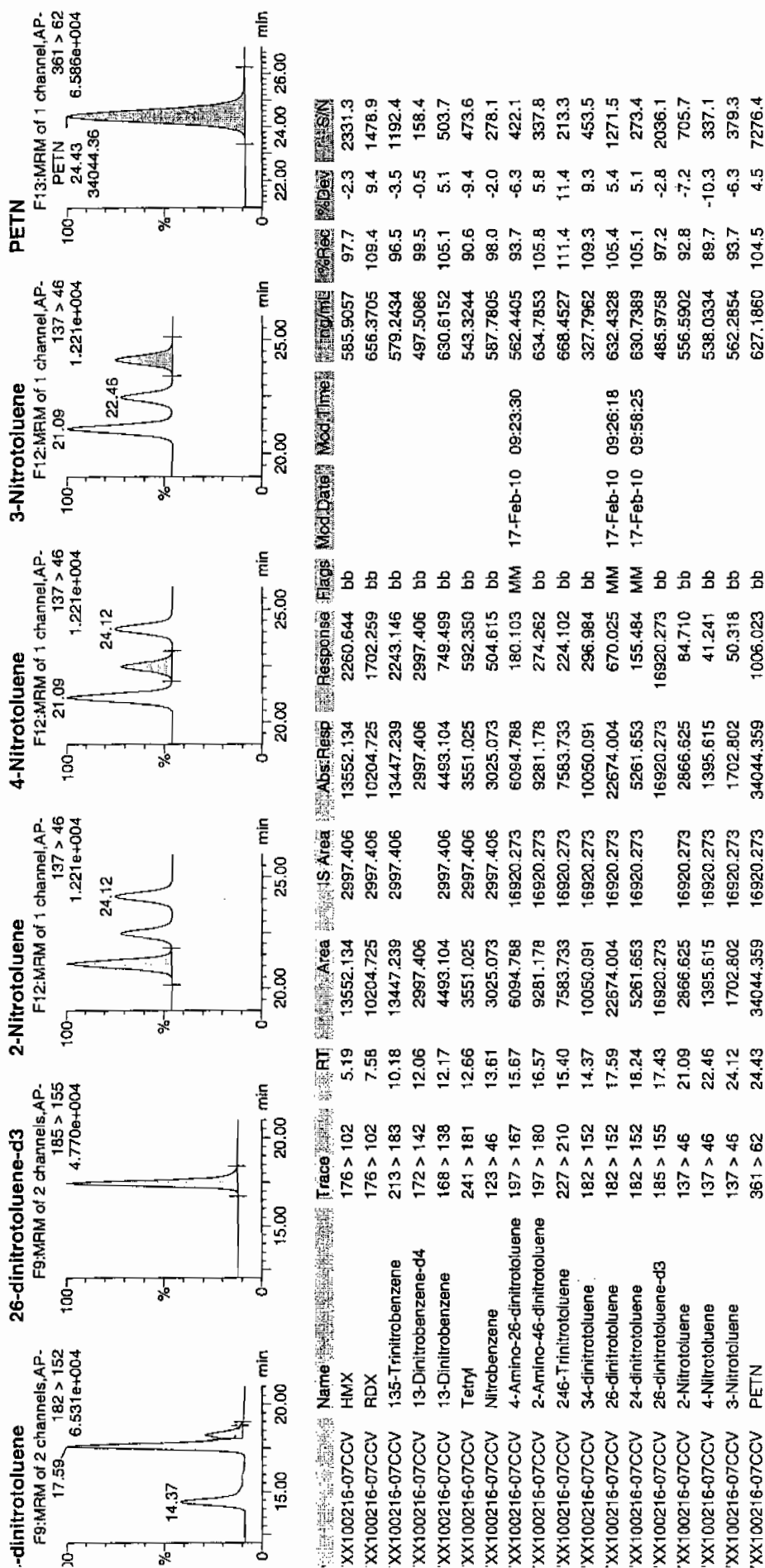
Al: 1:1,B

17/2/10



Handwritten: 02/17/10

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/17/10
 Time of Injection: 0300
 Standard Number: WXX100216-07CCV
 Data File: EXP0216021a

HMX	97.7
RDX	109.4
135-TNB	96.5
13-DNB	105.1
Tetryl	90.6
Nitrobenzene	98.0
4A-26-DNT	93.7
2A-46-DNT	105.8
246-TNT	111.4
34-DNT(surr)	109.3
26-DNT	105.4
24-DNT	105.1
2-NT	92.8
4-NT	89.7
3-NT	93.7
PETN	104.5
Total	1608.7

WXX
2/17/10

Average 100.5

WXX-02/17/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216023a

Analysis Date: 17-FEB-10 03:59

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.744	124	
1,3-Dinitrobenzene-d4	500	479.66	96	
2,4,6-Trinitrotoluene	40	35.851	90	
2,4-Dinitrotoluene	40	39.455	99	
2,6-Dinitrotoluene	40	41.064	103	
2,6-Dinitrotoluene-d3	500	491.1	98	
2-Amino-4,6-dinitrotoluene	40	38.066	95	
3,4-Dinitrotoluene	20	21.18	106	
4-Amino-2,6-dinitrotoluene	40	45.31	113	
HMX	40	40.495	101	
Nitrobenzene	40	46.027	115	
PETN	40	46.88	117	
RDX	40	40.003	100	
Tetryl	40	46.382	116	
m-Dinitrobenzene	40	47.022	118	
m-Nitrotoluene	40	34.333	86	
o-Nitrotoluene	40	37.918	95	
p-Nitrotoluene	40	33.624	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

Printed: Wed Feb 17 10:00:54 2010, Page 45 of 59

uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216023a

ate: 17-Feb-2010

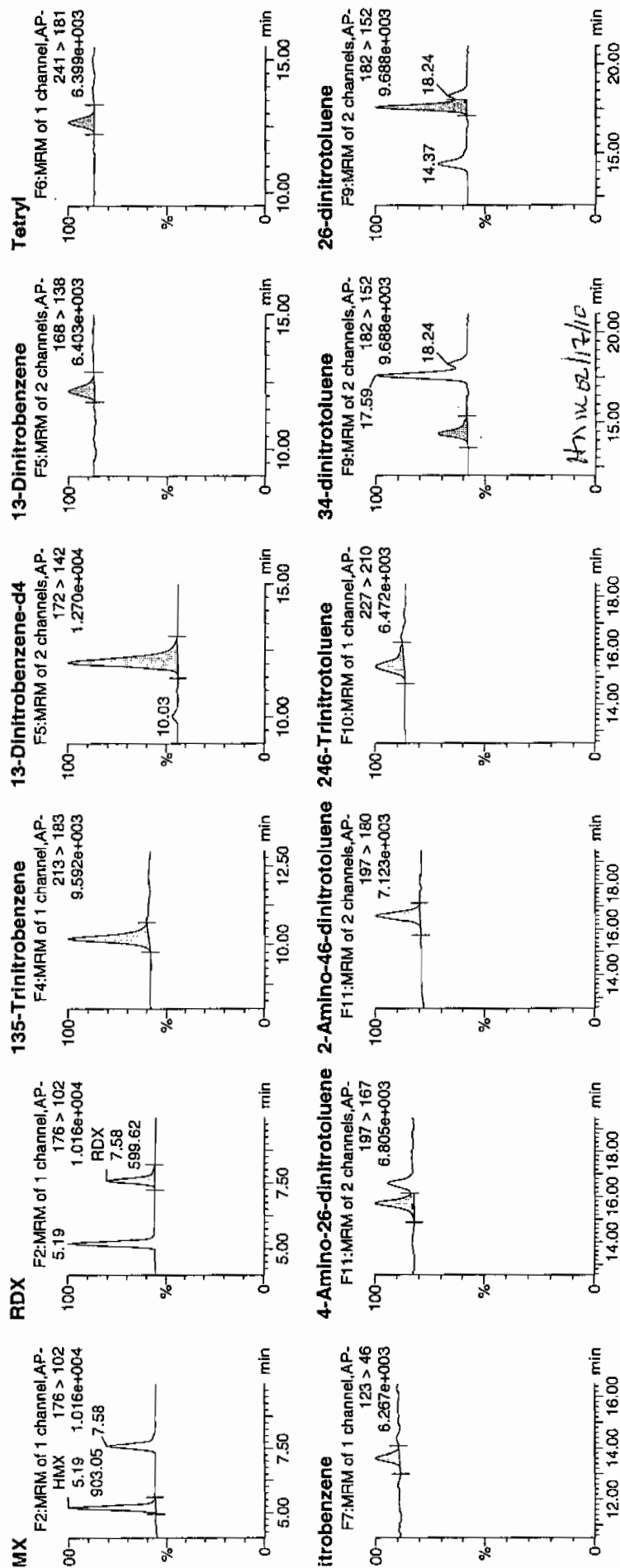
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i: WXX100216-08CRI

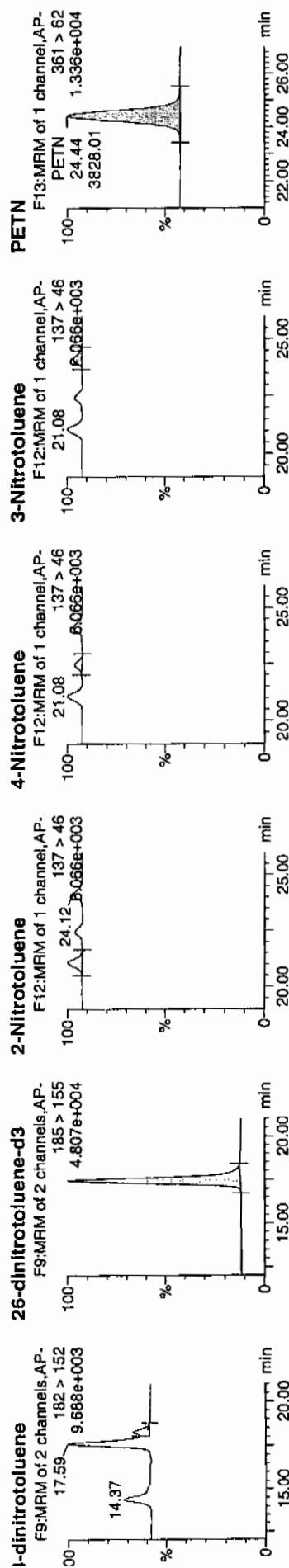
al: 1:1,C

WXX
2/17/10

Page 853 of 1179



Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



Name	Trace	RT	Area	IS Area	Abi Resp	Response	Flags	Mod Date	Mod Time	Eng/m	% Rec	% Dev	SN
'XX100216-08CRI	HMx	176 > 102	5.19	903.051	2889.872	903.051	156.244	bb		40.4948	101.2	1.2	129.0
'XX100216-08CRI	RDX	176 > 102	7.58	599.618	2889.872	599.618	103.745	bb		40.0027	100.0	0.0	71.5
135-Trinitrobenzene		213 > 183	10.18	1113.391	2889.872	1113.391	192.637	bb		49.7442	124.4	24.4	149.0
13-Dinitrobenzene-d4		172 > 142	12.03	2889.872		2889.872	2889.872	bb		479.6602	95.9	-4.1	417.1
13-Dinitrobenzene		168 > 138	12.20	323.009	2889.872	323.009	55.886	bb		47.0218	117.6	17.6	49.9
Tetryl		241 > 181	12.66	292.267	2889.872	292.267	50.567	bb		46.3823	116.0	16.0	23.4
Nitrobenzene		123 > 46	13.61	228.386	2889.872	228.386	39.515	bb		46.0273	115.1	15.1	23.5
4-Amino-26-dinitrotoluene		197 > 167	15.70	496.172	17098.684	496.172	14.509	MM	17-Feb-10	09:23:37	45.3101	113.3	43.7
2-Amino-46-dinitrotoluene		197 > 180	16.57	562.424	17098.684	562.424	16.446	bb		38.0656	95.2	-4.8	54.4
246-Trinitrotoluene		227 > 210	15.37	411.028	17098.684	411.028	12.019	bb		35.8512	89.6	-10.4	34.7
34-dinitrotoluene		182 > 152	14.37	656.211	17098.684	656.211	19.189	bb		21.1798	105.9	5.9	25.2
26-dinitrotoluene		182 > 152	17.59	1487.743	17098.684	1487.743	43.505	MM	17-Feb-10	09:26:28	41.0638	102.7	2.7
24-dinitrotoluene		182 > 152	18.24	332.609	17098.684	332.609	9.726	MM	17-Feb-10	09:58:34	39.4554	98.6	-1.4
26-dinitrotoluene-d3		185 > 155	17.43	17098.684		17098.684	17098.684	bb		491.1000	98.2	-1.8	1844.2
2-Nitrotoluene		137 > 46	21.08	197.351	17098.684	197.351	5.771	bb		37.9183	94.8	-5.2	50.3
4-Nitrotoluene		137 > 46	22.44	88.137	17098.684	88.137	2.577	bb		33.6238	84.1	-15.9	24.1
3-Nitrotoluene		137 > 46	24.12	105.069	17098.684	105.069	3.072	bb		34.3330	85.8	-14.2	27.3
PETN		361 > 62	24.44	3828.005	17098.684	3828.005	111.939	bb		46.8804	117.2	17.2	698.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/17/10
 Time of Injection 0359
 Standard Number WXX100216-08CRI
 Data File EXP0216023a

HMX	101.2
RDX	100.0
135-TNB	124.4
13-DNB	117.6
Tetryl	116.0
Nitrobenzene	115.1
4A-26-DNT	113.3
2A-46-DNT	95.2
246-TNT	89.6
34-DNT(surr)	105.9
26-DNT	102.7
24-DNT	98.6
2-NT	94.8
4-NT	84.1
3-NT	85.8
PETN	117.2
Total	1661.5

HTP
2/17/10

Average

103.8

HTP 02/17/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216027a

Analysis Date: 17-FEB-10 05:58

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	600	636.41	106	
2,6-Dinitrotoluene-d3	500	422.753	85	
2-Amino-4,6-dinitrotoluene	600	651.036	109	
3,4-Dinitrotoluene	300	336.279	112	
4-Amino-2,6-dinitrotoluene	600	604.644	101	
HMX	600	612.626	102	
Nitrobenzene	600	578.267	96	
PETN	600	723.944	121	*
RDX	600	659.537	110	
Tetryl	600	567.895	95	
m-Dinitrobenzene	600	622.089	104	
m-Nitrotoluene	600	628.032	105	
o-Nitrotoluene	600	608.219	101	
p-Nitrotoluene	600	603.723	101	
1,3,5-Trinitrobenzene	600	611.171	102	
1,3-Dinitrobenzene-d4	500	441.467	88	
2,4,6-Trinitrotoluene	600	677.667	113	
2,4-Dinitrotoluene	600	637.719	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

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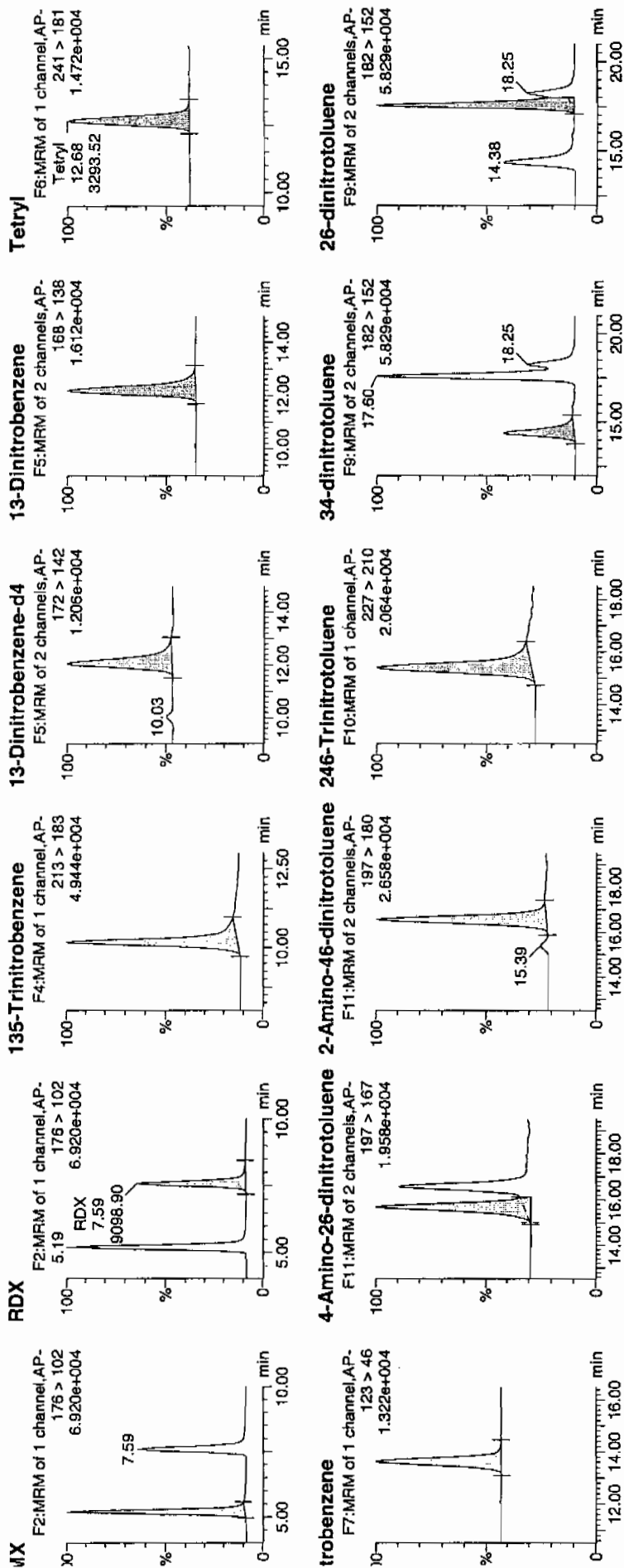
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Time: 05:58:23

Sample: WXX100216-07CCV

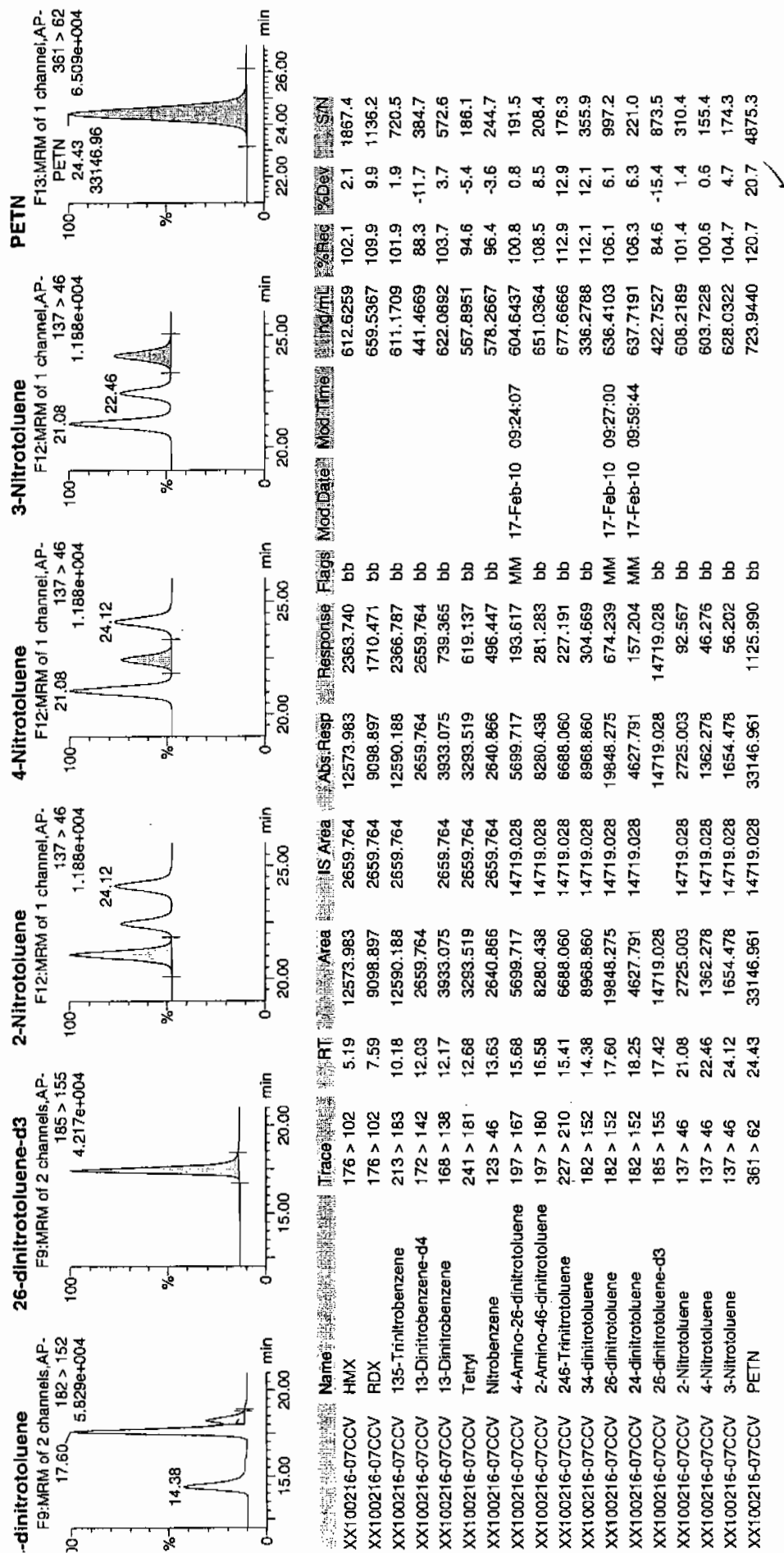
Ratio: 1:1,B

not
2/17/10



Handwritten note: 11/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/17/10
 Time of Injection: 0558
 Standard Number: WXX100216-07CCV
 Data File: EXP0216027a

HMX	102.1
RDX	109.9
135-TNB	101.9
13-DNB	103.7
Tetryl	94.6
Nitrobenzene	96.4
4A-26-DNT	100.8
2A-46-DNT	108.5
246-TNT	112.9
34-DNT(surr)	112.1
26-DNT	106.1
24-DNT	106.3
2-NT	101.4
4-NT	100.6
3-NT	104.7
PETN	120.7

*WXX
2/17/10*

Total 1682.7

Average 105.2

WXX 02 17/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216029a

Analysis Date: 17-FEB-10 06:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	42.003	105	
3,4-Dinitrotoluene	20	22.85	114	
4-Amino-2,6-dinitrotoluene	40	35.28	88	
HMX	40	35.563	89	
Nitrobenzene	40	35.31	88	
PETN	40	48.188	120	
RDX	40	37.715	94	
Tetryl	40	38.583	96	
m-Dinitrobenzene	40	47.424	119	
m-Nitrotoluene	40	37.561	94	
o-Nitrotoluene	40	37.519	94	
p-Nitrotoluene	40	38.529	96	
1,3,5-Trinitrobenzene	40	46.171	115	
1,3-Dinitrobenzene-d4	500	512.607	103	
2,4,6-Trinitrotoluene	40	37.982	95	
2,4-Dinitrotoluene	40	44.51	111	
2,6-Dinitrotoluene	40	42.325	106	
2,6-Dinitrotoluene-d3	500	468.417	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Identify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216029a

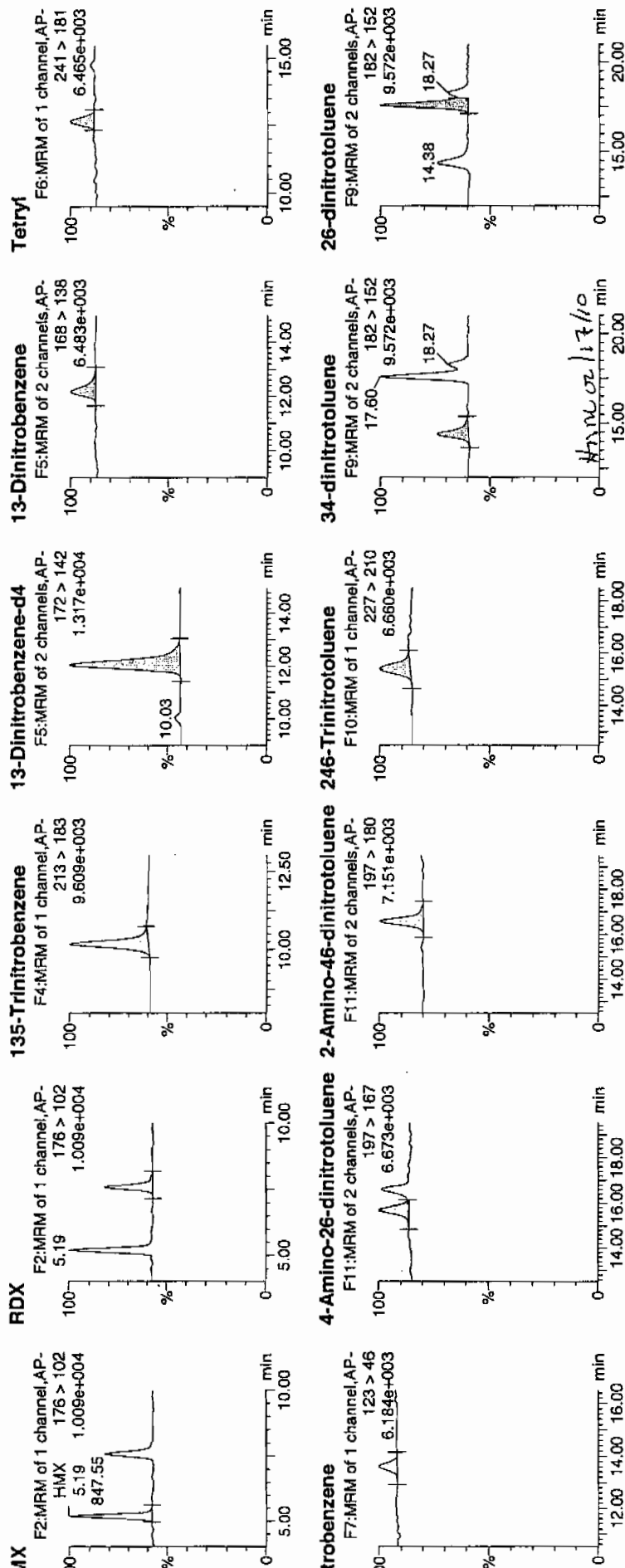
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Alt: 1:1,C

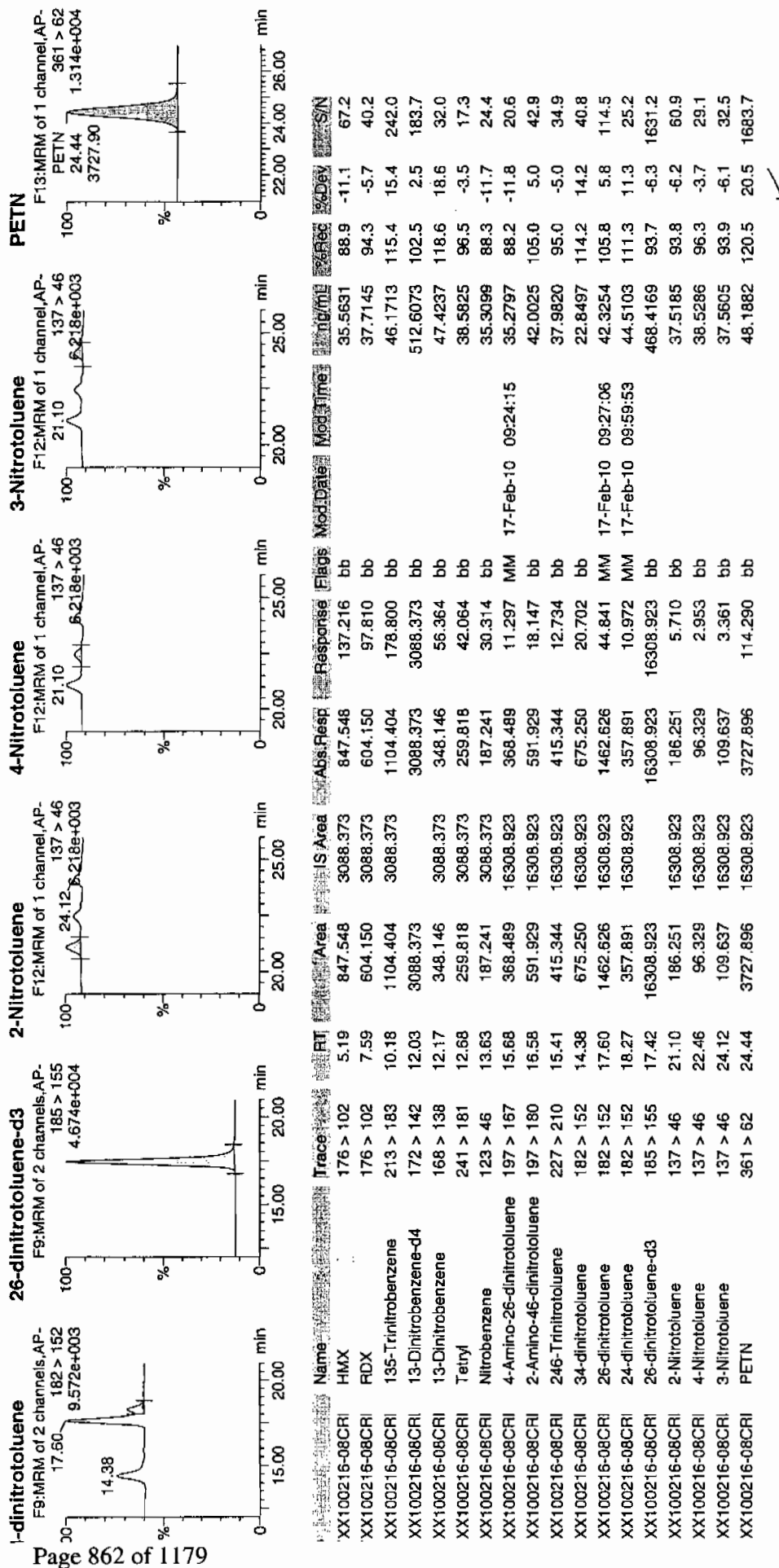
WXX
1/21/10



Printed: Wed Feb 17 10:00:54 2010, Page 58 of 59

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp_PRO\021610expA.qtd, Time: Wed Feb 17 10:00:06 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/17/10
 Time of Injection 0657
 Standard Number WXX100216-08CRI
 Data File EXP0216029a

HMX	88.9
RDX	94.3
135-TNB	115.4
13-DNB	118.6
Tetryl	96.5
Nitrobenzene	88.3
4A-26-DNT	88.2
2A-46-DNT	105.0
246-TNT	95.0
34-DNT(surr)	114.2
26-DNT	105.8
24-DNT	111.3
2-NT	93.8
4-NT	96.3
3-NT	93.9
PETN	120.5
Total	1626.0

*WXX
2/17/10*

Average

101.6

WXX-02/17/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216039a

Analysis Date: 17-FEB-10 11:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	600	662.654	110	
p-Nitrotoluene	600	651.214	109	
1,3,5-Trinitrobenzene	600	585.479	98	
1,3-Dinitrobenzene-d4	500	387.961	78	*
2,4,6-Trinitrotoluene	600	707.346	118	
2,4-Dinitrotoluene	600	645.209	108	
2,6-Dinitrotoluene	600	613.479	102	
2,6-Dinitrotoluene-d3	500	403.474	81	
2-Amino-4,6-dinitrotoluene	600	628.06	105	
3,4-Dinitrotoluene	300	337.542	113	
4-Amino-2,6-dinitrotoluene	600	652.842	109	
HMX	600	593.956	99	
Nitrobenzene	600	632.339	105	
PETN	600	805.557	134	*
RDX	600	659.382	110	
Tetryl	600	551.825	92	
m-Dinitrobenzene	600	625.313	104	
m-Nitrotoluene	600	627.48	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

untify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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ate: 17-Feb-2010

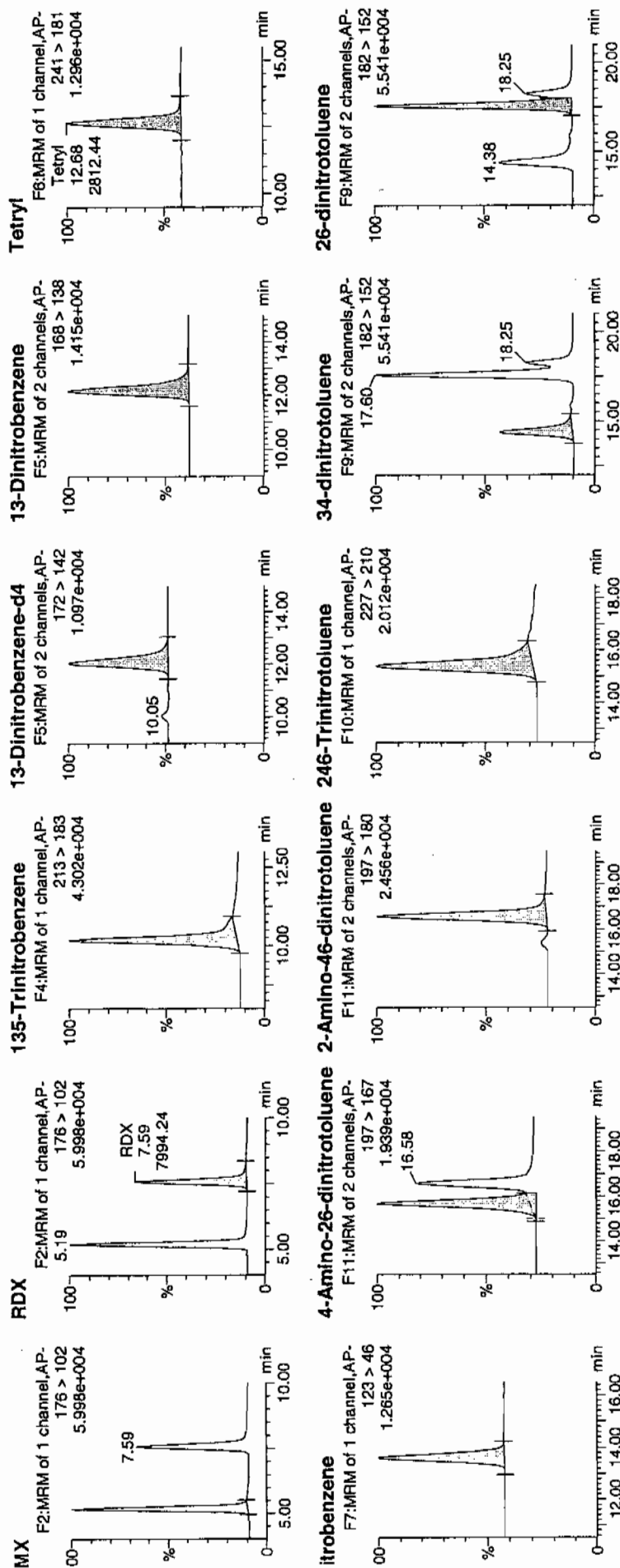
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WXX100216-07CCV

ial: 1:1,B

4/3/10

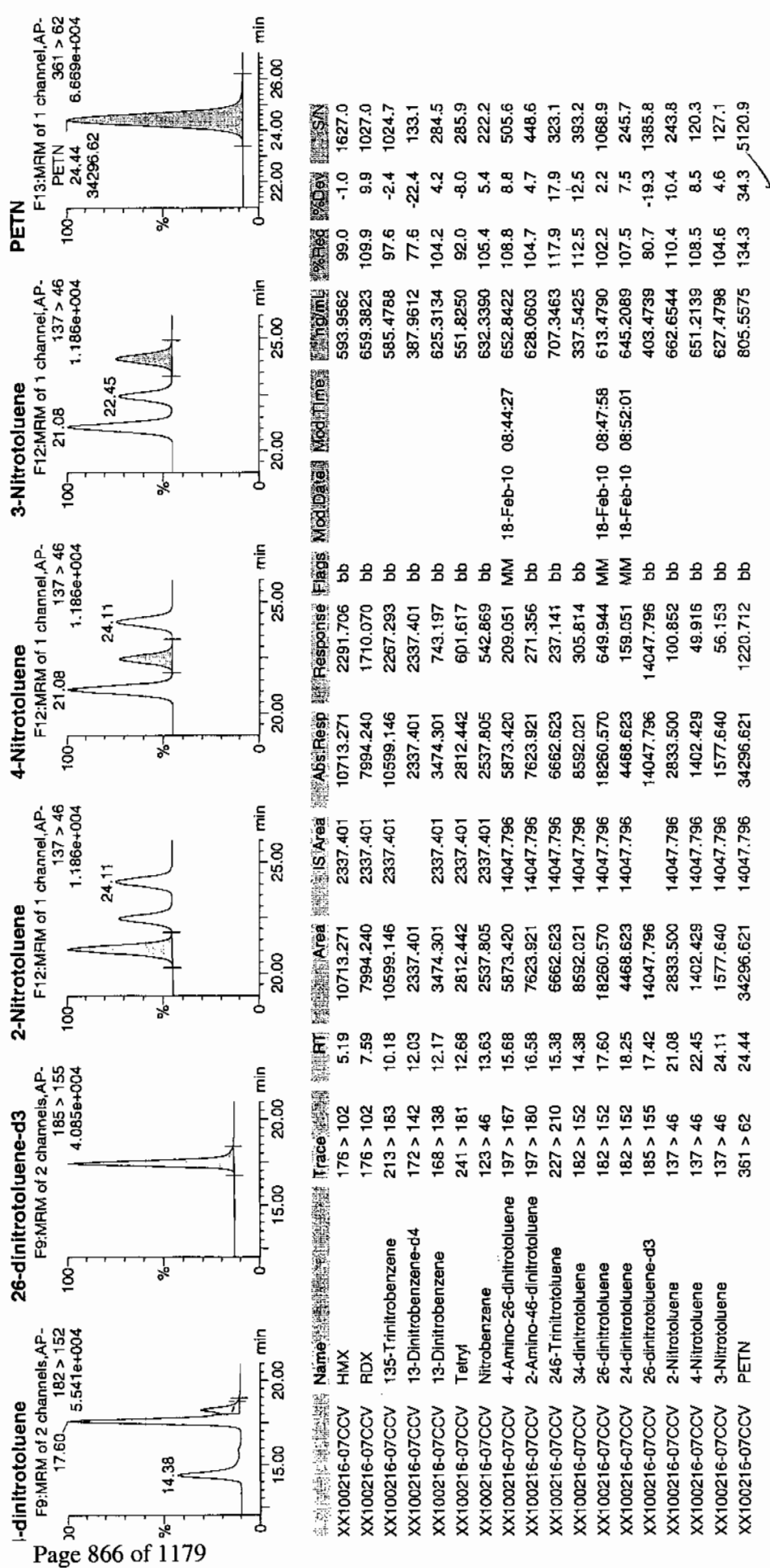
Page 865 of 1179



4/16/10

Printed: Thu Feb 18 08:53:51 2010, Page 20 of 103

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GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/17/10
 Time of Injection: 1155
 Standard Number: WXX100216-07CCV
 Data File: EXP0216039a

HMX	99.0
RDX	109.9
135-TNB	97.6
13-DNB	104.2
Tetryl	92.0
Nitrobenzene	105.4
4A-26-DNT	108.8
2A-46-DNT	104.7
246-TNT	117.9
34-DNT(surr)	112.5
26-DNT	102.2
24-DNT	107.5
2-NT	110.4
4-NT	108.5
3-NT	104.6
PETN	134.3

*107.5
2/18/10*

Total 1719.5

Average 107.5

Sum 02/18/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216041a

Analysis Date: 17-FEB-10 12:54

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	40	46.625	117	
1,3,5-Trinitrobenzene	40	49.958	125	
1,3-Dinitrobenzene-d4	500	436.567	87	
2,4,6-Trinitrotoluene	40	33.868	85	
2,4-Dinitrotoluene	40	48.789	122	
2,6-Dinitrotoluene	40	42.876	107	
2,6-Dinitrotoluene-d3	500	442.639	89	
2-Amino-4,6-dinitrotoluene	40	38.248	96	
3,4-Dinitrotoluene	20	20.64	103	
4-Amino-2,6-dinitrotoluene	40	36.085	90	
HMX	40	43.087	108	
Nitrobenzene	40	41.223	103	
PETN	40	49.973	125	
RDX	40	39.872	100	
Tetryl	40	51.62	129	
m-Dinitrobenzene	40	47.407	119	
m-Nitrotoluene	40	45.574	114	
o-Nitrotoluene	40	37.868	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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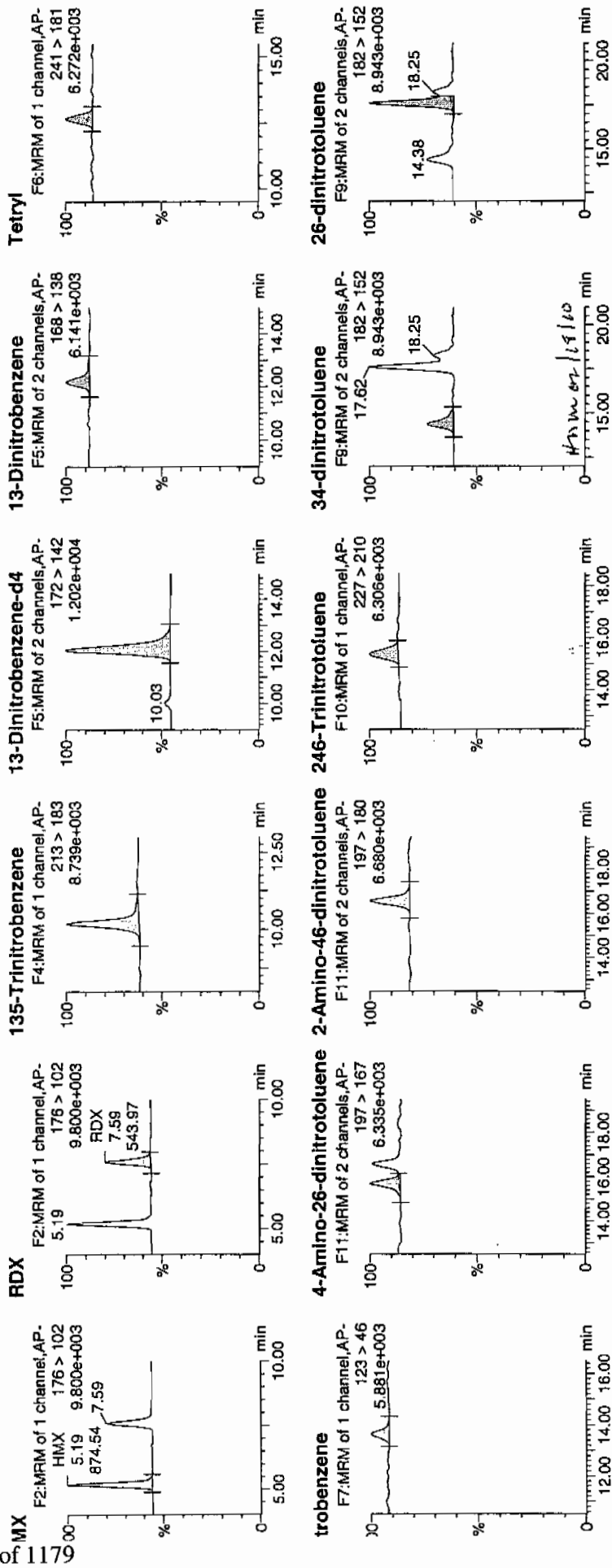
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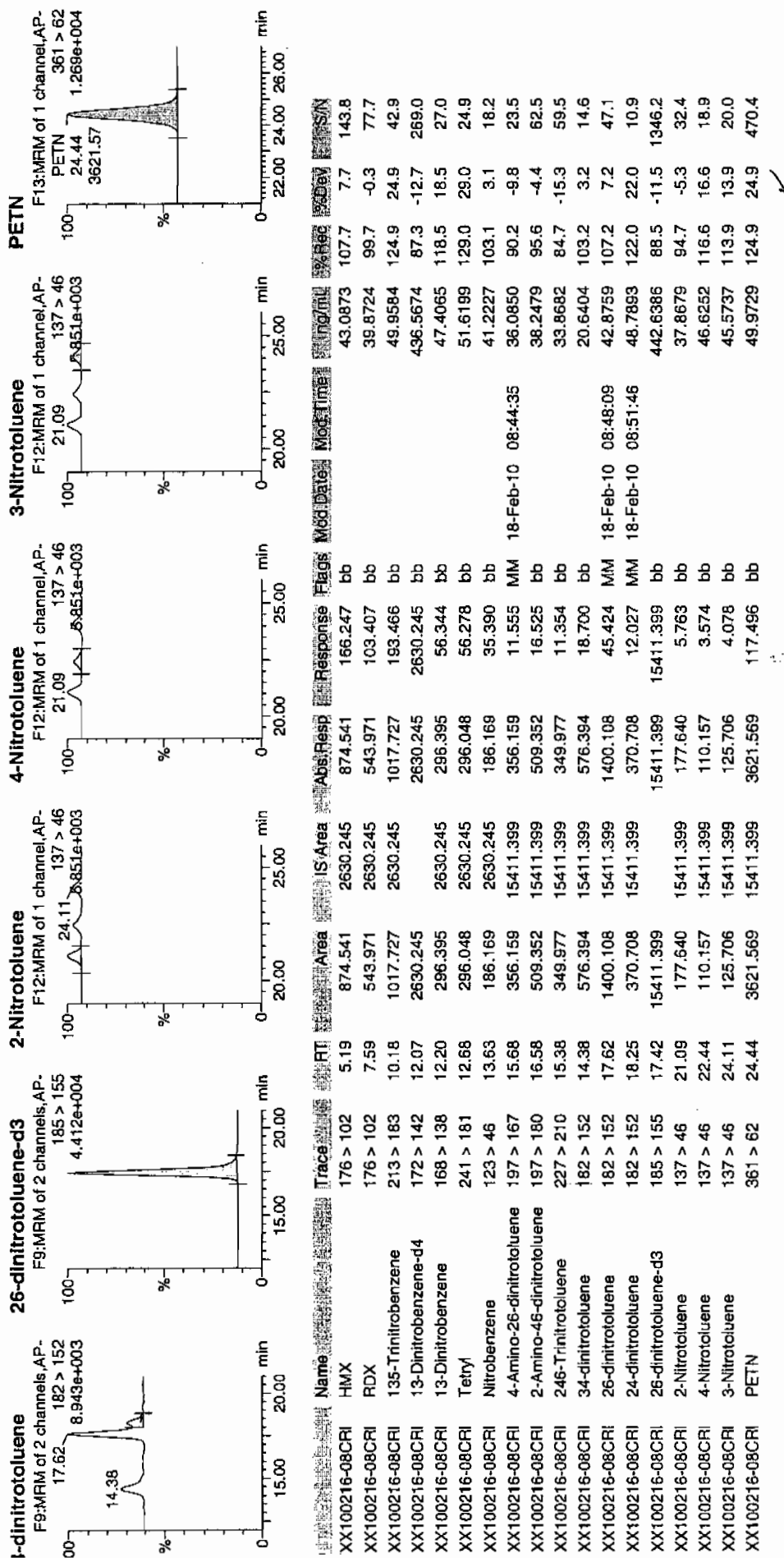
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2/18/10



uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/17/10
 Time of Injection 1254
 Standard Number WXX100216-08CRI
 Data File EXP0216041a

HMX	107.7
RDX	99.7
135-TNB	124.9
13-DNB	118.5
Tetryl	129.0
Nitrobenzene	103.1
4A-26-DNT	90.2
2A-46-DNT	95.6
246-TNT	84.7
34-DNT(surr)	103.2
26-DNT	107.2
24-DNT	122.0
2-NT	94.7
4-NT	116.6
3-NT	113.9
PETN	124.9
Total	1735.9

MTT
2/18/10

Average

108.5

Time 02/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216052a

Analysis Date: 17-FEB-10 18:20

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	600	614.714	102	
m-Nitrotoluene	600	522.1	87	
o-Nitrotoluene	600	521.805	87	
p-Nitrotoluene	600	528.568	88	
1,3,5-Trinitrobenzene	600	586.393	98	
1,3-Dinitrobenzene-d4	500	469.603	94	
2,4,6-Trinitrotoluene	600	667.732	111	
2,4-Dinitrotoluene	600	640.278	107	
2,6-Dinitrotoluene	600	617.89	103	
2,6-Dinitrotoluene-d3	500	472.936	95	
2-Amino-4,6-dinitrotoluene	600	700.294	117	
3,4-Dinitrotoluene	300	322.55	108	
4-Amino-2,6-dinitrotoluene	600	558.036	93	
HMX	600	526.292	88	
Nitrobenzene	600	561.562	94	
PETN	600	685.593	114	
RDX	600	615.154	103	
Tetryl	600	581.072	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

Printed: Thu Feb 18 08:53:51 2010, Page 45 of 103

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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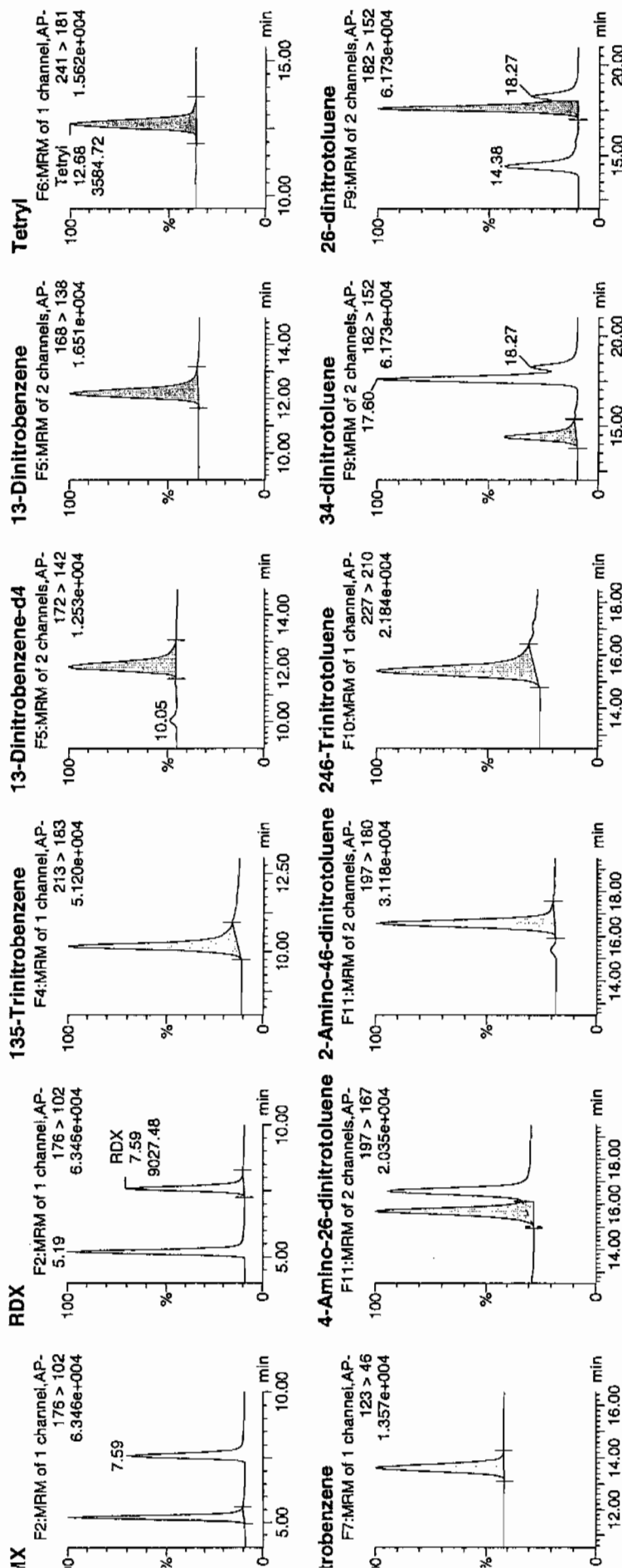
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Sample: WXX100216-07CCV

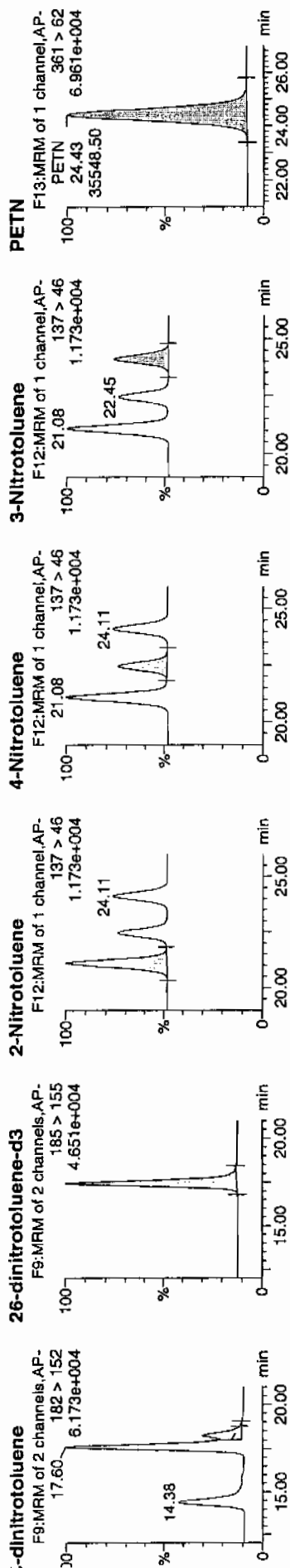
Injection: 1:1,B

MM 2/18/10



MM 2/18/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Int/ml	Res	%Dev	SN
XX100216-07CCV HMX	176 > 102	5.19	11490.467	2829.281	11490.467	2030.634	bb			526.2925	87.7	-12.3	815.5
XX100216-07CCV RDX	176 > 102	7.59	9027.476	2829.281	9027.476	1595.366	bb			615.1536	102.5	2.5	550.4
XX100216-07CCV 135-Trinitrobenzene	213 > 183	10.18	12849.643	2829.281	12849.643	2270.832	bb			586.3926	97.7	-2.3	1070.5
XX100216-07CCV 13-Dinitrobenzene-d4	172 > 142	12.07	2829.281	2829.281	2829.281	2829.281	bb			469.6033	93.9	-6.1	279.7
XX100216-07CCV 13-Dinitrobenzene	168 > 138	12.21	4134.145	2829.281	4134.145	730.600	bb			614.7141	102.5	2.5	343.4
XX100216-07CCV Tetra	241 > 181	12.68	3584.717	2829.281	3584.717	633.503	bb			581.0719	96.8	-3.2	310.8
XX100216-07CCV Nitrobenzene	123 > 46	13.63	2728.030	2829.281	2728.030	482.107	bb			561.5623	93.6	-6.4	278.0
XX100216-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.68	5894.796	16466.256	5894.796	178.693	MM	18-Feb-10	08:45:27	558.0356	93.0	-7.0	329.4
XX100216-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.58	9964.233	16466.256	9964.233	302.565	bb			700.2936	116.7	16.7	436.1
XX100216-07CCV 246-Trinitrotoluene	227 > 210	15.41	7372.284	16466.256	7372.284	223.860	bb			667.7320	111.3	11.3	133.4
XX100216-07CCV 34-dinitrotoluene	182 > 152	14.38	9623.878	16466.256	9623.878	292.230	bb			322.5496	107.5	7.5	471.5
XX100216-07CCV 26-dinitrotoluene	182 > 152	17.60	21558.193	16466.256	21558.193	654.617	MM	18-Feb-10	08:48:43	617.8898	103.0	3.0	1307.8
XX100216-07CCV 24-dinitrotoluene	182 > 152	18.27	5197.906	16466.256	5197.906	157.835	MM	18-Feb-10	08:50:57	640.2777	106.7	6.7	288.4
XX100216-07CCV 26-dinitrotoluene-d3	185 > 155	17.42	16466.256	16466.256	16466.256	16466.256	bb			472.9357	94.6	-5.4	1834.5
XX100216-07CCV 2-Nitrotoluene	137 > 46	21.08	2615.357	16466.256	2615.357	79.416	bb			521.8049	87.0	-13.0	493.9
XX100216-07CCV 4-Nitrotoluene	137 > 46	22.45	1334.272	16466.256	1334.272	40.515	bb			528.5675	88.1	-11.9	245.7
XX100216-07CCV 3-Nitrotoluene	137 > 46	24.11	1538.681	16466.256	1538.681	46.722	bb			522.1001	87.0	-13.0	271.2
XX100216-07CCV PETN	361 > 62	24.43	35548.496	16466.256	35548.496	1079.435	bb			685.5926	114.3	14.3	8100.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/17/10
 Time of Injection: 1820
 Standard Number: WXX100216-07CCV
 Data File: EXP0216052a

HMX	87.7
RDX	102.5
135-TNB	97.7
13-DNB	102.5
Tetryl	96.8
Nitrobenzene	93.6
4A-26-DNT	93.0
2A-46-DNT	116.7
246-TNT	111.3
34-DNT(surr)	107.5
26-DNT	103.0
24-DNT	106.7
2-NT	87.0
4-NT	88.1
3-NT	87.0
PETN	114.3

MAF
2/18/10

Total 1595.4

Average 99.7

Sum on 1/8/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216054a

Analysis Date: 17-FEB-10 19:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.067	123	
1,3-Dinitrobenzene-d4	500	526.622	105	
2,4,6-Trinitrotoluene	40	45.215	113	
2,4-Dinitrotoluene	40	38.588	96	
2,6-Dinitrotoluene	40	43.371	108	
2,6-Dinitrotoluene-d3	500	482.623	97	
2-Amino-4,6-dinitrotoluene	40	45.806	115	
3,4-Dinitrotoluene	20	22.123	111	
4-Amino-2,6-dinitrotoluene	40	49.639	124	
HMX	40	43.201	108	
Nitrobenzene	40	41.456	104	
PETN	40	47.927	120	
RDX	40	45.793	114	
Tetryl	40	38.525	96	
m-Dinitrobenzene	40	46.393	116	
m-Nitrotoluene	40	35.588	89	
o-Nitrotoluene	40	43.751	109	
p-Nitrotoluene	40	34.462	86	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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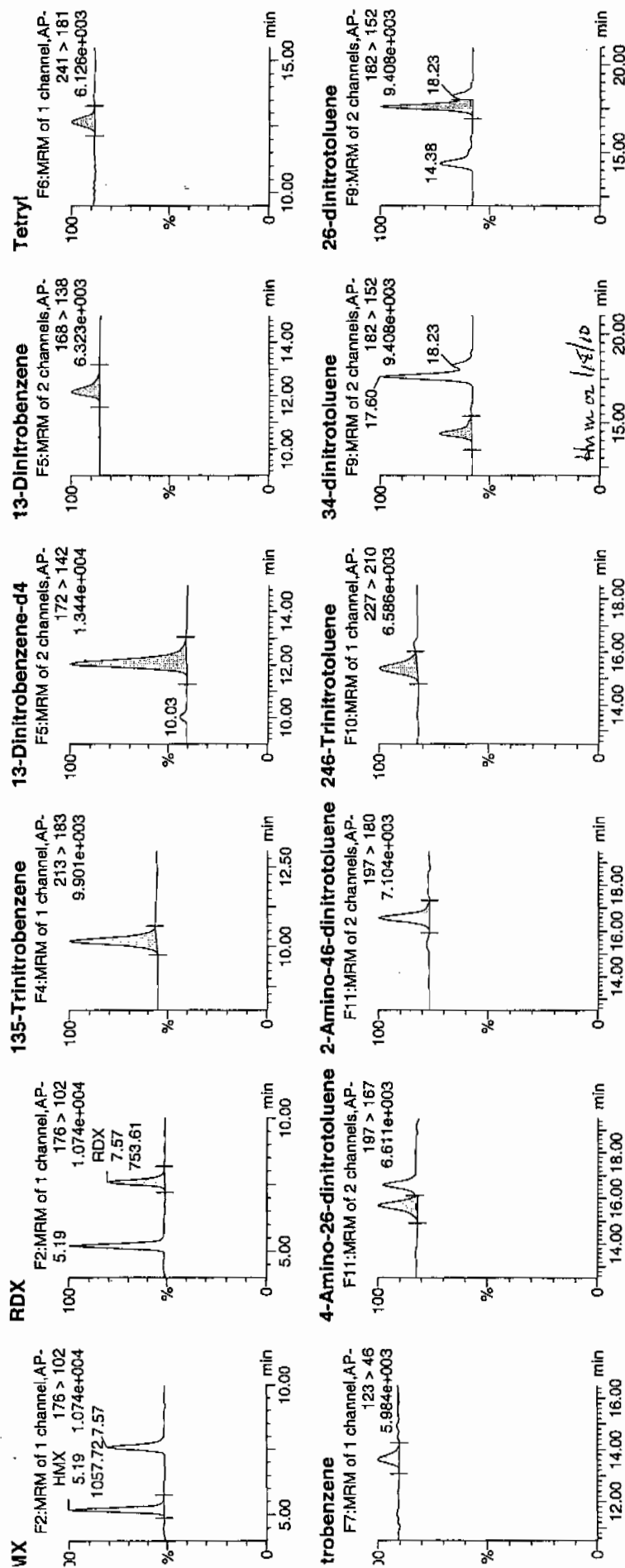
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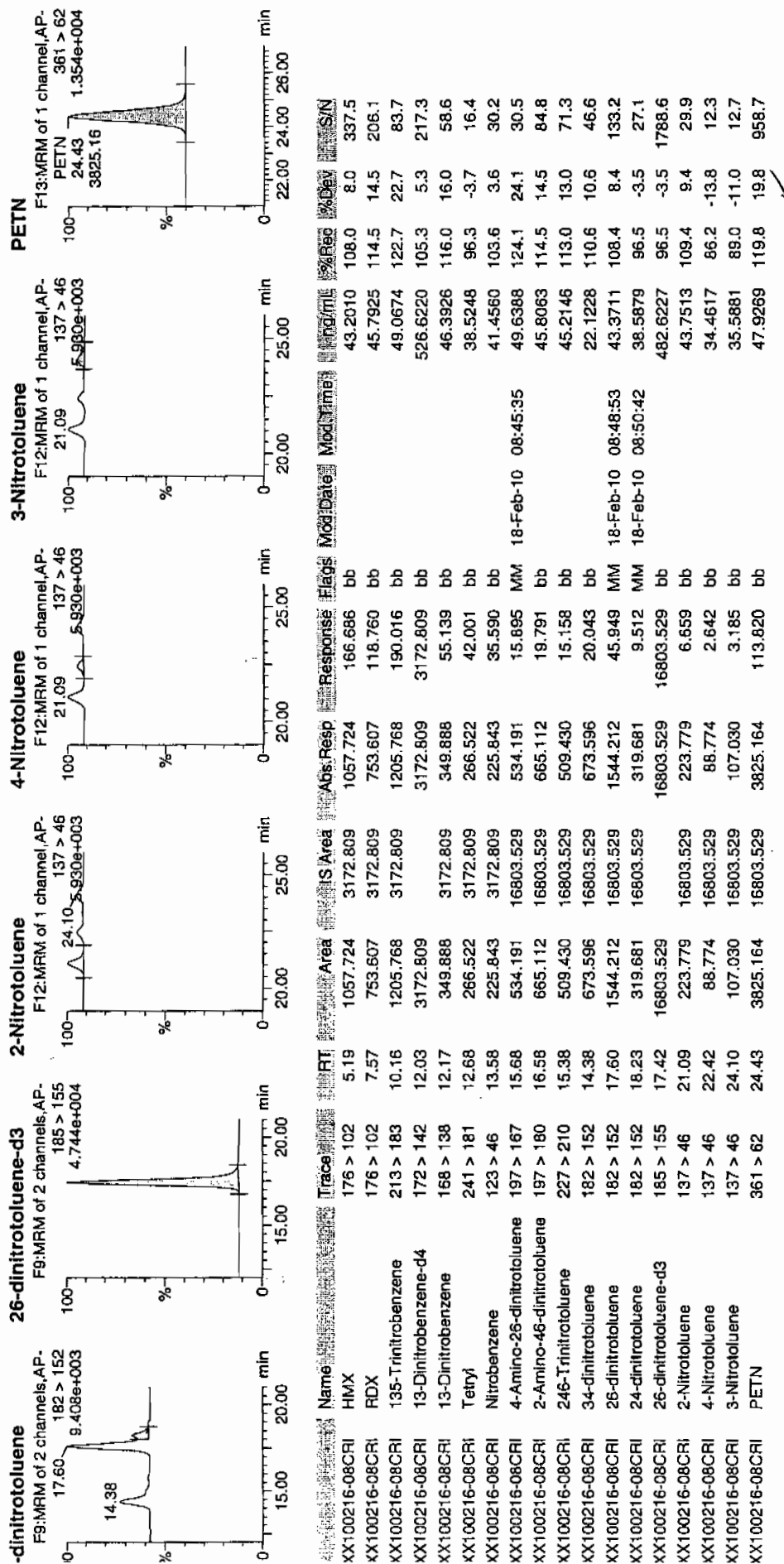
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WXX
2/18/10



Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/17/10
 Time of Injection 1919
 Standard Number WXX100216-08CRI
 Data File EXP0216054a

HMX	108.0
RDX	114.5
135-TNB	122.7
13-DNB	116.0
Tetryl	96.3
Nitrobenzene	103.6
4A-26-DNT	124.1
2A-46-DNT	114.5
246-TNT	113.0
34-DNT(surr)	110.6
26-DNT	108.4
24-DNT	96.5
2-NT	109.4
4-NT	86.2
3-NT	89.0
PETN	119.8

*WXX
2/18/10*

Total 1732.6

WXX 02/18/10

Average 108.3

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216065a

Analysis Date: 18-FEB-10 00:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	589.98	98	
1,3-Dinitrobenzene-d4	500	503.448	101	
2,4,6-Trinitrotoluene	600	674.628	112	
2,4-Dinitrotoluene	600	646.389	108	
2,6-Dinitrotoluene	600	642.938	107	
2,6-Dinitrotoluene-d3	500	484.848	97	
2-Amino-4,6-dinitrotoluene	600	685.308	114	
3,4-Dinitrotoluene	300	332.023	111	
4-Amino-2,6-dinitrotoluene	600	595.679	99	
HMX	600	685.513	114	
Nitrobenzene	600	619.311	103	
PETN	600	592.614	99	
RDX	600	694.615	116	
Tetryl	600	564.648	94	
m-Dinitrobenzene	600	607.21	101	
m-Nitrotoluene	600	591.803	99	
o-Nitrotoluene	600	604.859	101	
p-Nitrotoluene	600	605.824	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

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

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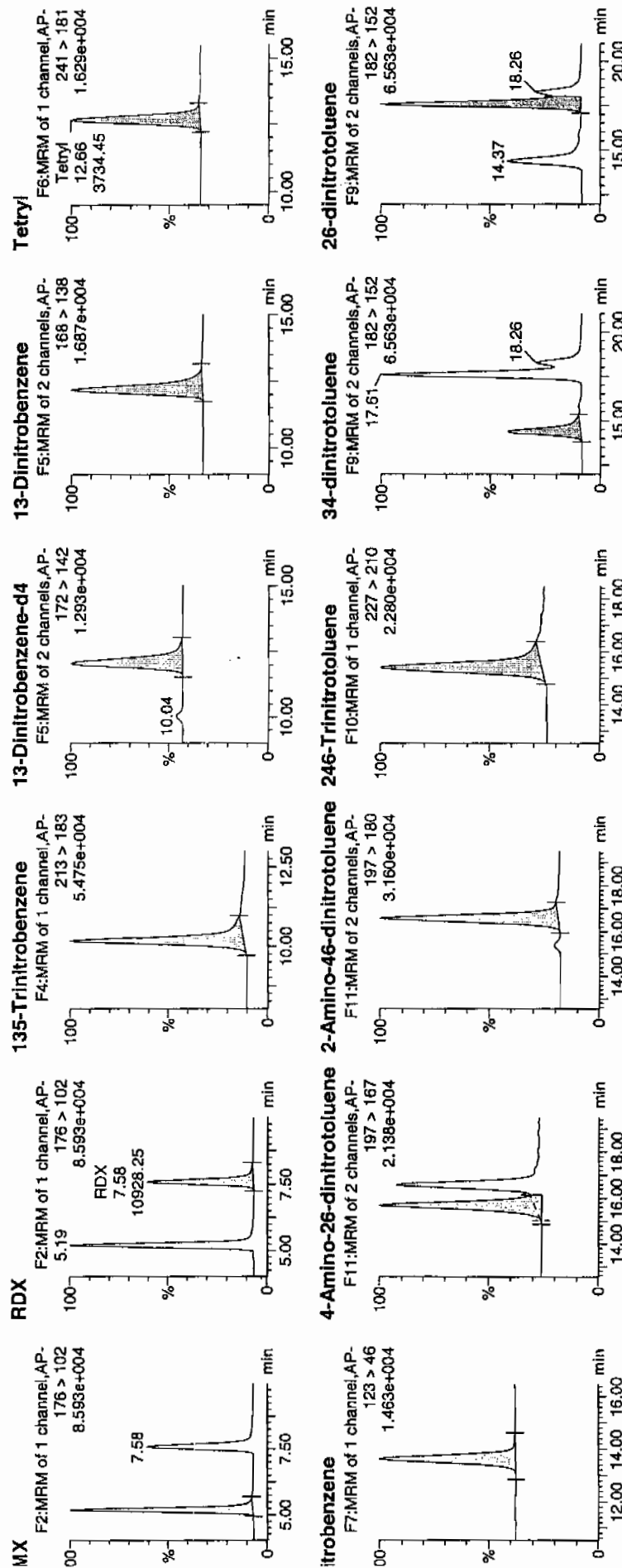
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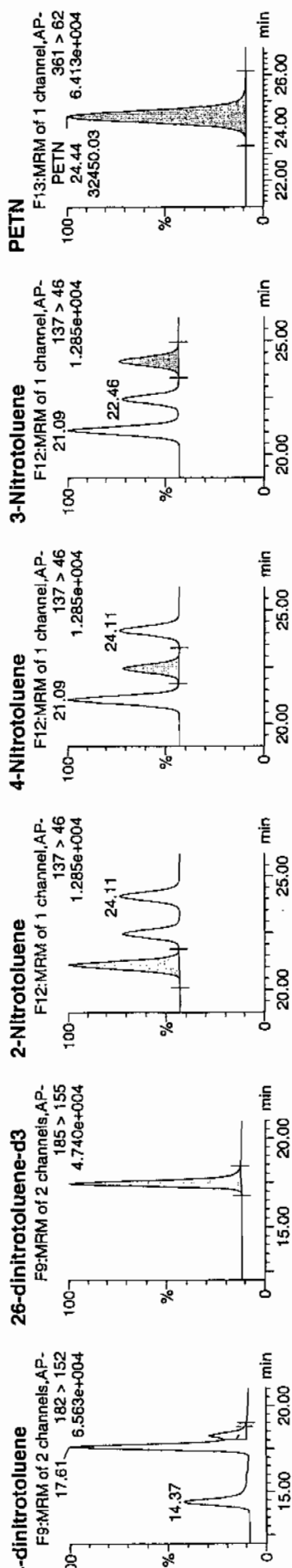
2/18/10

Page 881 of 1179



Handwritten note: 1/8/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	% Inj	% Rec	SN		
XX100216-07CCV	HMx	176 > 102	5.19	16045.377	3033.191	16045.377	2644.966	bb		685.5131	114.3	14.3	4796.8	
XX100216-07CCV	RDX	176 > 102	7.58	10928.254	3033.191	10928.254	1801.445	bb		694.6153	115.8	15.8	2791.9	
XX100216-07CCV	135-Trinitrobenzene	213 > 183	10.18	13860.002	3033.191	13860.002	2284.723	bb		589.9797	98.3	-1.7	651.9	
XX100216-07CCV	13-Dinitrobenzene-d4	172 > 142	12.06	3033.191	3033.191	3033.191	3033.191	bb		503.4482	100.7	0.7	211.0	
XX100216-07CCV	13-Dinitrobenzene	168 > 138	12.17	4377.993	3033.191	4377.993	721.681	bb		607.2099	101.2	1.2	1168.9	
XX100216-07CCV	Tetryl	241 > 181	12.66	3734.446	3033.191	3734.446	615.597	bb		564.6476	94.1	-5.9	245.8	
XX100216-07CCV	Nitrobenzene	123 > 46	13.61	3225.402	3033.191	3225.402	531.685	bb		619.3113	103.2	3.2	203.0	
XX100216-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.70	6439.984	16881.000	6439.984	190.747	MM	18-Feb-10	08:45:48	595.8786	99.3	-0.7	289.6
XX100216-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	9996.612	16881.000	9996.612	296.091	bb		685.3080	114.2	14.2	311.7	
XX100216-07CCV	246-Trinitrotoluene	227 > 210	15.40	7636.027	16881.000	7636.027	226.172	bb		674.6279	112.4	12.4	330.2	
XX100216-07CCV	34-dinitrotoluene	182 > 152	14.37	10156.054	16881.000	10156.054	300.813	bb		332.0230	110.7	10.7	270.1	
XX100216-07CCV	26-dinitrotoluene	182 > 152	17.61	22997.145	16881.000	22997.145	681.155	MM	18-Feb-10	08:49:12	642.9383	107.2	7.2	748.4
XX100216-07CCV	24-dinitrotoluene	182 > 152	18.26	5379.695	16881.000	5379.695	159.342	MM	18-Feb-10	08:50:31	646.3895	107.7	7.7	160.4
XX100216-07CCV	26-dinitrotoluene-d3	185 > 155	17.43	16881.000	16881.000	16881.000	16881.000	bb		484.8478	97.0	-3.0	2282.6	
XX100216-07CCV	2-Nitrotoluene	137 > 46	21.09	3107.994	16881.000	3107.994	92.056	bb		604.8569	100.8	0.8	698.8	
XX100216-07CCV	4-Nitrotoluene	137 > 46	22.46	1567.810	16881.000	1567.810	46.437	bb		605.8236	101.0	1.0	345.9	
XX100216-07CCV	3-Nitrotoluene	137 > 46	24.11	1788.032	16881.000	1788.032	52.960	bb		591.8030	98.6	-1.4	366.6	
XX100216-07CCV	PETN	361 > 62	24.44	32450.031	16881.000	32450.031	961.141	bb		592.6141	98.8	-1.2	10378.5	

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/18/10
 Time of Injection: 0045
 Standard Number: WXX100216-07CCV
 Data File: EXP0216065a

HMX	114.3
RDX	115.8
135-TNB	98.3
13-DNB	101.2
Tetryl	94.1
Nitrobenzene	103.2
4A-26-DNT	99.3
2A-46-DNT	114.2
246-TNT	112.4
34-DNT(surr)	110.7
26-DNT	107.2
24-DNT	107.7
2-NT	100.8
4-NT	101.0
3-NT	98.6
PETN	98.8

NOT
2/18/10

Total 1677.6

Average 104.9

HMX 02/18/10

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216067a

Analysis Date: 18-FEB-10 01:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
HMX	40	31.977	80	
Nitrobenzene	40	28.466	71	
PETN	40	44.163	110	
RDX	40	37.7	94	
Tetryl	40	40.159	100	
m-Dinitrobenzene	40	38.48	96	
m-Nitrotoluene	40	33.219	83	
o-Nitrotoluene	40	44.575	111	
p-Nitrotoluene	40	37.562	94	
1,3,5-Trinitrobenzene	40	50.874	127	
1,3-Dinitrobenzene-d4	500	574.253	115	
2,4,6-Trinitrotoluene	40	44.52	111	
2,4-Dinitrotoluene	40	35.748	89	
2,6-Dinitrotoluene	40	41.094	103	
2,6-Dinitrotoluene-d3	500	534.755	107	
2-Amino-4,6-dinitrotoluene	40	37.567	94	
3,4-Dinitrotoluene	20	20.903	105	
4-Amino-2,6-dinitrotoluene	40	37.482	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Identify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 75 of 103

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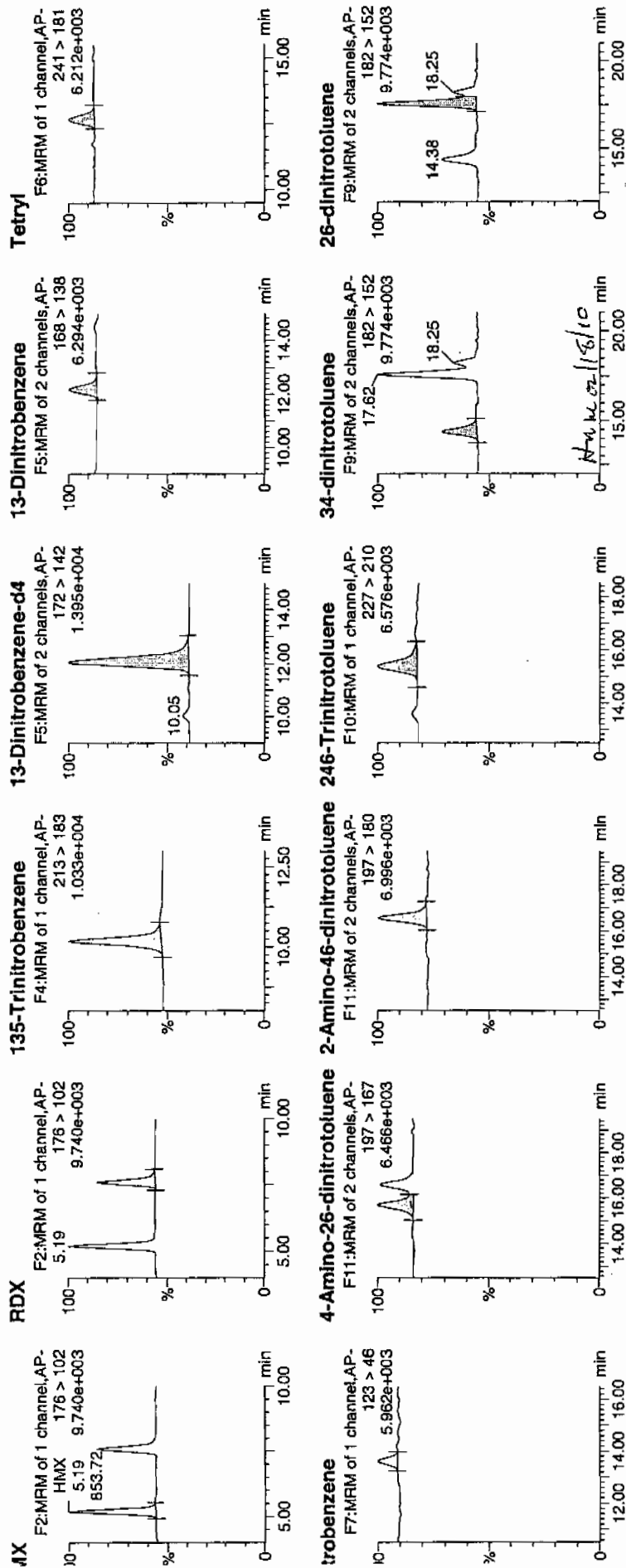
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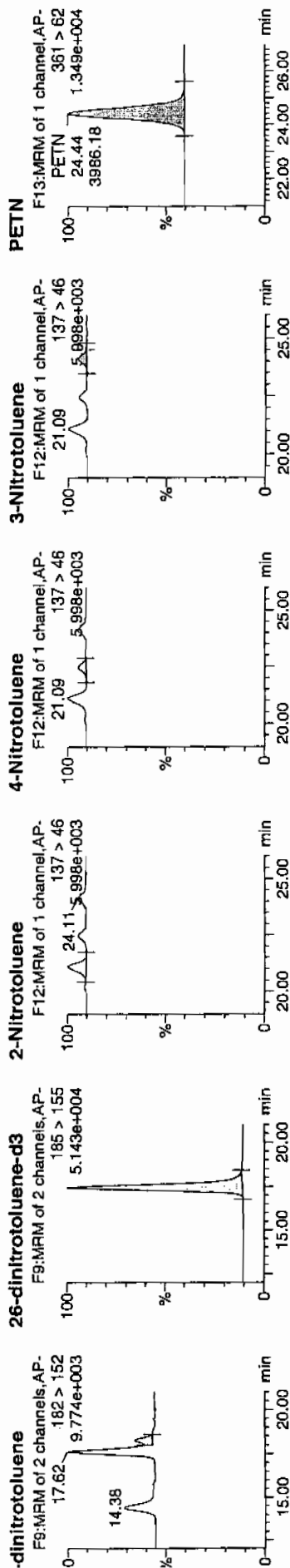
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AP
2/18/10



Identify Sample Report
iL Laboratories, LLC / Analyst: Michael A. Penny

taset: C:\MASSLYNX\New_Exp\PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	%Rec	%Dev	SN
X100216-08CRI HMX	176 > 102	5.19	853.724	3459.779	853.724	123.378	bb			31.9768	79.9	-20.1	197.3
X100216-08CRI RDX	176 > 102	7.59	676.552	3459.779	676.552	97.774	bb			37.7004	94.3	-5.7	132.5
X100216-08CRI 135-Trinitrobenzene	213 > 183	10.18	1363.239	3459.779	1363.239	197.012	bb			50.8741	127.2	27.2	225.1
X100216-08CRI 13-Dinitrobenzene-d4	172 > 142	12.07	3459.779		3459.779	3459.779	bb			574.2532	114.9	14.9	215.0
X100216-08CRI 13-Dinitrobenzene	168 > 138	12.17	316.458	3459.779	316.458	45.734	bb			38.4797	96.2	-3.8	49.6
X100216-08CRI Tetryl	241 > 181	12.68	302.953	3459.779	302.953	43.782	bb			40.1585	100.4	0.4	45.9
X100216-08CRI Nitrobenzene	123 > 46	13.58	169.101	3459.779	169.101	24.438	bb			28.4658	71.2	-28.8	16.7
X100216-08CRI 4-Amino-26-dinitrotoluene	197 > 167	15.68	446.929	18618.615	446.929	12.002	MM	18-Feb-10	08:46:00	37.4815	93.7	-6.3	9.9
X100216-08CRI 2-Amino-46-dinitrotoluene	197 > 180	16.58	604.400	18618.615	604.400	16.231	bb			37.5671	93.9	-6.1	115.4
X100216-08CRI 246-Trinitrotoluene	227 > 210	15.38	555.791	18618.615	555.791	14.926	bb			44.5204	111.3	11.3	29.1
X100216-08CRI 34-dinitrotoluene	182 > 152	14.38	705.192	18618.615	705.192	18.938	bb			20.9025	104.5	4.5	30.4
X100216-08CRI 26-dinitrotoluene	182 > 152	17.62	1621.167	18618.615	1621.167	43.536	MM	18-Feb-10	08:49:18	41.0936	102.7	2.7	86.4
X100216-08CRI 24-dinitrotoluene	182 > 152	18.25	328.140	18618.615	328.140	8.812	MM	18-Feb-10	08:50:18	35.7476	89.4	-10.6	18.8
X100216-08CRI 26-dinitrotoluene-d3	185 > 155	17.44	18618.615	18618.615	18618.615	18618.615	bb			534.7547	107.0	7.0	729.5
X100216-08CRI 2-Nitrotoluene	137 > 46	21.09	252.621	18618.615	252.621	6.784	bb			44.5753	111.4	11.4	39.4
X100216-08CRI 4-Nitrotoluene	137 > 46	22.46	107.213	18618.615	107.213	2.879	bb			37.5622	93.9	-6.1	17.2
X100216-08CRI 3-Nitrotoluene	137 > 46	24.11	110.695	18618.615	110.695	2.973	MM	18-Feb-10	08:53:07	33.2186	83.0	-17.0	17.0
X100216-08CRI PETN	361 > 62	24.44	3986.175	18618.615	3986.175	107.048	bb			44.1631	110.4	10.4	1704.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/18/10
 Time of Injection 0144
 Standard Number WXX100216-08CRI
 Data File EXP0216067a

HMX	79.9
RDX	94.3
135-TNB	127.2
13-DNB	96.2
Tetryl	100.4
Nitrobenzene	71.2
4A-26-DNT	93.7
2A-46-DNT	93.9
246-TNT	111.3
34-DNT(surr)	104.5
26-DNT	102.7
24-DNT	89.4
2-NT	111.4
4-NT	93.9
3-NT	83.0
PETN	110.4

MITT
2/18/10

Total 1563.4

Average 97.7

Hyd. on 1/8/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216078a

Analysis Date: 18-FEB-10 07:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	600	615.257	103	
3,4-Dinitrotoluene	300	357.759	119	
4-Amino-2,6-dinitrotoluene	600	549.787	92	
HMX	600	519.274	87	
Nitrobenzene	600	504.757	84	
PETN	600	715.342	119	
RDX	600	628.868	105	
Tetryl	600	541.018	90	
m-Dinitrobenzene	600	590.189	98	
m-Nitrotoluene	600	537.034	90	
o-Nitrotoluene	600	576.847	96	
p-Nitrotoluene	600	589.034	98	
1,3,5-Trinitrobenzene	600	520.611	87	
1,3-Dinitrobenzene-d4	500	542.41	108	
2,4,6-Trinitrotoluene	600	648.856	108	
2,4-Dinitrotoluene	600	647.037	108	
2,6-Dinitrotoluene	600	629.886	105	
2,6-Dinitrotoluene-d3	500	468.716	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

Printed: Thu Feb 18 08:53:51 2010, Page 97 of 103

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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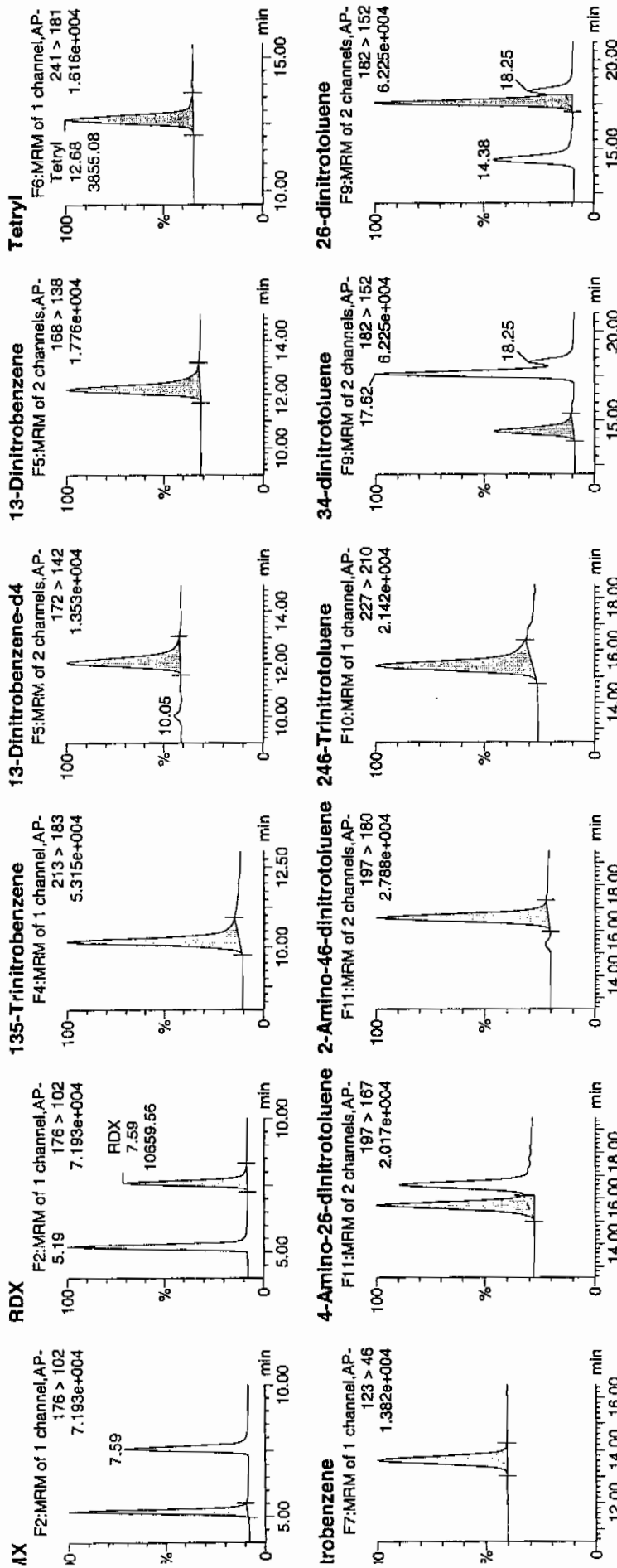
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Handwritten: 1/18/10

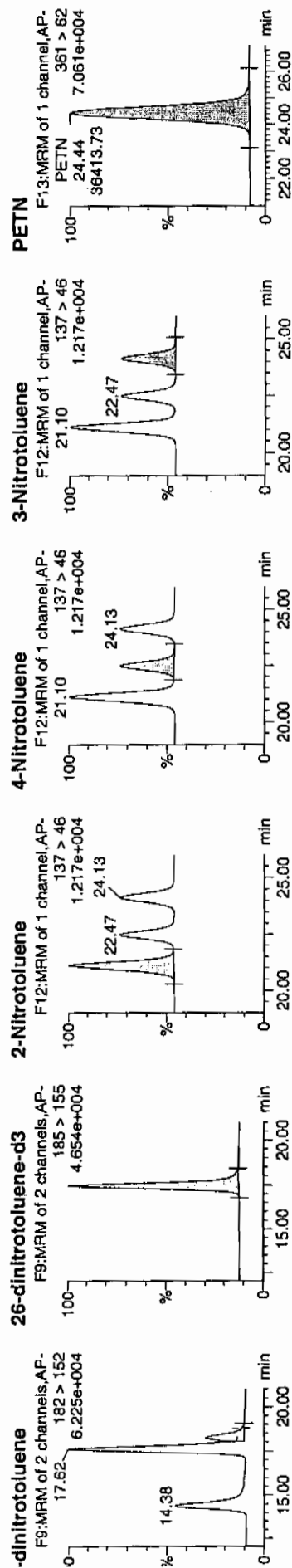


Handwritten: 1/18/10

Printed: Thu Feb 18 08:53:51 2010, Page 98 of 103

Identify Sample Report
 IL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	SN
XX100216-07CCV HMX	176 > 102	5.19	13094.961	3267.932	13094.961	2003.555	bb			519.2742	86.5	-13.5	2314.4
XX100216-07CCV RDX	176 > 102	7.59	10659.564	3267.932	10659.564	1630.934	bb			628.8683	104.8	4.8	1607.8
XX100216-07CCV 135-Trinitrobenzene	213 > 183	10.18	13176.895	3267.932	13176.895	2016.091	bb			520.6113	86.8	-13.2	844.8
XX100216-07CCV 13-Dinitrobenzene-d4	172 > 142	12.07	3267.932		3267.932	3267.932	bb			542.4105	108.5	8.5	247.9
XX100216-07CCV 13-Dinitrobenzene	168 > 138	12.21	4584.592	3267.932	4584.592	701.452	bb			590.1891	98.4	-1.6	710.8
XX100216-07CCV Tetryl	241 > 181	12.68	3855.081	3267.932	3855.081	589.835	bb			541.0178	90.2	-9.8	423.8
XX100216-07CCV Nitrobenzene	123 > 46	13.63	2832.244	3267.932	2832.244	433.339	bb			504.7572	84.1	-15.9	236.8
XX100216-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.68	5746.081	16319.334	5746.081	176.051	MM	18-Feb-10	08:46:17	549.7873	91.6	-8.4	542.5
XX100216-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.58	8676.166	16319.334	8676.166	265.825	bb			615.2570	102.5	2.5	836.2
XX100216-07CCV 246-Trinitrotoluene	227 > 210	15.41	7099.956	16319.334	7099.956	217.532	bb			648.8559	108.1	8.1	417.5
XX100216-07CCV 34-dinitrotoluene	182 > 152	14.38	10578.176	16319.334	10579.176	324.130	bb			357.7591	119.3	19.3	478.8
XX100216-07CCV 26-dinitrotoluene	182 > 152	17.62	21780.637	16319.334	21780.637	967.326	MM	18-Feb-10	08:49:35	629.8856	105.0	5.0	1206.0
XX100216-07CCV 24-dinitrotoluene	182 > 152	18.25	5205.910	16319.334	5205.910	159.501	MM	18-Feb-10	08:50:07	647.0369	107.8	7.8	267.1
XX100216-07CCV 26-dinitrotoluene-d3	185 > 155	17.44	16319.334		16319.334	16319.334	bb			468.7159	93.7	-6.3	1228.6
XX100216-07CCV 2-Nitrotoluene	137 > 46	21.10	2865.436	16319.334	2865.436	87.793	bb			576.8466	96.1	-3.9	675.9
XX100216-07CCV 4-Nitrotoluene	137 > 46	22.47	1473.642	16319.334	1473.642	45.150	bb			589.0342	98.2	-1.8	344.1
XX100216-07CCV 3-Nitrotoluene	137 > 46	24.13	1568.570	16319.334	1568.570	48.059	bb			537.0337	89.5	-10.5	344.9
XX100216-07CCV PETN	361 > 62	24.44	36413.730	16319.334	36413.730	1115.662	bb			715.3425	119.2	19.2	7773.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/18/10
 Time of Injection: 0710
 Standard Number: WXX100216-07CCV
 Data File: EXP0216078a

HMX	86.5
RDX	104.8
135-TNB	86.8
13-DNB	98.4
Tetryl	90.2
Nitrobenzene	84.1
4A-26-DNT	91.6
2A-46-DNT	102.5
246-TNT	108.1
34-DNT(surr)	119.3
26-DNT	105.0
24-DNT	107.8
2-NT	96.1
4-NT	98.2
3-NT	89.5
PETN	119.2
Total	1588.1

*MTT
4/18/10*

Average

99.3

These are 118/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216080a

Analysis Date: 18-FEB-10 08:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.403	121	
1,3-Dinitrobenzene-d4	500	494.727	99	
2,4,6-Trinitrotoluene	40	41.136	103	
2,4-Dinitrotoluene	40	38.771	97	
2,6-Dinitrotoluene	40	44.76	112	
2,6-Dinitrotoluene-d3	500	481.497	96	
2-Amino-4,6-dinitrotoluene	40	41.233	103	
3,4-Dinitrotoluene	20	22.678	113	
4-Amino-2,6-dinitrotoluene	40	37.418	94	
HMX	40	43.826	110	
Nitrobenzene	40	37.223	93	
PETN	40	54.239	136	*
RDX	40	42.015	105	
Tetryl	40	39.964	100	
m-Dinitrobenzene	40	45.818	115	
m-Nitrotoluene	40	40.759	102	
o-Nitrotoluene	40	45.987	115	
p-Nitrotoluene	40	51.62	129	

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 Feb 18 08:53:51 2010, Page 101 of 103

antify Sample Report
L Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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te: 18-Feb-2010

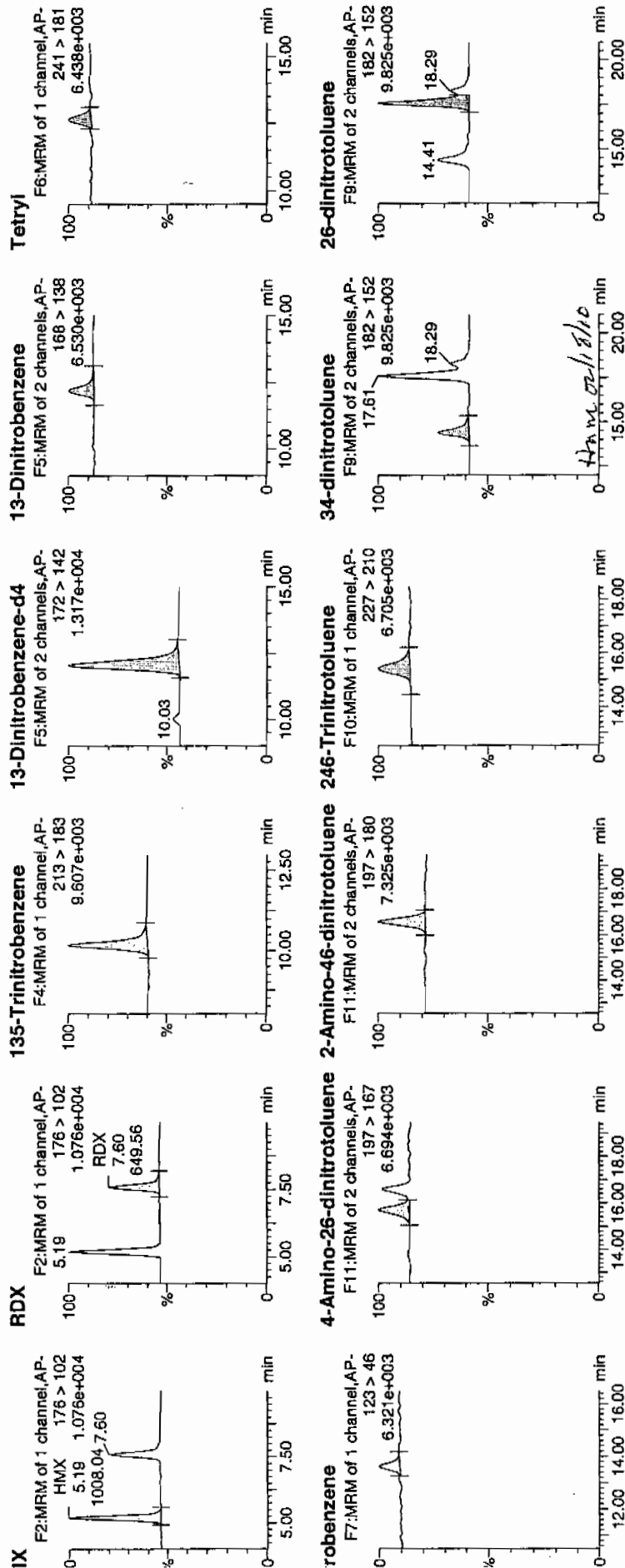
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WXX100216-08CRI

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1/3/10

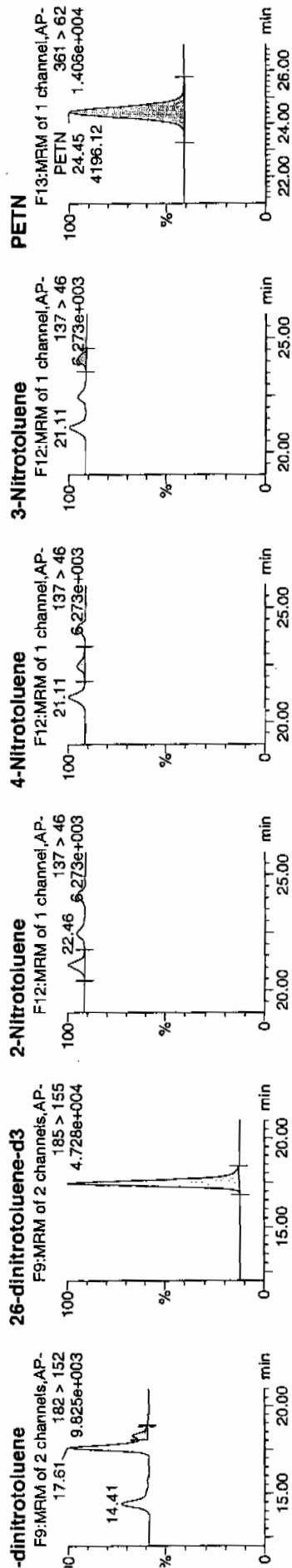
Page 893 of 1179



Printed: Thu Feb 18 08:53:51 2010, Page 102 of 103

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int/mL	%Rec	%Dev	SN
XX100216-08CRI	HMXX	176 > 102	5.19	1008.036	2980.646	1008.036	169.097	bb		43.8259	109.6	9.6	201.4
XX100216-08CRI	RDXX	176 > 102	7.60	649.563	2980.646	649.563	108.963	bb		42.0150	105.0	5.0	111.9
XX100216-08CRI	135-Trinitrobenzene	213 > 183	10.18	1117.398	2980.646	1117.398	187.442	bb		48.4029	121.0	21.0	143.8
XX100216-08CRI	13-Dinitrobenzene-d4	172 > 142	12.06	2980.646	2980.646	2980.646	2980.646	bb		494.7268	98.9	-1.1	450.8
XX100216-08CRI	13-Dinitrobenzene	168 > 138	12.20	324.627	2980.646	324.627	54.456	bb		45.8182	114.5	14.5	34.8
XX100216-08CRI	Tetryl	241 > 181	12.66	259.731	2980.646	259.731	43.570	db		39.9636	99.9	-0.1	29.4
XX100216-08CRI	Nitrobenzene	123 > 46	13.61	190.499	2980.646	190.499	31.956	db		37.2226	93.1	-6.9	28.0
XX100216-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.73	401.731	16764.338	401.731	11.982	MM	18-Feb-10 08:46:24	37.4175	93.5	-6.5	26.2
XX100216-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.59	597.310	16764.338	597.310	17.815	bb		41.2330	103.1	3.1	68.2
XX100216-08CRI	246-Trinitrotoluene	227 > 210	15.44	462.397	16764.338	462.397	13.791	bb		41.1361	102.8	2.8	49.8
XX100216-08CRI	34-dinitrotoluene	182 > 152	14.41	688.876	16764.338	688.876	20.546	bb		22.6775	113.4	13.4	28.8
XX100216-08CRI	26-dinitrotoluene	182 > 152	17.61	1589.948	16764.338	1589.948	47.421	MM	18-Feb-10 08:49:42	44.7600	111.9	11.9	83.5
XX100216-08CRI	24-dinitrotoluene	182 > 152	18.29	320.451	16764.338	320.451	9.558	MM	18-Feb-10 08:50:00	38.7713	96.9	-3.1	15.9
XX100216-08CRI	26-dinitrotoluene-d3	185 > 155	17.43	16764.338	16764.338	16764.338	16764.338	bb		481.4971	96.3	-3.7	1198.5
XX100216-08CRI	2-Nitrotoluene	137 > 46	21.11	234.663	16764.338	234.663	6.999	bb		45.9865	115.0	15.0	54.3
XX100216-08CRI	4-Nitrotoluene	137 > 46	22.46	132.665	16764.338	132.665	3.957	bb		51.6203	129.1	29.1	25.9
XX100216-08CRI	3-Nitrotoluene	137 > 46	24.10	122.295	16764.338	122.295	3.647	bb		40.7589	101.9	1.9	25.8
XX100216-08CRI	PETN	361 > 62	24.45	4196.118	16764.338	4196.118	125.150	bb		54.2394	135.6	35.6	1668.2

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/18/10
 Time of Injection 0810
 Standard Number WXX100216-08CRI
 Data File EXP0216080a

HMX	109.6
RDX	105.0
135-TNB	121.0
13-DNB	114.5
Tetryl	99.9
Nitrobenzene	93.1
4A-26-DNT	93.5
2A-46-DNT	103.1
246-TNT	102.8
34-DNT(surr)	113.4
26-DNT	111.9
24-DNT	96.9
2-NT	115.0
4-NT	129.1
3-NT	101.9
PETN	135.6

*WTF
2/18/10*

Total 1746.3

Average 109.1

Home on 2/18/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216089a

Analysis Date: 18-FEB-10 12:36

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	600	691.665	115	
2,4-Dinitrotoluene	600	659.229	110	
2,6-Dinitrotoluene	600	644.249	107	
2,6-Dinitrotoluene-d3	500	461.757	92	
2-Amino-4,6-dinitrotoluene	600	655.311	109	
3,4-Dinitrotoluene	300	351.733	117	
4-Amino-2,6-dinitrotoluene	600	586.497	98	
HMX	600	695.878	116	
Nitrobenzene	600	570.735	95	
PETN	600	765.325	128	*
RDX	600	762.426	127	*
Tetryl	600	584.833	97	
m-Dinitrobenzene	600	636.337	106	
m-Nitrotoluene	600	573.92	96	
o-Nitrotoluene	600	648.456	108	
p-Nitrotoluene	600	589.135	98	
1,3,5-Trinitrobenzene	600	575.828	96	
1,3-Dinitrobenzene-d4	500	495.598	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216089a

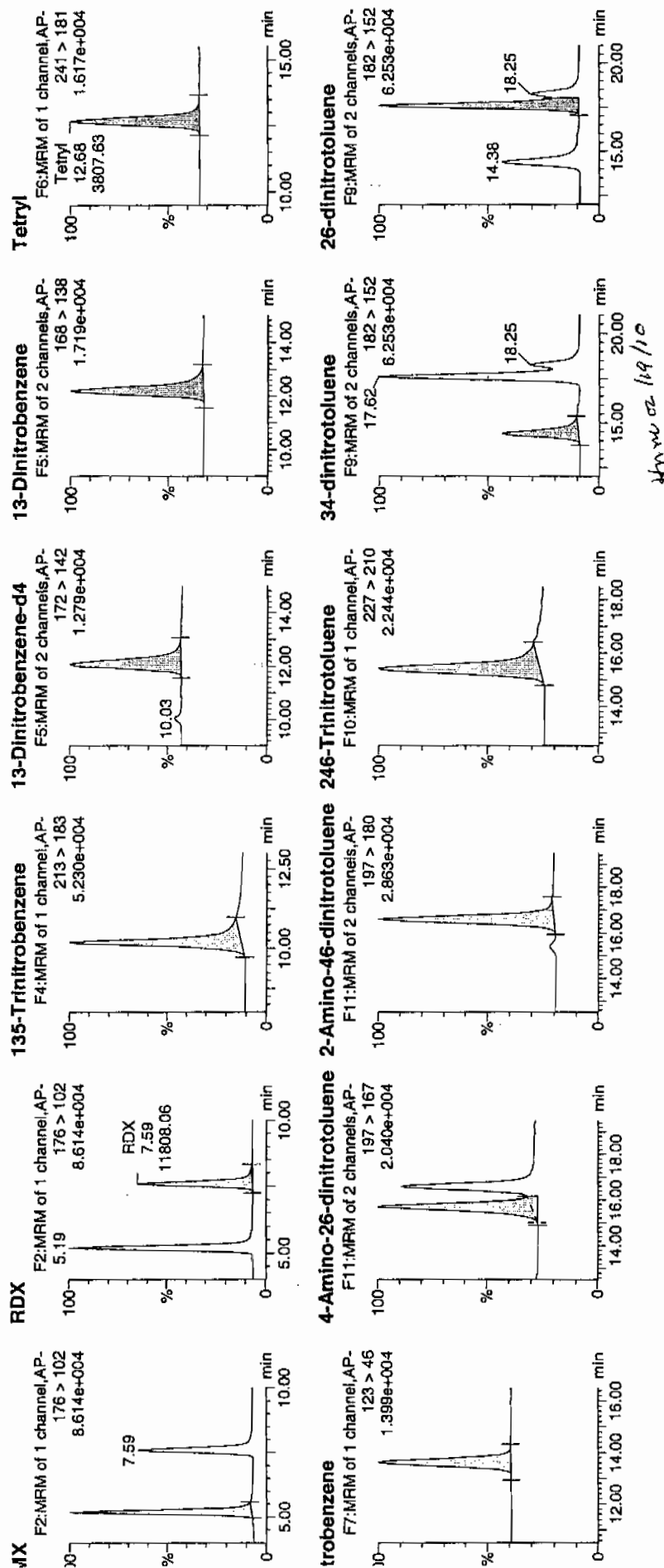
Date: 18-Feb-2010

Time: 12:36:18

File: WXX100216-07CCV

Ratio: 1:1,B

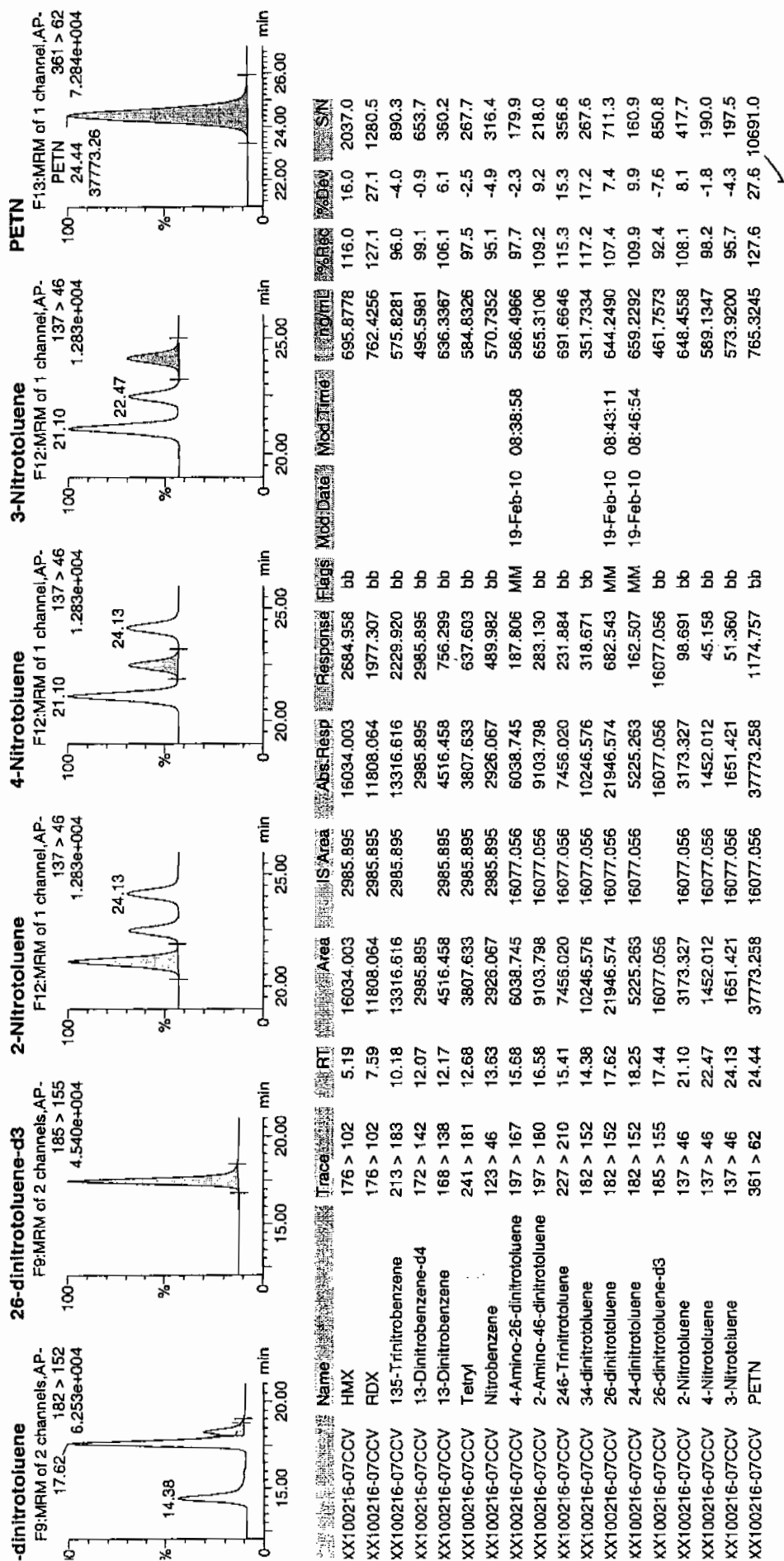
Handwritten: 2/19/10



Printed: Fri Feb 19 08:50:21 2010, Page 18 of 97

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/18/10
 Time of Injection: 1236
 Standard Number: WXX100216-07CCV
 Data File: EXP0216089a

HMX	116.0
RDX	127.1
135-TNB	96.0
13-DNB	106.1
Tetryl	97.5
Nitrobenzene	95.1
4A-26-DNT	97.7
2A-46-DNT	109.2
246-TNT	115.3
34-DNT(surr)	117.2
26-DNT	107.4
24-DNT	109.9
2-NT	108.1
4-NT	98.2
3-NT	95.7
PETN	127.6

*with
2/19/10*

Total 1724.1

Average 107.8

4/22/10 02/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216091a

Analysis Date: 18-FEB-10 13:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	63.823	160	*
2,4-Dinitrotoluene	40	44.759	112	
2,6-Dinitrotoluene	40	43.488	109	
2,6-Dinitrotoluene-d3	500	500.11	100	
2-Amino-4,6-dinitrotoluene	40	42.691	107	
3,4-Dinitrotoluene	20	22.924	115	
4-Amino-2,6-dinitrotoluene	40	39.308	98	
HMX	40	45.096	113	
Nitrobenzene	40	40.389	101	
PETN	40	50.626	127	
RDX	40	44.527	111	
Tetryl	40	44.164	110	
m-Dinitrobenzene	40	38.138	95	
m-Nitrotoluene	40	37.355	93	
o-Nitrotoluene	40	34.55	86	
p-Nitrotoluene	40	31.551	79	
1,3,5-Trinitrobenzene	40	49.419	124	
1,3-Dinitrobenzene-d4	500	495.095	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Fri Feb 19 08:50:21 2010, Page 21 of 97

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Time: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216091a

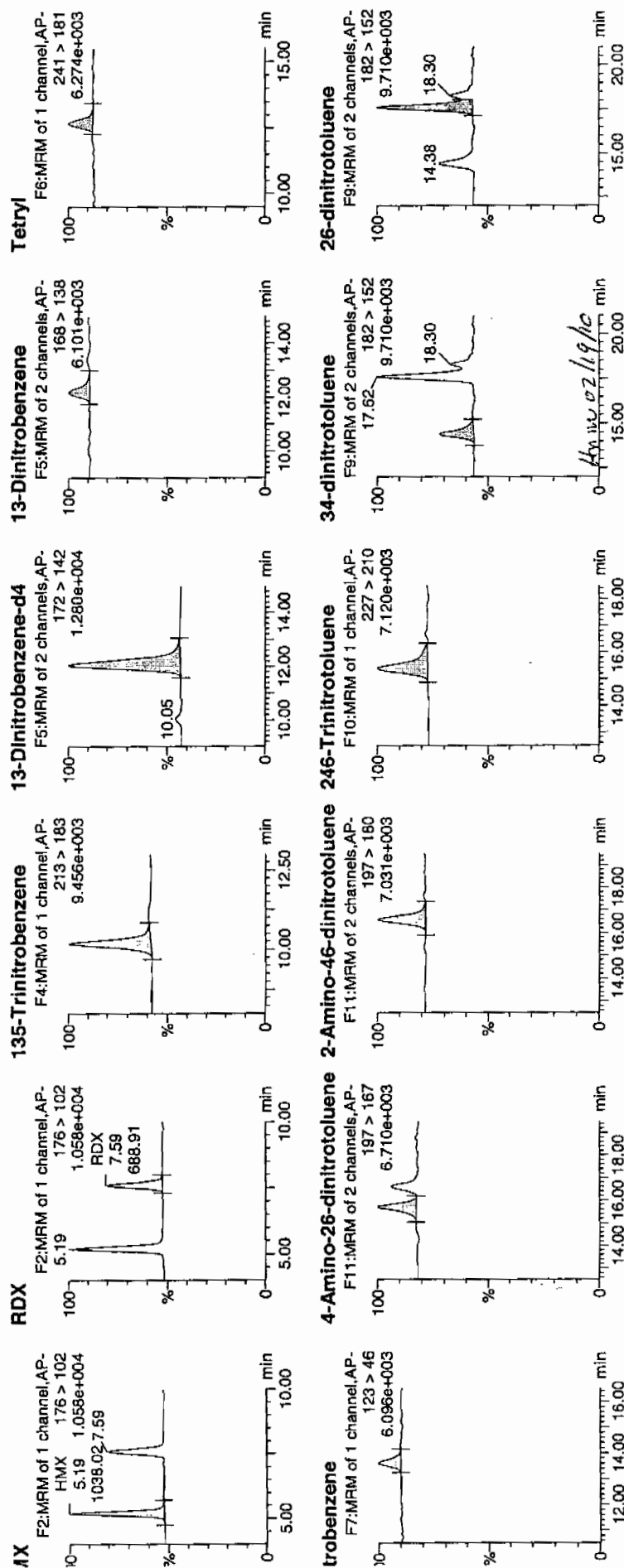
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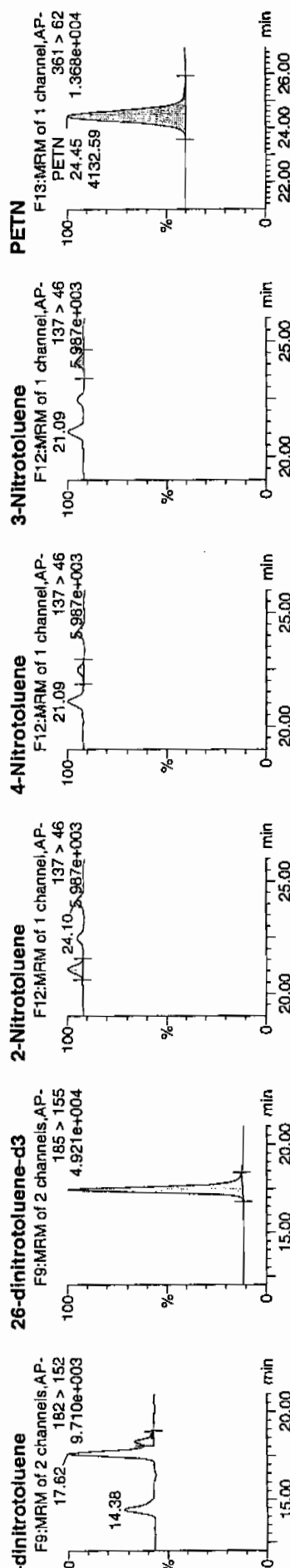
Time: 13:35:23

File: WXX100216-08CRI

Ratio: 1:1,C

Page 901 of 1179





Name	Trace	RT	Area	IS Area	Abs.Rsp	Response	Flags	ModDate	ModTime	Intg/Min	%Rec	%Dev	S/N
HMX	176 > 102	5.19	1038.023	2982.866	1038.023	173.998	bb			45.0961	112.7	12.7	166.4
RDX	176 > 102	7.59	688.912	2982.866	688.912	115.478	bb			44.5270	111.3	11.3	97.9
135-Trinitrobenzene	213 > 183	10.18	1141.707	2982.866	1141.707	191.378	bb			49.4191	123.5	23.5	56.1
13-Dinitrobenzene-d4	172 > 142	12.07	2982.866	2982.866	2982.866	2982.866	bb			495.0953	99.0	-1.0	121.3
13-Dinitrobenzene	168 > 138	12.20	270.413	2982.866	270.413	45.328	bb			38.1380	95.3	-4.7	27.2
Tetryl	241 > 181	12.68	287.244	2982.866	287.244	48.149	bb			44.1640	110.4	10.4	28.0
Nitrobenzene	123 > 46	13.58	206.859	2982.866	206.859	34.675	bb			40.3892	101.0	1.0	31.0
4-Amino-26-dinitrotoluene	197 > 167	15.71	438.338	17412.377	438.338	12.587	bb			39.3076	98.3	-1.7	36.6
2-Amino-46-dinitrotoluene	197 > 180	16.58	642.342	17412.377	642.342	18.445	bb			42.6913	106.7	6.7	109.0
246-Trinitrotoluene	227 > 210	15.41	745.148	17412.377	745.148	21.397	bb			63.8233	159.6	59.6	80.8
34-dinitrotoluene	182 > 152	14.38	723.283	17412.377	723.283	20.769	bb			22.9241	114.6	14.6	41.3
26-dinitrotoluene	182 > 152	17.62	1804.459	17412.377	1604.459	46.072	MM	19-Feb-10	08:43:19	43.4875	108.7	8.7	115.7
24-dinitrotoluene	182 > 152	18.30	364.242	17412.377	384.242	11.034	MM	19-Feb-10	08:46:31	44.7591	111.9	11.9	26.9
26-dinitrotoluene-d3	185 > 155	17.44	17412.377	17412.377	17412.377	17412.377	bb			500.1098	100.0	0.0	2498.5
2-Nitrotoluene	137 > 46	21.09	183.120	17412.377	183.120	5.258	bb			34.5501	86.4	-13.6	48.1
4-Nitrotoluene	137 > 46	22.47	84.222	17412.377	84.222	2.418	bb			31.5514	78.9	-21.1	19.4
3-Nitrotoluene	137 > 46	24.10	116.415	17412.377	116.415	3.343	bb			37.3552	93.4	-6.6	24.4
PETN	361 > 62	24.45	4132.593	17412.377	4132.593	118.668	bb			50.6256	126.6	26.6	818.9

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/18/10
 Time of Injection 1335
 Standard Number WXX100216-08CRI
 Data File EXP0216091a

HMX	112.7
RDX	111.3
135-TNB	123.5
13-DNB	95.3
Tetryl	110.4
Nitrobenzene	101.0
4A-26-DNT	98.3
2A-46-DNT	106.7
246-TNT	159.6
34-DNT(surr)	114.6
26-DNT	108.7
24-DNT	111.9
2-NT	86.4
4-NT	78.9
3-NT	93.4
PETN	126.6

*WFA
2/19/10*

Total 1739.3

Average 108.7

WFA 02/19/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216101a

Analysis Date: 18-FEB-10 18:31

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	600	788.92	131	*
Tetryl	600	597.56	100	
m-Dinitrobenzene	600	622.496	104	
m-Nitrotoluene	600	569.513	95	
o-Nitrotoluene	600	604.641	101	
p-Nitrotoluene	600	614.496	102	
1,3,5-Trinitrobenzene	600	636.536	106	
1,3-Dinitrobenzene-d4	500	417.68	84	
2,4,6-Trinitrotoluene	600	691.126	115	
2,4-Dinitrotoluene	600	637.013	106	
2,6-Dinitrotoluene	600	619.323	103	
2,6-Dinitrotoluene-d3	500	397.466	79	*
2-Amino-4,6-dinitrotoluene	600	648.012	108	
3,4-Dinitrotoluene	300	329.226	110	
4-Amino-2,6-dinitrotoluene	600	589.342	98	
HMX	600	661.47	110	
Nitrobenzene	600	556.503	93	
PETN	600	838.314	140	*

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

Identify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

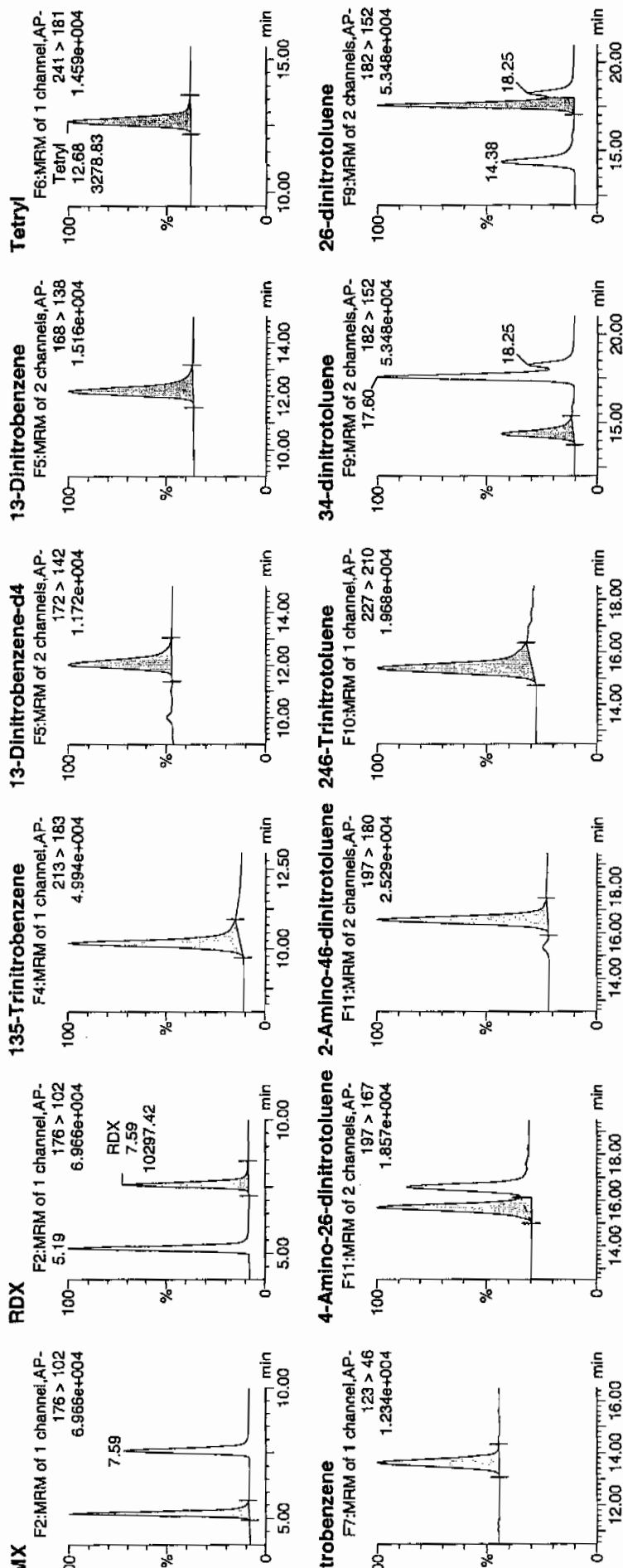
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Date: 18-Feb-2010

Time: 18:31:14

File: WXX100216-07CCV

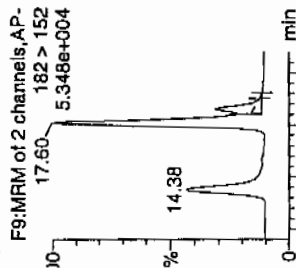
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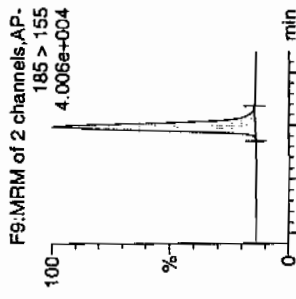
Handwritten note: 1/19/10

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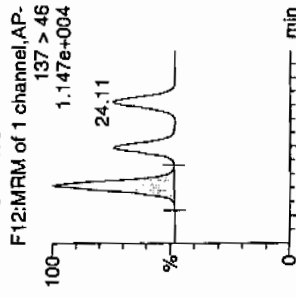
-dinitrotoluene



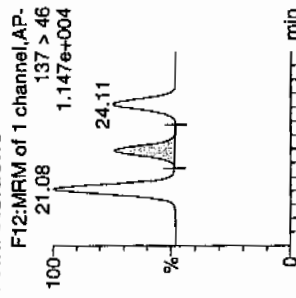
26-dinitrotoluene-d3



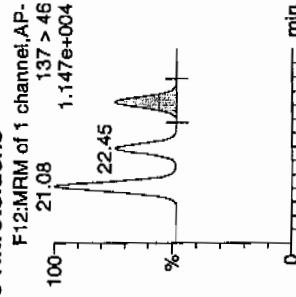
2-Nitrotoluene



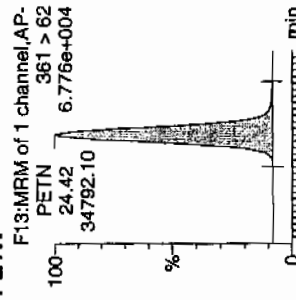
4-Nitrotoluene



3-Nitrotoluene



PETN



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
XX100216-07CCV HMX	176 > 102	5.19	12844.975	2516.453	12844.975	2552.198	bb			661.4698	110.2	805.0
XX100216-07CCV RDX	176 > 102	7.59	10297.420	2516.453	10297.420	2046.019	bb			788.9199	131.5	562.4
XX100216-07CCV 135-Trinitrobenzene	213 > 183	10.18	12406.179	2516.453	12406.179	2465.013	bb			636.5357	106.1	424.6
XX100216-07CCV 13-Dinitrobenzene-d4	172 > 142	12.03	2516.453		2516.453	2516.453	bb			417.6802	83.5	330.0
XX100216-07CCV 13-Dinitrobenzene	168 > 138	12.17	3723.589	2516.453	3723.589	739.849	bb			622.4958	103.7	190.3
XX100216-07CCV Tetyl	241 > 181	12.68	3278.833	2516.453	3278.833	651.479	bb			597.5600	99.6	372.1
XX100216-07CCV Nitrobenzene	123 > 46	13.63	2404.535	2516.453	2404.535	477.763	bb			556.5026	92.8	198.0
XX100216-07CCV 4-Amino-26-dinitrotoluene	197 > 157	15.68	5223.180	13838.627	5223.180	188.717	MM	19-Feb-10	08:39:12	589.3419	98.2	189.6
XX100216-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.58	7748.987	13838.627	7748.987	279.977	bb			648.0120	108.0	493.7
XX100216-07CCV 245-Trinitrotoluene	227 > 210	15.38	6412.913	13838.627	6412.913	231.703	bb			691.1262	115.2	120.2
XX100216-07CCV 34-dinitrotoluene	182 > 152	14.38	8255.552	13838.627	8255.552	298.279	bb			329.2262	109.7	337.2
XX100216-07CCV 26-dinitrotoluene	182 > 152	17.60	18160.029	13838.627	18160.029	656.136	MM	19-Feb-10	08:43:33	619.3228	103.2	922.8
XX100216-07CCV 24-dinitrotoluene	182 > 152	18.25	4346.167	13838.627	4346.167	157.030	MM	19-Feb-10	08:46:08	637.0129	106.2	207.3
XX100216-07CCV 26-dinitrotoluene-d3	185 > 155	17.42	13838.627		13838.627	13838.627	bb			397.4663	79.5	1774.9
XX100216-07CCV 2-Nitrotoluene	137 > 46	21.08	2546.937	13838.627	2546.937	92.023	bb			604.6405	100.8	226.0
XX100216-07CCV 4-Nitrotoluene	137 > 46	22.45	1303.650	13838.627	1303.650	47.102	bb			614.4959	102.4	112.4
XX100216-07CCV 3-Nitrotoluene	137 > 46	24.11	1410.576	13838.627	1410.576	50.965	bb			569.5129	94.9	114.8
XX100216-07CCV PETN	361 > 62	24.42	34792.098	13838.627	34792.098	1257.065	bb			838.3138	139.7	7852.2

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/18/10
 Time of Injection: 1831
 Standard Number: WXX100216-07CCV
 Data File: EXP0216101a

HMX	110.2
RDX	131.5
135-TNB	106.1
13-DNB	109.7
Tetryl	99.6
Nitrobenzene	92.8
4A-26-DNT	98.2
2A-46-DNT	108.0
246-TNT	115.2
34-DNT(surr)	109.7
26-DNT	103.2
24-DNT	106.2
2-NT	100.8
4-NT	102.4
3-NT	94.9
PETN	139.7

*MAF
2/19/10*

Total 1728.2

Average 108.0

done 02/19/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216103a

Analysis Date: 18-FEB-10 19:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	40	41.533	104	
Tetryl	40	53.24	133	*
m-Dinitrobenzene	40	46.745	117	
m-Nitrotoluene	40	40.745	102	
o-Nitrotoluene	40	34.511	86	
p-Nitrotoluene	40	26.865	67	*
1,3,5-Trinitrobenzene	40	58.779	147	*
1,3-Dinitrobenzene-d4	500	457.386	91	
2,4,6-Trinitrotoluene	40	46.527	116	
2,4-Dinitrotoluene	40	46.8	117	
2,6-Dinitrotoluene	40	41.187	103	
2,6-Dinitrotoluene-d3	500	451.82	90	
2-Amino-4,6-dinitrotoluene	40	40.759	102	
3,4-Dinitrotoluene	20	21.612	108	
4-Amino-2,6-dinitrotoluene	40	34.649	87	
HMX	40	46.441	116	
Nitrobenzene	40	31.128	78	
PETN	40	54.273	136	*

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: Fri Feb 19 08:50:21 2010, Page 45 of 97

Identify Sample Report
L Laboratories, LLC / Analyst: Michael A. Penny

taset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

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te: 18-Feb-2010

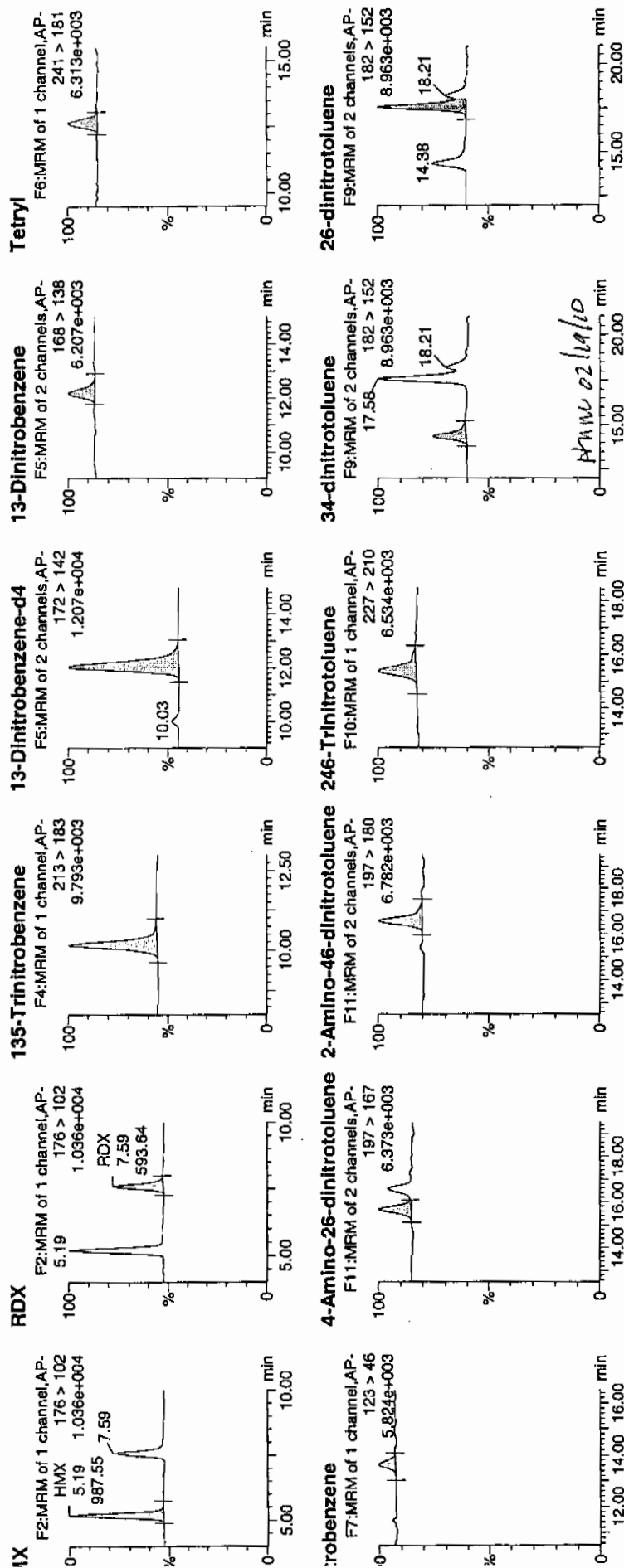
ne: 19:30:18

WXX100216-08CRI

il: 1:1,C

WXX
2/19/10

Page 909 of 1179



aset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

dinitrotoluene

F9:MRM of 2 channels,AP-

17.58 182 > 152

8.963e+003

14.38

min

20.00

min

15.00

min

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26-dinitrotoluene-d3

F9:MRM of 2 channels,AP-

185 > 155

4.490e+004

min

20.00

min

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2-Nitrotoluene

F12:MRM of 1 channel,AP-

24.09 137 > 46

5.714e+003

min

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4-Nitrotoluene

F12:MRM of 1 channel,AP-

21.08 137 > 46

5.714e+003

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3-Nitrotoluene

F12:MRM of 1 channel,AP-

21.08 137 > 46

5.714e+003

min

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PETN

F13:MRM of 1 channel,AP-

361 > 62

1.328e+004

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22.00

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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/18/10
 Time of Injection 1930
 Standard Number WXX100216-08CRI
 Data File EXP0216103a

HMX	116.1
RDX	103.8
135-TNB	146.9
13-DNB	116.9
Tetryl	133.1
Nitrobenzene	77.8
4A-26-DNT	86.6
2A-46-DNT	101.9
246-TNT	116.3
34-DNT(surr)	108.1
26-DNT	103.0
24-DNT	117.0
2-NT	86.3
4-NT	67.2
3-NT	101.9
PETN	135.7

Handwritten: 147.2/10

Total 1718.6

Average 107.4

Handwritten: 147.2/10

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): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140013.wiff

Analysis Date: 14-FEB-10 17:25

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	109	109	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	49.4	99	
3,5-Dinitroaniline	100	110	110	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

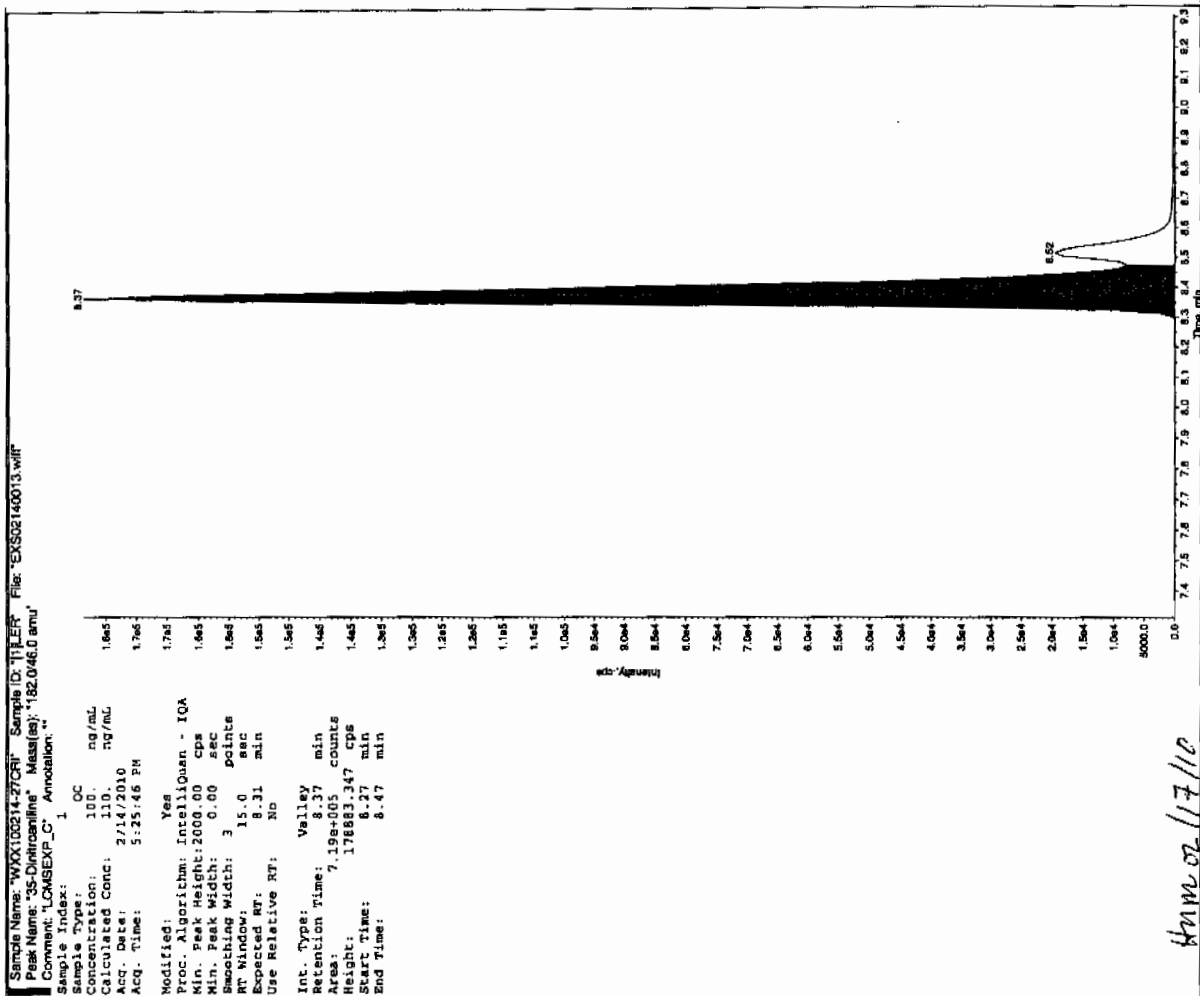
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

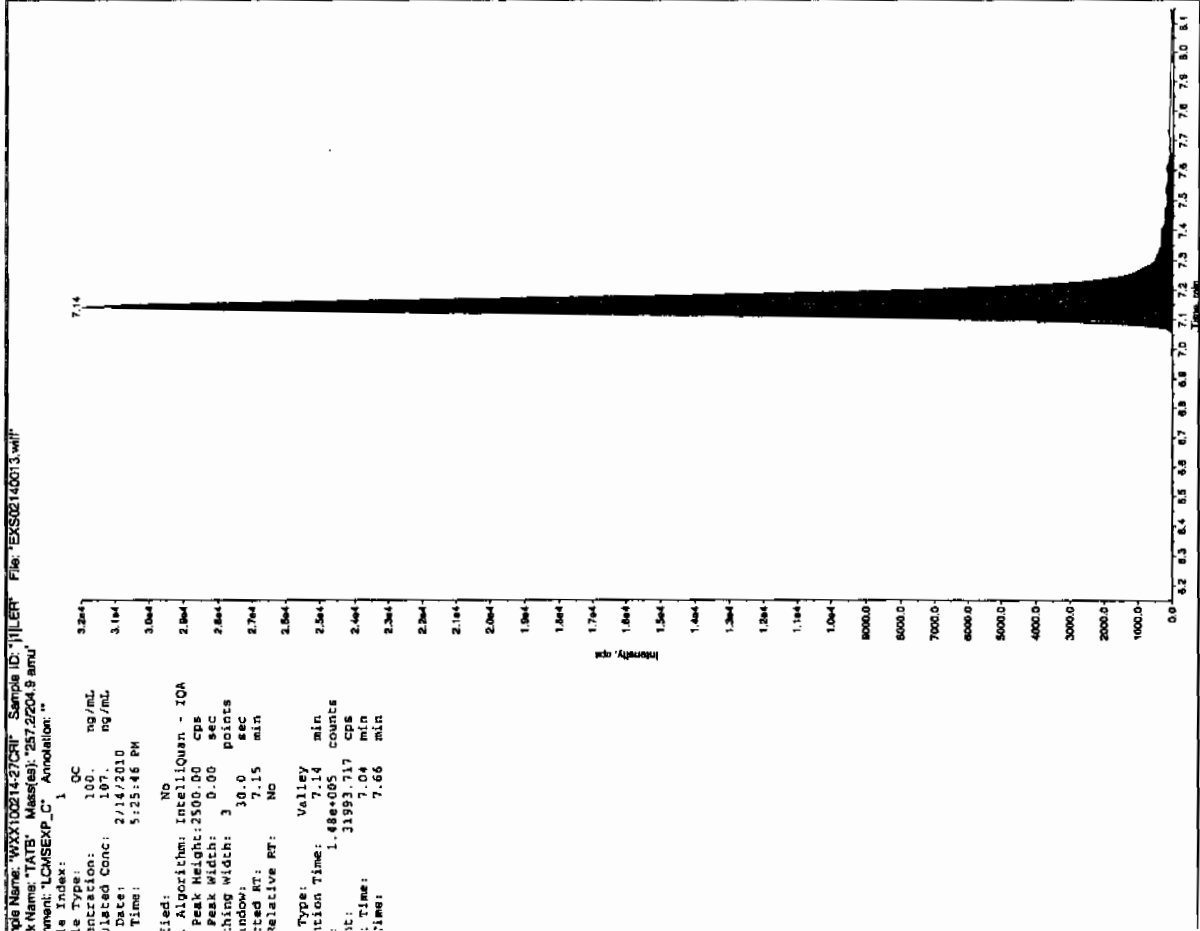
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

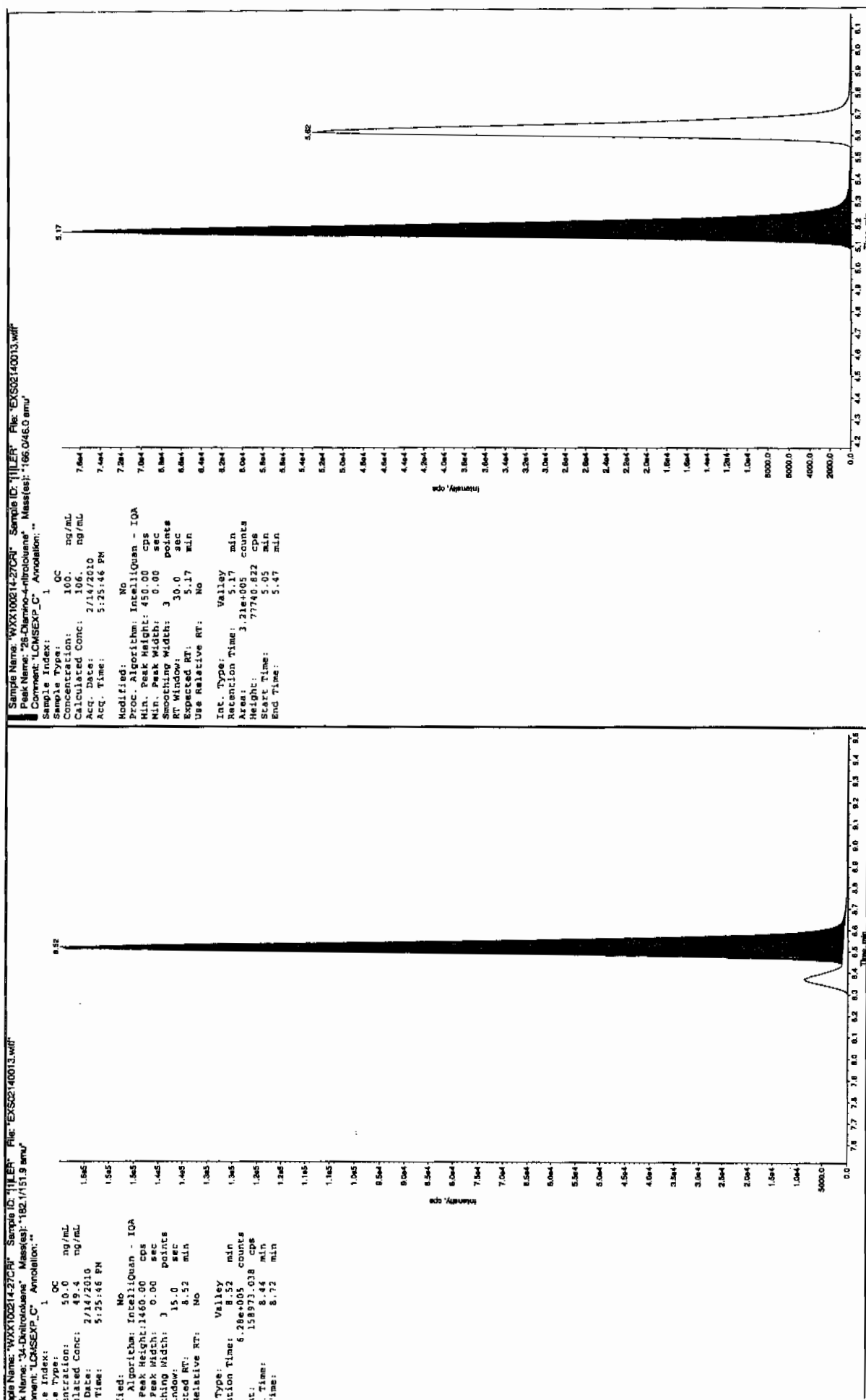
San 2/16/10

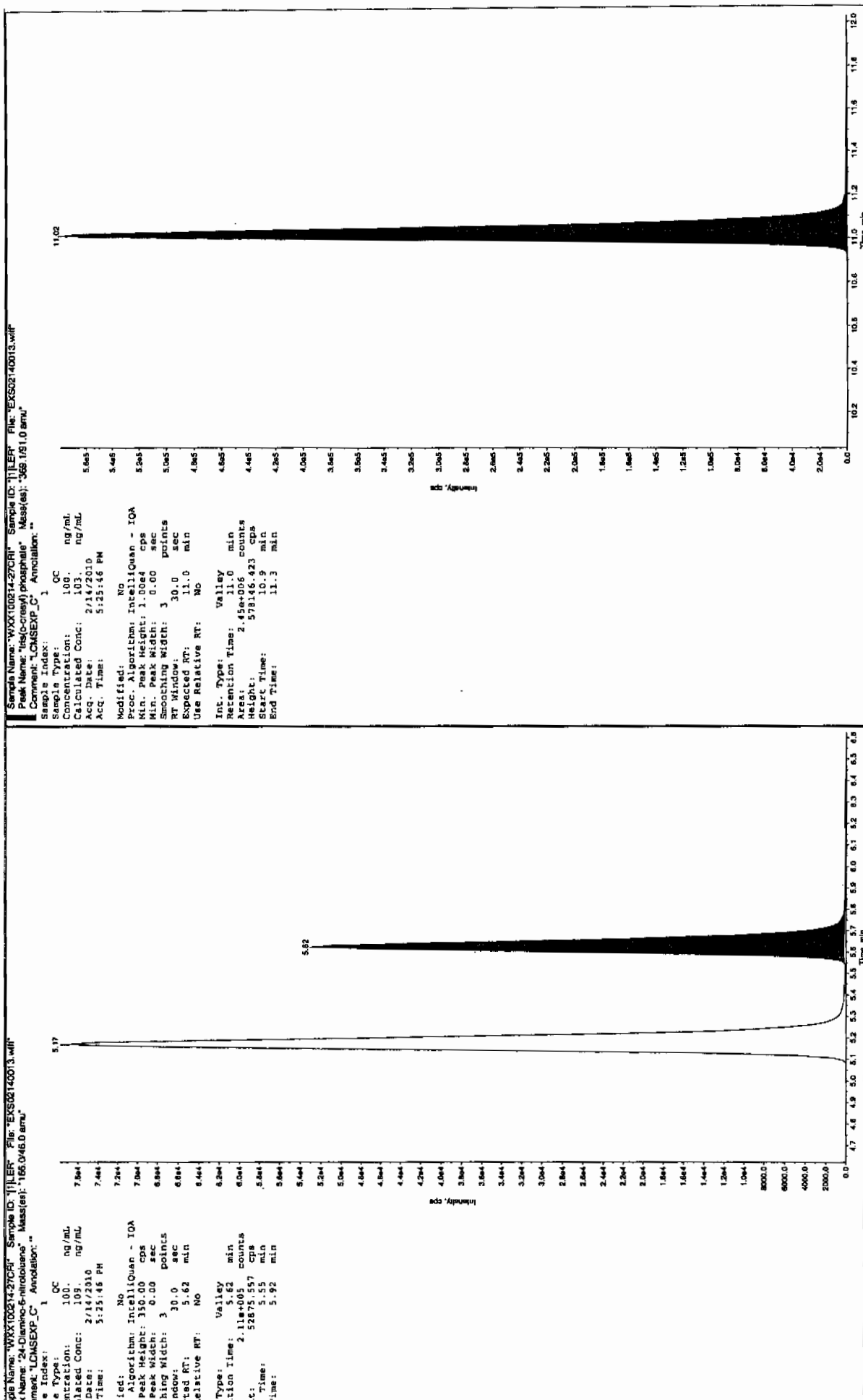


Wmm 02/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140017.wiff

Analysis Date: 14-FEB-10 18:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	529	106	
2,6-Diamino-4-nitrotoluene	500	502	100	
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	494	99	
TATB	500	494	99	
tris(o-cresyl) phosphate	500	492	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 2/17/10

Sample Name: "WXX100214-26CCV" Sample ID: "111ER" File: "EXS02140017.will"

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: 494. ng/mL

Date: 2/14/2010

Acq. Time: 6:28:34 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: 7.15 min

Use Relative RT: No

Int. Type: Valley

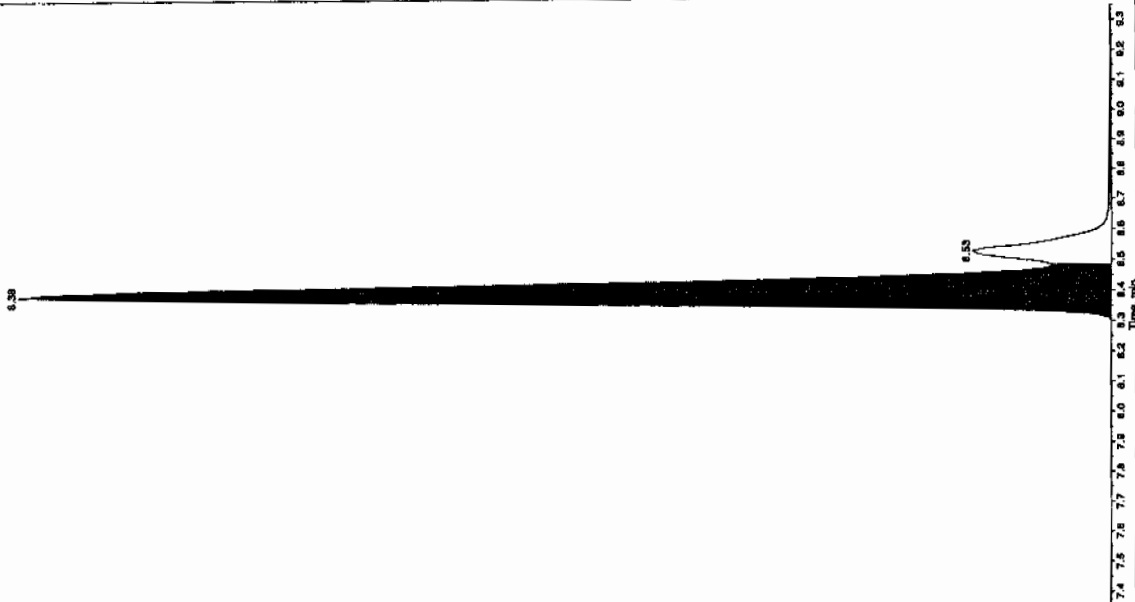
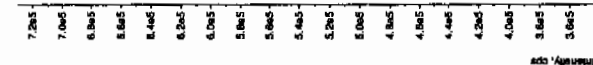
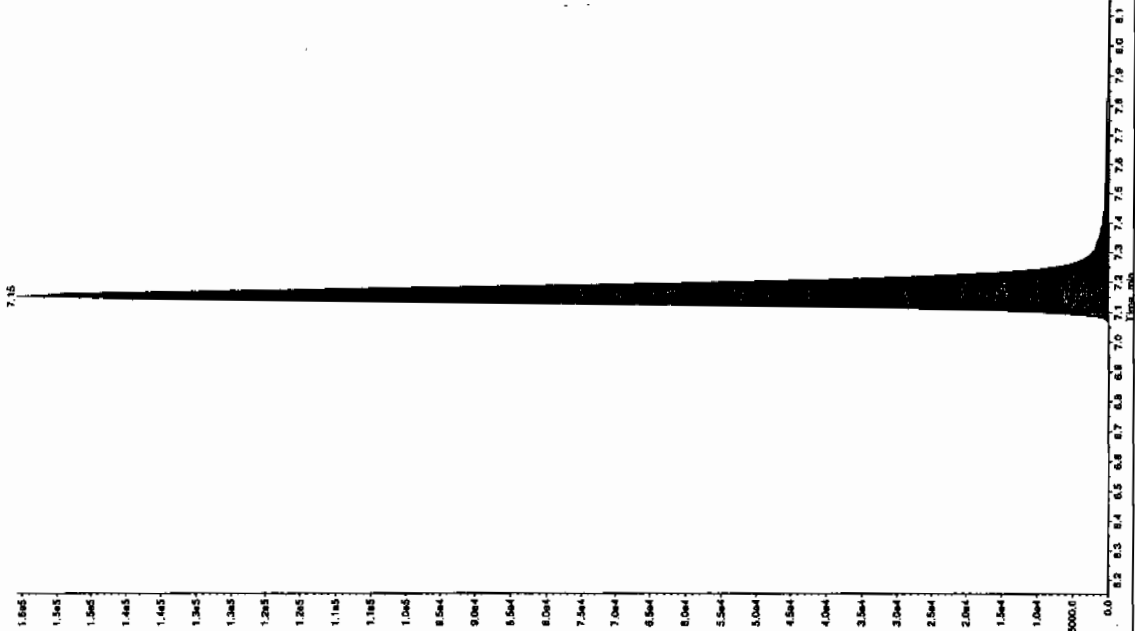
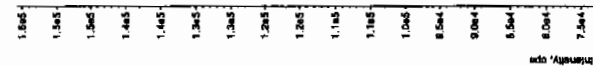
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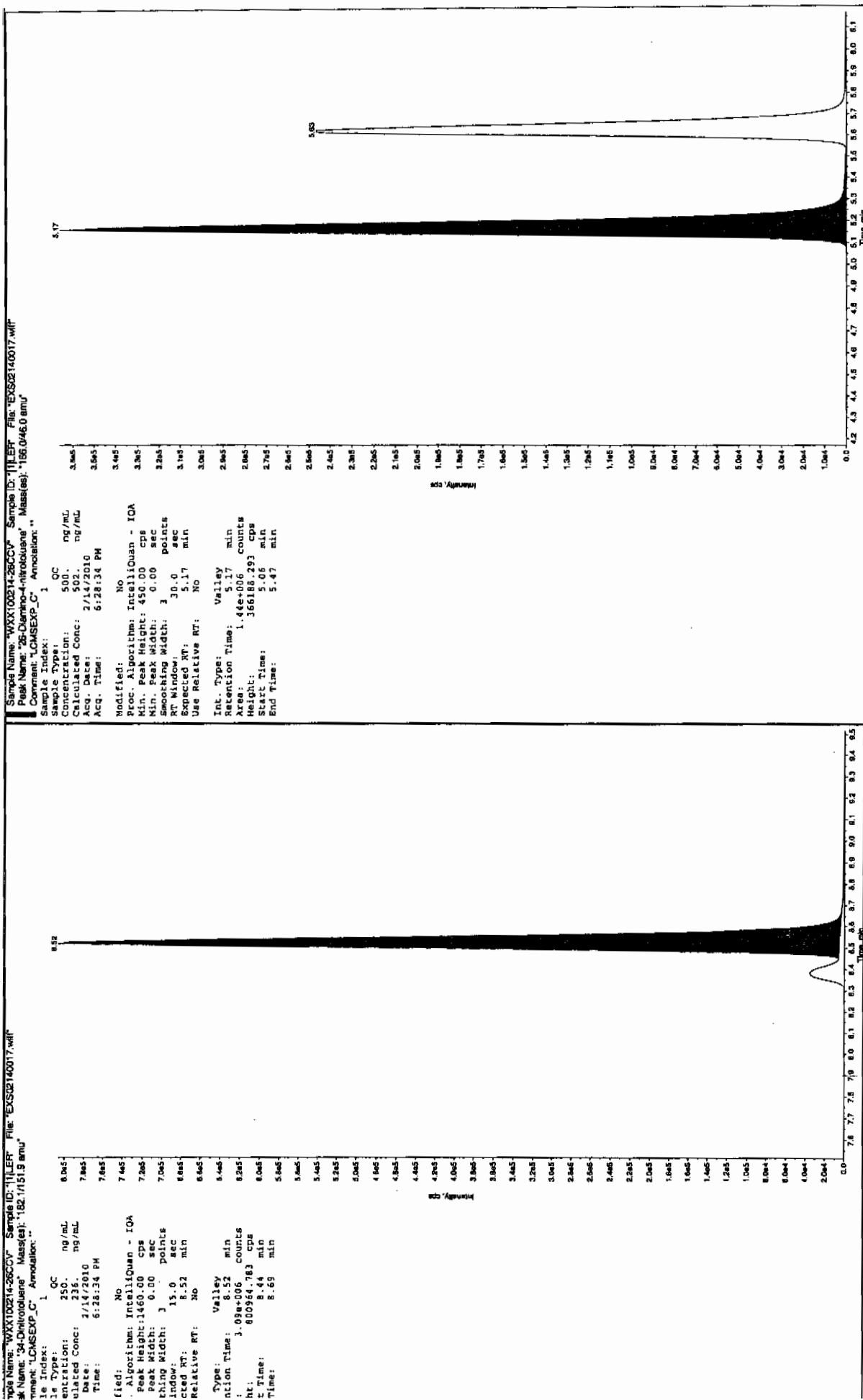
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Start Time: 7.02 min

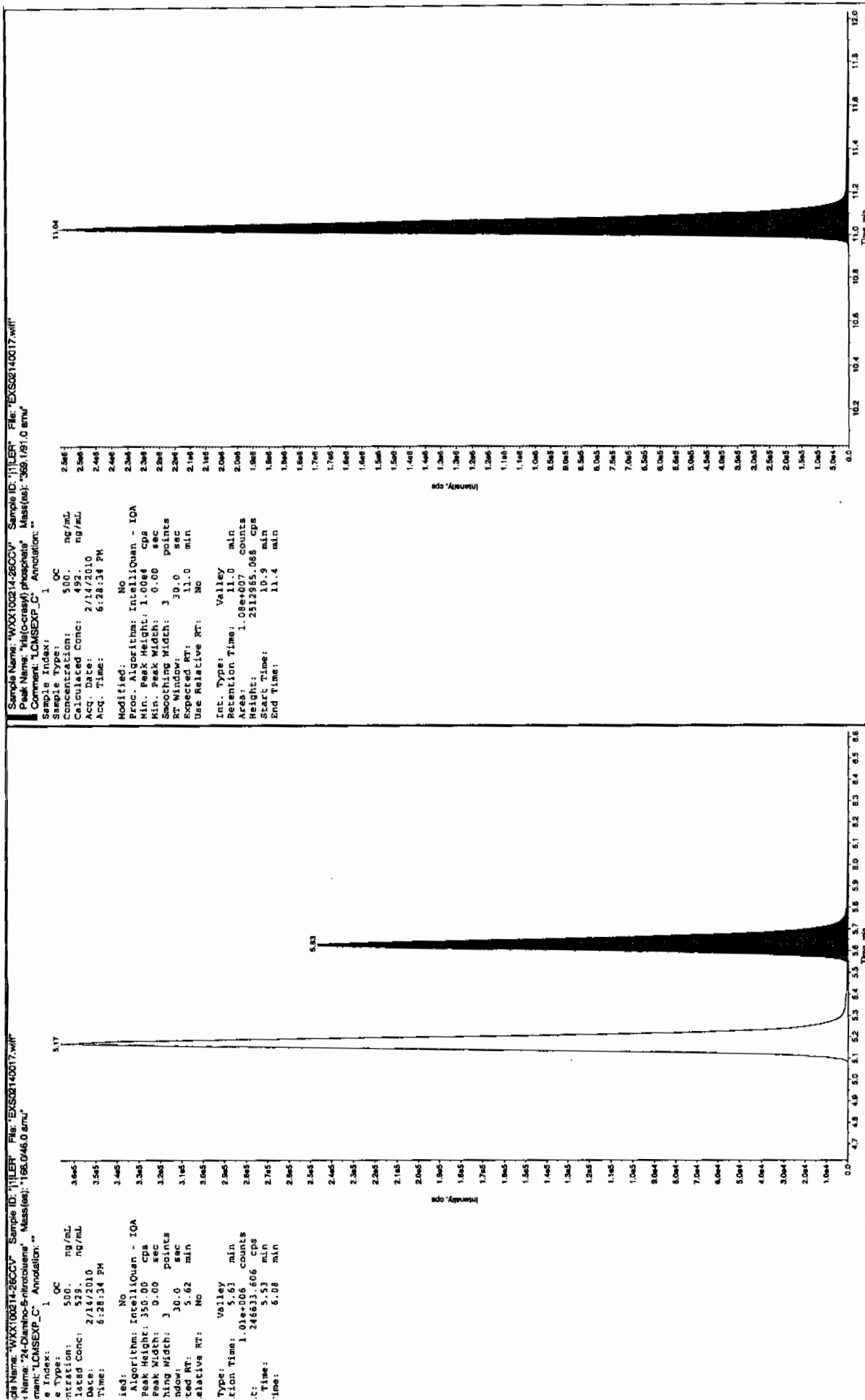
End Time: 7.73 min



Run on 2/17/10



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140019.wiff

Analysis Date: 14-FEB-10 18:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.3	96	
2,6-Diamino-4-nitrotoluene	100	97.2	97	
3,4-Dinitrotoluene	50	48.7	97	
3,5-Dinitroaniline	100	100	100	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

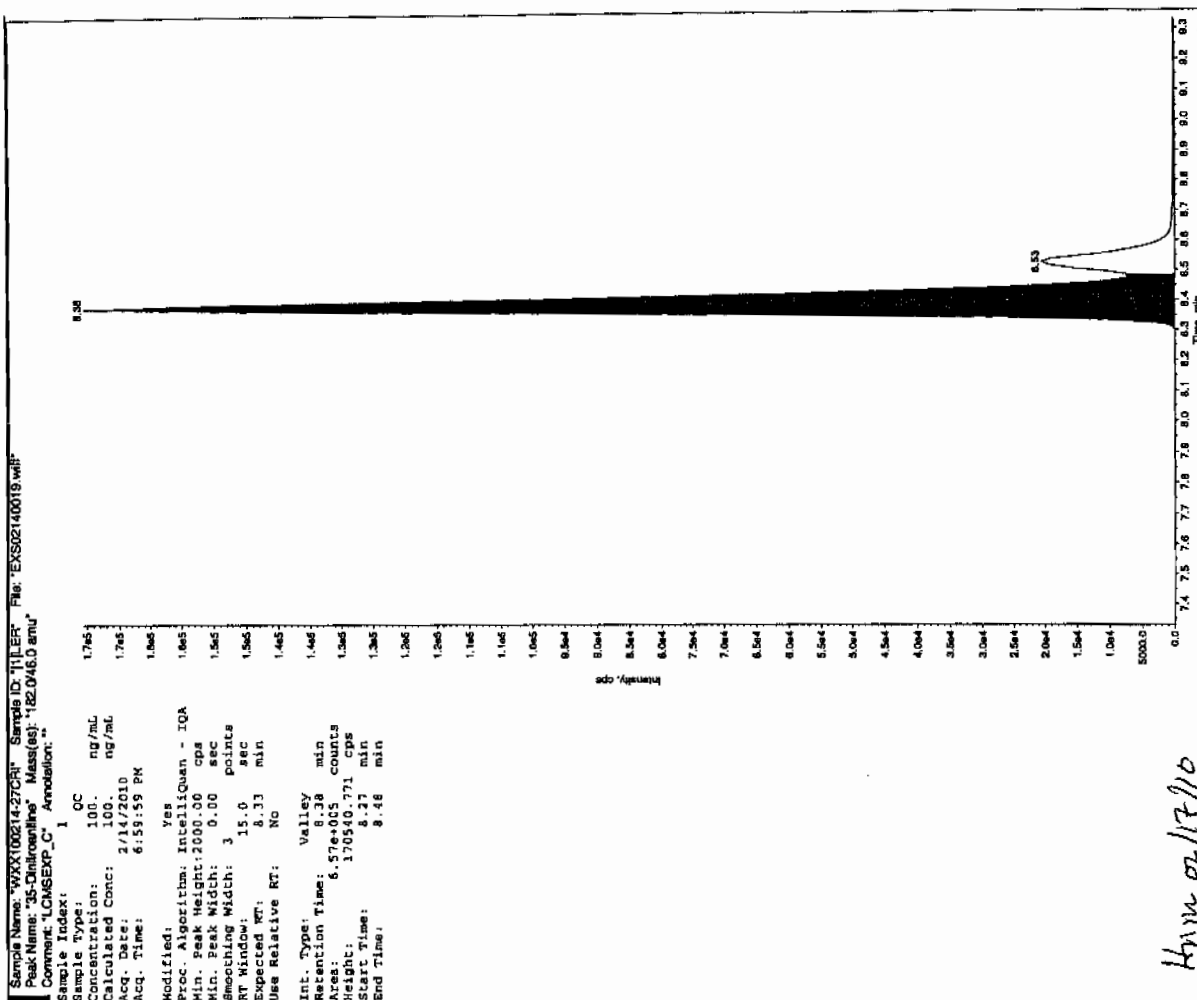
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

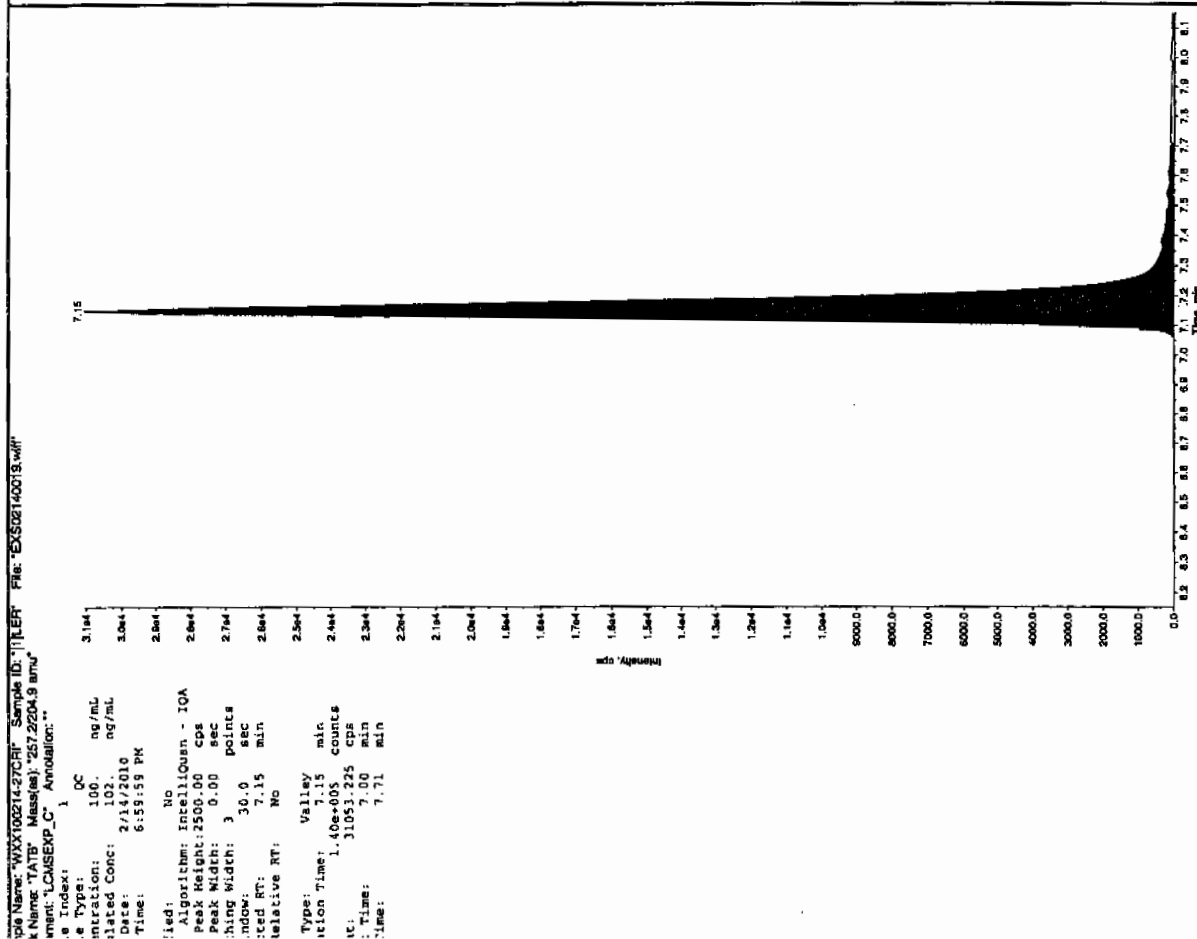
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

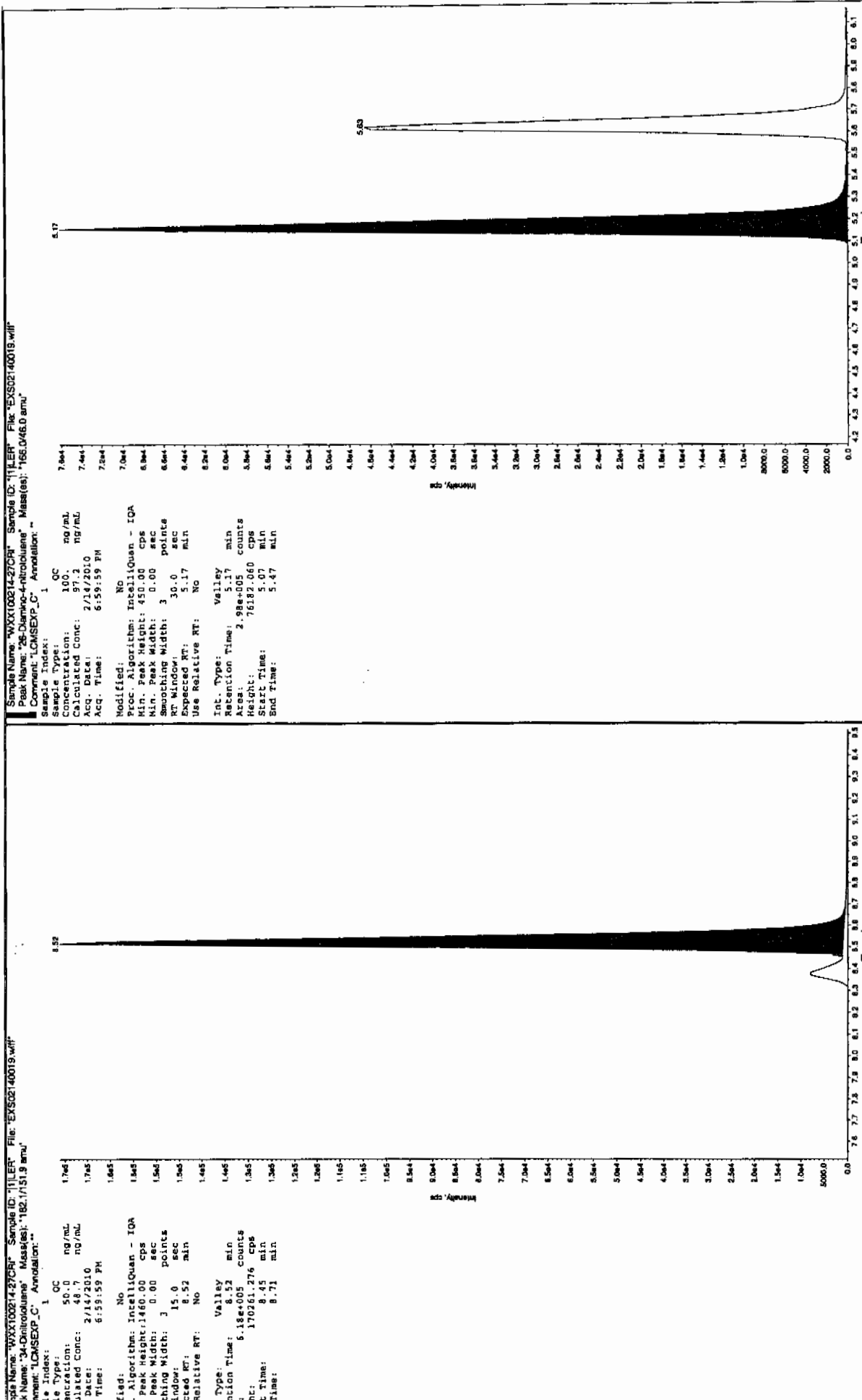
See 2/17/10

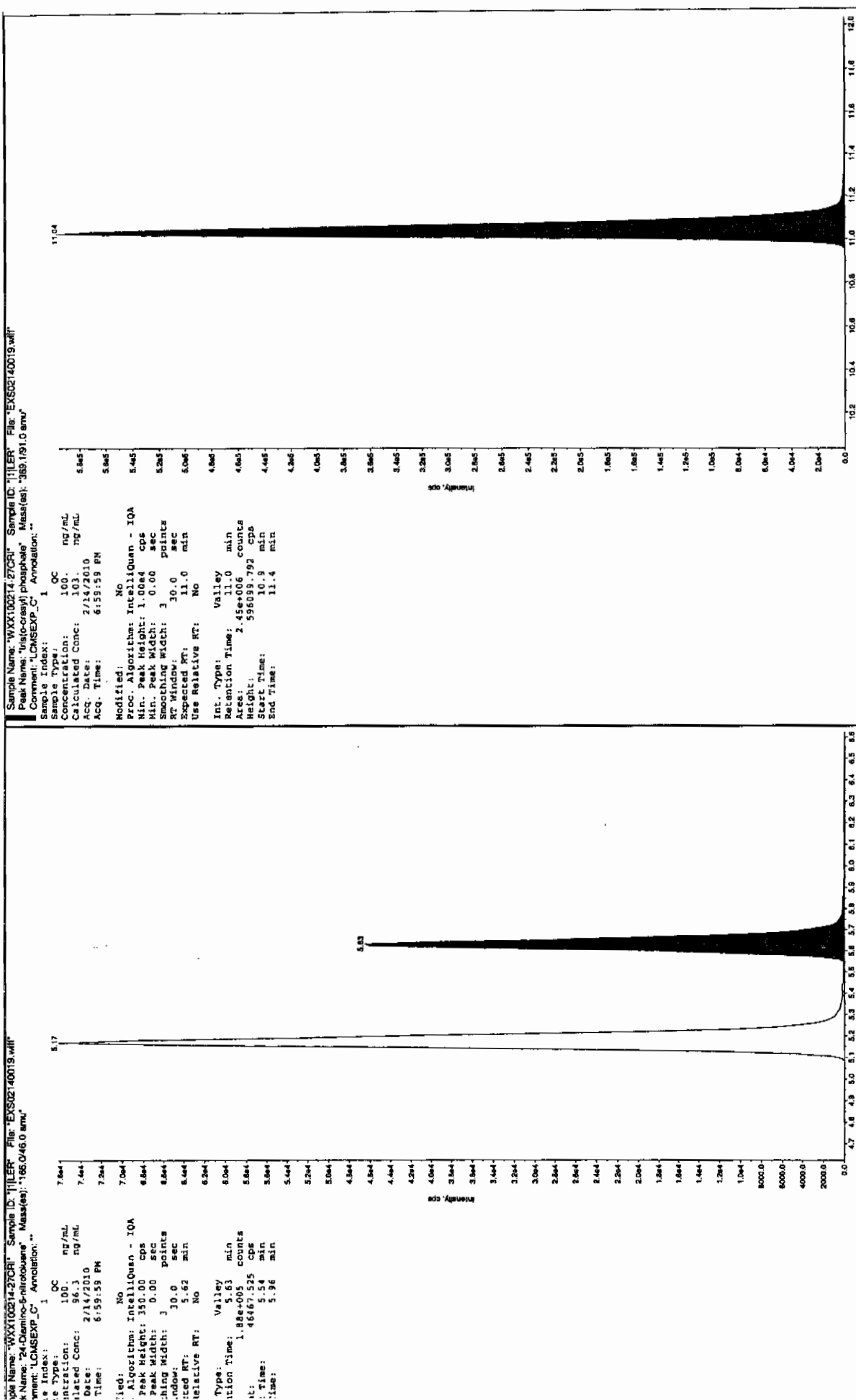


Hyne 02/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140030.wiff

Analysis Date: 14-FEB-10 21:52

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	542	108	
2,6-Diamino-4-nitrotoluene	500	542	108	
3,4-Dinitrotoluene	250	258	103	
3,5-Dinitroaniline	500	507	101	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	509	102	

Recovery Limits:

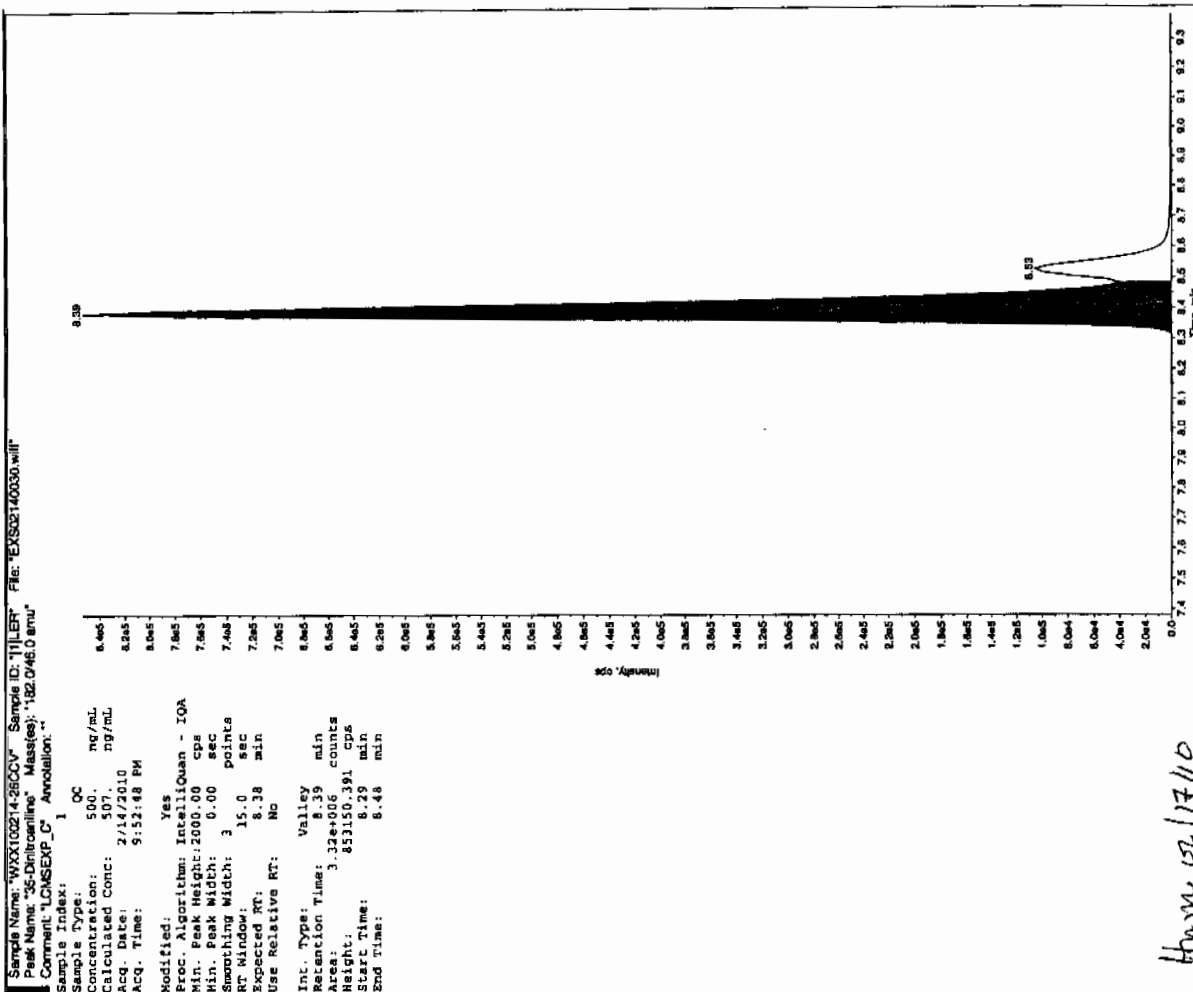
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

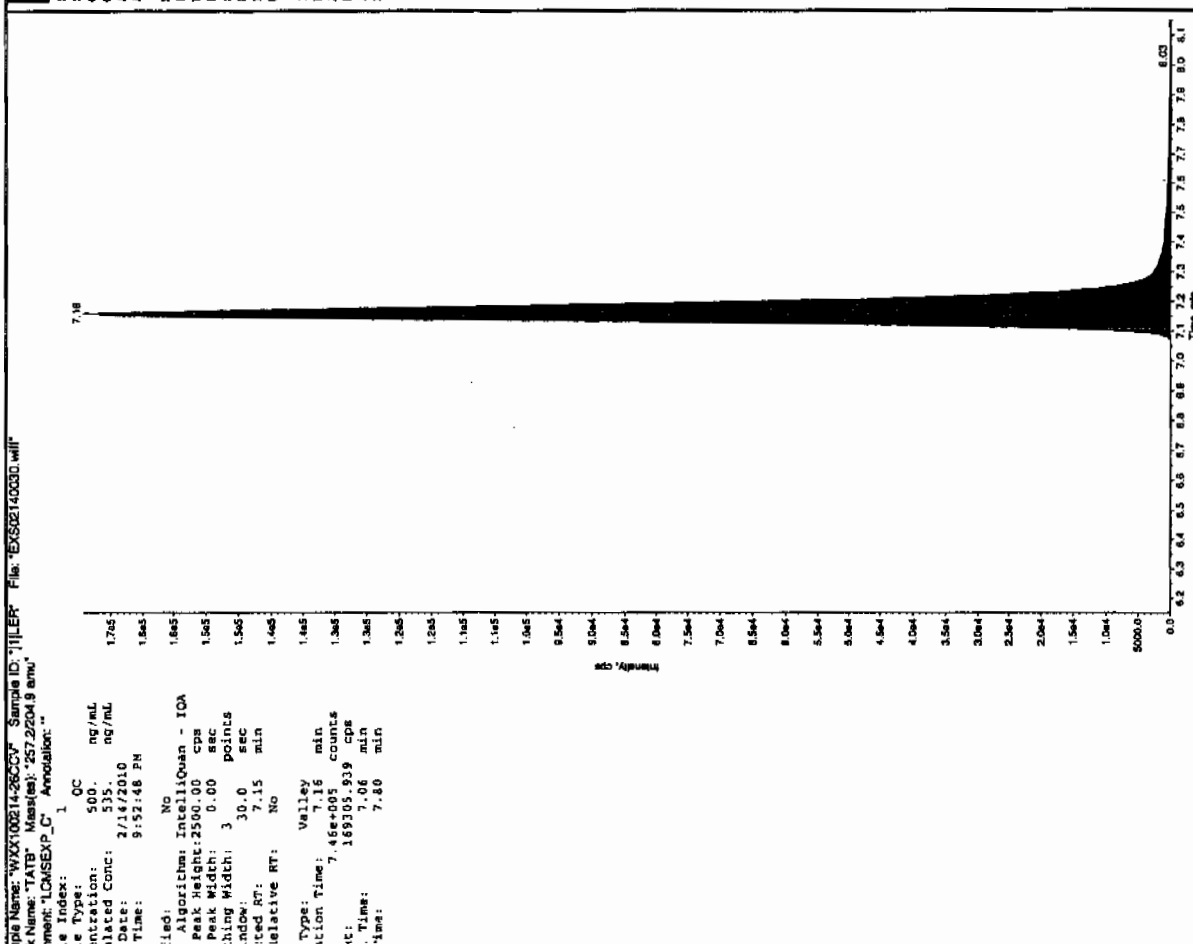
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

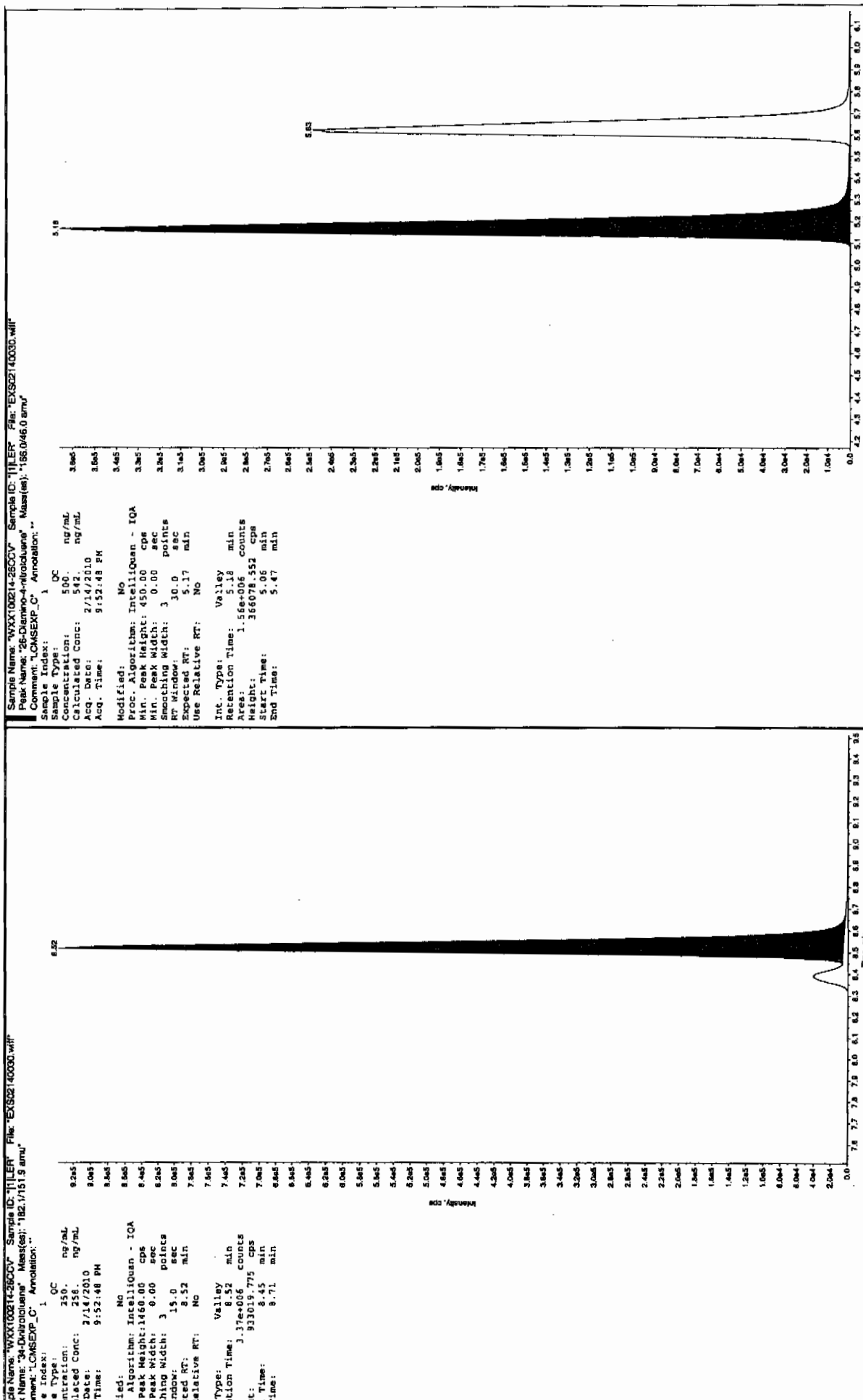
Sen 2/17/10



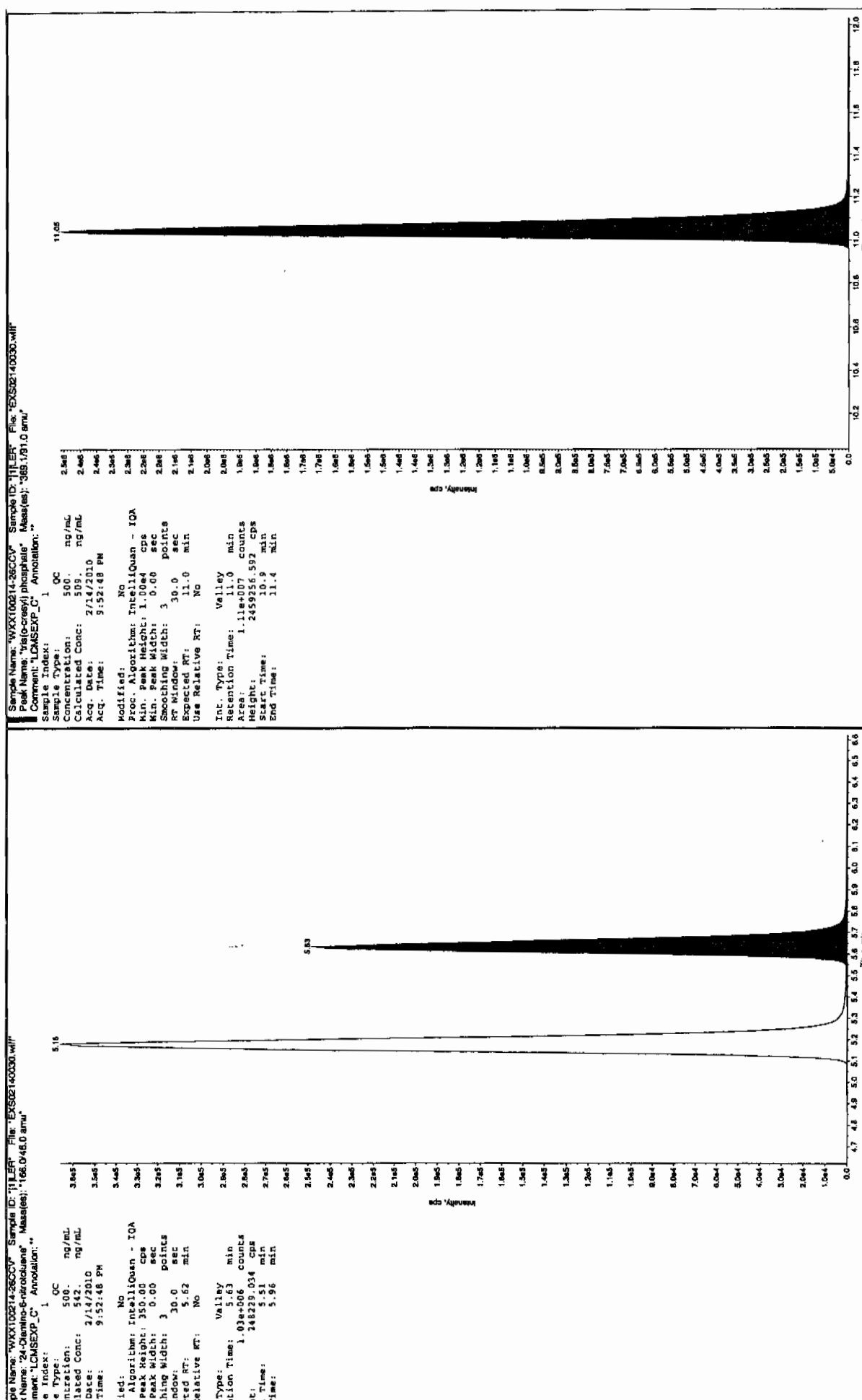
Sen 2/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140032.wiff

Analysis Date: 14-FEB-10 22:24

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	52.2	104	
3,5-Dinitroaniline	100	113	113	
TATB	100	117	117	
tris(o-cresyl) phosphate	100	106	106	

Recovery Limits:

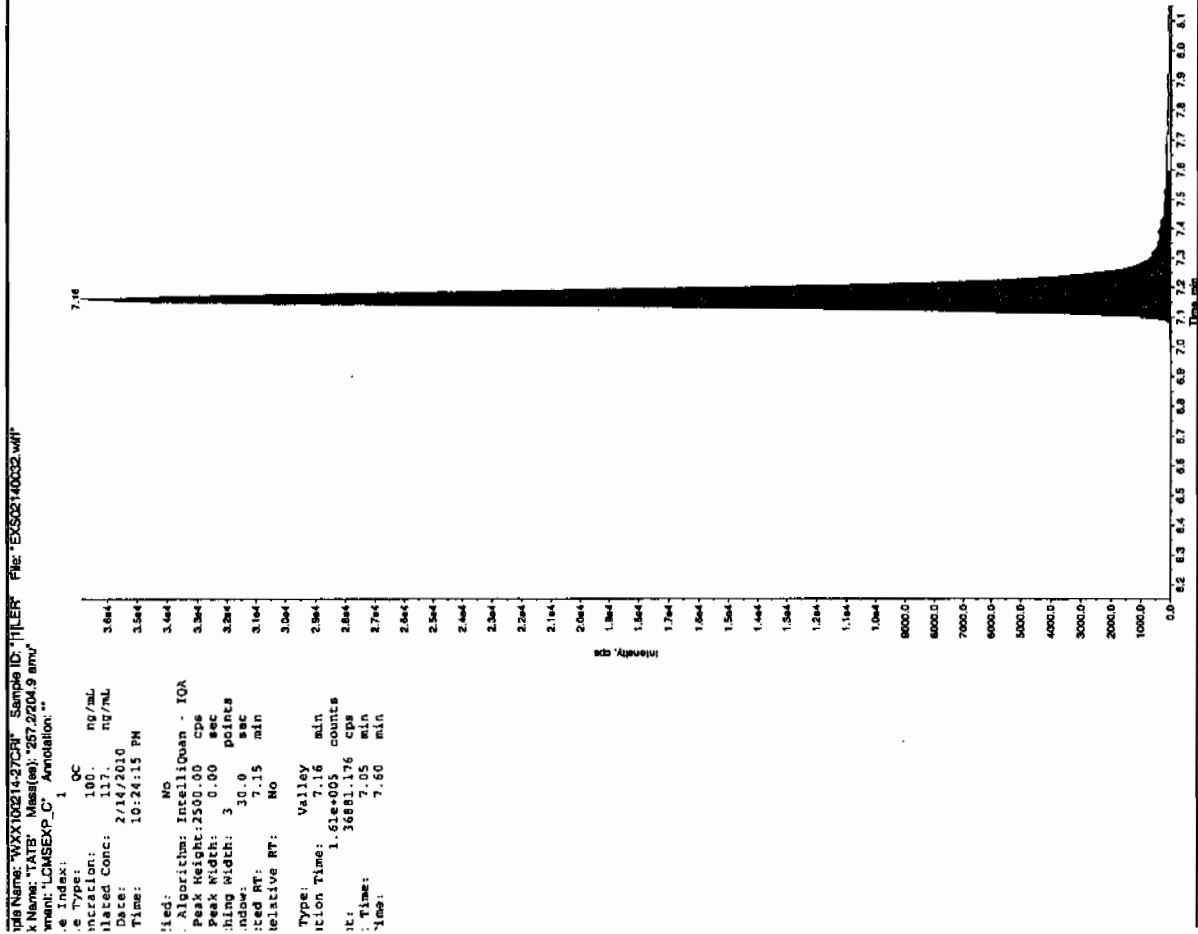
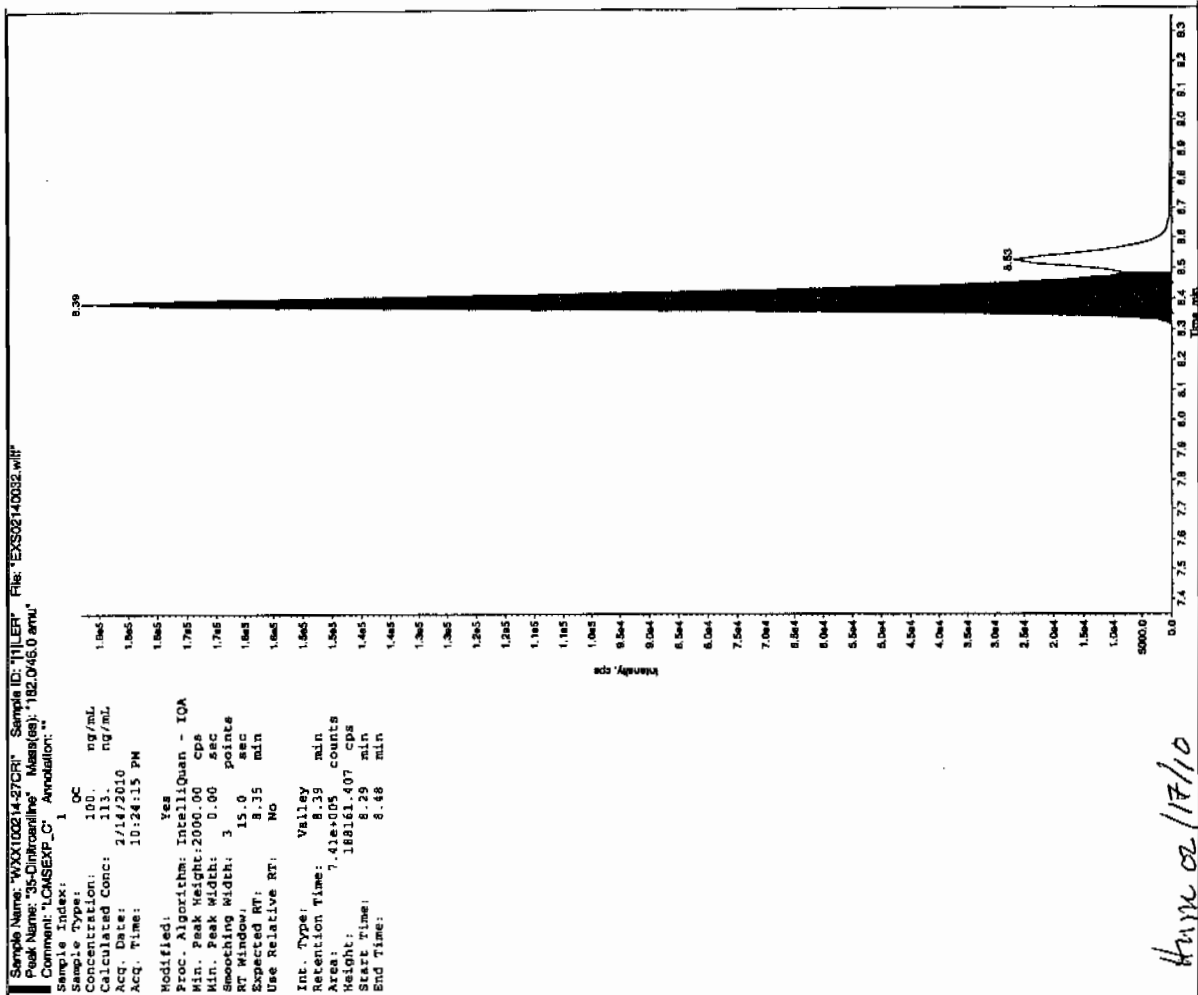
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

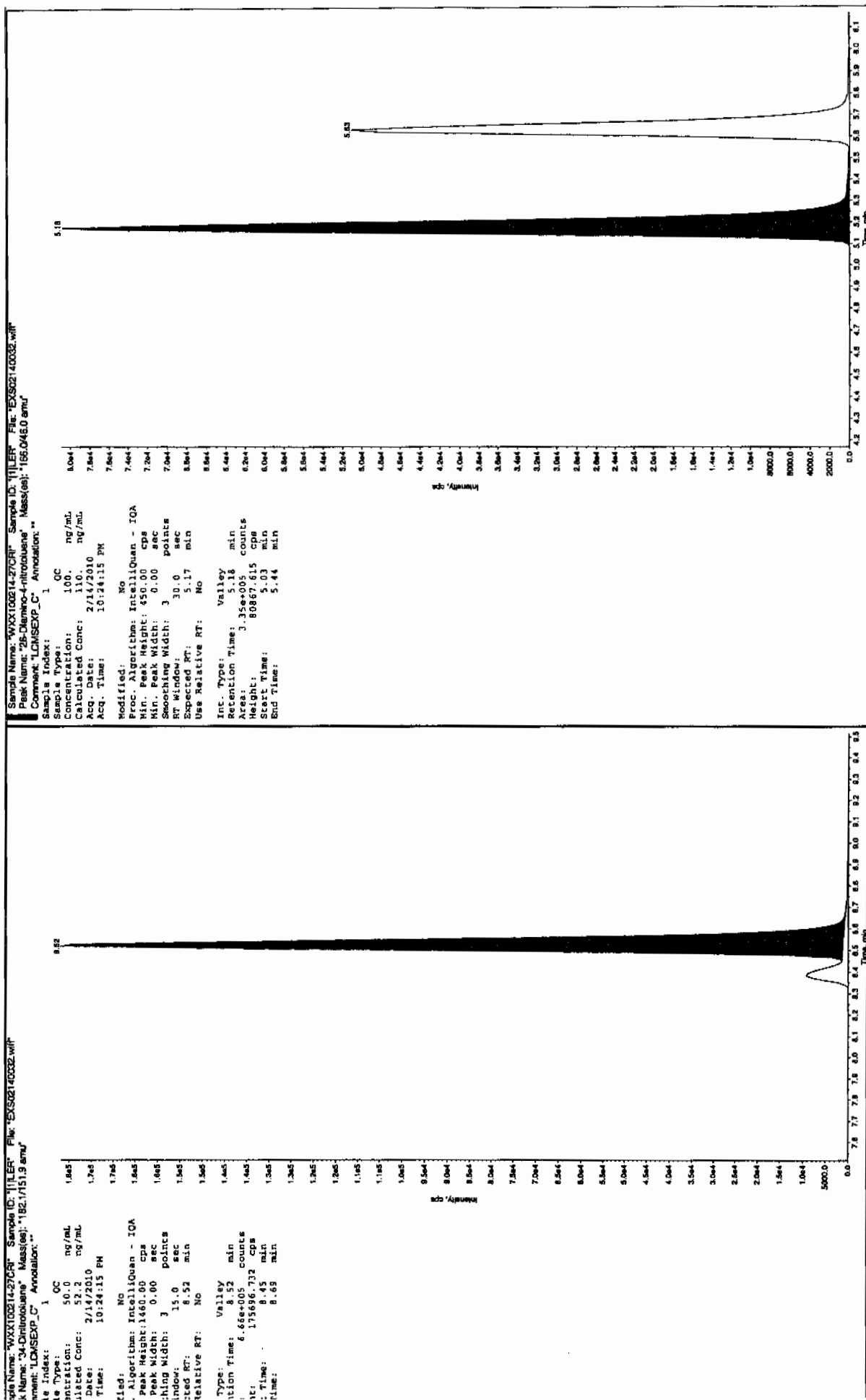
Column used to flag Recovery outside of Limits

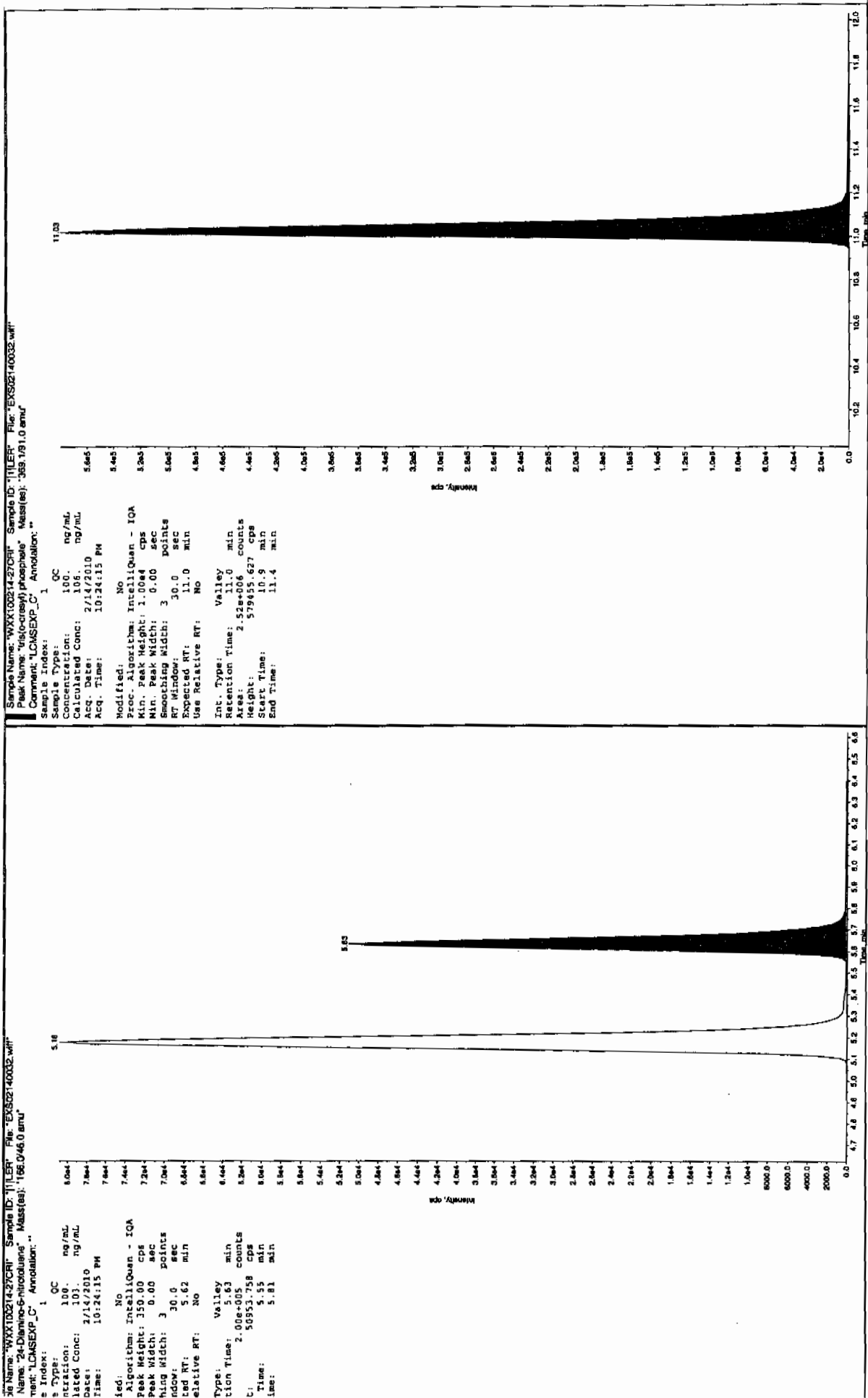
* Value outside of Recovery Limits

See 2/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140043.wiff

Analysis Date: 15-FEB-10 01:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	545	109	
2,6-Diamino-4-nitrotoluene	500	596	119	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	533	107	
TATB	500	568	114	
tris(o-cresyl) phosphate	500	512	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

Low 2/17/10

Sample Name: "WXX100214-260CV" Sample ID: "111ER" File: "EXS02140043.wif"

Peak Name: "3S-Dithraniline" Mass(es): "182.0460 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC

Sample Type: 500. ng/mL

Injection: 533. ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 1:16:59 AM

Acq. Time: 1:16:59 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: 8.38 min

Use Relative RT: No

Int. Type: Valley

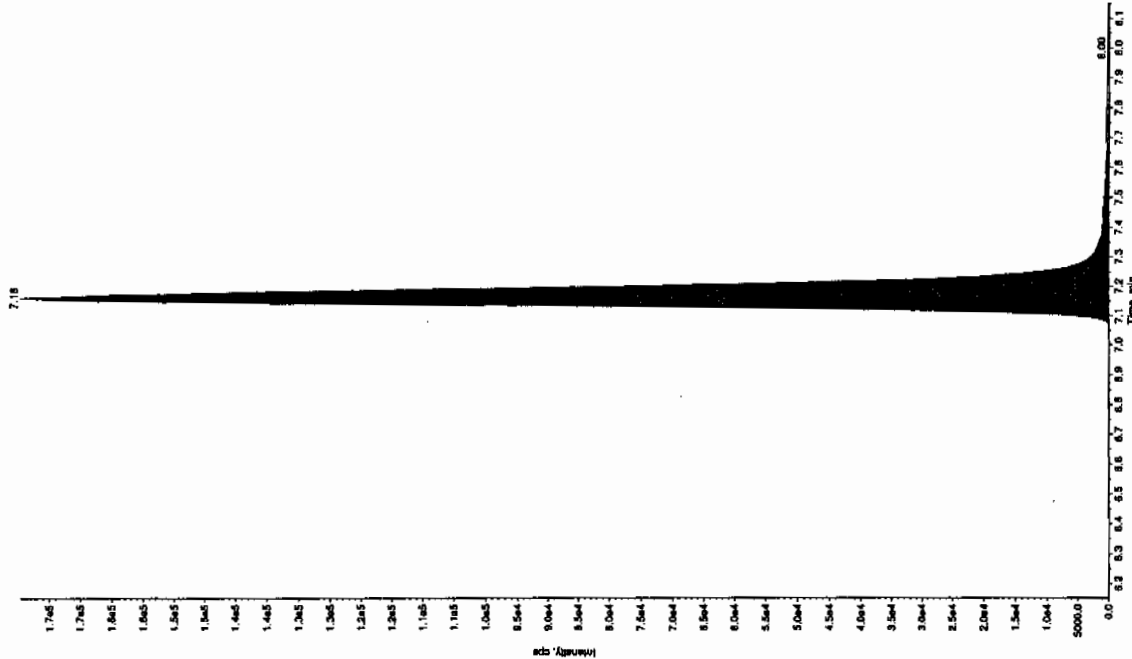
Retention Time: 8.39 min

Area: 3.48e+006 counts

Height: 818873.230 cps

Start Time: 8.29 min

End Time: 8.48 min



Sample Name: "WXX100214-260CV" Sample ID: "111ER" File: "EXS02140043.wif"

Peak Name: "3S-Dithraniline" Mass(es): "182.0460 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC

Sample Type: 500. ng/mL

Injection: 533. ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 1:16:59 AM

Acq. Time: 1:16:59 AM

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: 7.15 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 7.16 min

Area: 7.32e+005 counts

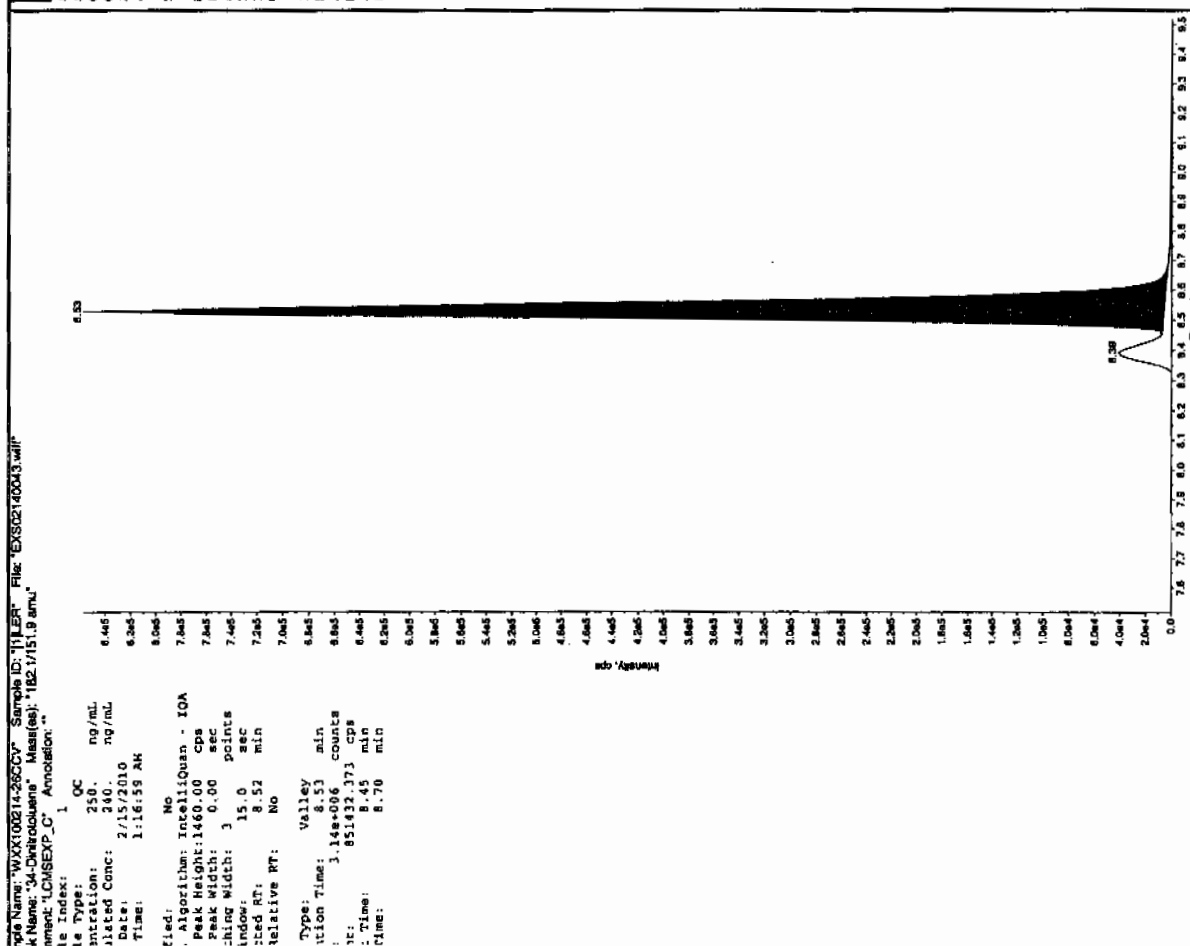
Height: 174783.081 cps

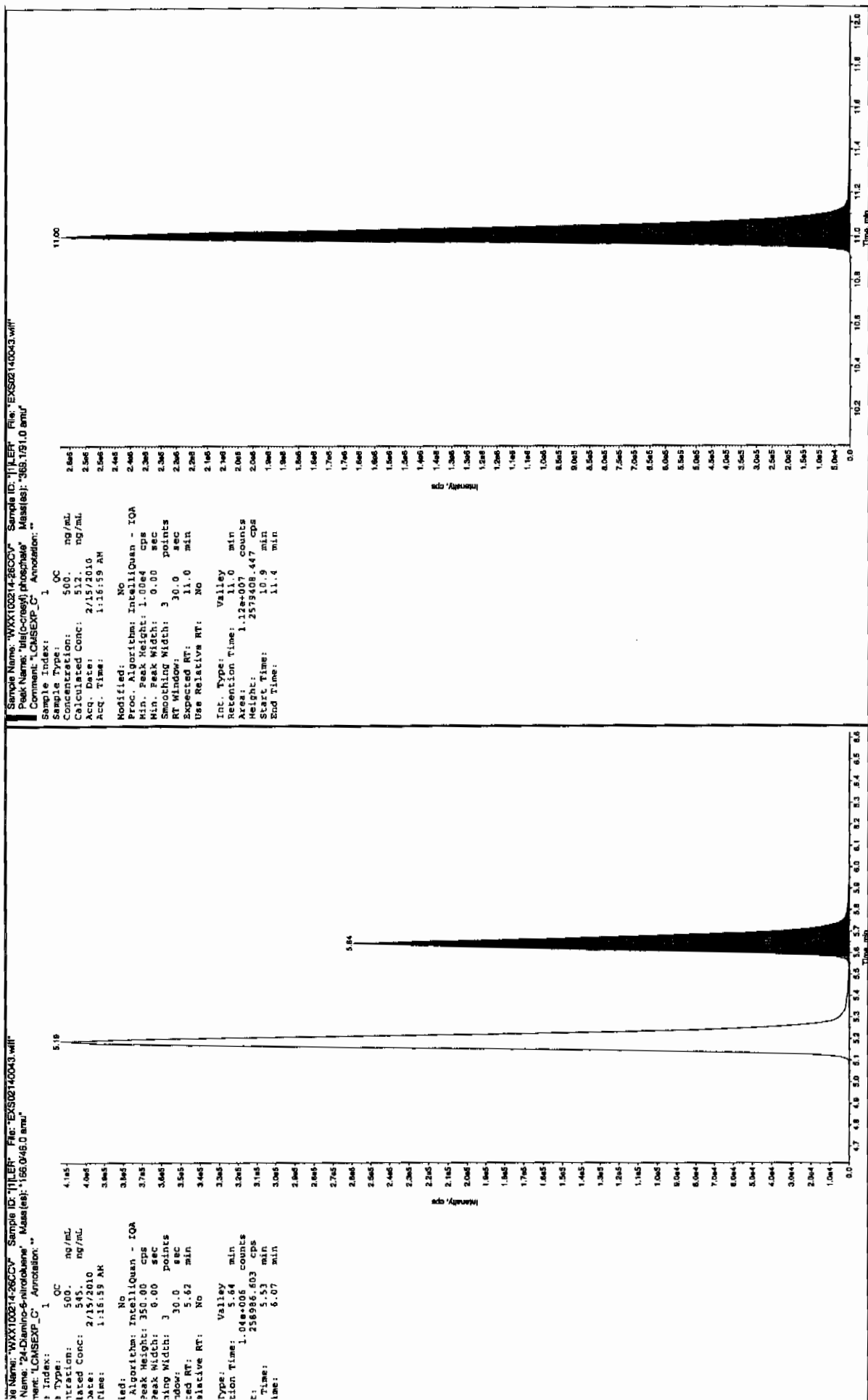
Start Time: 7.00 min

End Time: 7.68 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140045.wiff

Analysis Date: 15-FEB-10 01:48

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	116	116	
2,6-Diamino-4-nitrotoluene	100	112	112	
3,4-Dinitrotoluene	50	52.3	105	
3,5-Dinitroaniline	100	120	120	
TATB	100	119	119	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

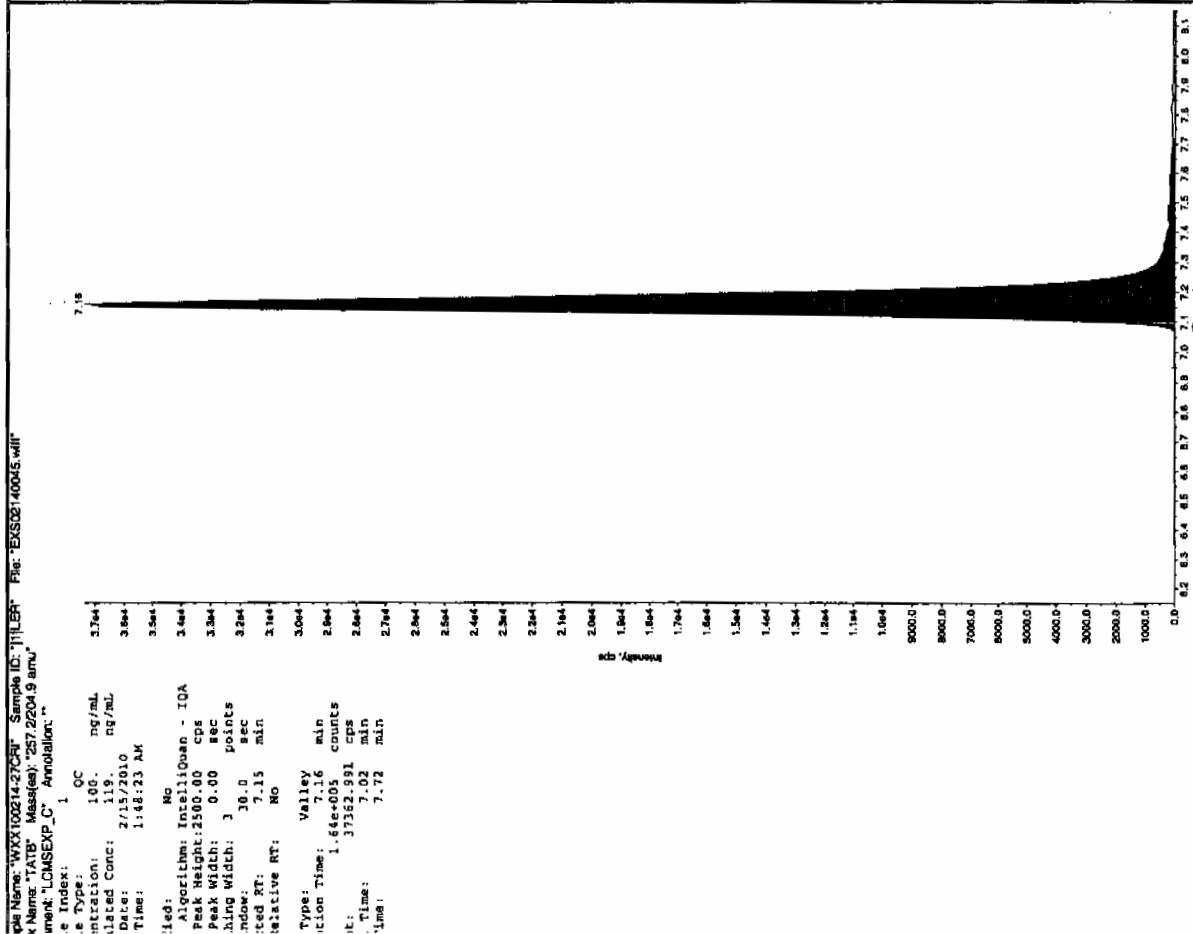
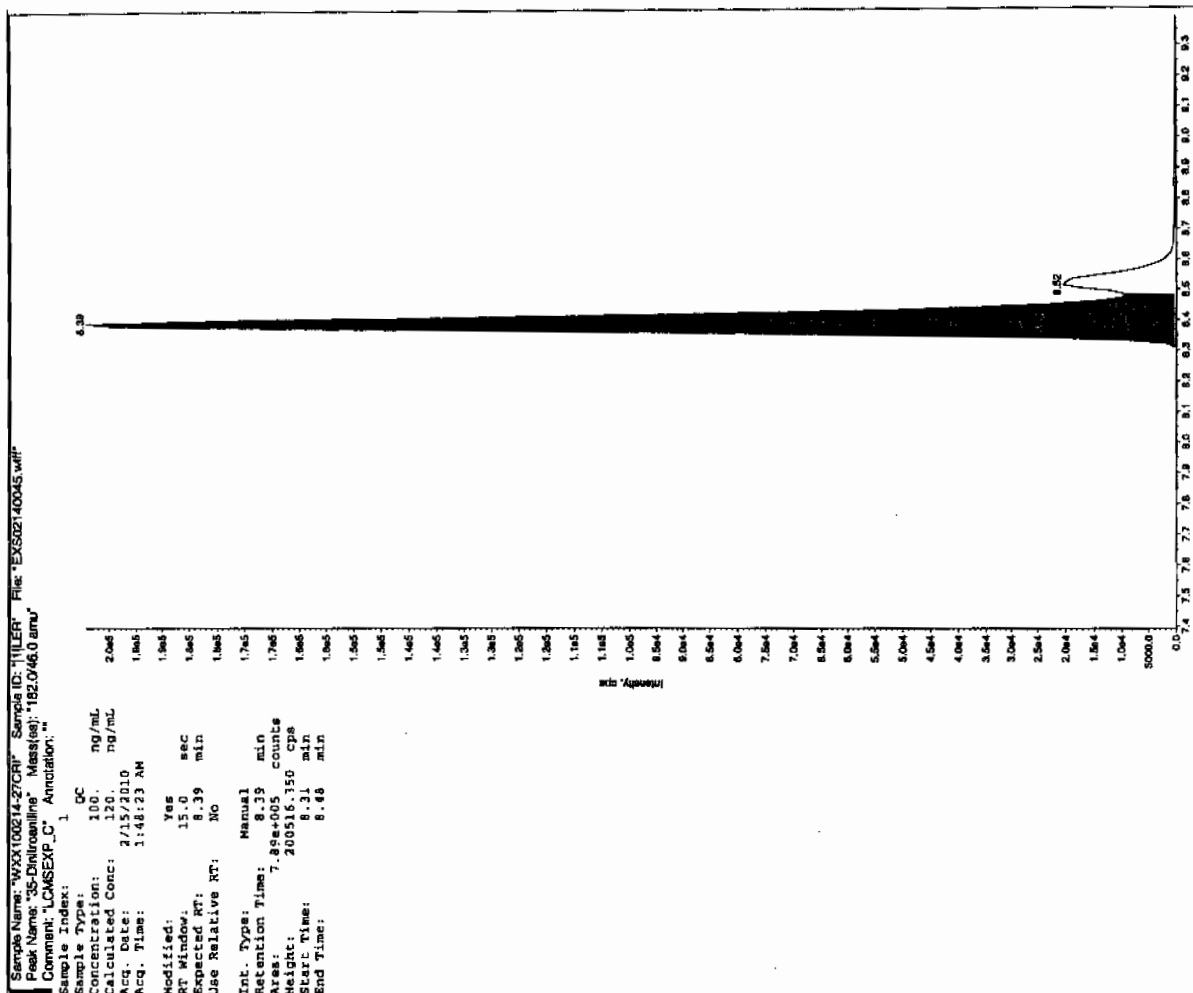
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

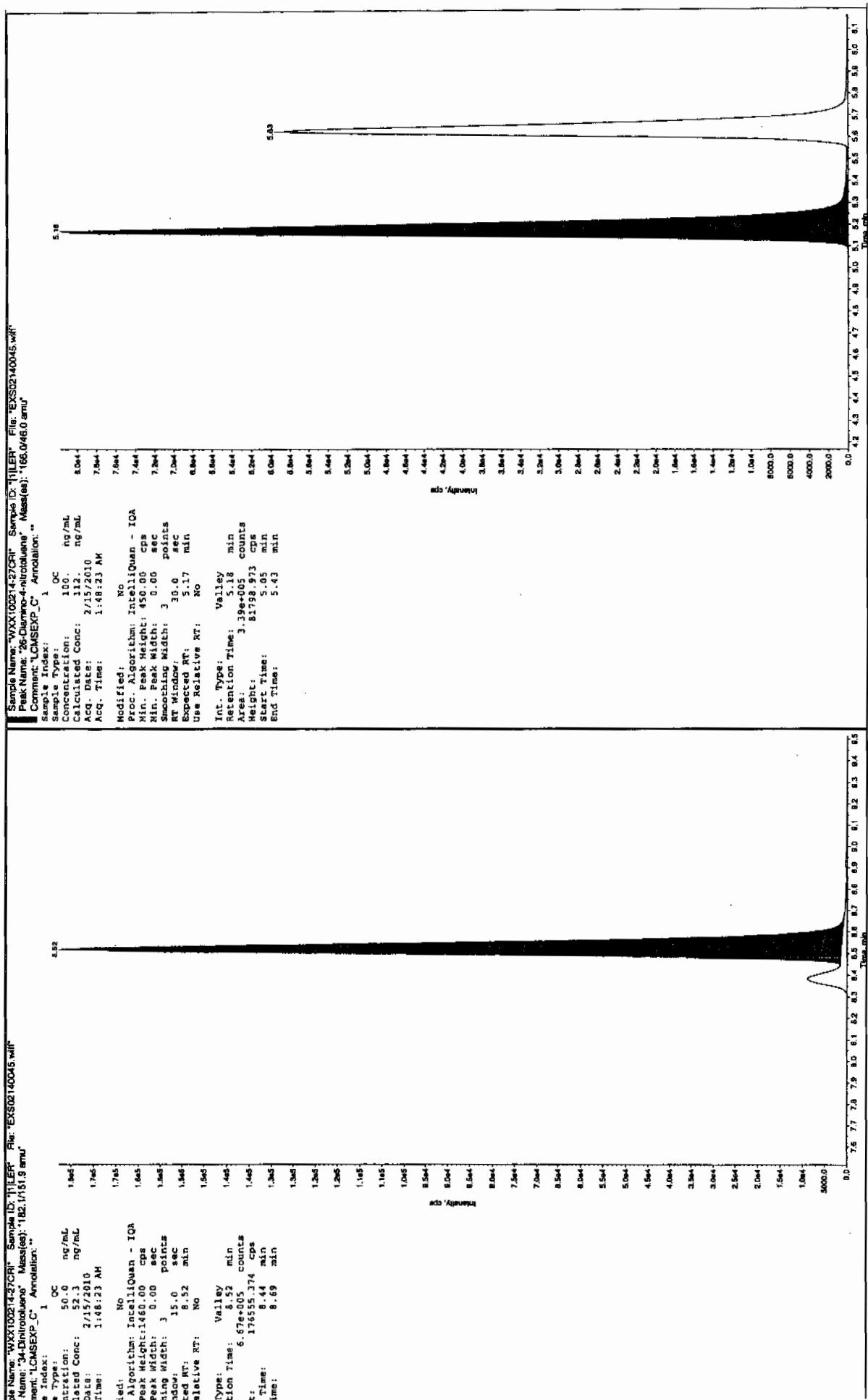
* Value outside of Recovery Limits



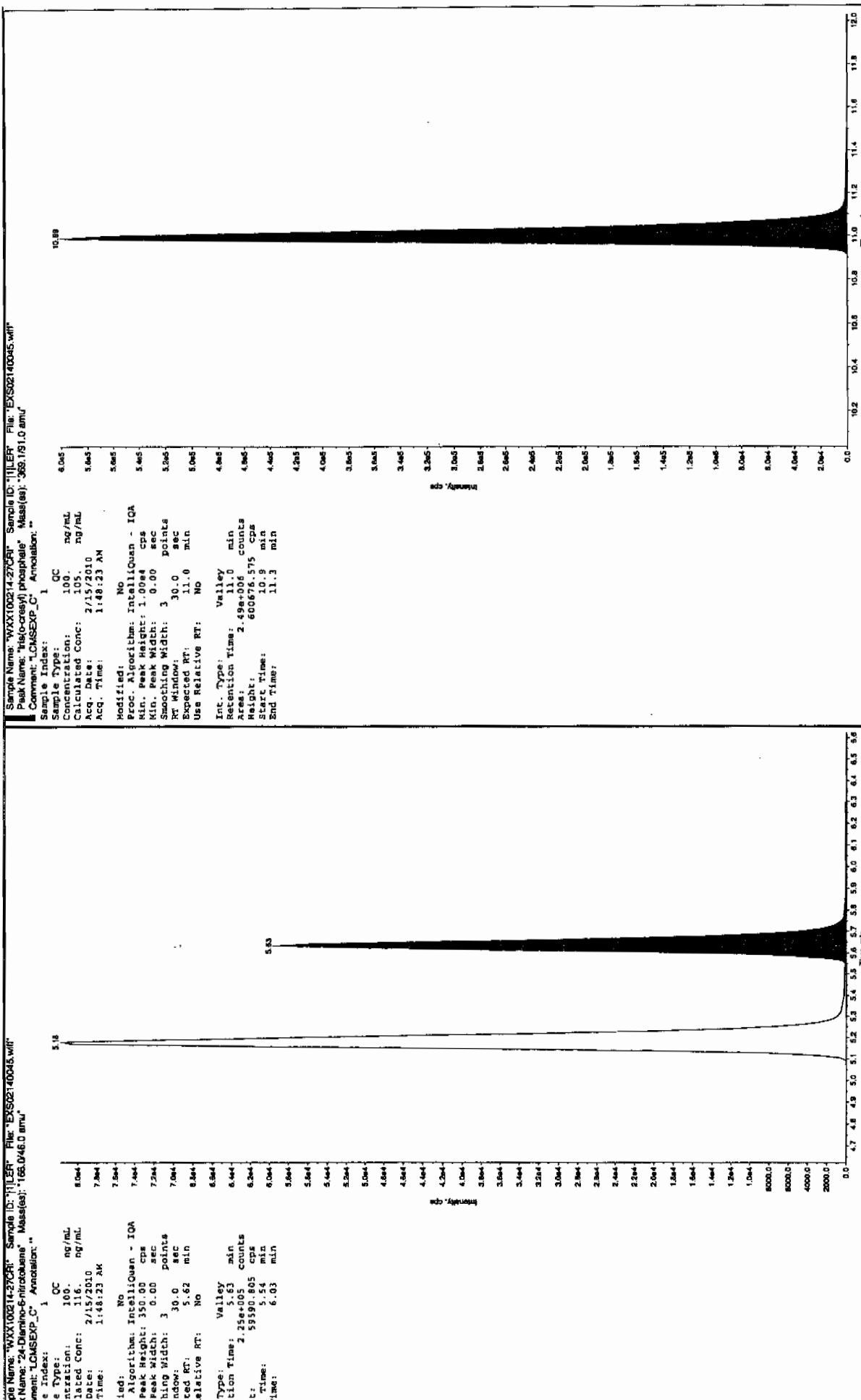
after Jan 2/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140056.wiff

Analysis Date: 15-FEB-10 04:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	610	122	
2,6-Diamino-4-nitrotoluene	500	600	120	
3,4-Dinitrotoluene	250	253	101	
3,5-Dinitroaniline	500	551	110	
TATB	500	567	113	
tris(o-cresyl) phosphate	500	504	101	

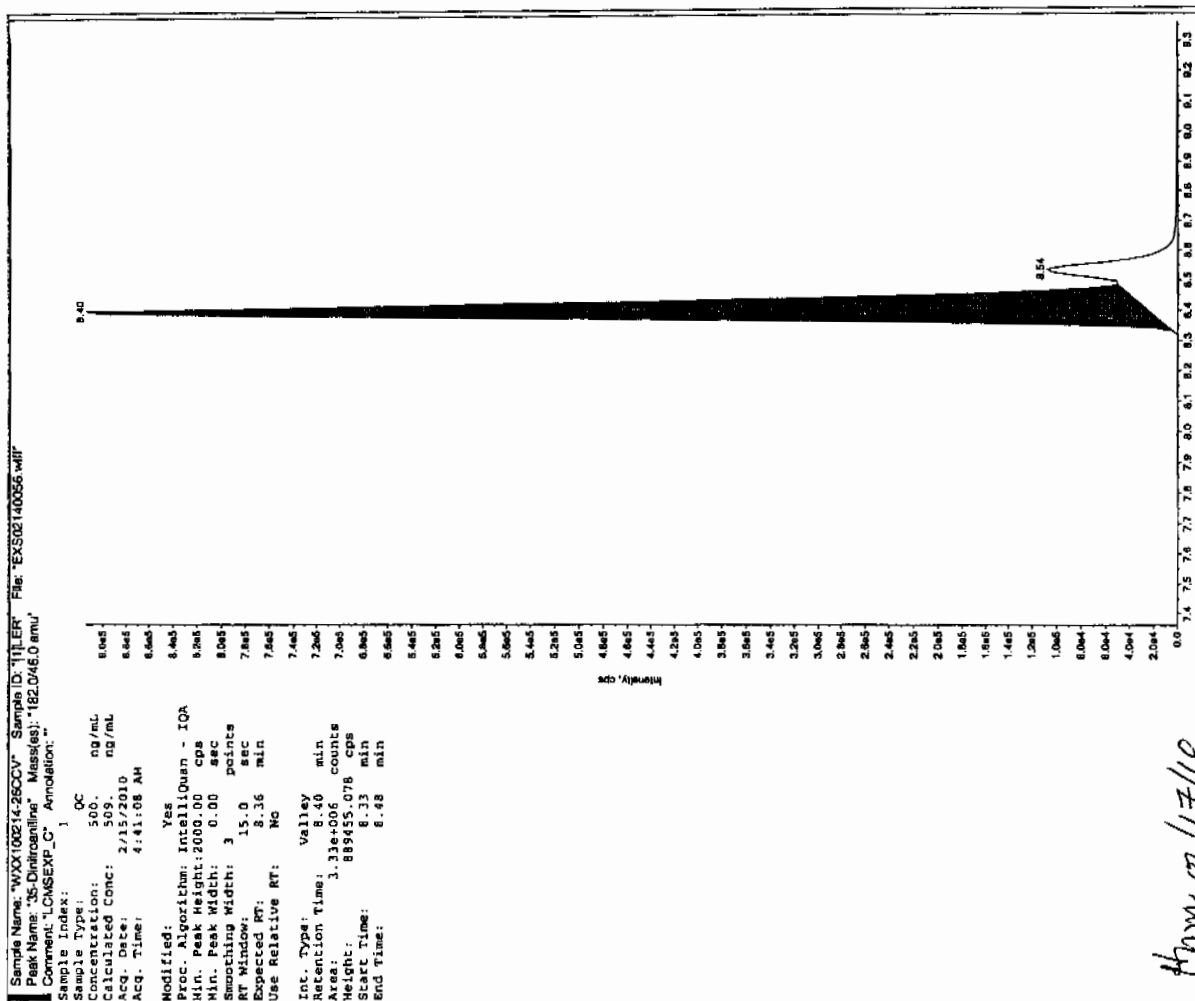
Recovery Limits:

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%

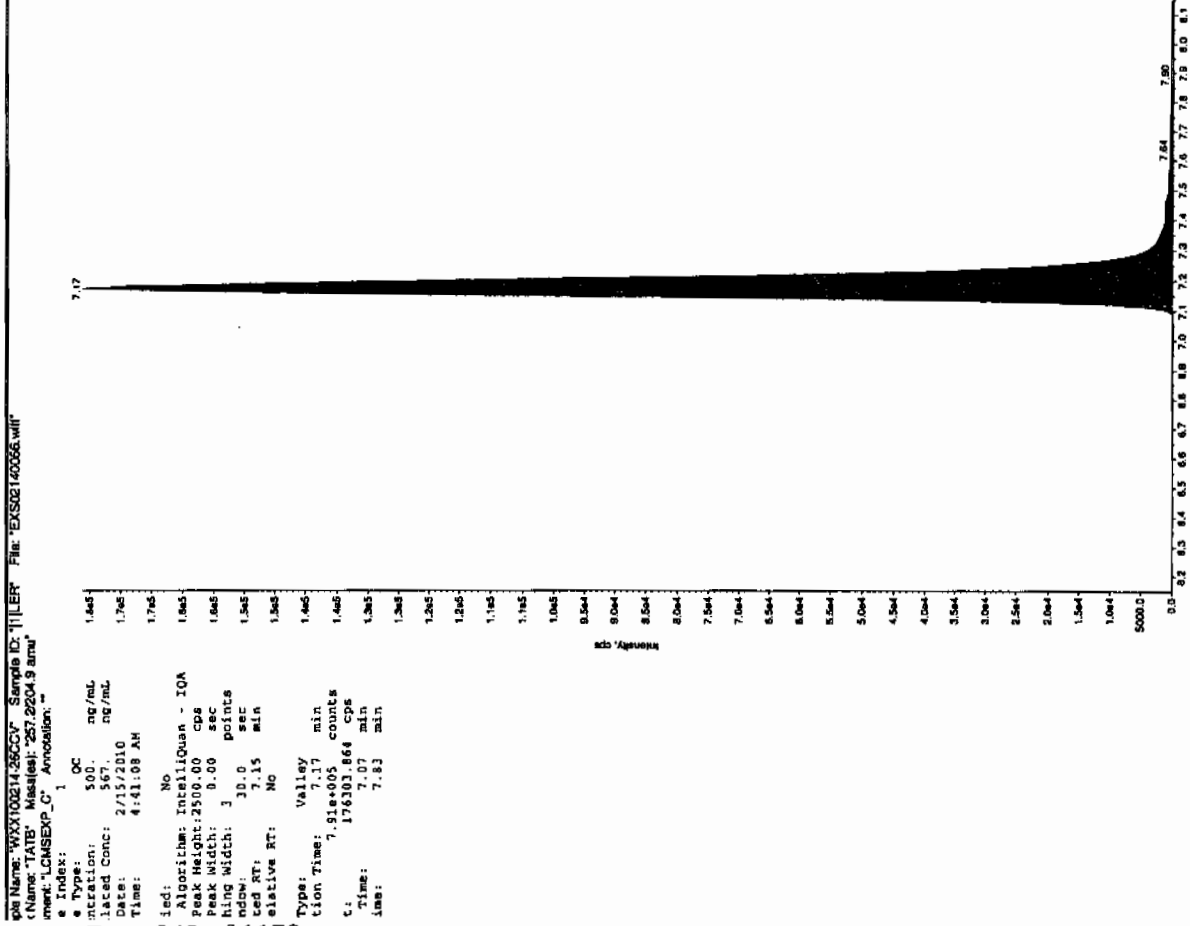
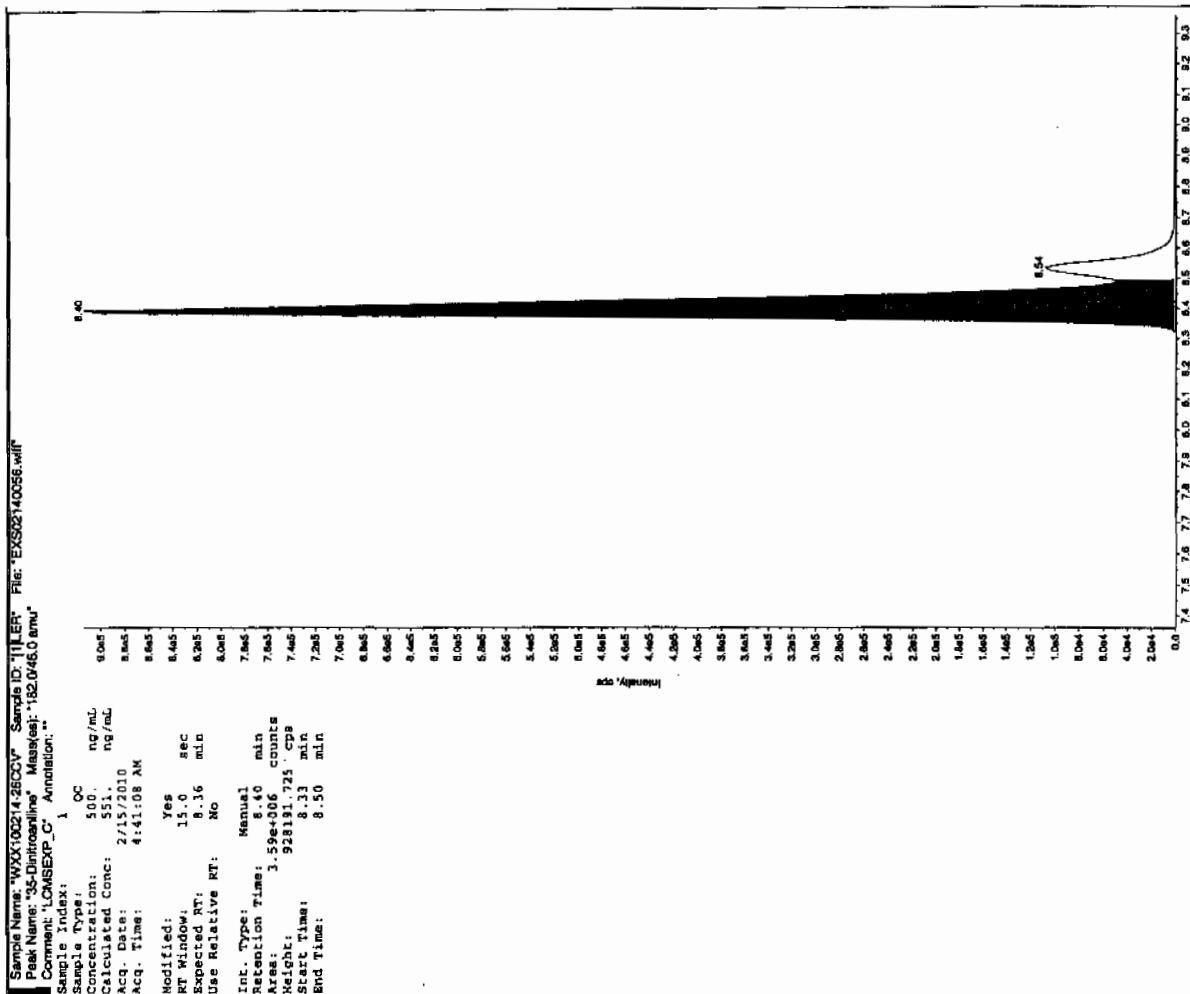
Column used to flag Recovery outside of Limits

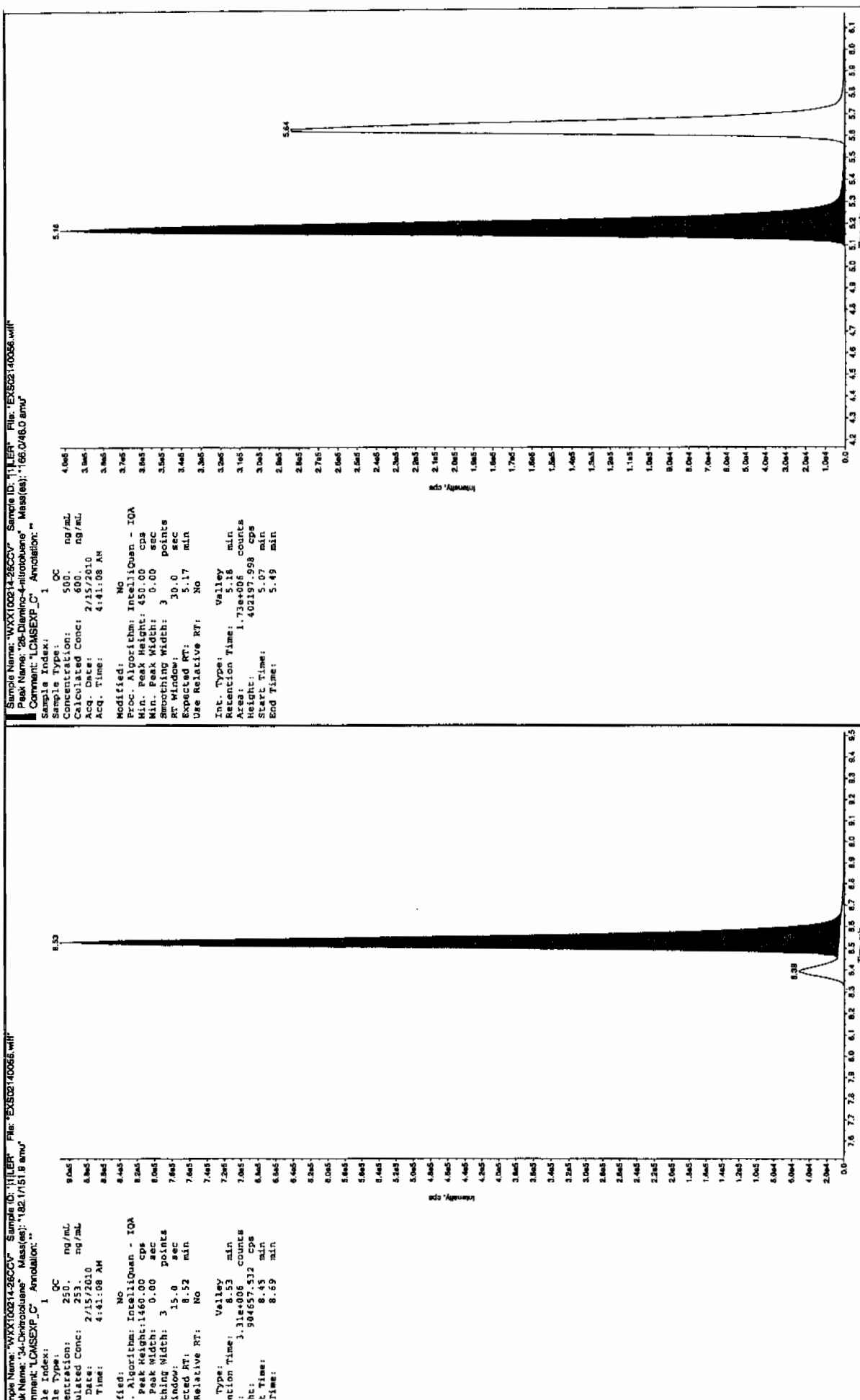
* Value outside of Recovery Limits

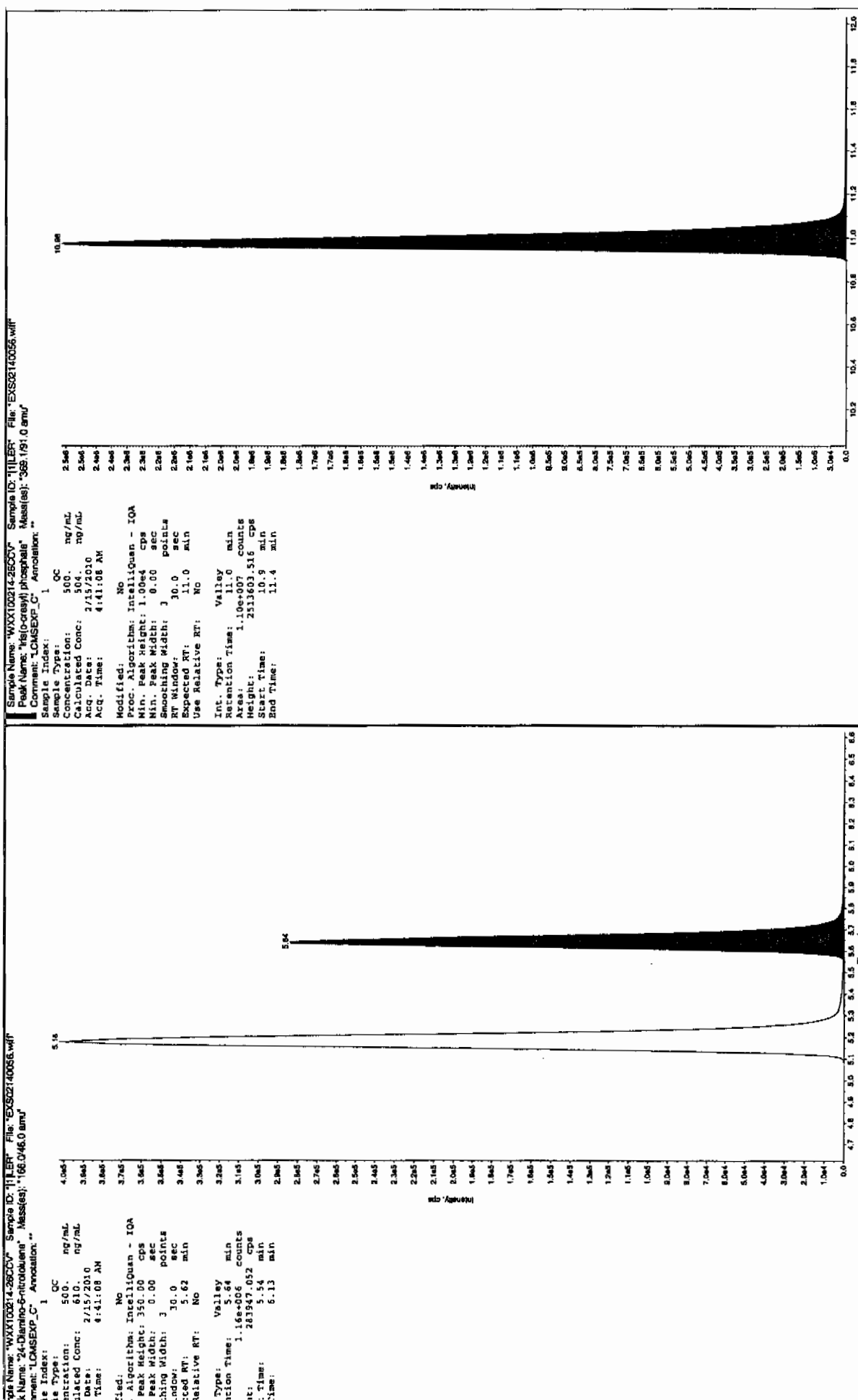


thru 02/17/10

after Jan 2/17/10







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140058.wiff

Analysis Date: 15-FEB-10 05:12

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	100	119	119	
3,4-Dinitrotoluene	50	54.2	108	
3,5-Dinitroaniline	100	116	116	
TATB	100	114	114	
tris(o-cresyl) phosphate	100	104	104	
2,4-Diamino-6-nitrotoluene	100	120	120	

Recovery Limits:

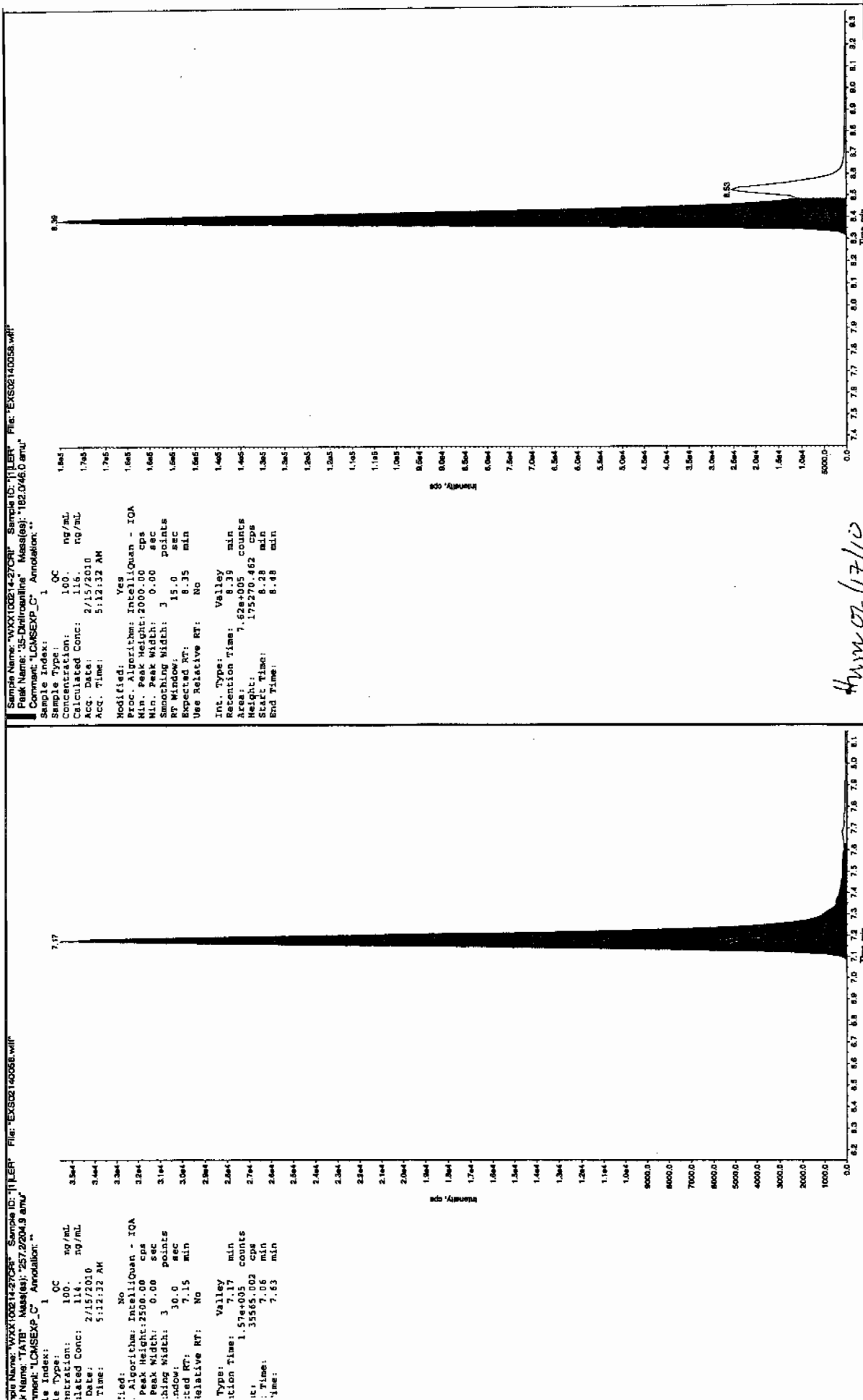
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

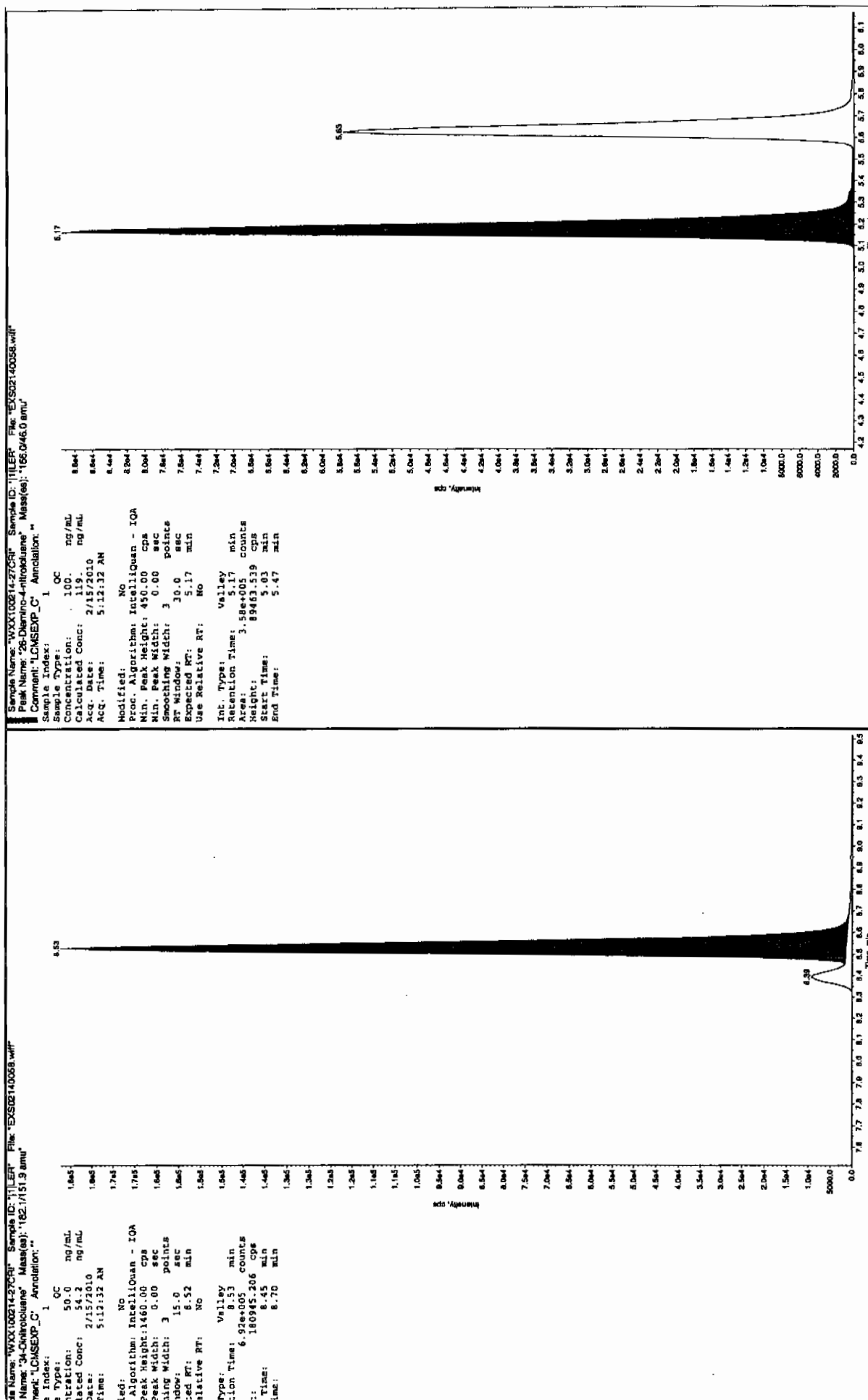
Column used to flag Recovery outside of Limits

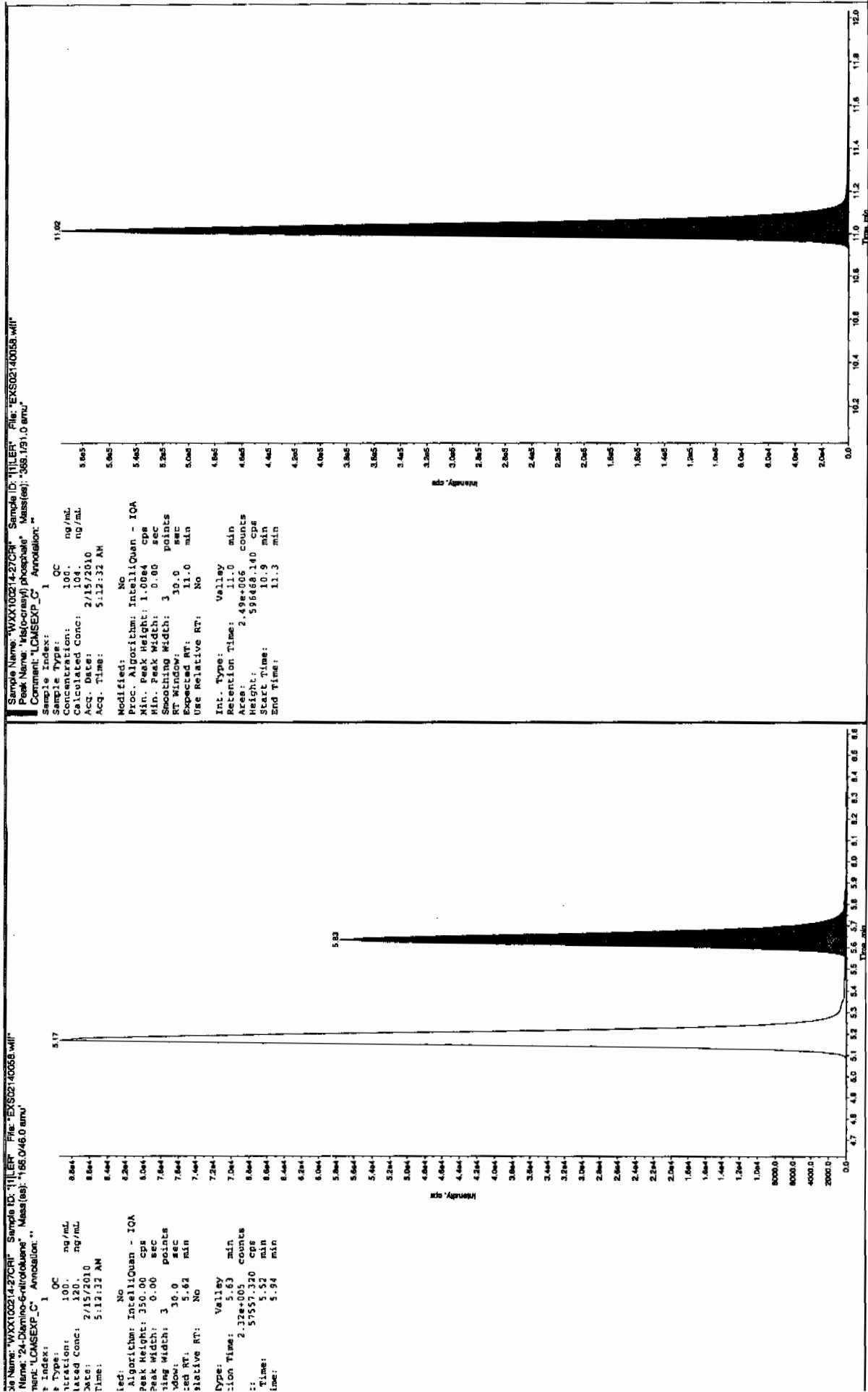
* Value outside of Recovery Limits

2/17/10



2/17/10





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140069.wiff

Analysis Date: 15-FEB-10 08:05

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	562	112	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	535	107	
TATB	500	530	106	
tris(o-cresyl) phosphate	500	505	101	

Recovery Limits:

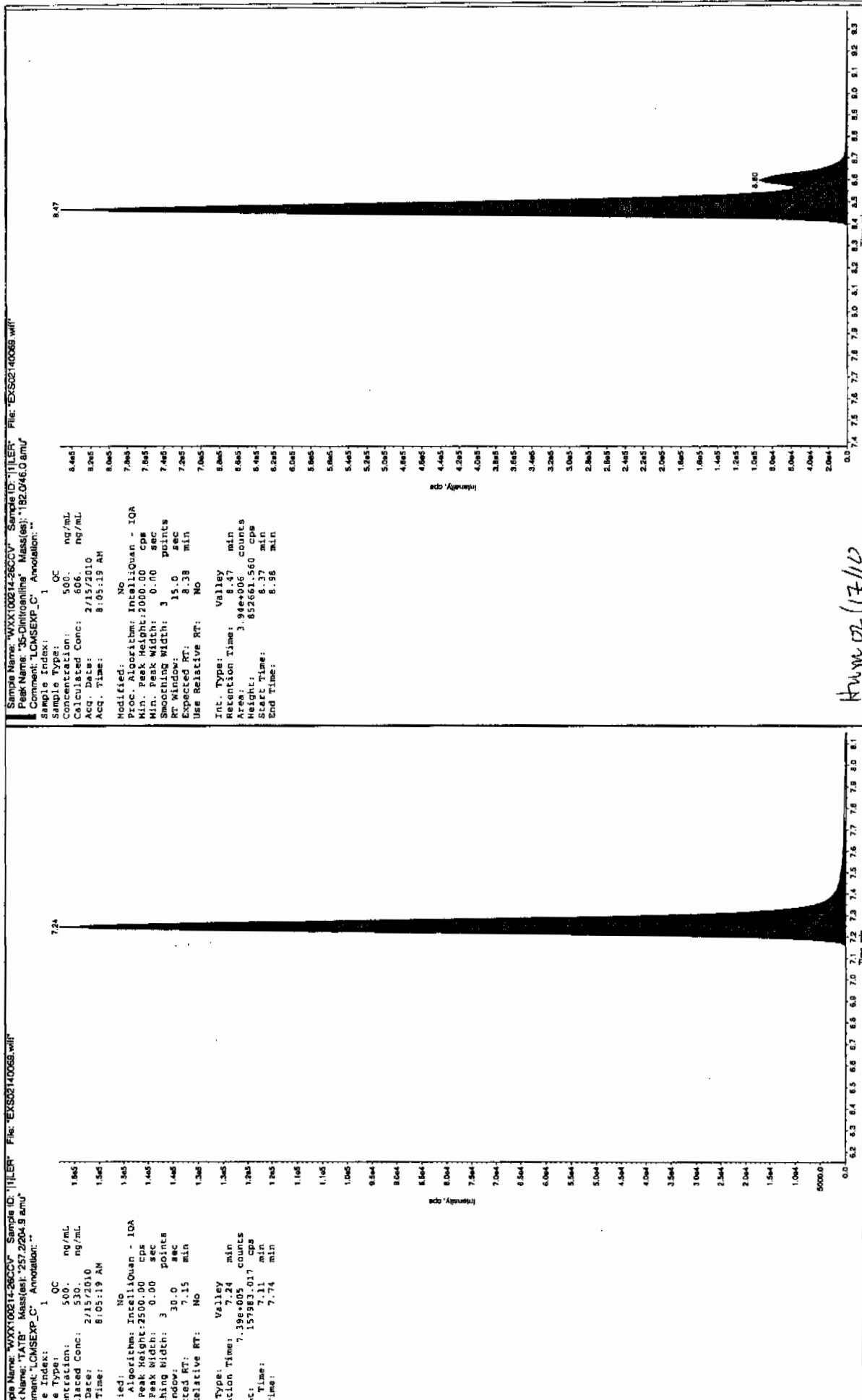
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

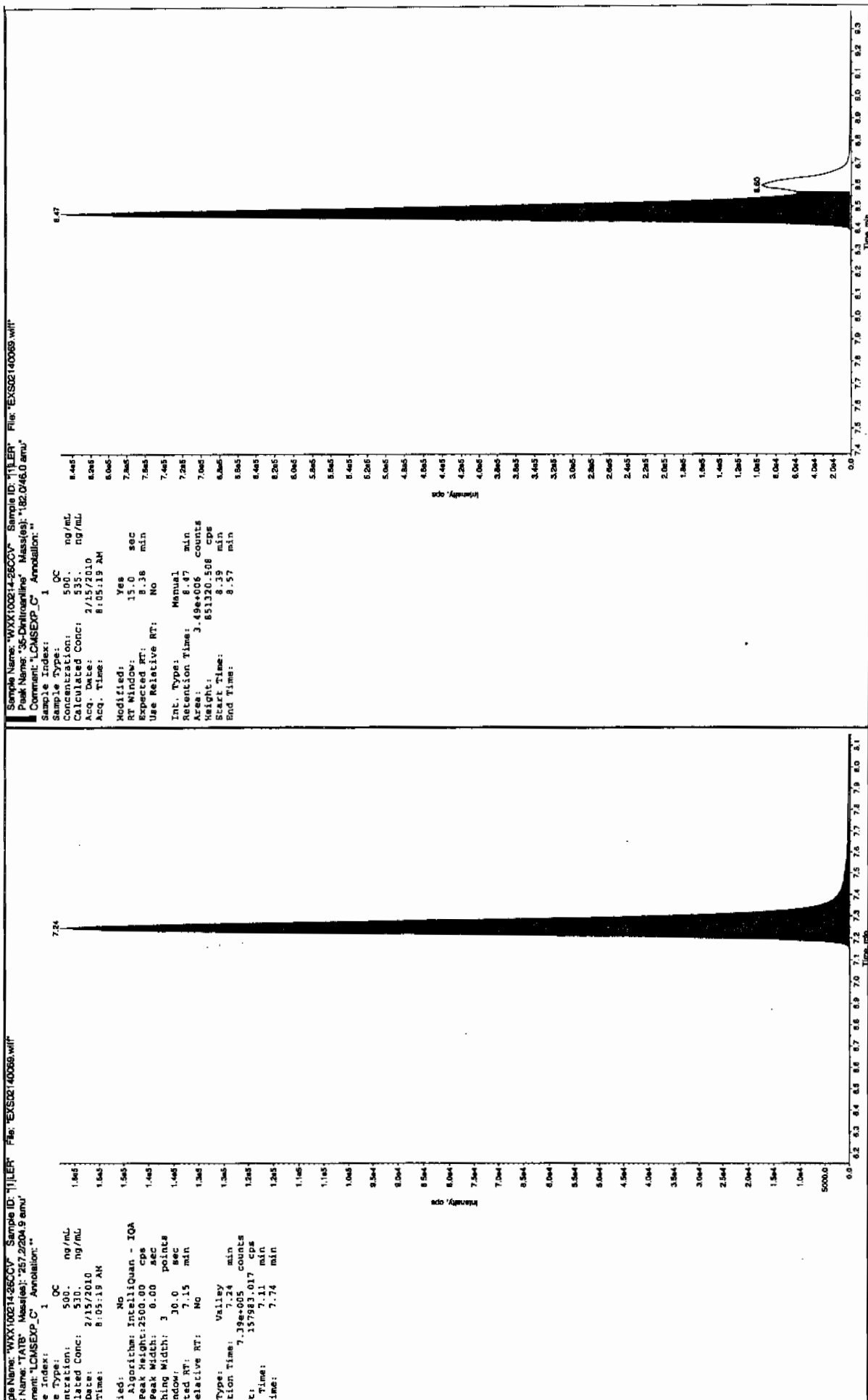
* Value outside of Recovery Limits

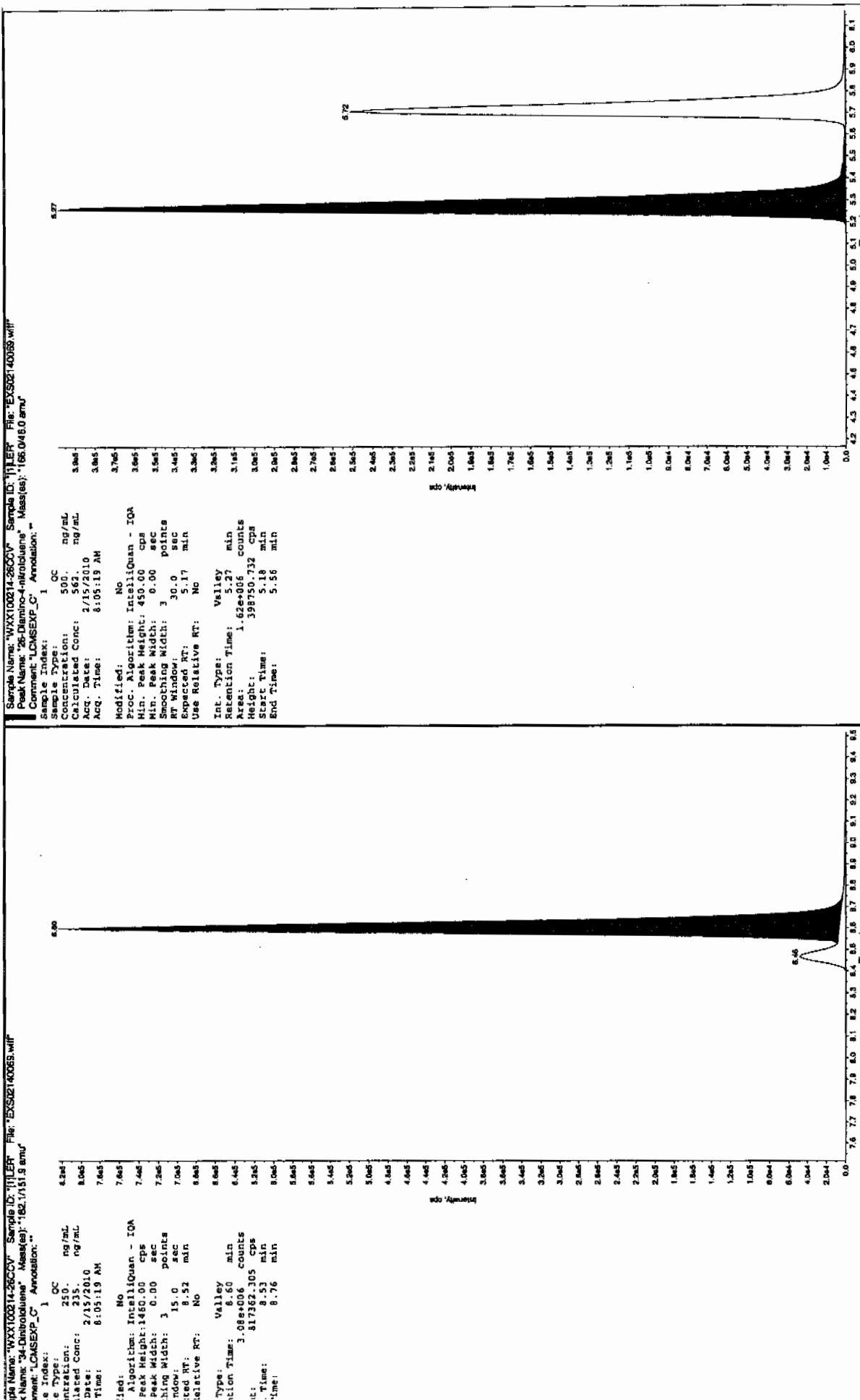
Before Jan 21/10

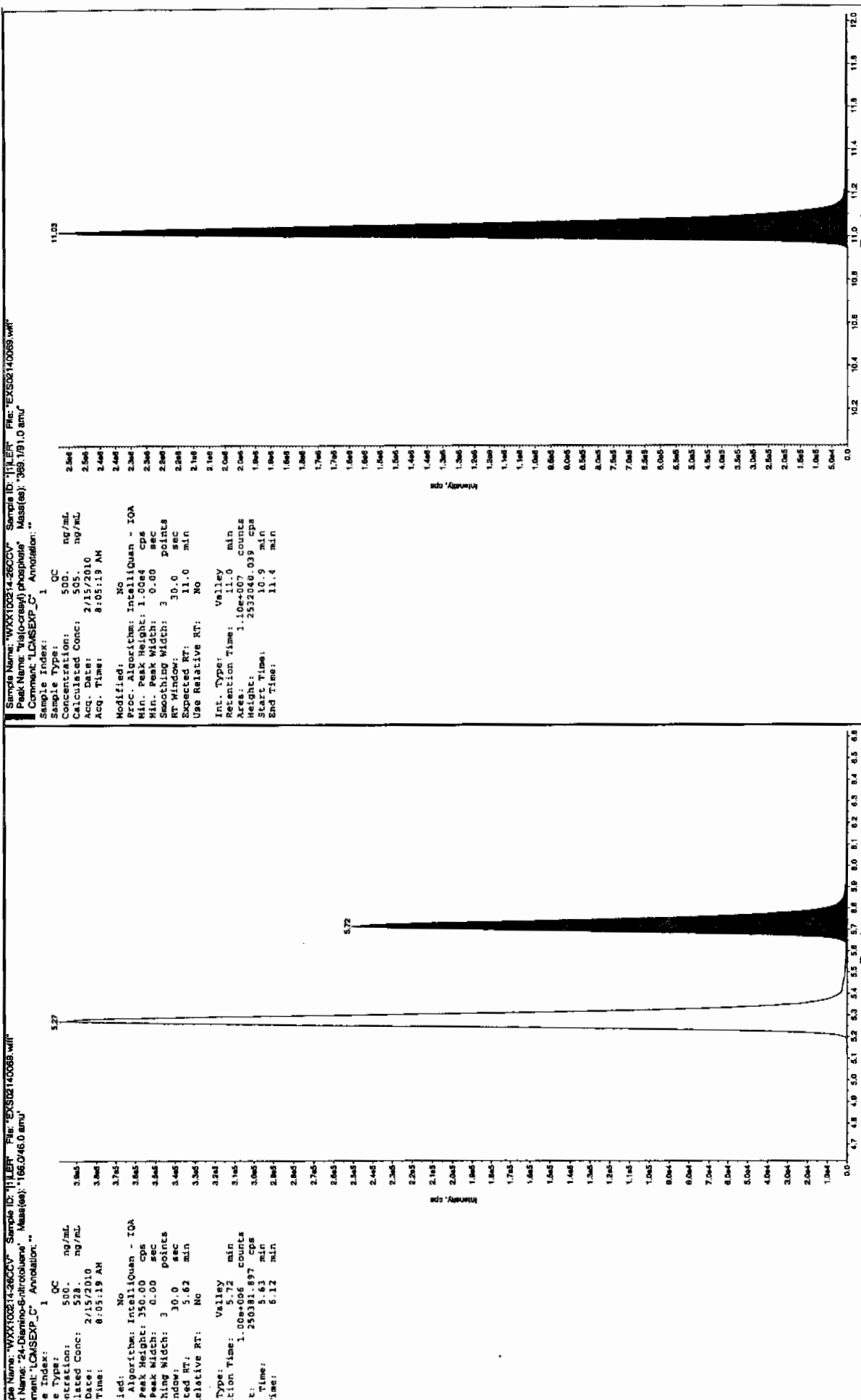


Humor 02/17/10

after Jan 2/17/10







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140071.wiff

Analysis Date: 15-FEB-10 08:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	105	105	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	51.3	103	
3,5-Dinitroaniline	100	115	115	
TATB	100	115	115	
tris(o-cresyl) phosphate	100	105	105	

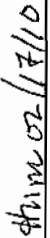
Recovery Limits:

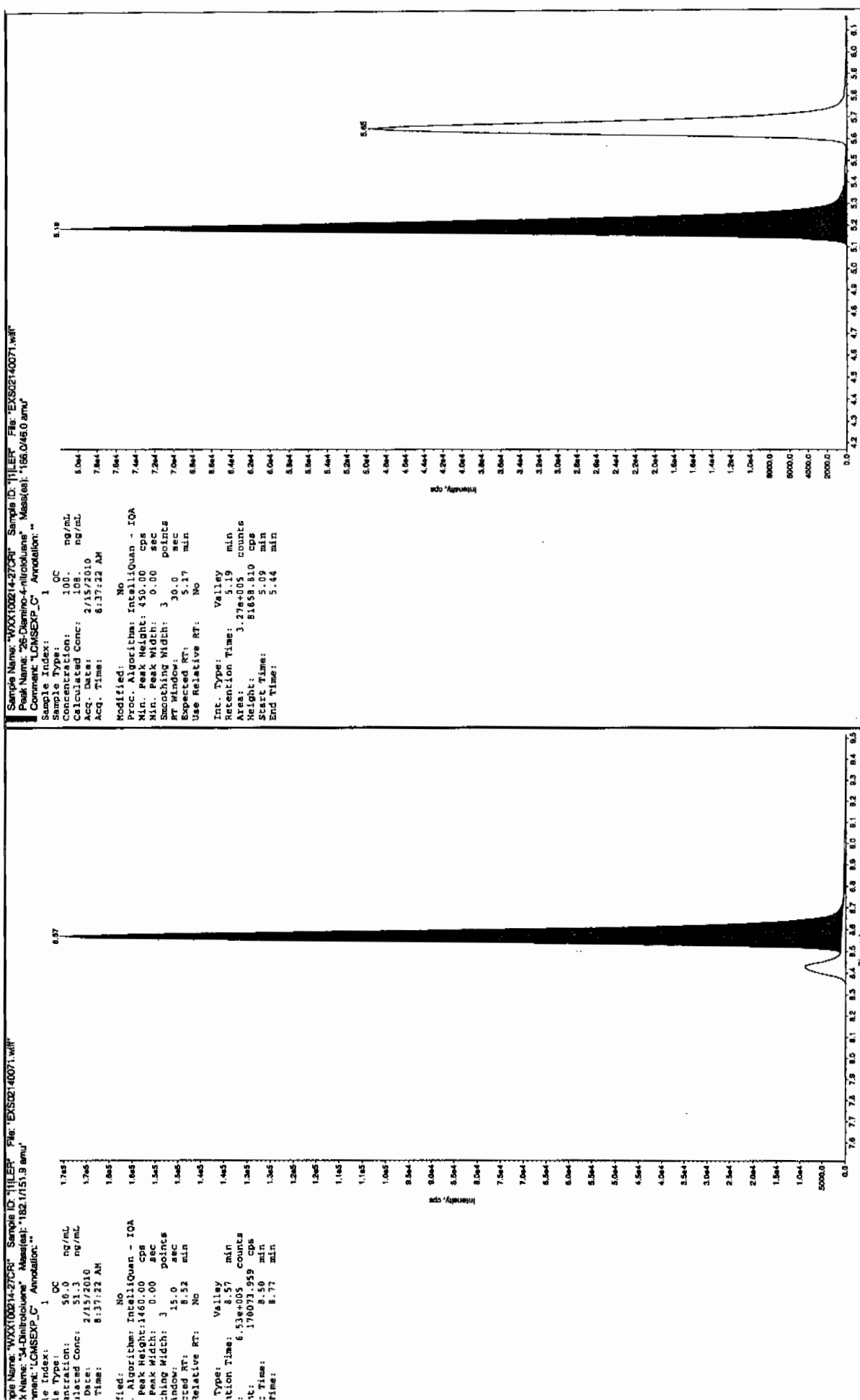
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

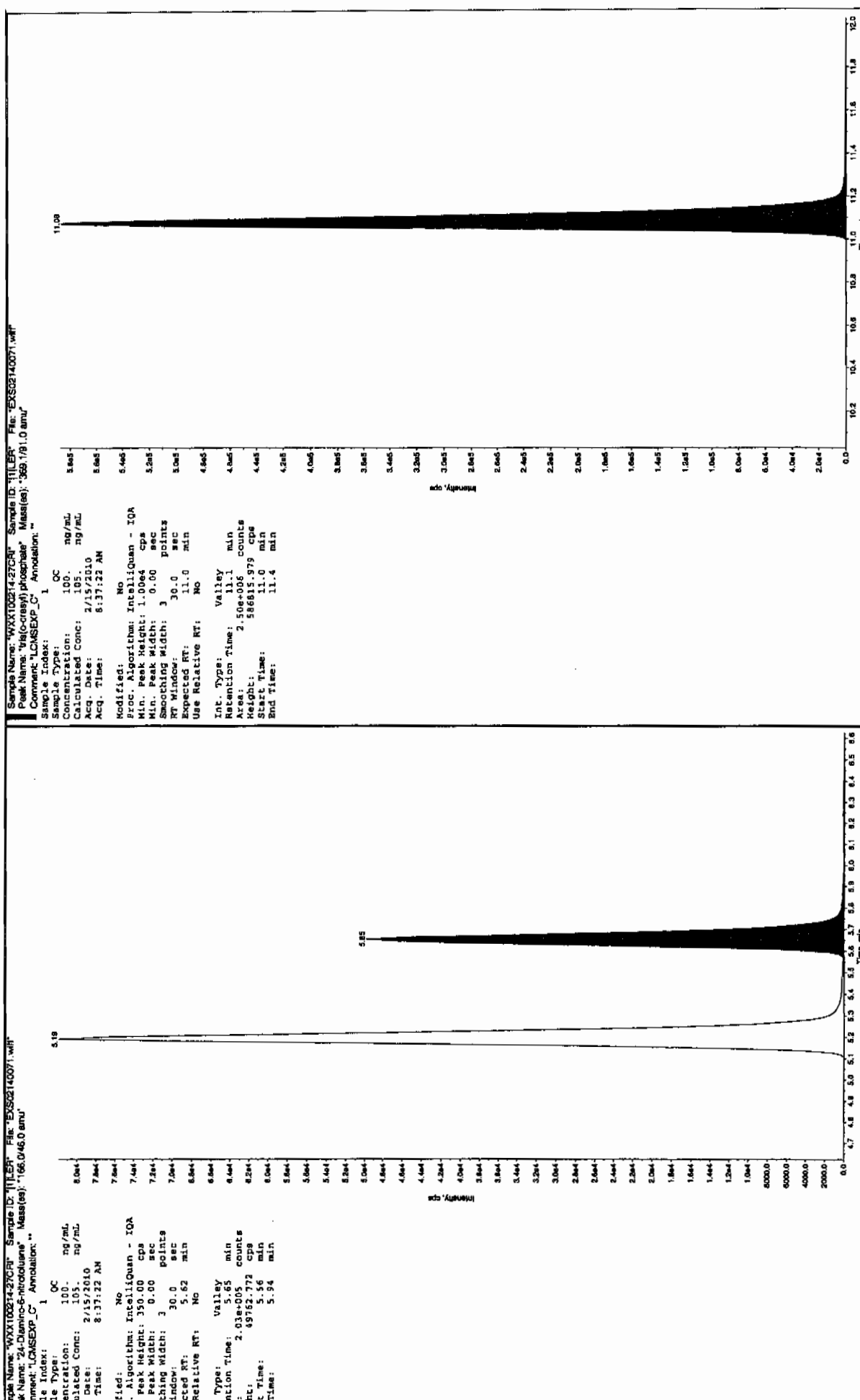
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits





IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140082.wiff

Analysis Date: 15-FEB-10 11:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	382	76	
2,6-Diamino-4-nitrotoluene	500	446	89	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	505	101	
TATB	500	544	109	
tris(o-cresyl) phosphate	500	484	97	

Recovery Limits:

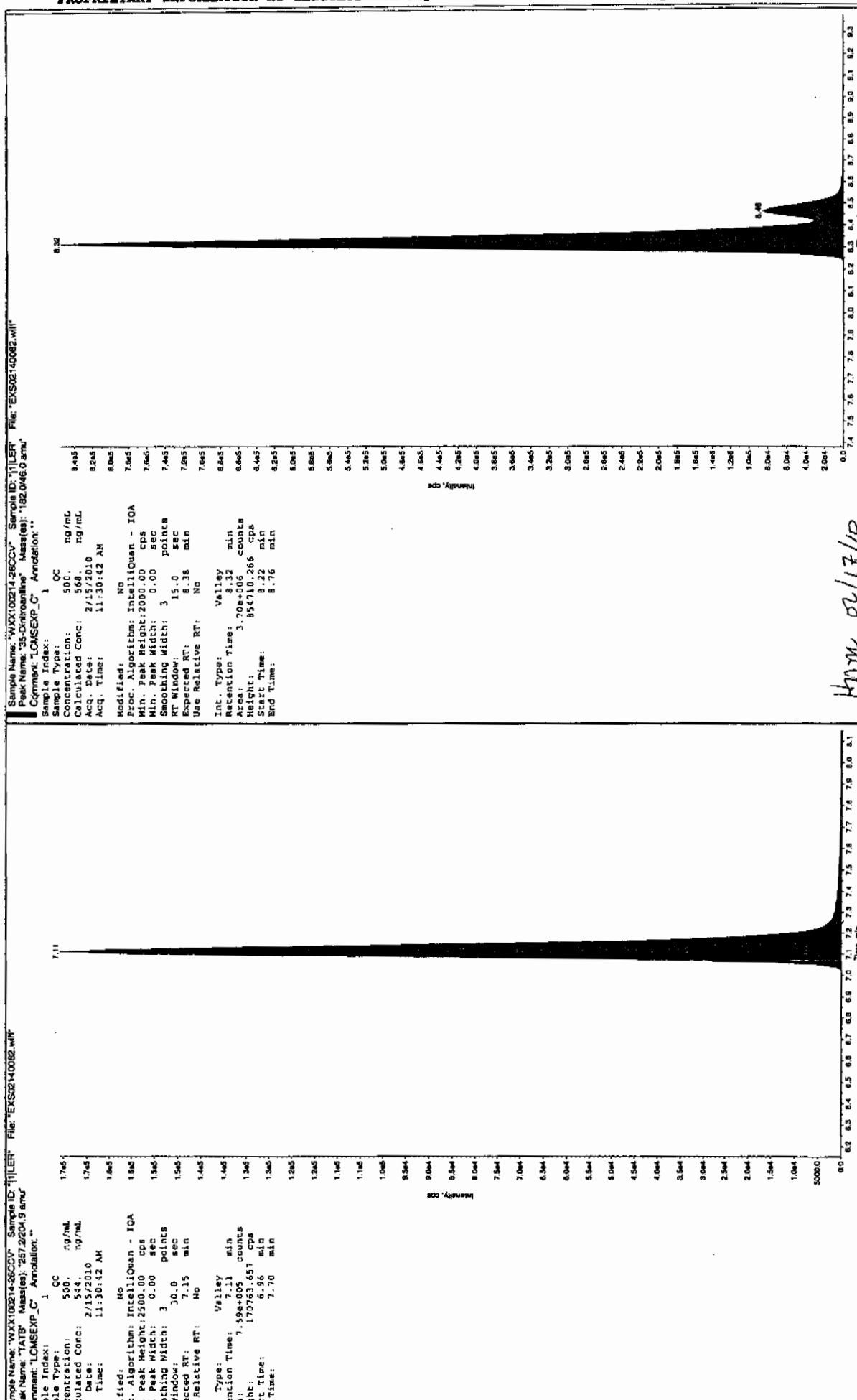
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

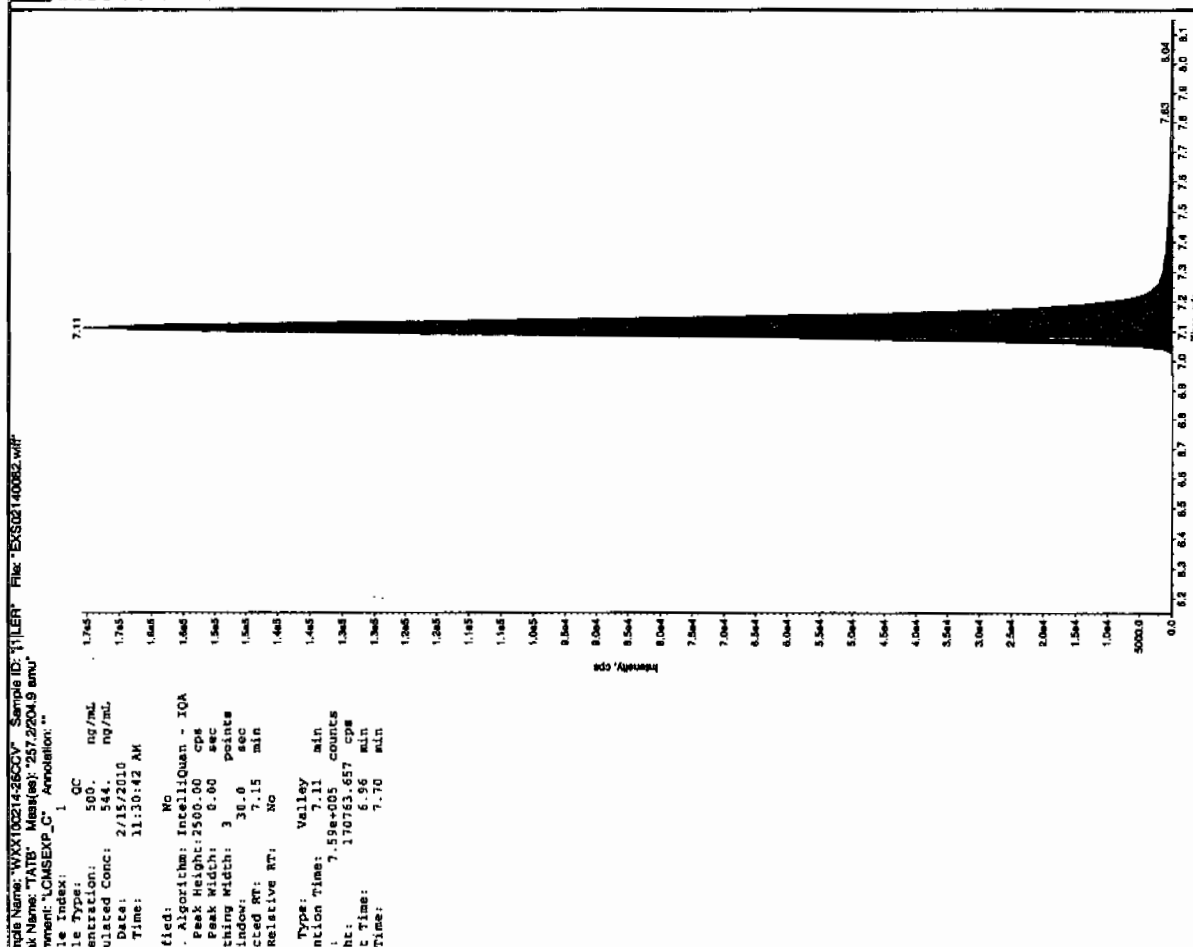
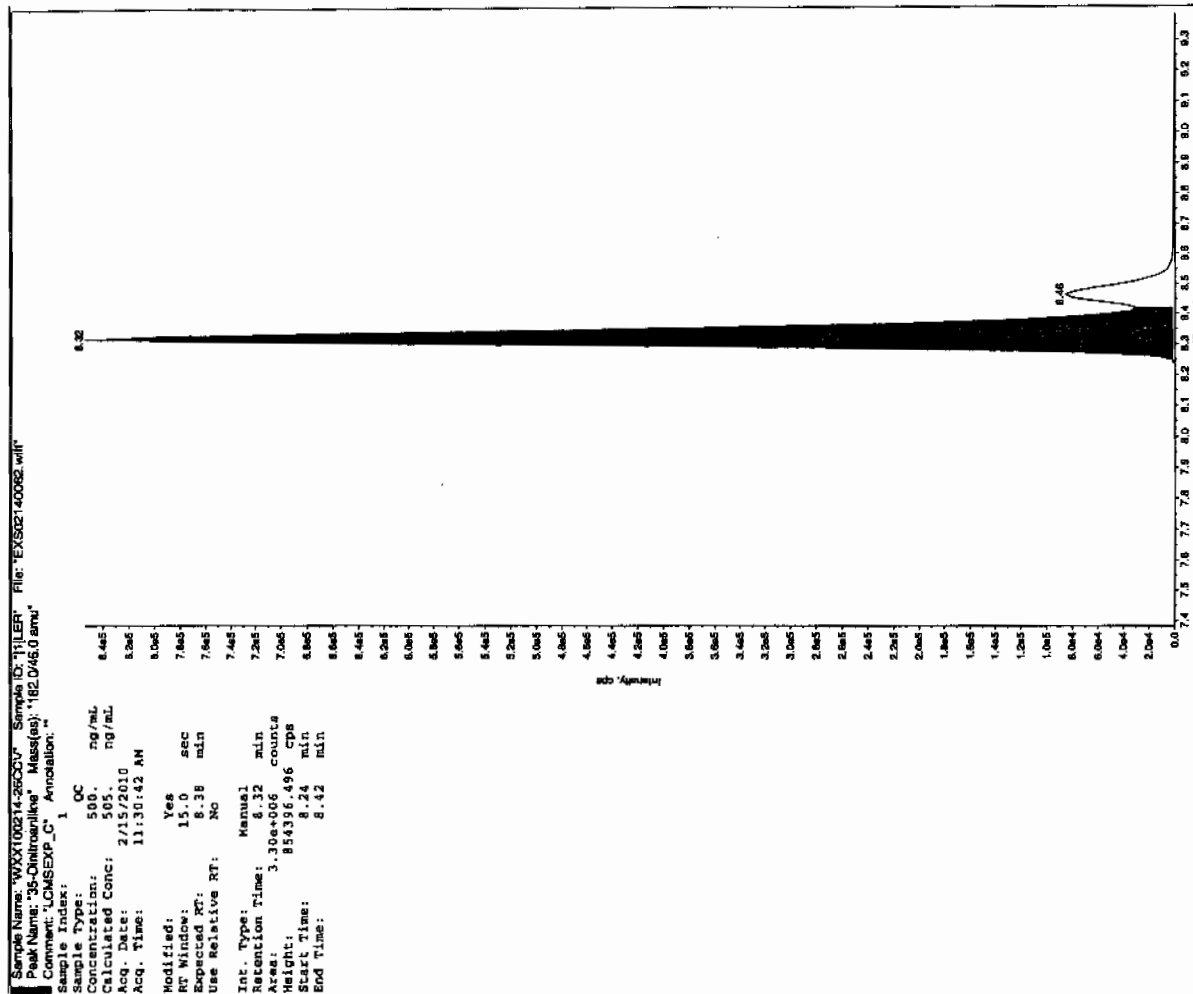
Before Sea 2/16/10



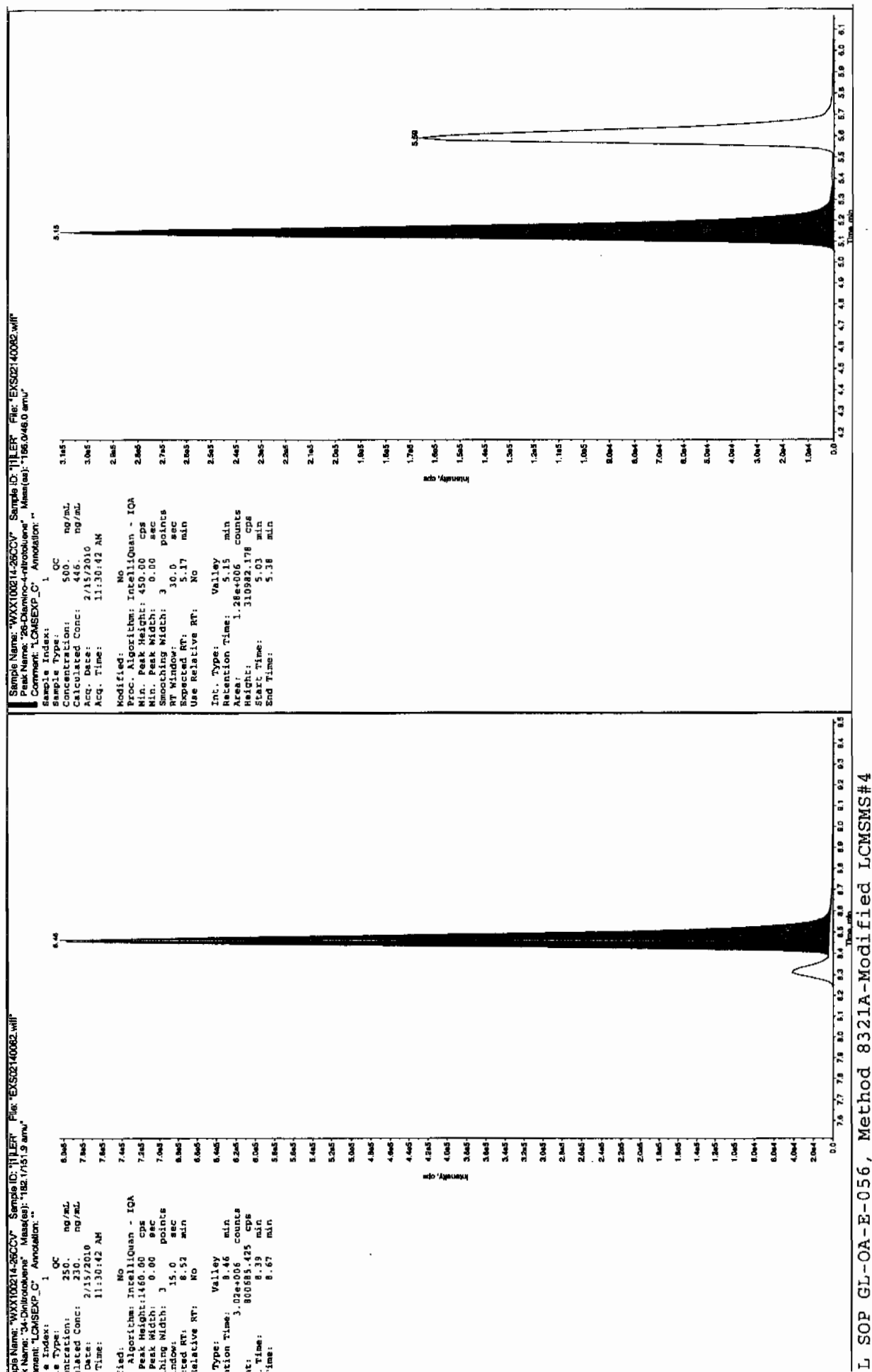
After 02/17/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

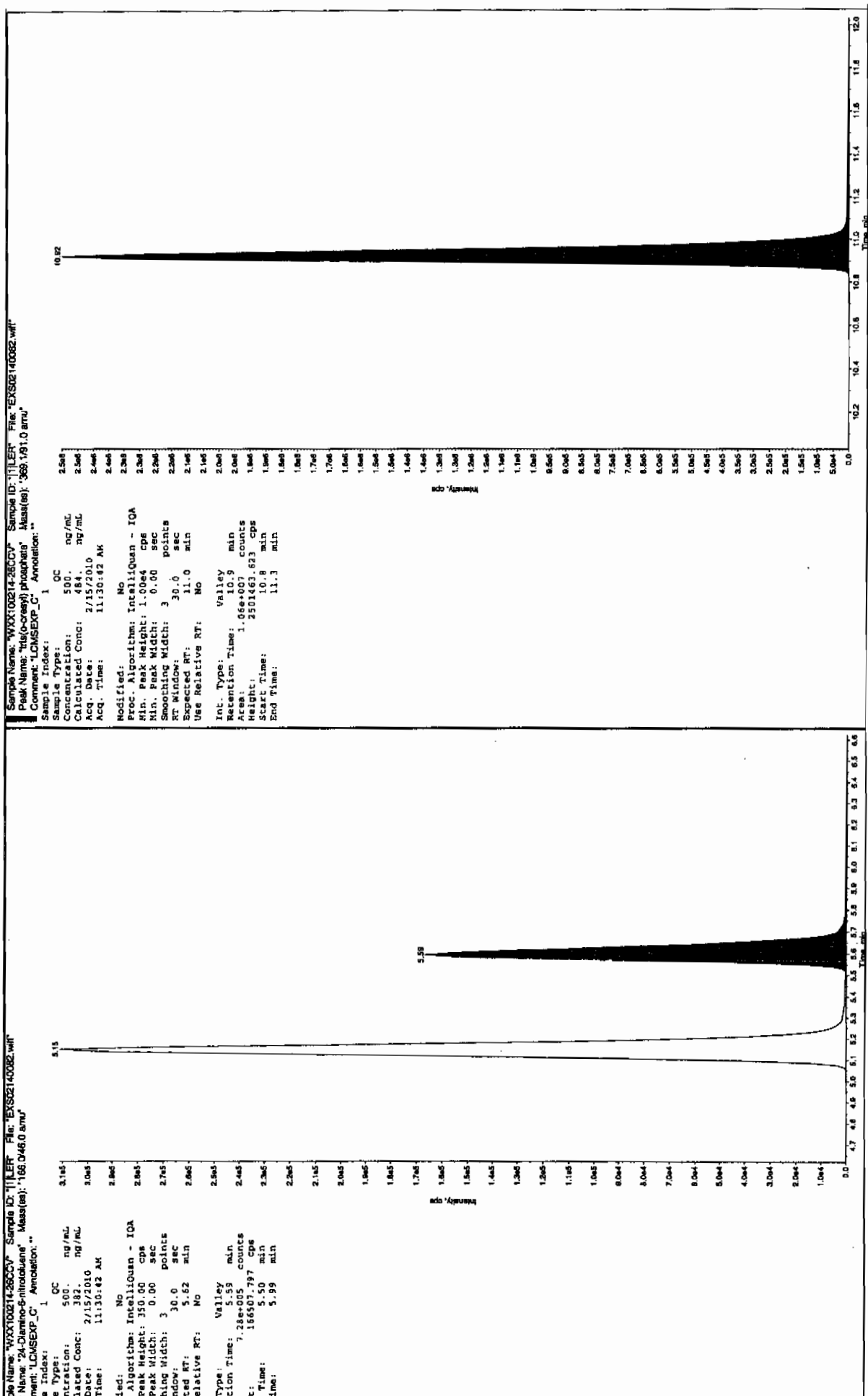
after Scan 2/17/10



Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140084.wiff

Analysis Date: 15-FEB-10 12:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	86.5	87	
2,6-Diamino-4-nitrotoluene	100	85.4	85	
3,4-Dinitrotoluene	50	51.9	104	
3,5-Dinitroaniline	100	108	108	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	99.7	100	

Recovery Limits:

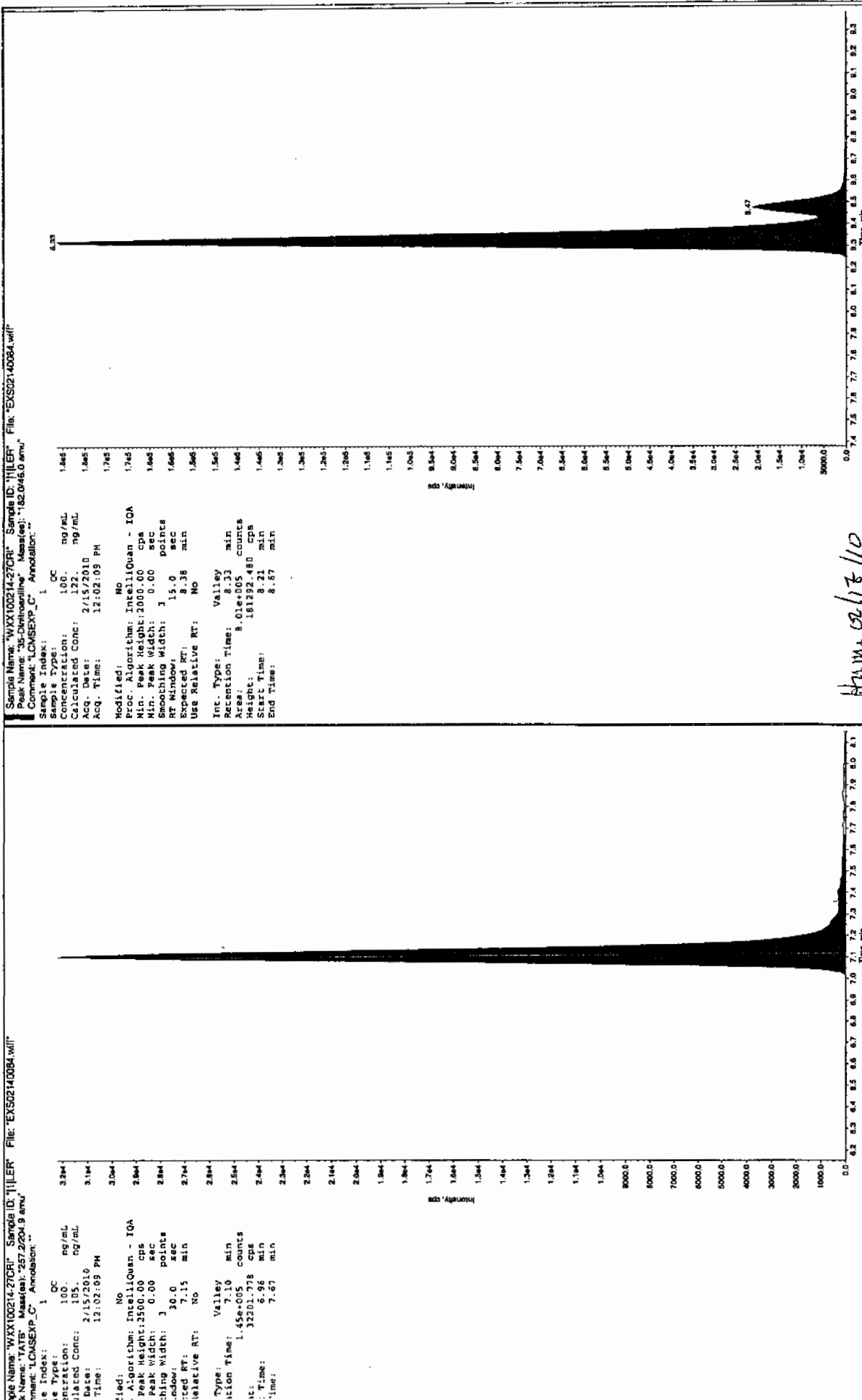
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

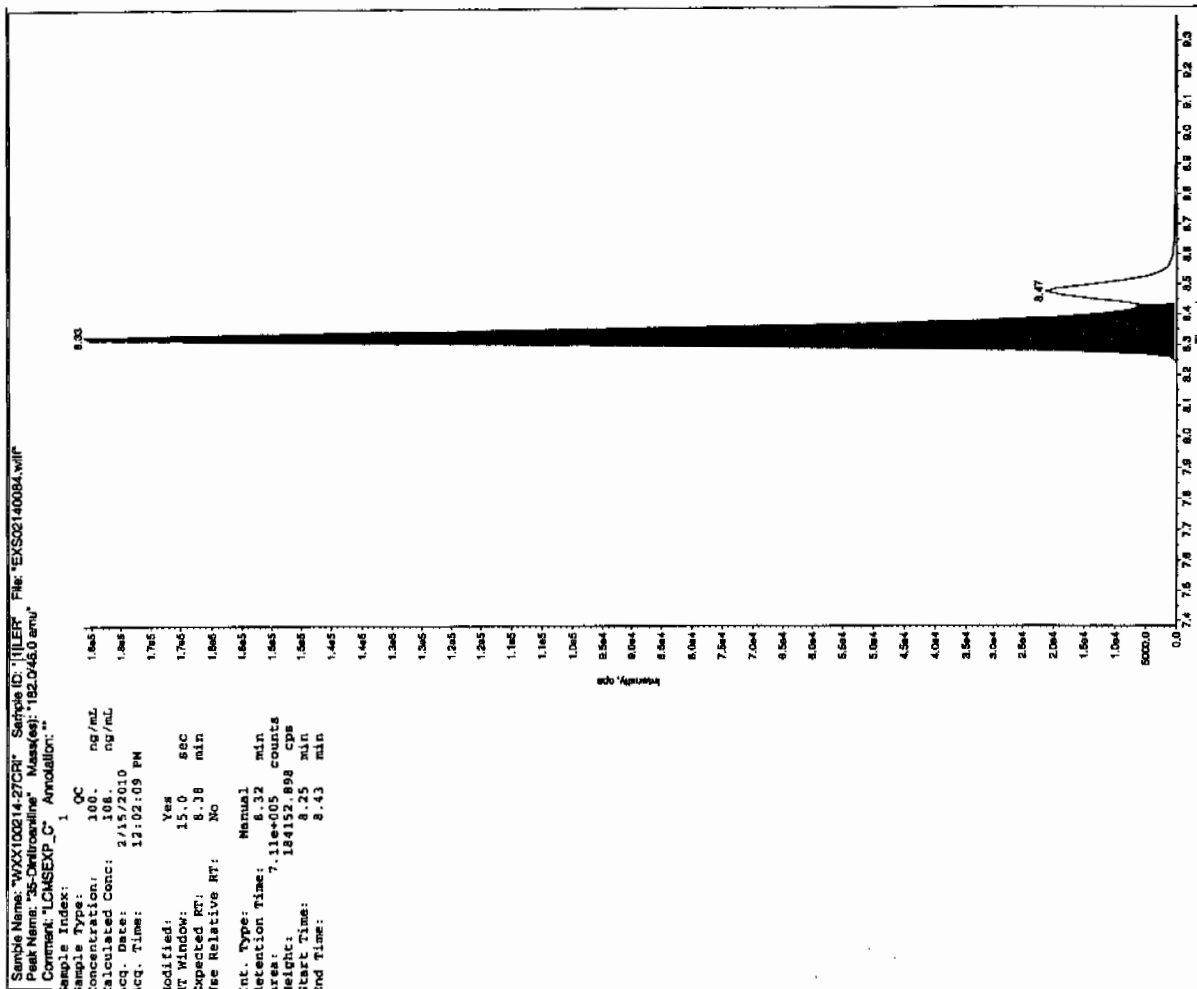
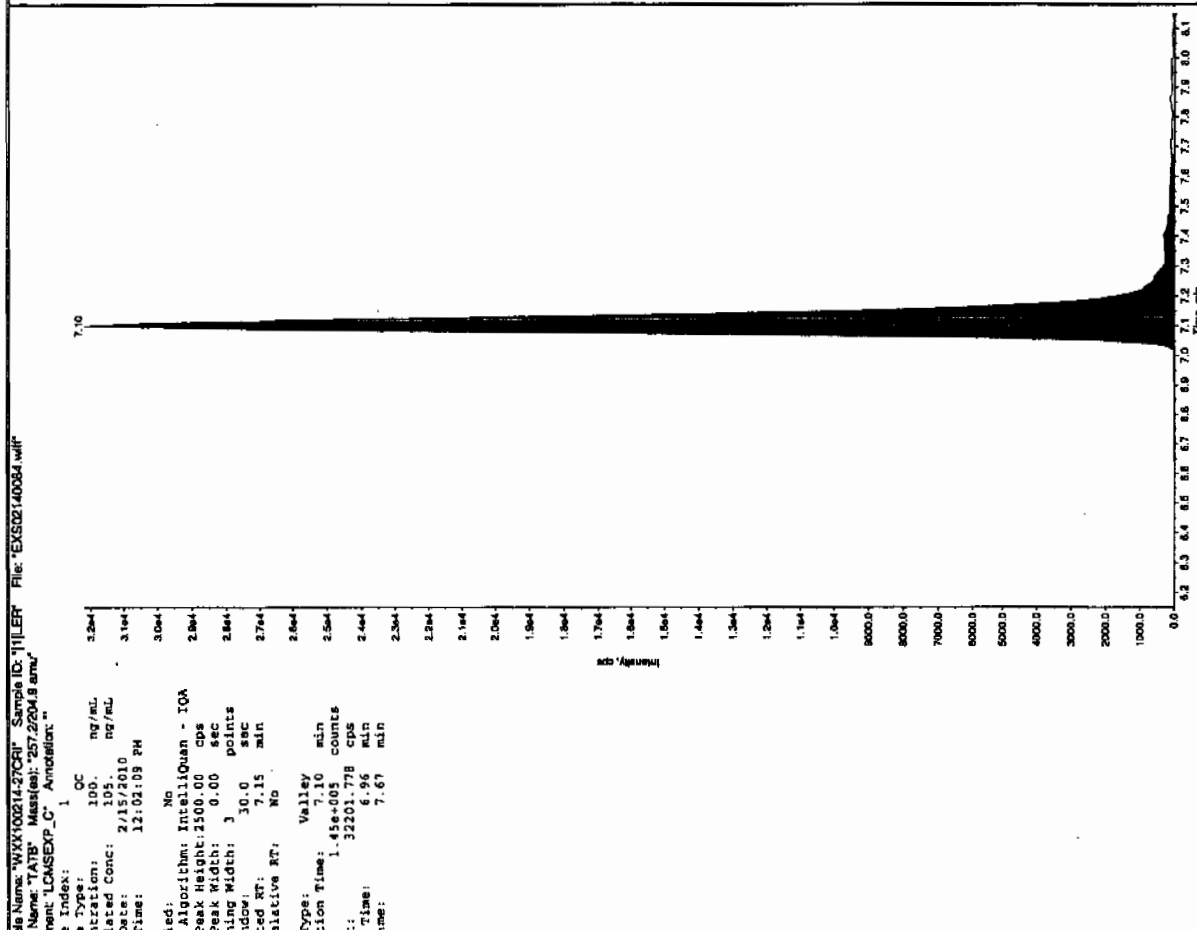
Before Scan 2/16/10

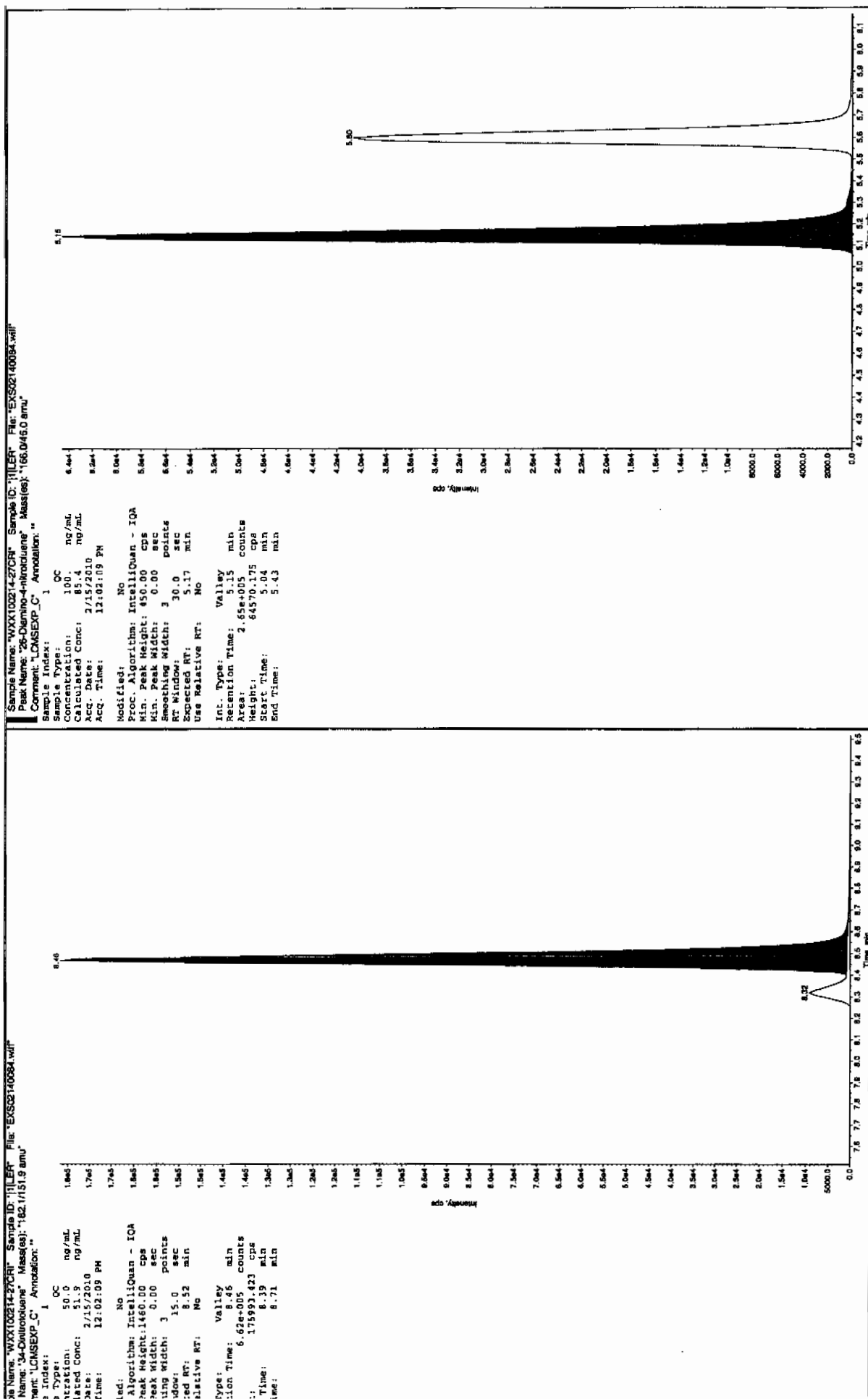


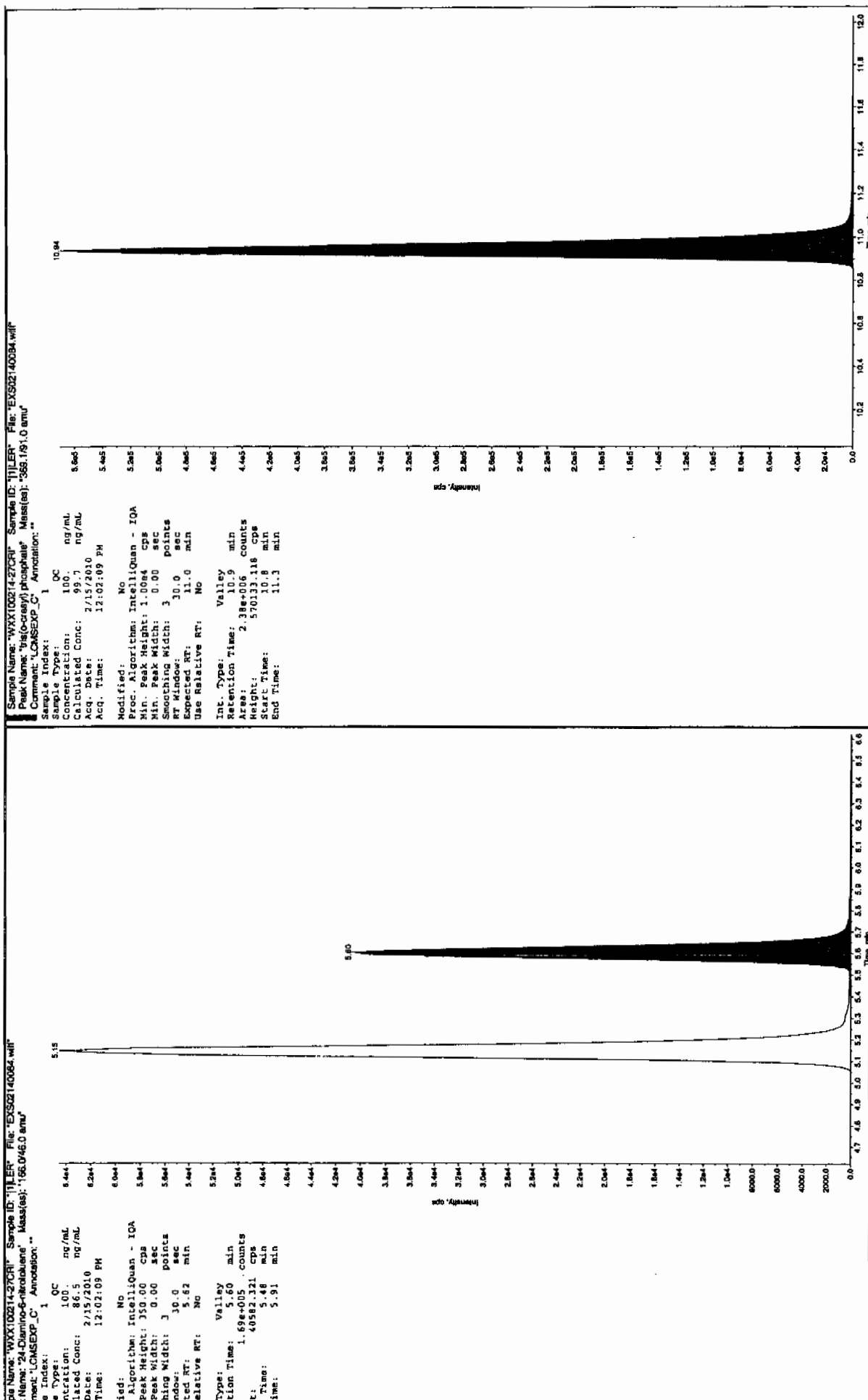
After Scan 2/16/10

J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after 2/17/10







SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140095.wiff

Analysis Date: 15-FEB-10 14:54

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	406	81	
2,6-Diamino-4-nitrotoluene	500	351	70	
3,4-Dinitrotoluene	250	229	92	
3,5-Dinitroaniline	500	474	95	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

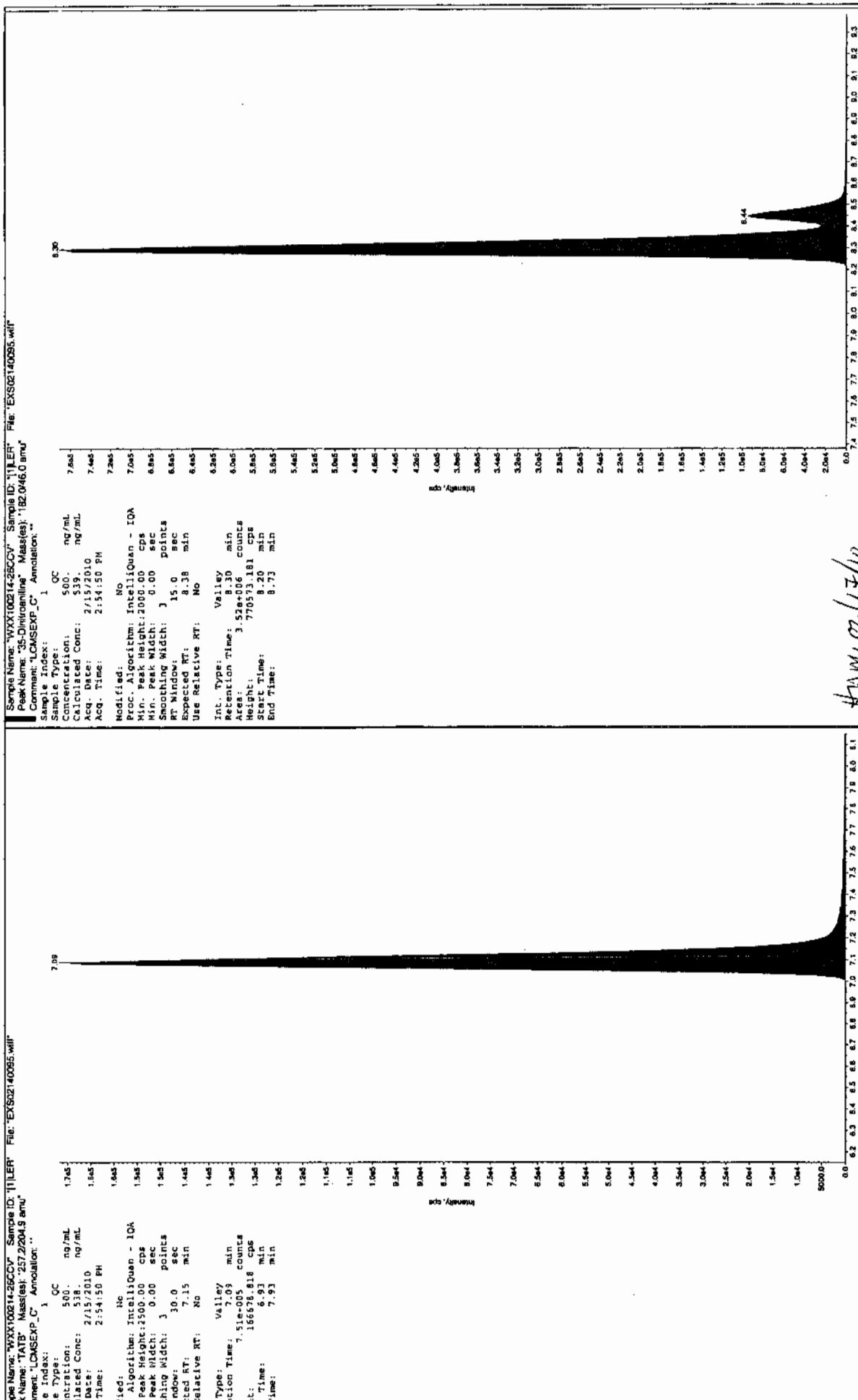
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

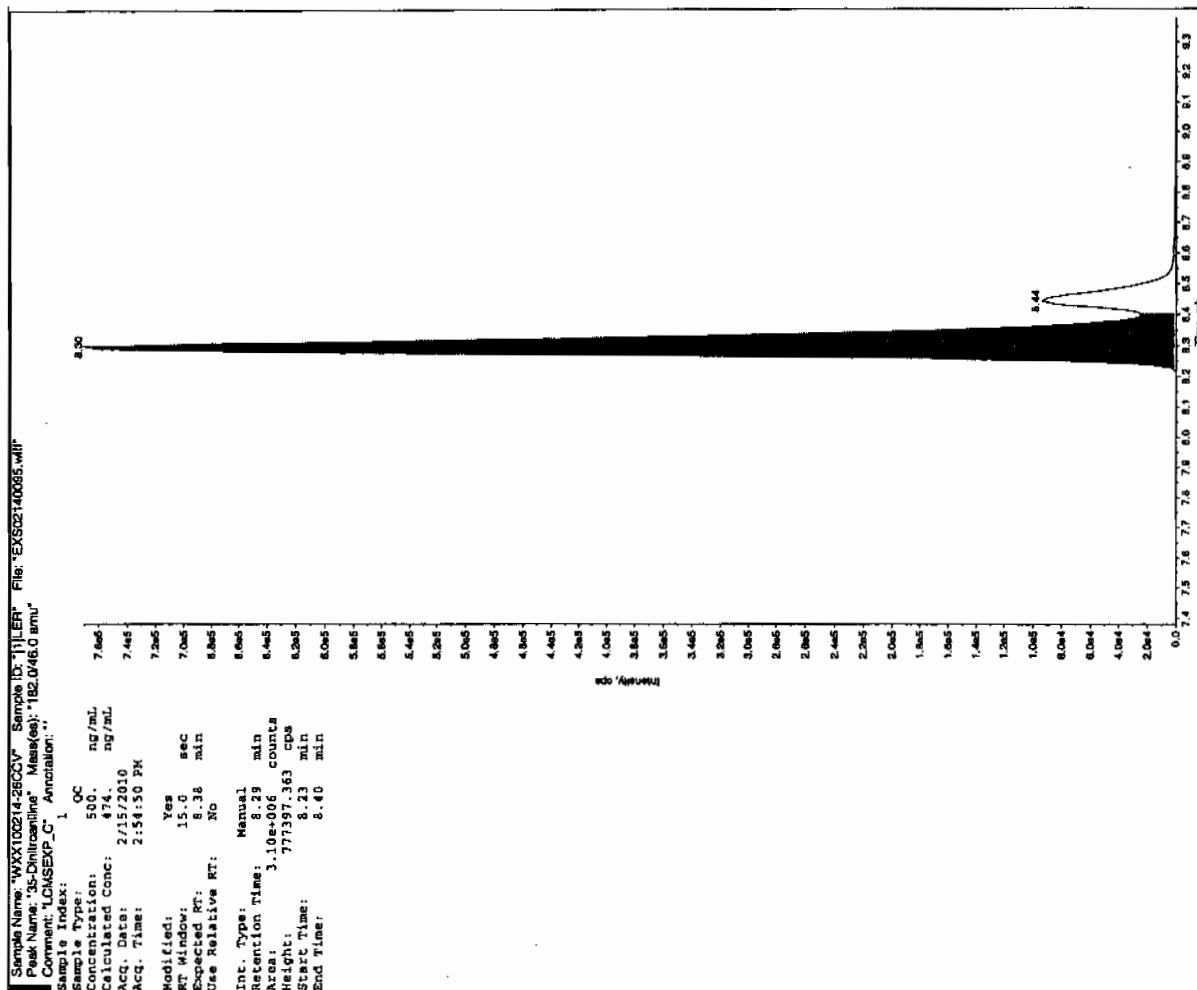
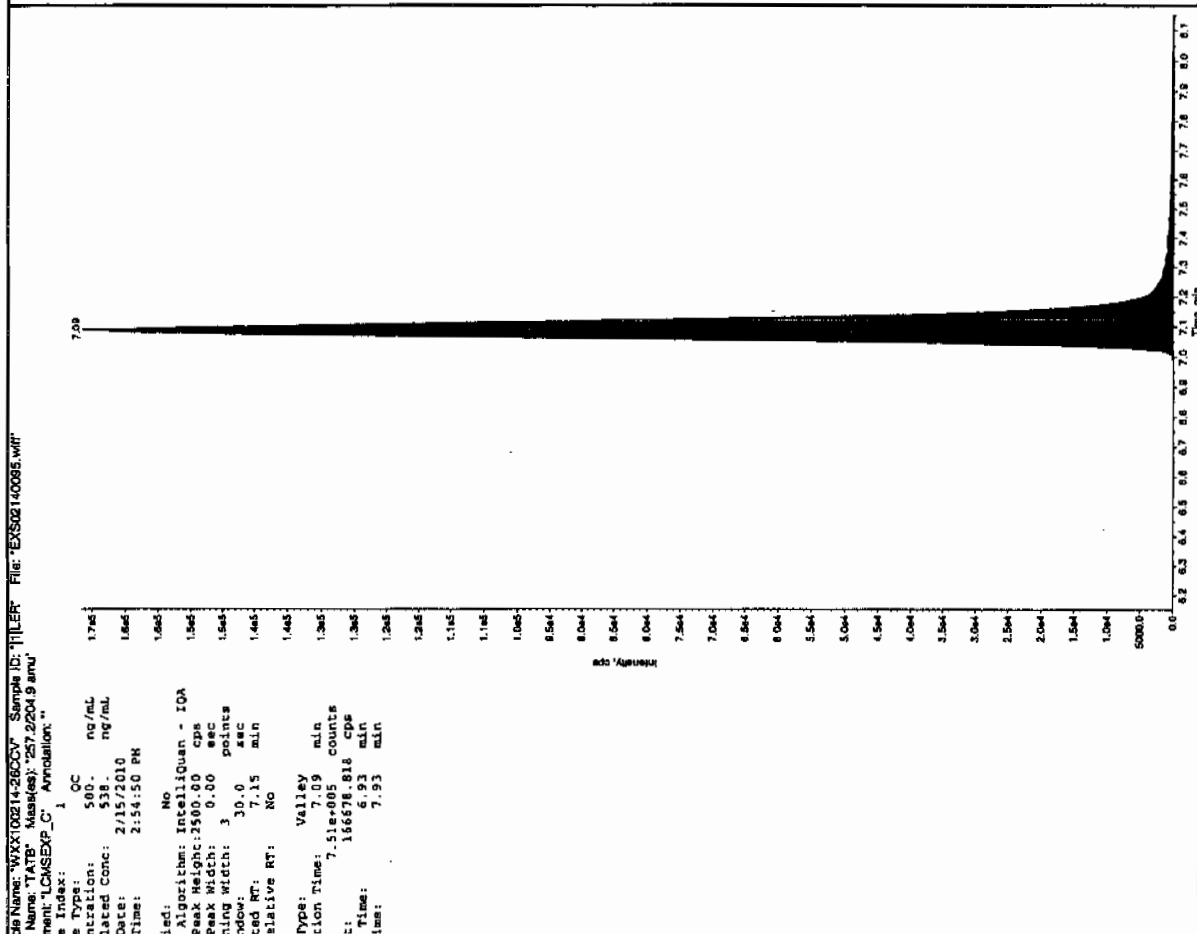
Column used to flag Recovery outside of Limits

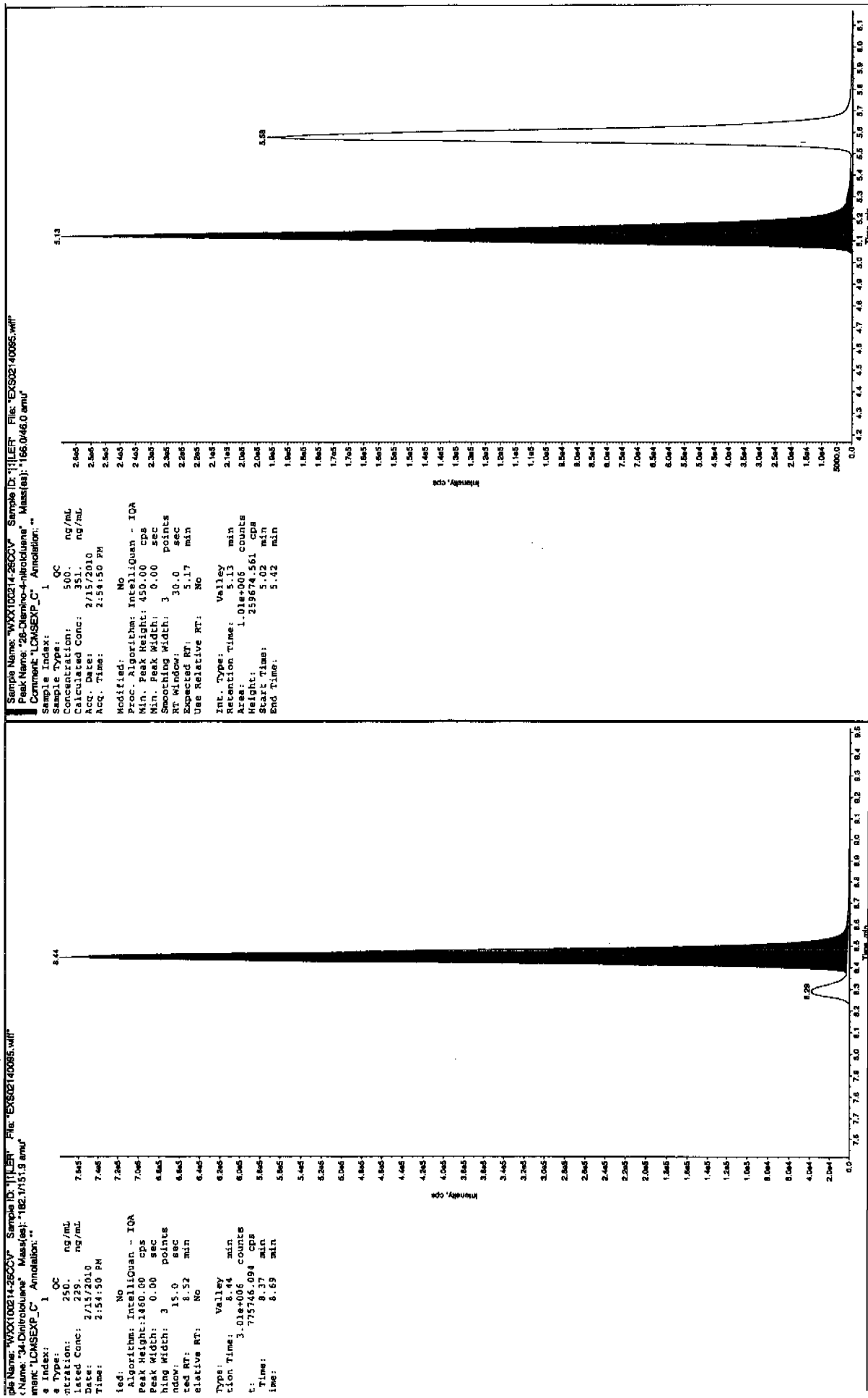
* Value outside of Recovery Limits

Before
 2/16/10
 After 02/17/10

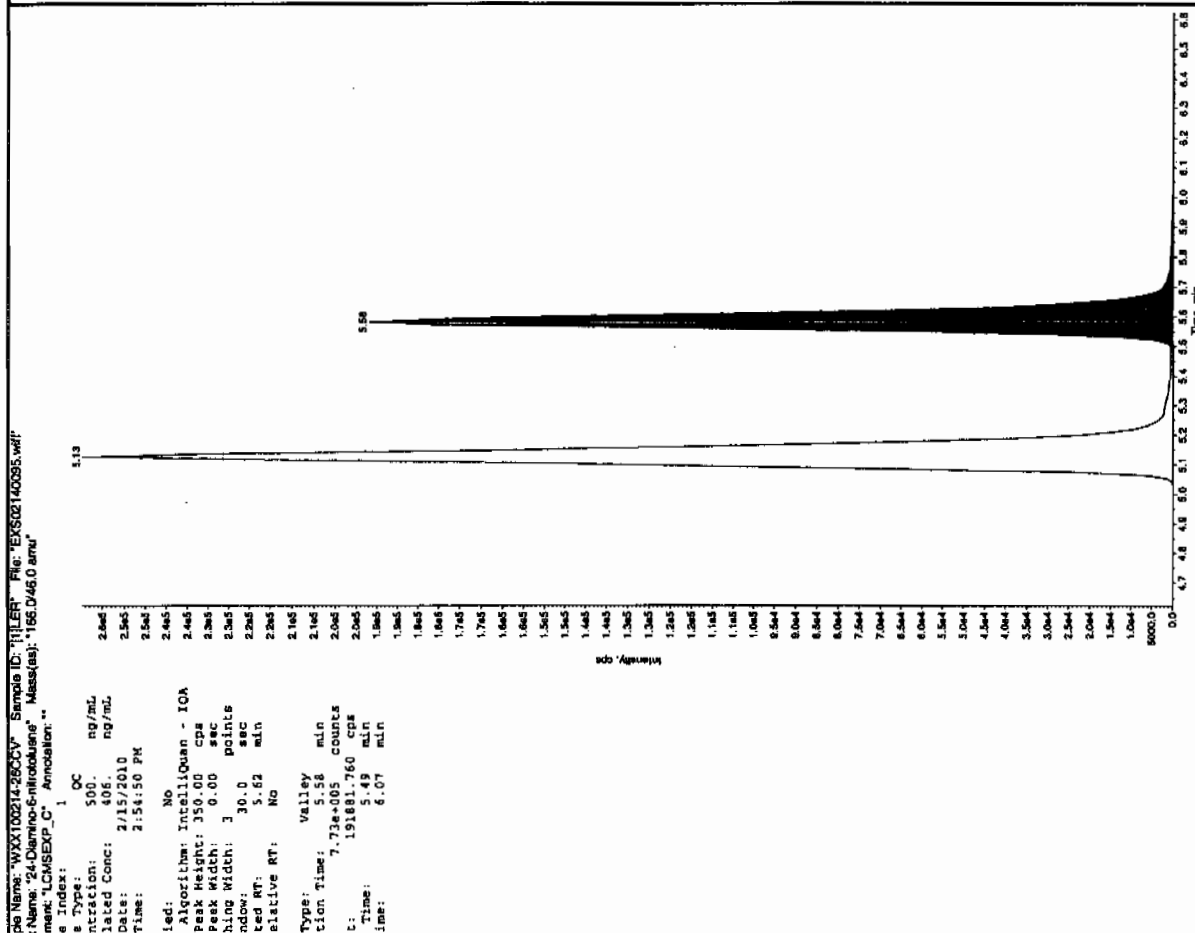


after scan 2/12/10





SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140097.wiff

Analysis Date: 15-FEB-10 15:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	87.3	87	
2,6-Diamino-4-nitrotoluene	100	89.4	89	
3,4-Dinitrotoluene	50	51.7	103	
3,5-Dinitroaniline	100	105	105	
TATB	100	111	111	
tris(o-cresyl) phosphate	100	100	100	

Recovery Limits:

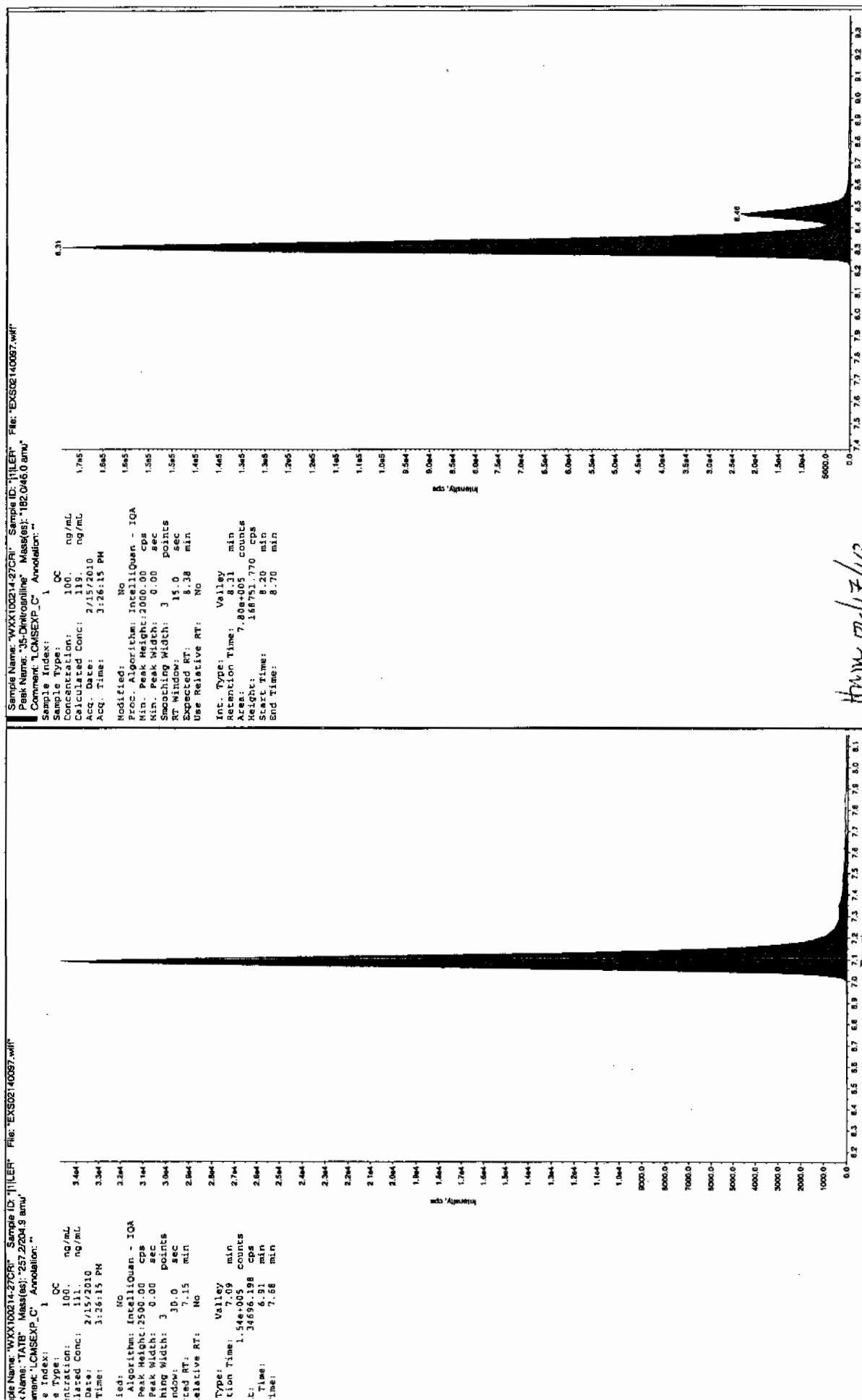
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

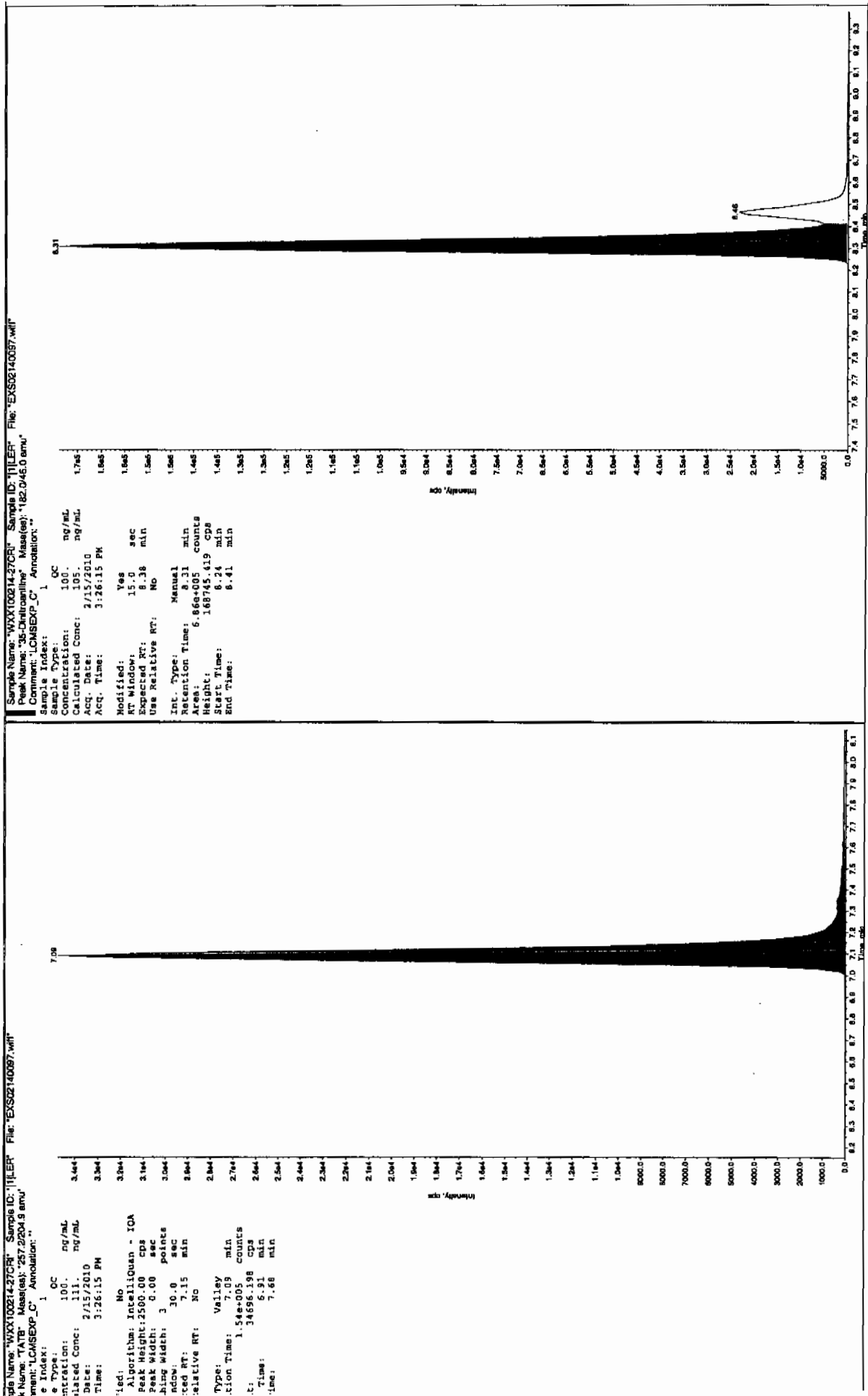
* Value outside of Recovery Limits

Before Jan 26/10

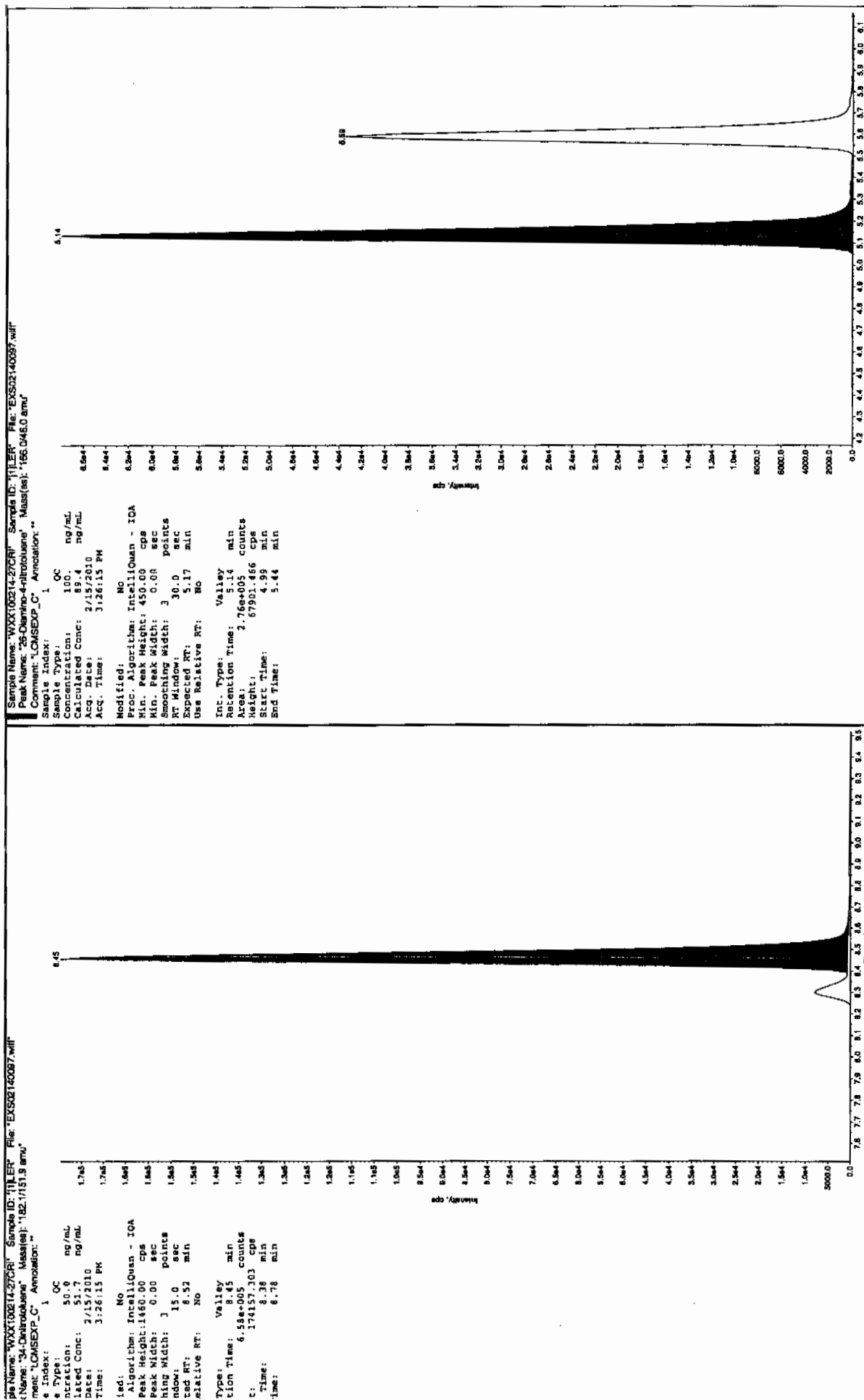


After Jan 17/10

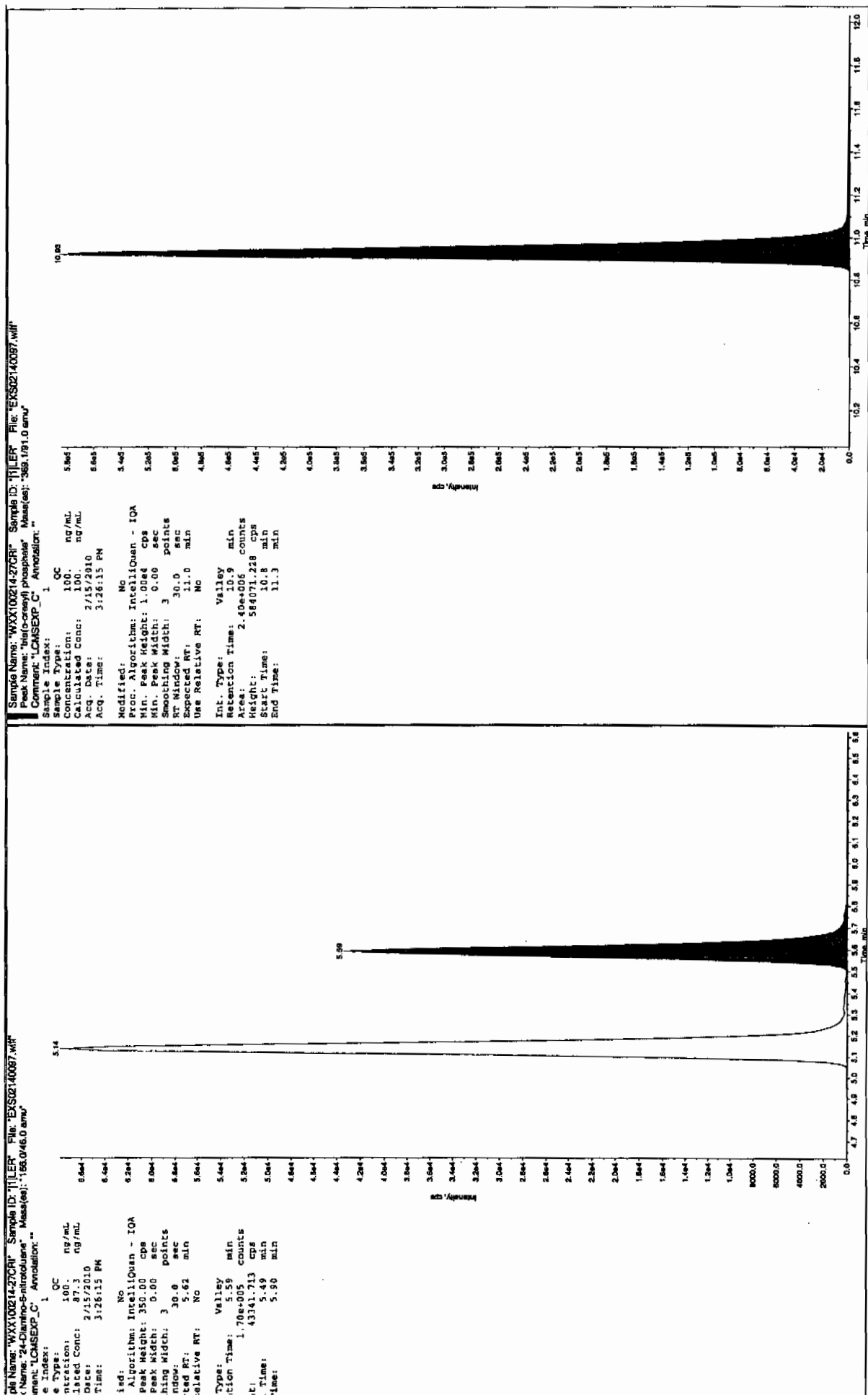
after Jan 21/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140108.wiff

Analysis Date: 15-FEB-10 18:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	432	86	
2,6-Diamino-4-nitrotoluene	500	357	71	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	517	103	
TATB	500	532	106	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

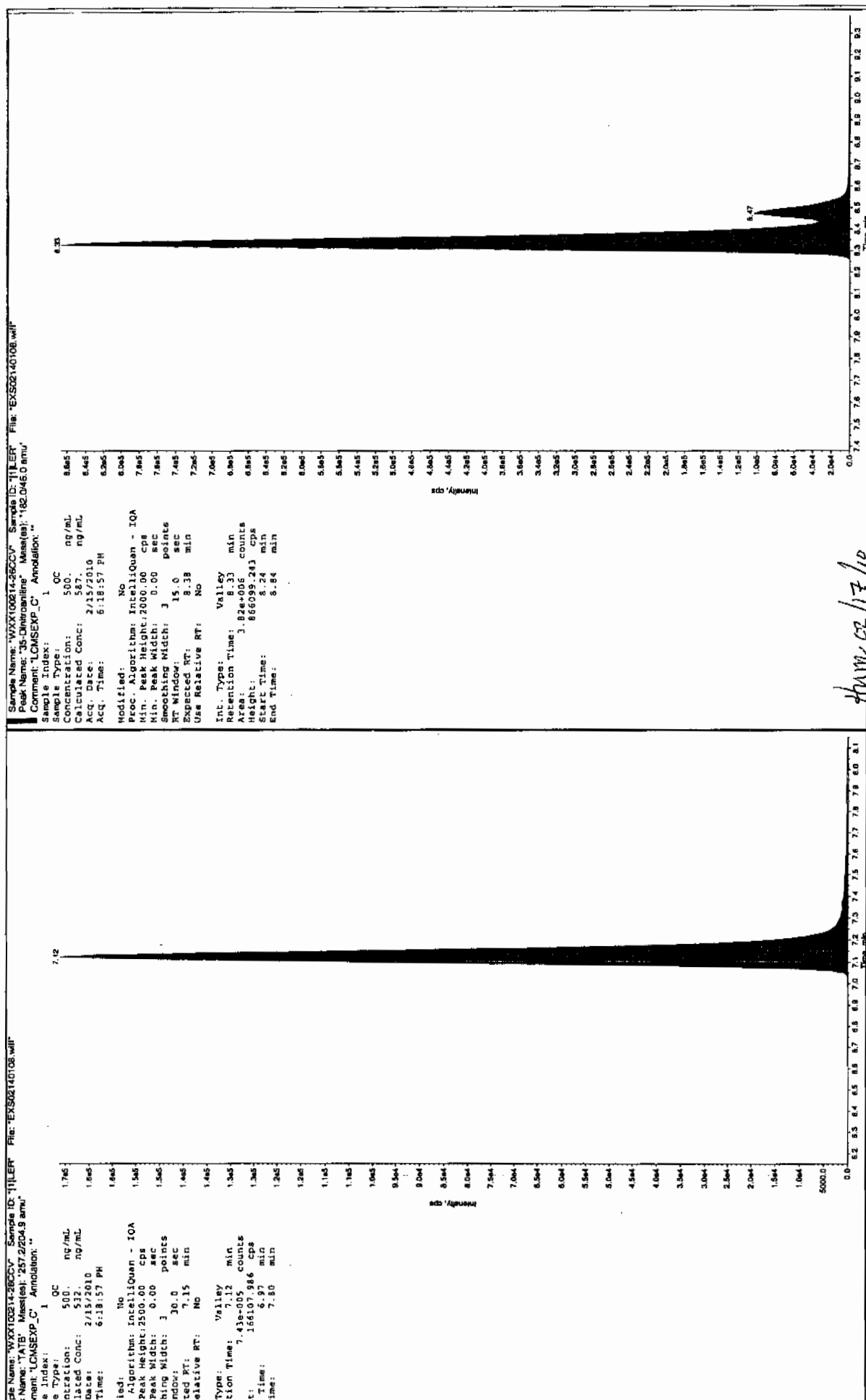
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 21/10



Sample Name: "WXX100214-260CV" Sample ID: "11LER" File: "EX502140108.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

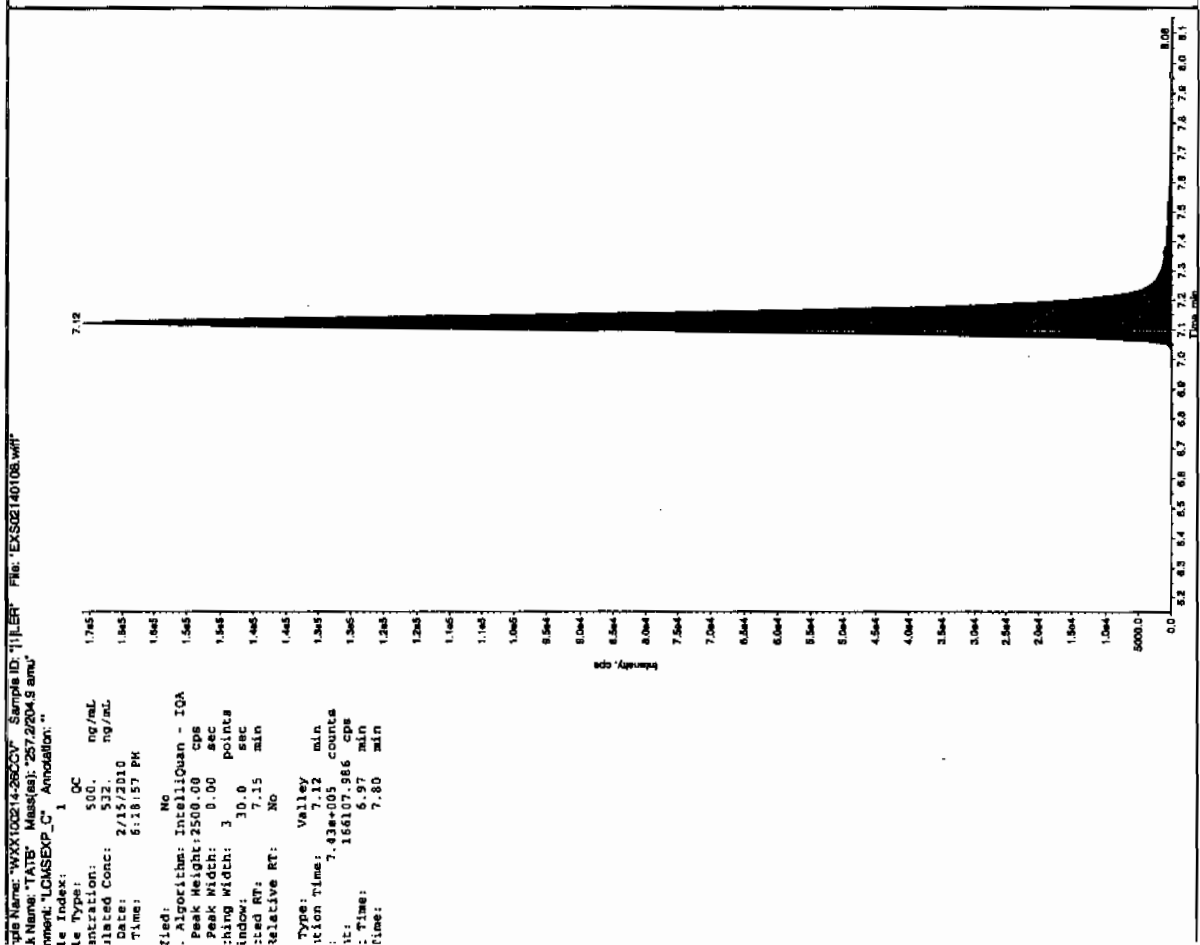
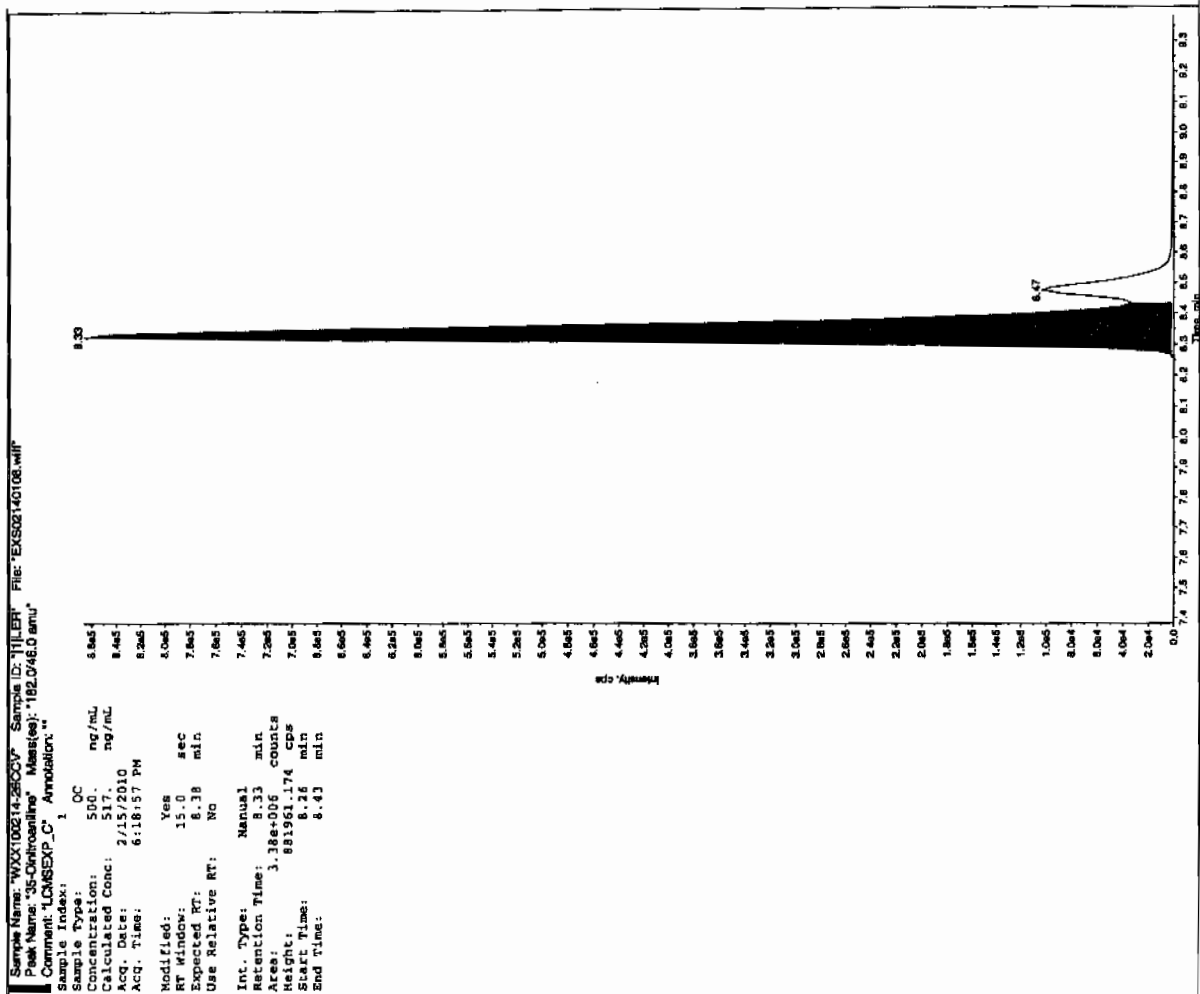
Sample Index:
 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 587. ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 6:18:57 PM

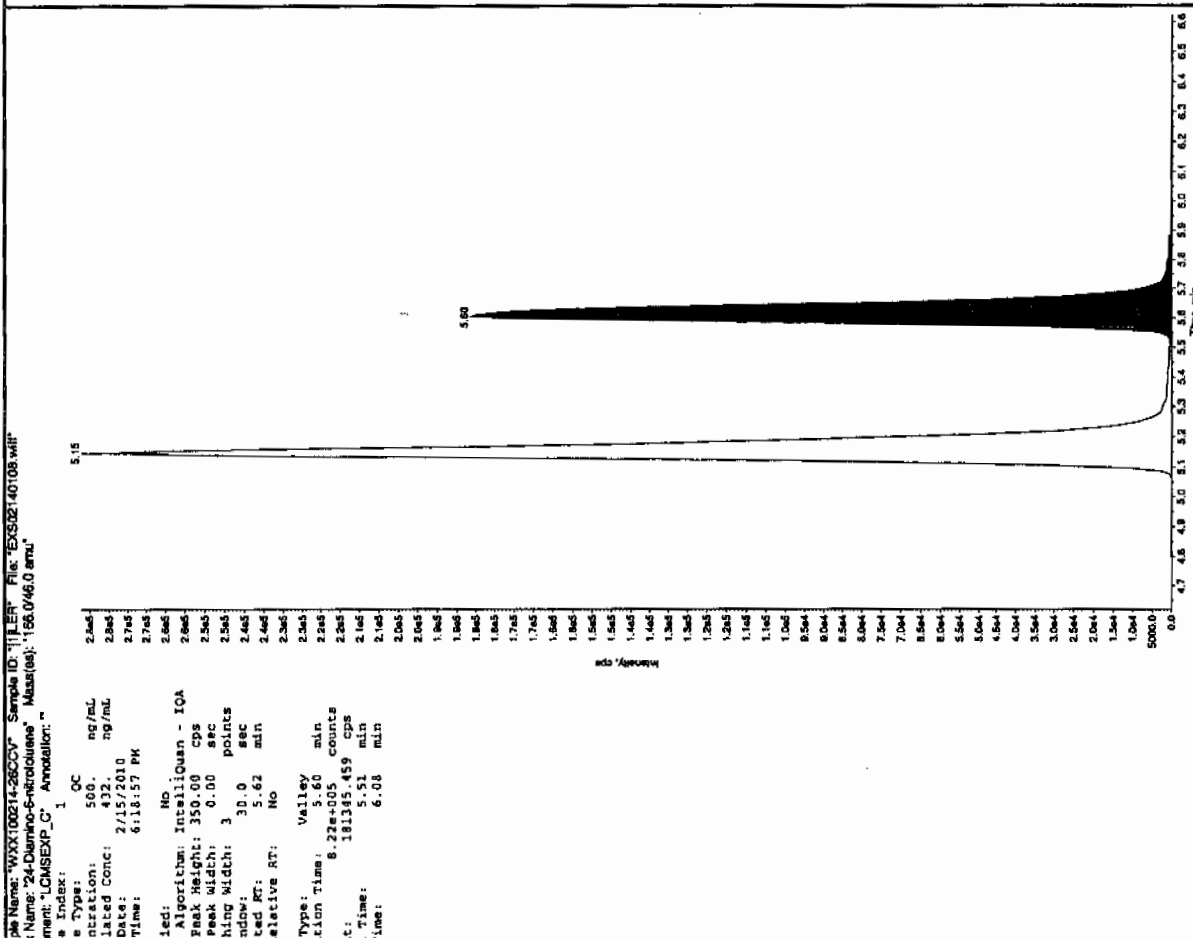
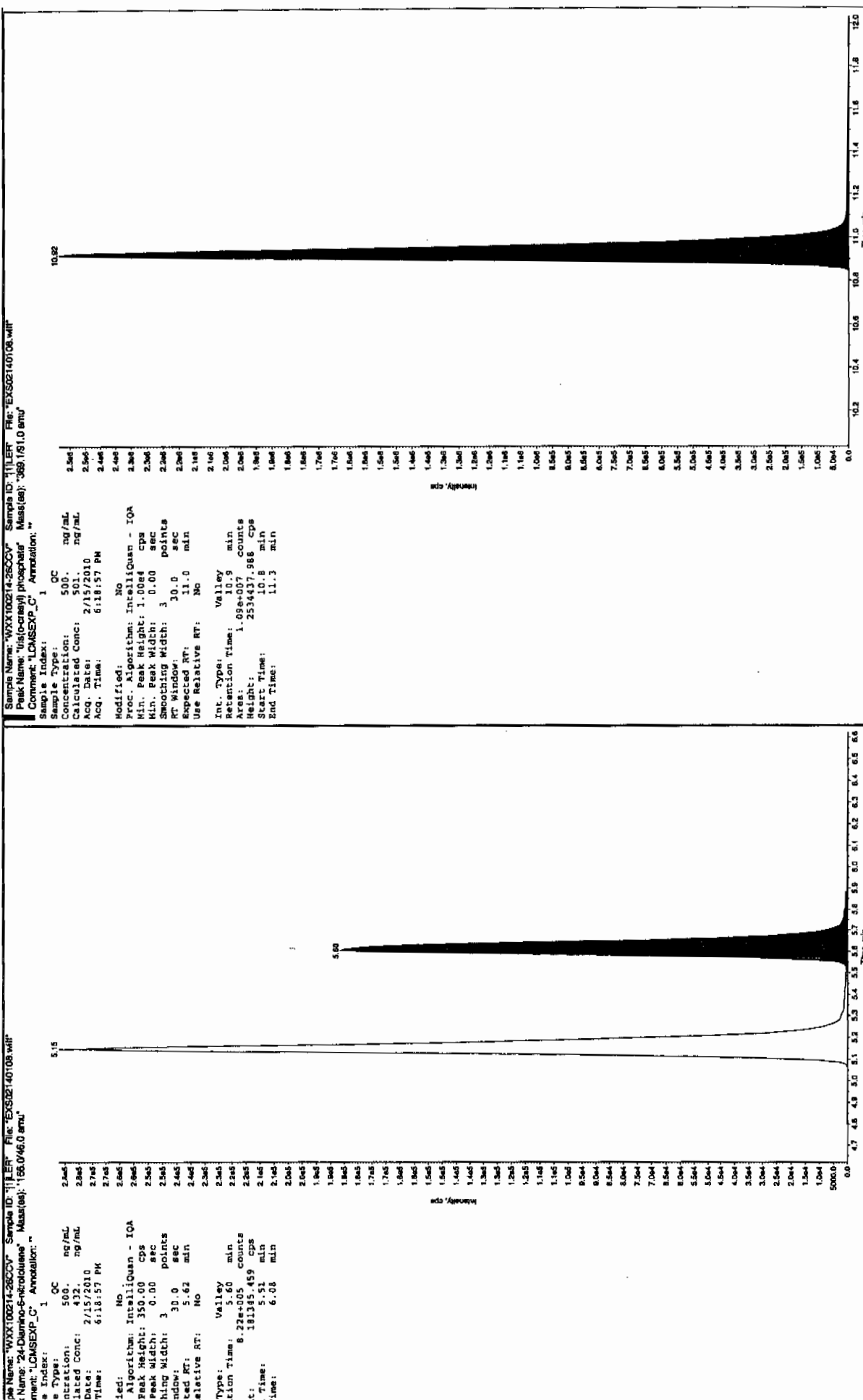
Method:
 No
 Algorithm: IntelliQuan - IQA
 Peak Height: 2500.00 cps
 Min. Peak Width: 3 0.00 points
 Smoothing Width: 3 0.00 points
 RT Window: 15.0 sec
 Expected RT: 8.18 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.33 min
 Area: 3.82e+005 counts
 Height: 86099.243 cps
 Start Time: 8.24 min
 End Time: 8.84 min

L SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

after Jan 2/17/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140110.wiff

Analysis Date: 15-FEB-10 18:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	86.8	87	
2,6-Diamino-4-nitrotoluene	100	80.4	80	
3,4-Dinitrotoluene	50	51.8	104	
3,5-Dinitroaniline	100	105	105	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

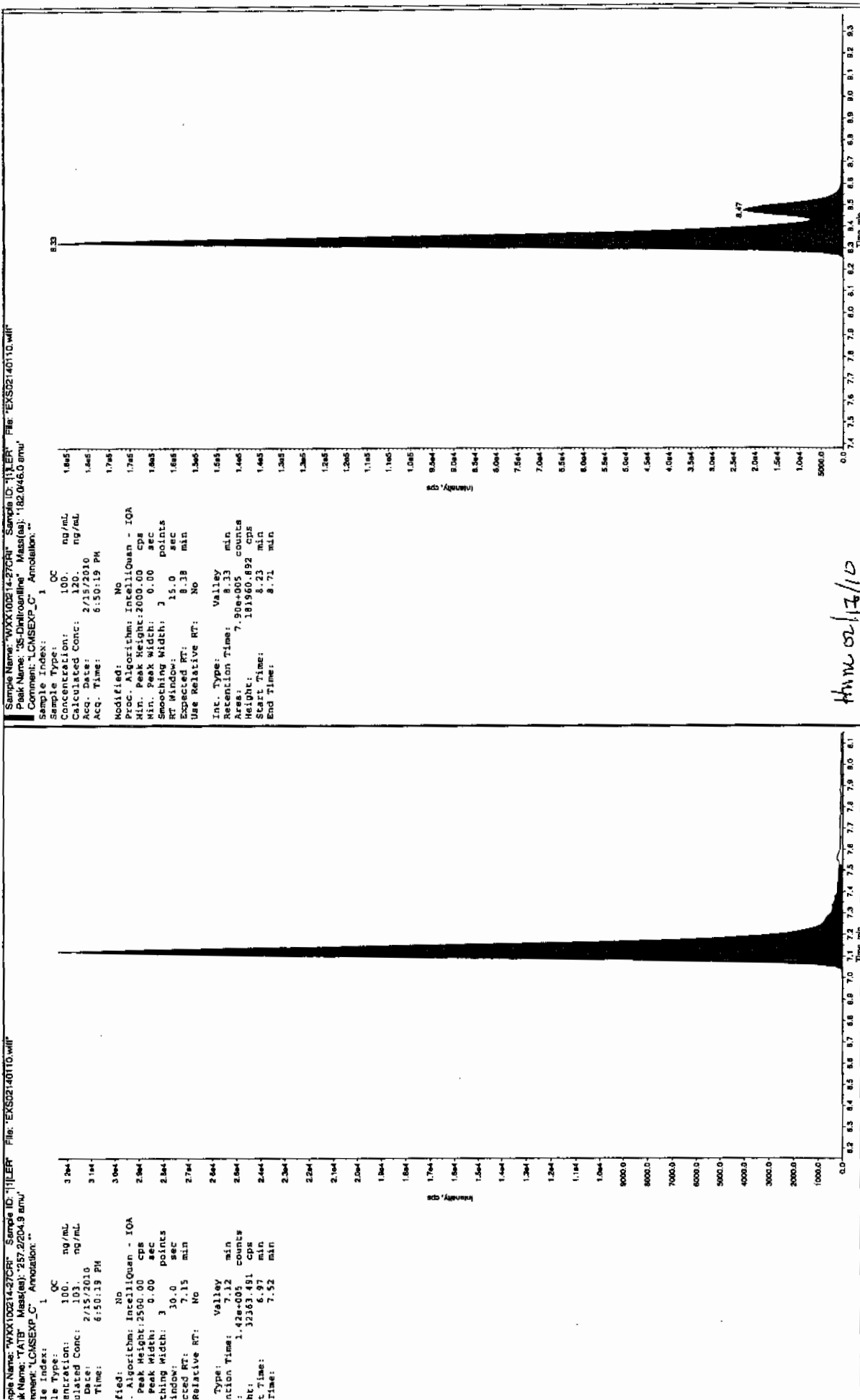
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

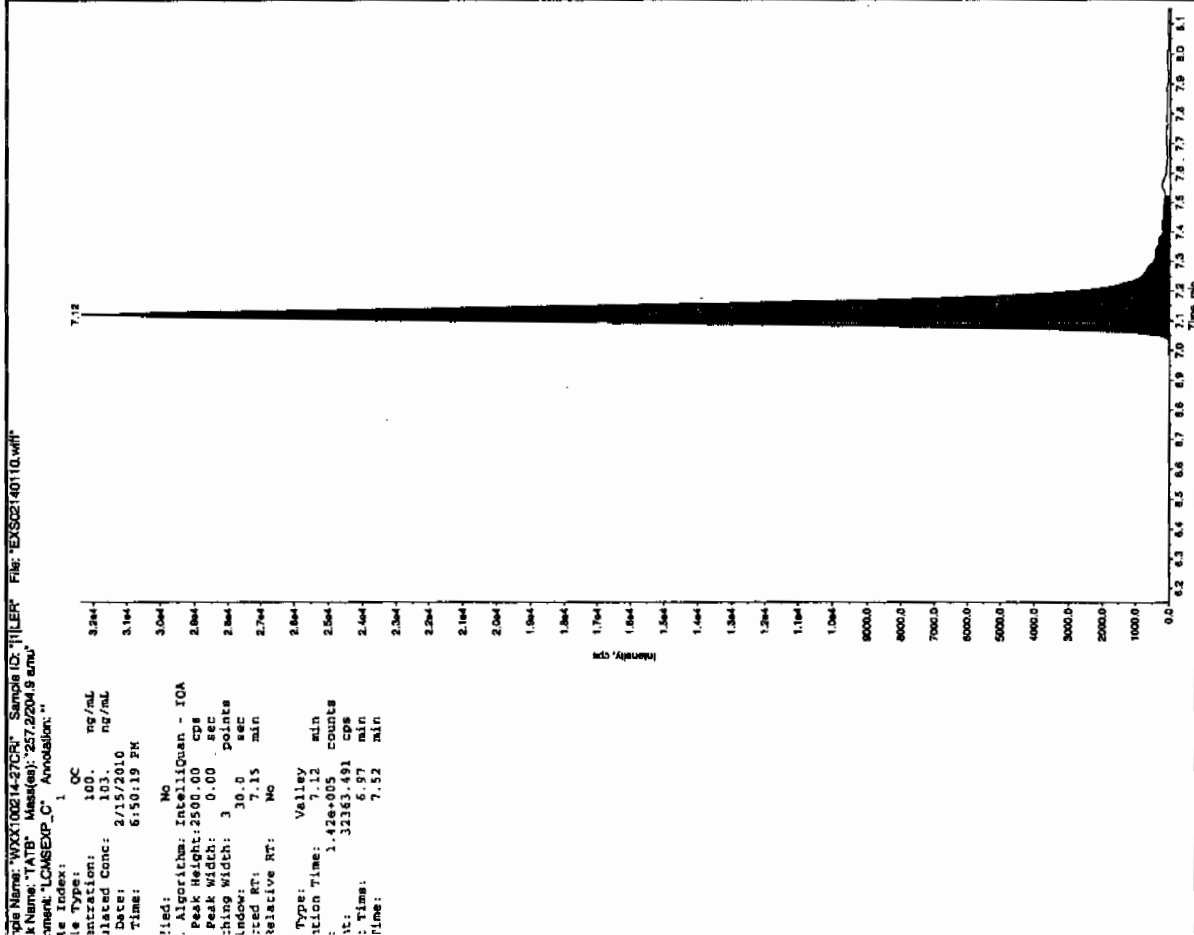
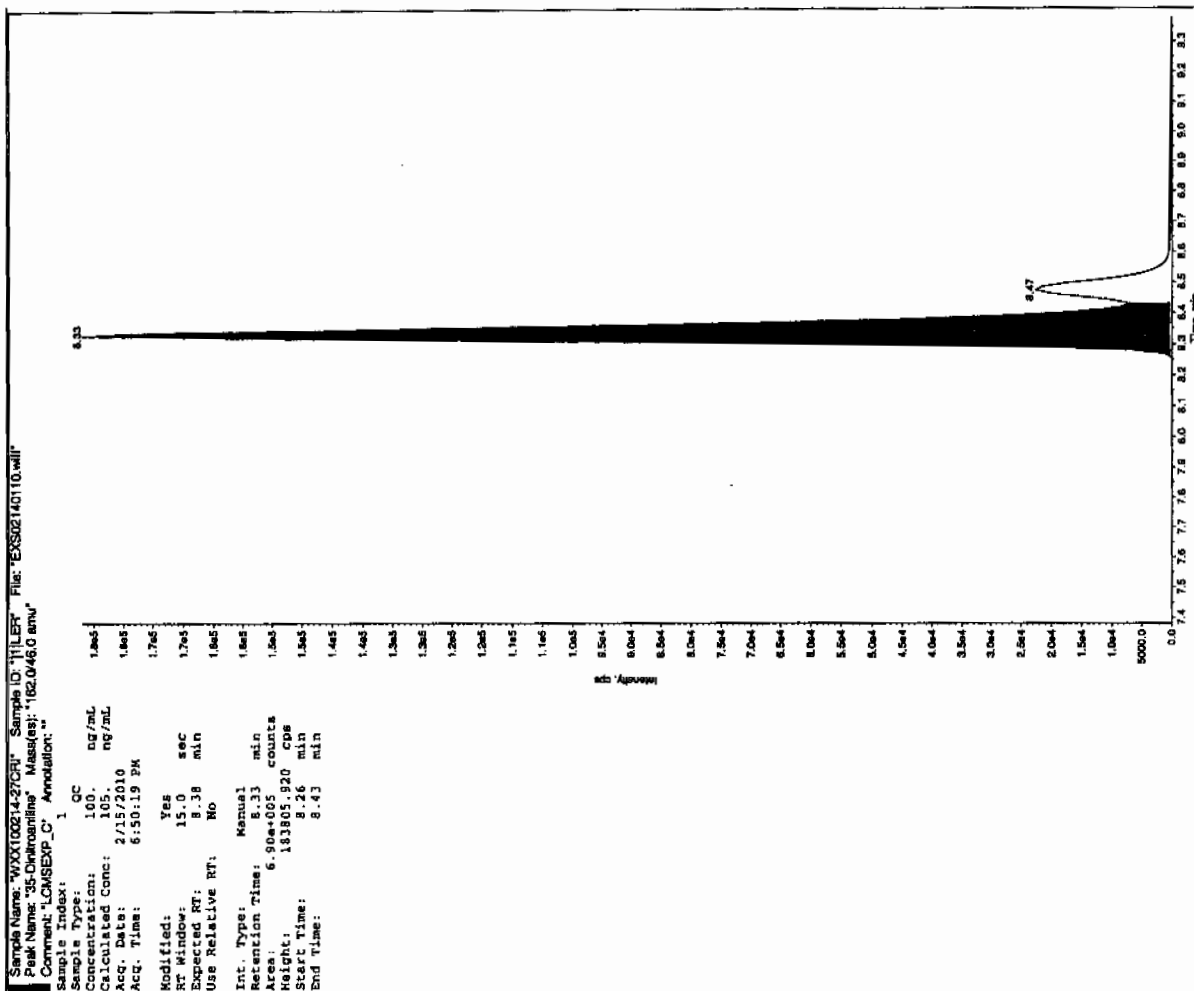
Before Jan 2/10/10

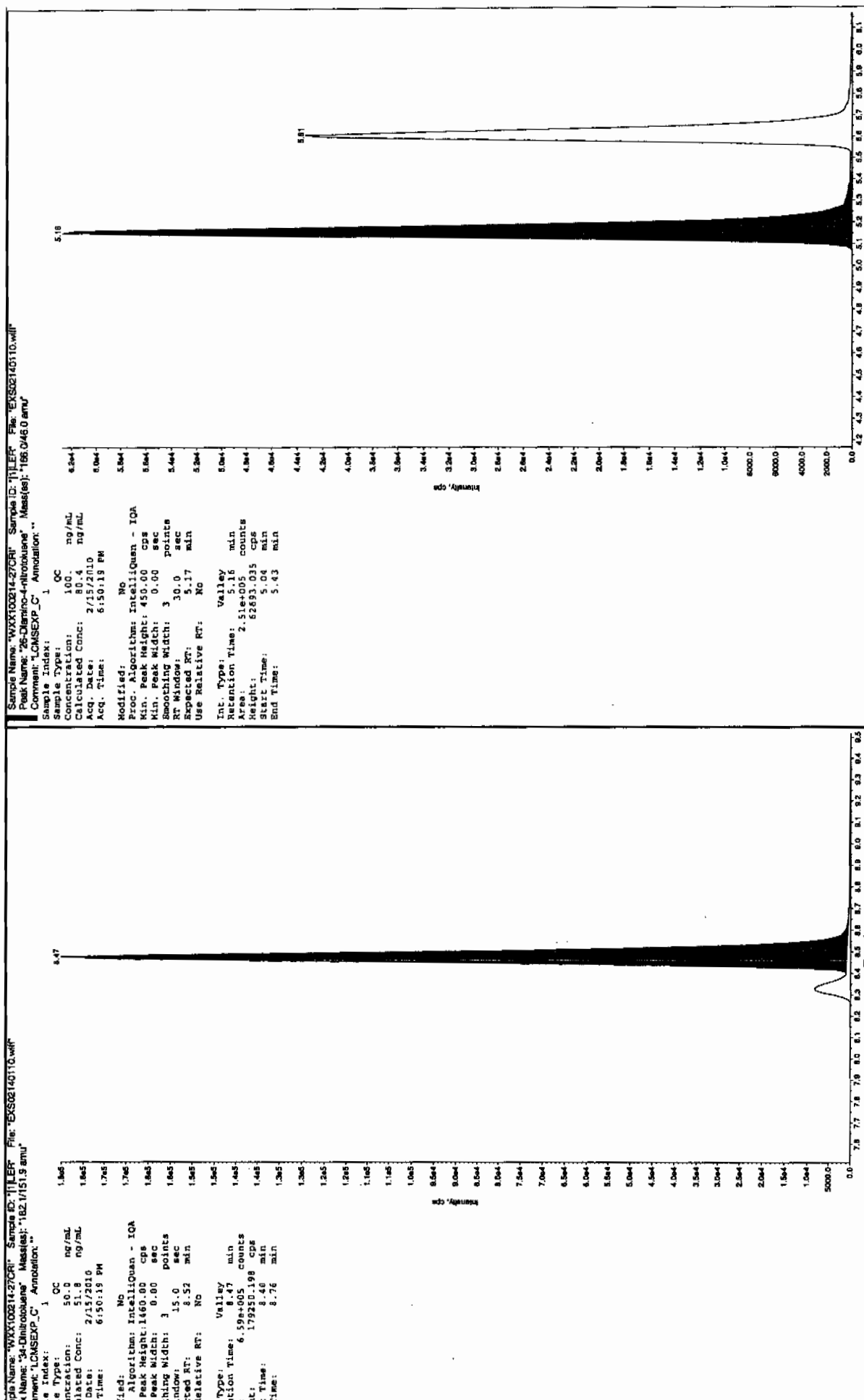


Time 8.23/10

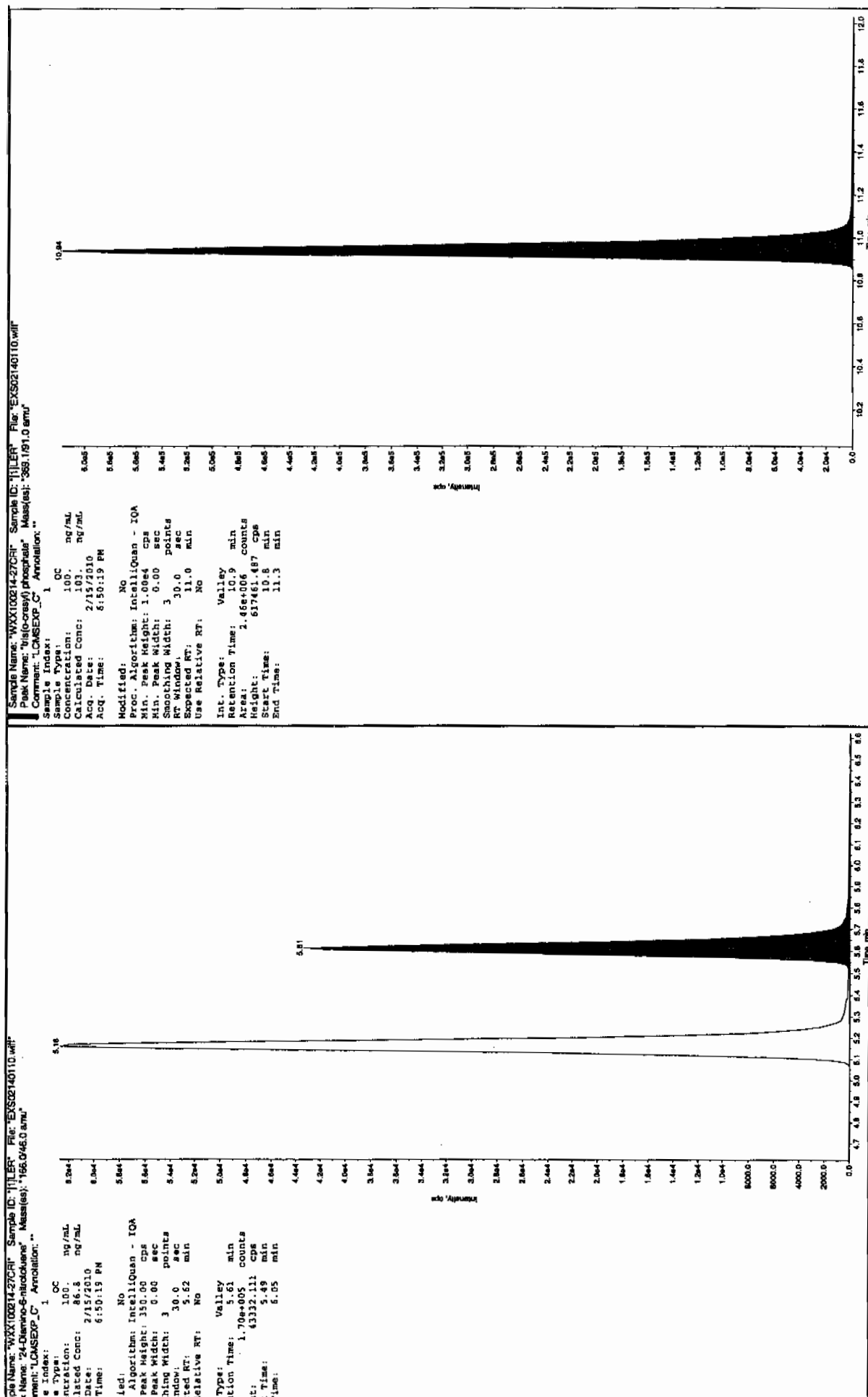
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after scan 2/17/10





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140117.wiff

Analysis Date: 15-FEB-10 20:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
tris(o-cresyl) phosphate	500	501	100	
2,4-Diamino-6-nitrotoluene	500	421	84	
2,6-Diamino-4-nitrotoluene	500	441	88	
3,4-Dinitrotoluene	250	243	97	
3,5-Dinitroaniline	500	488	98	
TATB	500	513	103	

Recovery Limits:

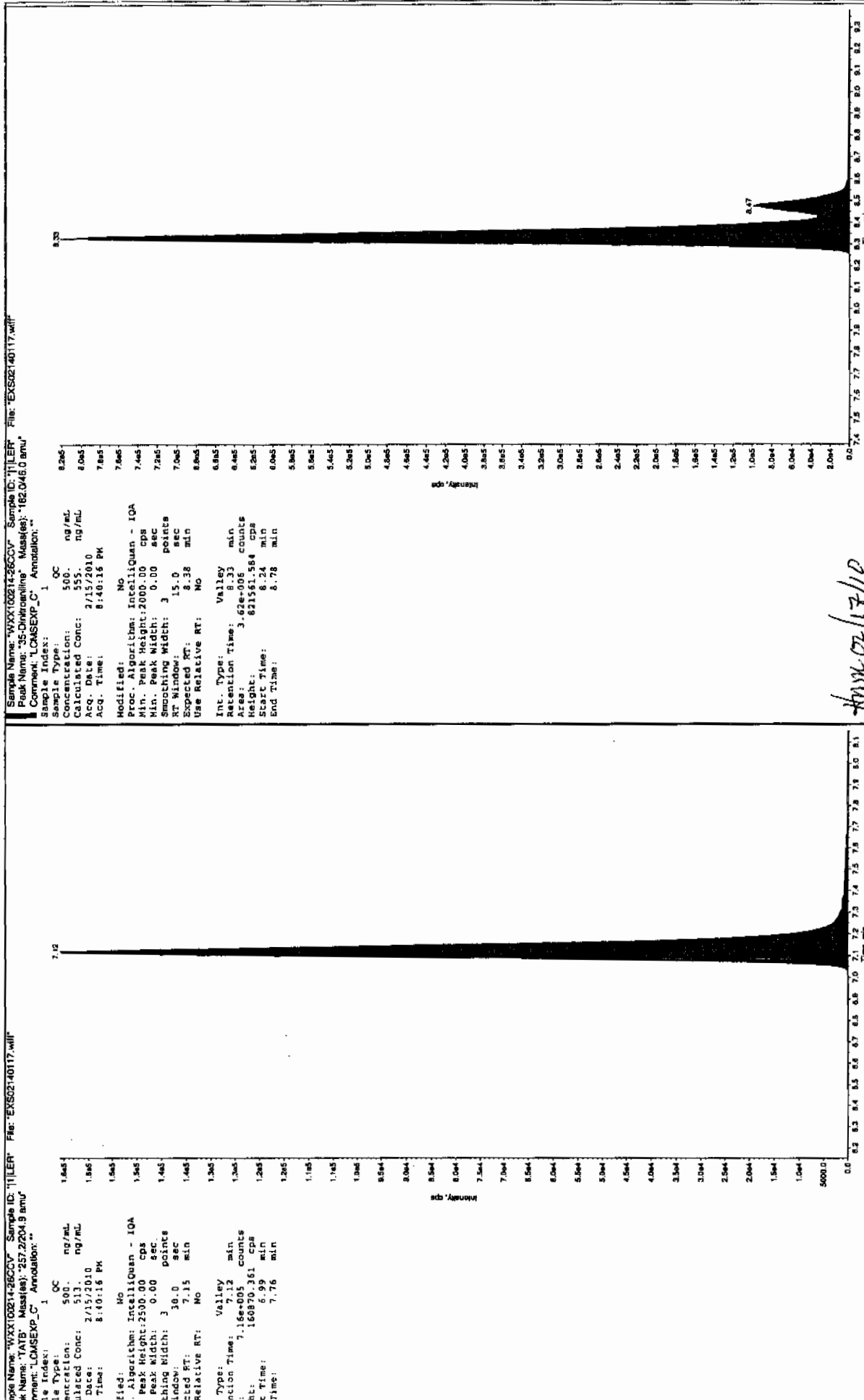
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

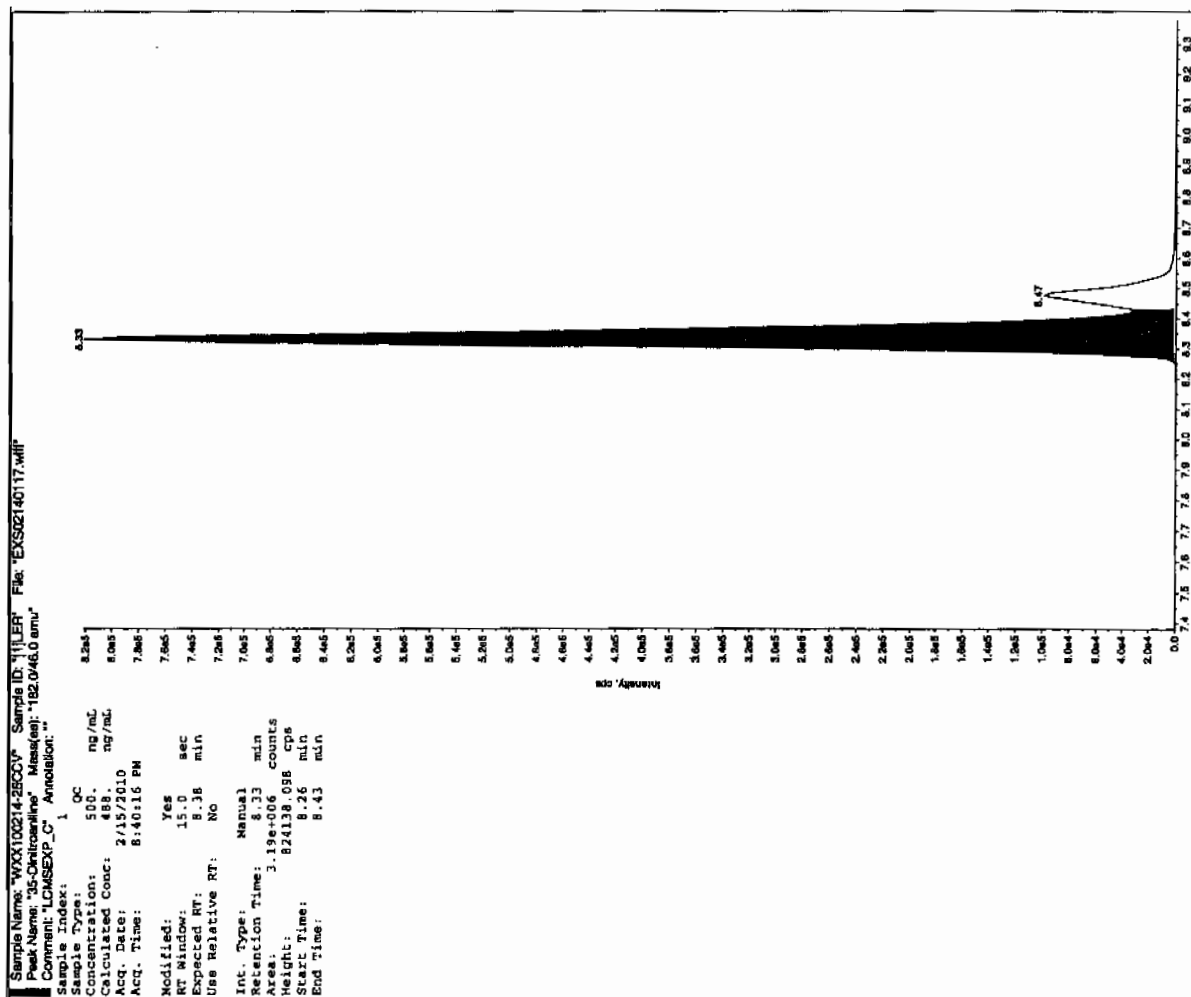
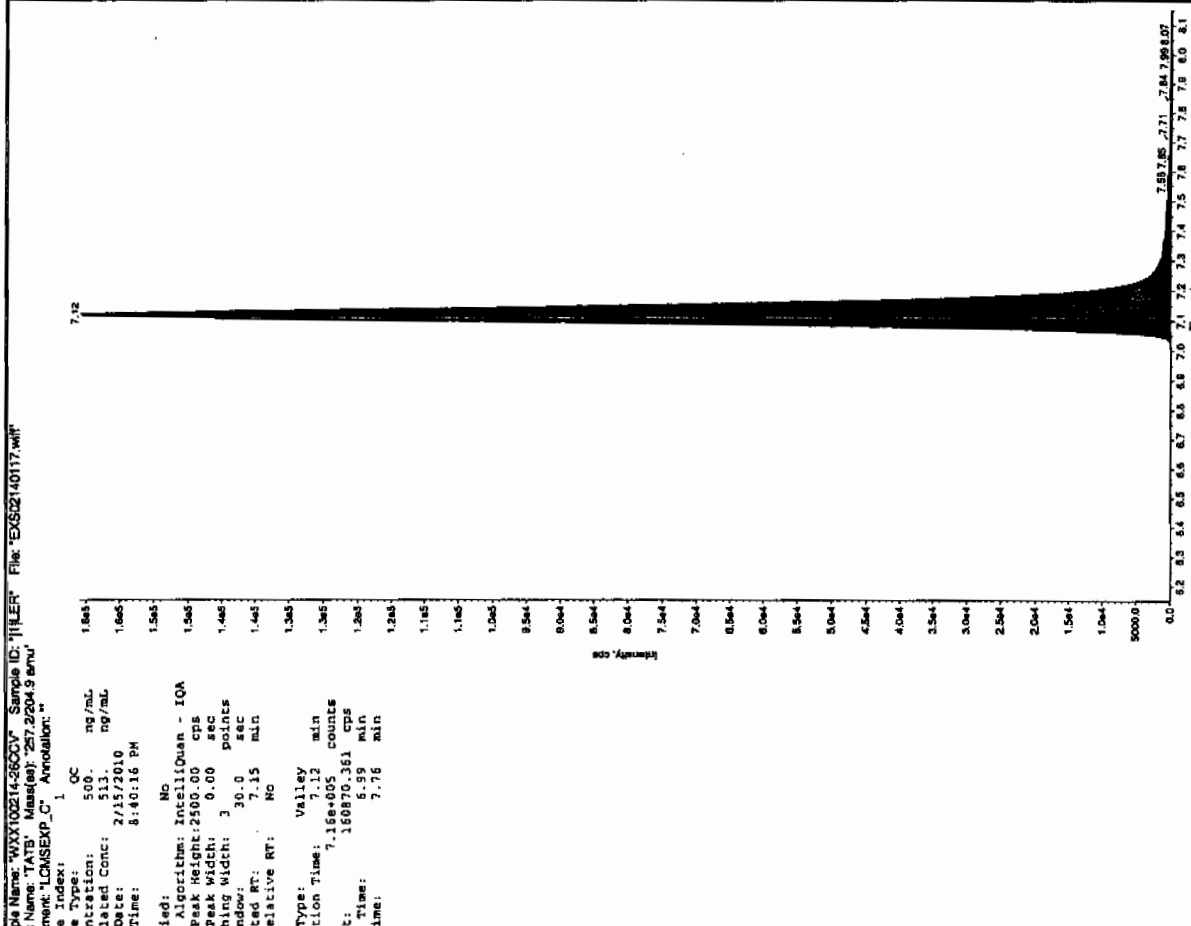
* Value outside of Recovery Limits

Before Scan 216 110

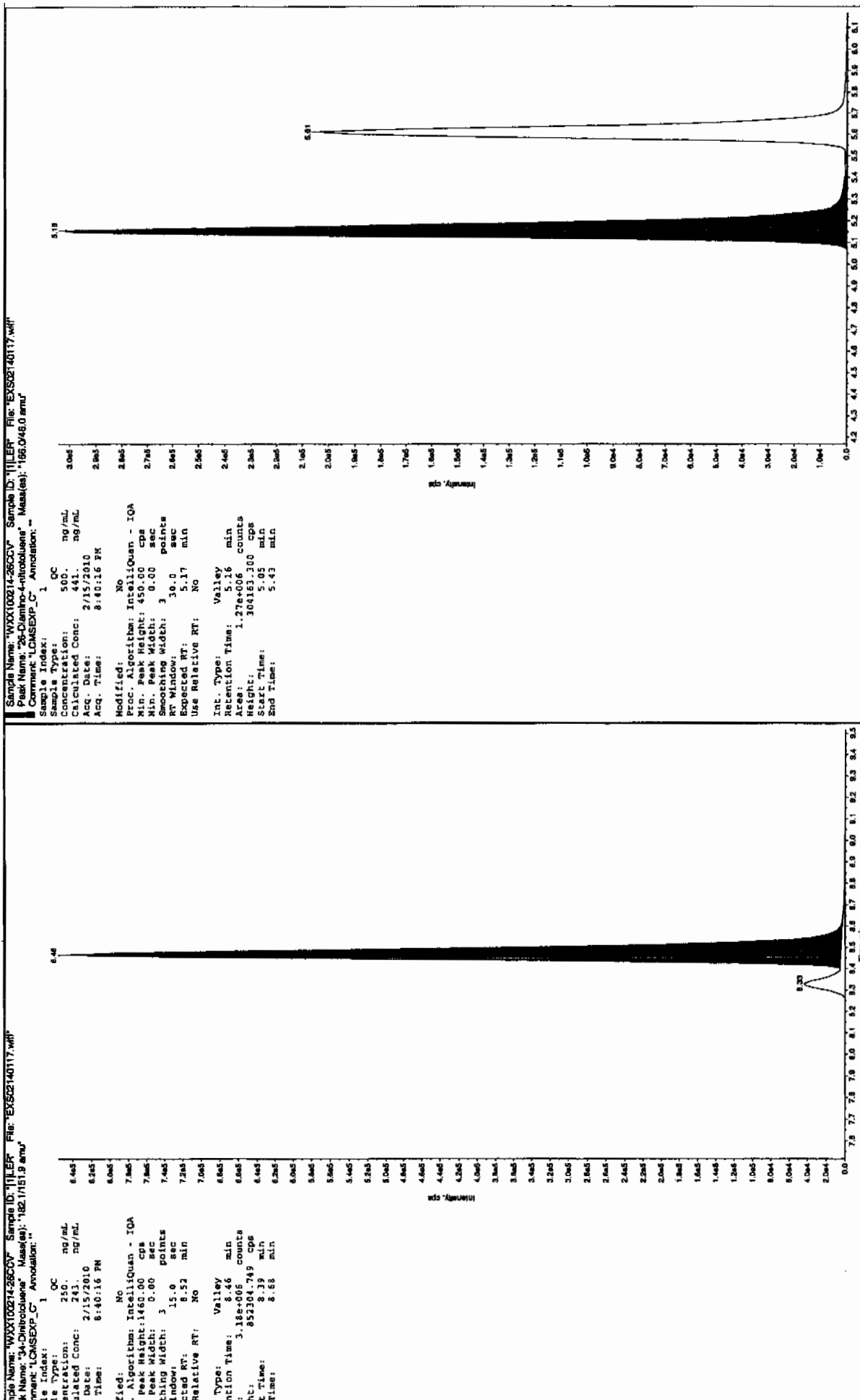


ANAL 02/17/10

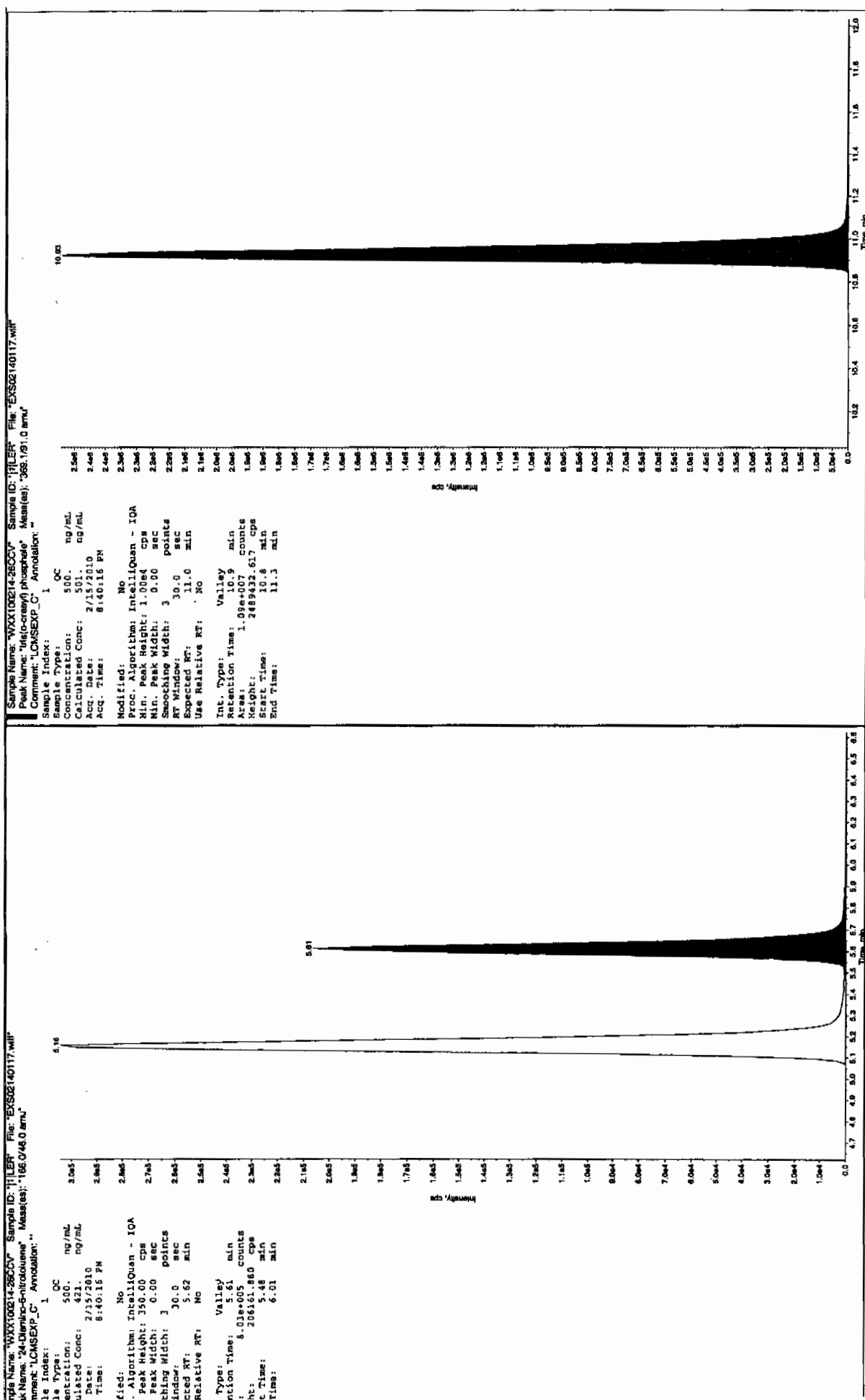
after Jan 2/17/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140119.wiff

Analysis Date: 15-FEB-10 21:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	51	102	
3,5-Dinitroaniline	100	95.2	95	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	103	103	
2,4-Diamino-6-nitrotoluene	100	90.9	91	
2,6-Diamino-4-nitrotoluene	100	91.1	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

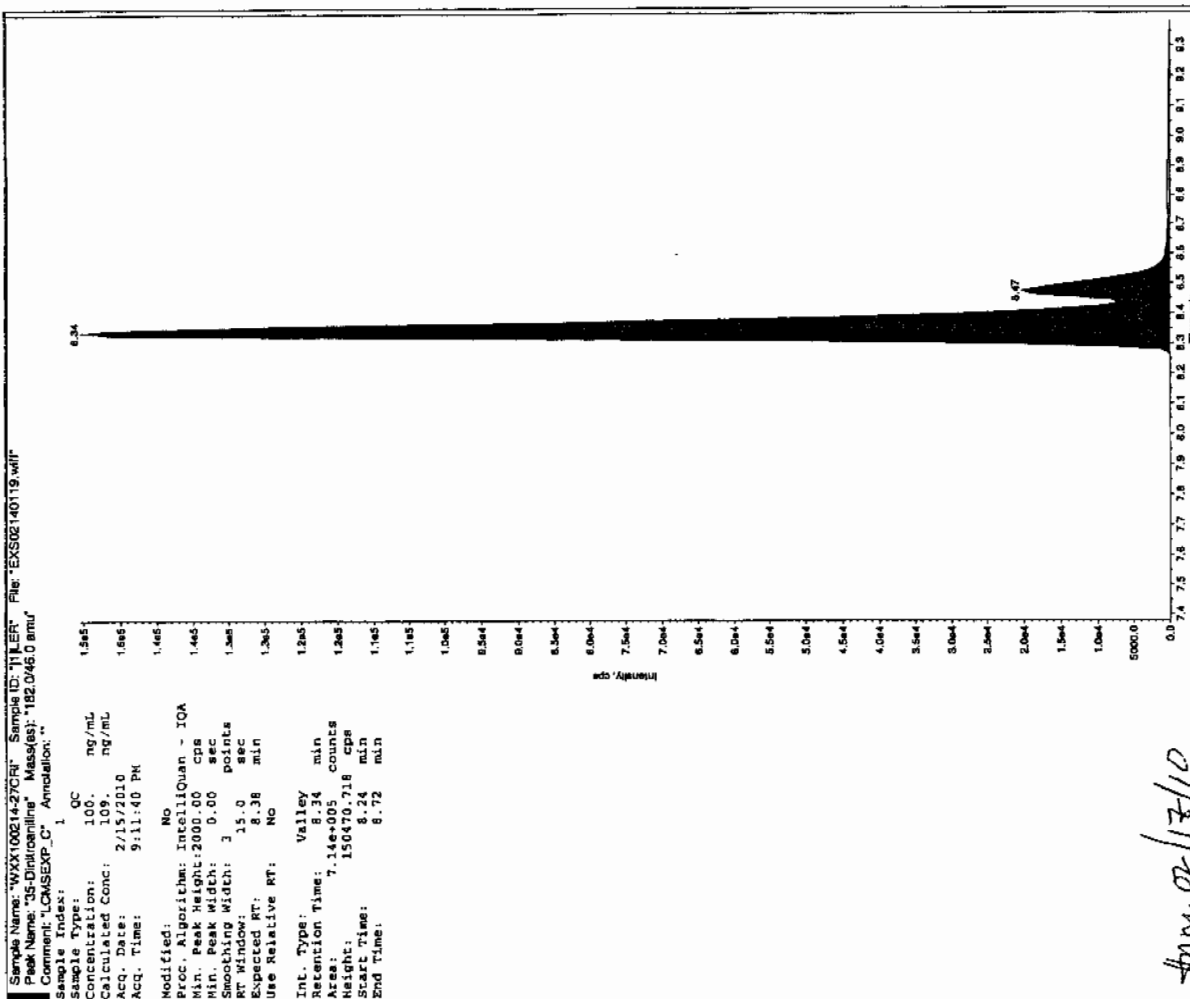
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

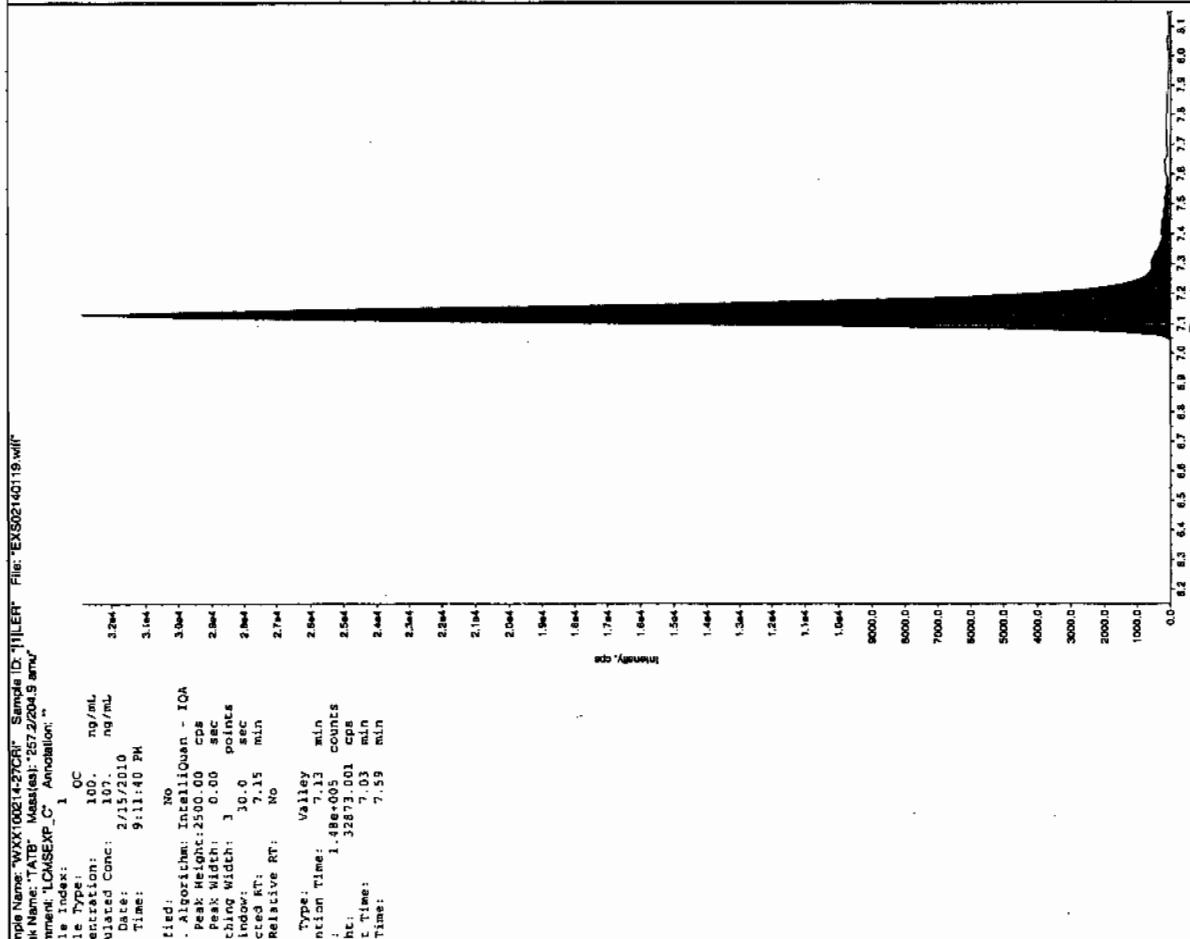
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Dec 2/16/10

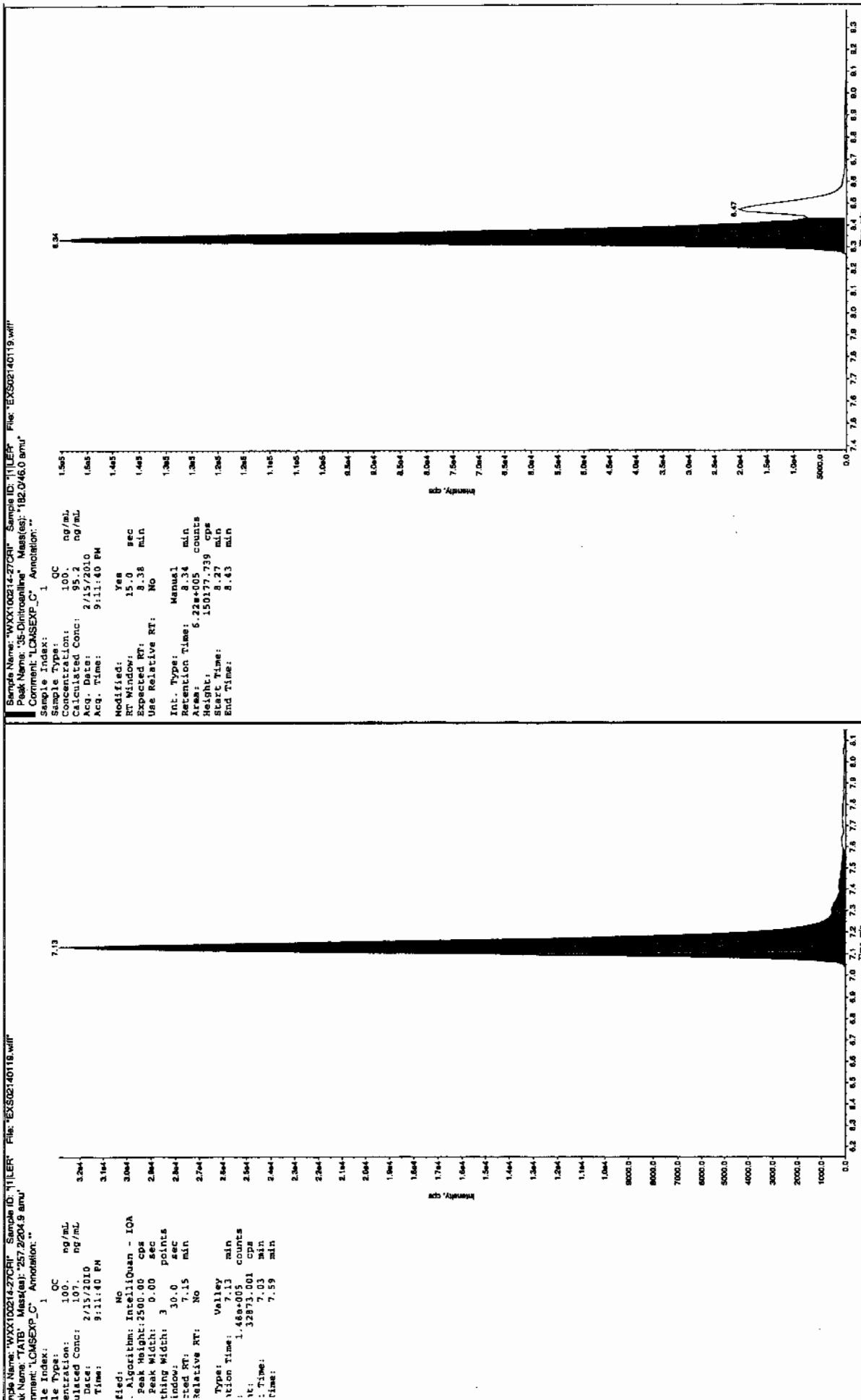


After 02-17-10

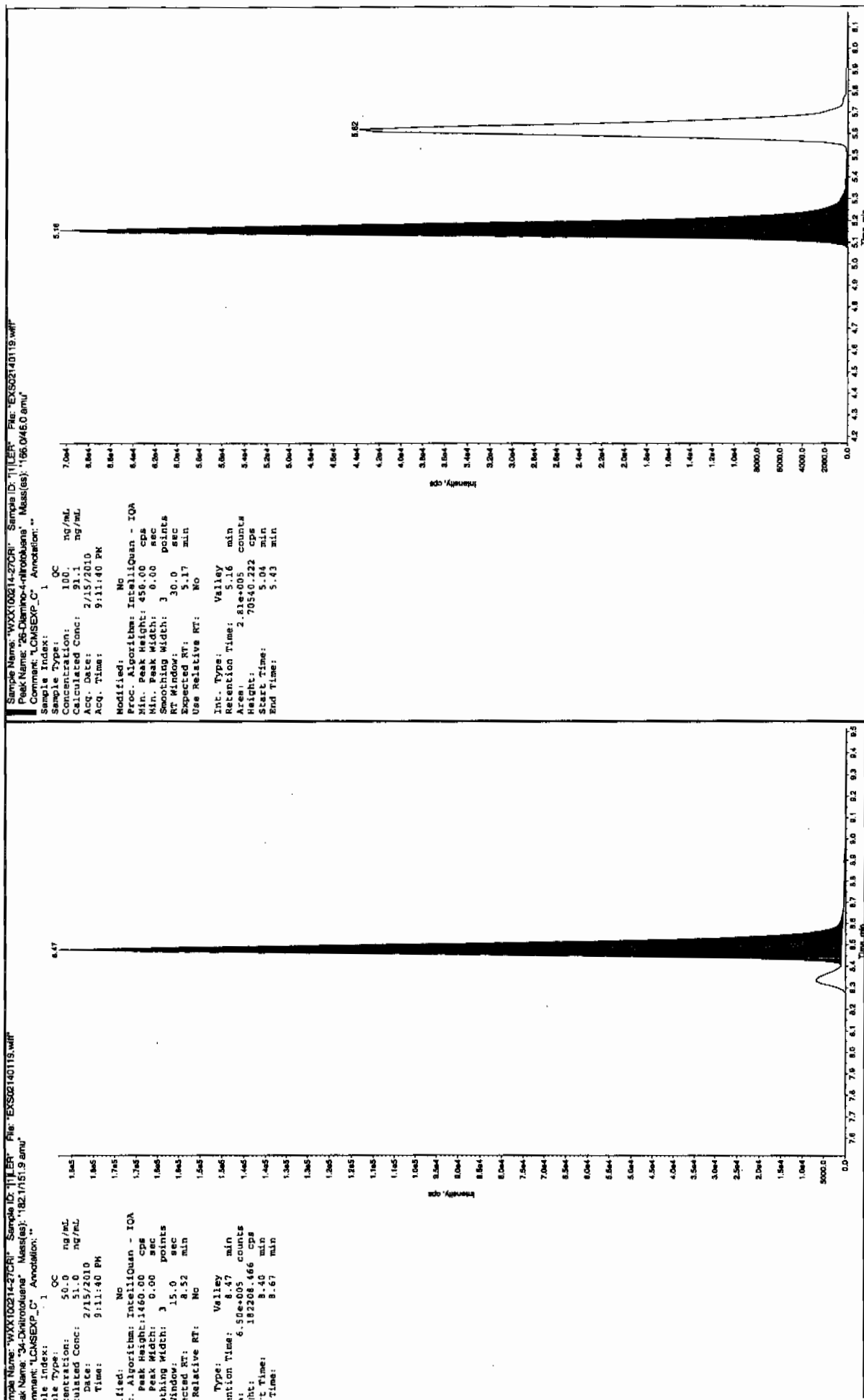


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

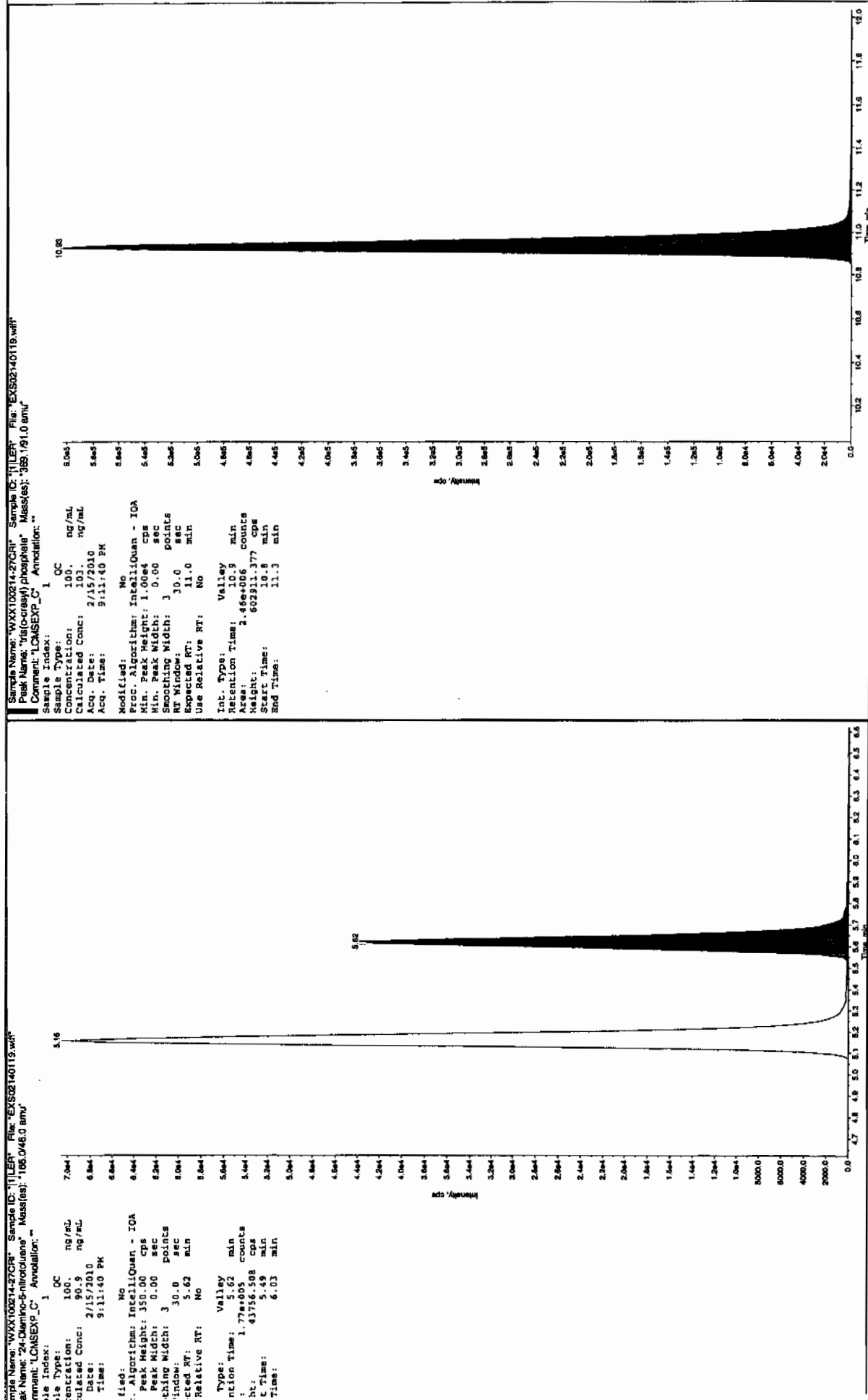
after Jan 21/7/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140130.wiff

Analysis Date: 16-FEB-10 00:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	372	74	
2,6-Diamino-4-nitrotoluene	500	423	85	
3,4-Dinitrotoluene	250	233	93	
3,5-Dinitroaniline	500	479	96	
TATB	500	493	99	
tris(o-cresyl) phosphate	500	494	99	

Recovery Limits:

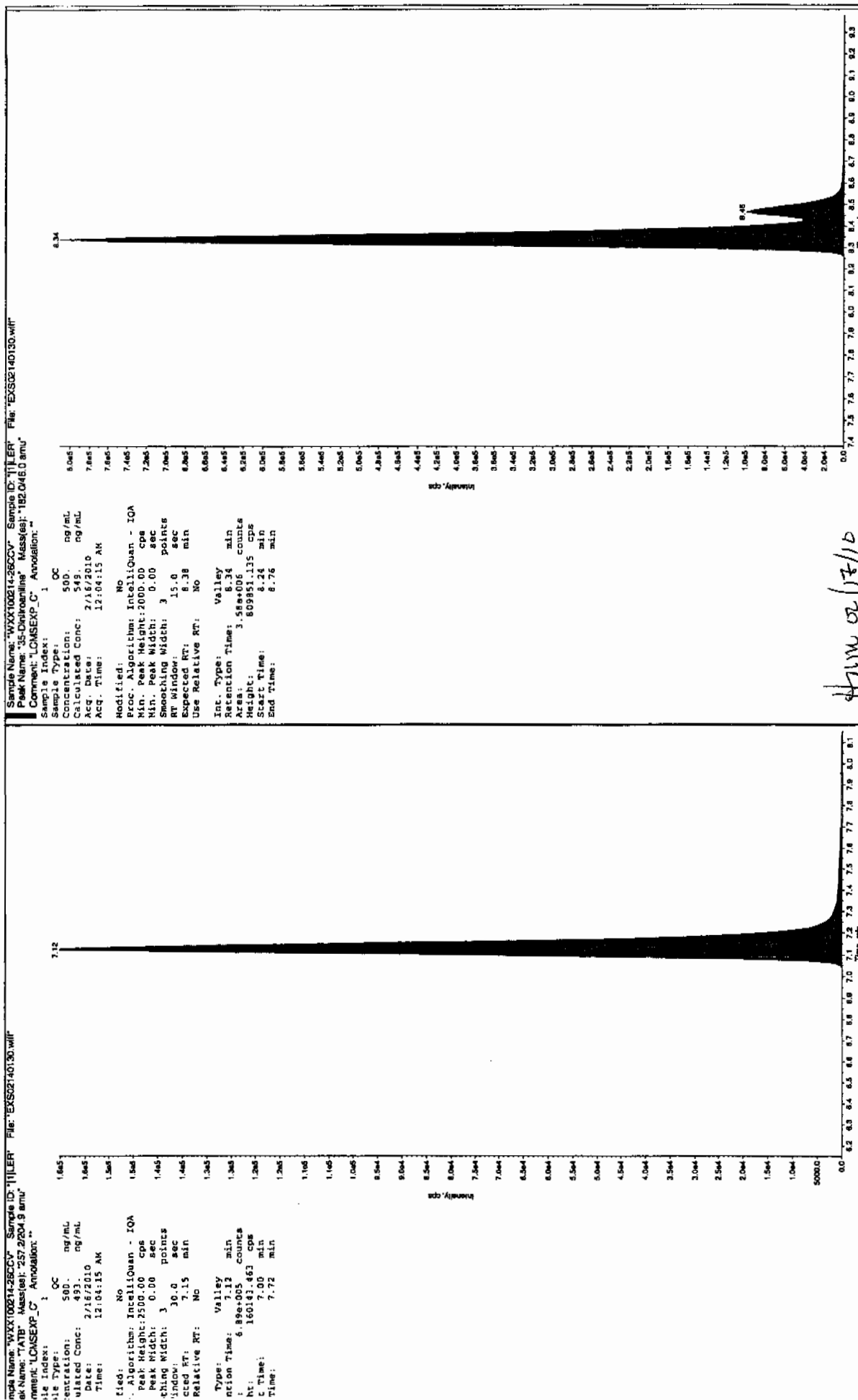
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

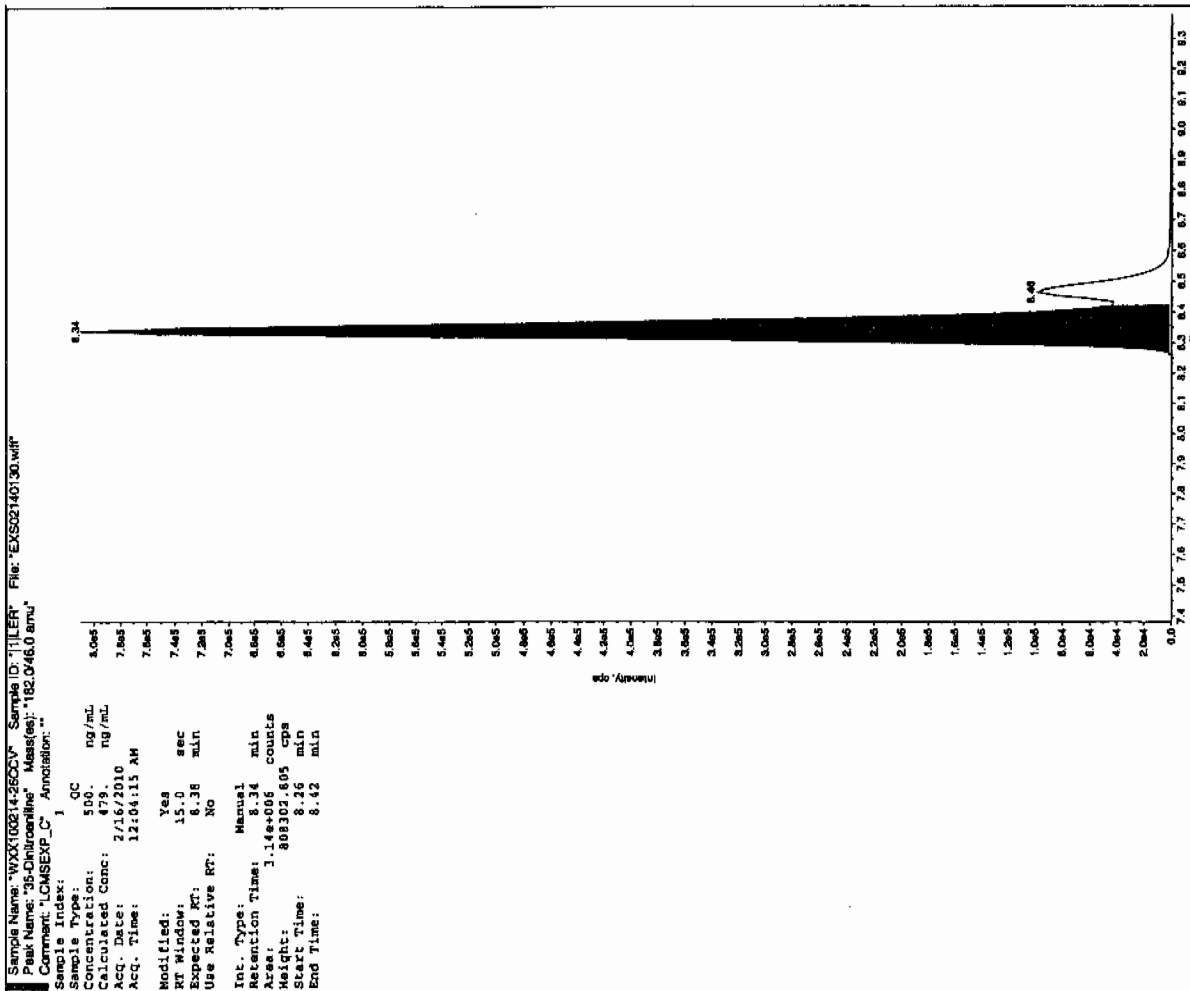
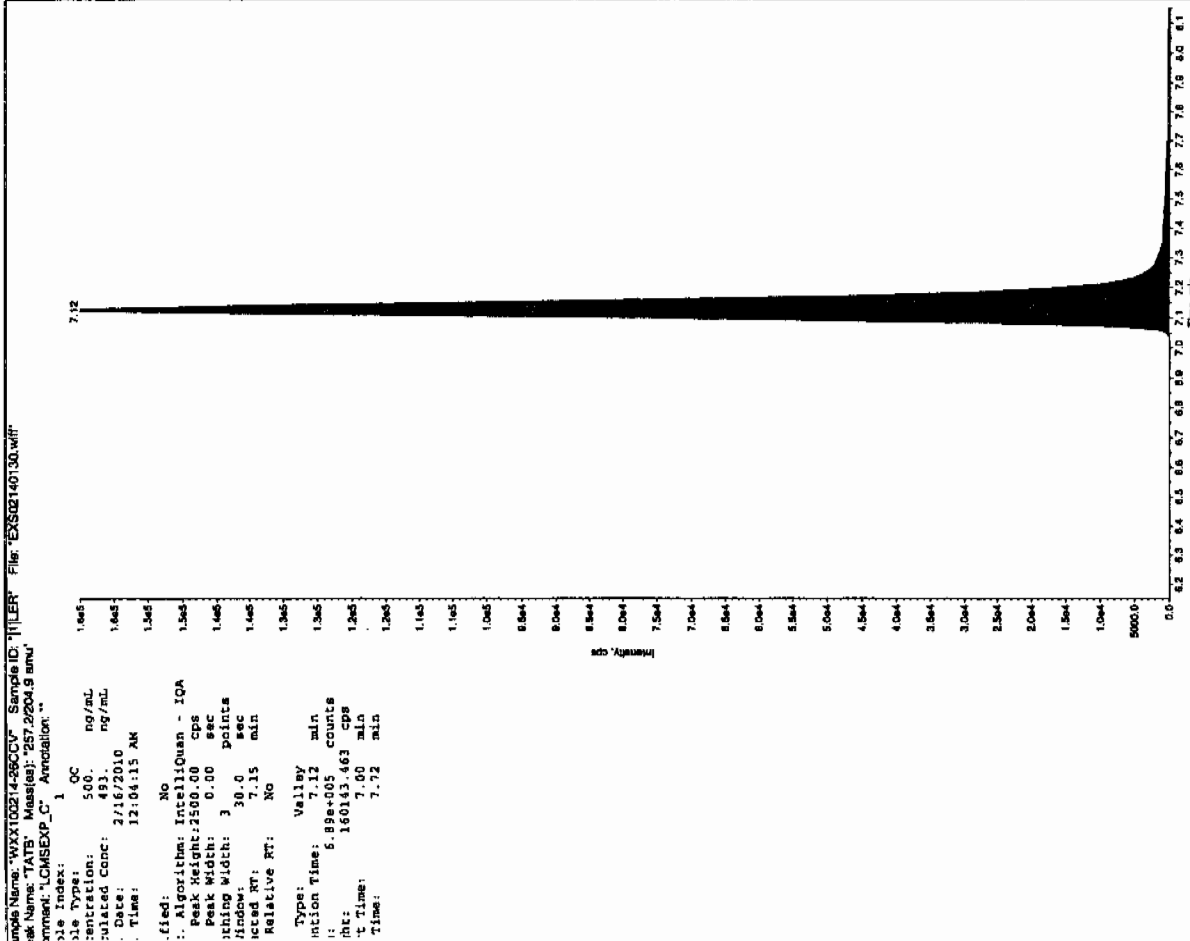
* Value outside of Recovery Limits

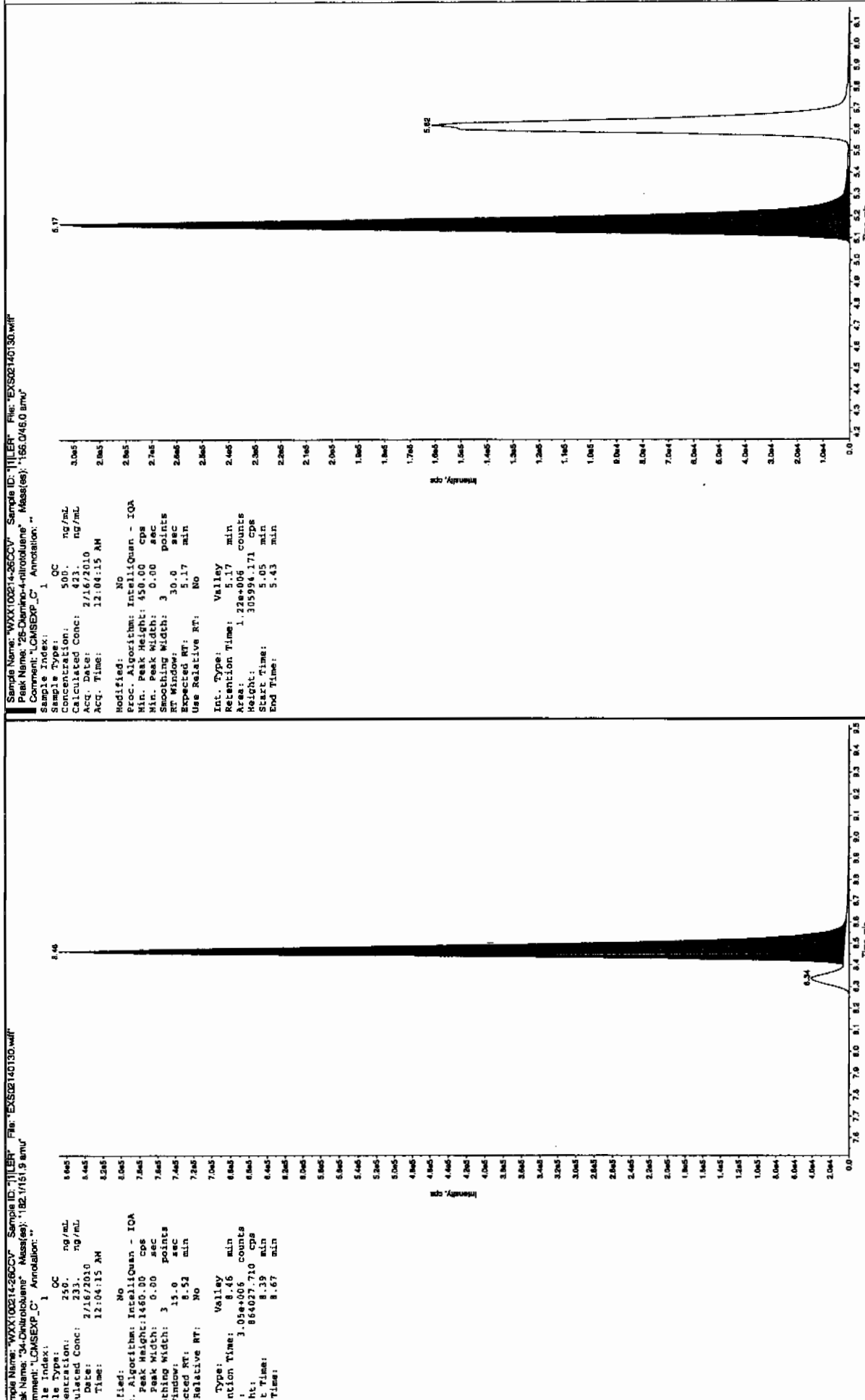
Before Scan 2/10/10

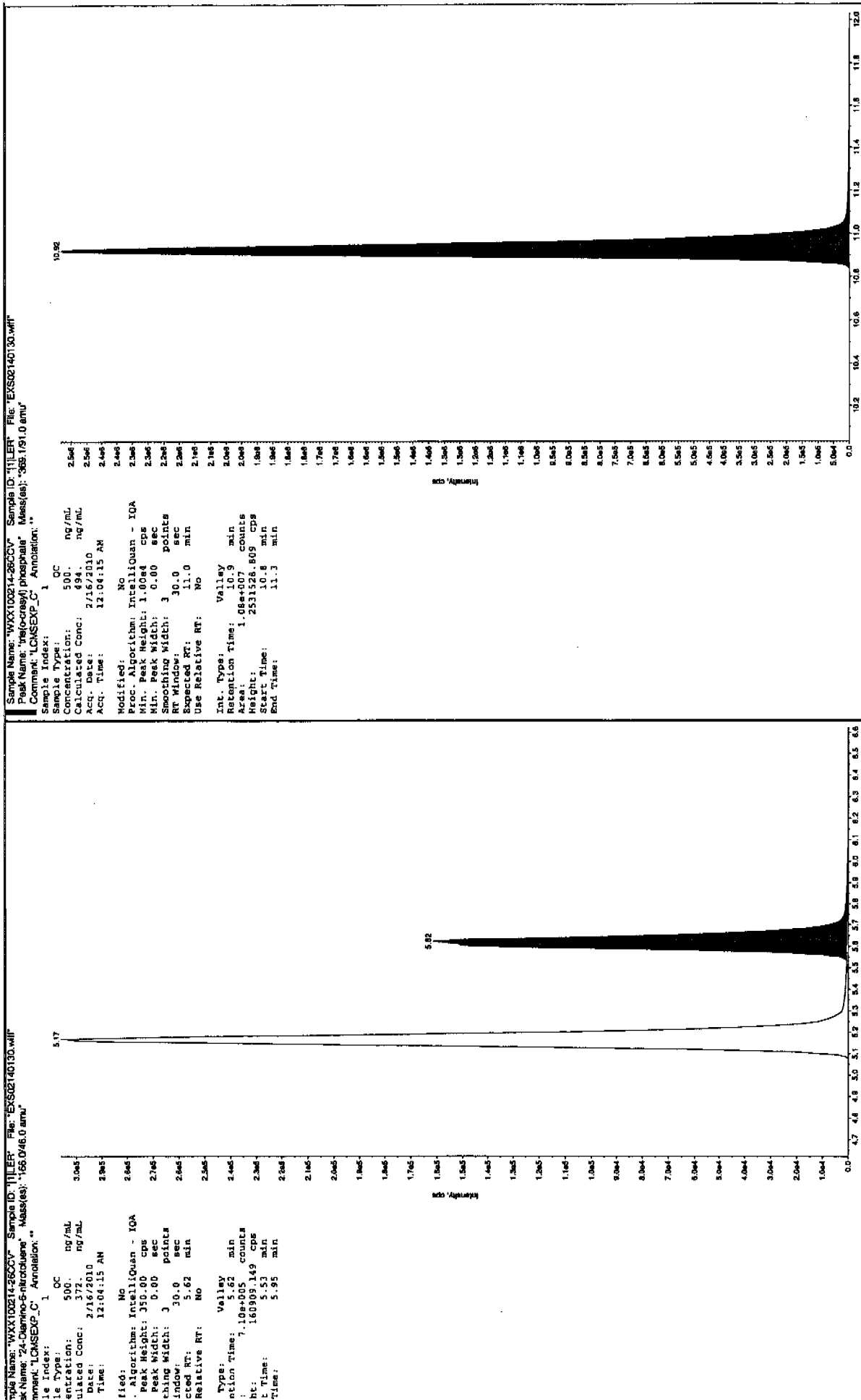


After Scan 2/10/10

after Scan 2/17/10







L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140132.wiff

Analysis Date: 16-FEB-10 00:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	82	82	
2,6-Diamino-4-nitrotoluene	100	81.2	81	
3,4-Dinitrotoluene	50	47.5	95	
3,5-Dinitroaniline	100	98.2	98	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

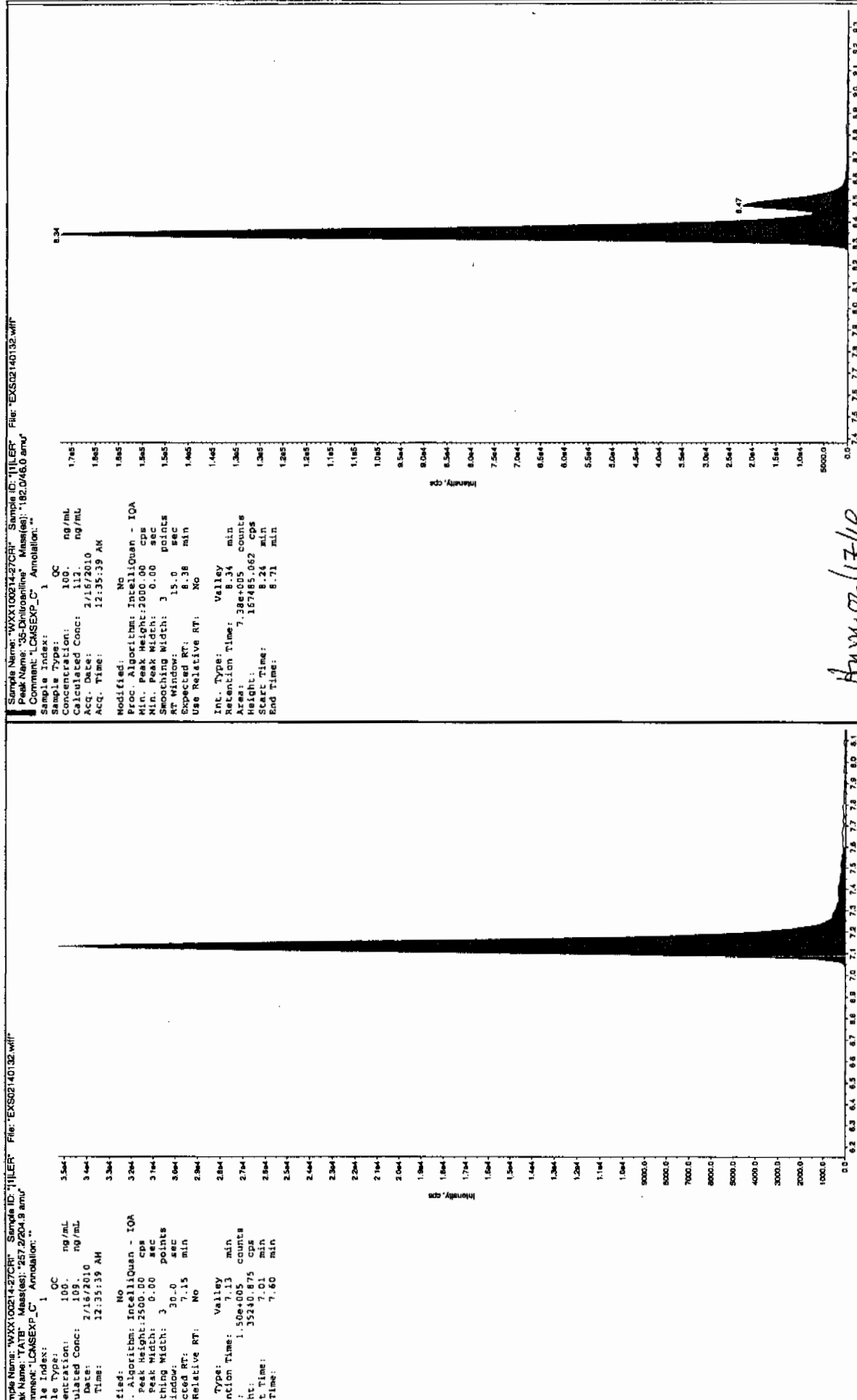
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

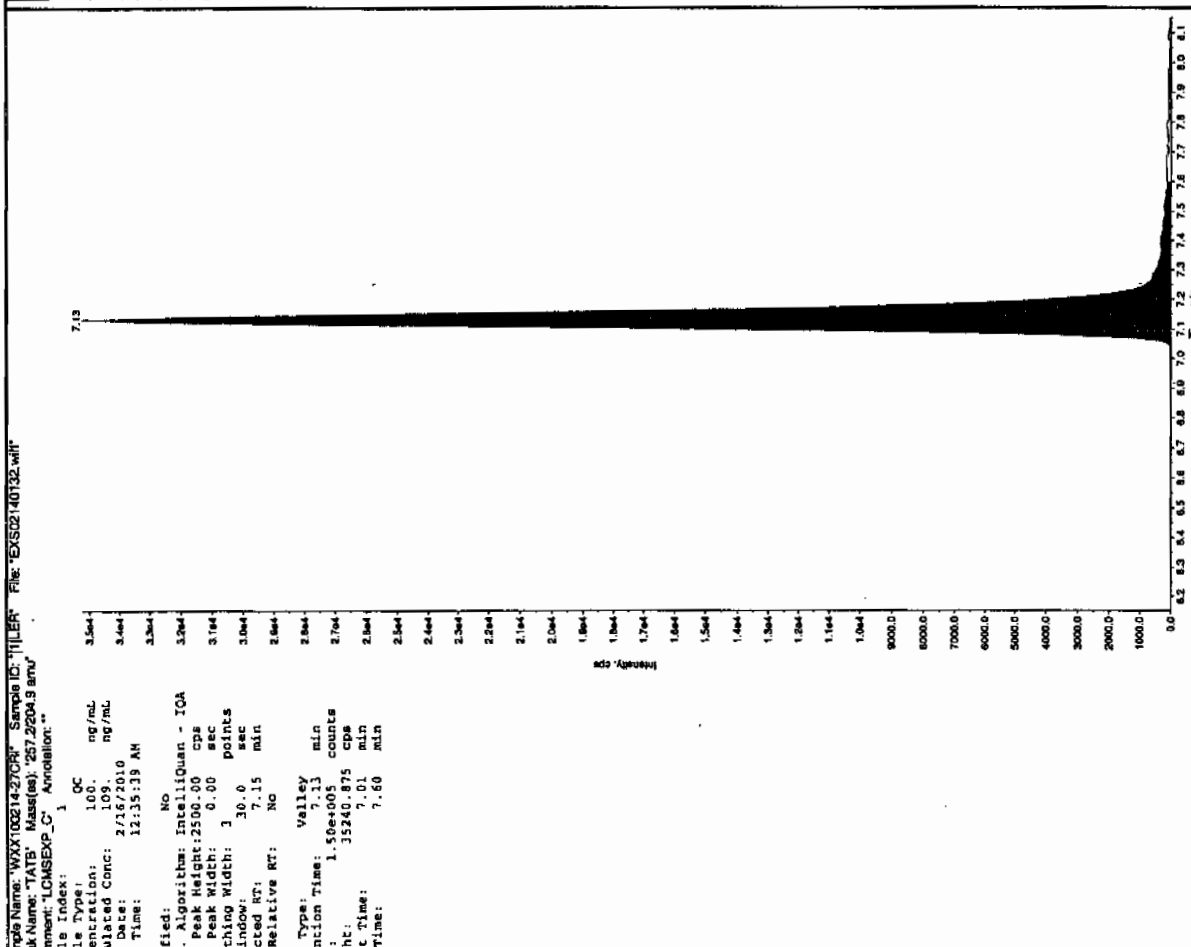
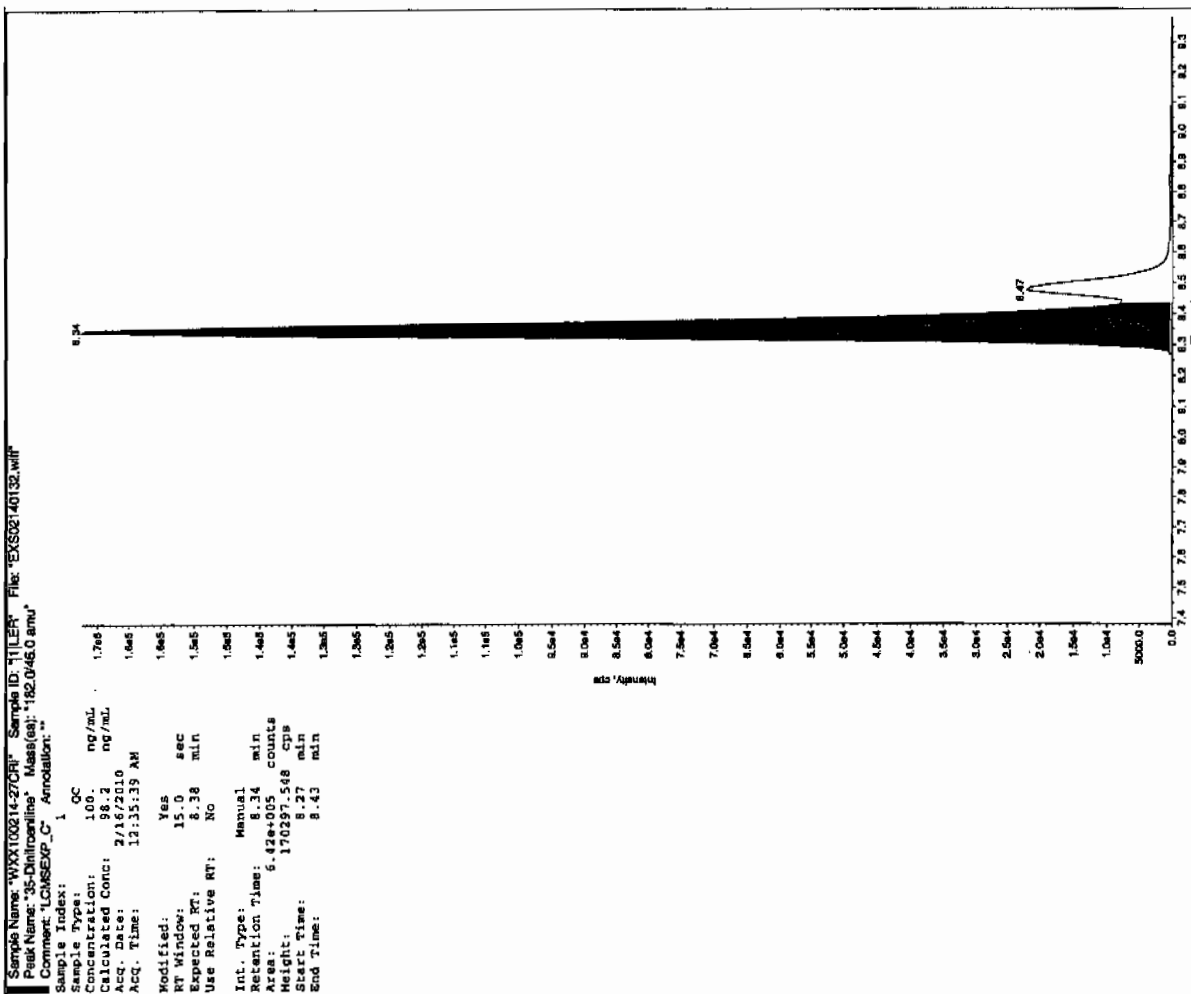
* Value outside of Recovery Limits

Before Scan 21610

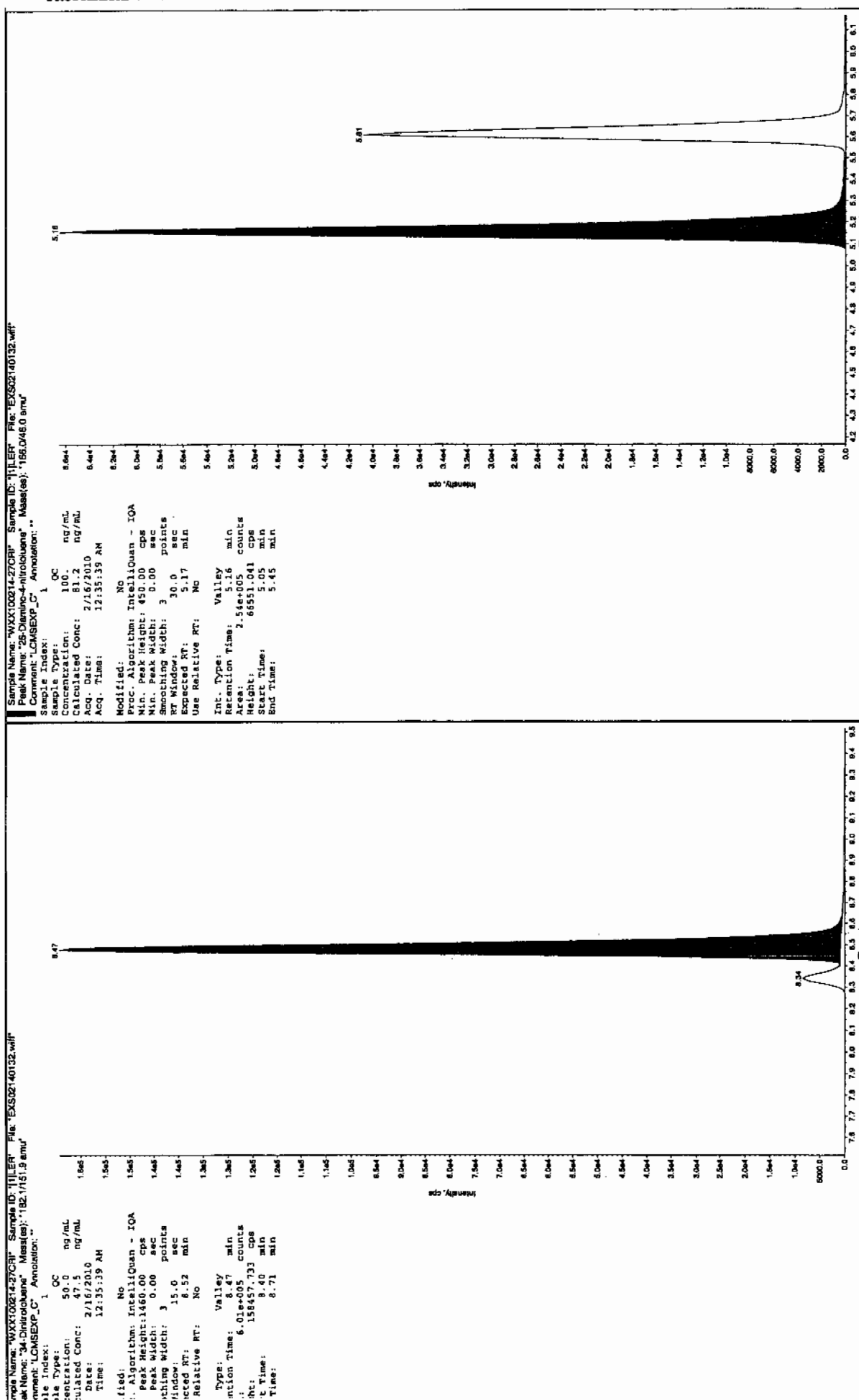


After Scan 1710

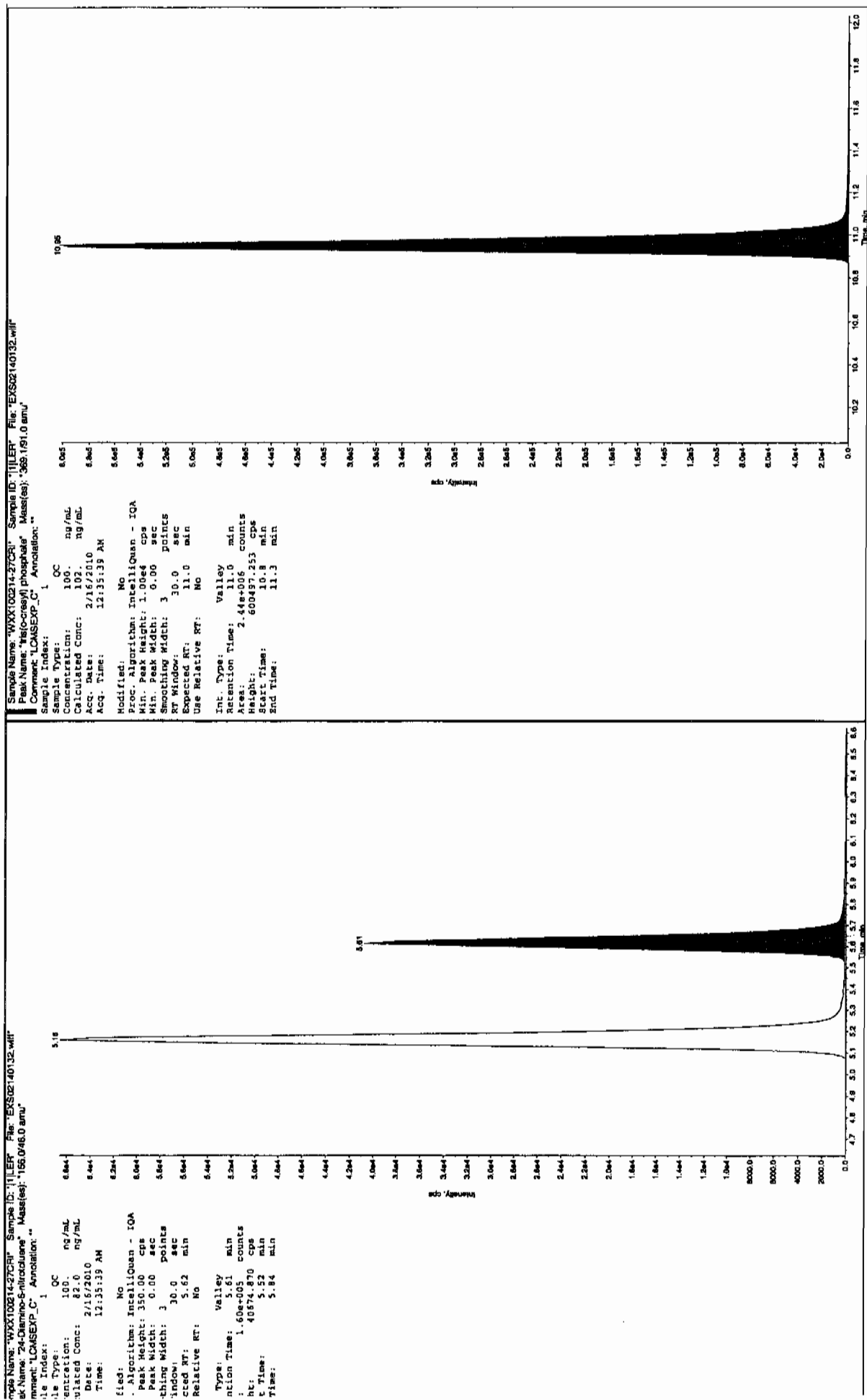
after Jan 21/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140140.wiff

Analysis Date: 16-FEB-10 02:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	353	71	
2,6-Diamino-4-nitrotoluene	500	427	86	
3,4-Dinitrotoluene	250	244	98	
3,5-Dinitroaniline	500	466	93	
TATB	500	488	98	
tris(o-cresyl) phosphate	500	495	99	

Recovery Limits:

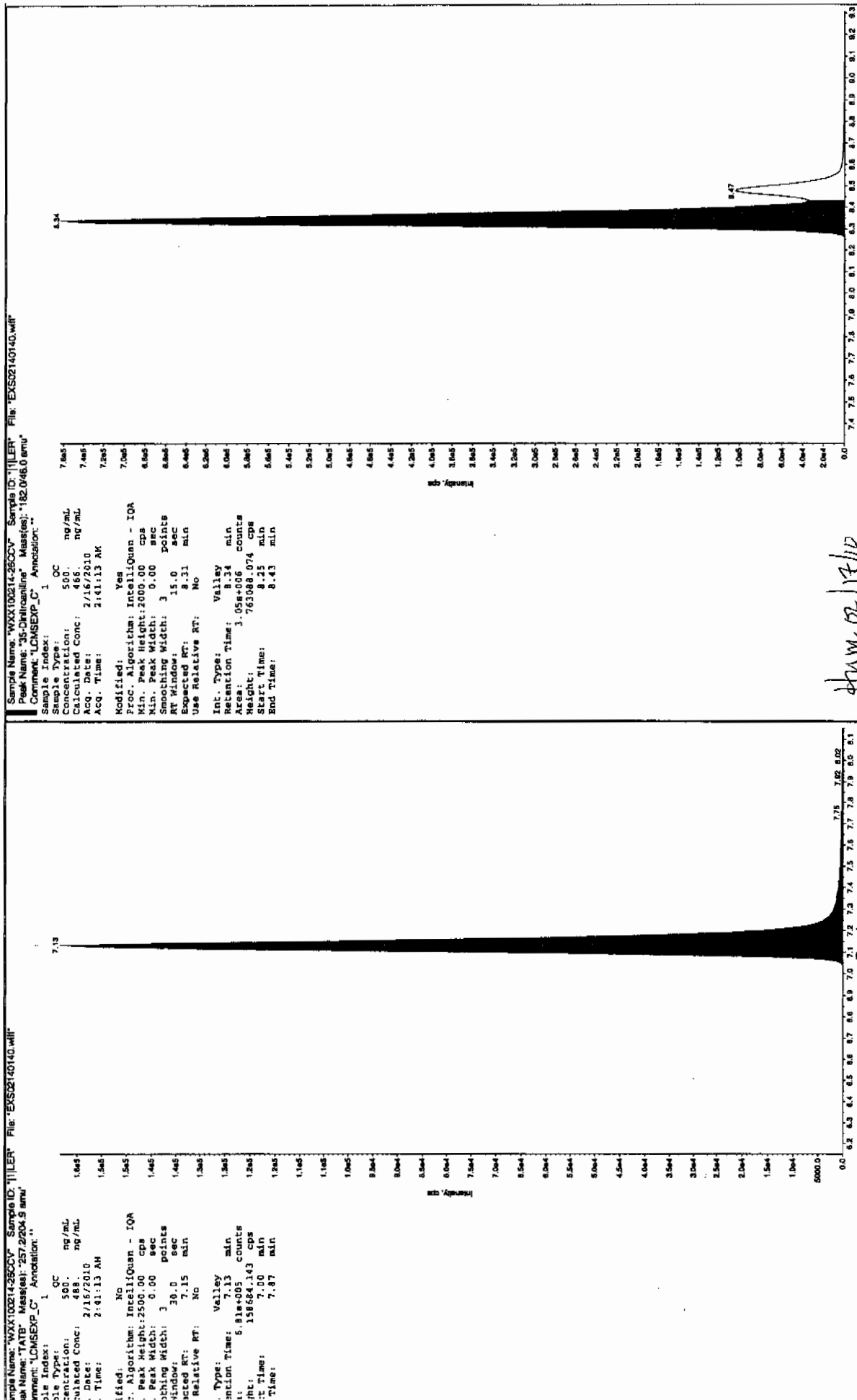
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

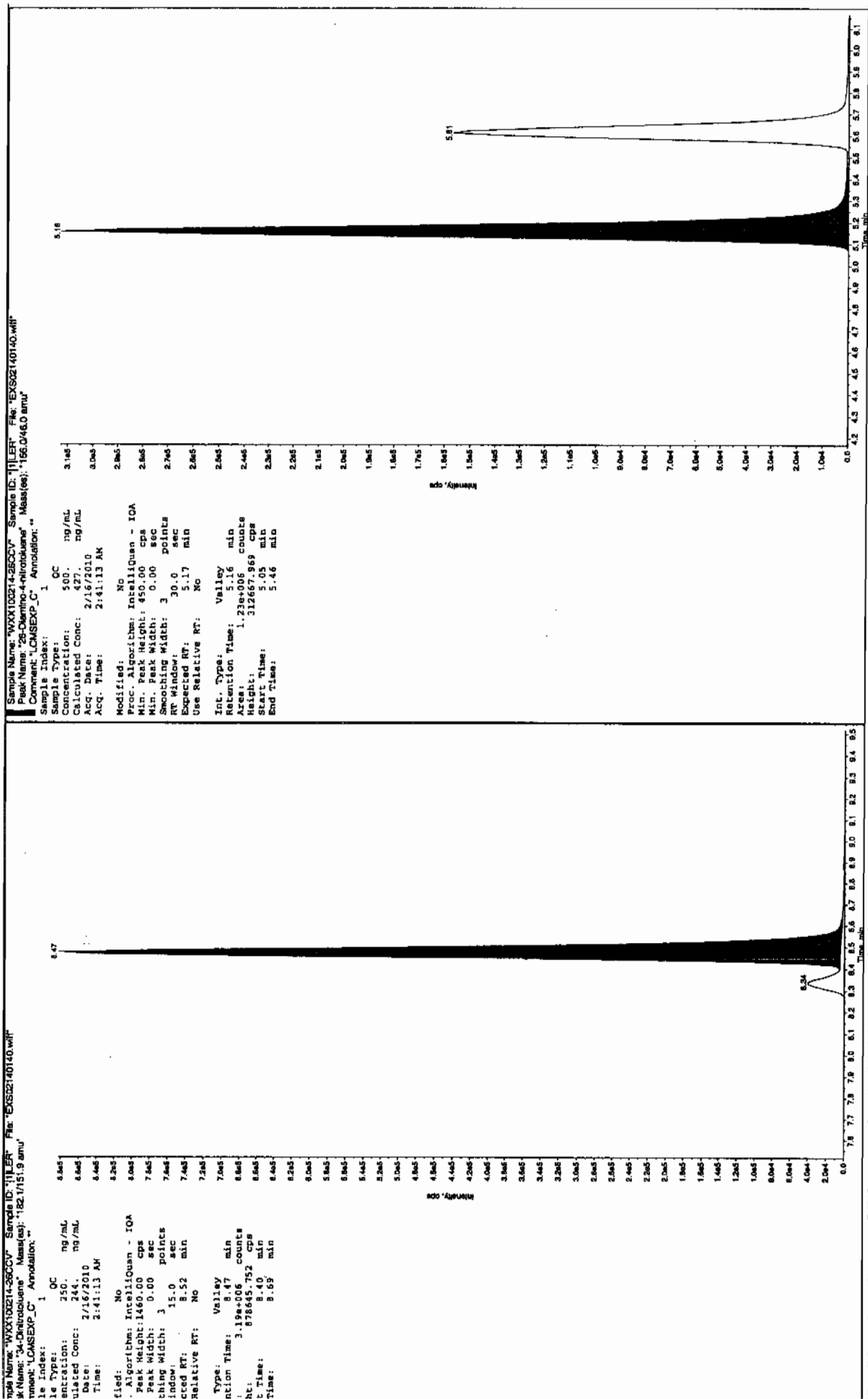
Column used to flag Recovery outside of Limits

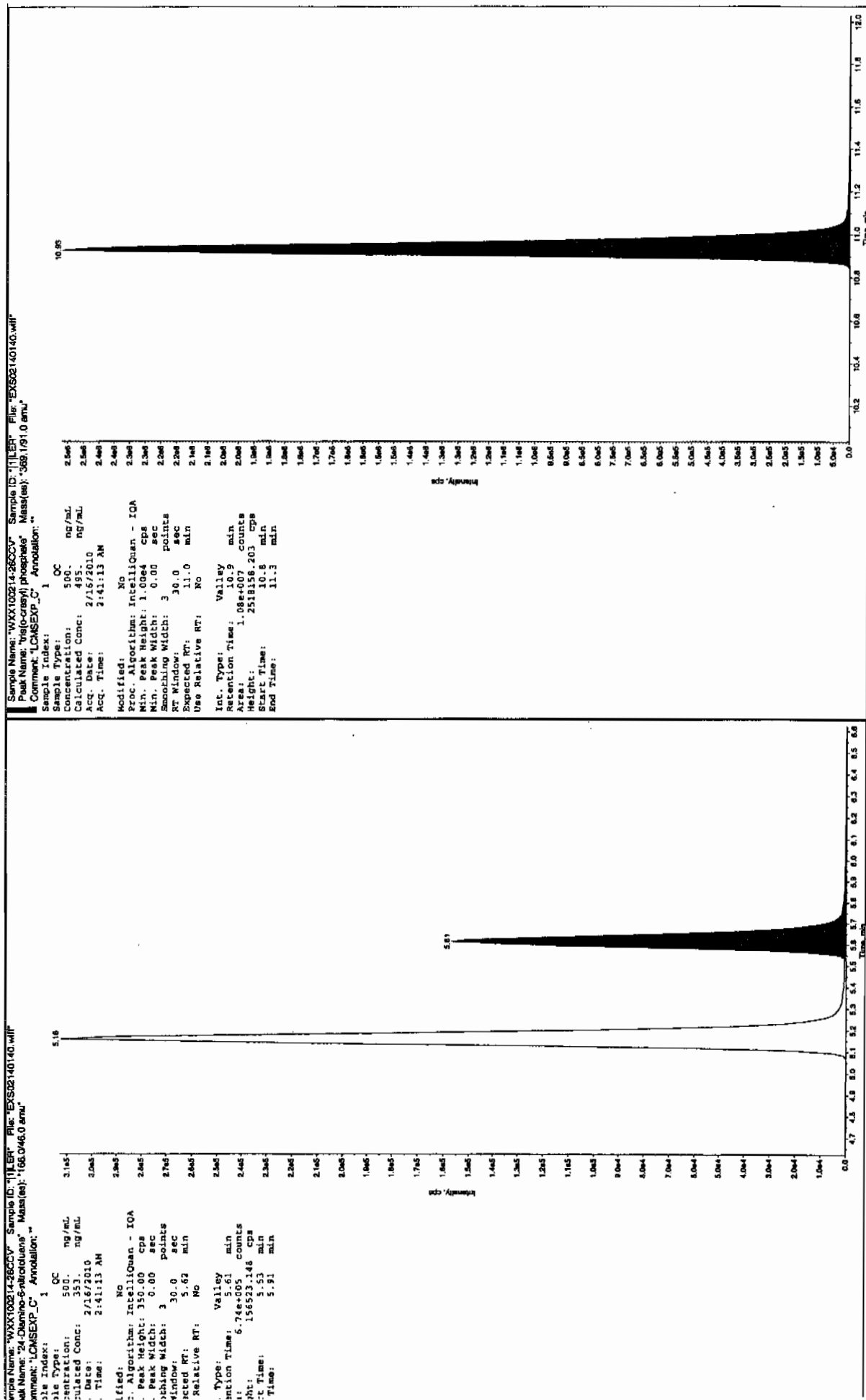
* Value outside of Recovery Limits

See 2/17/10



See 2/17/10





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1510

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140142.wiff

Analysis Date: 16-FEB-10 03:12

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	81.9	82	
2,6-Diamino-4-nitrotoluene	100	85.2	85	
3,4-Dinitrotoluene	50	49.5	99	
3,5-Dinitroaniline	100	105	105	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

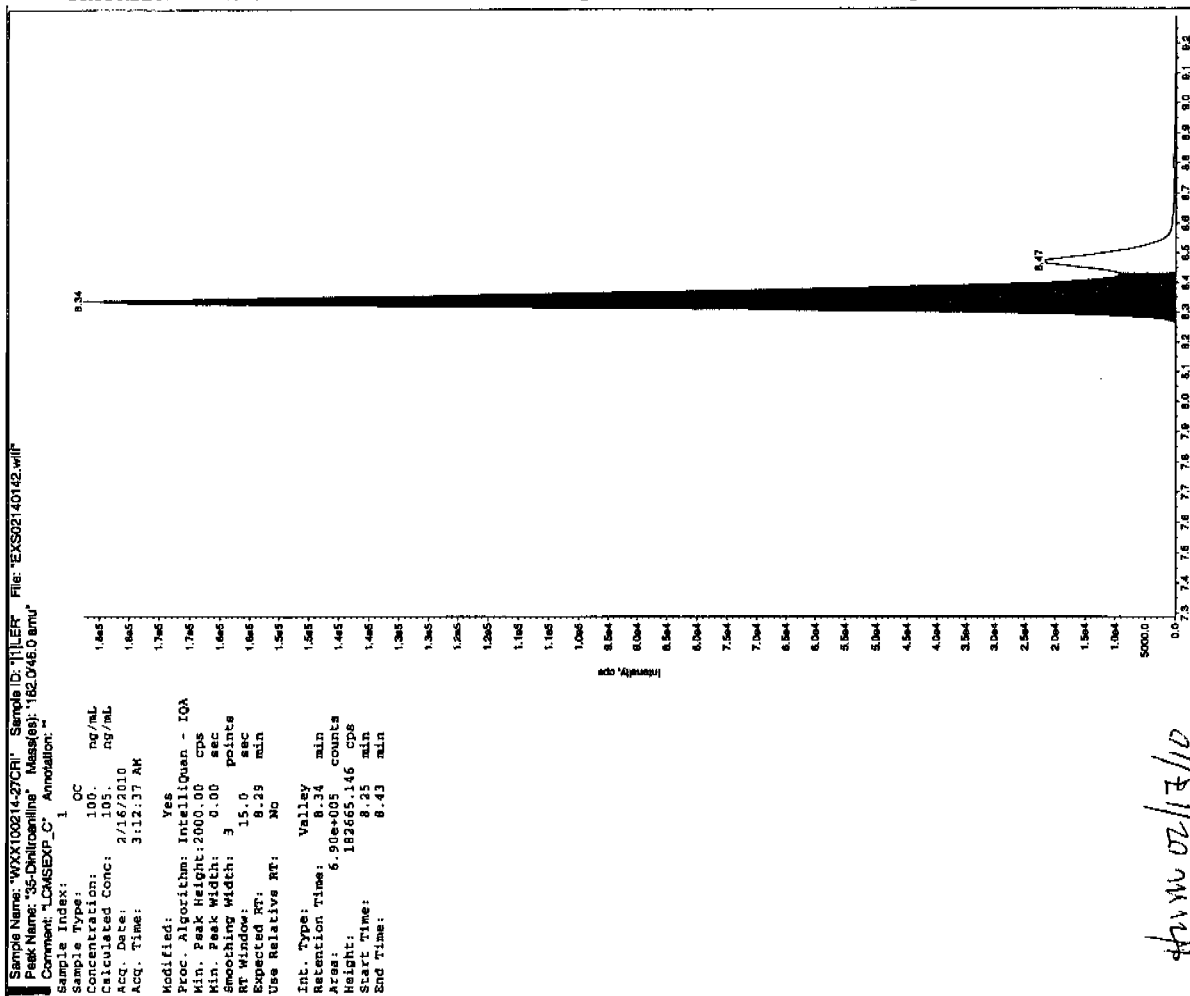
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

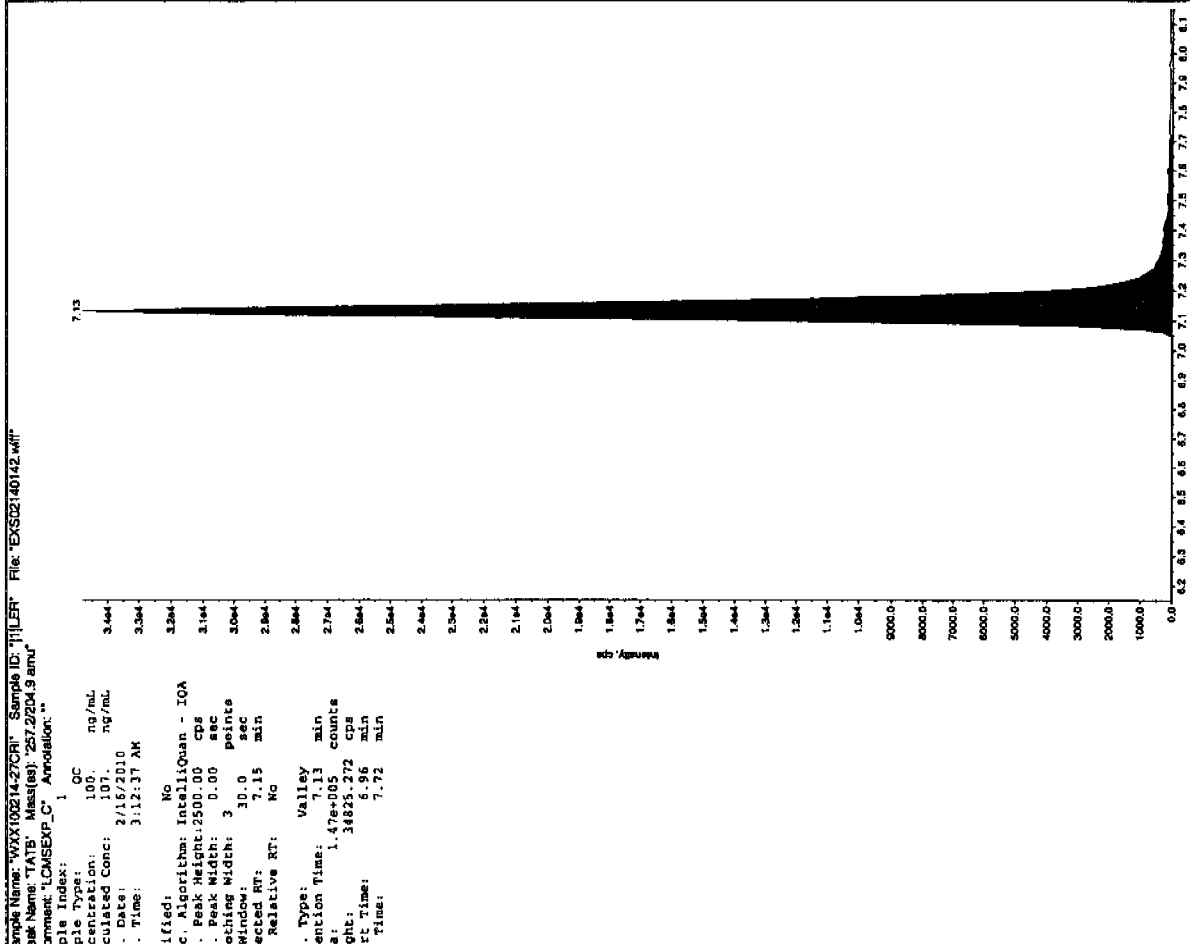
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

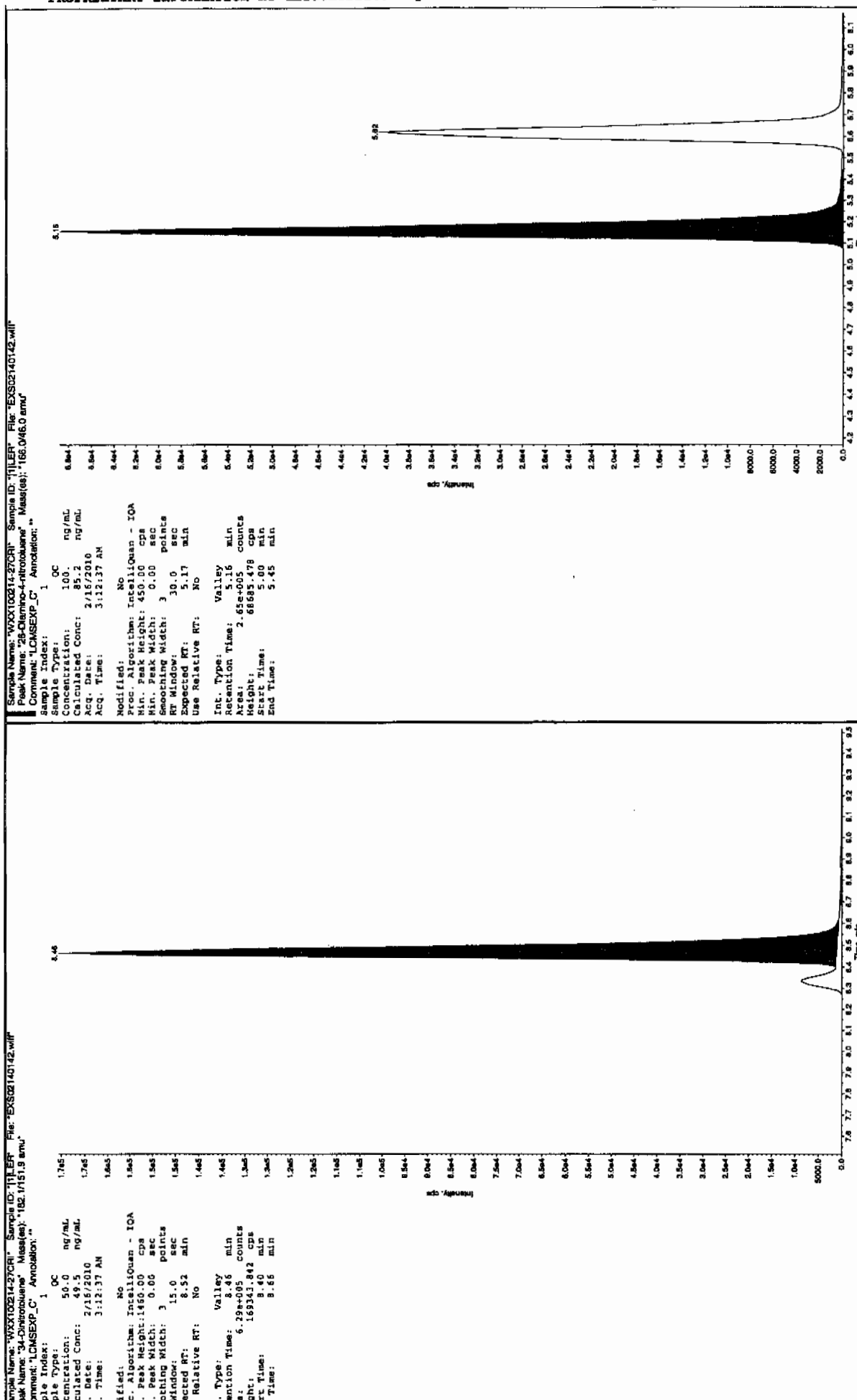
Jan 21/7/10

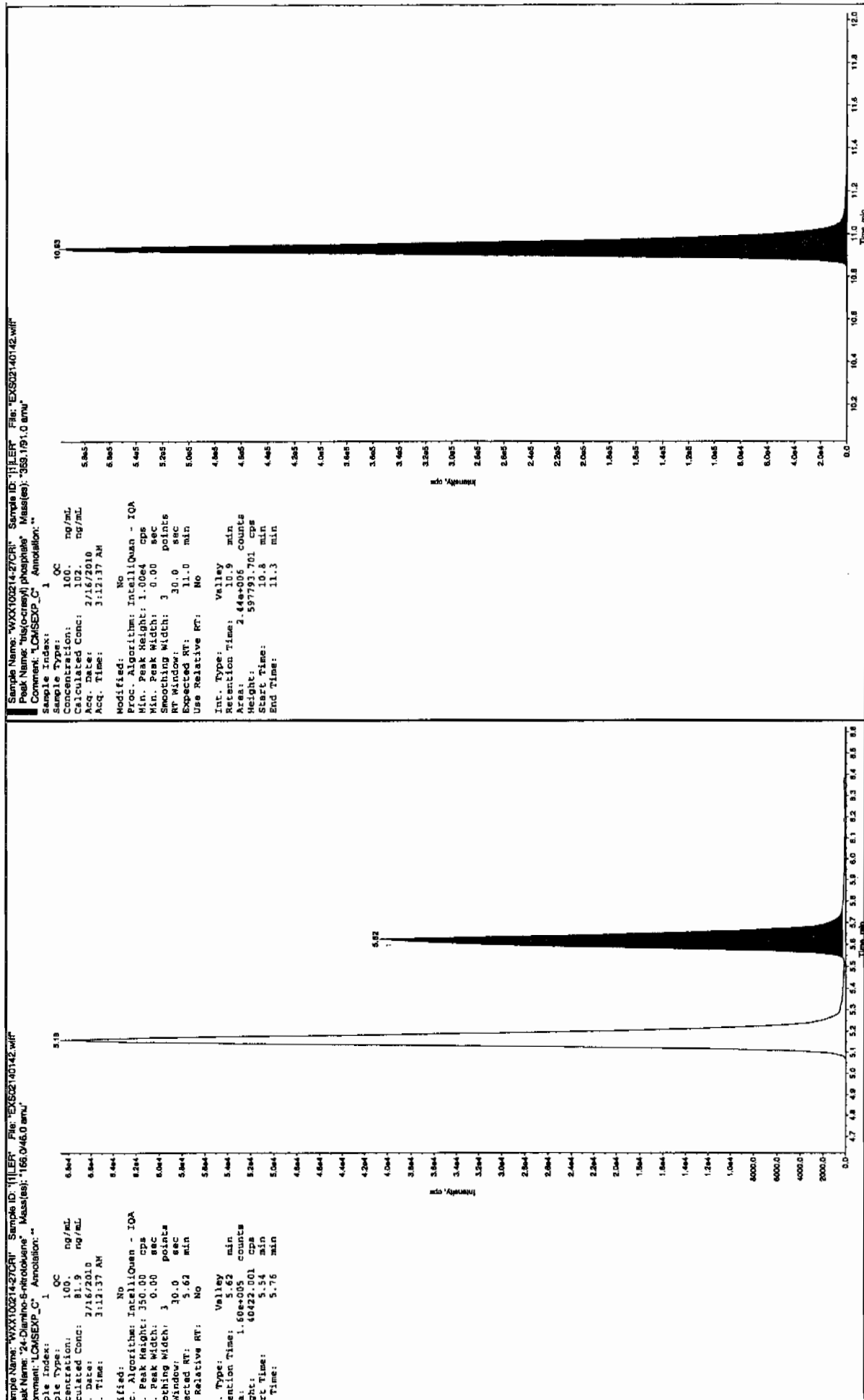


Jan 21/7/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





QUALITY CONTROL DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948571

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032097

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216081a

Date Analyzed: 18-FEB-10 08:39

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\021610expa.mdb, Time: Wed Feb 17 09:19:04 2010
Calibration: C:\MASSLYNX\New_Exp.PRO\CurveDB\021610expa.cdb, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216081a

Date: 18-Feb-2010

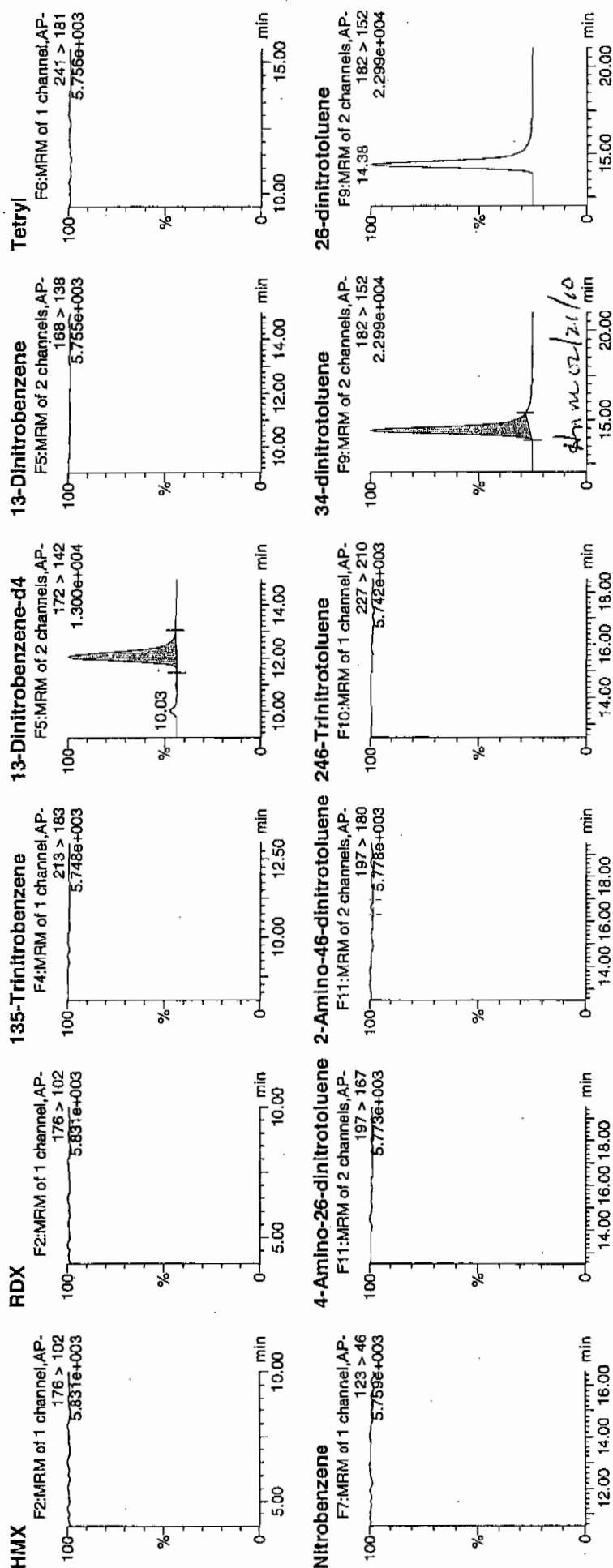
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ID: 1202032097

Vial: 2:5,A

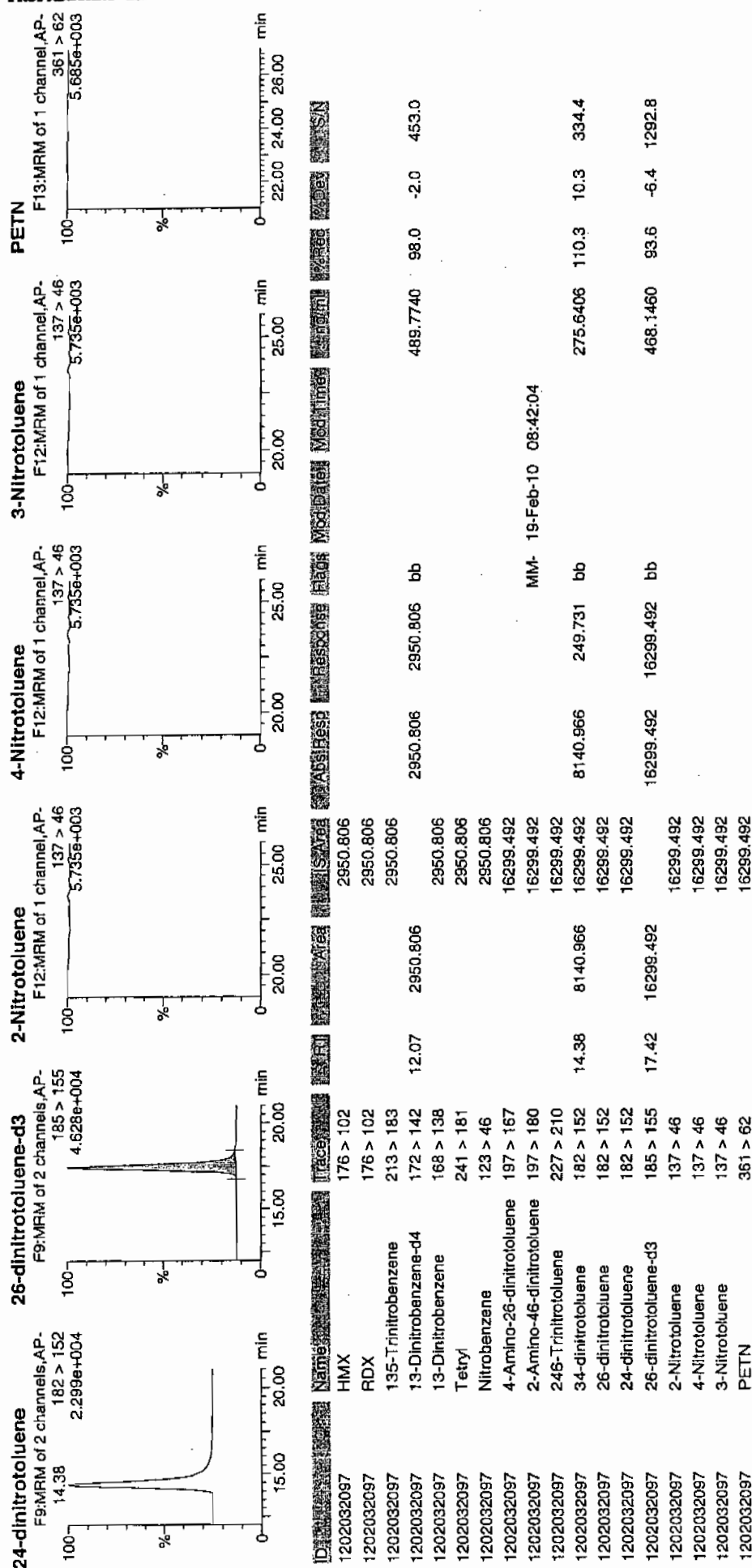
12/19/10

12/19/10



Dataset: C:\MASSLYNX\New_Exp\PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948571

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032097

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140120.wiff

Date Analyzed: 15-FEB-10 21:27

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

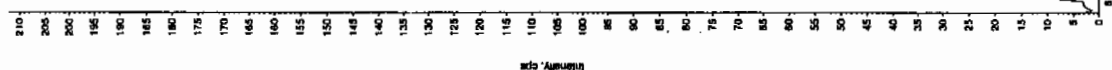
*Concentration =

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

See 2/17/10

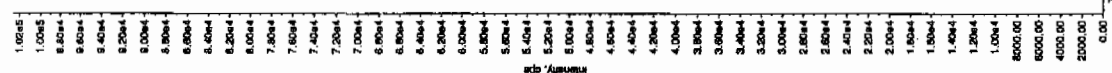
Sample Name: "120032097" Sample ID: "948572121.ER" File: "EX502140120.w"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:27:20 PM
 Modified: No



Sample Name: "120032097" Sample ID: "948572121.ER" File: "EX502140120.w"
 Peak Name: "35-Dinitrophenol" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

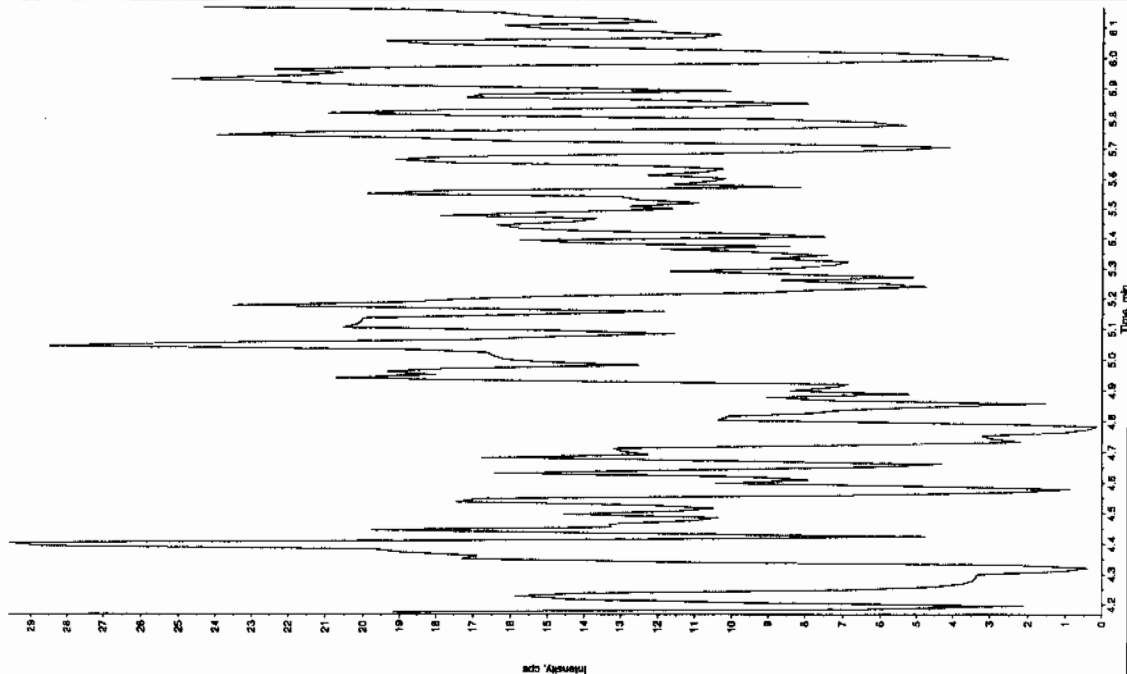
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:27:20 PM
 Modified: Yes



See 2/17/10

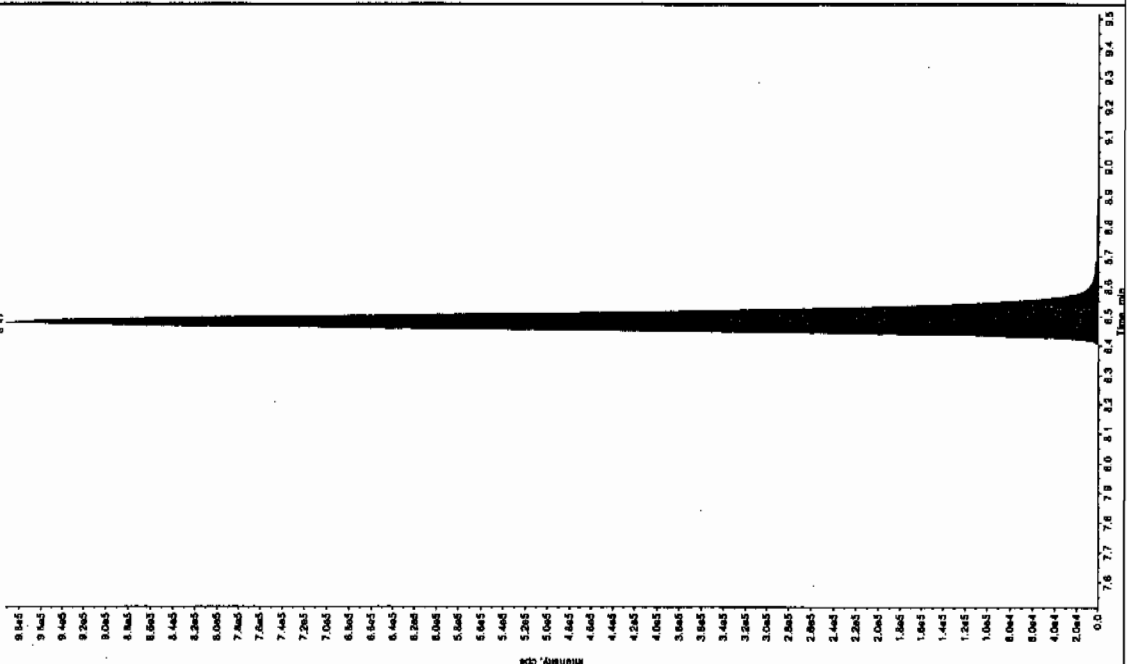
Sample Name: "120203097" Sample ID: "646572121" File: "EX02140120.wif"
 Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:27:20 PM
 Modified: No

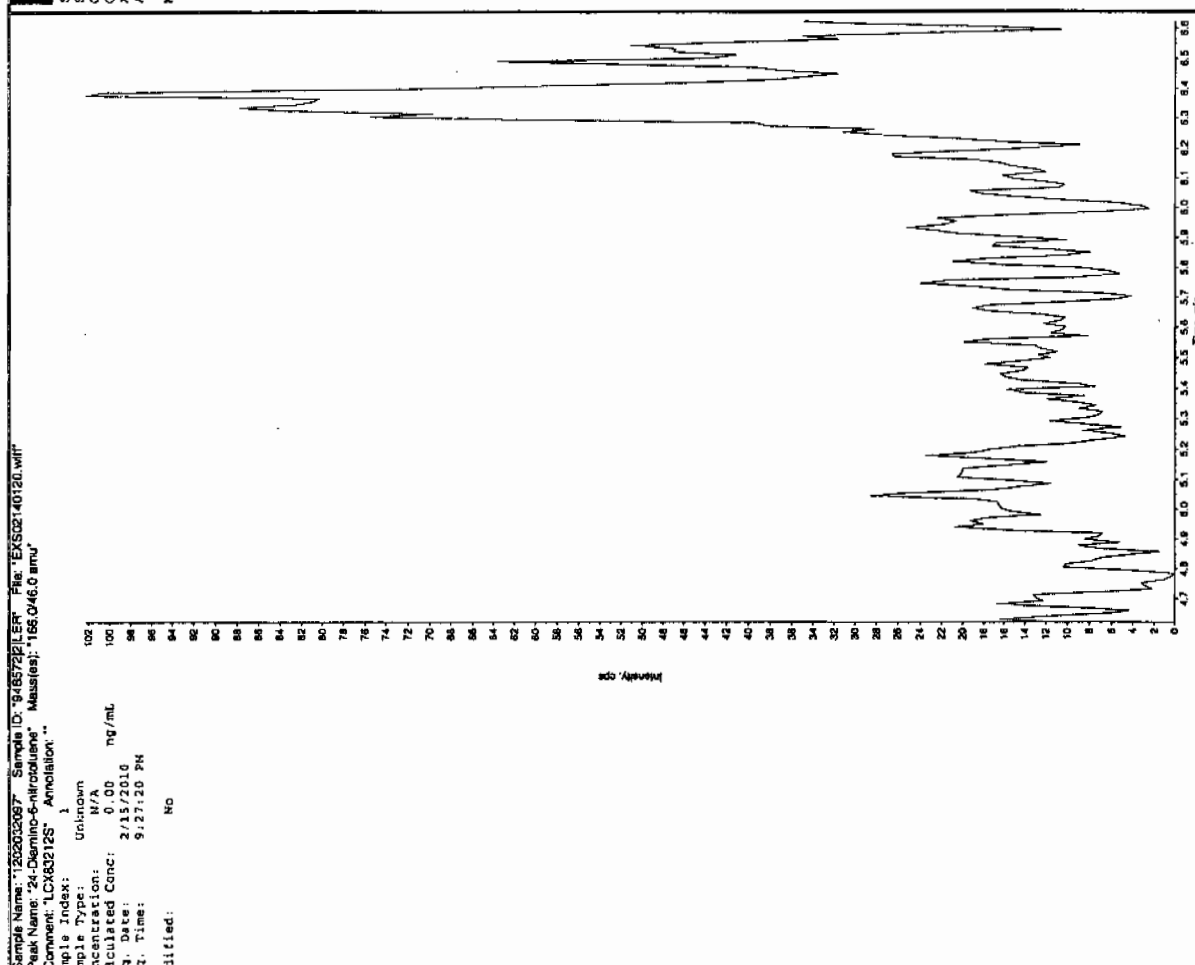
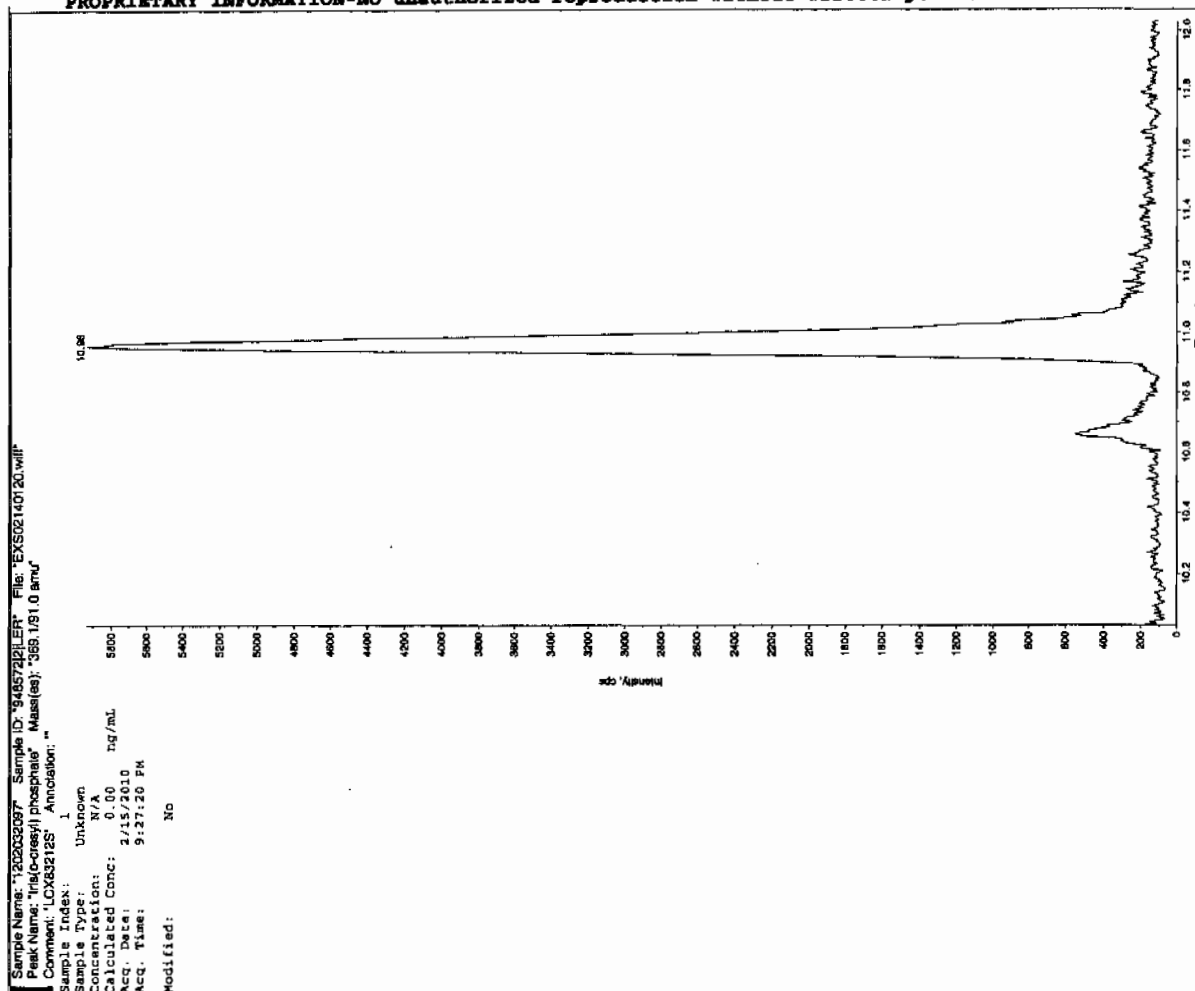


Sample Name: "120203097" Sample ID: "646572121" File: "EX02140120.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:27:20 PM
 Modified: No
 Occ. Algorithm: IntelliQuan - IQA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.52 min
 Relative RT: No
 C. Type: Valley
 Retention Time: 8.47 min
 Height: 3.97e+006 counts
 Acq. Time: 9:27:20 PM
 File Time: 8.57 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 948571

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032098

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216082a

Date Analyzed: 18-FEB-10 09:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4940	
121-14-2	2,4-Dinitrotoluene	5160	
121-82-4	RDX	5220	
19406-51-0	4-Amino-2,6-dinitrotoluene	4630	
2691-41-0	HMX	4400	
35572-78-2	2-Amino-4,6-dinitrotoluene	5150	
479-45-8	Tetryl	2570	
606-20-2	2,6-Dinitrotoluene	4890	
78-11-5	PETN	6050	
88-72-2	o-Nitrotoluene	4930	
98-95-3	Nitrobenzene	4280	
99-08-1	m-Nitrotoluene	4610	
99-35-4	1,3,5-Trinitrobenzene	4040	
99-65-0	m-Dinitrobenzene	4810	
99-99-0	p-Nitrotoluene	4850	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216082a

Date: 18-Feb-2010

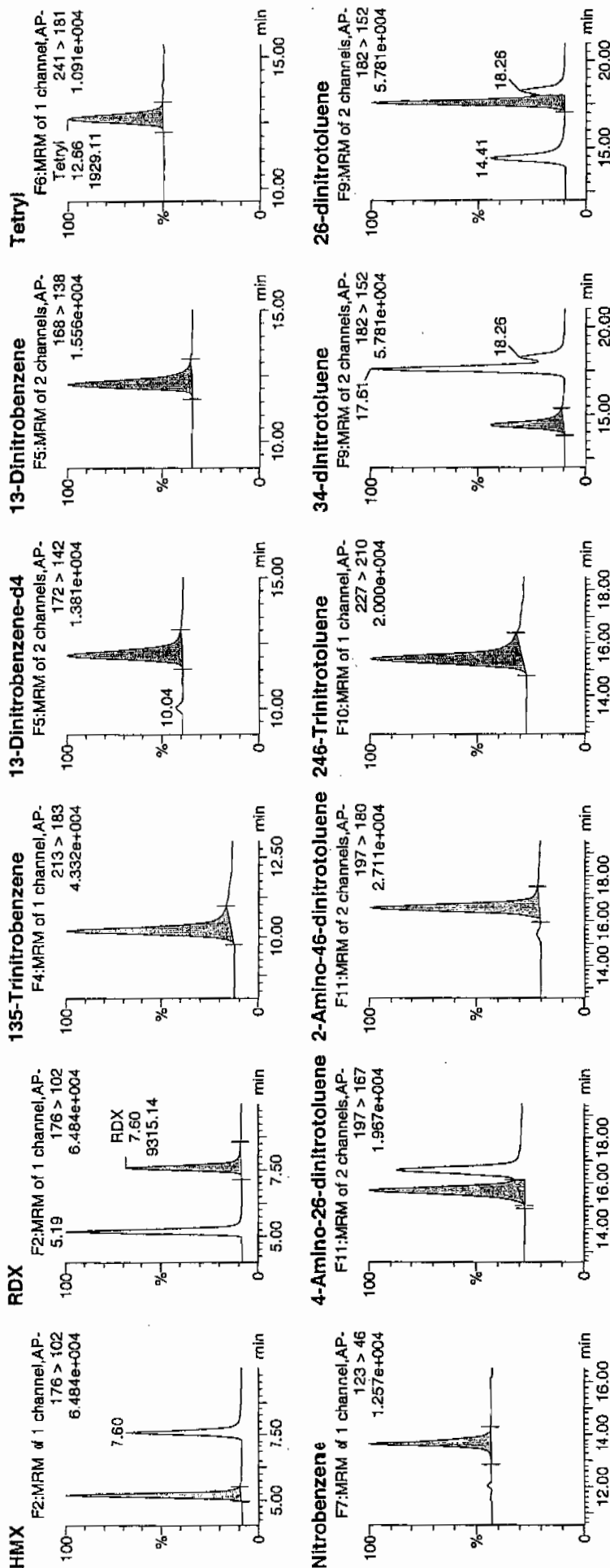
Time: 09:09:13

ID: 1202032C98

Vial: 2:5,B

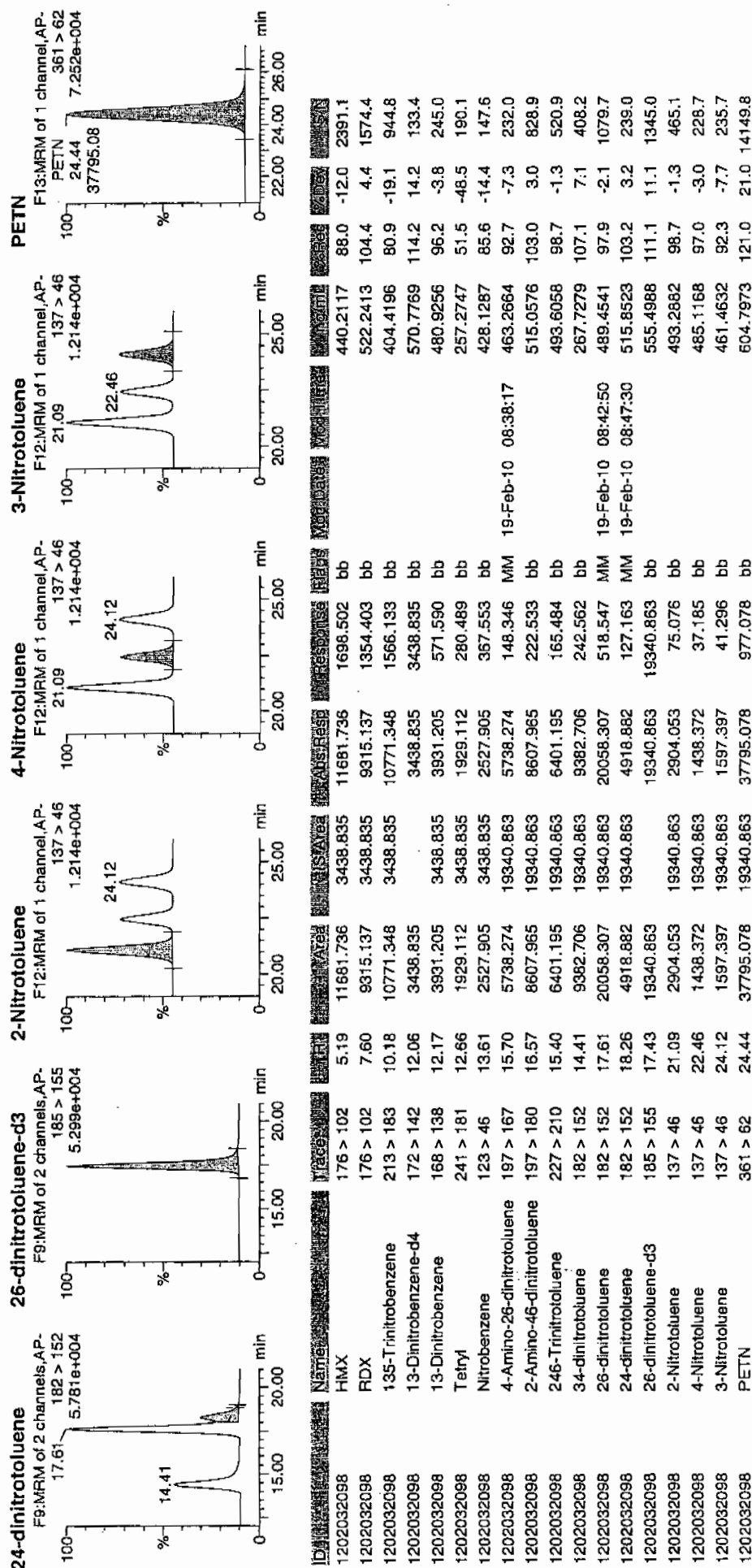
2/19/10

WAW 948572 / 8022 / 121



2/19/10

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 948571

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032098

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140121.wiff

Date Analyzed: 15-FEB-10 21:43

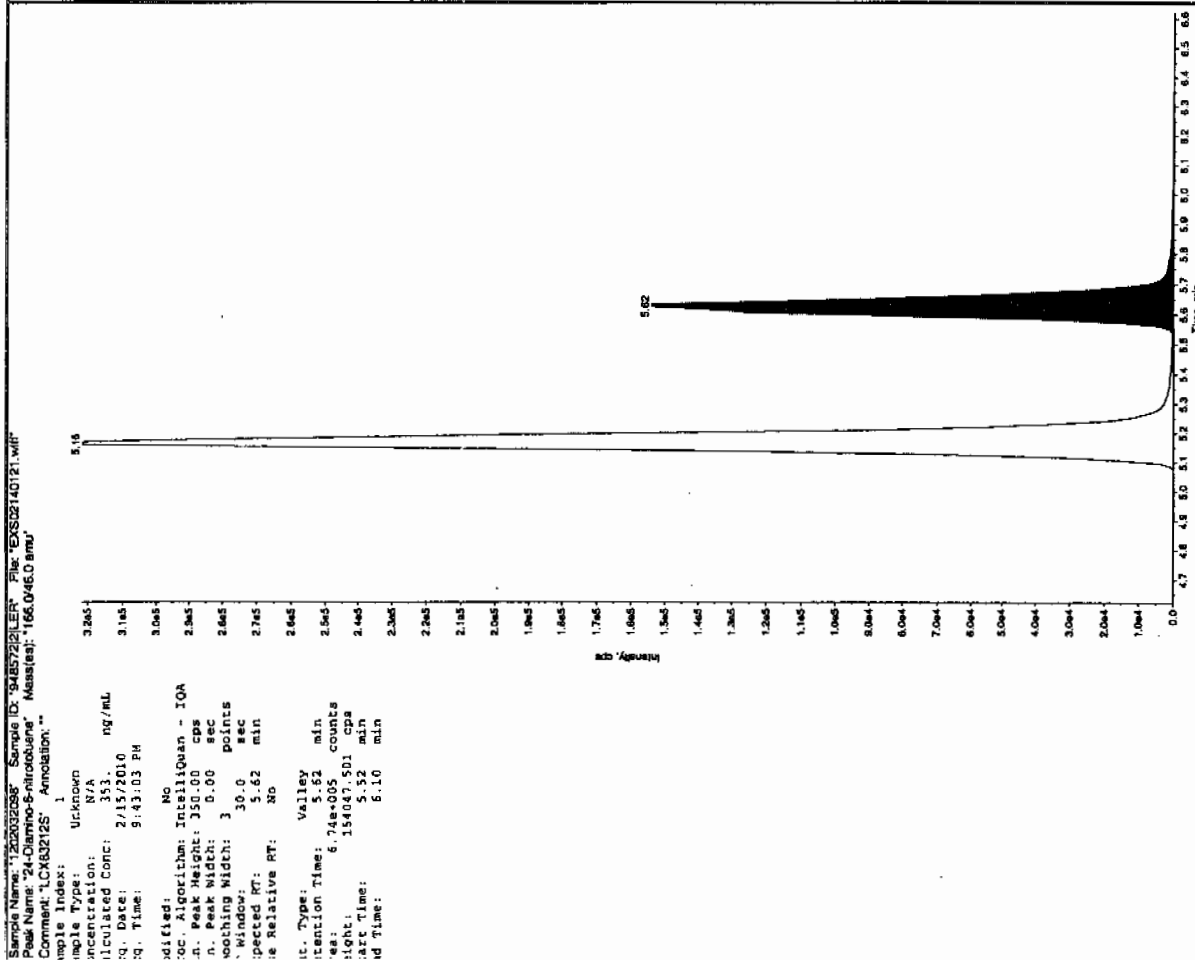
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7510	
59229-75-3	2,6-Diamino-4-nitrotoluene	4340	
618-87-1	3,5-Dinitroaniline	5060	
6629-29-4	2,4-Diamino-6-nitrotoluene	3530	
78-30-8	tris(o-cresyl) phosphate	4950	

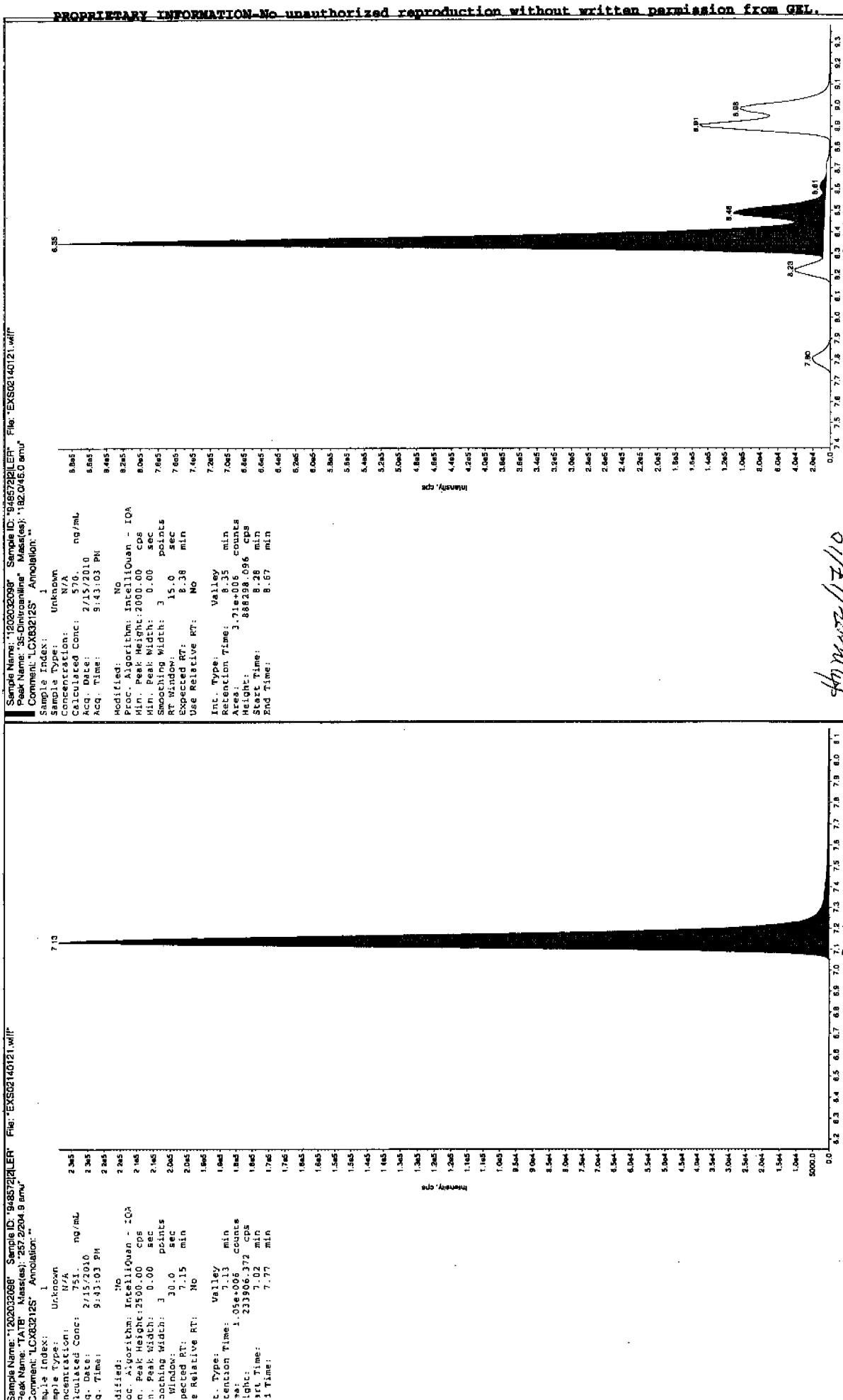
*Concentration =

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

Sample Name: "1202032098" Sample ID: "948572|2|LER" File: "EXS02140121.wif"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX63212S" Annotation: ""



Before Jan 21/10



After Jan 21/10

after Jan 21/7/10

Sample Name: "120203058" Sample ID: "9485721.ER" File: "EX502140121.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 506.

Acq. Date: 2/15/2010

Acq. Time: 9:43:03 PM

Modified: Yes

RT Window: 15.0 sec

Expected RT: 8.38 min

Use Relative RT: No

Int. Type: Manual

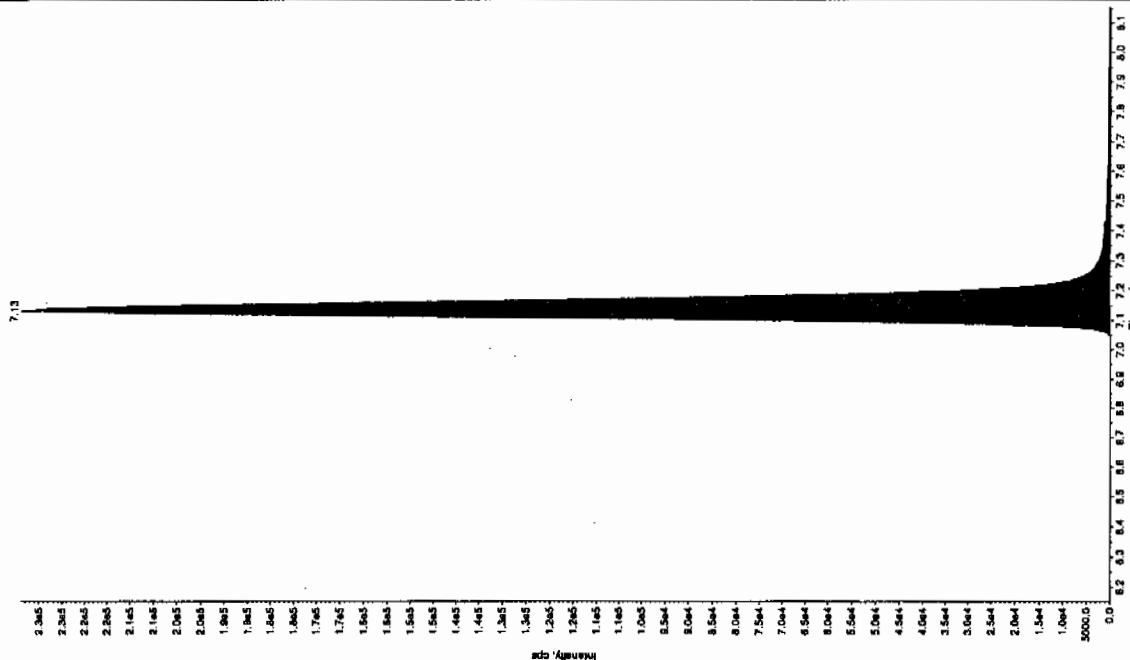
Retention Time: 8.35 min

Area: 3.31e+006 counts

Height: 89442.410 cps

Start Time: 8.28 min

End Time: 8.44 min



Sample Name: "120203058" Sample ID: "9485721.ER" File: "EX502140121.wif"

Peak Name: "TAIB" Mass(es): "257.2204.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 751.

Acq. Date: 2/15/2010

Acq. Time: 9:43:03 PM

Modified: No

RT Window: 30.0 sec

Expected RT: 7.15 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 7.13 min

Area: 1.05e+006 counts

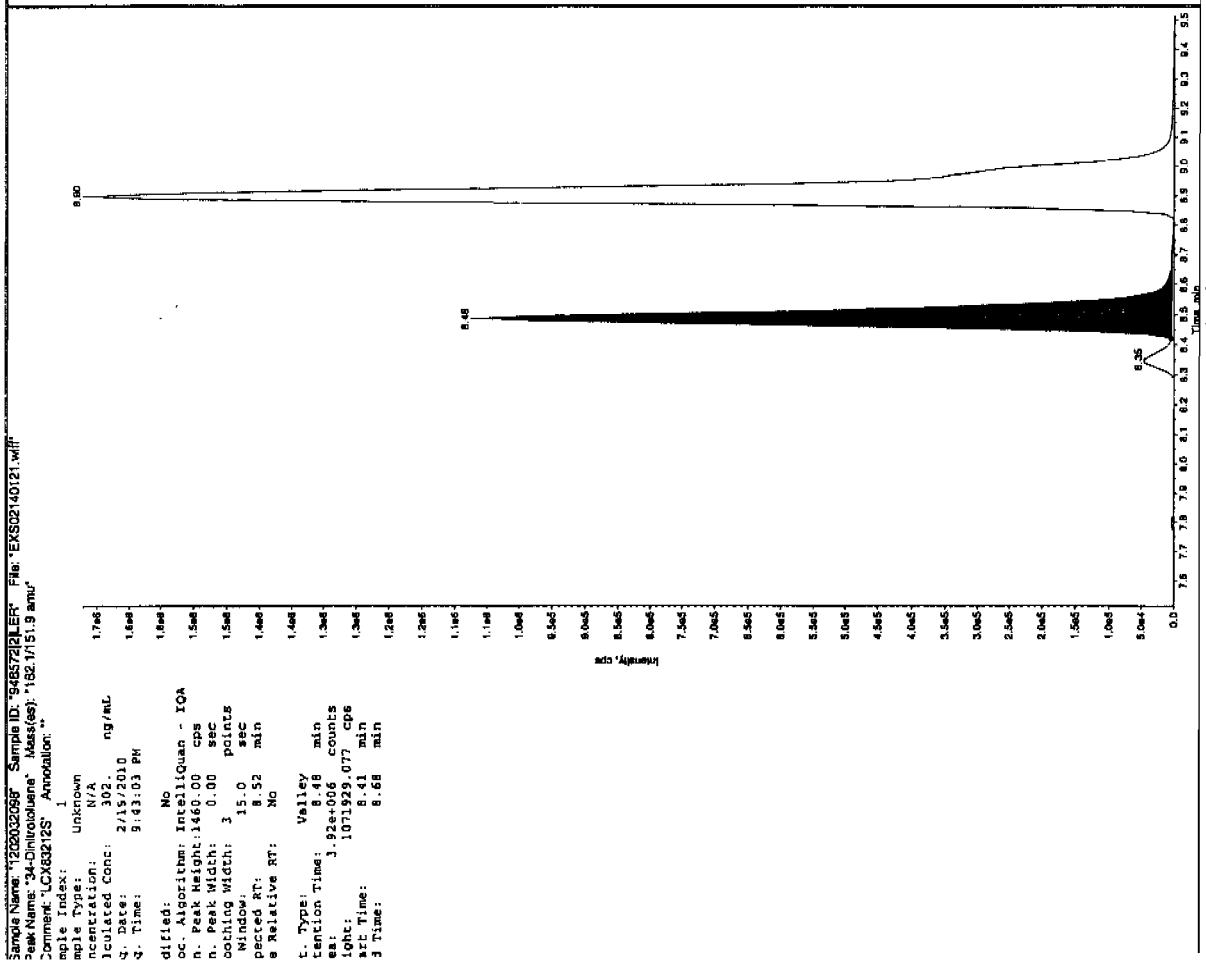
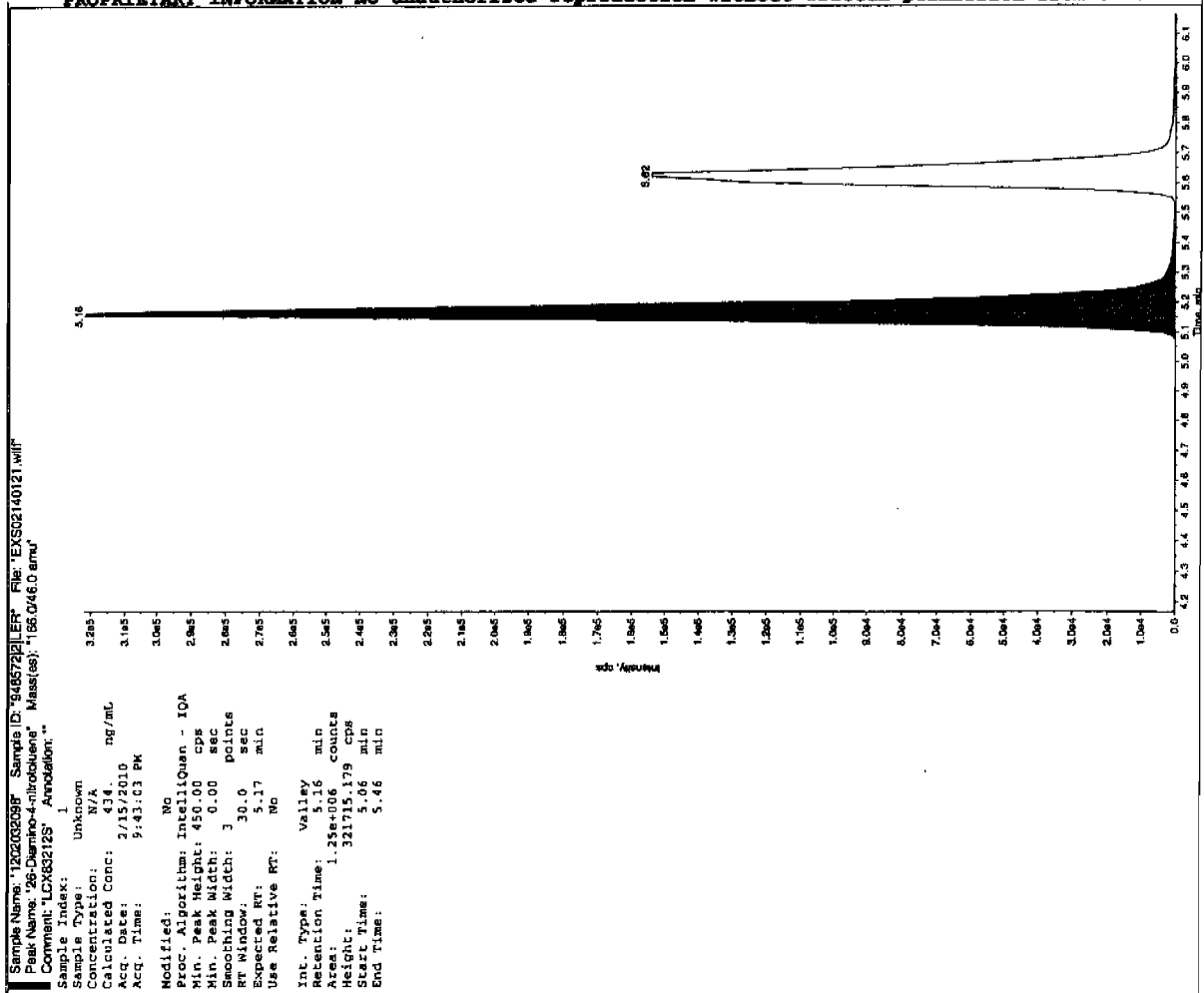
Height: 233906.372 cps

Start Time: 7.02 min

End Time: 7.17 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309(245959001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032099

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216086a

Date Analyzed: 18-FEB-10 11:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4480	
121-14-2	2,4-Dinitrotoluene	4420	
121-82-4	RDX	3690	
19406-51-0	4-Amino-2,6-dinitrotoluene	4190	
2691-41-0	HMX	4120	
35572-78-2	2-Amino-4,6-dinitrotoluene	4830	
479-45-8	Tetryl	3300	
606-20-2	2,6-Dinitrotoluene	4910	
78-11-5	PETN	5760	
88-72-2	o-Nitrotoluene	4740	
98-95-3	Nitrobenzene	4170	
99-08-1	m-Nitrotoluene	4410	
99-35-4	1,3,5-Trinitrobenzene	4770	
99-65-0	m-Dinitrobenzene	4970	
99-99-0	p-Nitrotoluene	4800	

*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\021610expA2.qtd, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0216086a

Date: 18-Feb-2010

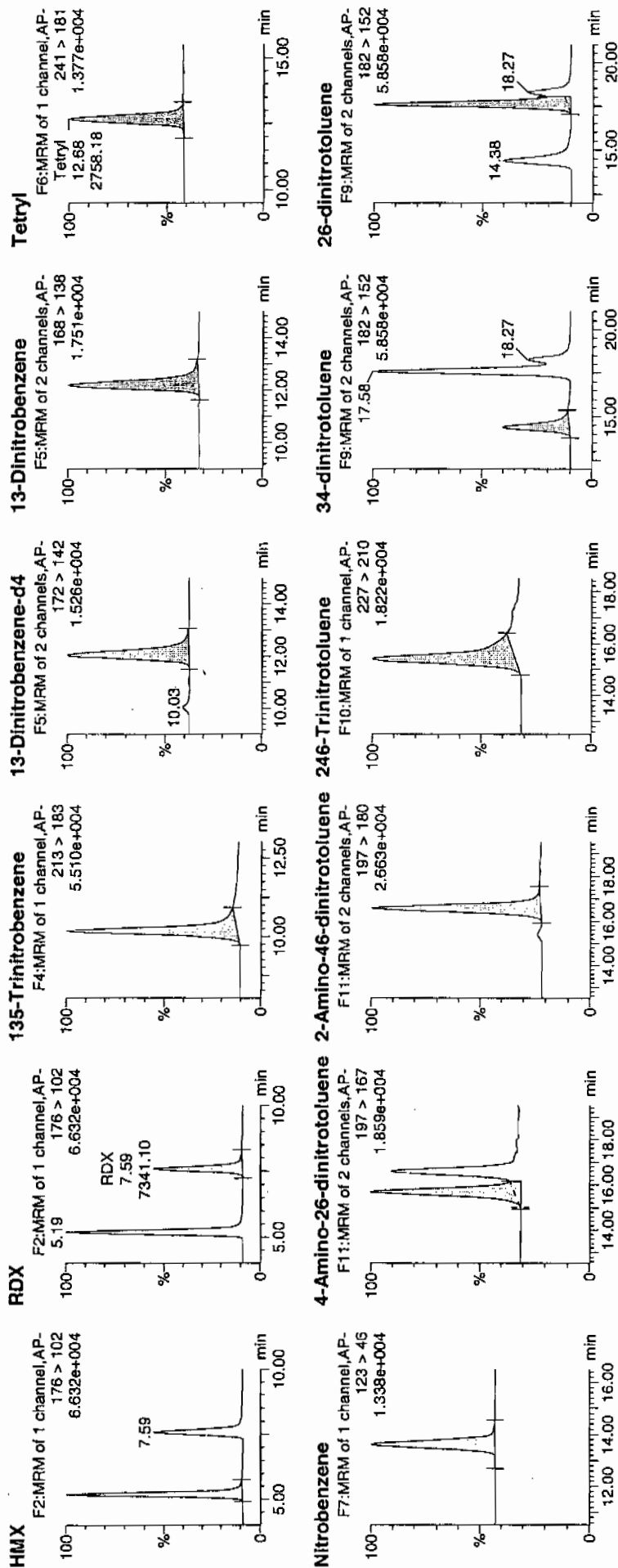
Time: 11:07:26

ID: 1202032099

Vial: 2:5,F

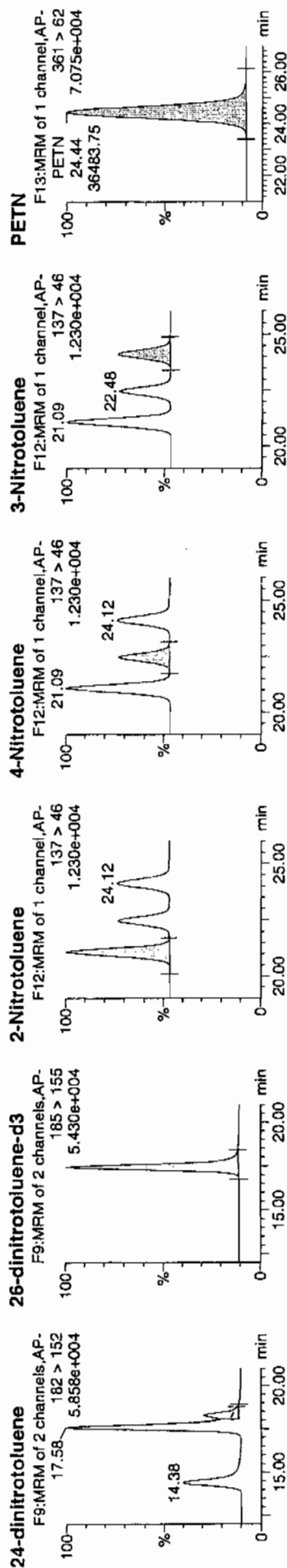
2/19/10

24595700128



time 2/1/10

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Time	% Rec	Dev	SN
1202032099	HMX	176 > 102	5.19	12206.928	3837.569	12206.928	1590.451	db			412.2074	82.4	-17.6	1696.6
1202032099	RDX	176 > 102	7.59	7341.104	3837.569	7341.104	956.478	bb			368.8064	73.8	-26.2	866.0
1202032099	135-Trinitrobenzene	213 > 183	10.18	14183.823	3837.569	14183.823	1848.022	bb			477.2112	95.4	-4.6	1333.0
1202032099	13-Dinitrobenzene-d4	172 > 142	12.03	3837.569	3837.569	3837.569	3837.569	bb			636.9587	127.4	27.4	560.3
1202032099	13-Dinitrobenzene	168 > 138	12.20	4533.043	3837.569	4533.043	590.614	bb			496.9322	99.4	-0.6	426.7
1202032099	Tetryl	241 > 181	12.68	2758.181	3837.569	2758.181	359.366	bb			329.6231	65.9	-34.1	250.7
1202032099	Nitrobenzene	123 > 46	13.63	2747.401	3837.569	2747.401	357.961	bb			416.9565	83.4	-16.6	327.1
1202032099	4-Amino-26-dinitrotoluene	197 > 167	15.68	5209.237	19410.270	5209.237	134.188	MM	19-Feb-10	08:38:26	419.0520	83.8	-16.2	208.0
1202032099	2-Amino-46-dinitrotoluene	197 > 180	16.58	8093.038	19410.270	8093.038	208.473	bb			482.5153	96.5	-3.5	621.4
1202032099	246-Trinitrotoluene	227 > 210	15.41	5834.427	19410.270	5834.427	150.292	bb			448.2927	89.7	-10.3	108.7
1202032099	34-dinitrotoluene	182 > 152	14.38	8374.098	19410.270	8374.098	215.713	bb			238.0936	95.2	-4.8	298.8
1202032099	26-dinitrotoluene	182 > 152	17.58	20186.814	19410.270	20186.814	520.003	MM	19-Feb-10	08:42:56	490.8285	98.2	-1.8	897.7
1202032099	24-dinitrotoluene	182 > 152	18.27	4233.443	19410.270	4233.443	109.052	MM	19-Feb-10	08:47:10	442.3815	88.5	-11.5	180.0
1202032099	26-dinitrotoluene-d3	185 > 155	17.44	19410.270	19410.270	19410.270	19410.270	bb			557.4923	111.5	11.5	17.9
1202032099	2-Nitrotoluene	137 > 46	21.09	2803.106	19410.270	2803.106	72.207	bb			474.4386	94.9	-5.1	817.9
1202032099	4-Nitrotoluene	137 > 46	22.48	1427.965	19410.270	1427.965	36.784	bb			479.8847	96.0	-4.0	402.7
1202032099	3-Nitrotoluene	137 > 46	24.12	1532.856	19410.270	1532.856	39.486	bb			441.2349	88.2	-11.8	411.4
1202032099	PETN	361 > 62	24.44	36483.754	19410.270	36483.754	939.805	bb			576.4604	115.3	15.3	3283.2

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309(245959001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032099

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140125.wiff

Date Analyzed: 15-FEB-10 22:45

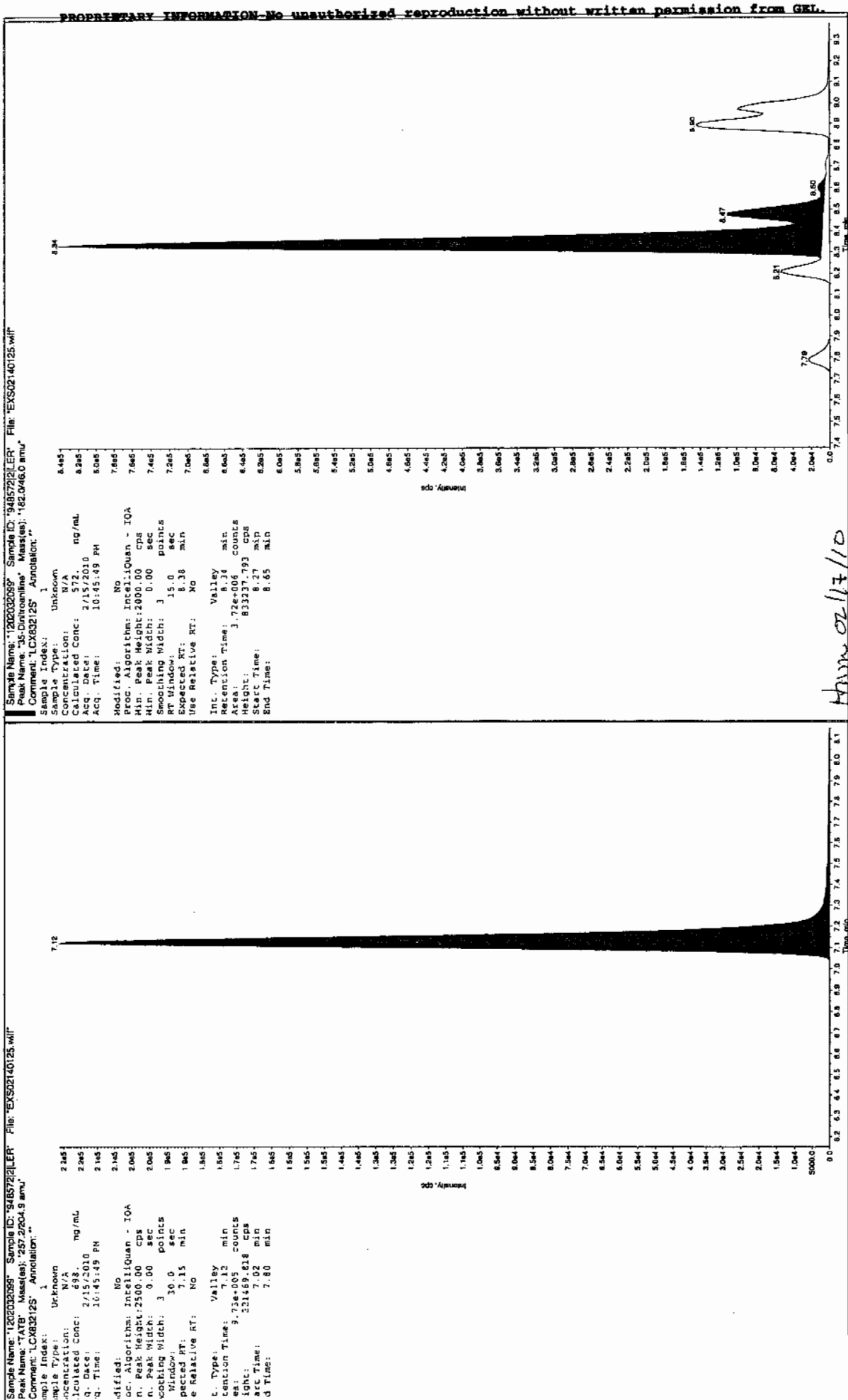
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6980	
59229-75-3	2,6-Diamino-4-nitrotoluene	4120	
618-87-1	3,5-Dinitroaniline	5130	
6629-29-4	2,4-Diamino-6-nitrotoluene	4200	
78-30-8	tris(o-cresyl) phosphate	4890	

*Concentration =

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

Before Jan 21/6/10



After Jan 21/6/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 21/7/10

Sample Name: "1202032059" Sample ID: "948572121ER" File: "EX502140125.will"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Concentration: 894 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 10:45:49 PM

Acq. Time: 10:45:49 PM

Modified: No

oc. Algorithm: IntelliQuan - IQA

n. Peak Height: 2500.00 cps

n. Peak Width: 0.00 sec

soothing Width: 3 points

Window: 30.0 sec

ected RT: 7.15 min

s Relative RT: No

t. Type: Valley

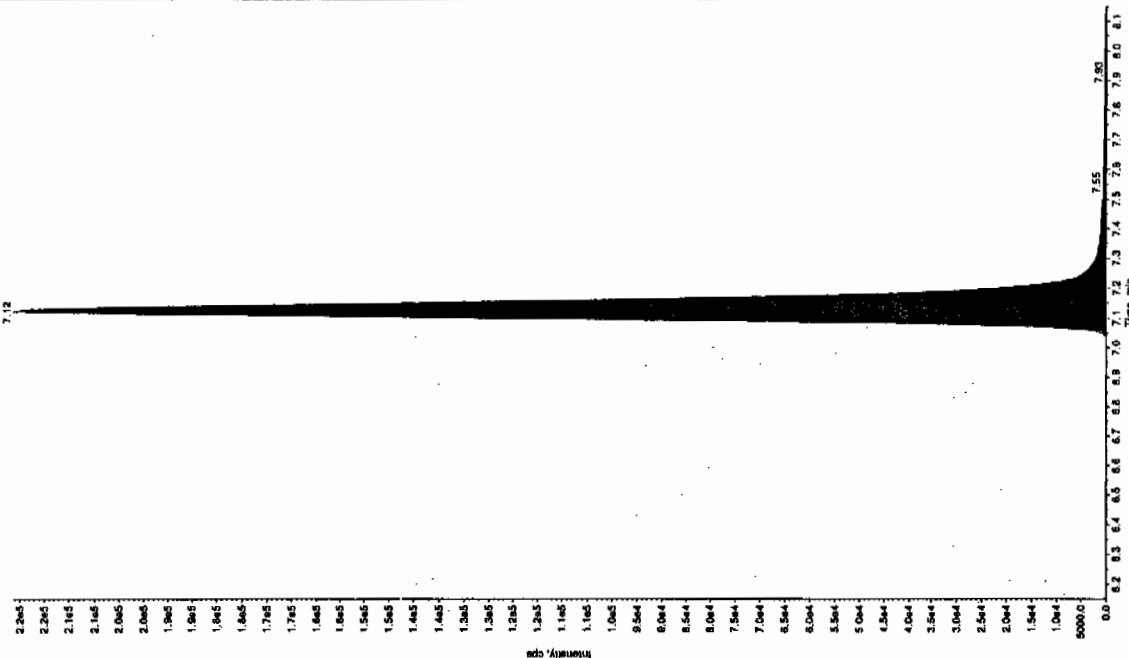
ention Time: 7.12 min

sa: 9.73e+005 counts

ight: 221459.818 cps

ift Time: 7.02 min

f Time: 7.80 min



Sample Name: "1202032059" Sample ID: "948572121ER" File: "EX502140125.will"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Concentration: N/A
 Calculated Conc: 2/15/2010
 Acq. Date: 10:45:49 PM

Acq. Time: 10:45:49 PM

Modified: Yes

RT Window: 15.0 sec

Expected RT: 8.38 min

Use Relative RT: No

Int. Type: Manual

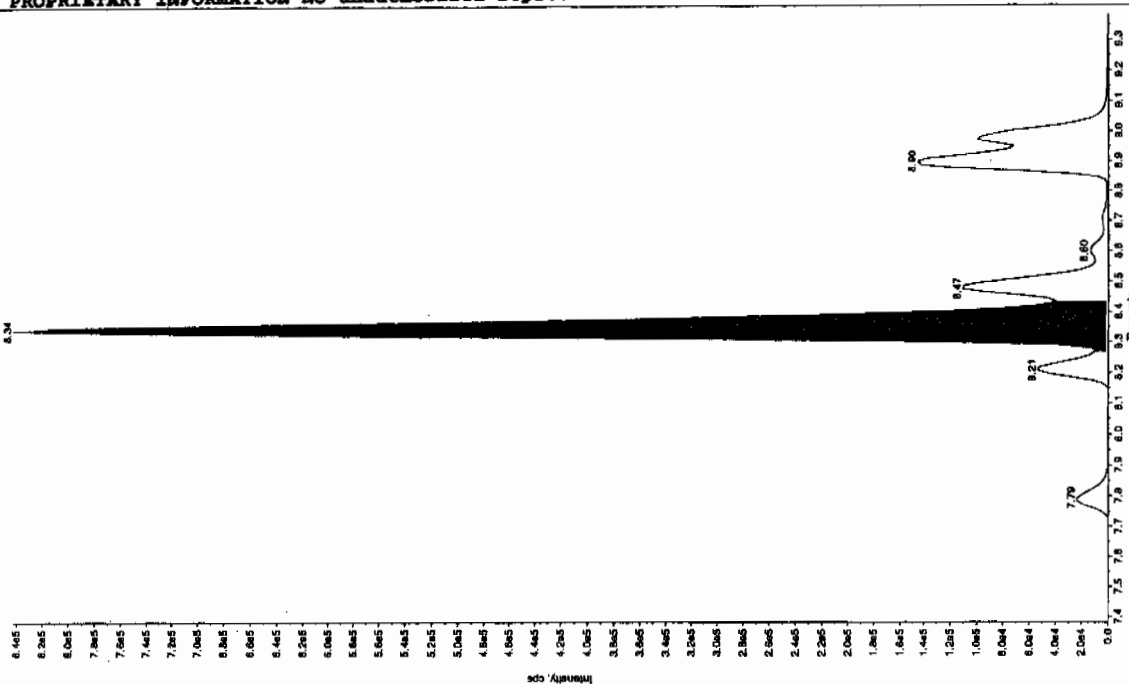
Retention Time: 8.34 min

Area: 3.35e+006 counts

Height: 842739.913 cps

Start Time: 8.27 min

End Time: 8.43 min

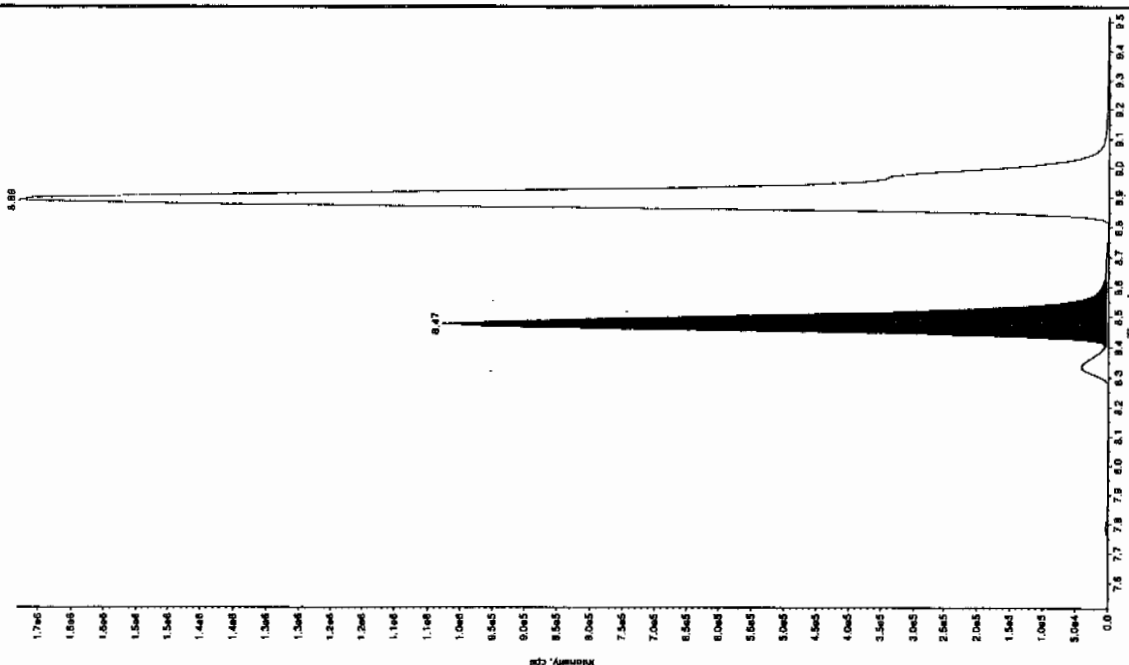


Sample Name: "120203089" Sample ID: "948572" LER: "EXS02140125.wif"
 Peak Name: "28-Diethyl-4-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Name: Unknown
 Concentration: N/A
 Calculated Conc: 412 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 10:45:49 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: 5.17 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 5.17 min
 Area: 1.18e+006 counts
 Height: 295000.397 cps
 Start Time: 5.05 min
 End Time: 5.44 min

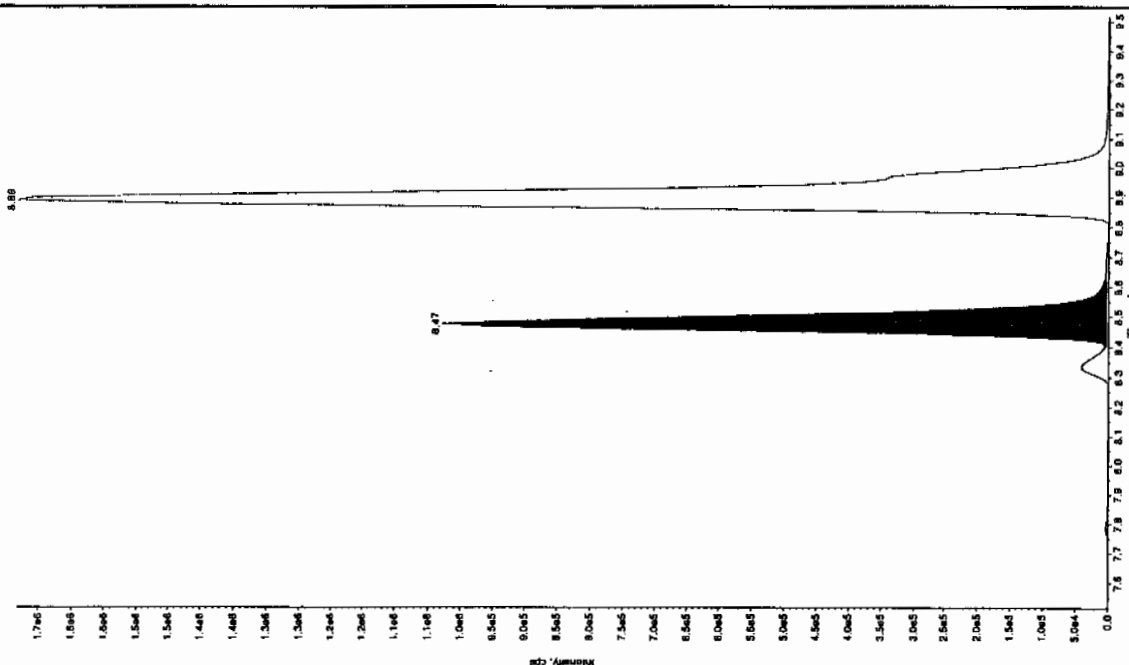


Sample Name: "120203089" Sample ID: "948572" LER: "EXS02140125.wif"
 Peak Name: "34-Chlorofluorene" Mass(es): "182.1715.9 amu"
 Comment: "LCX832125" Annotation: ""

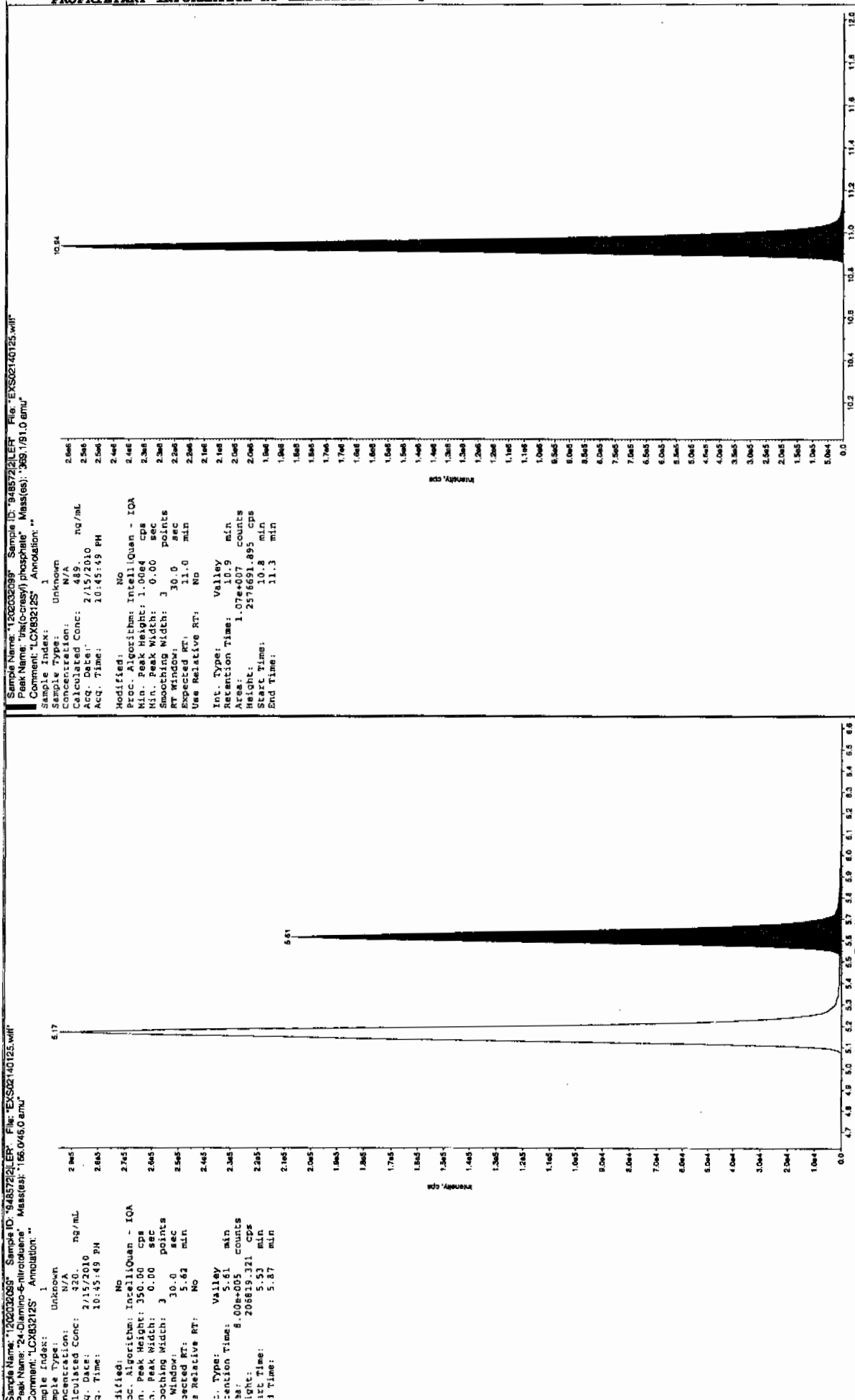
Sample Index: 1
 Sample Name: Unknown
 Concentration: N/A
 Calculated Conc: 294 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 10:45:49 PM

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: 8.52 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.47 min
 Area: 3.42e+004 counts
 Height: 102570.02 cps
 Start Time: 8.40 min
 End Time: 8.67 min



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309(245959001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032100

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216087a

Date Analyzed: 18-FEB-10 11:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5690	
121-14-2	2,4-Dinitrotoluene	4640	
121-82-4	RDX	5910	
19406-51-0	4-Amino-2,6-dinitrotoluene	5260	
2691-41-0	HMX	3660	
35572-78-2	2-Amino-4,6-dinitrotoluene	5460	
479-45-8	Tetryl	3380	
606-20-2	2,6-Dinitrotoluene	4960	
78-11-5	PETN	6800	
88-72-2	o-Nitrotoluene	4860	
98-95-3	Nitrobenzene	4210	
99-08-1	m-Nitrotoluene	4540	
99-35-4	1,3,5-Trinitrobenzene	5000	
99-65-0	m-Dinitrobenzene	5240	
99-99-0	p-Nitrotoluene	5000	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp_PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0216087a

Date: 18-Feb-2010

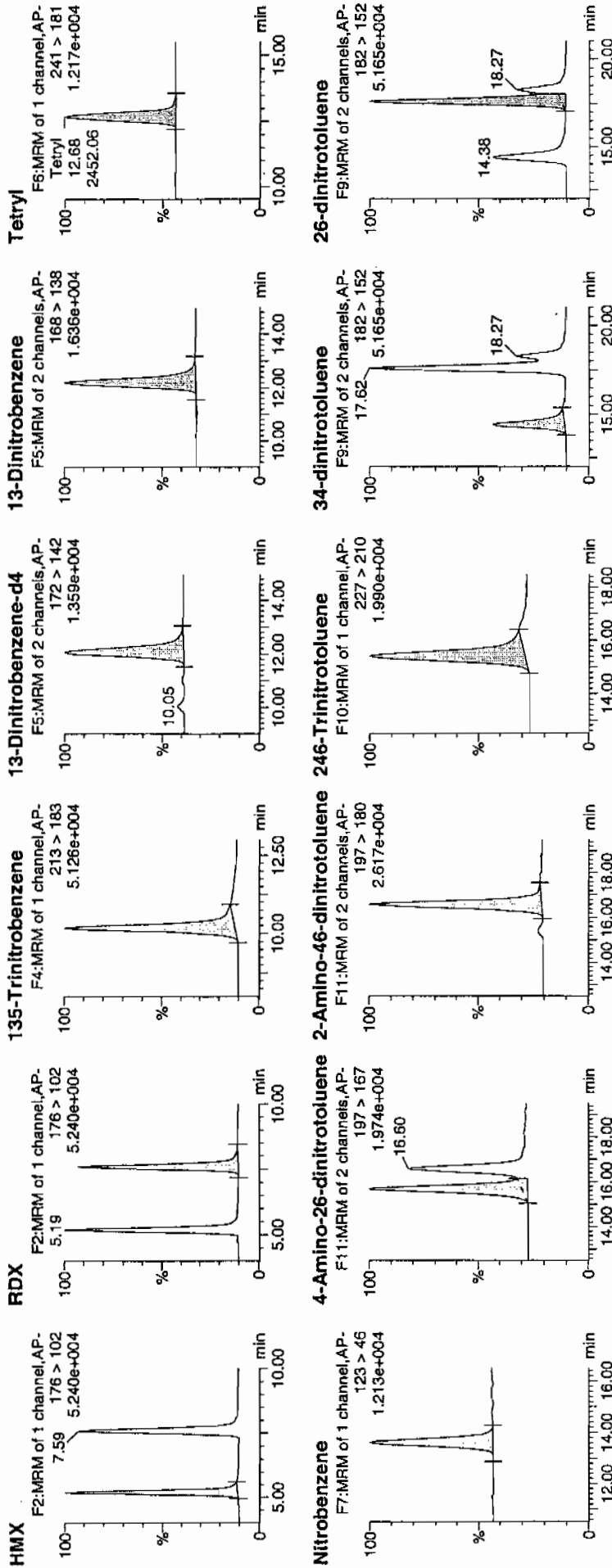
Time: 11:36:54

ID: 1202032100

Vial: 2:6,A

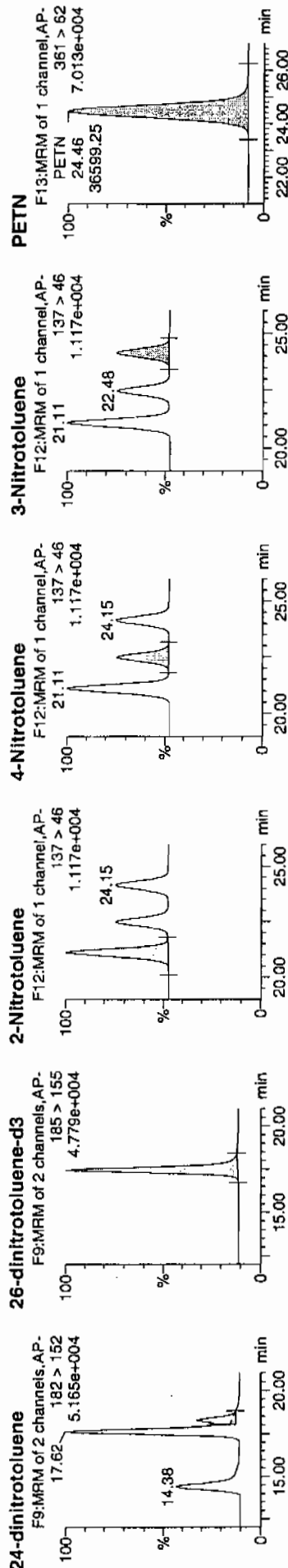
Handwritten notes: *max 948572 / 24595001 MS* and *2/19/10*

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Handwritten note: *same 2/1/10*

Dataset: C:\MASSLYNX\New_Exp.PRO\021610expA2.qld, Time: Fri Feb 19 08:48:26 2010



ID	Name	Trace	RT	Area	IS Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	%R66	%Dev	S/N
1202032100	HMX	176 > 102	5.19	9382.814	3325.714	9382.814	1410.647	bb			73.1	-26.9	1249.2
1202032100	RDX	176 > 102	7.59	10189.819	3325.714	10189.819	1531.975	bb			118.1	18.1	1157.0
1202032100	135-Trinitrobenzene	213 > 183	10.18	12869.273	3325.714	12869.273	1934.814	bb			99.9	-0.1	1118.6
1202032100	13-Dinitrobenzene-d4	172 > 142	12.07	3325.714		3325.714	3325.714	bb			110.4	10.4	415.5
1202032100	13-Dinitrobenzene	168 > 138	12.20	4138.615	3325.714	4138.615	622.215	bb			523.5205	104.7	470.2
1202032100	Tetryl	241 > 181	12.68	2452.056	3325.714	2452.056	368.651	bb			338.1400	67.6	239.8
1202032100	Nitrobenzene	123 > 46	13.63	2403.196	3325.714	2403.196	361.305	bb			420.8518	84.2	333.9
1202032100	4-Amino-26-dinitrotoluene	197 > 167	15.71	5742.911	17062.541	5742.911	168.280	MM	19-Feb-10	08:38:41	525.5496	105.1	218.1
1202032100	2-Amino-46-dinitrotoluene	197 > 180	16.60	8055.035	17062.541	8055.035	236.044	bb			546.3297	109.3	387.7
1202032100	246-Trinitrotoluene	227 > 210	15.41	6504.671	17062.541	6504.671	190.613	bb			568.5605	113.7	501.3
1202032100	34-dinitrotoluene	182 > 152	14.38	8043.268	17062.541	8043.268	235.700	bb			260.1538	104.1	245.1
1202032100	26-dinitrotoluene	182 > 152	17.62	17926.650	17062.541	17926.650	525.322	MM	19-Feb-10	08:43:03	495.8485	99.2	679.0
1202032100	24-dinitrotoluene	182 > 152	18.27	3906.811	17062.541	3906.811	114.485	MM	19-Feb-10	08:47:02	464.4228	92.9	151.3
1202032100	26-dinitrotoluene-d3	185 > 155	17.44	17062.541		17062.541	17062.541	bb			490.0619	98.0	1708.1
1202032100	2-Nitrotoluene	137 > 46	21.11	2526.494	17062.541	2526.494	74.036	bb			486.4594	97.3	824.2
1202032100	4-Nitrotoluene	137 > 46	22.48	1308.081	17062.541	1308.081	38.332	bb			500.0828	100.0	418.8
1202032100	3-Nitrotoluene	137 > 46	24.15	1385.826	17062.541	1385.826	40.610	bb			453.8006	90.8	421.8
1202032100	PETN	361 > 62	24.46	36599.246	17062.541	36599.246	1072.503	bb			679.9727	136.0	7831.7

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7309(245959001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1510

Matrix: SOIL

GEL Sample ID: 1202032100

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948571

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140126.wiff

Date Analyzed: 15-FEB-10 23:01

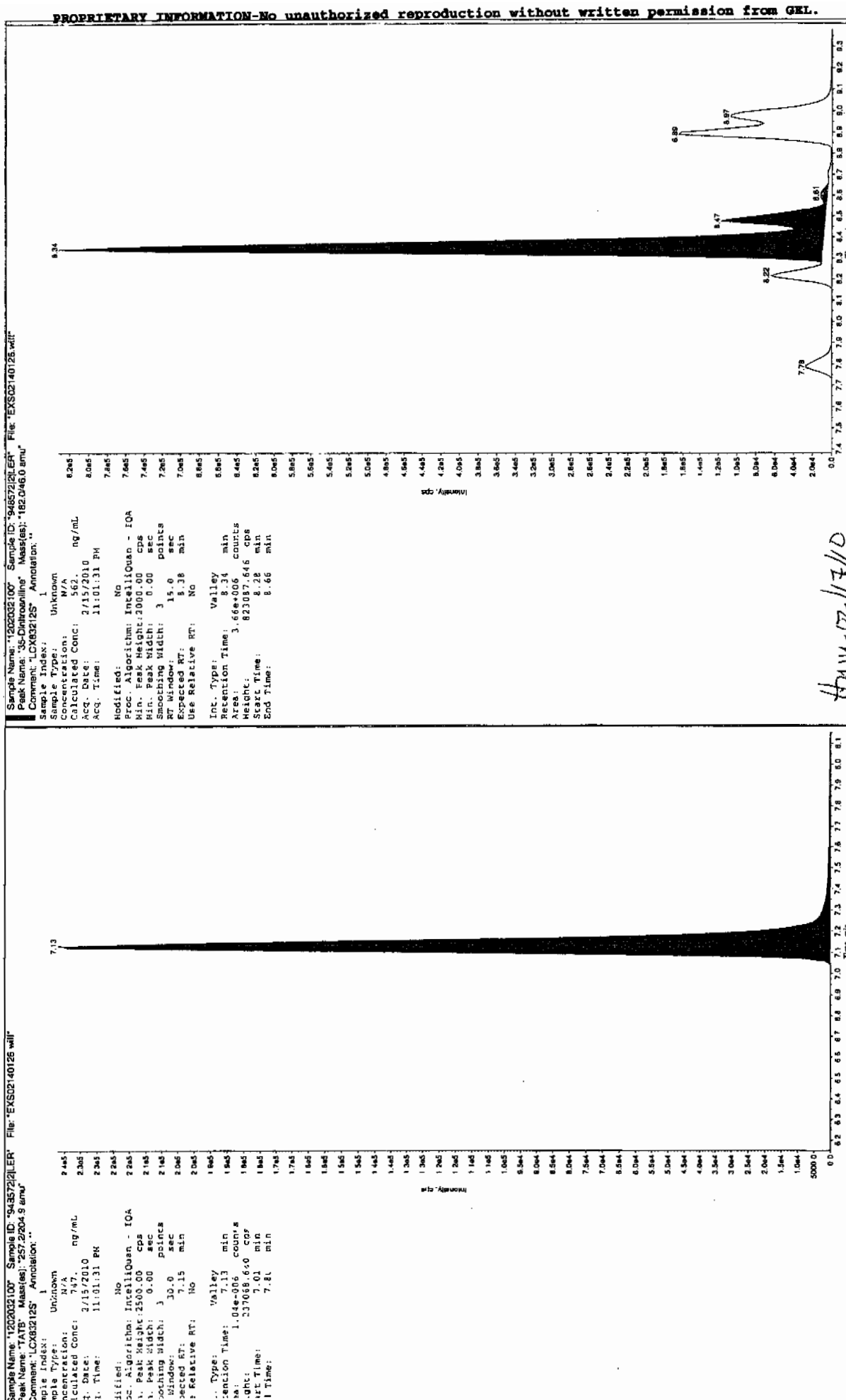
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7470	
59229-75-3	2,6-Diamino-4-nitrotoluene	4140	
618-87-1	3,5-Dinitroaniline	5100	
6629-29-4	2,4-Diamino-6-nitrotoluene	3740	
78-30-8	tris(o-cresyl) phosphate	4870	

*Concentration =

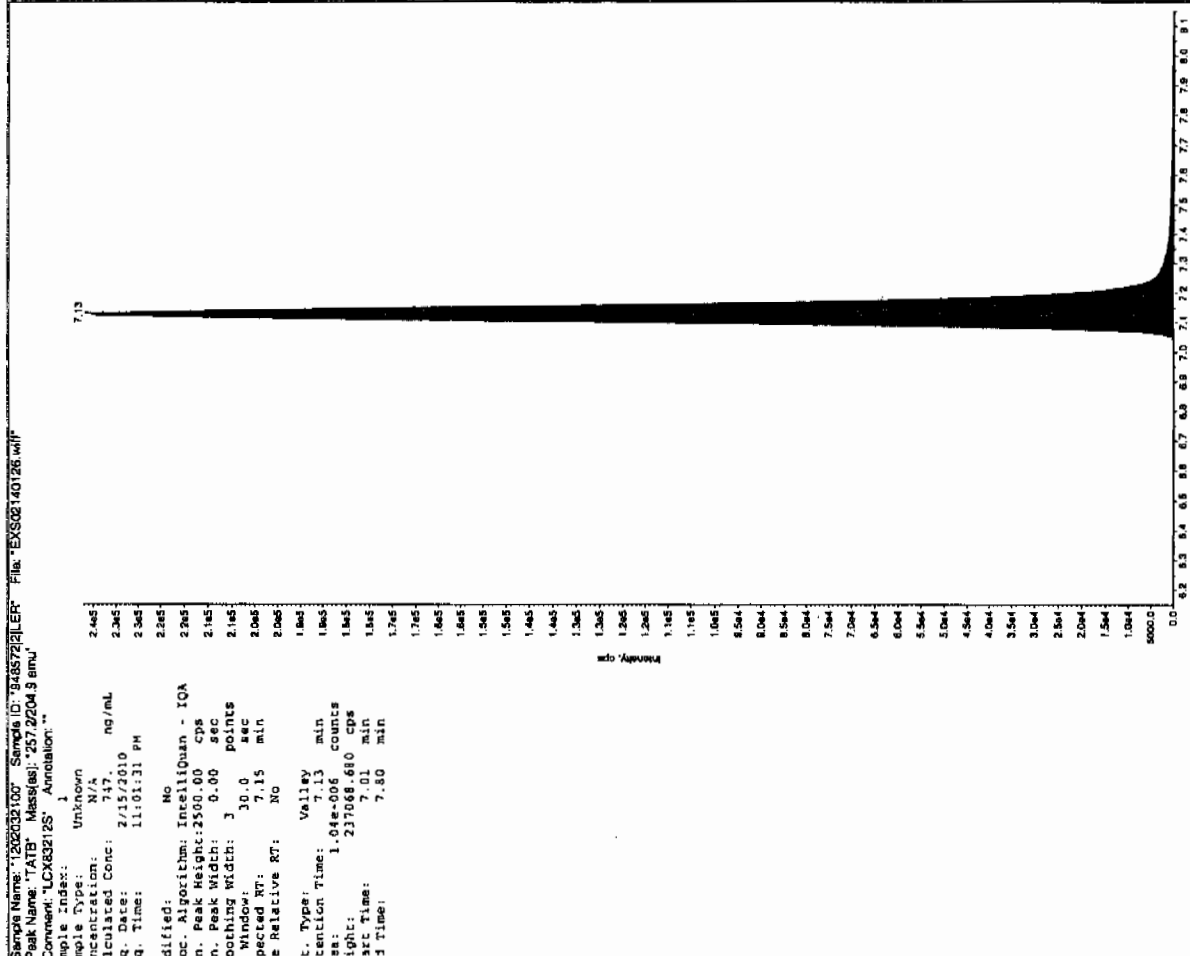
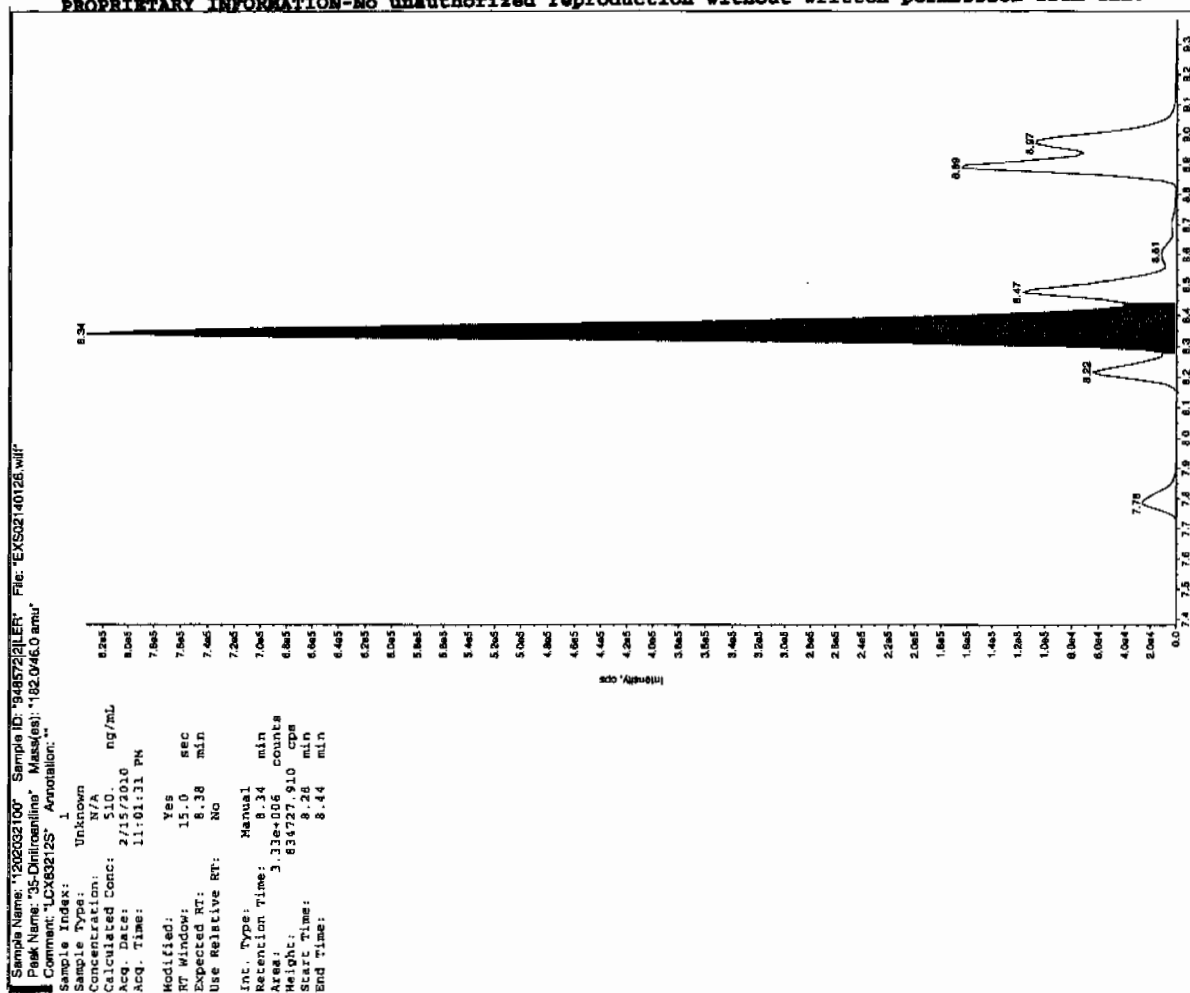
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Before Law 2/16/10

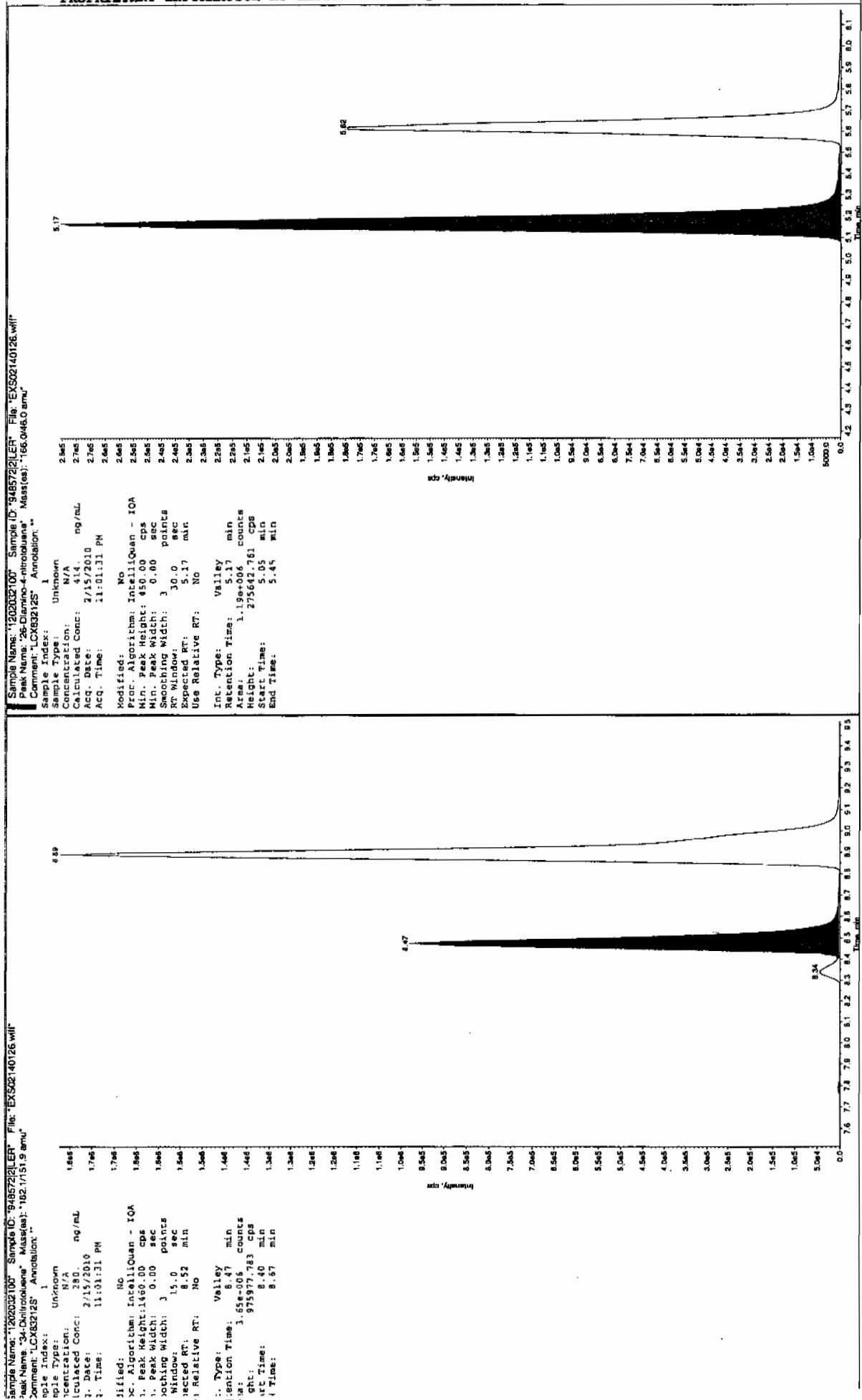


Handwritten: 2/17/10

after Jan 21/2/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

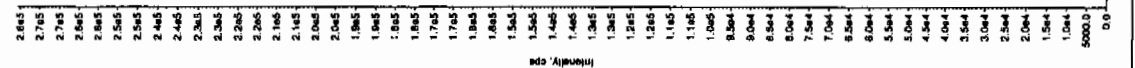
Sample Name: "1202032100" Sample ID: "9485721LER" File: "EX502140126.wif"
 Peak Name: "tel(o-cray) phosphate" Mass(es): "359.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 487. ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:01:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Xr Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.07e+007 counts
 Height: 2471264.893 cps
 Start Time: 10.8 min
 End Time: 11.3 min



Sample Name: "1202032100" Sample ID: "9485721LER" File: "EX502140126.wif"
 Peak Name: "24-Diamino-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 174. ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:01:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Xr Window: 30.0 sec
 Expected RT: 5.62 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.62 min
 Area: 7.13e+005 counts
 Height: 174258.425 cps
 Start Time: 5.53 min
 End Time: 6.05 min



!L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

MISCELLANEOUS DATA

Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 948571 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	Allquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202032097 MB	10-FEB-2010 17:03:00	2	10	5
1202032098 LCS	10-FEB-2010 17:03:00	2	10	5
245955001	10-FEB-2010 17:03:00	2	10	5
245955002	10-FEB-2010 17:03:00	2	10	5
245955001	10-FEB-2010 17:03:00	2	10	5
1202032099 MS (245959001)	10-FEB-2010 17:03:00	2	10	5
1202032100 MSD (245959001)	10-FEB-2010 17:03:00	2	10	5
245959002	10-FEB-2010 17:03:00	2	10	5
245959003	10-FEB-2010 17:03:00	2	10	5
245959004	10-FEB-2010 17:03:00	2	10	5
245959005	10-FEB-2010 17:03:00	2	10	5
245959006	10-FEB-2010 17:03:00	2	10	5
245959007	10-FEB-2010 17:03:00	2	10	5
245959008	10-FEB-2010 17:03:00	2	10	5
245959009	10-FEB-2010 17:03:00	2	10	5
245959010	10-FEB-2010 17:03:00	2	10	5
245959012	10-FEB-2010 17:03:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202032098	8321 Explosives LCS	IXX100125-03	.1	mL	Final Solvent: ACN
LCS	1202032098	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
MS	1202032099	8321 Explosives LCS	IXX100125-03	.1	mL	
MS	1202032099	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
MSD	1202032100	8321 Explosives LCS	IXX100125-03	.1	mL	
MSD	1202032100	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	IXP100204-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 02/16/10
 Extr. Injection Volume: 50uL
 Sequence Number: 021610expA
 Initial Calibration Date: 02/16/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100128-01.3
 Mobile Phase Lot#: 1269631, 1263794
 Standard-Samp Reagent Lot#: 1260901, 1261217
 Reviewed BY: *[Signature]*
 Date: 02/21/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100216-07,
 WXX100219-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0216001a	XIBLK01	MAP	2/16/10 17:07			1		USE	B
EXP0216002a	XIBLK01	MAP	2/16/10 17:37			1		USE	B
EXP0216003a	WXXICAL-01	MAP	2/16/10 18:07			1		USE	I
EXP0216004a	WXXICAL-02	MAP	2/16/10 18:36			1		USE	I
EXP0216005a	WXXICAL-03	MAP	2/16/10 19:06			1		USE	I
EXP0216006a	WXXICAL-04	MAP	2/16/10 19:35			1		USE	I
EXP0216007a	WXXICAL-05	MAP	2/16/10 20:05			1		USE	I
EXP0216008a	WXXICAL-06	MAP	2/16/10 20:35			1		USE	I
EXP0216009a	XIBLK02	MAP	2/16/10 21:04			1		USE	B
EXP0216010a	WXXICV	MAP	2/16/10 21:34			1		USE	C
EXP0216011a	XIBLK03	MAP	2/16/10 22:04			1		USE	B
EXP0216012a	WXXCRI	MAP	2/16/10 22:33			1		USE	C
EXP0216013a	1202038759	MAP	2/16/10 23:03	951342	Various	2	LANL	USE	S
EXP0216014a	1202038760	MAP	2/16/10 23:33	951342	Various	2	LANL	USE	S
EXP0216015a	246569007	MAP	2/17/10 0:02	951342	10-1669	2	LANL	USE	S
EXP0216016a	1202038761	MAP	2/17/10 0:32	951342	10-1669	2	LANL	USE	S
EXP0216017a	1202038762	MAP	2/17/10 1:02	951342	10-1669	2	LANL	USE	S
EXP0216018a	246572005	MAP	2/17/10 1:32	951342	10-1678	2	LANL	USE	S
EXP0216019a	246580002	MAP	2/17/10 2:01	951342	10-1683	2	LANL	USE	S
EXP0216020a	246580003	MAP	2/17/10 2:31	951342	10-1683	2	LANL	USE	S
EXP0216021a	WXXCCV	MAP	2/17/10 3:00			1		USE	C
EXP0216022a	XIBLK04	MAP	2/17/10 3:30			1		USE	B
EXP0216023a	WXXCRI	MAP	2/17/10 3:59			1		USE	C
EXP0216024a	246595004	MAP	2/17/10 4:29	951342	10-1694	2	LANL	USE	S
EXP0216025a	1202038763	MAP	2/17/10 4:58	951342	10-1694	2	LANL	USE	S
EXP0216026a	1202038764	MAP	2/17/10 5:28	951342	10-1694	2	LANL	USE	S
EXP0216027a	WXXCCV	MAP	2/17/10 5:58			1		USE	C
EXP0216028a	XIBLK05	MAP	2/17/10 6:28			1		USE	B
EXP0216029a	WXXCRI	MAP	2/17/10 6:57			1		USE	C
EXP0216030a	1202030577	MAP	2/17/10 7:27	947919	Various	2	LANL	USE	S
EXP0216031a	1202030578	MAP	2/17/10 7:57	947919	Various	2	LANL	USE	S

EXP0216032a	245908001	MAP	2/17/10 8:27	947919	10-1486	2	LANL	USE	S
EXP0216033a	1202030579	MAP	2/17/10 8:56	947919	10-1486	2	LANL	USE	S
EXP0216034a	1202030580	MAP	2/17/10 9:26	947919	10-1486	2	LANL	USE	S
EXP0216035a	245908002	MAP	2/17/10 9:56	947919	10-1486	2	LANL	USE	S
EXP0216036a	245908005	MAP	2/17/10 10:25	947919	10-1486	2	LANL	USE	S
EXP0216037a	245908006	MAP	2/17/10 10:55	947919	10-1486	2	LANL	USE	S
EXP0216038a	245912003	MAP	2/17/10 11:25	947919	10-1488	2	LANL	USE	S
EXP0216039a	WXXCCV	MAP	2/17/10 11:55			1		USE	C
EXP0216040a	XIBLK06	MAP	2/17/10 12:24			1		USE	B
EXP0216041a	WXXCRI	MAP	2/17/10 12:54			1		USE	C
EXP0216042a	1202038769	MAP	2/17/10 13:23	951349	Various	2	LANL	USE	S
EXP0216043a	1202038770	MAP	2/17/10 13:53	951349	Various	2	LANL	USE	S
EXP0216044a	246554001	MAP	2/17/10 14:23	951349	10-1665	2	LANL	USE	S
EXP0216045a	1202038771	MAP	2/17/10 14:52	951349	10-1665	2	LANL	USE	S
EXP0216046a	1202038772	MAP	2/17/10 15:22	951349	10-1665	2	LANL	USE	S
EXP0216047a	246554002	MAP	2/17/10 15:52	951349	10-1665	2	LANL	USE	S
EXP0216048a	246554003	MAP	2/17/10 16:21	951349	10-1665	2	LANL	USE	S
EXP0216049a	246554004	MAP	2/17/10 16:51	951349	10-1665	2	LANL	USE	S
EXP0216050a	246554005	MAP	2/17/10 17:20	951349	10-1665	2	LANL	USE	S
EXP0216051a	246554006	MAP	2/17/10 17:50	951349	10-1665	2	LANL	USE	S
EXP0216052a	WXXCCV	MAP	2/17/10 18:20			1		USE	C
EXP0216053a	XIBLK07	MAP	2/17/10 18:50			1		USE	B
EXP0216054a	WXXCRI	MAP	2/17/10 19:19			1		USE	C
EXP0216055a	246557001	MAP	2/17/10 19:49	951349	10-1666	2	LANL	USE	S
EXP0216056a	246562001	MAP	2/17/10 20:19	951349	10-1668	2	LANL	USE	S
EXP0216057a	246575003	MAP	2/17/10 20:49	951349	10-1675	2	LANL	USE	S
EXP0216058a	246575004	MAP	2/17/10 21:18	951349	10-1675	2	LANL	USE	S
EXP0216059a	246582002	MAP	2/17/10 21:48	951349	10-1685	2	LANL	USE	S
EXP0216060a	246582003	MAP	2/17/10 22:17	951349	10-1685	2	LANL	USE	S
EXP0216061a	246582004	MAP	2/17/10 22:47	951349	10-1685	2	LANL	USE	S
EXP0216062a	246582005	MAP	2/17/10 23:16	951349	10-1685	2	LANL	USE	S
EXP0216063a	246582006	MAP	2/17/10 23:46	951349	10-1685	2	LANL	USE	S
EXP0216064a	246582007	MAP	2/18/10 0:15	951349	10-1685	2	LANL	USE	S
EXP0216065a	WXXCCV	MAP	2/18/10 0:45			1		USE	C
EXP0216066a	XIBLK08	MAP	2/18/10 1:14			1		USE	B
EXP0216067a	WXXCRI	MAP	2/18/10 1:44			1		USE	C
EXP0216068a	246582008	MAP	2/18/10 2:14	951349	10-1685	2	LANL	USE	S
EXP0216069a	XIBLK09	MAP	2/18/10 2:43			1		USE	B
EXP0216070a	1202032097	MAP	2/18/10 3:13	948572	Various	2	LANL	DUSE	S

EXP0216071a	1202032098	MAP	2/18/10 3:43	948572	Various	2	LANL	DUSE	S
EXP0216072a	245955001	MAP	2/18/10 4:12	948572	10-1509	2	LANL	DUSE	S
EXP0216073a	245955002	MAP	2/18/10 4:42	948572	10-1509	2	LANL	DUSE	S
EXP0216074a	245959001	MAP	2/18/10 5:12	948572	10-1510	2	LANL	DUSE	S
EXP0216075a	1202032099	MAP	2/18/10 5:42	948572	10-1510	2	LANL	DUSE	S
EXP0216076a	1202032100	MAP	2/18/10 6:11	948572	10-1510	2	LANL	DUSE	S
EXP0216077a	245959002	MAP	2/18/10 6:41	948572	10-1510	2	LANL	DUSE	S
EXP0216078a	WXXCCV	MAP	2/18/10 7:10			1		USE	C
EXP0216079a	XIBLK10	MAP	2/18/10 7:40			1		USE	B
EXP0216080a	WXXCRI	MAP	2/18/10 8:10			1		USE	C
EXP0216081a	1202032097	MAP	2/18/10 8:39	948572	Various	2	LANL	USE	S
EXP0216082a	1202032098	MAP	2/18/10 9:09	948572	Various	2	LANL	USE	S
EXP0216083a	245955001	MAP	2/18/10 9:38	948572	10-1509	2	LANL	USE	S
EXP0216084a	245955002	MAP	2/18/10 10:08	948572	10-1509	2	LANL	USE	S
EXP0216085a	245959001	MAP	2/18/10 10:37	948572	10-1510	2	LANL	USE	S
EXP0216086a	1202032099	MAP	2/18/10 11:07	948572	10-1510	2	LANL	USE	S
EXP0216087a	1202032100	MAP	2/18/10 11:36	948572	10-1510	2	LANL	USE	S
EXP0216088a	245959002	MAP	2/18/10 12:06	948572	10-1510	2	LANL	USE	S
EXP0216089a	WXXCCV	MAP	2/18/10 12:36			1		USE	C
EXP0216090a	XIBLK11	MAP	2/18/10 13:05			1		USE	B
EXP0216091a	WXXCRI	MAP	2/18/10 13:35			1		USE	C
EXP0216092a	245959003	MAP	2/18/10 14:04	948572	10-1510	2	LANL	USE	S
EXP0216093a	245959004	MAP	2/18/10 14:34	948572	10-1510	2	LANL	USE	S
EXP0216094a	245959005	MAP	2/18/10 15:03	948572	10-1510	2	LANL	USE	S
EXP0216095a	245959006	MAP	2/18/10 15:33	948572	10-1510	2	LANL	USE	S
EXP0216096a	245959007	MAP	2/18/10 16:03	948572	10-1510	2	LANL	USE	S
EXP0216097a	245959008	MAP	2/18/10 16:32	948572	10-1510	2	LANL	USE	S
EXP0216098a	245959009	MAP	2/18/10 17:02	948572	10-1510	2	LANL	USE	S
EXP0216099a	245959010	MAP	2/18/10 17:32	948572	10-1510	2	LANL	USE	S
EXP0216100a	245959012	MAP	2/18/10 18:01	948572	10-1510	2	LANL	USE	S
EXP0216101a	WXXCCV	MAP	2/18/10 18:31			1		USE	C
EXP0216102a	XIBLK12	MAP	2/18/10 19:00			1		USE	B
EXP0216103a	WXXCRI	MAP	2/18/10 19:30			1		USE	C
EXP0216104a	1202023589	MAP	2/18/10 19:59	944915	Various	2	LANL	USE	S
EXP0216105a	1202023590	MAP	2/18/10 20:29	944915	Various	2	LANL	USE	S
EXP0216106a	245377001	MAP	2/18/10 20:58	944915	10-1378	2	LANL	USE	S
EXP0216107a	245377002	MAP	2/18/10 21:28	944915	10-1378	2	LANL	USE	S
EXP0216108a	245377003	MAP	2/18/10 21:57	944915	10-1378	2	LANL	USE	S
EXP0216109a	245377004	MAP	2/18/10 22:27	944915	10-1378	2	LANL	USE	S

EXP0216110a	245377005	MAP	2/18/10 22:56	944915	10-1378	2	LANL	USE	S
EXP0216111a	245377006	MAP	2/18/10 23:26	944915	10-1378	2	LANL	USE	S
EXP0216112a	245377007	MAP	2/18/10 23:56	944915	10-1378	2	LANL	USE	S
EXP0216113a	245377008	MAP	2/19/10 0:25	944915	10-1378	2	LANL	USE	S
EXP0216114a	WXXCCV	MAP	2/19/10 0:55			1		USE	C
EXP0216115a	XIBLK13	MAP	2/19/10 1:24			1		USE	B
EXP0216116a	WXXCRI	MAP	2/19/10 1:54			1		USE	C
EXP0216117a	245377009	MAP	2/19/10 2:23	944915	10-1378	2	LANL	USE	S
EXP0216118a	245377010	MAP	2/19/10 2:53	944915	10-1378	2	LANL	USE	S
EXP0216119a	245396001	MAP	2/19/10 3:23	944915	10-1394	2	LANL	USE	S
EXP0216120a	1202023591	MAP	2/19/10 3:52	944915	10-1394	2	LANL	USE	S
EXP0216121a	1202023592	MAP	2/19/10 4:22	944915	10-1394	2	LANL	USE	S
EXP0216122a	245396002	MAP	2/19/10 4:52	944915	10-1394	2	LANL	USE	S
EXP0216123a	245396003	MAP	2/19/10 5:22	944915	10-1394	2	LANL	USE	S
EXP0216124a	245396004	MAP	2/19/10 5:51	944915	10-1394	2	LANL	USE	S
EXP0216125a	247033002	MAP	2/19/10 6:21	944915	10-1394	2	LANL	USE	S
EXP0216126a	WXXCCV	MAP	2/19/10 6:51		10-1821	1	LANL	USE	C
EXP0216127a	XIBLK14	MAP	2/19/10 7:21			1		USE	B
EXP0216128a	WXXCRI	MAP	2/19/10 7:51			1		USE	C
EXP0216129a	1202032113	MAP	2/19/10 8:20	948579	Various	2	LANL	USE	S
EXP0216130a	1202032114	MAP	2/19/10 8:51	948579	Various	2	LANL	USE	S
EXP0216131a	245994001	MAP	2/19/10 9:20	948579	10-1516	2	LANL	USE	S
EXP0216132a	245994002	MAP	2/19/10 9:50	948579	10-1516	2	LANL	USE	S
EXP0216133a	245994003	MAP	2/19/10 10:19	948579	10-1516	2	LANL	USE	S
EXP0216134a	245994004	MAP	2/19/10 10:49	948579	10-1516	2	LANL	USE	S
EXP0216135a	245994005	MAP	2/19/10 11:18	948579	10-1516	2	LANL	USE	S
EXP0216136a	245994006	MAP	2/19/10 11:48	948579	10-1516	2	LANL	USE	S
EXP0216137a	245994007	MAP	2/19/10 12:18	948579	10-1516	2	LANL	USE	S
EXP0216138a	245994008	MAP	2/19/10 12:47	948579	10-1516	2	LANL	USE	S
EXP0216139a	WXXCCV	MAP	2/19/10 13:16			1		USE	C
EXP0216140a	XIBLK15	MAP	2/19/10 13:46			1		USE	B
EXP0216141a	WXXCRI	MAP	2/19/10 14:38			1		USE	C
EXP0216142a	245994009	MAP	2/19/10 15:08	948579	10-1516	2	LANL	USE	S
EXP0216143a	246006001	MAP	2/19/10 15:37	948579	10-1520	500	LANL	DUSE	S
EXP0216144a	246006001	MAP	2/19/10 16:07	948579	10-1520	2	LANL	USE	S
EXP0216145a	1202032115	MAP	2/19/10 16:37	948579	10-1520	2	LANL	USE	S
EXP0216146a	1202032116	MAP	2/19/10 17:07	948579	10-1520	2	LANL	USE	S
EXP0216147a	246006002	MAP	2/19/10 17:36	948579	10-1520	2	LANL	USE	S
EXP0216148a	246006003	MAP	2/19/10 18:06	948579	10-1520	2	LANL	USE	S

EXP0216149a	246006004	MAP	2/19/10 18:35	948579	10-1520	2	LANL	USE	S
EXP0216150a	246006005	MAP	2/19/10 19:05	948579	10-1520	2	LANL	USE	S
EXP0216151a	246006006	MAP	2/19/10 19:35	948579	10-1520	2	LANL	USE	S
EXP0216152a	WXXCCV	MAP	2/19/10 20:04			1		USE	C
EXP0216153a	XIBLK16	MAP	2/19/10 20:34			1		USE	B
EXP0216154a	WXXCRI	MAP	2/19/10 21:04			1		USE	C
EXP0216155a	246006007	MAP	2/19/10 21:34	948579	10-1520	2	LANL	USE	S
EXP0216156a	246006008	MAP	2/19/10 22:04	948579	10-1520	2	LANL	USE	S
EXP0216157a	246006009	MAP	2/19/10 22:34	948579	10-1520	2	LANL	USE	S
EXP0216158a	XIBLK17	MAP	2/19/10 23:03			1		USE	B
EXP0216159a	1202040417	MAP	2/19/10 23:33	952030	Various	2	LANL	USE	S
EXP0216160a	1202040418	MAP	2/20/10 0:03	952030	Various	2	LANL	USE	S
EXP0216161a	246707005	MAP	2/20/10 0:32	952030	10-1726	2	LANL	USE	S
EXP0216162a	1202040419	MAP	2/20/10 1:02	952030	10-1726	2	LANL	USE	S
EXP0216163a	1202040420	MAP	2/20/10 1:31	952030	10-1726	2	LANL	USE	S
EXP0216164a	246764004	MAP	2/20/10 2:01	952030	10-1721	2	LANL	USE	S
EXP0216165a	WXXCCV	MAP	2/20/10 2:30			1		USE	C
EXP0216166a	XIBLK18	MAP	2/20/10 3:00			1		USE	B
EXP0216167a	WXXCRI	MAP	2/20/10 3:30			1		USE	C
EXP0216168a	1202028657	MAP	2/20/10 3:59	947074	Various	2	LANL	USE	S
EXP0216169a	1202028658	MAP	2/20/10 4:29	947074	Various	2	LANL	USE	S
EXP0216170a	245789005	MAP	2/20/10 4:59	947074	10-1466	2	LANL	USE	S
EXP0216171a	245789009	MAP	2/20/10 5:28	947074	10-1466	2	LANL	USE	S
EXP0216172a	245789013	MAP	2/20/10 5:58	947074	10-1466	2	LANL	USE	S
EXP0216173a	245789017	MAP	2/20/10 6:28	947074	10-1466	2	LANL	USE	S
EXP0216174a	245809001	MAP	2/20/10 6:57	947074	10-1480	2	LANL	USE	S
EXP0216175a	1202028659	MAP	2/20/10 7:27	947074	10-1480	2	LANL	USE	S
EXP0216176a	1202028660	MAP	2/20/10 7:57	947074	10-1480	2	LANL	USE	S
EXP0216177a	WXXCCV	MAP	2/20/10 8:26			1		USE	C
EXP0216178a	XIBLK19	MAP	2/20/10 8:56			1		USE	B
EXP0216179a	WXXCRI	MAP	2/20/10 9:25			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 02/14/10
 Extr. Injection Volume: 10uL
 Sequence Number: 021410exs
 Initial Calibration Date: 021410
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1263794, 1258141
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: *hmc*
 Date: 02/17/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100214-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02140001.wiff	XIBLK01	LER	2/14/2010 14:17			1		USE	B
EXS02140002.wiff	XIBLK01	LER	2/14/2010 14:33			1		USE	B
EXS02140003.wiff	WXXICAL-19	LER	2/14/2010 14:48			1		USE	I
EXS02140004.wiff	WXXICAL-20	LER	2/14/2010 15:04			1		USE	I
EXS02140005.wiff	WXXICAL-21	LER	2/14/2010 15:20			1		USE	I
EXS02140006.wiff	WXXICAL-22	LER	2/14/2010 15:35			1		USE	I
EXS02140007.wiff	WXXICAL-23	LER	2/14/2010 15:51			1		USE	I
EXS02140008.wiff	WXXICAL-24	LER	2/14/2010 16:07			1		USE	I
EXS02140009.wiff	WXXICAL-25	LER	2/14/2010 16:22			1		USE	I
EXS02140010.wiff	XIBLK02	LER	2/14/2010 16:38			1		USE	B
EXS02140011.wiff	WXXICV	LER	2/14/2010 16:54			1		USE	C
EXS02140012.wiff	XIBLK03	LER	2/14/2010 17:10			1		USE	B
EXS02140013.wiff	WXXCRI	LER	2/14/2010 17:25			1		USE	C
EXS02140014.wiff	245387008	LER	2/14/2010 17:41	944907	10-1384	2	LANL	USE	S
EXS02140015.wiff	245387009	LER	2/14/2010 17:57	944907	10-1384	2	LANL	USE	S
EXS02140016.wiff	245387010	LER	2/14/2010 18:12	944907	10-1384	2	LANL	USE	S
EXS02140017.wiff	WXXCCV	LER	2/14/2010 18:28			1		USE	C
EXS02140018.wiff	XIBLK04	LER	2/14/2010 18:44			1		USE	B
EXS02140019.wiff	WXXCRI	LER	2/14/2010 18:59			1		USE	C
EXS02140020.wiff	1202030577	LER	2/14/2010 19:15	947919	VARIOUS	2	LANL	USE	S
EXS02140021.wiff	1202030578	LER	2/14/2010 19:31	947919	VARIOUS	2	LANL	USE	S
EXS02140022.wiff	245908001	LER	2/14/2010 19:47	947919	10-1486	2	LANL	USE	S
EXS02140023.wiff	1202030579	LER	2/14/2010 20:02	947919	10-1486	2	LANL	USE	S
EXS02140024.wiff	1202030580	LER	2/14/2010 20:18	947919	10-1486	2	LANL	USE	S
EXS02140025.wiff	245908002	LER	2/14/2010 20:34	947919	10-1486	2	LANL	USE	S
EXS02140026.wiff	245908003	LER	2/14/2010 20:49	947919	10-1486	2	LANL	USE	S
EXS02140027.wiff	245908004	LER	2/14/2010 21:05	947919	10-1486	2	LANL	USE	S
EXS02140028.wiff	245908005	LER	2/14/2010 21:21	947919	10-1486	2	LANL	USE	S
EXS02140029.wiff	245908006	LER	2/14/2010 21:37	947919	10-1486	2	LANL	USE	S
EXS02140030.wiff	WXXCCV	LER	2/14/2010 21:52			1		USE	C

EXS02140068.wiff	120203634	LER	2/15/2010 7:49	944935	10-1392	2	LANL	USE	S
EXS02140069.wiff	WXXCCV	LER	2/15/2010 8:05			1		USE	C
EXS02140070.wiff	XIBLK10	LER	2/15/2010 8:21			1		USE	B
EXS02140071.wiff	WXXCRI	LER	2/15/2010 8:37			1		USE	C
EXS02140072.wiff	245394002	LER	2/15/2010 8:53	944935	10-1392	2	LANL	USE	S
EXS02140073.wiff	245394003	LER	2/15/2010 9:09	944935	10-1392	2	LANL	USE	S
EXS02140074.wiff	245394004	LER	2/15/2010 9:25	944935	10-1392	2	LANL	USE	S
EXS02140075.wiff	245394005	LER	2/15/2010 9:40	944935	10-1392	2	LANL	USE	S
EXS02140076.wiff	245394006	LER	2/15/2010 9:56	944935	10-1392	2	LANL	USE	S
EXS02140077.wiff	245394007	LER	2/15/2010 10:12	944935	10-1392	2	LANL	USE	S
EXS02140078.wiff	245394008	LER	2/15/2010 10:27	944935	10-1392	2	LANL	USE	S
EXS02140079.wiff	245394009	LER	2/15/2010 10:43	944935	10-1392	2	LANL	USE	S
EXS02140080.wiff	245394010	LER	2/15/2010 10:59	944935	10-1392	2	LANL	USE	S
EXS02140081.wiff	245394011	LER	2/15/2010 11:15	944935	10-1392	2	LANL	USE	S
EXS02140082.wiff	WXXCCV	LER	2/15/2010 11:30			1		USE	C
EXS02140083.wiff	XIBLK11	LER	2/15/2010 11:46			1		USE	B
EXS02140084.wiff	WXXCRI	LER	2/15/2010 12:02			1		USE	C
EXS02140085.wiff	245394012	LER	2/15/2010 12:17	944935	10-1392	2	LANL	USE	S
EXS02140086.wiff	245394013	LER	2/15/2010 12:33	944935	10-1392	2	LANL	USE	S
EXS02140087.wiff	245394014	LER	2/15/2010 12:49	944935	10-1392	2	LANL	USE	S
EXS02140088.wiff	245394015	LER	2/15/2010 13:04	944935	10-1392	2	LANL	USE	S
EXS02140089.wiff	XIBLK12	LER	2/15/2010 13:20			1		USE	B
EXS02140090.wiff	1202032042	LER	2/15/2010 13:36	948561	VARIOUS	2	LANL	USE	S
EXS02140091.wiff	1202032043	LER	2/15/2010 13:52	948561	VARIOUS	2	LANL	USE	S
EXS02140092.wiff	245916001	LER	2/15/2010 14:07	948561	10-1492	2	LANL	USE	S
EXS02140093.wiff	1202032044	LER	2/15/2010 14:23	948561	10-1492	2	LANL	USE	S
EXS02140094.wiff	1202032045	LER	2/15/2010 14:39	948561	10-1492	2	LANL	USE	S
EXS02140095.wiff	WXXCCV	LER	2/15/2010 14:54			1		USE	C
EXS02140096.wiff	XIBLK13	LER	2/15/2010 15:10			1		USE	B
EXS02140097.wiff	WXXCRI	LER	2/15/2010 15:26			1		USE	C
EXS02140098.wiff	245916002	LER	2/15/2010 15:41	948561	10-1492	2	LANL	USE	S
EXS02140099.wiff	245916003	LER	2/15/2010 15:57	948561	10-1492	2	LANL	USE	S
EXS02140100.wiff	245916004	LER	2/15/2010 16:13	948561	10-1492	2	LANL	USE	S
EXS02140101.wiff	245916005	LER	2/15/2010 16:29	948561	10-1492	2	LANL	USE	S
EXS02140102.wiff	245947002	LER	2/15/2010 16:44	948561	10-1507	2	LANL	USE	S
EXS02140103.wiff	245947003	LER	2/15/2010 17:00	948561	10-1507	2	LANL	USE	S
EXS02140104.wiff	245947004	LER	2/15/2010 17:16	948561	10-1507	2	LANL	USE	S

EXS02140105.wiff	245947005	LER	2/15/2010 17:31	948561	10-1507	2	LANL	USE	S
EXS02140106.wiff	245947006	LER	2/15/2010 17:47	948561	10-1507	2	LANL	USE	S
EXS02140107.wiff	245947007	LER	2/15/2010 18:03	948561	10-1507	2	LANL	USE	S
EXS02140108.wiff	WXXCCV	LER	2/15/2010 18:18			1		USE	C
EXS02140109.wiff	XIBLK14	LER	2/15/2010 18:34			1		USE	B
EXS02140110.wiff	WXXCRI	LER	2/15/2010 18:50			1		USE	C
EXS02140111.wiff	245947008	LER	2/15/2010 19:06	948561	10-1507	2	LANL	USE	S
EXS02140112.wiff	245947009	LER	2/15/2010 19:21	948561	10-1507	2	LANL	USE	S
EXS02140113.wiff	245947010	LER	2/15/2010 19:37	948561	10-1507	2	LANL	USE	S
EXS02140114.wiff	XIBLK15	LER	2/15/2010 19:53			1		USE	B
EXS02140115.wiff	245394004	LER	2/15/2010 20:08	944935	10-1392	2	LANL	USE	S
EXS02140116.wiff	245394003	LER	2/15/2010 20:24	944935	10-1392	10	LANL	USE	S
EXS02140117.wiff	WXXCCV	LER	2/15/2010 20:40			1		USE	C
EXS02140118.wiff	XIBLK16	LER	2/15/2010 20:55			1		USE	B
EXS02140119.wiff	WXXCRI	LER	2/15/2010 21:11			1		USE	C
EXS02140120.wiff	1202032097	LER	2/15/2010 21:27	948572	VARIOUS	2	LANL	USE	S
EXS02140121.wiff	1202032098	LER	2/15/2010 21:43	948572	VARIOUS	2	LANL	USE	S
EXS02140122.wiff	245955001	LER	2/15/2010 21:58	948572	10-1509	2	LANL	USE	S
EXS02140123.wiff	245955002	LER	2/15/2010 22:14	948572	10-1509	2	LANL	USE	S
EXS02140124.wiff	245959001	LER	2/15/2010 22:30	948572	10-1510	2	LANL	USE	S
EXS02140125.wiff	1202032099	LER	2/15/2010 22:45	948572	10-1510	2	LANL	USE	S
EXS02140126.wiff	1202032100	LER	2/15/2010 23:01	948572	10-1510	2	LANL	USE	S
EXS02140127.wiff	245959002	LER	2/15/2010 23:17	948572	10-1510	2	LANL	USE	S
EXS02140128.wiff	245959003	LER	2/15/2010 23:32	948572	10-1510	2	LANL	USE	S
EXS02140129.wiff	245959004	LER	2/15/2010 23:48	948572	10-1510	2	LANL	USE	S
EXS02140130.wiff	WXXCCV	LER	2/16/2010 0:04			1		USE	C
EXS02140131.wiff	XIBLK17	LER	2/16/2010 0:19			1		USE	B
EXS02140132.wiff	WXXCRI	LER	2/16/2010 0:35			1		USE	C
EXS02140133.wiff	245959005	LER	2/16/2010 0:51	948572	10-1510	2	LANL	USE	S
EXS02140134.wiff	245959006	LER	2/16/2010 1:07	948572	10-1510	2	LANL	USE	S
EXS02140135.wiff	245959007	LER	2/16/2010 1:22	948572	10-1510	2	LANL	USE	S
EXS02140136.wiff	245959008	LER	2/16/2010 1:38	948572	10-1510	2	LANL	USE	S
EXS02140137.wiff	245959009	LER	2/16/2010 1:54	948572	10-1510	2	LANL	USE	S
EXS02140138.wiff	245959010	LER	2/16/2010 2:09	948572	10-1510	2	LANL	USE	S
EXS02140139.wiff	245959012	LER	2/16/2010 2:25	948572	10-1510	2	LANL	USE	S
EXS02140140.wiff	WXXCCV	LER	2/16/2010 2:41			1		USE	C
EXS02140141.wiff	XIBLK18	LER	2/16/2010 2:56			1		USE	B

EXS02140142.wiff	WXXCRI	LER	2/16/2010 3:12	948579	VARIOUS	1	LANL	USE	C
EXS02140143.wiff	1202032113	LER	2/16/2010 3:28	948579	VARIOUS	2	LANL	USE	S
EXS02140144.wiff	1202032114	LER	2/16/2010 3:43	948579	VARIOUS	2	LANL	USE	S
EXS02140145.wiff	245994001	LER	2/16/2010 3:59	948579	10-1516	2	LANL	USE	S
EXS02140146.wiff	245994002	LER	2/16/2010 4:15	948579	10-1516	2	LANL	USE	S
EXS02140147.wiff	245994003	LER	2/16/2010 4:31	948579	10-1516	2	LANL	USE	S
EXS02140148.wiff	245994004	LER	2/16/2010 4:46	948579	10-1516	2	LANL	USE	S
EXS02140149.wiff	245994005	LER	2/16/2010 5:02	948579	10-1516	2	LANL	USE	S
EXS02140150.wiff	245994006	LER	2/16/2010 5:18	948579	10-1516	2	LANL	USE	S
EXS02140151.wiff	245994007	LER	2/16/2010 5:33	948579	10-1516	2	LANL	USE	S
EXS02140152.wiff	245994008	LER	2/16/2010 5:49	948579	10-1516	2	LANL	USE	S
EXS02140153.wiff	WXXCCV	LER	2/16/2010 6:05			1		USE	C
EXS02140154.wiff	XIBLK19	LER	2/16/2010 6:21			1		USE	B
EXS02140155.wiff	WXXCRI	LER	2/16/2010 6:36			1		USE	C
EXS02140156.wiff	245994009	LER	2/16/2010 6:52	948579	10-1516	2	LANL	DUSE-RA	S
EXS02140157.wiff	246006001	LER	2/16/2010 7:08	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140158.wiff	1202032115	LER	2/16/2010 7:24	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140159.wiff	1202032116	LER	2/16/2010 7:39	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140160.wiff	246006002	LER	2/16/2010 7:55	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140161.wiff	246006003	LER	2/16/2010 8:11	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140162.wiff	246006004	LER	2/16/2010 8:27	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140163.wiff	246006005	LER	2/16/2010 8:42	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140164.wiff	246006006	LER	2/16/2010 8:58	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140165.wiff	246006007	LER	2/16/2010 9:14	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140166.wiff	WXXCCV	LER	2/16/2010 9:29			1		DUSE-RA	C
EXS02140167.wiff	XIBLK20	LER	2/16/2010 9:45			1		DUSE-RA	B
EXS02140168.wiff	WXXCRI	LER	2/16/2010 10:01			1		DUSE-RA	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 793093

Revision No.:

DATA EXCEPTION REPORT			
Mo. Day Yr. 19-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 8321A Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 948572	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245955(10-1509), 245959(10-1510)			
Application Issues: Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
<p>1. The MS/MSD pair (1202032099/100) did not meet RPD acceptance limits for RDX at 48.3%. The acceptance limits are 0-30%.</p>		<p>1. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative.</p>	

Originator's Name:

Michael Penny 19-FEB-10

Data Validator/Group Leader:

Herbert Maier 21-FEB-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1510**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 949033
Prep Batch Number: 949031

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
245959001	RE15-10-7309
245959002	RE15-10-7308
245959012	RE15-10-7324
1202033246	Method Blank (MB)
1202033247	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

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

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

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

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

Continuing Calibration Verification (CCV) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

A LANL sample of similar matrix associated with another SDG (#10-1512) was selected for the matrix spike and matrix spike duplicate analysis for this batch. However, the MS and MSD results were not reportable in this batch because the parent sample was re-extracted and reported in another batch.

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

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

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

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction. .

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

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

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

Reviewer: Jimmi Cao

Date: 3/1/10

Roadmap for LANL 10-1510 PCB

This roadmap was analyzed by yip00818 on 02-12-2010, 13:46.

This roadmap was reviewed by jim01140 on 02-16-2010, 09:06.

This roadmap was packaged by yml on 02-26-2010, 17:07.

This roadmap was validated by jim01140 on 03-01-2010, 09:22.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/028f2801.d	245959001	sample	05-FEB-2010	12:03	10-1510.sub	RE15-10-7309	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/029f2901.d	245959002	sample	05-FEB-2010	12:15	10-1510.sub	RE15-10-7308	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/030f3001.d	245959012	sample	05-FEB-2010	12:28	10-1510.sub	RE15-10-7324	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/028f2801.d	245959001	sample	05-FEB-2010	12:03	10-1510.sub	RE15-10-7309	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/029f2901.d	245959002	sample	05-FEB-2010	12:15	10-1510.sub	RE15-10-7308	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/030f3001.d	245959012	sample	05-FEB-2010	12:28	10-1510.sub	RE15-10-7324	1.00000	949033	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/012f1201-3.d	1202033246	mb	05-FEB-2010	08:52	10-1510.sub	PBLK01	1.00000	949033	
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/013f1301-3.d	1202033247	lcs	05-FEB-2010	09:02	10-1510.sub	PBLK01LCS	1.00000	949033	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/012b1201-3.d	1202033246	mb	05-FEB-2010	08:52	10-1510.sub	PBLK01	1.00000	949033	
<input type="checkbox"/>	N	/chem/ecd1a.i/020510.b/013b1301-3.d	1202033247	lcs	05-FEB-2010	09:02	10-1510.sub	PBLK01LCS	1.00000	949033	

SAMPLE DATA SUMMARY

PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959002

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10

Matrix: R
%Moisture: 22.3

Client ID: RE15-10-7308

Client: LANL010

Project: LANL01004

Batch ID: 949033

Method: SW846 8082

SOP Ref: GL-OA-E-040

Run Date: 02/05/2010 12:15

Inst: ECD1A.I

Dilution: 1

Prep Date: 02/04/2010 20:32

Analyst: YS1

Inj. Vol: 1 uL

Data File: 029f2901.d

Aliquot: 30.02 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.29	ug/kg	1.43	4.29	1
11104-28-2	Aroclor-1221	U	4.29	ug/kg	1.43	4.29	1
11141-16-5	Aroclor-1232	U	4.29	ug/kg	1.43	4.29	1
53469-21-9	Aroclor-1242	U	4.29	ug/kg	1.43	4.29	1
12672-29-6	Aroclor-1248	U	4.29	ug/kg	1.43	4.29	1
11097-69-1	Aroclor-1254	U	4.29	ug/kg	1.43	4.29	1
11096-82-5	Aroclor-1260	U	4.29	ug/kg	1.43	4.29	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-1510	Date Collected:	01/28/2010 12:00	Matrix:	R
Lab Sample ID:	245959001	Date Received:	02/02/2010 09:10	%Moisture:	9.8
Client ID:	RE15-10-7309	Client:	LANL010	Project:	LANL01004
Batch ID:	949033	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/05/2010 12:03	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/04/2010 20:32	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	028f2801.d	Aliquot:	30.19 g	Final Volume:	1 mL
	028b2801.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.67	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

Page 1 of 1

Certificate of Analysis

Sample Summary

SDG Number: 10-1510
Lab Sample ID: 245959012

Client ID: RE15-10-7324
Batch ID: 949033
Run Date: 02/05/2010 12:28
Prep Date: 02/04/2010 20:32
Data File: 030f3001.d
030b3001.d

Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.03 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 10.3
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	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1510

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 #
1202033246	MB for batch 949031	61	61	56	67
1202033247	LCS for batch 949031	63	62	61	67
245959001	RE15-10-7309	65	63	57	73
245959002	RE15-10-7308	62	61	57	65
245959012	RE15-10-7324	66	65	60	73

Surrogate**Acceptance Limits**

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-1510

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 949031

Matrix: SOIL

Lab Sample ID:1202033247

Instrument: ECD1A.I

Analysis Date: 02/05/2010 09:02

Dilution: 1

Analyst: YS1

Prep Batch ID 949031

Inj. Vol: 1 uL

Batch ID: 949033

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	20.2	61	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	23.7	71	45-118

Method Blank Summary

Page 1 of 1

SDG Number:	10-1510	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 949031	Instrument ID:	ECD1A.I_2	Data File:	012b1201-1.d
Lab Sample ID:	1202033246		ECD1A.I_1		012f1201-1.d
Column:	CLP2	Prep Date:	02/04/2010 20:32	Analyzed:	02/05/10 08:52
	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 949031	1202033247	013f1301-1.d 013b1301-1.d	02/05/10	0902
02 RE15-10-7309	245959001	028f2801.d 028b2801.d	02/05/10	1203
03 RE15-10-7308	245959002	029f2901.d 029b2901.d	02/05/10	1215
04 RE15-10-7324	245959012	030f3001.d 030b3001.d	02/05/10	1228

SAMPLE DATA

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1510
Lab Sample ID: 245959002Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 22.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.29	ug/kg	1.43	4.29	1
11104-28-2	Aroclor-1221	U	4.29	ug/kg	1.43	4.29	1
11141-16-5	Aroclor-1232	U	4.29	ug/kg	1.43	4.29	1
53469-21-9	Aroclor-1242	U	4.29	ug/kg	1.43	4.29	1
12672-29-6	Aroclor-1248	U	4.29	ug/kg	1.43	4.29	1
11097-69-1	Aroclor-1254	U	4.29	ug/kg	1.43	4.29	1
11096-82-5	Aroclor-1260	U	4.29	ug/kg	1.43	4.29	1

Data File: /chem/ecdl1a.i/020510.b/029f2901.d
Report Date: 09-Feb-2010 09:12

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/029f2901.d

Lab Smp Id: 245959002

Client Smp ID: RE15-10-7308

Inj Date : 05-FEB-2010 12:15

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245959002|1|

Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7308|||

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 08-Feb-2010 09:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 29

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1510.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	30.02000	Weight of sample extracted (g)
M	22.30290	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	1.965	0.000	49255734	123.557	5.3	80.00- 120.00	100.00

12	5.274	-0.001	37093393	114.728	4.9	80.00- 120.00	100.00

\$ 11 4cmx CAS #: 877-09-8

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3

Data File: /chem/ecdl1.i/020510.b/029f2901.d

Date : 05-FEB-2010 12:15

Client ID: REL5-10-7308

Sample Info: 1245959002111

Volume Injected (uL): 1.0

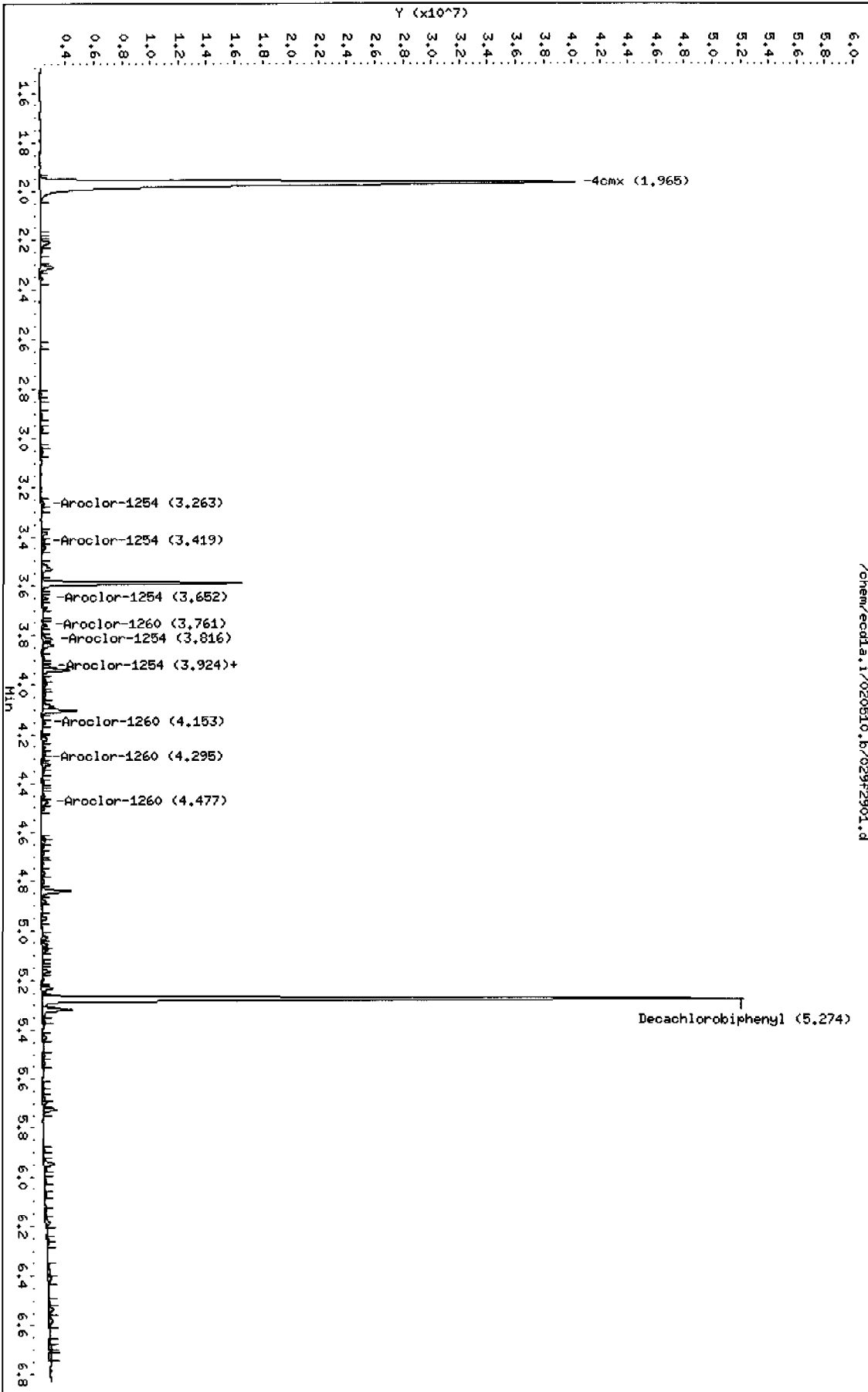
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSA

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/020510.b/029b2901.d
Report Date: 09-Feb-2010 09:12

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/029b2901.d
Lab Smp Id: 245959002 Client Smp ID: RE15-10-7308
Inj Date : 05-FEB-2010 12:15
Operator : YS1 Inst ID: ecdla.i
Smp Info : |245959002|1|
Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7308|||
Comment :
Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 08-Feb-2010 09:06 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1510.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	30.02000	Weight of sample extracted (g)
M	22.30290	% 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						
2.296	2.296	0.000	34956086	121.695	5.2 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.941	5.942	-0.001	28491563	130.919	5.6 80.00- 120.00	100.00

Data File: /chem/eodla.i/020510.b/029b2901.d

Date : 05-FEB-2010 12:15

Client ID: RE15-10-7308

Sample Infc: 1245959002111

Volume Injected (uL): 1.0

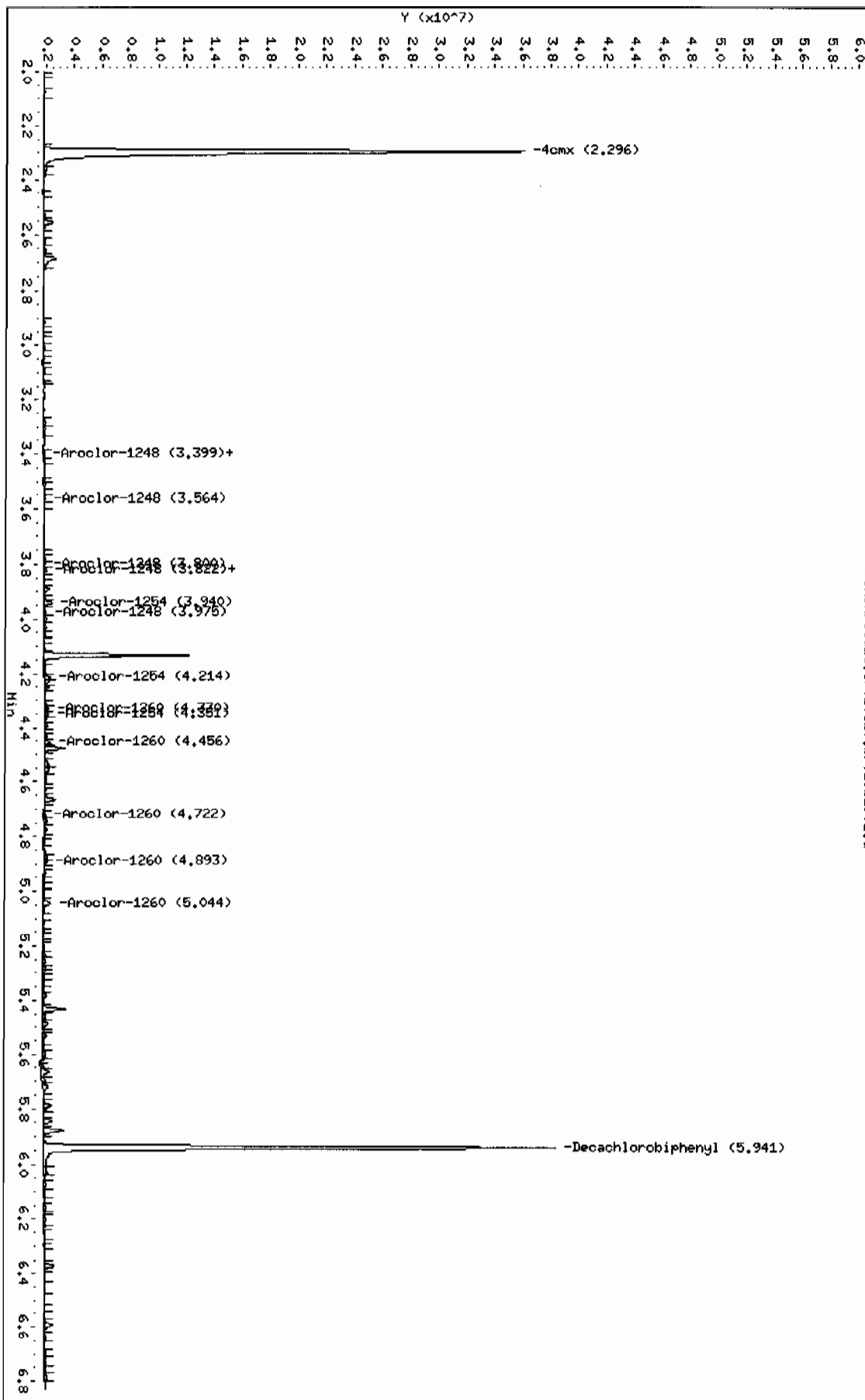
Column phase: CLP2

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/020510.b/029b2901.d



PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1510
Lab Sample ID: 245959001Date Collected: 01/28/2010 12:00
Date Received: 02/02/2010 09:10
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

Data File: /chem/ecdl1a.i/020510.b/028f2801.d
Report Date: 09-Feb-2010 09:12

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/028f2801.d
Lab Smp Id: 245959001 Client Smp ID: RE15-10-7309
Inj Date : 05-FEB-2010 12:03
Operator : YSl Inst ID: ecd1a.i
Smp Info : |245959001|1|
Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7309|||
Comment :
Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
Meth Date : 08-Feb-2010 09:06 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1510.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	30.19000	Weight of sample extracted (g)
M	9.83940	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	1.964	1.965	-0.001	51706429	129.704	4.8 80.00- 120.00	100.00

12	5.274	5.275	-0.001	36737024	113.626	4.2 80.00- 120.00	100.00

\$ 11 4cmx CAS #: 877-09-8

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3

Data File: /chem/ecdl.a.i/020510.b/028f2801.d

Date : 05-FEB-2010 12:03

Client ID: RE15-10-7309

Sample Info: 124595900111

Volume Injected (uL): 1.0

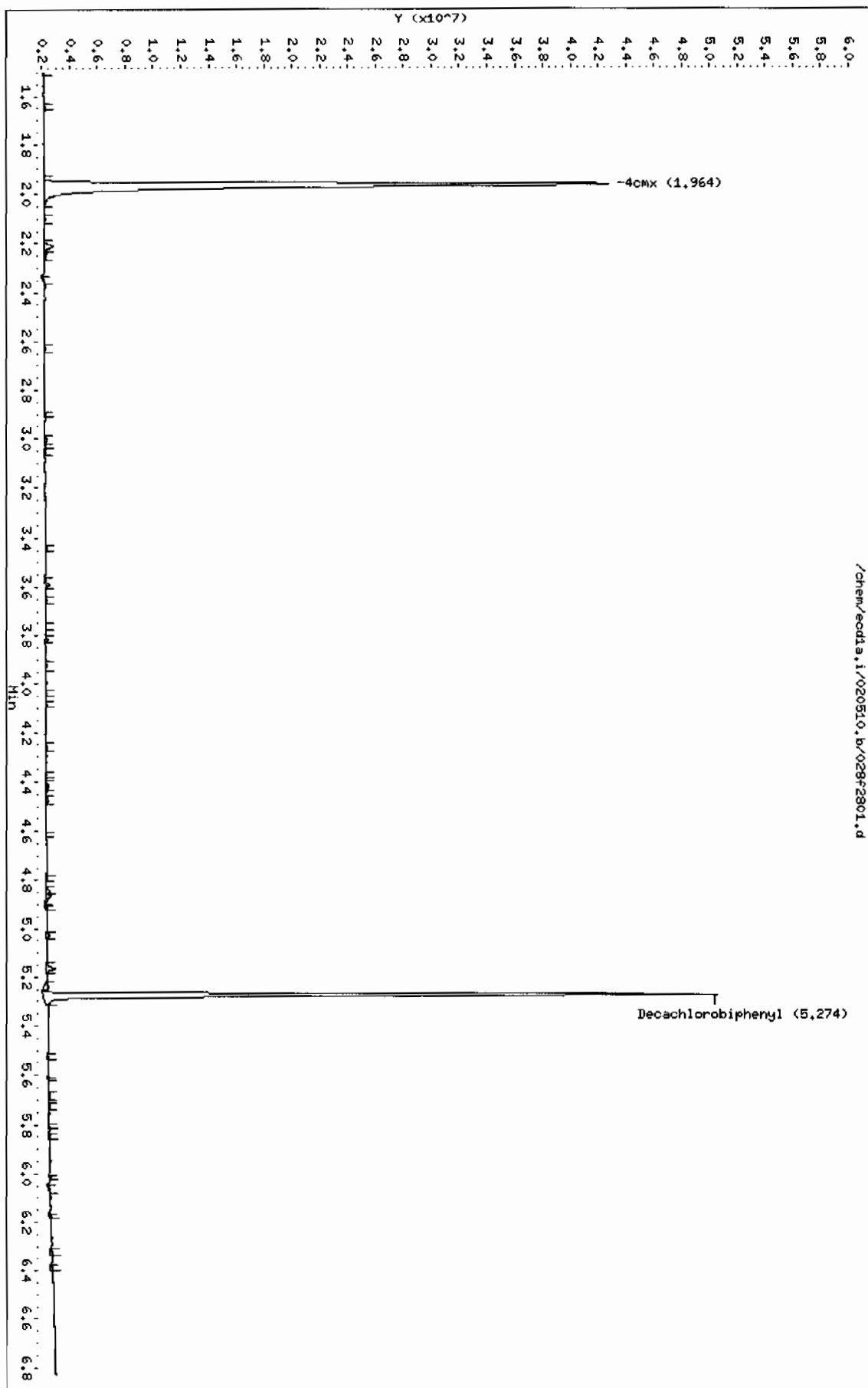
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/020510.b/028b2801.d
Report Date: 09-Feb-2010 09:12

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/028b2801.d
Lab Smp Id: 245959001 Client Smp ID: RE15-10-7309
Inj Date : 05-FEB-2010 12:03
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |245959001|1|
Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7309|||
Comment :
Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 08-Feb-2010 09:06 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1510.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	30.19000	Weight of sample extracted (g)
M	9.83940	% 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						
2.296	2.296	0.000	36444169	126.876	4.7 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.940	5.942	-0.002	31924780	146.694	5.4 80.00- 120.00	100.00

Data File: /chem/eodla.i/020510.b/028b2801.d

Date: 05-FEB-2010 12:03

Client ID: RELS-10-7309

Sample Info: 124595900111

Volume Injected (uL): 1.0

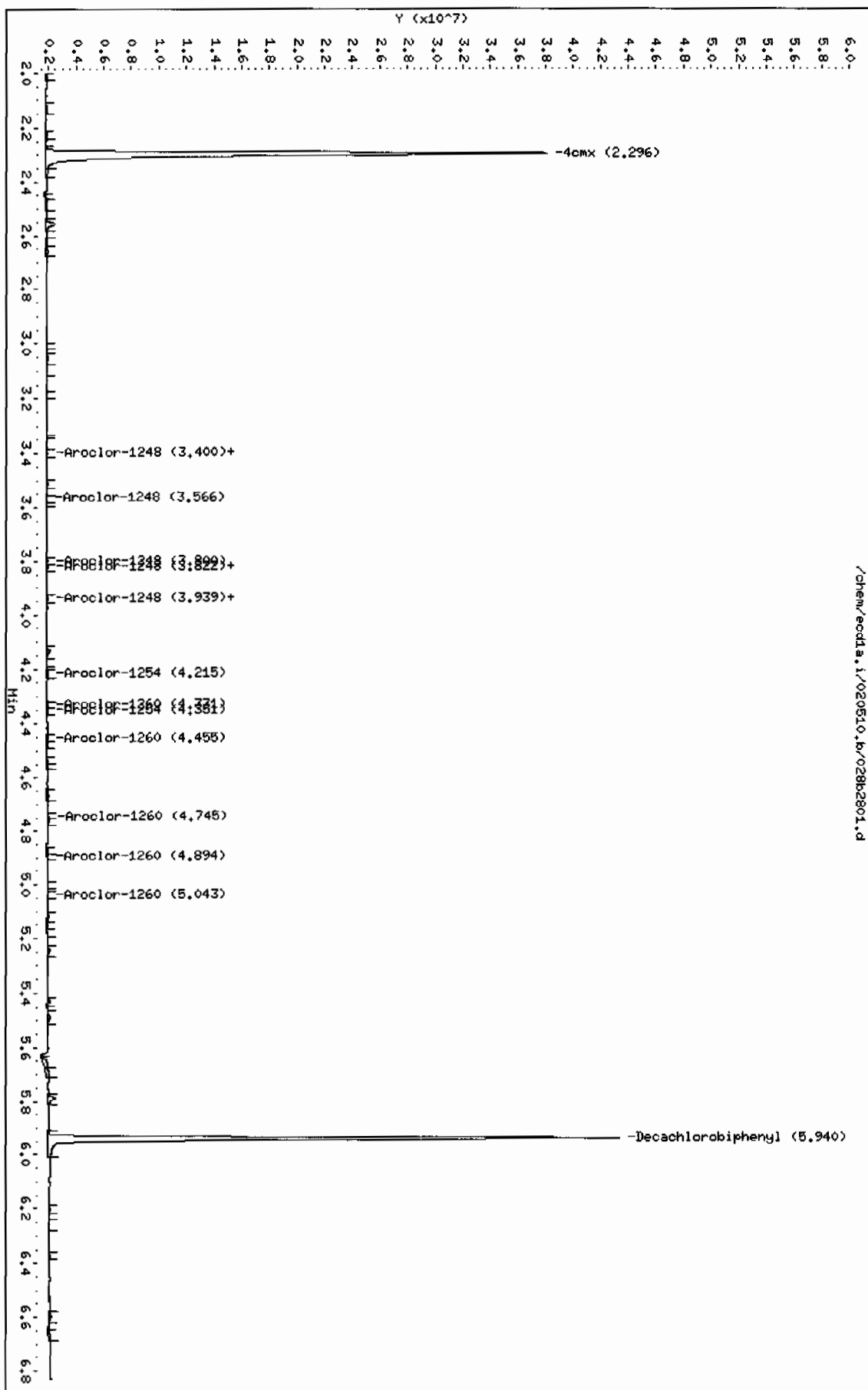
Column phase: CLP2

Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

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Certificate of Analysis

Sample Summary

SDG Number:	10-1510	Date Collected:	01/28/2010 12:00	Matrix:	R
Lab Sample ID:	245959012	Date Received:	02/02/2010 09:10	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-7324	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	949033	Inst:	ECD1A.J	Dilution:	1
Run Date:	02/05/2010 12:28	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	02/04/2010 20:32	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	1 CLP1	Level:	LOW
	030b3001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/030f3001.d

Lab Smp Id: 245959012

Client Smp ID: RE15-10-7324

Inj Date : 05-FEB-2010 12:28

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245959012|1|

Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7324|||

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 08-Feb-2010 09:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 30

Dil Factor: 1.00000

Integrator: Falcon

Target Version: 3.50

Compound Sublist: 10-1510.sub

Processing Host: hpc1p1

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	10.28410	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
<div> \$ 11 4cmx CAS #: 877-09-8 </div>							
1.965	1.965	0.000	52335292	131.282	4.9	80.00- 120.00	100.00

<div> \$ 12 Decachlorobiphenyl CAS #: 2051-24-3 </div>							
5.274	5.275	-0.001	38833266	120.109	4.4	80.00- 120.00	100.00

Data File: /chem/eod1a.1/020510.b/030f3001.d

Date: 05-FEB-2010 12:28

Client ID: REL5-10-7324

Sample Info: 1245959012111

Volume Injected (uL): 1.0

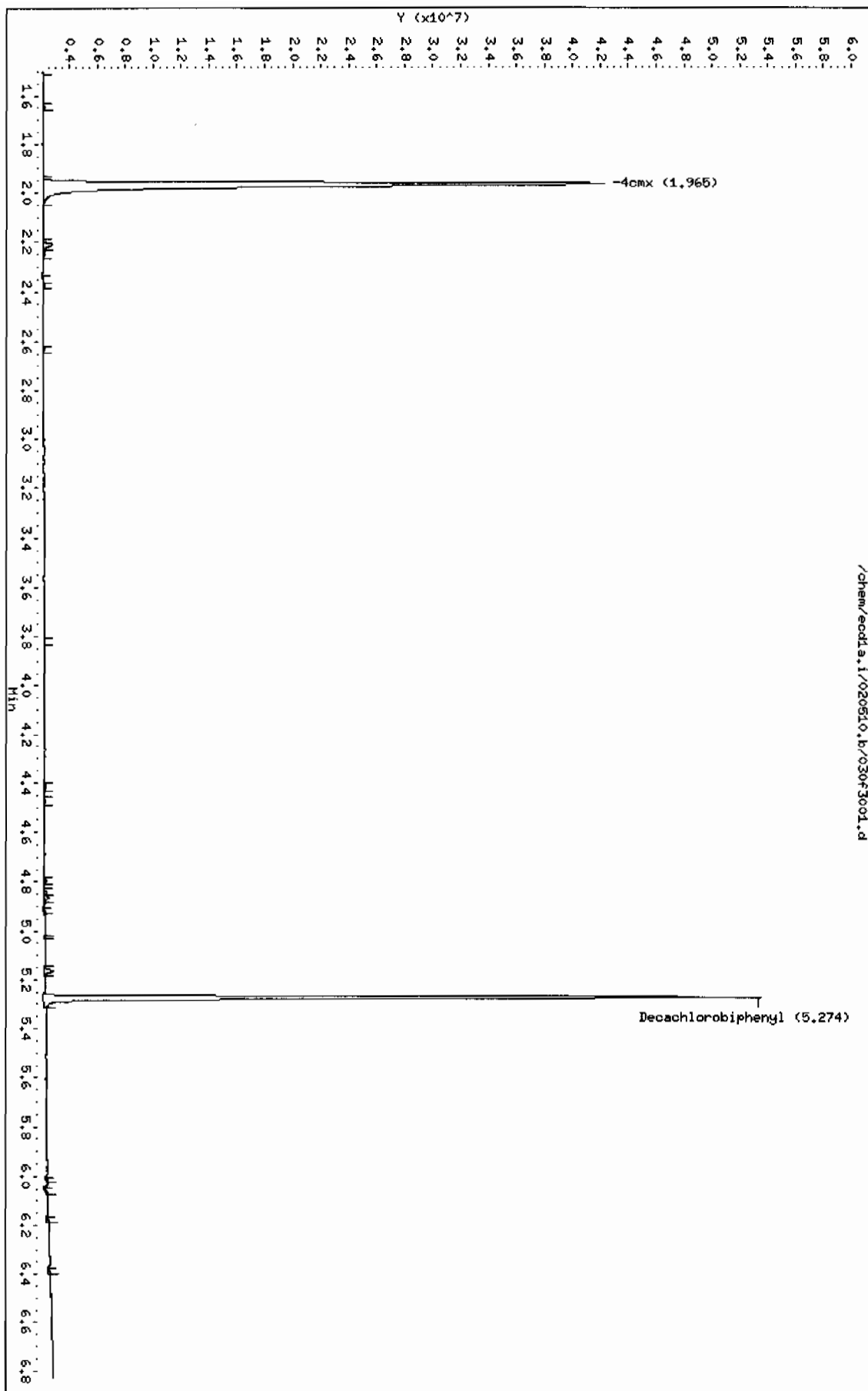
Column Phase: CLP1

Instrument: eod1a.1

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/020510.b/030b3001.d
Report Date: 09-Feb-2010 09:12

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/020510.b/030b3001.d
Lab Smp Id: 245959012 Client Smp ID: RE15-10-7324
Inj Date : 05-FEB-2010 12:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |245959012|1|
Misc Info : |ECD82P_1S|949033|SVA|LANL|SOIL|RE15-10-7324|||
Comment :
Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 08-Feb-2010 09:06 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1510.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	10.28410	% 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		
2.296	2.296	0.000	37108781	129.189	4.8	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.941	5.942	-0.001	31713022	145.721	5.4	80.00- 120.00	100.00

Data File: /chem/eod1a.i/020510.b/030b3001.d

Date: 05-FEB-2010 12:28

Client ID: RE15-10-7324

Sample Info: 124599012111

Volume Injected (uL): 1.0

Column phase: CLP2

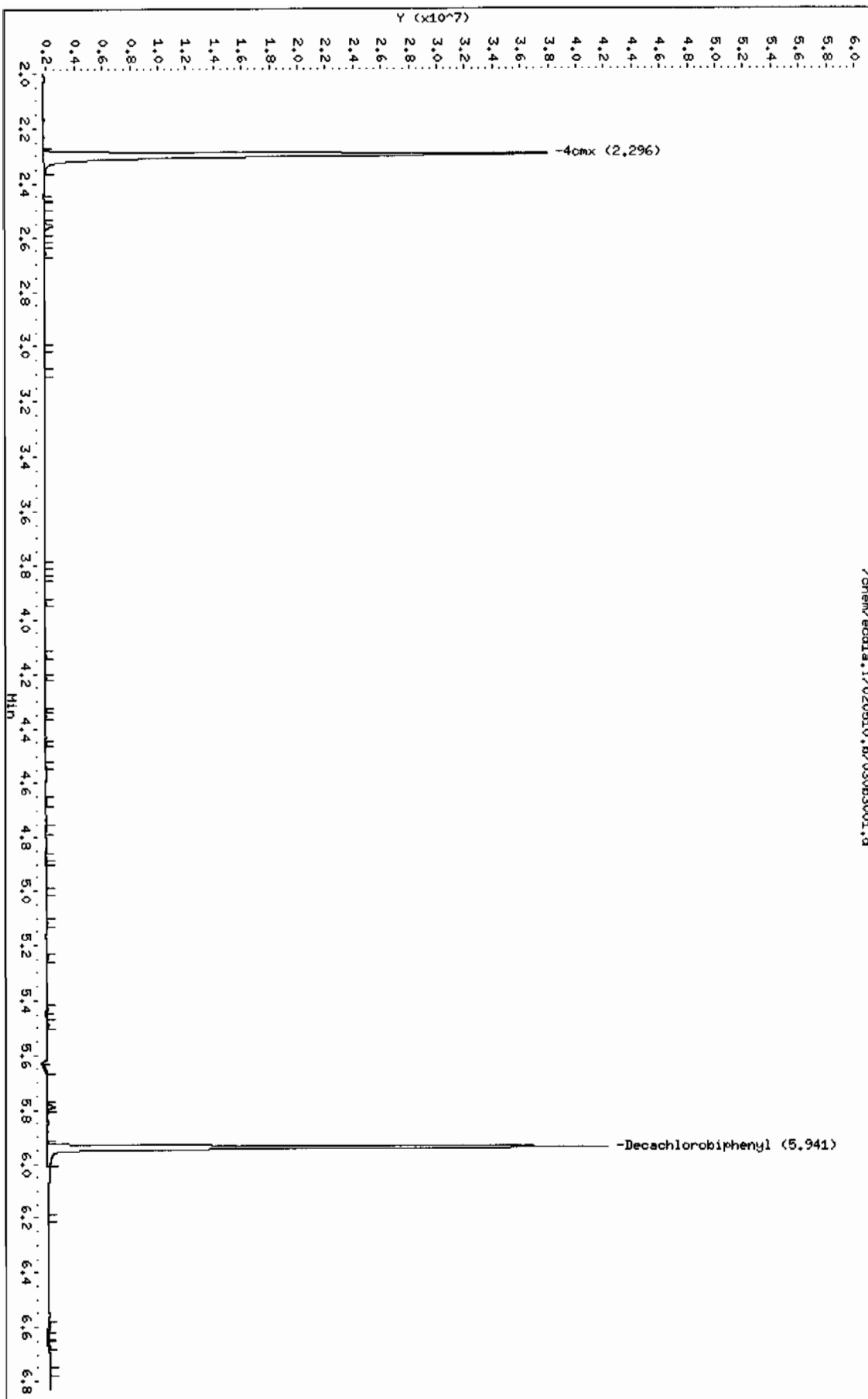
Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

/chem/eod1a.i/020510.b/030b3001.d

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STANDARDS DATA

Report Date: 08-Feb-2010 09:31

Calibration History

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
Start Cal Date: 14-DEC-2009 05:36
End Cal Date : 29-JAN-2010 08:59

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/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdl1a.i/012210.b/006f0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdl1a.i/012810a.b/018f1801.d
14-DEC-2009 09:28	AR1248	/chem/ecdl1a.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdl1a.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdl1a.i/121409.b/016f1601.d
29-JAN-2010 07:46	AR1660	/chem/ecdl1a.i/012910.b/010f1001.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdl1a.i/012210.b/014f1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdl1a.i/012210.b/007f0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdl1a.i/012810a.b/019f1901.d
14-DEC-2009 09:38	AR1248	/chem/ecdl1a.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdl1a.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdl1a.i/121409.b/017f1701.d
29-JAN-2010 07:57	AR1660	/chem/ecdl1a.i/012910.b/011f1101.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdl1a.i/012210.b/015f1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdl1a.i/012210.b/008f0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdl1a.i/012810a.b/020f2001.d
14-DEC-2009 09:49	AR1248	/chem/ecdl1a.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdl1a.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdl1a.i/121409.b/018f1801.d
29-JAN-2010 08:07	AR1660	/chem/ecdl1a.i/012910.b/012f1201.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecdl1a.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdl1a.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdl1a.i/121409.b/019f1901.d
29-JAN-2010 08:18	AR1660	/chem/ecdl1a.i/012910.b/013f1301.d
28-JAN-2010 12:50	AR1268	/chem/ecdl1a.i/012810a.b/021f2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdl1a.i/012210.b/016f1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdl1a.i/121409.b/007f0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdl1a.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
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022f2201.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdla.i/121409.b/020f2001.d
29-JAN-2010 08:59	AR1660	/chem/ecdla.i/012910.b/014f1401.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 15:29	AR1660	/chem/ecdla.i/020510.b/046f4601.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 14:05	AR1660	/chem/ecdla.i/020510.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 12:40	AR1660	/chem/ecdla.i/020510.b/031f3101.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 10:51	AR1660	/chem/ecdla.i/020510.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 08:20	AR1268	/chem/ecdla.i/020510.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:59	AR1221	/chem/ecdla.i/020510.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:48	AR1232	/chem/ecdla.i/020510.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:38	AR1248	/chem/ecdla.i/020510.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:27	AR1242	/chem/ecdla.i/020510.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:17	AR1254	/chem/ecdla.i/020510.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
05-FEB-2010 07:06	AR1660	/chem/ecdla.i/020510.b/002f0201.d

Report Date: 08-Feb-2010 09:45

Calibration History

Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Start Cal Date: 11-DEC-2009 10:17
End Cal Date : 29-JAN-2010 08:59

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
28-JAN-2010 12:18	AR1268	/chem/ecdl1a.i/012810a.b/018b1801.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
29-JAN-2010 07:46	AR1660	/chem/ecdl1a.i/012910.b/010b1001.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
28-JAN-2010 12:29	AR1268	/chem/ecdl1a.i/012810a.b/019b1901.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
29-JAN-2010 07:57	AR1660	/chem/ecdl1a.i/012910.b/011b1101.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
28-JAN-2010 12:39	AR1268	/chem/ecdl1a.i/012810a.b/020b2001.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
29-JAN-2010 08:07	AR1660	/chem/ecdl1a.i/012910.b/012b1201.d
+-----+-----+-----+		
Cal Level: 4 , Cal Amount: 1000.00000		
+=====+		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046b4601.d
28-JAN-2010 12:50	AR1268	/chem/ecdl1a.i/012810a.b/021b2101.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
29-JAN-2010 08:18	AR1660	/chem/ecdl1a.i/012910.b/013b1301.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
28-JAN-2010 13:00	AR1268	/chem/ecdl1a.i/012810a.b/022b2201.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/ecdla.i/121409.b/020b2001.d
29-JAN-2010 08:59 AR1660	/chem/ecdla.i/012910.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 15:29 AR1660	/chem/ecdla.i/020510.b/046b4601.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 14:05 AR1660	/chem/ecdla.i/020510.b/038b3801.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 12:40 AR1660	/chem/ecdla.i/020510.b/031b3101.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 10:51 AR1660	/chem/ecdla.i/020510.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:38 AR1248	/chem/ecdla.i/020510.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 08:20 AR1268	/chem/ecdla.i/020510.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:59 AR1221	/chem/ecdla.i/020510.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:48 AR1232	/chem/ecdla.i/020510.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 08:09 AR1262	/chem/ecdla.i/020510.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:27 AR1242	/chem/ecdla.i/020510.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:17 AR1254	/chem/ecdla.i/020510.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
05-FEB-2010 07:06 AR1660	/chem/ecdla.i/020510.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 08-Feb-2010 09:06 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	2.419	2.389-2.449	1.466e+04
	2.707	2.677-2.737	1.832e+04
	2.788	2.758-2.818	1.202e+04
	2.826	2.796-2.856	7.180e+03
	3.036	3.006-3.066	9.290e+03
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
64 4,4-DDE	3.603	3.583-3.623	4.795e+05
62 4,4-DDT	4.118	4.098-4.138	3.238e+05
2 Aroclor-1221	2.077	2.047-2.107	4.301e+03
	2.170	2.140-2.200	2.440e+03
	2.195	2.165-2.225	1.027e+04
3 Aroclor-1232	2.421	2.391-2.451	6.849e+03
	2.709	2.679-2.739	8.426e+03
	2.789	2.759-2.819	5.627e+03
	3.038	3.008-3.068	3.983e+03
4 Aroclor-1242	3.291	3.261-3.321	3.858e+03
	2.420	2.390-2.450	1.166e+04
	2.708	2.678-2.738	1.345e+04
	2.826	2.796-2.856	5.506e+03
	3.037	3.007-3.067	7.245e+03
	3.290	3.260-3.320	6.811e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.088	3.058-3.118	7.848e+03
	3.240	3.210-3.270	6.870e+03
	3.291	3.261-3.321	1.331e+04
	3.422	3.392-3.452	1.101e+04
	3.655	3.625-3.685	7.455e+03
6 Aroclor-1254	3.266	3.236-3.296	1.249e+04
	3.421	3.391-3.451	1.672e+04
	3.655	3.625-3.685	2.071e+04
	3.818	3.788-3.848	1.569e+04
	3.926	3.896-3.956	1.517e+04
7 Aroclor-1260	3.762	3.732-3.792	1.764e+04
	3.925	3.895-3.955	2.666e+04
	4.155	4.125-4.185	1.592e+04
	4.297	4.267-4.327	1.655e+04
	4.477	4.447-4.507	3.714e+04
8 Aroclor-1262	3.763	3.733-3.793	1.500e+04
	3.926	3.896-3.956	2.038e+04
	4.156	4.126-4.186	2.520e+04
	4.299	4.269-4.329	2.299e+04
	4.478	4.448-4.508	4.717e+04
9 Aroclor-1268	4.663	4.633-4.693	5.248e+04
	4.686	4.656-4.716	4.812e+04
	4.799	4.769-4.829	3.703e+04
	5.001	4.971-5.031	1.629e+04
	5.167	5.137-5.197	1.083e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.965	1.935-1.995	3.986e+05
\$ 12 Decachlorobiphenyl	5.275	5.245-5.305	3.233e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Quant Method : ESTD Target Version : 3.50
Last Update : 08-Feb-2010 09:06 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.192	3.162-3.222	1.248e+04
	3.275	3.245-3.305	8.547e+03
	3.339	3.309-3.369	5.291e+03
	3.565	3.535-3.595	6.814e+03
	3.641	3.611-3.671	6.405e+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	2.492	2.462-2.522	3.640e+03
	2.586	2.556-2.616	2.329e+03
	2.627	2.597-2.657	8.119e+03
3 Aroclor-1232	2.895	2.865-2.925	5.892e+03
	3.193	3.163-3.223	6.222e+03
	3.276	3.246-3.306	4.345e+03
	3.567	3.537-3.597	3.111e+03
4 Aroclor-1242	3.800	3.770-3.830	3.193e+03
	3.192	3.162-3.222	1.059e+04
	3.275	3.245-3.305	8.054e+03
	3.566	3.536-3.596	5.962e+03
	3.800	3.770-3.830	6.057e+03
	3.828	3.798-3.858	6.701e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/020510.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.401	3.371-3.431	8.054e+03
	3.566	3.536-3.596	9.874e+03
	3.800	3.770-3.830	1.122e+04
	3.827	3.797-3.857	1.248e+04
	3.965	3.935-3.995	1.210e+04
6 Aroclor-1254	3.401	3.371-3.431	6.435e+03
	3.824	3.794-3.854	1.156e+04
	3.940	3.910-3.970	1.243e+04
	4.216	4.186-4.246	1.688e+04
	4.353	4.323-4.383	1.244e+04
7 Aroclor-1260	4.332	4.302-4.362	1.264e+04
	4.457	4.427-4.487	1.522e+04
	4.722	4.692-4.752	1.165e+04
	4.896	4.866-4.926	1.205e+04
	5.043	5.013-5.073	2.607e+04
8 Aroclor-1262	4.457	4.427-4.487	1.356e+04
	4.723	4.693-4.753	1.889e+04
	4.897	4.867-4.927	1.747e+04
	5.044	5.014-5.074	3.453e+04
	5.257	5.227-5.287	2.487e+04
9 Aroclor-1268	5.255	5.225-5.285	3.626e+04
	5.283	5.253-5.313	3.358e+04
	5.433	5.403-5.463	2.598e+04
	5.598	5.568-5.628	1.135e+04
	5.790	5.760-5.820	6.708e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.296	2.266-2.326	2.872e+05
\$ 12 Decachlorobiphenyl	5.942	5.912-5.972	2.176e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 29-JAN-2010 08:59
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
 Cal Date : 08-Feb-2010 09:06 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013f1301.d
 Level 2: /chem/ecdl1a.i/012210.b/014f1401.d
 Level 3: /chem/ecdl1a.i/012210.b/015f1501.d
 Level 4: /chem/ecdl1a.i/121409.b/046f4601.d
 Level 5: /chem/ecdl1a.i/012210.b/017f1701.d

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)	17274	15624	14668	13618	12110	14659	13.365
(2)	20414	18506	18422	17664	16607	18323	7.617
(3)	13811	12507	11857	11466	10478	12024	10.320
(4)	8094	7393	7100	6874	6439	7180	8.612
(5)	10520	9736	9158	8813	8222	9290	9.475
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 : 29-JAN-2010 08:59
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
 Cal Date : 08-Feb-2010 09:06 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)	19303	18084	17596	17320	15881	17637	7.037
(2)	28906	27177	26621	26372	24235	26662	6.298
(3)	17466	16264	15774	15593	14511	15922	6.750
(4)	17694	16895	16482	16357	15325	16551	5.206
(5)	38673	37803	37114	37178	34909	37135	3.753
8 Aroclor-1262(1)	16796	15375	14585	14470	13775	15000	7.687
(2)	22563	20964	19865	19587	18936	20383	6.975
(3)	27641	25661	24522	24605	23554	25197	6.179
(4)	25041	23378	22465	22352	21708	22989	5.624
(5)	49563	47861	46825	46728	44852	47166	3.655
9 Aroclor-1268(1)	55111	53385	52967	52495	48466	52485	4.676
(2)	51014	48609	47960	48222	44786	48118	4.620
(3)	39244	37391	36973	36968	34562	37028	4.505
(4)	17802	16531	16072	16029	15038	16294	6.158
(5)	113064	109648	108755	109096	100824	108277	4.162
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 11 4cmx	416570	402663	398822	398666	376523	398649	3.607
\$ 12 Decachlorobiphenyl	349811	330143	318231	316573	301823	323316	5.537

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 29-JAN-2010 08:59
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
 Cal Date : 08-Feb-2010 09:06 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/121409.b/046b4601.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)	14228	12876	12485	11870	10964	12485	9.713
(2)	10308	9112	8344	7935	7035	8547	14.474
(3)	6330	5599	5139	4929	4456	5291	13.452
(4)	8280	7111	6551	6409	5718	6814	14.062
(5)	7890	6662	6193	5904	5375	6405	14.872
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 : 29-JAN-2010 08:59
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Cal Date : 08-Feb-2010 09:06 yip00818
Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	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)	14858	13325	12348	11932	10758	12644	12.198
(2)	17461	15979	14935	14482	13243	15220	10.456
(3)	13572	12242	11423	10976	10040	11651	11.471
(4)	14023	12666	11806	11380	10392	12054	11.383
(5)	28927	27037	25880	25311	23188	26068	8.140
8 Aroclor-1262(1)	15849	14211	13033	12748	11945	13557	11.192
(2)	21776	19630	18382	17939	16725	18890	10.157
(3)	20222	18124	16968	16542	15497	17471	10.323
(4)	38743	35618	34053	33297	30946	34532	8.384
(5)	28740	25266	23755	23937	22633	24866	9.485
9 Aroclor-1268(1)	40076	37508	36193	35765	31736	36256	8.369
(2)	36699	34342	33454	33223	30195	33583	6.968
(3)	29294	26633	25688	25340	22957	25982	8.826
(4)	12990	11609	11161	10996	9978	11347	9.656
(5)	67306	67058	67598	69416	64002	67076	2.911
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	314910	295845	285456	280701	259306	287244	7.105
\$ 12 Decachlorobiphenyl	251054	227132	210476	206848	192632	217628	10.274

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.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 0706
 Lab File ID: 002F0201 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	14658.821	12837.588	0.01	-12.4	15.0
(2)	18322.626	16881.446	0.01	-7.9	15.0
(3)	12023.655	10579.542	0.01	-12.0	15.0
(4)	7180.129	6340.762	0.01	-11.7	15.0
(5)	9289.783	8310.417	0.01	-10.5	15.0
Aroclor-1260	17636.550	17492.483	0.01	-0.8	15.0
(2)	26662.025	26719.248	0.01	0.2	15.0
(3)	15921.638	15874.558	0.01	-0.3	15.0
(4)	16550.665	16698.516	0.01	0.9	15.0
(5)	37135.384	38229.555	0.01	2.9	15.0
=====	=====	=====	=====	=====	=====
4cmx	398648.98	371361.76	0.01	-6.8	15.0
Decachlorobiphenyl	323316.27	306305.72	0.01	-5.3	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.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 0706
 Lab File ID: 002B0201 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12484.762	11513.111	0.01	-7.8	15.0
(2)	8546.824	7680.091	0.01	-10.1	15.0
(3)	5290.741	4732.691	0.01	-10.5	15.0
(4)	6813.513	6037.895	0.01	-11.4	15.0
(5)	6404.782	5752.367	0.01	-10.2	15.0
Aroclor-1260	12644.310	12622.486	0.01	-0.2	15.0
(2)	15220.096	15319.189	0.01	0.6	15.0
(3)	11650.528	11665.669	0.01	0.1	15.0
(4)	12053.523	12022.139	0.01	-0.3	15.0
(5)	26068.381	27036.683	0.01	3.7	15.0
4cmx	287243.52	273128.74	0.01	-4.9	15.0
Decachlorobiphenyl	217628.16	208183.20	0.01	-4.3	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.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 1051
 Lab File ID: 022F2201 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	14658.821	14089.870	0.01	-3.9	15.0
(2)	18322.626	18254.738	0.01	-0.4	15.0
(3)	12023.655	11539.563	0.01	-4.0	15.0
(4)	7180.129	6922.359	0.01	-3.6	15.0
(5)	9289.783	8923.226	0.01	-3.9	15.0
Aroclor-1260	17636.550	19002.908	0.01	7.7	15.0
(2)	26662.025	28995.739	0.01	8.8	15.0
(3)	15921.638	17302.329	0.01	8.7	15.0
(4)	16550.665	18016.442	0.01	8.8	15.0
(5)	37135.384	41342.662	0.01	11.3	15.0
4cmx	398648.98	405041.02	0.01	1.6	15.0
Decachlorobiphenyl	323316.27	329068.95	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.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 1051
 Lab File ID: 022B2201 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12484.762	12553.097	0.01	0.5	15.0
(2)	8546.824	8166.106	0.01	-4.4	15.0
(3)	5290.741	5045.053	0.01	-4.6	15.0
(4)	6813.513	6628.314	0.01	-2.7	15.0
(5)	6404.782	6123.430	0.01	-4.4	15.0
Aroclor-1260	12644.310	13388.386	0.01	5.9	15.0
(2)	15220.096	16291.509	0.01	7.0	15.0
(3)	11650.528	12420.565	0.01	6.6	15.0
(4)	12053.523	12892.266	0.01	7.0	15.0
(5)	26068.381	28894.660	0.01	10.8	15.0
4cmx	287243.52	289912.86	0.01	0.9	15.0
Decachlorobiphenyl	217628.16	222287.65	0.01	2.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 1240
 Lab File ID: 031F3101 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	14658.821	14012.608	0.01	-4.4	15.0
(2)	18322.626	18319.018	0.01	-0.0	15.0
(3)	12023.655	11547.801	0.01	-4.0	15.0
(4)	7180.129	6929.943	0.01	-3.5	15.0
(5)	9289.783	8939.715	0.01	-3.8	15.0
Aroclor-1260	17636.550	18972.127	0.01	7.6	15.0
(2)	26662.025	28835.947	0.01	8.2	15.0
(3)	15921.638	17204.186	0.01	8.0	15.0
(4)	16550.665	18148.577	0.01	9.6	15.0
(5)	37135.384	41262.622	0.01	11.1	15.0
4cmx	398648.98	404599.75	0.01	1.5	15.0
Decachlorobiphenyl	323316.27	326299.17	0.01	0.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510
 Instrument ID: ECD1A Calibration Date: 02/05/10 Time: 1240
 Lab File ID: 031B3101 Init. Calib. Date(s): 01/29/10 01/29/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0746 0859
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12484.762	12359.615	0.01	-1.0	15.0
(2)	8546.824	8069.931	0.01	-5.6	15.0
(3)	5290.741	4988.684	0.01	-5.7	15.0
(4)	6813.513	6345.906	0.01	-6.9	15.0
(5)	6404.782	6017.327	0.01	-6.0	15.0
Aroclor-1260	12644.310	13242.341	0.01	4.7	15.0
(2)	15220.096	16223.303	0.01	6.6	15.0
(3)	11650.528	12301.397	0.01	5.6	15.0
(4)	12053.523	12694.909	0.01	5.3	15.0
(5)	26068.381	28307.638	0.01	8.6	15.0
4cmx	287243.52	286907.88	0.01	-0.1	15.0
Decachlorobiphenyl	217628.16	219266.81	0.01	0.8	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/002f0201.d

Lab Smp Id: WAR100203-60 01

Client Smp ID: AR166001

Inj Date : 05-FEB-2010 07:06

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

\$ 11 4cmx				CAS #: 877-09-8		
1.965	1.965	0.000	37136176 100.000	93.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.275	5.275	0.000	30630572 100.000	94.7	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.419	2.419	0.000	12837588 1000.00	876	80.00- 120.00	100.00
2.707	2.707	0.000	16881446 1000.00	921	111.50- 151.50	131.50
2.788	2.788	0.000	10579542 1000.00	880	62.41- 102.41	82.41
2.826	2.826	0.000	6340762 1000.00	883	29.39- 69.39	49.39
3.036	3.036	0.000	8310417 1000.00	894	44.74- 84.74	64.74
Average of Peak Amounts =				891		

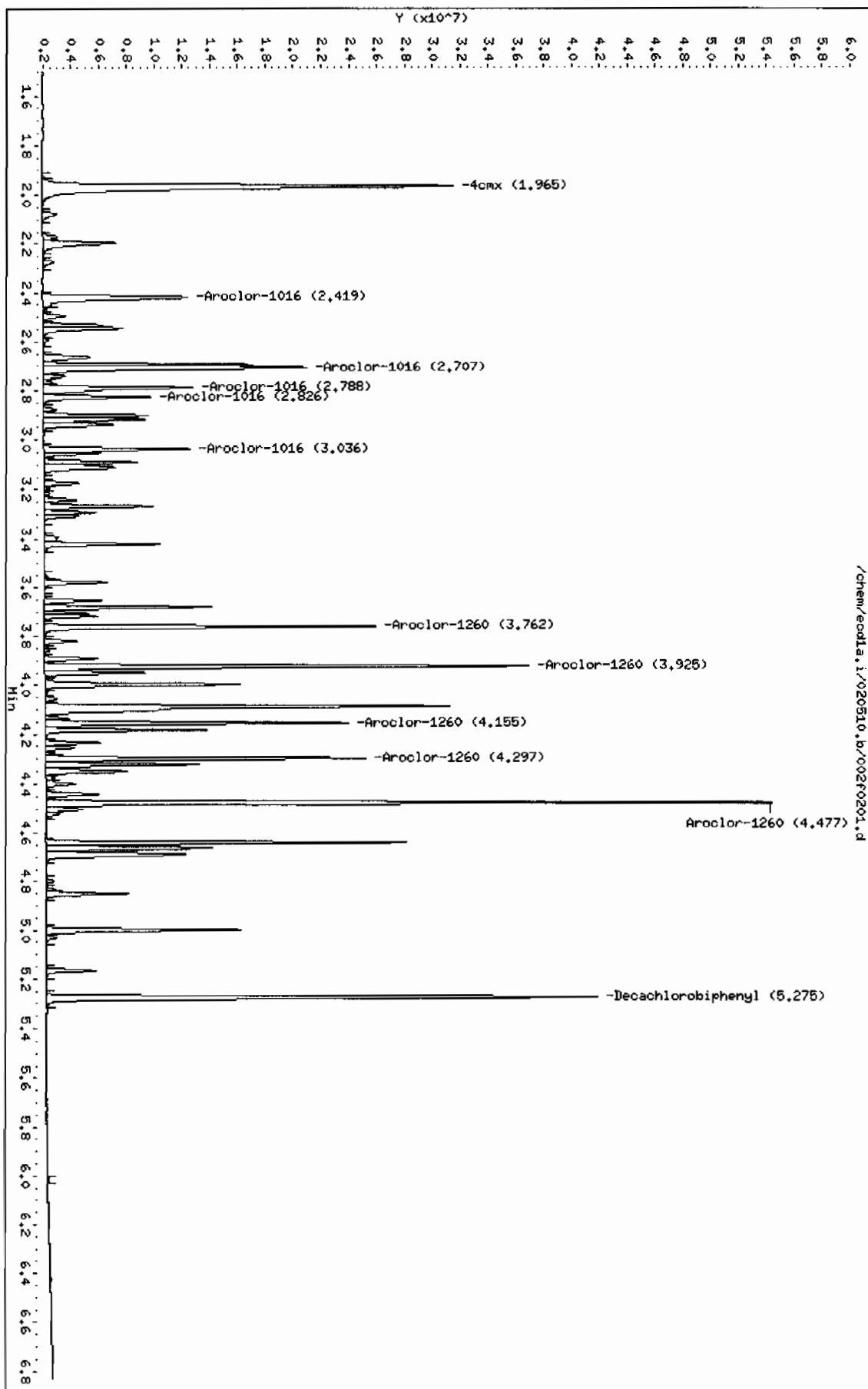
7 Aroclor-1260				CAS #: 11096-82-5		
3.762	3.762	0.000	17492483 1000.00	992	80.00- 120.00	100.00
3.925	3.925	0.000	26719248 1000.00	1000	132.75- 172.75	152.75
4.155	4.155	0.000	15874558 1000.00	997	70.75- 110.75	90.75
4.297	4.297	0.000	16698516 1000.00	1010	75.46- 115.46	95.46
4.477	4.477	0.000	38229555 1000.00	1030	198.55- 238.55	218.55
Average of Peak Amounts =				1.01e+03		

Data File: /chem/ecdda.i/020510.b/002f0201.d
Date: 08-FEB-2010 07:06
Client ID: AR16001
Sample Info: IMR100203-60 01

Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdl1.i/020510.b/002b0201.d
 Report Date: 05-Feb-2010 08:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/020510.b/002b0201.d

Lab Smp Id: WAR100203-60 01

Client Smp ID: AR166001

Inj Date : 05-FEB-2010 07:06

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 01

Misc Info :

Comment :

Method : /chem/ecdl1.i/020510.b/ECD1-B-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.296	2.296	0.000	27312874	100.000	95.1	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.942	5.942	0.000	20818320	100.000	95.7	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
3.192	3.192	0.000	11513111	1000.00	922	80.00-	120.00	100.00(M)
3.275	3.275	0.000	7680091	1000.00	898	46.71-	86.71	66.71
3.339	3.339	0.000	4732691	1000.00	894	21.11-	61.11	41.11
3.565	3.565	0.000	6037895	1000.00	886	32.44-	72.44	52.44
3.641	3.641	0.000	5752367	1000.00	898	29.96-	69.96	49.96
Average of Peak Amounts					900			

7 Aroclor-1260					CAS #: 11096-82-5			
4.332	4.332	0.000	12622486	1000.00	998	80.00-	120.00	100.00
4.457	4.457	0.000	15319189	1000.00	1010	101.36-	141.36	121.36
4.722	4.722	0.000	11665669	1000.00	1000	72.42-	112.42	92.42
4.896	4.896	0.000	12022139	1000.00	997	75.24-	115.24	95.24
5.043	5.043	0.000	27036683	1000.00	1040	194.19-	234.19	214.19
Average of Peak Amounts =					1.01e+03			

QC Flag Legend

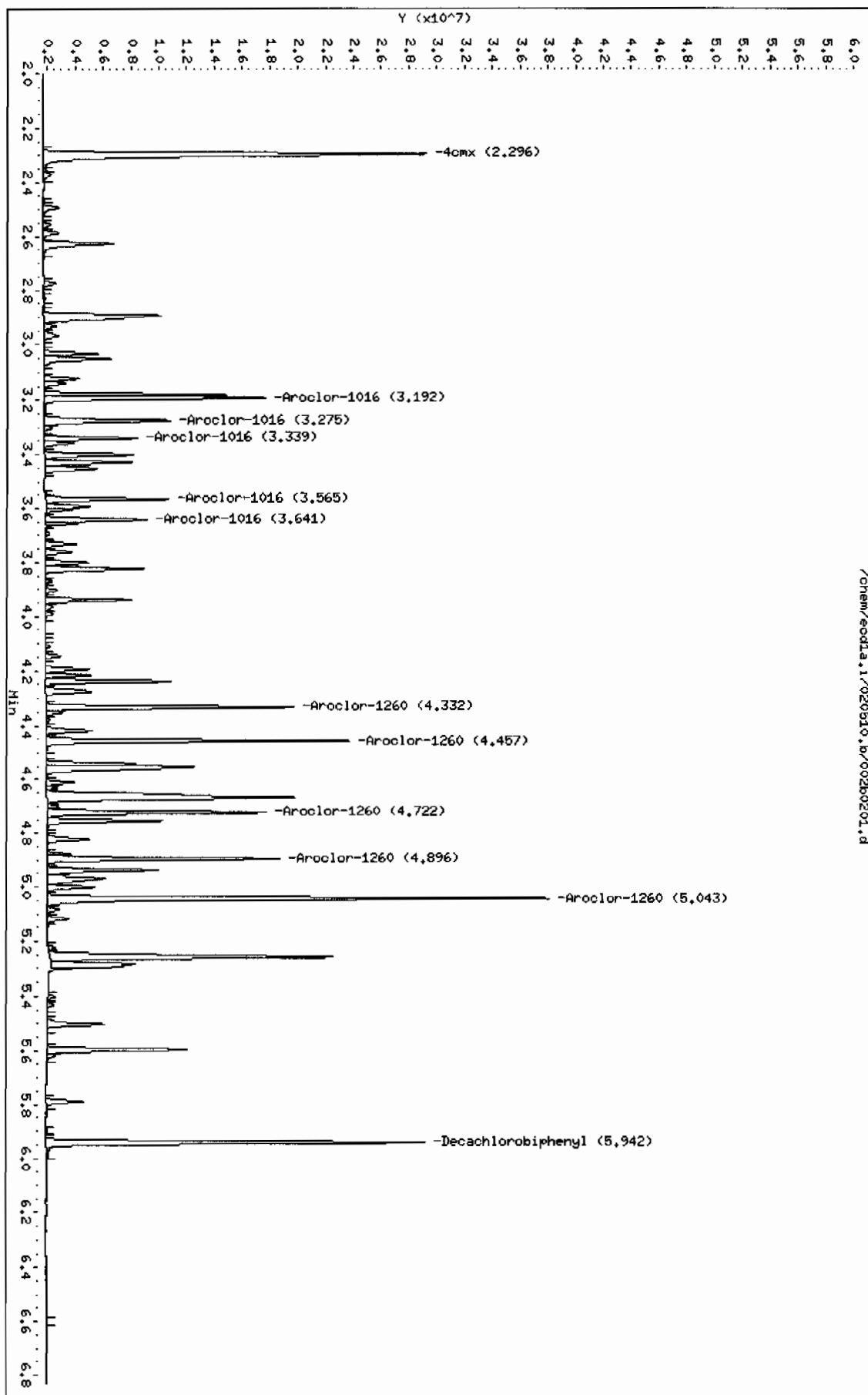
M - Compound response manually integrated.

Data File: /chem/eodla.i/020510.b/002b0201.d
Date: 05-FEB-2010 07:06
Client ID: AR166001
Sample Info: INR100203-60 01

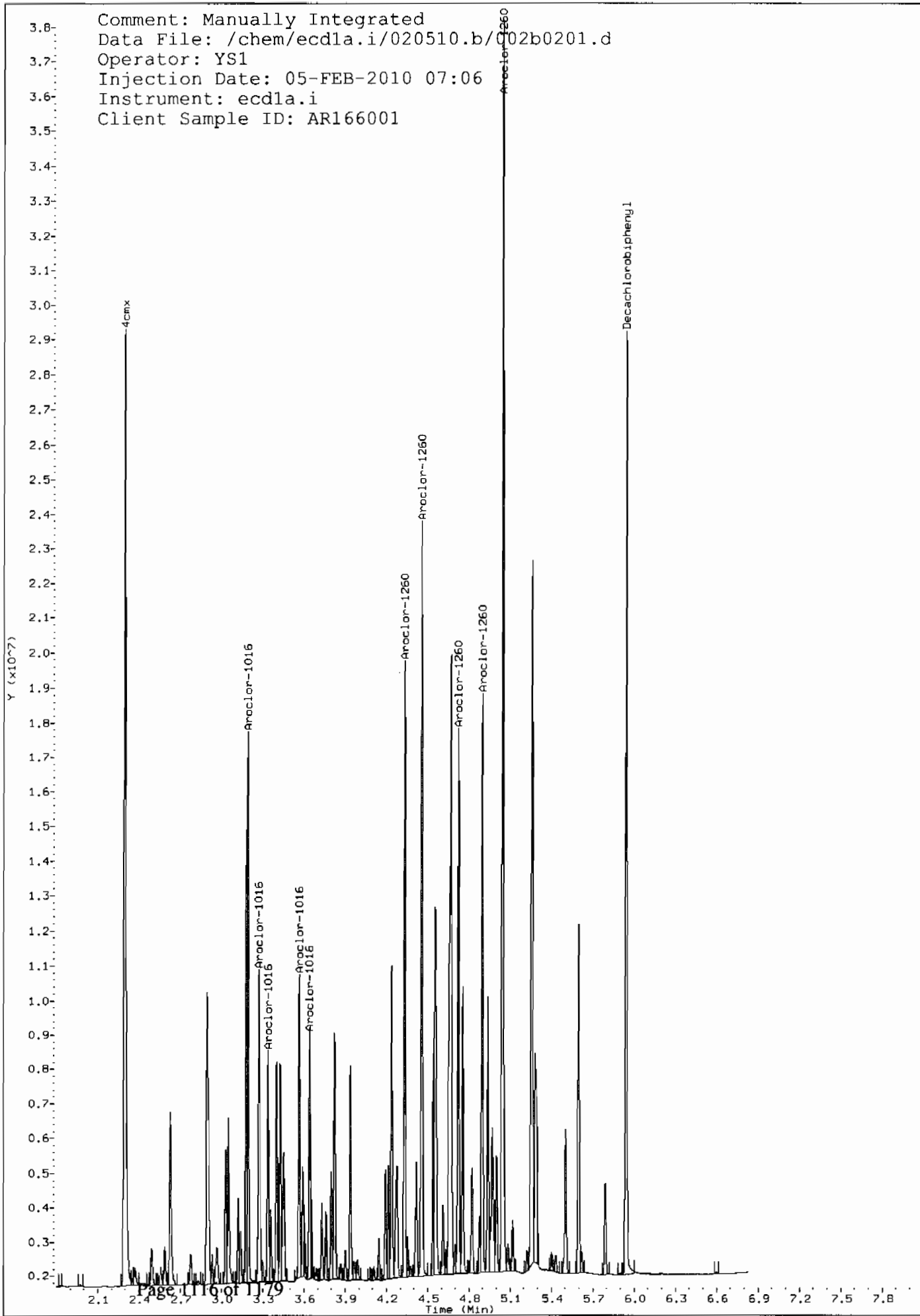
Column phase: CLP2

Instrument: eodla.i
Operator: YSI
Column diameter: 0.25

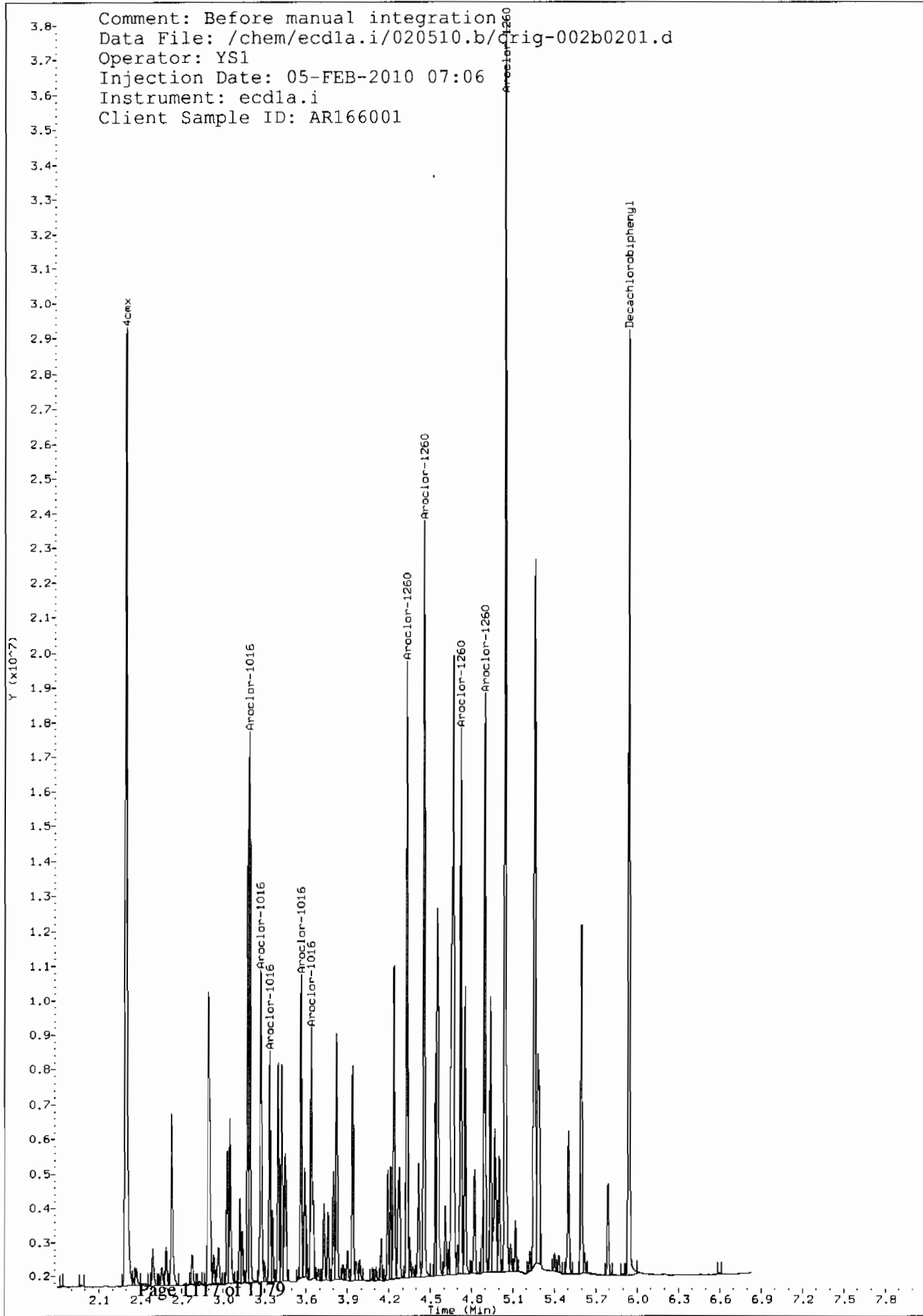
Page 1



Comment: Manually Integrated
Data File: /chem/ecdla.i/020510.b/002b0201.d
Operator: YS1
Injection Date: 05-FEB-2010 07:06
Instrument: ecdla.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdla.i/020510.b/Orig-002b0201.d
Operator: YS1
Injection Date: 05-FEB-2010 07:06
Instrument: ecdla.i
Client Sample ID: AR166001



Data File: /chem/ecdl1a.i/020510.b/003f0301.d
Report Date: 05-Feb-2010 08:29

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 05-FEB-2010 07:17

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.266	3.266	0.000	13316408 1000.00	1070	80.00- 120.00	100.00
3.421	3.421	0.000	18383138 1000.00	1100	118.05- 158.05	138.05
3.655	3.655	0.000	24035597 1000.00	1160	160.50- 200.50	180.50
3.818	3.818	0.000	18227087 1000.00	1160	116.88- 156.88	136.88
3.926	3.926	0.000	17340088 1000.00	1140	110.22- 150.22	130.22

Average of Peak Amounts = 1.13e+03

Data File: /chem/eodla.i/020510.b/003f0301.d

Date: 05-FEB-2010 07:17

Client ID: AR125401

Sample Info: 1MR091216-54

Column phase: CLP1

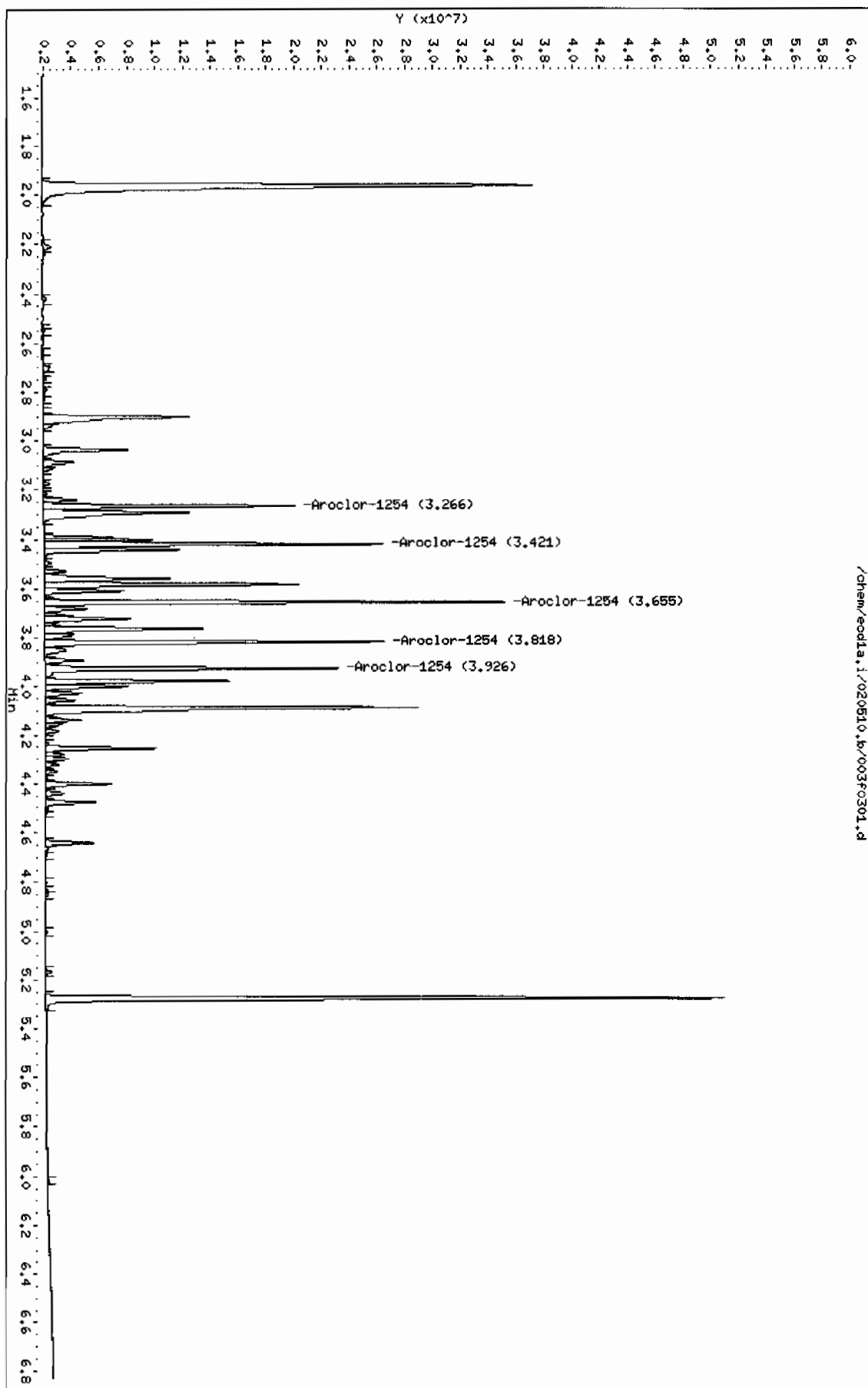
Page 1

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25

/chem/eodla.i/020510.b/003f0301.d



Data File: /chem/ecdl1a.i/020510.b/003b0301.d
Report Date: 05-Feb-2010 08:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/003b0301.d
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401
Inj Date : 05-FEB-2010 07:17
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091216-54
Misc Info :
Comment :
Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

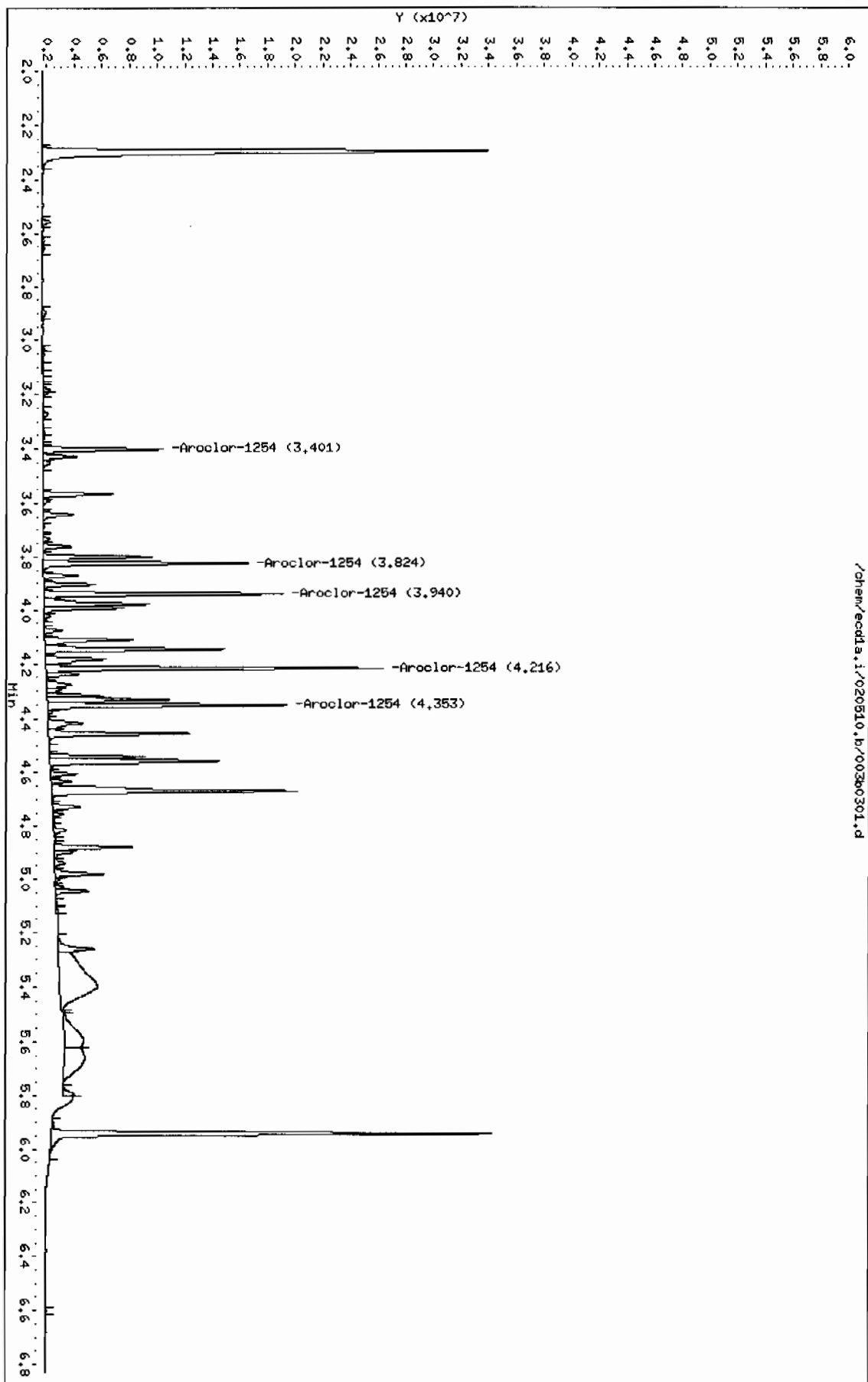
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254			CAS #: 11097-69-1			
3.401	3.401	0.000	6210292 1000.00	965	80.00- 120.00	100.00
3.824	3.824	0.000	11223428 1000.00	971	160.72- 200.72	180.72
3.940	3.940	0.000	12385662 1000.00	996	179.44- 219.44	199.44
4.216	4.216	0.000	17124358 1000.00	1010	255.74- 295.74	275.74
4.353	4.353	0.000	12208508 1000.00	982	176.59- 216.59	196.59
Average of Peak Amounts =			986			

Data File: /chem/ecdda.i/020510.b/00360301.d
Date: 05-FEB-2010 07:17
Client ID: AR125401
Sample Info: IMR091216-S4

Column phase: CLP2

Instrument: ecdda.i
Operator: YSI
Column diameter: 0.25

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Data File: /chem/ecdla.i/020510.b/004f0401.d
Report Date: 05-Feb-2010 08:29

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/004f0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 05-FEB-2010 07:27
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdla.i/020510.b/ECD1-F-8082-121409.m
Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
4 Aroclor-1242			CAS #: 53469-21-9			
2.420	2.420	0.000	11255044 1000.00	965	80.00- 120.00	100.00
2.708	2.708	0.000	14293317 1000.00	1060	106.99- 146.99	126.99
2.826	2.826	0.000	5433097 1000.00	987	28.27- 68.27	48.27
3.037	3.037	0.000	7156483 1000.00	988	43.58- 83.58	63.58
3.290	3.290	0.000	6999007 1000.00	1030	42.19- 82.19	62.19
Average of Peak Amounts =			1.01e+03			

Data File: /chem/ecdl1.i/020510.b/004f0401.d

Date: 05-FEB-2010 07:27

Client ID: AR124201

Sample Info: 1MAR091217-42

Column phase: CLP1

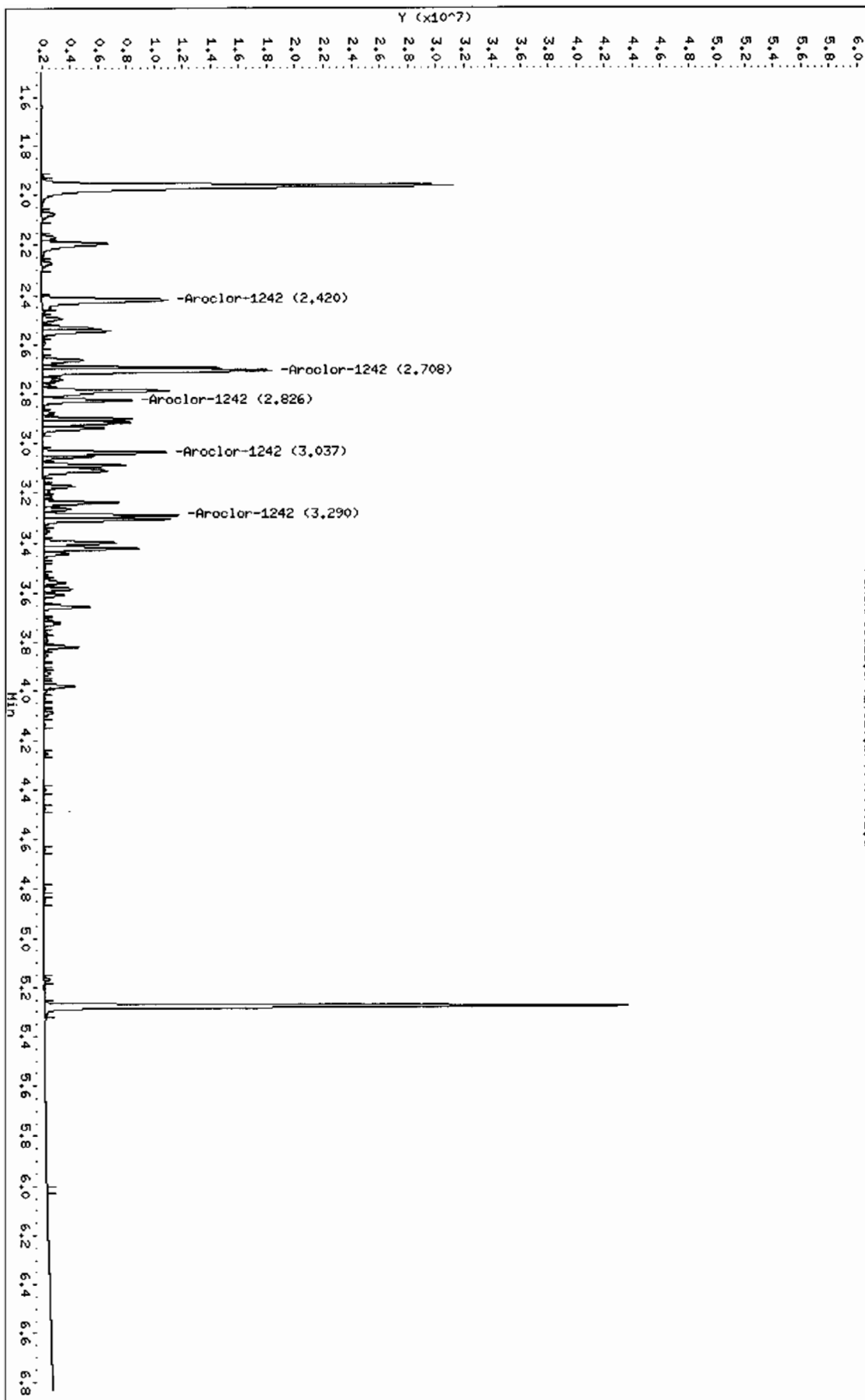
Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

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/chem/ecdl1.i/020510.b/004f0401.d



Data File: /chem/ecdla.i/020510.b/004b0401.d
Report Date: 05-Feb-2010 08:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/004b0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 05-FEB-2010 07:27
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242						
3.192	3.192	0.000	10109273 1000.00	955	80.00- 120.00	100.00
3.275	3.275	0.000	6573360 1000.00	816	45.02- 85.02	65.02
3.566	3.566	0.000	5197092 1000.00	872	31.41- 71.41	51.41
3.800	3.800	0.000	5378692 1000.00	888	33.21- 73.21	53.21
3.828	3.828	0.000	6016980 1000.00	898	39.52- 79.52	59.52
Average of Peak Amounts =				886		

Data File: /chem/eod1a.i/020510.b/004b0401.d

Date : 05-FEB-2010 07:27

Client ID: AR124201

Sample Info: 1MAR091217-42

Column phase: CLP2

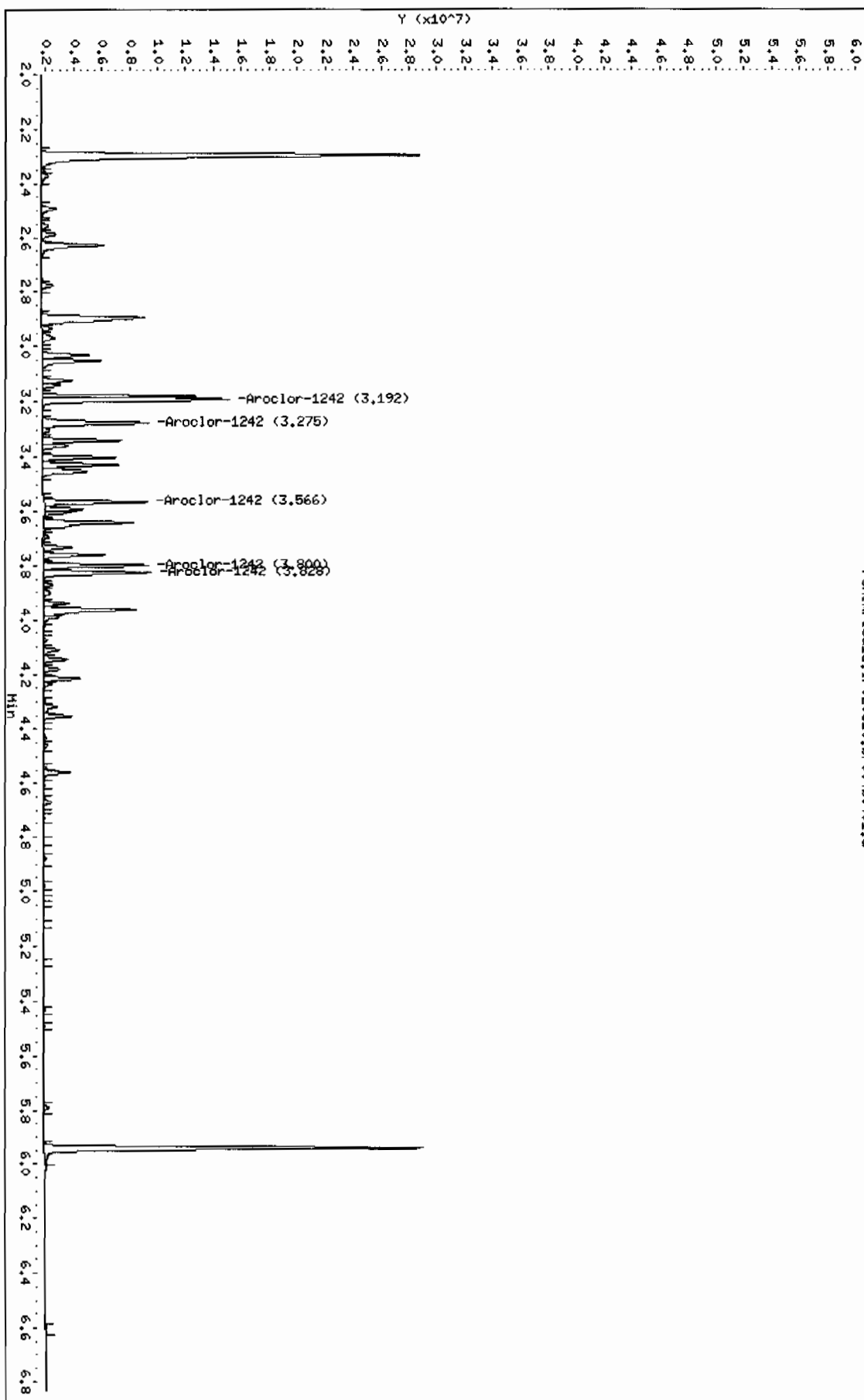
Page 1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

/chem/eod1a.i/020510.b/004b0401.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/020510.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 05-FEB-2010 07:38

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
=====			=====	=====	=====	=====	
5 Aroclor-1248				CAS #: 12672-29-6			
3.088	3.088	0.000	8241247 1000.00	1050	80.00- 120.00	100.00	
3.240	3.240	0.000	7125731 1000.00	1040	66.46- 106.46	86.46	
3.291	3.291	0.000	14052338 1000.00	1060	150.51- 190.51	170.51	
3.422	3.422	0.000	11222456 1000.00	1020	116.17- 156.17	136.17	
3.655	3.655	0.000	7182031 1000.00	963	67.15- 107.15	87.15	

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecda.i/020510.b/005f0501.d

Date : 05-FEB-2010 07:38

Client ID: 6R124801

Sample Info: 1MAR091217-48

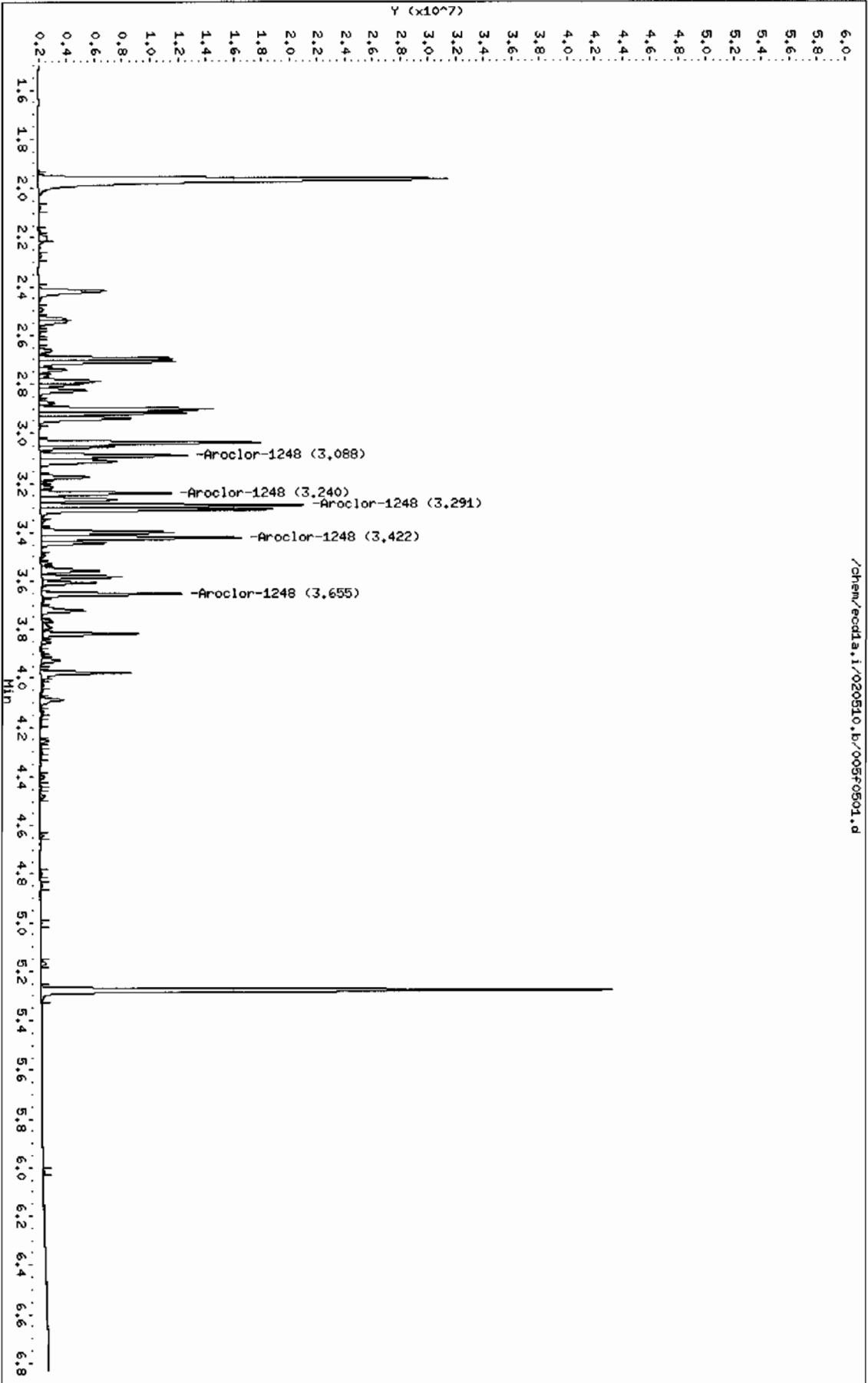
Column phase: CLP1

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Instrument: ecda.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdla.i/020510.b/005b0501.d
Report Date: 05-Feb-2010 09:40

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/005b0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 05-FEB-2010 07:38

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m

Meth Date : 05-Feb-2010 09:40 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: hpclp1

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248

CAS #: 12672-29-6

3.401	3.401	0.000	7358985 1000.00	914	80.00- 120.00	100.00
3.566	3.566	0.000	9216148 1000.00	933	105.24- 145.24	125.24
3.800	3.800	0.000	10436092 1000.00	930	121.81- 161.81	141.81
3.827	3.827	0.000	11626532 1000.00	931	137.99- 177.99	157.99
3.965	3.965	0.000	11178442 1000.00	924	131.90- 171.90	151.90

Average of Peak Amounts =

926

Data File: /chem/eod1a.i/020510.b/005b0501.d

Date: 05-FEB-2010 07:38

Client ID: AR124801

Sample Info: IWR091217-48

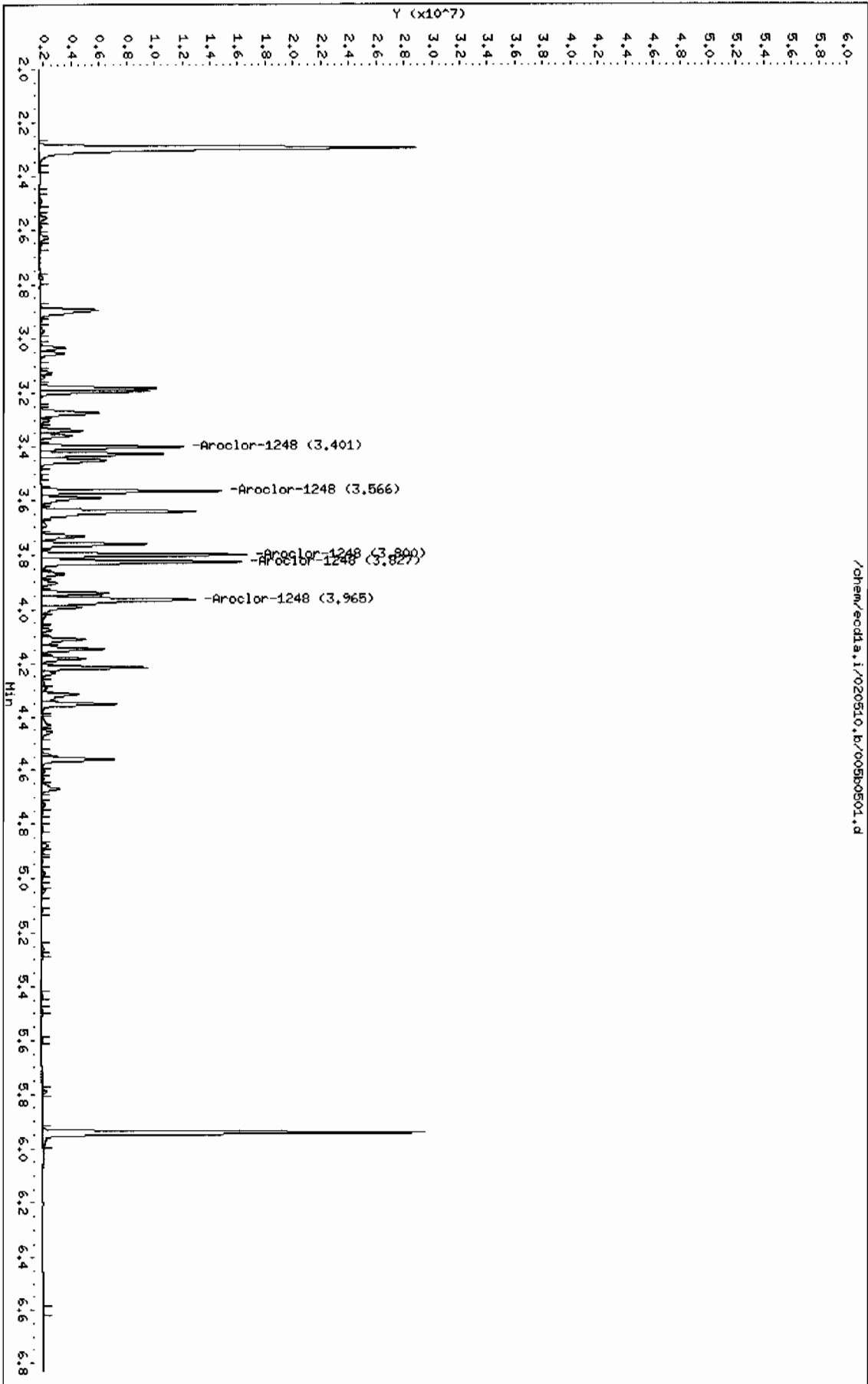
Column phase: CLP2

Instrument: eod1a.i

Operator: VSI

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 05-FEB-2010 07:48

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
2.421	2.421	0.000	6684520	1000.00	976 80.00- 120.00	100.00
2.709	2.709	0.000	8973672	1000.00	1060 114.25- 154.25	134.25
2.789	2.789	0.000	5627474	1000.00	1000 64.19- 104.19	84.19
3.038	3.038	0.000	4163606	1000.00	1040 42.29- 82.29	62.29
3.291	3.291	0.000	3786517	1000.00	981 36.65- 76.65	56.65
Average of Peak Amounts =			1.01e+03			

3 Aroclor-1232

CAS #: 11141-16-5

2.421	2.421	0.000	6684520	1000.00	976 80.00- 120.00	100.00
2.709	2.709	0.000	8973672	1000.00	1060 114.25- 154.25	134.25
2.789	2.789	0.000	5627474	1000.00	1000 64.19- 104.19	84.19
3.038	3.038	0.000	4163606	1000.00	1040 42.29- 82.29	62.29
3.291	3.291	0.000	3786517	1000.00	981 36.65- 76.65	56.65

Average of Peak Amounts = 1.01e+03

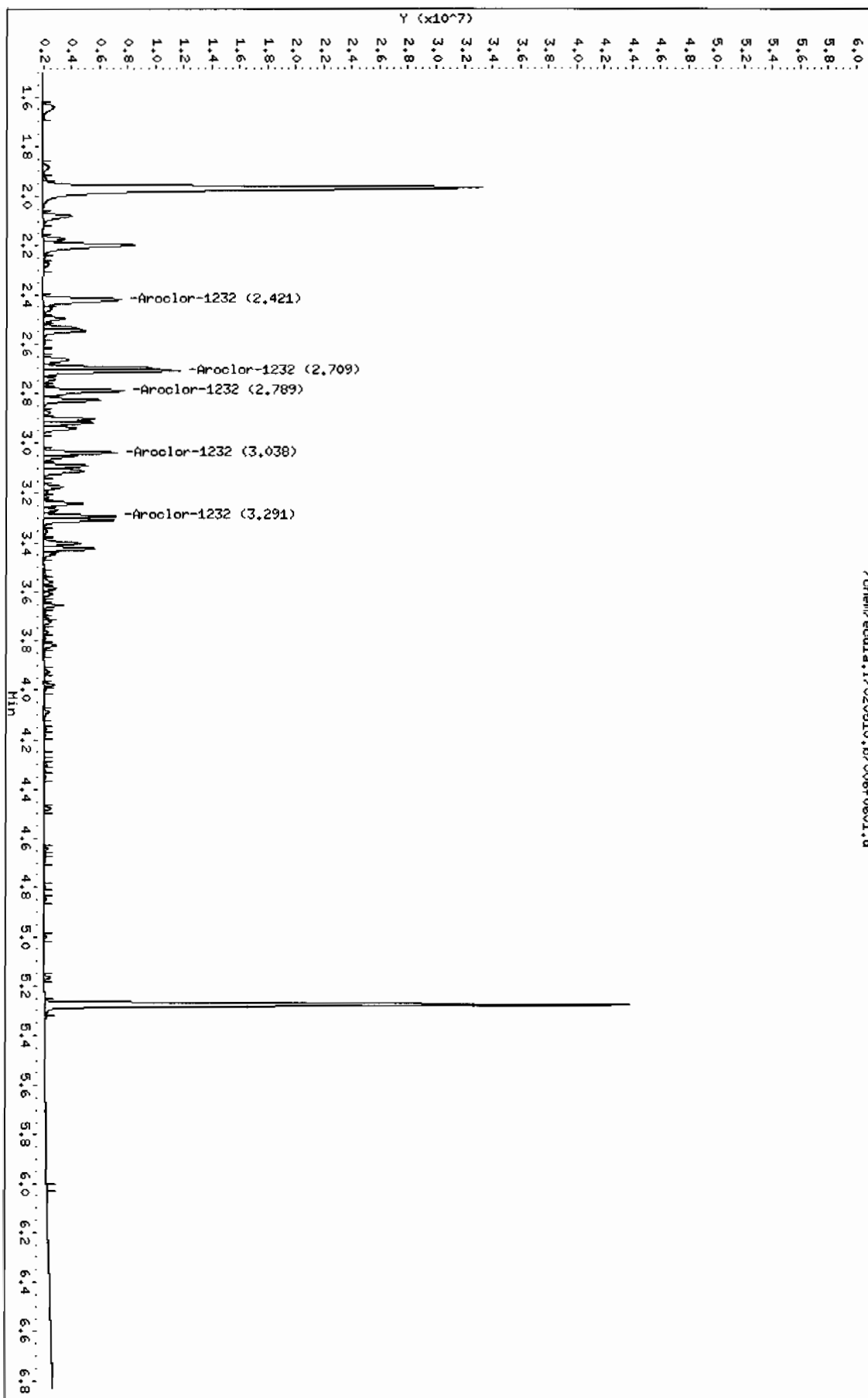
Data File: /chem/ecdl1.i/020510.b/006f0601.d
Date : 05-FEB-2010 07:48
Client ID: AR123201
Sample Info: INAR100104-32

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Column phase: CLP1

Instrument: ecdl1.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl1.i/020510.b/006f0601.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/006b0601.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 05-FEB-2010 07:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 05-Feb-2010 08:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

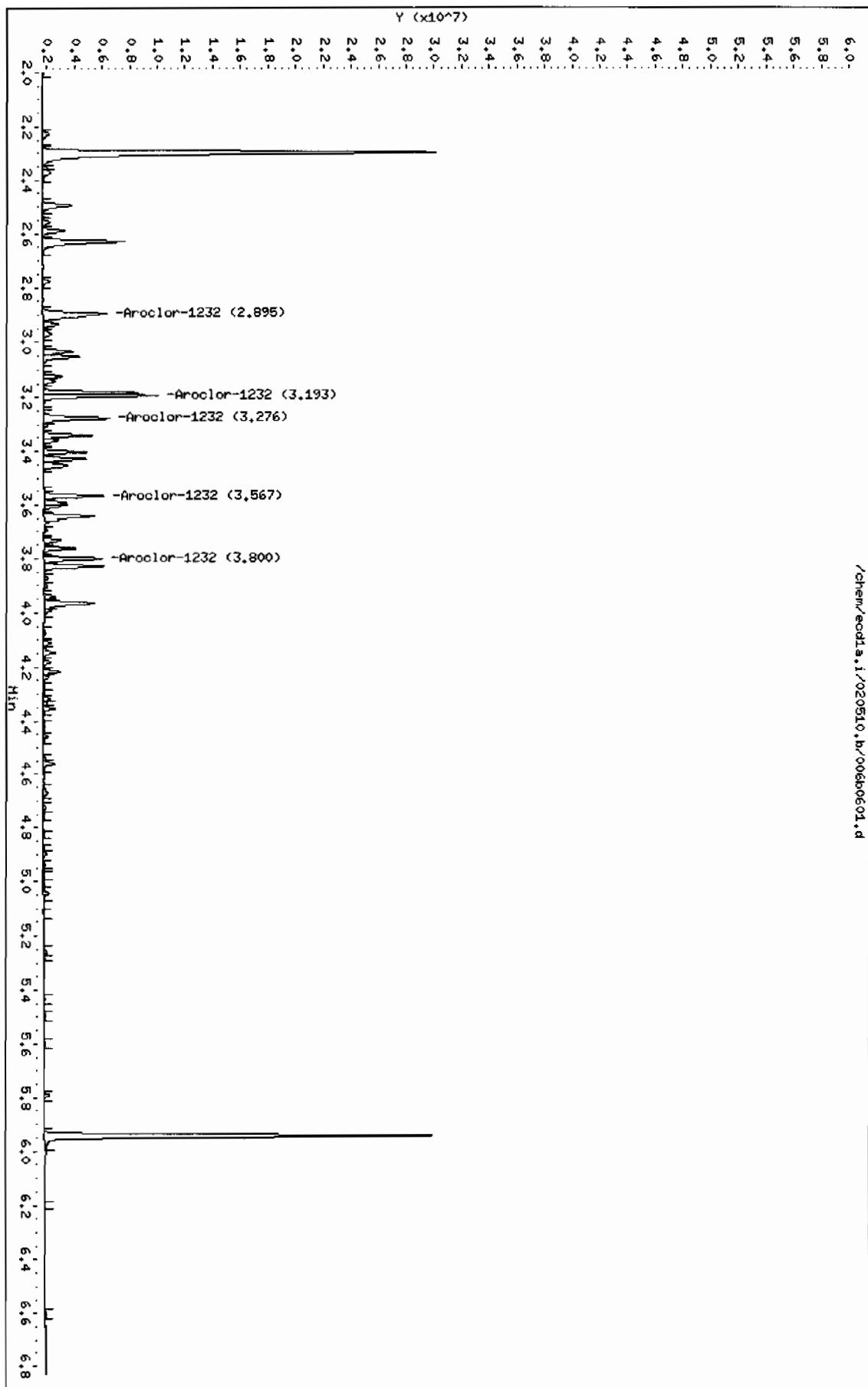
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3	Aroclor-1232				CAS #: 11141-16-5	
2.895	2.895	0.000	5518314 1000.00	937	80.00- 120.00	100.00
3.193	3.193	0.000	6067838 1000.00	975	89.96- 129.96	109.96
3.276	3.276	0.000	4176572 1000.00	961	55.69- 95.69	75.69
3.567	3.567	0.000	3101183 1000.00	997	36.20- 76.20	56.20
3.800	3.800	0.000	3042822 1000.00	953	35.14- 75.14	55.14
Average of Peak Amounts =				965		

Data File: /chem/eod1a.i/020510.b/006b0601.d
Date: 05-FEB-2010 07:48
Client ID: AR123201
Sample Info: 1MAR100104-32

Column phase: CLP2

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdla.i/020510.b/007f0701.d
Report Date: 05-Feb-2010 08:30

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 05-FEB-2010 07:59

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

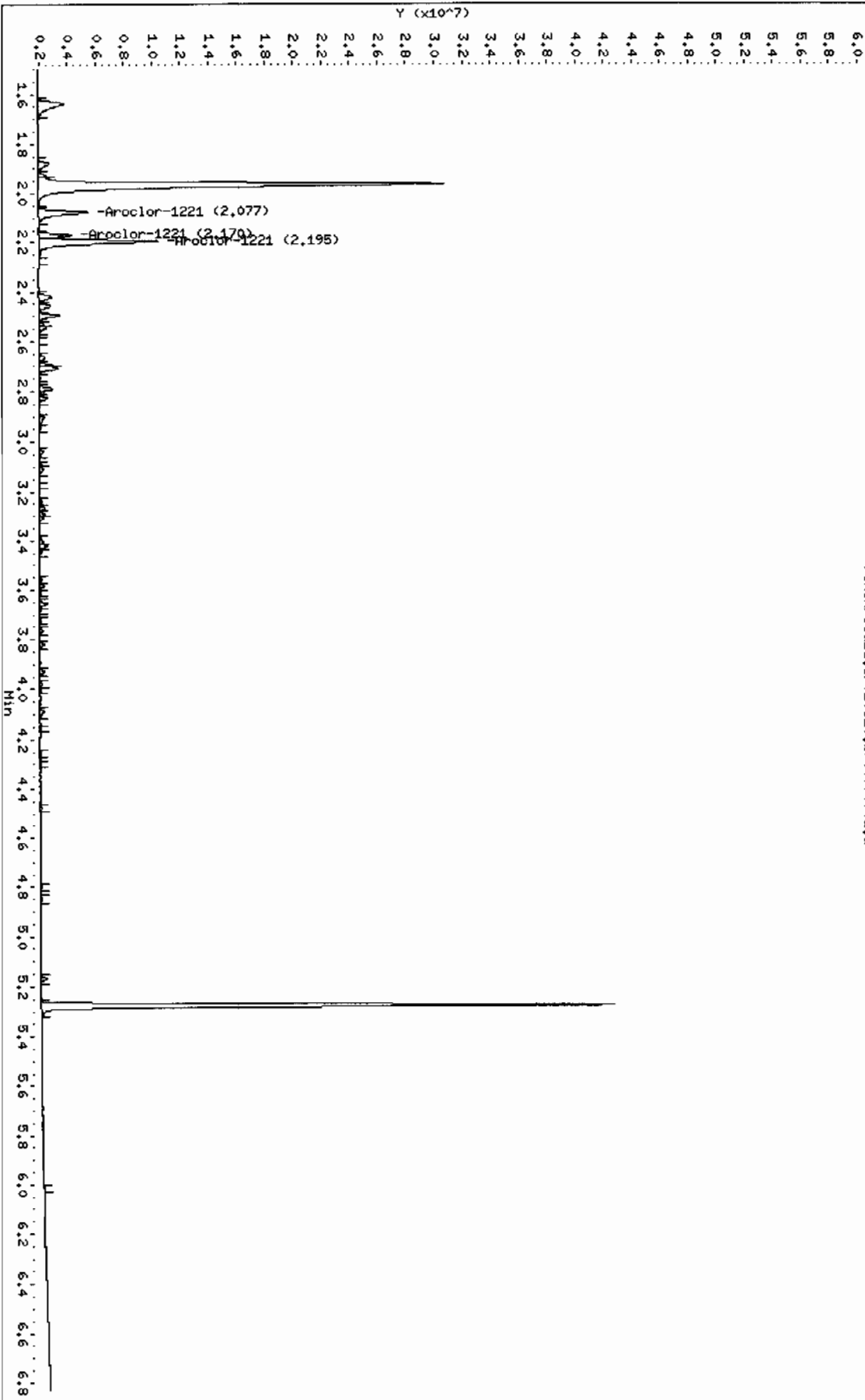
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2 Aroclor-1221			CAS #: 11104-28-2			
2.077	2.077	0.000	4201820	1000.00	977 80.00- 120.00	100.00
2.170	2.170	0.000	2263486	1000.00	927 33.87- 73.87	53.87
2.195	2.195	0.000	10281522	1000.00	1000 224.69- 264.69	244.69
Average of Peak Amounts =			968			

Data File: /chem/ecda.i/020510.b/0070701.d
 Date: 05-FEB-2010 07:59
 Client ID: AR122101
 Sample Info: IWR100104-21
 Column phase: CLP1

Instrument: ecda.i
 Operator: YSI
 Column diameter: 0.25

/chem/ecda.i/020510.b/0070701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR123201

Inj Date : 05-FEB-2010 07:59

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m

Meth Date : 05-Feb-2010 08:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
=====			=====	=====	=====	=====
2 Aroclor-1221			CAS #: 11104-28-2			
2.492	2.492	0.000	3283686	1000.00	902 80.00- 120.00	100.00
2.586	2.586	0.000	2130872	1000.00	915 44.89- 84.89	64.89
2.627	2.627	0.000	7321346	1000.00	902 202.96- 242.96	222.96
Average of Peak Amounts =			906			

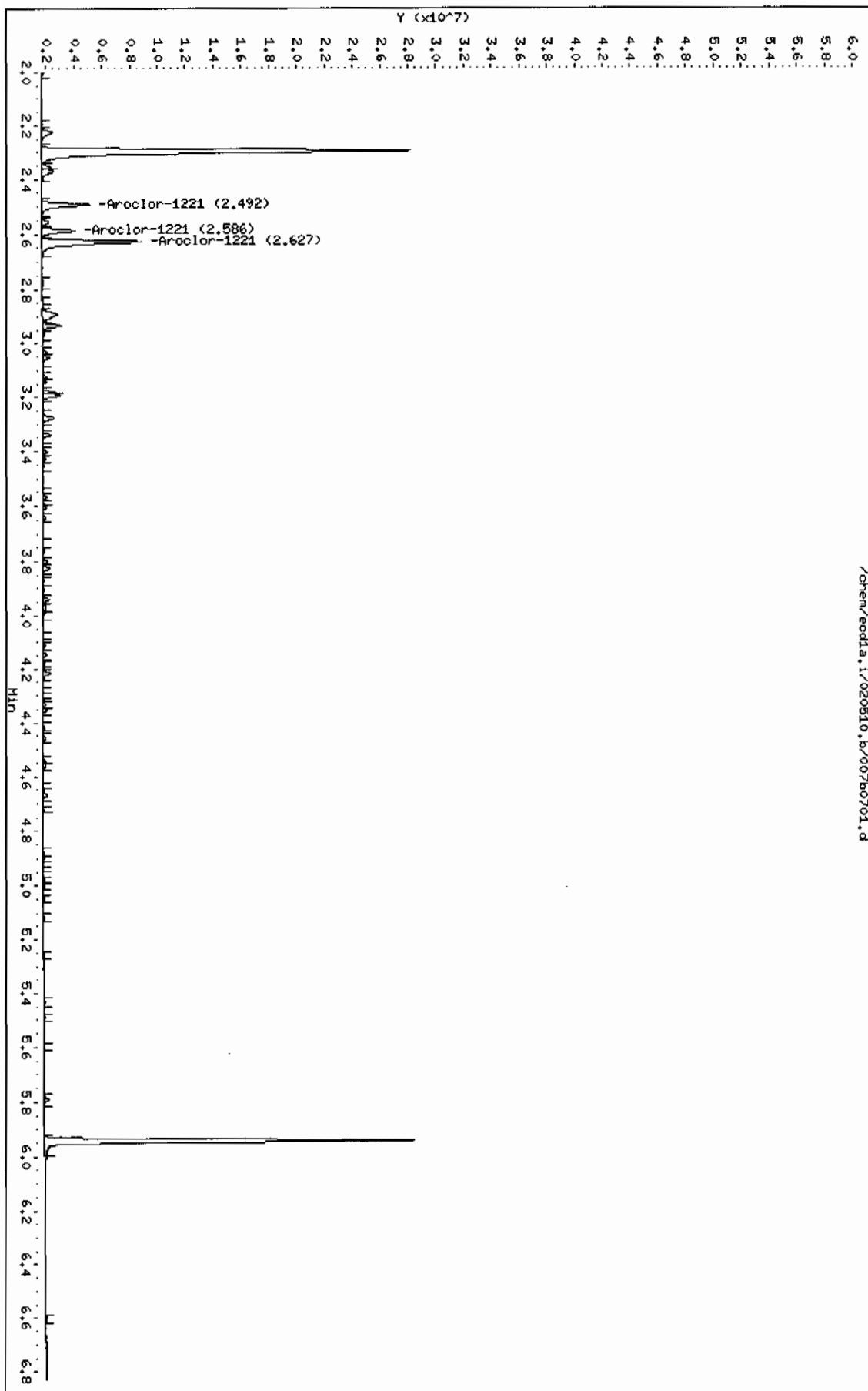
Data File: /chem/eodla.i/020510.b/007b0701.d
Date: 05-FEB-2010 07:59
Client ID: AR123201
Sample Info: IMR100104-21

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Column phase: CLP2

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25

/chem/eodla.i/020510.b/007b0701.d



Data File: /chem/ecdl1a.i/020510.b/022f2201.d
 Report Date: 08-Feb-2010 10:03

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/022f2201.d
 Lab Smp Id: WAR100203-60 02 Client Smp ID: AR166002
 Inj Date : 05-FEB-2010 10:51
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100203-60 02
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m
 Meth Date : 08-Feb-2010 09:06 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 22 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.965	1.965	0.000	40504102 100.000	102	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.274	5.275	-0.001	32906895 100.000	102	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
2.420	2.419	0.001	14089870 1000.00	961	80.00- 120.00	100.00	
2.707	2.707	0.000	18254738 1000.00	996	106.82- 146.82	129.56	
2.787	2.788	-0.001	11539563 1000.00	960	60.66- 100.66	81.90	
2.826	2.826	0.000	6922359 1000.00	964	28.59- 68.59	49.13	
3.036	3.036	0.000	8923226 1000.00	960	42.97- 82.97	63.33	
Average of Peak Amounts =				968			

7 Aroclor-1260				CAS #: 11096-82-5			
3.761	3.762	-0.001	19002907 1000.00	1080	80.00- 120.00	100.00 (M)	
3.924	3.925	-0.001	28995739 1000.00	1090	132.12- 172.12	152.59	
4.154	4.155	-0.001	17302329 1000.00	1090	70.53- 110.53	91.05	
4.297	4.297	0.000	18016442 1000.00	1090	75.55- 115.55	94.81	
4.476	4.477	-0.001	41342662 1000.00	1110	197.21- 237.21	217.56	
Average of Peak Amounts =				1.09e+03			

Data File: /chem/ecdl1a.i/020510.b/022f2201.d
Report Date: 08-Feb-2010 10:03

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QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/020510.b/022f2201.d

Date: 05-FEB-2010 10:51

Client ID: AR166002

Sample Info: 1MAR100203-60 02

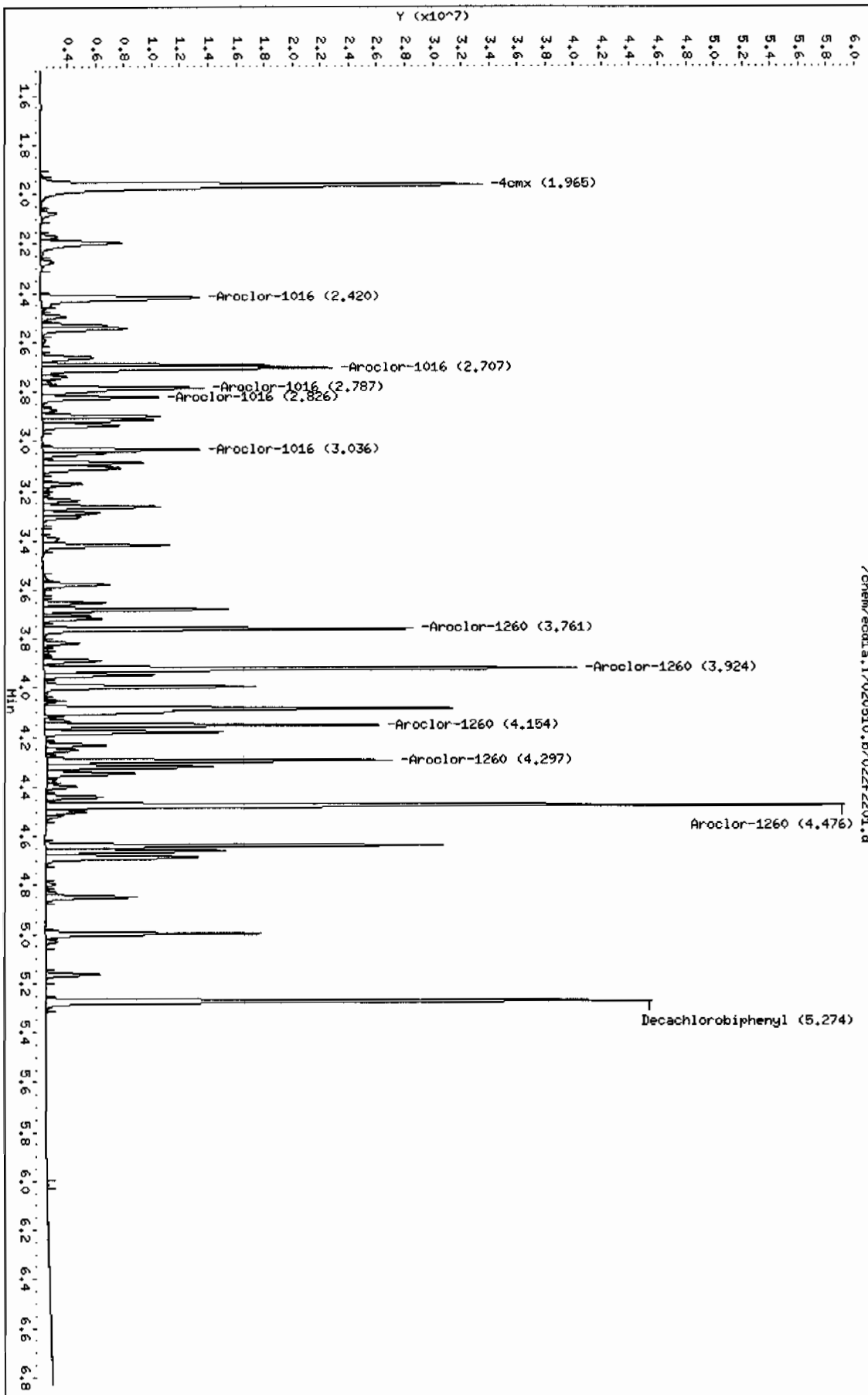
Column phase: CLP1

Instrument: eod1a.i

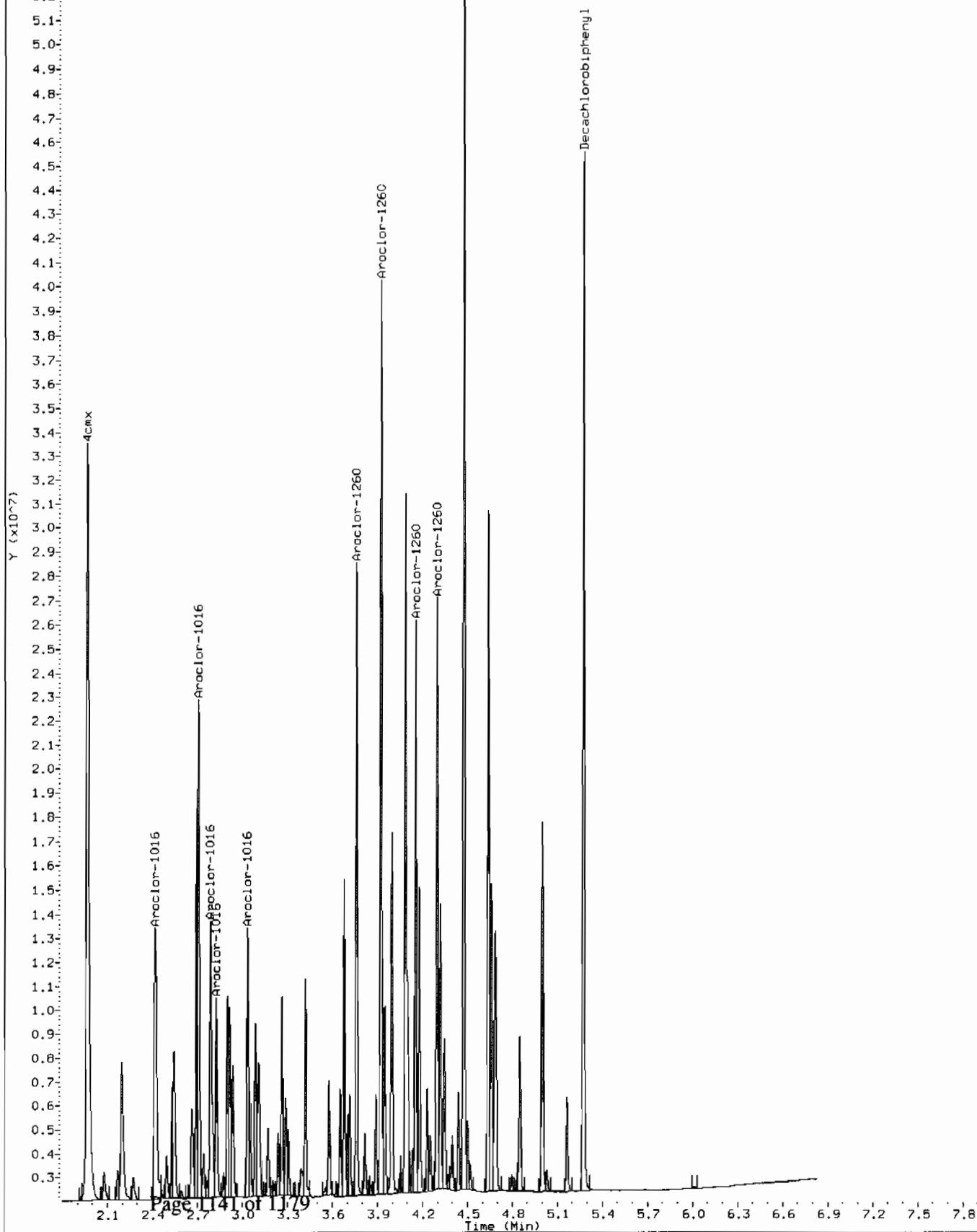
Operator: YSL

Column diameter: 0.25

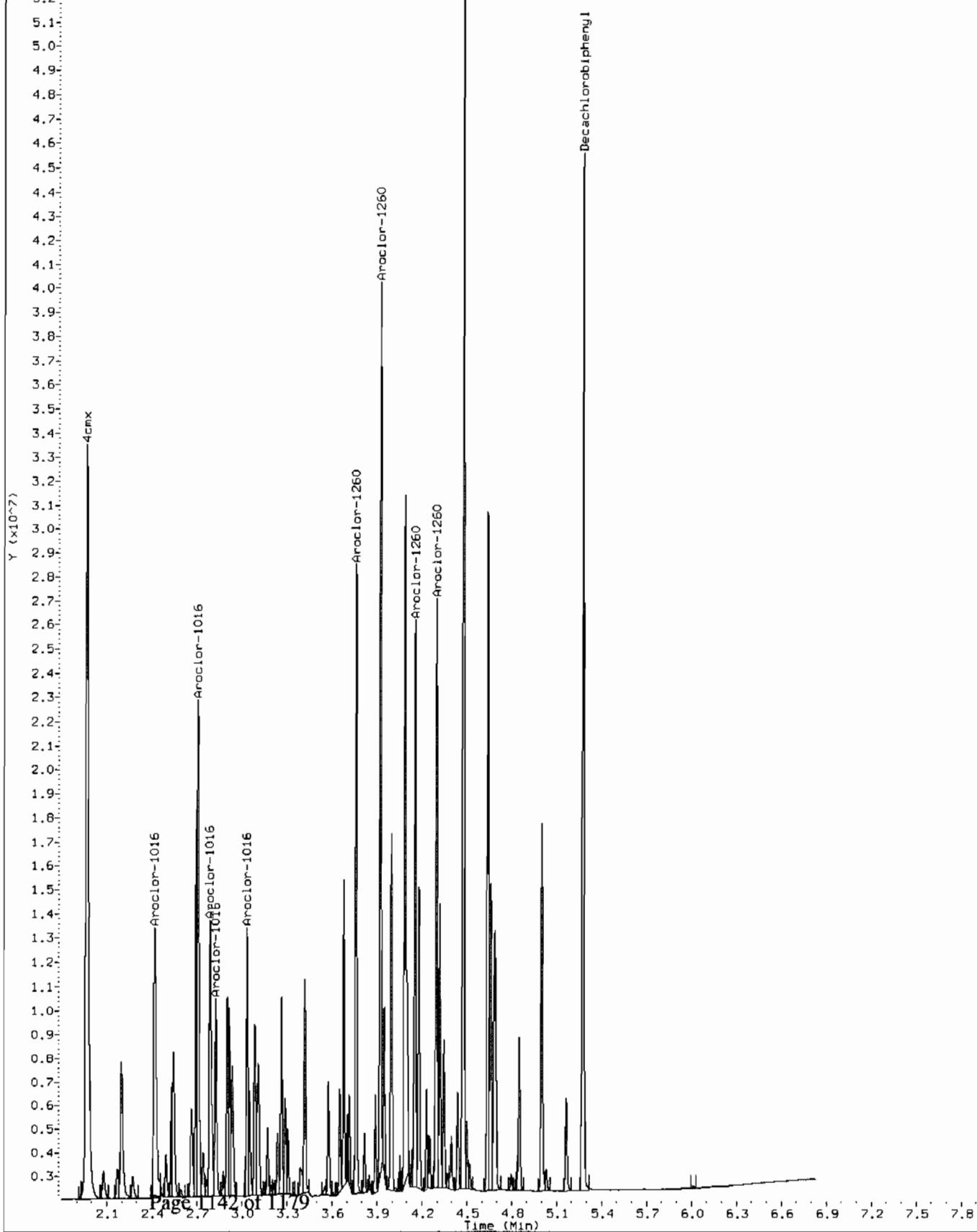
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/020510.b/022f2201.d
Operator: YS1
Injection Date: 05-FEB-2010 10:51
Instrument: ecd1a.i
Client Sample ID: AR166002



Comment: Before manual integration
Data File: /chem/ecdl1.i/020510.b/orig-022f2201.d
Operator: YS1
Injection Date: 05-FEB-2010 10:51
Instrument: ecd1a.i
Client Sample ID: AR166002



Data File: /chem/ecdl1a.i/020510.b/022b2201.d
 Report Date: 05-Feb-2010 11:31

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/022b2201.d

Lab Smp Id: WAR100203-60 02

Client Smp ID: AR166002

Inj Date : 05-FEB-2010 10:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-B-8082-121409.m

Meth Date : 05-Feb-2010 11:30 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d

Als bottle: 22

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.297	2.296	0.001	28991286 100.000	101	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.941	5.942	-0.001	22228765 100.000	102	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.192	3.192	0.000	12553096 1000.00	1000	80.00- 120.00	100.00	
3.275	3.275	0.000	8166105 1000.00	955	45.05- 85.05	65.05	
3.338	3.339	-0.001	5045053 1000.00	954	20.19- 60.19	40.19	
3.565	3.565	0.000	6628313 1000.00	973	32.80- 72.80	52.80	
3.641	3.641	0.000	6123429 1000.00	956	28.78- 68.78	48.78	
Average of Peak Amounts =				969			

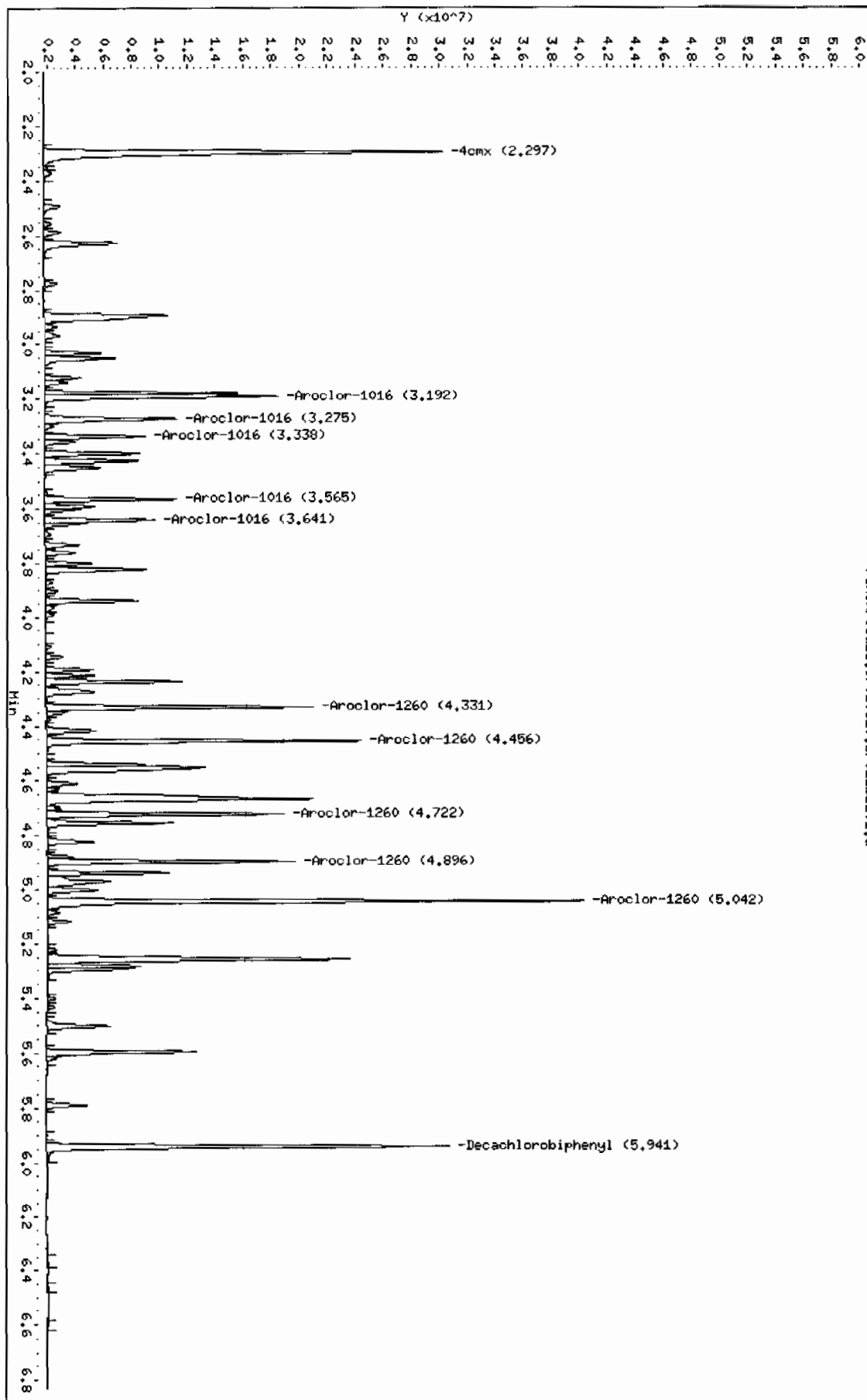
7 Aroclor-1260				CAS #: 11096-82-5			
4.331	4.332	-0.001	13388385 1000.00	1060	80.00- 120.00	100.00	
4.456	4.457	-0.001	16291509 1000.00	1070	101.68- 141.68	121.68	
4.722	4.722	0.000	12420564 1000.00	1070	72.77- 112.77	92.77	
4.896	4.896	0.000	12892265 1000.00	1070	76.29- 116.29	96.29	
5.042	5.043	-0.001	28894660 1000.00	1110	195.82- 235.82	215.82	
Average of Peak Amounts =				1.07e+03			

Data File: /chem/ecdl.a.i/020510.b/022b2201.d
Date: 05-FEB-2010 10:51
Client ID: AR166002
Sample Info: 14AR100203-60 02

Column phase: CLP2

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl.a.i/020510.b/022b2201.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/031f3101.d

Lab Smp Id: WAR100203-60 03

Client Smp ID: AR166003

Inj Date : 05-FEB-2010 12:40

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 13:50 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 31

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.966	1.965	0.001	40459975	100.000	101	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.274	5.275	-0.001	32629917	100.000	101	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.420	2.419	0.001	14012607	1000.00	956	80.00- 120.00	100.00
2.708	2.707	0.001	18319018	1000.00	1000	110.73- 150.73	130.73
2.788	2.788	0.000	11547800	1000.00	960	62.41- 102.41	82.41
2.826	2.826	0.000	6929943	1000.00	965	29.46- 69.46	49.46
3.036	3.036	0.000	8939714	1000.00	962	43.80- 83.80	63.80
Average of Peak Amounts =					969		

7 Aroclor-1260					CAS #: 11096-82-5		
3.761	3.762	-0.001	18972126	1000.00	1080	80.00- 120.00	100.00
3.924	3.925	-0.001	28835947	1000.00	1080	131.99- 171.99	151.99
4.154	4.155	-0.001	17204186	1000.00	1080	70.68- 110.68	90.68
4.297	4.297	0.000	18148577	1000.00	1100	75.66- 115.66	95.66
4.476	4.477	-0.001	41262621	1000.00	1110	197.49- 237.49	217.49
Average of Peak Amounts =					1.09e+03		

Data File: /chem/eodla.i/020510.b/031f3101.d

Date: 05-FEB-2010 12:40

Client ID: 66166003

Sample Info: 146R100203-60 03

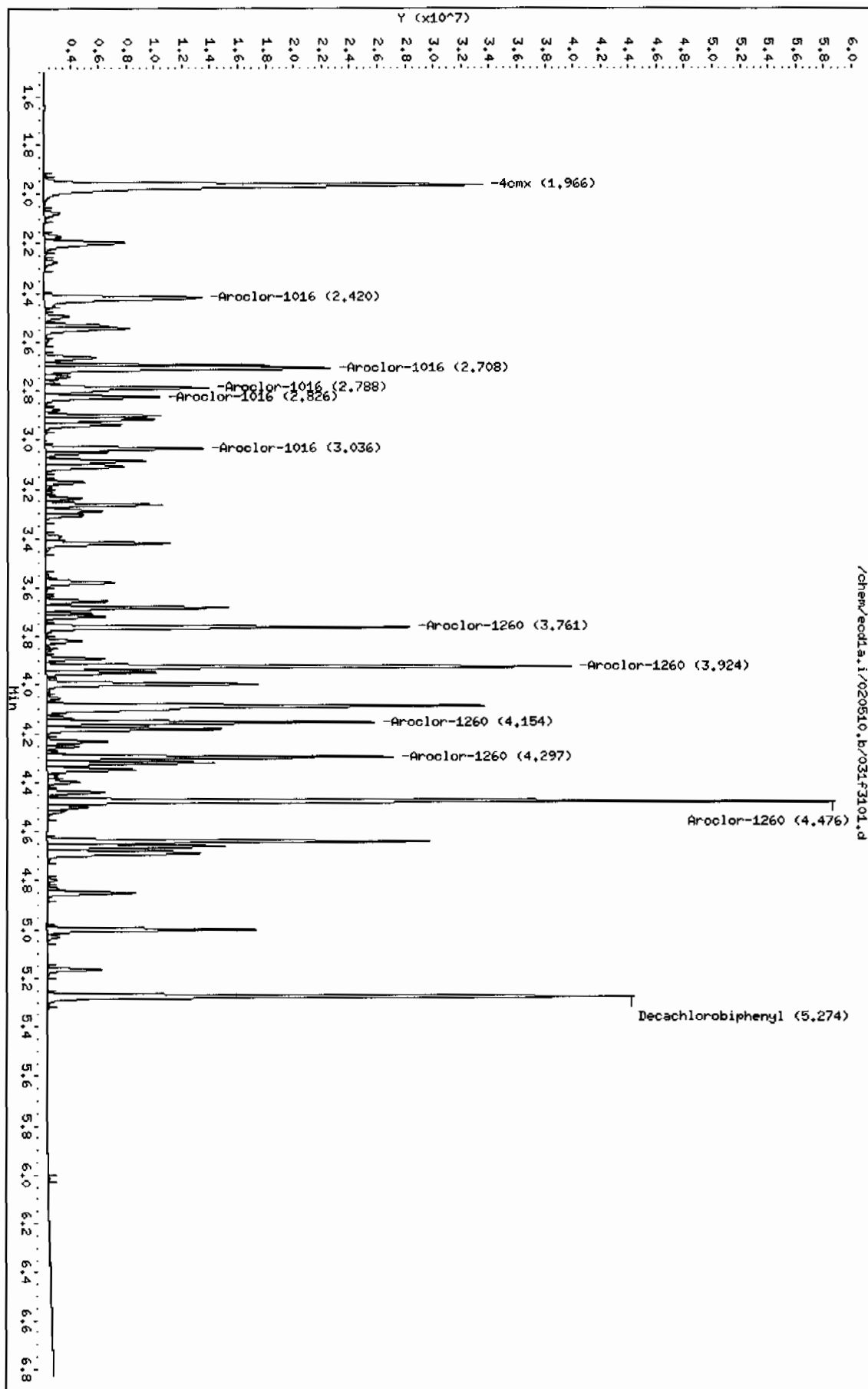
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/020510.b/031b3101.d

Lab Smp Id: WAR100203-60 03

Client Smp ID: AR166003

Inj Date : 05-FEB-2010 12:40

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100203-60 03

Misc Info :

Comment :

Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m

Meth Date : 05-Feb-2010 13:50 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 31

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.297	2.296	0.001	28690788 100.000	99.9	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.941	5.942	-0.001	21926681 100.000	101	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.192	3.192	0.000	12359615 1000.00	990	80.00- 120.00	100.00 (M)	
3.275	3.275	0.000	8069931 1000.00	944	45.29- 85.29	65.29	
3.338	3.339	-0.001	4988684 1000.00	943	20.36- 60.36	40.36	
3.565	3.565	0.000	6345906 1000.00	931	31.34- 71.34	51.34	
3.641	3.641	0.000	6017327 1000.00	940	38.11- 78.11	58.11	
Average of Peak Amounts =				950			

7 Aroclor-1260				CAS #: 11096-82-5			
4.331	4.332	-0.001	13242341 1000.00	1050	80.00- 120.00	100.00	
4.456	4.457	-0.001	16223303 1000.00	1060	102.51- 142.51	122.51	
4.722	4.722	0.000	12301397 1000.00	1060	72.89- 112.89	92.89	
4.895	4.896	-0.001	12694909 1000.00	1050	75.87- 115.87	95.87	
5.043	5.043	0.000	28307638 1000.00	1080	193.77- 233.77	213.77	
Average of Peak Amounts =				1.06e+03			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1.i/020510.b/031b3101.d

Date: 05-FEB-2010 12:40

Client ID: AR166003

Sample Info: 1MAR100203-60 03

Page 1

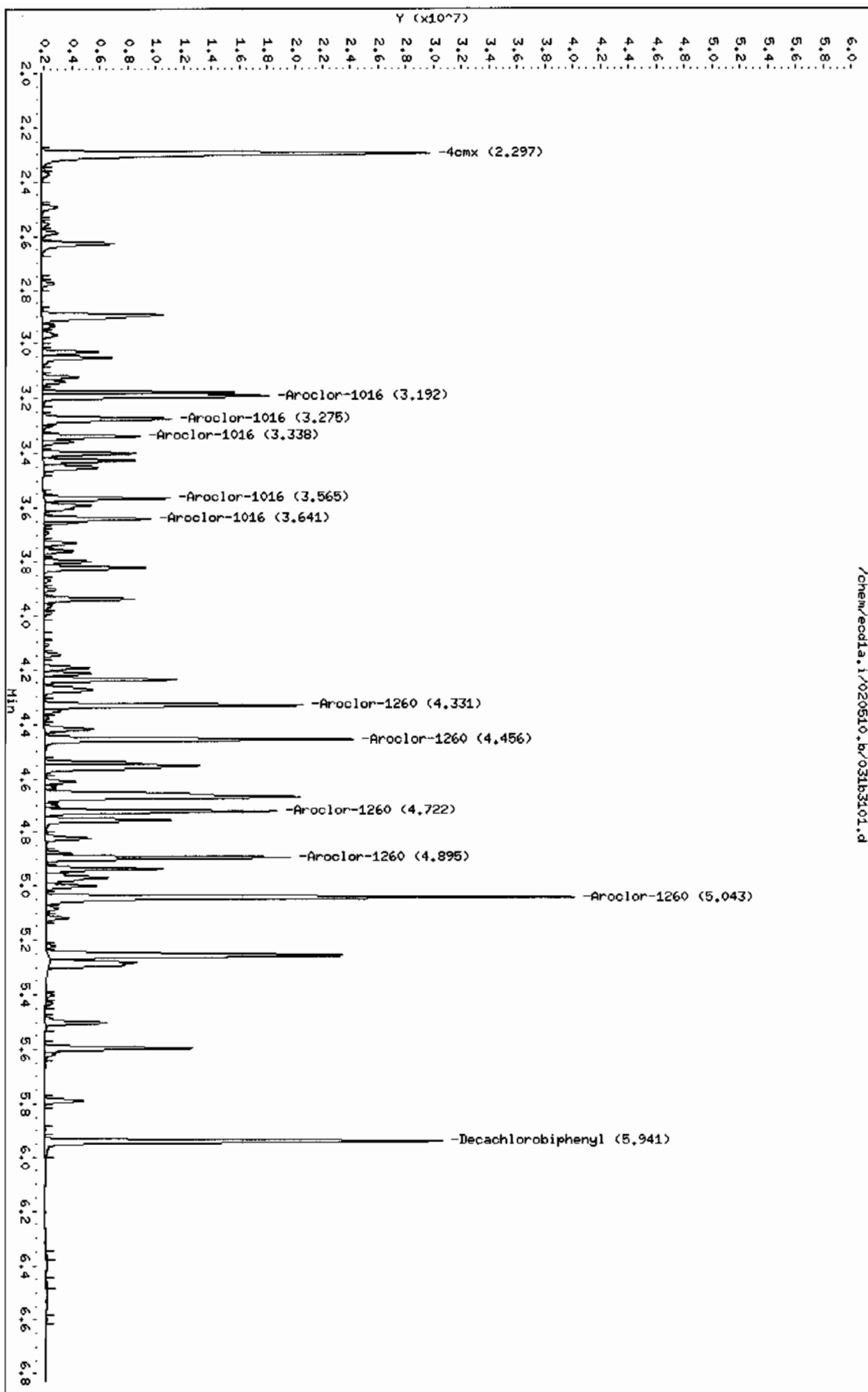
Instrument: ecdl1.i

Operator: YSI

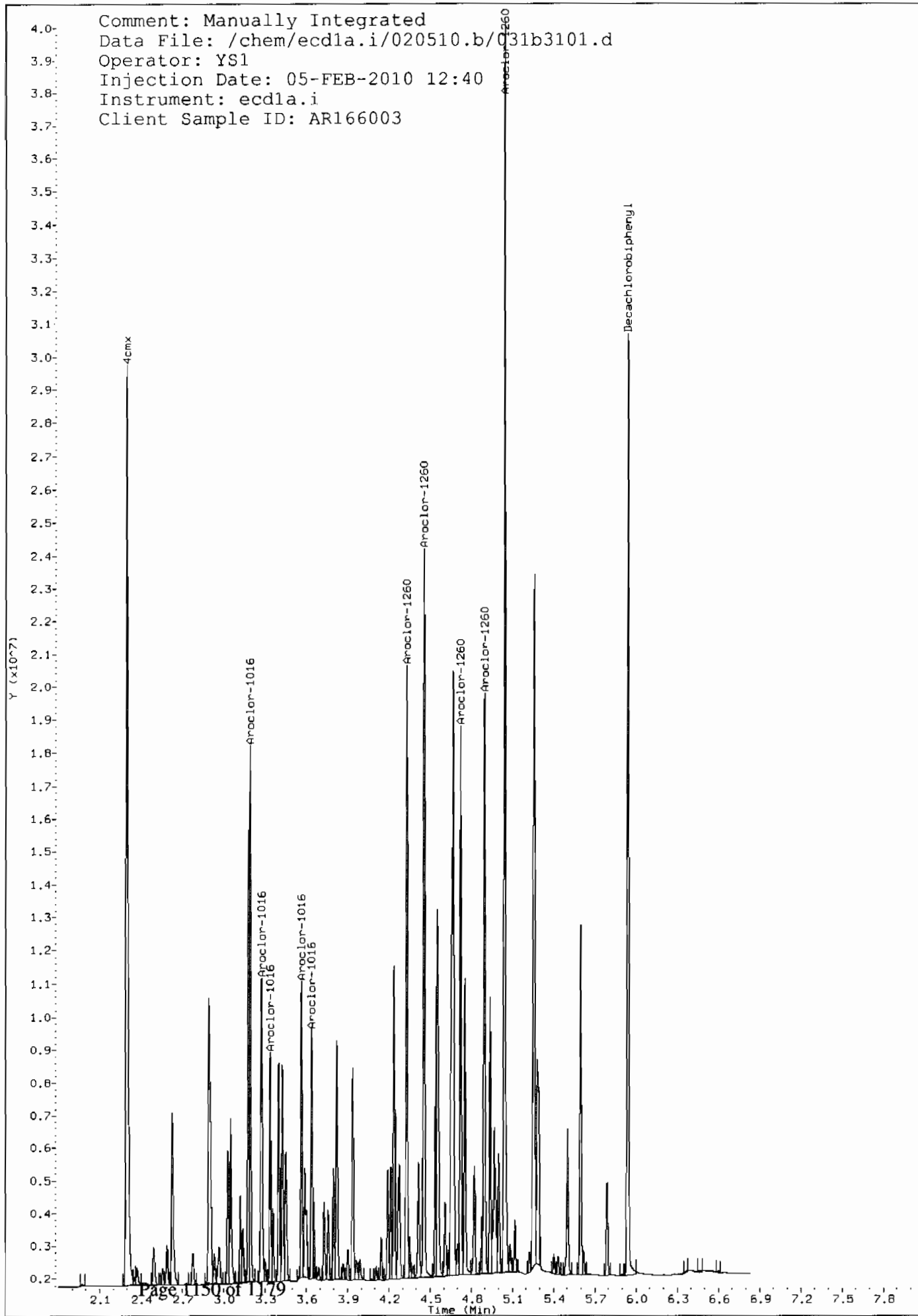
Column diameter: 0.25

Column phase: CLP2

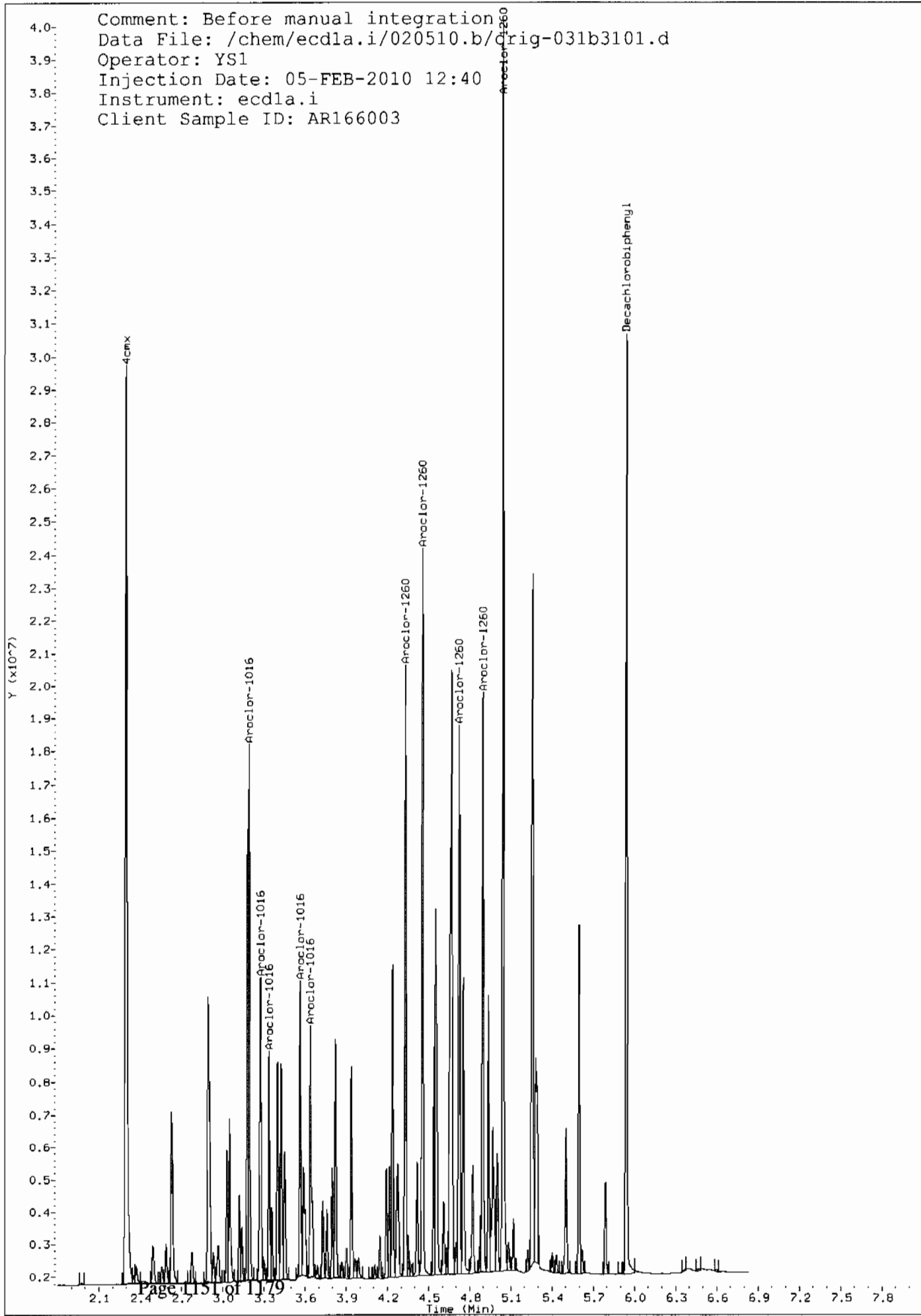
/chem/ecdl1.i/020510.b/031b3101.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/020510.b/031b3101.d
Operator: YS1
Injection Date: 05-FEB-2010 12:40
Instrument: ecdl1a.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1.i/020510.b/orig-031b3101.d
Operator: YS1
Injection Date: 05-FEB-2010 12:40
Instrument: ecdl1.i
Client Sample ID: AR166003



8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510
 GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/29/10 01/29/10
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.97		DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100105-99	01/29/10 0612	1.96	5.28
02	ZZZZZ	ZZZZZ	01/29/10 0622	1.97	5.28
03	AR125401	WAR091216-54	01/29/10 0633		
04	AR124201	WAR091217-42	01/29/10 0643		
05	AR124801	WAR091217-48	01/29/10 0654		
06	AR123201	WAR100104-32	01/29/10 0704		
07	AR122101	WAR100104-21	01/29/10 0715		
08	AR126201	WAR100104-62	01/29/10 0725		
09	AR126801	WAR100107-68	01/29/10 0736		
10	AR166001	WAR100129-01	01/29/10 0746	1.96	5.28
11	AR166002	WAR100129-02	01/29/10 0757	1.97	5.28
12	AR166003	WAR100129-03	01/29/10 0807	1.97	5.28
13	AR166004	WAR100129-04	01/29/10 0818	1.97	5.28
14	AR166005	IAR100104-01	01/29/10 0859	1.97	5.29
15	AR166001	WAR100104-60	01/29/10 0909	1.97	5.28
16	DDTANALOGSTD	WAR091219-DD	01/29/10 0920		
17	PIBLK02	WAR100105-99	01/29/10 0930	1.97	5.28
18	ZZZZZ	ZZZZZ	01/29/10 0941	1.97	5.28
19	ZZZZZ	ZZZZZ	01/29/10 0951	1.97	5.28
20	ZZZZZ	ZZZZZ	01/29/10 1002	1.97	5.28
21	ZZZZZ	ZZZZZ	01/29/10 1014	1.97	5.28
22	ZZZZZ	ZZZZZ	01/29/10 1027	1.96	5.28
23	ZZZZZ	ZZZZZ	01/29/10 1040	1.97	5.28
24	ZZZZZ	ZZZZZ	01/29/10 1052	1.97	5.28
25	ZZZZZ	ZZZZZ	01/29/10 1105	1.97	5.28
26	ZZZZZ	ZZZZZ	01/29/10 1117	1.96	5.28
27	ZZZZZ	ZZZZZ	01/29/10 1130	1.96	5.28
28	AR166002	WAR100104-60	01/29/10 1142	1.97	5.28
29	PIBLK03	WAR100105-99	01/29/10 1153	1.97	5.28
30	ZZZZZ	ZZZZZ	01/29/10 1203	1.97	5.28
31	ZZZZZ	ZZZZZ	01/29/10 1216	1.97	5.28
32	ZZZZZ	ZZZZZ	01/29/10 1228	1.97	5.28

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/29/10 01/29/10
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.95			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01 PIBLK01	WAR100105-99	01/29/10	0612	2.30	5.94	
02 ZZZZZ	ZZZZZ	01/29/10	0622	2.30	5.94	
03 AR125401	WAR091216-54	01/29/10	0633			
04 AR124201	WAR091217-42	01/29/10	0643			
05 AR124801	WAR091217-48	01/29/10	0654			
06 AR123201	WAR100104-32	01/29/10	0704			
07 AR122101	WAR100104-21	01/29/10	0715			
08 AR126201	WAR100104-62	01/29/10	0725			
09 AR126801	WAR100107-68	01/29/10	0736			
10 AR166001	WAR100129-01	01/29/10	0746	2.30	5.94	
11 AR166002	WAR100129-02	01/29/10	0757	2.30	5.94	
12 AR166003	WAR100129-03	01/29/10	0807	2.30	5.94	
13 AR166004	WAR100129-04	01/29/10	0818	2.30	5.94	
14 AR166005	IAR100104-01	01/29/10	0859	2.30	5.95	
15 AR166001	WAR100104-60	01/29/10	0909	2.30	5.95	
16 DDTANALOGSTD	WAR091219-DD	01/29/10	0920			
17 PIBLK02	WAR100105-99	01/29/10	0930	2.30	5.94	
18 ZZZZZ	ZZZZZ	01/29/10	0941	2.30	5.94	
19 ZZZZZ	ZZZZZ	01/29/10	0951	2.30	5.94	
20 ZZZZZ	ZZZZZ	01/29/10	1002	2.30	5.94	
21 ZZZZZ	ZZZZZ	01/29/10	1014	2.30	5.94	
22 ZZZZZ	ZZZZZ	01/29/10	1027	2.30	5.94	
23 ZZZZZ	ZZZZZ	01/29/10	1040	2.30	5.94	
24 ZZZZZ	ZZZZZ	01/29/10	1052	2.30	5.94	
25 ZZZZZ	ZZZZZ	01/29/10	1105	2.30	5.94	
26 ZZZZZ	ZZZZZ	01/29/10	1117	2.30	5.94	
27 ZZZZZ	ZZZZZ	01/29/10	1130	2.30	5.94	
28 AR166002	WAR100104-60	01/29/10	1142	2.30	5.94	
29 PIBLK03	WAR100105-99	01/29/10	1153	2.30	5.94	
30 ZZZZZ	ZZZZZ	01/29/10	1203	2.30	5.94	
31 ZZZZZ	ZZZZZ	01/29/10	1216	2.30	5.94	
32 ZZZZZ	ZZZZZ	01/29/10	1228	2.30	5.94	

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/29/10 01/29/10

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: 5.27			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/05/10	0656	1.96	5.27
02	AR166001	WAR100203-60	02/05/10	0706	1.96	5.27
03	AR125401	WAR091216-54	02/05/10	0717		
04	AR124201	WAR091217-42	02/05/10	0727		
05	AR124801	WAR091217-48	02/05/10	0738		
06	AR123201	WAR100104-32	02/05/10	0748		
07	AR122101	WAR100104-21	02/05/10	0759		
08	AR166002	WAR100104-62	02/05/10	0809		
09	AR126801	WAR100107-68	02/05/10	0820		
10	DDTANALOGSTD	WAR091219-DD	02/05/10	0831		
11	PIBLK02	WAR100105-99	02/05/10	0841	1.97	5.28
12	PBLK01	1202033246	02/05/10	0852	1.97	5.28
13	PBLK01LCS	1202033247	02/05/10	0902	1.96	5.28
14	ZZZZZ	ZZZZZ	02/05/10	0913	1.96	5.28
15	ZZZZZ	ZZZZZ	02/05/10	0923	1.96	5.28
16	ZZZZZ	ZZZZZ	02/05/10	0936	1.96	5.27
17	ZZZZZ	ZZZZZ	02/05/10	0948	1.96	5.27
18	ZZZZZ	ZZZZZ	02/05/10	1001	1.96	5.27
19	ZZZZZ	ZZZZZ	02/05/10	1013	1.97	5.28
20	ZZZZZ	ZZZZZ	02/05/10	1026	1.96	5.28
21	ZZZZZ	ZZZZZ	02/05/10	1039	1.96	5.27
22	AR166002	WAR100203-60	02/05/10	1051	1.96	5.27
23	PIBLK03	WAR100105-99	02/05/10	1102	1.97	5.28
24	ZZZZZ	ZZZZZ	02/05/10	1112	1.97	5.28
25	ZZZZZ	ZZZZZ	02/05/10	1125	1.96	5.27
26	ZZZZZ	ZZZZZ	02/05/10	1137	1.96	5.27
27	ZZZZZ	ZZZZZ	02/05/10	1150	1.97	5.27
28	RE15-10-7309	245959001	02/05/10	1203	1.96	5.27
29	RE15-10-7308	245959002	02/05/10	1215	1.96	5.27
30	RE15-10-7324	245959012	02/05/10	1228	1.96	5.27
31	AR166003	WAR100203-60	02/05/10	1240	1.97	5.27
32	PIBLK04	WAR100105-99	02/05/10	1251	1.97	5.28

S1 = 4cmx
DCB = Decachlorobiphenyl

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1510

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/29/10 01/29/10

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: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/05/10	0656	2.29	5.94
02	AR166001	WAR100203-60	02/05/10	0706	2.30	5.94
03	AR125401	WAR091216-54	02/05/10	0717		
04	AR124201	WAR091217-42	02/05/10	0727		
05	AR124801	WAR091217-48	02/05/10	0738		
06	AR123201	WAR100104-32	02/05/10	0748		
07	AR123201	WAR100104-21	02/05/10	0759		
08	AR126201	WAR100104-62	02/05/10	0809		
09	AR126801	WAR100107-68	02/05/10	0820		
10	DDTANALOGSTD	WAR091219-DD	02/05/10	0831		
11	PIBLK02	WAR100105-99	02/05/10	0841	2.30	5.94
12	PBLK01	1202033246	02/05/10	0852	2.30	5.94
13	PBLK01LCS	1202033247	02/05/10	0902	2.29	5.94
14	ZZZZZ	ZZZZZ	02/05/10	0913	2.30	5.94
15	ZZZZZ	ZZZZZ	02/05/10	0923	2.30	5.94
16	ZZZZZ	ZZZZZ	02/05/10	0936	2.30	5.94
17	ZZZZZ	ZZZZZ	02/05/10	0948	2.30	5.94
18	ZZZZZ	ZZZZZ	02/05/10	1001	2.30	5.94
19	ZZZZZ	ZZZZZ	02/05/10	1013	2.30	5.94
20	ZZZZZ	ZZZZZ	02/05/10	1026	2.30	5.94
21	ZZZZZ	ZZZZZ	02/05/10	1039	2.30	5.94
22	AR166002	WAR100203-60	02/05/10	1051	2.30	5.94
23	PIBLK03	WAR100105-99	02/05/10	1102	2.30	5.94
24	ZZZZZ	ZZZZZ	02/05/10	1112	2.30	5.94
25	ZZZZZ	ZZZZZ	02/05/10	1125	2.30	5.94
26	ZZZZZ	ZZZZZ	02/05/10	1137	2.30	5.94
27	ZZZZZ	ZZZZZ	02/05/10	1150	2.30	5.94
28	RE15-10-7309	245959001	02/05/10	1203	2.30	5.94
29	RE15-10-7308	245959002	02/05/10	1215	2.30	5.94
30	RE15-10-7324	245959012	02/05/10	1228	2.30	5.94
31	AR166003	WAR100203-60	02/05/10	1240	2.30	5.94
32	PIBLK04	WAR100105-99	02/05/10	1251	2.30	5.94

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

Page 1 of 1

SDG Number: 10-1510

Client ID: LCS for batch 949031

Lab Sample ID: 1202033247

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD1A.J_1

Inst: ECD1A.J_2

Column: CLP1

Column: CLP2

Analyzed: 05-FEB-10 09:02

Analyzed: 05-FEB-10 09:02

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							.689
<i>Column 1</i>	1	2.42	2.39 – 2.45	20.2		ug/kg	
	2	2.71	2.68 – 2.74	20.8		ug/kg	
	3	2.79	2.76 – 2.82	20		ug/kg	
	4	2.83	2.8 – 2.86	20.2		ug/kg	
	5	3.04	3.01 – 3.07	20		ug/kg	
					20.2		
<i>Column 2</i>	1	3.19	3.16 – 3.22	20.9		ug/kg	
	2	3.27	3.24 – 3.3	20.3		ug/kg	
	3	3.34	3.31 – 3.37	19.5		ug/kg	
	4	3.57	3.53 – 3.59	19.8		ug/kg	
	5	3.64	3.61 – 3.67	20		ug/kg	
					20.1		
Aroclor-1260							.412
<i>Column 1</i>	1	3.76	3.73 – 3.79	23.2		ug/kg	
	2	3.93	3.89 – 3.95	23.4		ug/kg	
	3	4.16	4.12 – 4.18	23.7		ug/kg	
	4	4.3	4.27 – 4.33	23.9		ug/kg	
	5	4.48	4.45 – 4.51	24.4		ug/kg	
					23.7		
<i>Column 2</i>	1	4.33	4.3 – 4.36	22.9		ug/kg	
	2	4.46	4.43 – 4.49	23.5		ug/kg	
	3	4.72	4.69 – 4.75	23.7		ug/kg	
	4	4.9	4.87 – 4.93	23.4		ug/kg	
	5	5.04	5.01 – 5.07	24.6		ug/kg	
					23.6		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1510

Matrix: SOIL

Lab Sample ID: 1202033246

Client Sample: QC for batch 949031

Client: LANL010

Project: QC

Client ID: MB for batch 949031

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 949033

Inst: ECD1A.J

Dilution: 1

Run Date: 02/05/2010 08:52

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 02/04/2010 20:32

Aliquot: 30 g

Final Volume: 1 mL

Data File: 012f1201-1.d

Column: 1 CLP1

Level: LOW

012b1201-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/020510.b/012f1201-3.d
 Lab Smp Id: 1202033246 Client Smp ID: PBLK01
 Inj Date : 05-FEB-2010 08:52
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202033246|1|
 Misc Info : |ECD82P_1S|949033|SVA|QC A|SOIL|MB|||
 Comment :
 Method : /chem/ecdla.i/020510.b/ECD1-F-8082-121409.m
 Meth Date : 05-Feb-2010 08:39 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 12 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1510.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8	
1.965	1.965	0.000	48584892 121.874	4.1	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.277	5.275	0.002	36515828 112.942	3.8	80.00- 120.00	100.00

Data File: /chem/eodla.i/020510.bv/012f1201-3.d

Date: 05-FEB-2010 08:52

Client ID: PBLK01

Sample Info: 11202033246111

Volume Injected (uL): 1.0

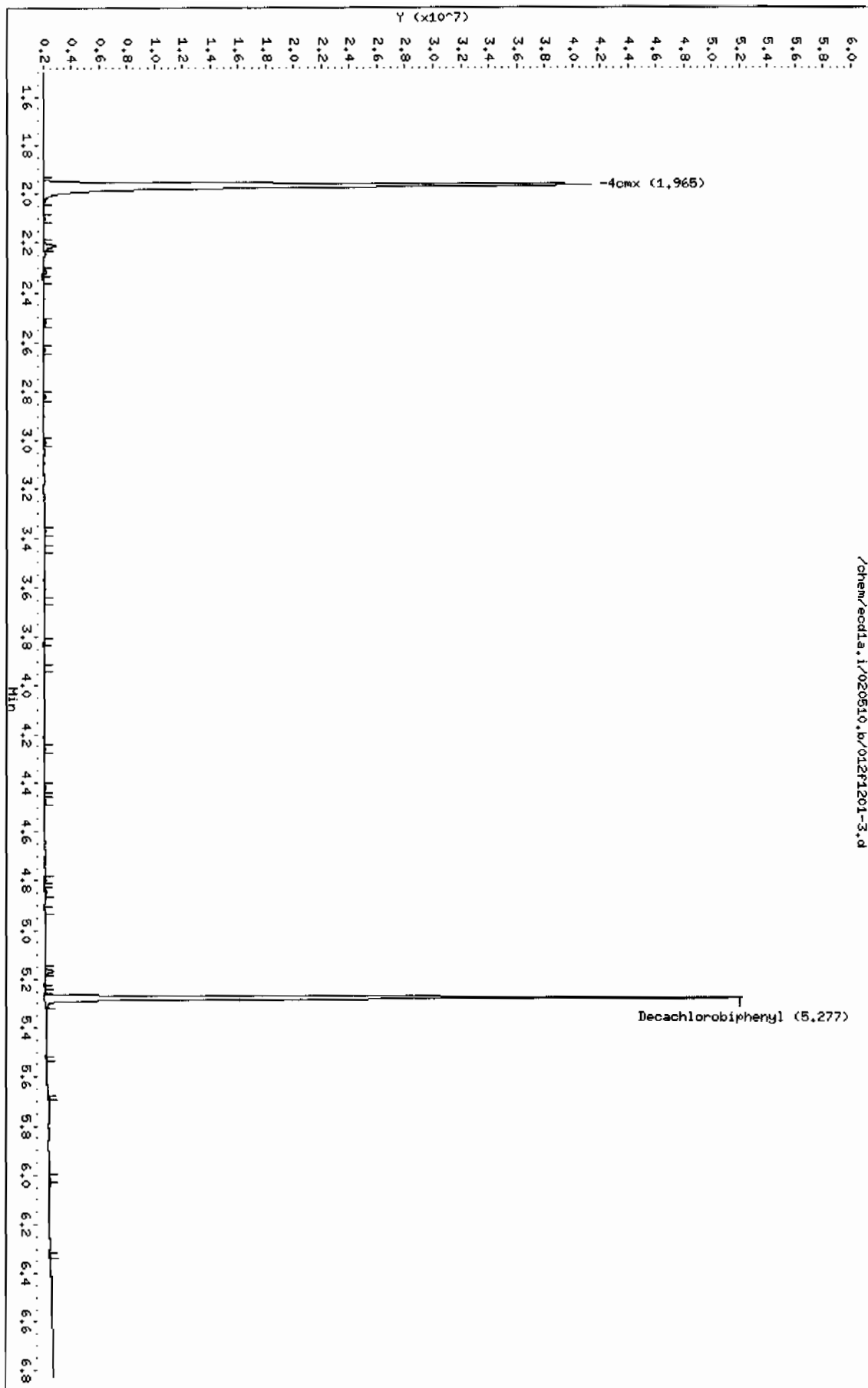
Column phase: CLP1

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/020510.b/012b1201-3.d
 Report Date: 05-Feb-2010 10:08

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/020510.b/012b1201-3.d
 Lab Smp Id: 1202033246 Client Smp ID: PBLK01
 Inj Date : 05-FEB-2010 08:52
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202033246|1|
 Misc Info : |ECD82P_1S|949033|SVA|QC A|SOIL|MB|||
 Comment :
 Method : /chem/ecdla.i/020510.b/ECD1-B-8082-121409.m
 Meth Date : 05-Feb-2010 09:40 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 12 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1510.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

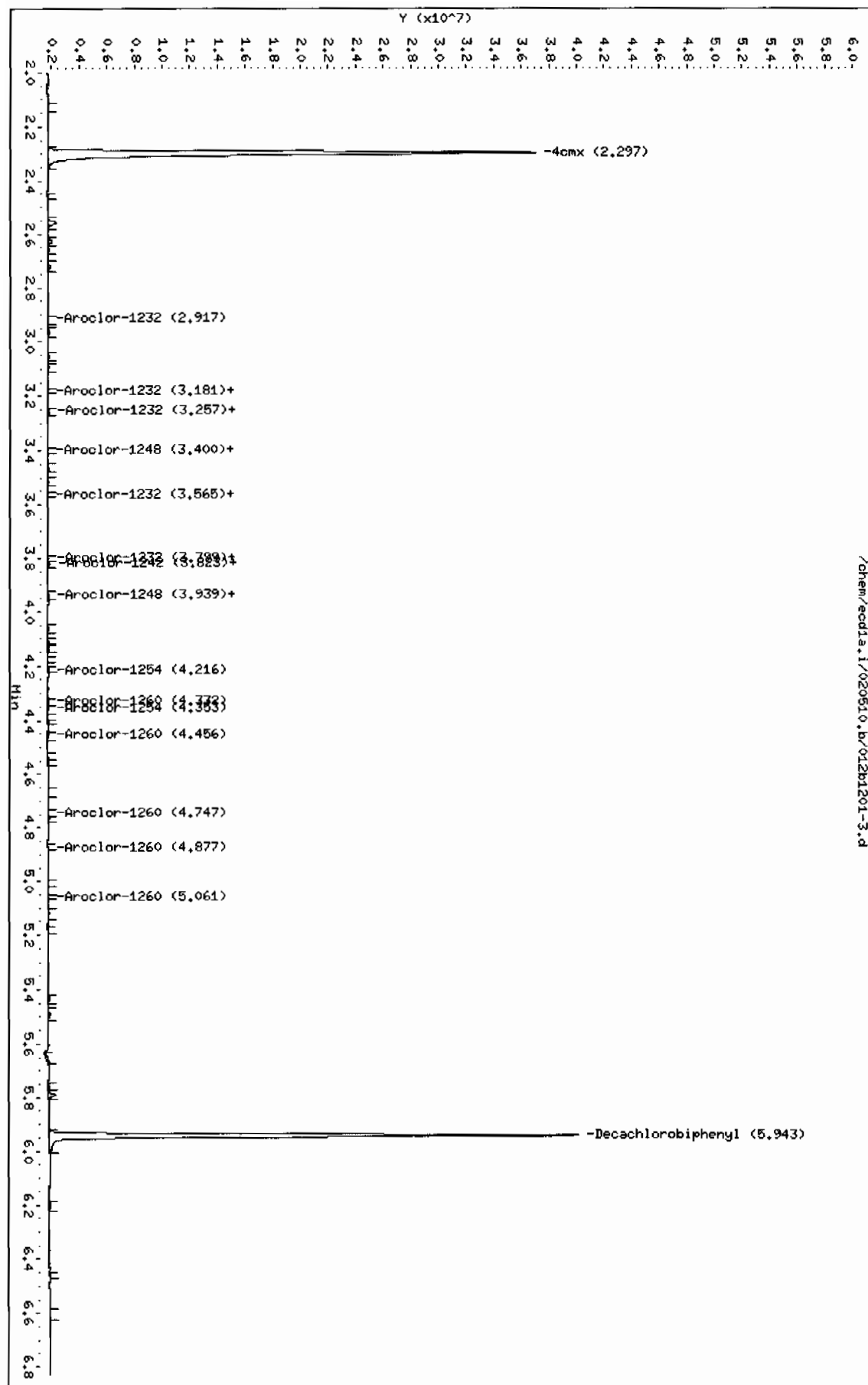
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.297	2.296	0.001	34903615	121.512	4.0 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.942	0.001	29195934	134.155	4.5 80.00- 120.00	100.00

Data File: /chem/ecdl1.i/020510.b/012p1201-3.d
Date : 05-FEB-2010 09:52
Client ID: PRLK01
Sample Info: 1120203324611
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl1.i
Operator: YSL
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1510

Lab Sample ID: 1202033247

Client Sample: QC for batch 949031

Client ID: LCS for batch 949031

Batch ID: 949033

Run Date: 02/05/2010 09:02

Prep Date: 02/04/2010 20:32

Data File: 013f1301-1.d

013b1301-1.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		20.2	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		23.7	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/020510.b/013f1301-3.d

Lab Smp Id: 1202033247

Client Smp ID: PBLK01LCS

Inj Date : 05-FEB-2010 09:02

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202033247|1|

Misc Info : |ECD82P_1S|949033|SVA|QC A|SOIL|LCS|

Comment :

Method : /chem/ecdl1a.i/020510.b/ECD1-F-8082-121409.m

Meth Date : 05-Feb-2010 08:39 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 13

QC Sample: LCS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1510.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.964	1.965	-0.001	50013903 125.458	4.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.277	5.275	0.002	39702847 122.799	4.1	80.00- 120.00	100.00	
1 Aroclor-1016				CAS #: 12674-11-2			
2.420	2.419	0.001	8867856 604.950	20.2	80.00- 120.00	100.00	
2.708	2.707	0.001	11431437 623.897	20.8	111.50- 151.50	128.91	
2.789	2.788	0.001	7213810 599.968	20.0	62.41- 102.41	81.35	
2.826	2.826	0.000	4356989 606.812	20.2	29.39- 69.39	49.13	

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.037	3.036	0.001	5584390	601.132	20.0	44.74-	84.74	62.97
Average of Peak Concentrations =					20.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.763	3.762	0.001	12251339	694.656	23.2	80.00-	120.00	100.00
3.926	3.925	0.001	18755441	703.451	23.4	132.75-	172.75	153.09
4.156	4.155	0.001	11339517	712.208	23.7	70.75-	110.75	92.56
4.299	4.297	0.002	11864393	716.853	23.9	75.46-	115.46	96.84
4.478	4.477	0.001	27215780	732.880	24.4	198.55-	238.55	222.15
Average of Peak Concentrations =					23.7			

Data File: /chem/eodla.i/020510.b/013f1301-3.d

Date: 05-FEB-2010 09:02

Client ID: PBLK01LCS

Sample Info: 1120203324711

Volume Injected (uL): 1.0

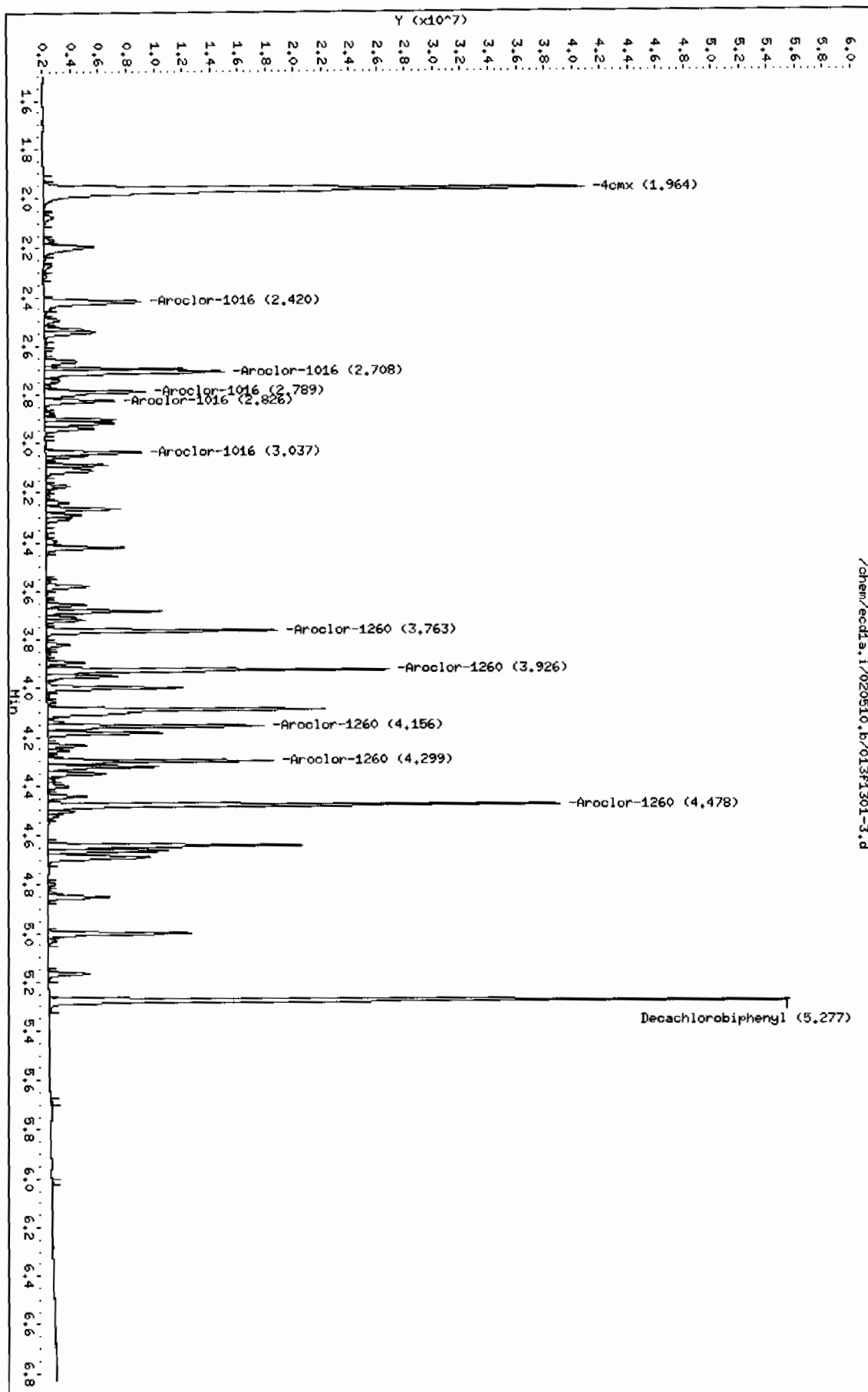
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecd1a.i/020510.b/013b1301-3.d
Report Date: 05-Feb-2010 10:09

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd1a.i/020510.b/013b1301-3.d
Lab Smp Id: 1202033247 Client Smp ID: PBLK01LCS
Inj Date : 05-FEB-2010 09:02
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202033247|1|
Misc Info : |ECD82P_1S|949033|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/020510.b/ECD1-B-8082-121409.m
Meth Date : 05-Feb-2010 09:40 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1510.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	
==	==	==	=====	=====	=====	=====	
S 11 4cmx CAS #: 877-09-8							
2.295	2.296	-0.001	35785063	124.581	4.2 80.00- 120.00	100.00	

S 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.943	5.942	0.001	29148749	133.938	4.5 80.00- 120.00	100.00	

1 Aroclor-1016 CAS #: 12674-11-2							
3.192	3.192	0.000	7837768	627.787	20.9 80.00- 120.00	100.00 (M)	
3.275	3.275	0.000	5207354	609.274	20.3 46.71- 86.71	66.44	
3.340	3.339	0.001	3101086	586.135	19.5 21.11- 61.11	39.57	
3.566	3.565	0.001	4040701	593.042	19.8 32.44- 72.44	51.55	

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)						
3.642	3.641	0.001	3840836	599.683	20.0 29.96-	69.96 49.00
Average of Peak Concentrations =				20.1		

7 Aroclor-1260				CAS #: 11096-82-5		
4.332	4.332	0.000	8683387	686.743	22.9 80.00-	120.00 100.00
4.457	4.457	0.000	10720030	704.334	23.5 101.36-	141.36 123.45
4.723	4.722	0.001	8290264	711.578	23.7 72.42-	112.42 95.47
4.896	4.896	0.000	8478479	703.403	23.4 75.24-	115.24 97.64
5.044	5.043	0.001	19273891	739.359	24.6 194.19-	234.19 221.96
Average of Peak Concentrations =				23.6		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/020510.b/013b1301-3.d

Date: 05-FEB-2010 09:02

Client ID: PBLK01LCS

Sample Info: 1120203324711

Volume Injected (uL): 1.0

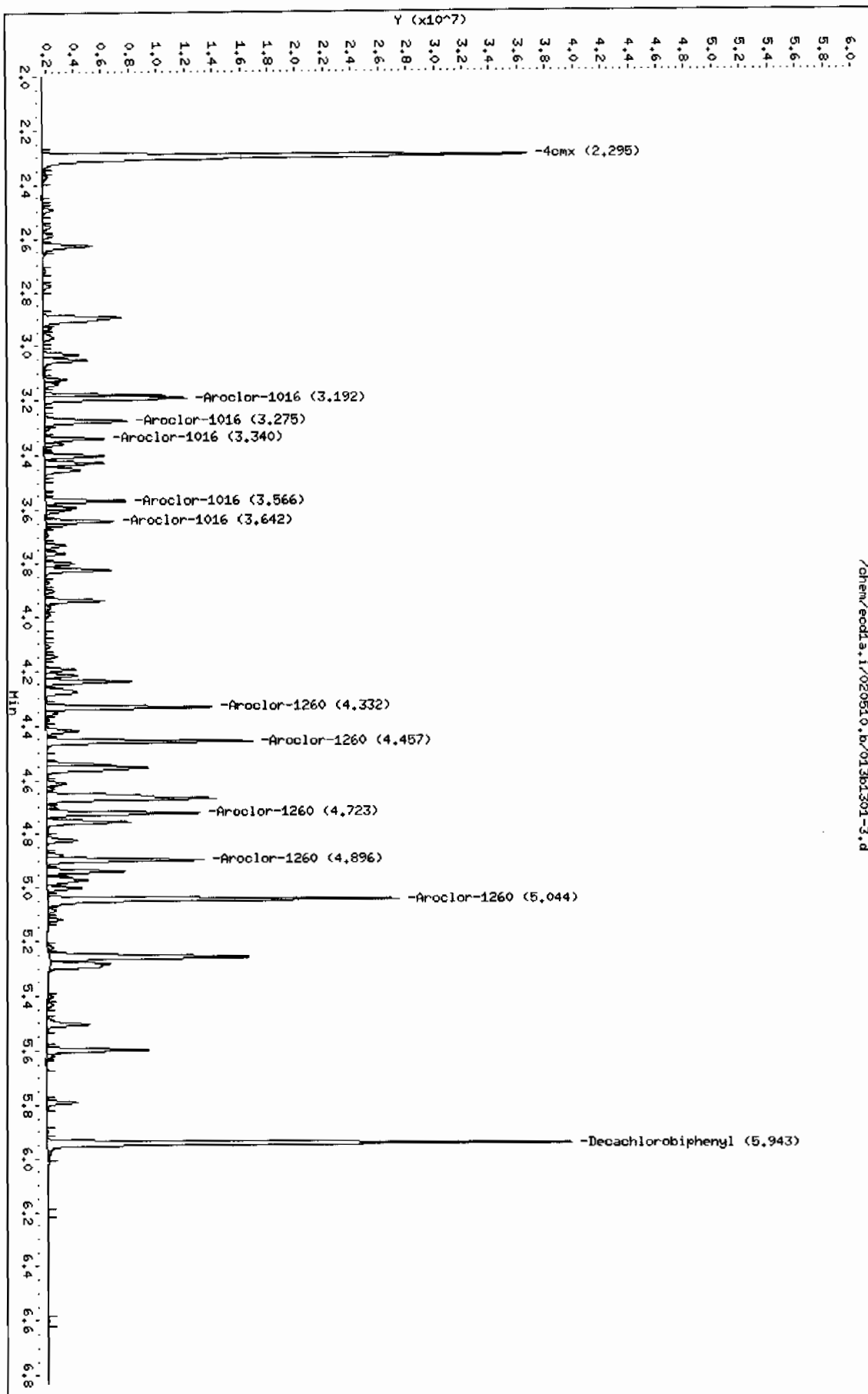
Column phase: CLP2

Instrument: eod1a.i

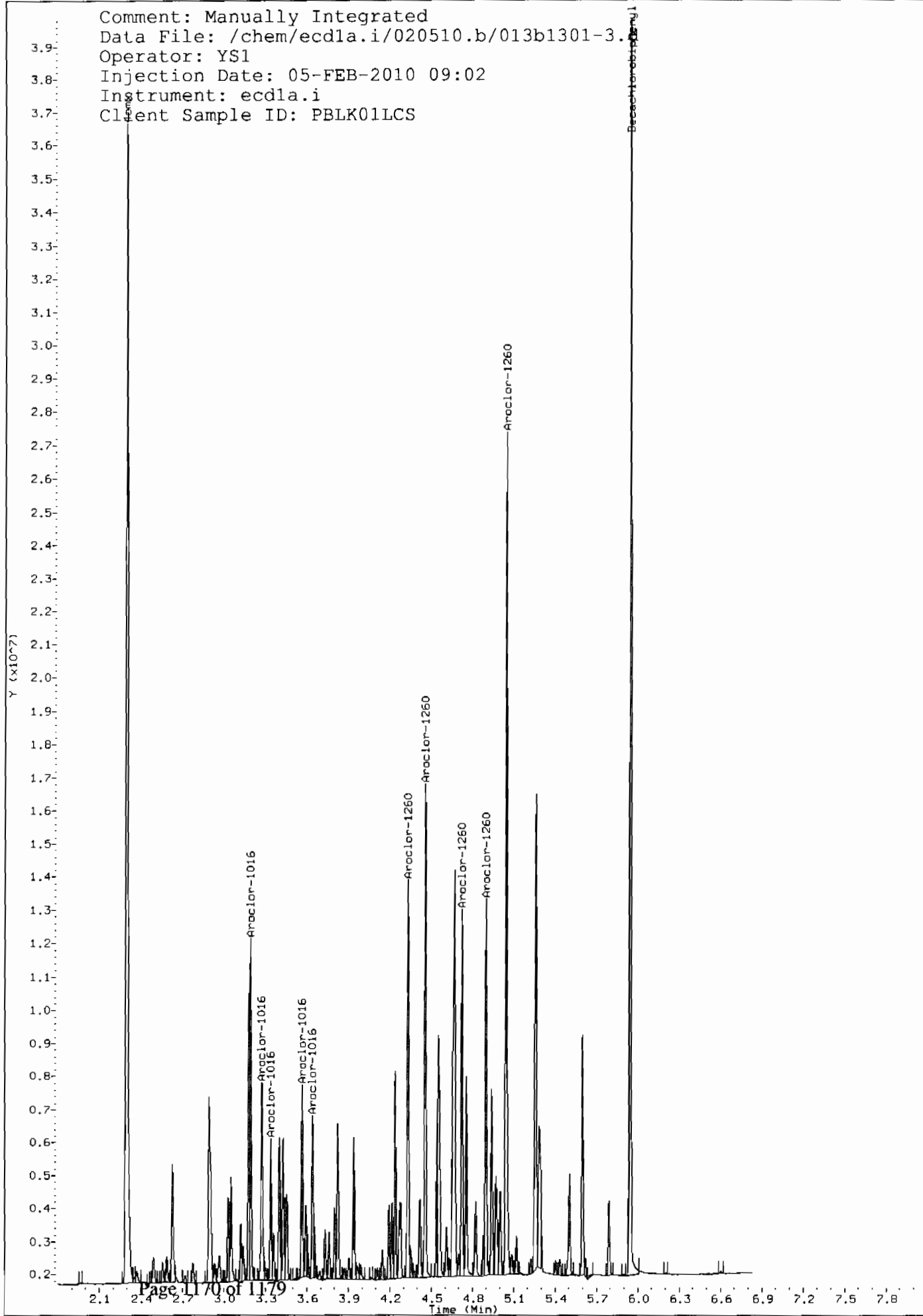
Operator: YSL

Column diameter: 0.25

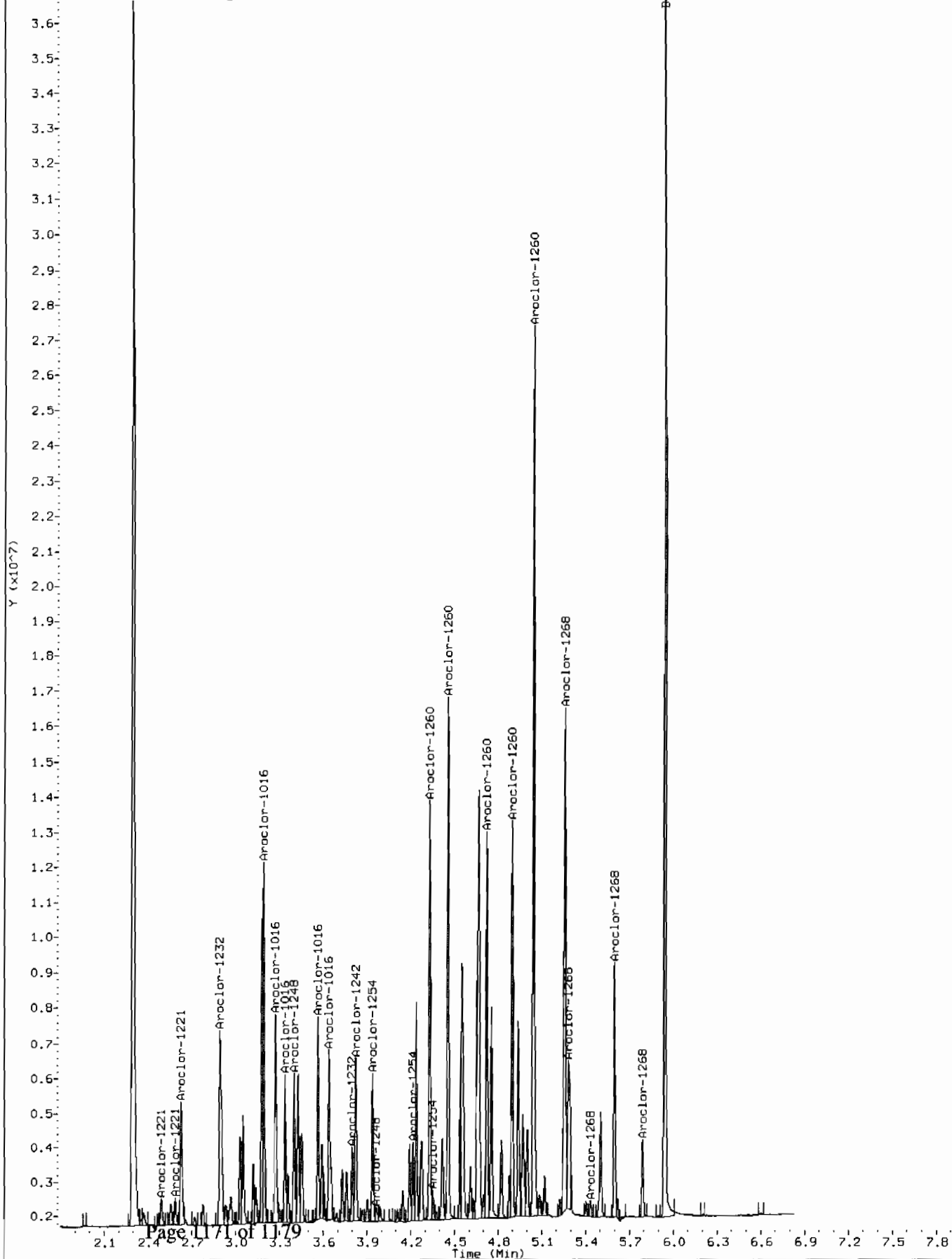
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/020510.b/013b1301-3.
Operator: YS1
Injection Date: 05-FEB-2010 09:02
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdl1.i/020510.b/orig-013b1301-3.d
Operator: YS1
Injection Date: 05-FEB-2010 09:02
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



MISCELLANEOUS DATA

INSTRUMENT ID: FCDT

METHOD: ECD1-F-8082-121409.m

REVIEWED BY:

DATE: _____

pg. 1 SOLVENT L

ADOLPH
COPPER

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Logbook.

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Retention

Injection Volume: 0.5 ul

Data File	CEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR00105-99 01	YS1	29-JAN-2010 06:12		012910		1.01	CLEAN
002f0201.d	WAR100104-60 01	YS1	29-JAN-2010 06:22		012910		1.01	DUSE RE I-CAL
003f0301.d	WAR091216-54	YS1	29-JAN-2010 06:33		012910		1.01	PASSED ON BOTH COLUMNS
004f0401.d	WAR091217-42	YS1	29-JAN-2010 06:43		012910		1.01	PASSED ON BOTH COLUMNS
005f0501.d	WAR091217-48	YS1	29-JAN-2010 06:54		012910		1.01	PASSED ON BOTH COLUMNS
006f0601.d	WAR100104-32	YS1	29-JAN-2010 07:04		012910		1.01	PATTERN ONLY
007f0701.d	WAR100104-21	YS1	29-JAN-2010 07:15		012910		1.01	PATTERN ONLY
008f0801.d	WAR100104-62	YS1	29-JAN-2010 07:25		012910		1.01	PATTERN ONLY
009f0901.d	WAR100107-68	YS1	29-JAN-2010 07:36		012910		1.01	PATTERN ONLY
010f1001.d	WAR100129-01 60	YS1	29-JAN-2010 07:46		012910		1.01	ARI1660 I-CAL LEVEL 1
011f1101.d	WAR100129-02 60	YS1	29-JAN-2010 07:57		012910		1.01	ARI1660 I-CAL LEVEL 2
012f1201.d	WAR100129-03 60	YS1	29-JAN-2010 08:07		012910		1.01	ARI1660 I-CAL LEVEL 3
013f1301.d	WAR100129-04 60	YS1	29-JAN-2010 08:18		012910		1.01	ARI1660 I-CAL LEVEL 4
014f1401.d	WAR100104-01	YS1	29-JAN-2010 08:59		012910		1.01	ARI1660 I-CAL LEVEL 5
015f1501.d	WAR100104-60 01	YS1	29-JAN-2010 09:09		012910		1.01	PASSED ON BOTH COLUMNS

Page: 1

1016f1601.d	WAR091219-DDT	YS1	29-JAN-2010 09:20	1012910	1.0	DDT ANALOG STANDARD
1017f1701.d	WAR100105-99 02	YS1	29-JAN-2010 09:30	1012910	1.0	CLEAN
1018f1801.d	12020227001	YS1	29-JAN-2010 09:41	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1019f1901.d	12020227002	YS1	29-JAN-2010 09:51	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1020f2001.d	1245609001	YS1	29-JAN-2010 10:02	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1021f2101.d	1245609002	YS1	29-JAN-2010 10:14	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1022f2201.d	1245609003	YS1	29-JAN-2010 10:27	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1023f2301.d	12020227003	YS1	29-JAN-2010 10:40	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1024f2401.d	12020227004	YS1	29-JAN-2010 10:52	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1025f2501.d	1245609004	YS1	29-JAN-2010 11:05	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1026f2601.d	1245609005	YS1	29-JAN-2010 11:17	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1027f2701.d	1245609006	YS1	29-JAN-2010 11:30	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1028f2801.d	WAR100104-60 02	YS1	29-JAN-2010 11:42	1012910	1.0	PASSED ON BOTH COLUMNS
1029f2901.d	WAR100105-99 03	YS1	29-JAN-2010 11:53	1012910	1.0	CLEAN
1030f3001.d	1245609007	YS1	29-JAN-2010 12:03	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1031f3101.d	1245609008	YS1	29-JAN-2010 12:16	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1032f3201.d	1245609009	YS1	29-JAN-2010 12:28	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1033f3301.d	1245609010	YS1	29-JAN-2010 12:41	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1034f3401.d	1245609011	YS1	29-JAN-2010 12:54	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
1035f3501.d	1245609012	YS1	29-JAN-2010 13:06	1012910	1.0	UPLOAD BOTH COLUMNS, USE HIGHER

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Instrument Batch: /chem/ecdl1a.i/012910.b

Data File	GE Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1245609013	YS1	29-JAN-2010 13:19	1012910	1.0	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1037f3701.d	1245609014	YS1	29-JAN-2010 13:31	1012910	1.0	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1038f3801.d	1245609015	YS1	29-JAN-2010 13:44	1012910	1.0	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1039f3901.d	1245609016	YS1	29-JAN-2010 13:56	1012910	1.0	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1040f4001.d	WAR100104-60 03	YS1	29-JAN-2010 14:09	1012910	1.0	1.0	LANL	PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/012910.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/08/2010 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/ecdla.i/020510.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	1WAR100105-99 01	YS1	05-FEB-2010 06:56		020510	1.0		CLEAN
1002f0201.d	1WAR100203-60 01	YS1	05-FEB-2010 07:06		020510	1.0		PASSED ON BOTH COLUMNS
1003f0301.d	1WAR091216-54	YS1	05-FEB-2010 07:17		020510	1.0		PASSED ON BOTH COLUMNS
1004f0401.d	1WAR091217-42	YS1	05-FEB-2010 07:27		020510	1.0		PASSED ON BOTH COLUMNS
1005f0501.d	1WAR091217-48	YS1	05-FEB-2010 07:38		020510	1.0		PASSED ON BOTH COLUMNS
1006f0601.d	1WAR100104-32	YS1	05-FEB-2010 07:48		020510	1.0		PATTERN ONLY
1007f0701.d	1WAR100104-21	YS1	05-FEB-2010 07:59		020510	1.0		PATTERN ONLY
1008f0801.d	1WAR100104-62	YS1	05-FEB-2010 08:09		020510	1.0		PASSED ON BOTH COLUMNS
1009f0901.d	1WAR100107-68	YS1	05-FEB-2010 08:20		020510	1.0		PASSED ON BOTH COLUMNS
1010f1001.d	1WAR091219-DDT	YS1	05-FEB-2010 08:31		020510	1.0		DDT ANALOG STANDARD
1011f1101.d	1WAR100105-99 02	YS1	05-FEB-2010 08:41		020510	1.0		CLEAN
1012f1201.d	11202033246	YS1	05-FEB-2010 08:52	949033	10-1462	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1013f1301.d	11202033247	YS1	05-FEB-2010 09:02	949033	10-1462	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1014f1401.d	1245786301	YS1	05-FEB-2010 09:13	949033	10-1462	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1015f1501.d	1245795001	YS1	05-FEB-2010 09:23	949033	10-1473	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/020510.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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1016f1601.d	245795002	YSL	05-FEB-2010 09:36	949033	10-1470	1.0	LANL	ARI268 RE TO CONFIRM
1017f1701.d	245795003	YSL	05-FEB-2010 09:48	949033	10-1470	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1018f1801.d	245795004	YSL	05-FEB-2010 10:01	949033	10-1470	1.0	LANL	ARI268 RE TO CONFIRM
1019f1901.d	245795005	YSL	05-FEB-2010 10:13	949033	10-1470	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1020f2001.d	245795006	YSL	05-FEB-2010 10:26	949033	10-1470	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1021f2101.d	245795007	YSL	05-FEB-2010 10:39	949033	10-1470	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1022f2201.d	WAR100203-60 02	YSL	05-FEB-2010 10:51		020510	1.0		PASSED ON BOTH COLUMNS
1023f2301.d	WAR100105-99 03	YSL	05-FEB-2010 11:02		020510	1.0		CLEAN
1024f2401.d	245795008	YSL	05-FEB-2010 11:12	949033	10-1470	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1025f2501.d	245803006	YSL	05-FEB-2010 11:25	949033	10-1473	1.0	LANL	ARI268 RE TO CONFIRM
1026f2601.d	245803007	YSL	05-FEB-2010 11:37	949033	10-1473	1.0	LANL	ARI268 RE TO CONFIRM
1027f2701.d	245803008	YSL	05-FEB-2010 11:50	949033	10-1473	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1028f2801.d	245959001	YSL	05-FEB-2010 12:03	949033	10-1510	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1029f2901.d	245959002	YSL	05-FEB-2010 12:15	949033	10-1510	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1030f3001.d	245959012	YSL	05-FEB-2010 12:28	949033	10-1510	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1031f3101.d	WAR100203-60 03	YSL	05-FEB-2010 12:40		020510	1.0		PASSED ON BOTH COLUMNS
1032f3201.d	WAR100105-99 04	YSL	05-FEB-2010 12:52		020510	1.0		CLEAN
1033f3301.d	245969001	YSL	05-FEB-2010 13:01	949033	10-1512	1.0	LANL	RE RESULT DID NOT MATCH WITH MS/MSD
1034f3401.d	1202033248	YSL	05-FEB-2010 13:14	949033	10-1512	1.0	QC A	DUSE
1035f3501.d	1202033249	YSL	05-FEB-2010 13:27	949033	10-1512	1.0	QC A	DUSE
1036f3601.d	245969002	YSL	05-FEB-2010 13:39	949033	10-1512	1.0	LANL	ARI268 RE TO CONFIRM

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Instrument Batch: /chem/ecdl1a.i/020510.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1037f3701.d	245969003	YSL	05-FEB-2010 13:52	949033	10-1512	1.0	LANL	UPLOAD BOTH COLUMNS ,USE HIGHER
1038f3801.d	WAR100203-60 04	YSL	05-FEB-2010 14:05		020510	1.0		PASSED ON BOTH COLUMNS
1039f3901.d	WAR100105-99 05	YSL	05-FEB-2010 14:15		020510	1.0		CLEAN
1040f4001.d	1202026314	YSL	05-FEB-2010 14:26	946047	020510	1.0	QC A	REPORT FROM ECD 8

041f4101.d	12C2026315	Y51	05-FEB-2010 14:36	1946047	1	1.0 QC A	REPORT FROM ECD 8		
042f4201.d	243861001	Y51	05-FEB-2010 14:47	1946047	2010MDLVECD11262-L1	1.0 QCQA	UPLOAD BOTH COLUMNS		
043f4301.d	243861002	Y51	05-FEB-2010 14:57	1946047	2010MDLVECD11262-L1	1.0 QCQA	UPLOAD BOTH COLUMNS		
044f4401.d	243861003	Y51	05-FEB-2010 15:08	1946047	2010MDLVECD11262-L1	1.0 QCQA	UPLOAD BOTH COLUMNS		
045f4501.d	243861004	Y51	05-FEB-2010 15:18	1946047	2010MDLVECD11262-L1	1.0 QCQA	UPLOAD BOTH COLUMNS		
046f4601.d	WAR100203-60 05	Y51	05-FEB-2010 15:29	1	020510	1	PASSED ON BOTH COLUMNS		
047f4701.d	WAR100105-99 06	Y51	05-FEB-2010 15:39	1	020510	1	CLEAN		

Prep Logbook Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 949031 Verified by: _____
 Analyst: Andrew Schwenmin
 Method: SW846 3550B
 Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202033246 MB	04-FEB-2010 20:32:00	30	H2SO4/KM2	2	9	1	0.03333	
1202033247 LCS	04-FEB-2010 20:32:00	30	H2SO4/KM2	2	9	1	0.03333	
245786001	04-FEB-2010 20:32:00	30.05	H2SO4/KM2	2	9	1	0.03328	
245795001	04-FEB-2010 20:32:00	30.05	H2SO4/KM2	2	9	1	0.03328	
245795002	04-FEB-2010 20:32:00	30.19	H2SO4/KM2	2	9	1	0.03312	
245795003	04-FEB-2010 20:32:00	30.18	H2SO4/KM2	2	9	1	0.03313	
245795004	04-FEB-2010 20:32:00	30.01	H2SO4/KM2	2	9	1	0.03332	
245795005	04-FEB-2010 20:32:00	30.05	H2SO4/KM2	2	9	1	0.03328	
245795006	04-FEB-2010 20:32:00	30.03	H2SO4/KM2	2	9	1	0.0333	
245795007	04-FEB-2010 20:32:00	30.01	H2SO4/KM2	2	9	1	0.03332	
245795008	04-FEB-2010 20:32:00	30.02	H2SO4/KM2	2	9	1	0.03331	
245803006	04-FEB-2010 20:32:00	30.11	H2SO4/KM2	2	9	1	0.03321	
245803007	04-FEB-2010 20:32:00	30.04	H2SO4/KM2	2	9	1	0.03329	
245803008	04-FEB-2010 20:32:00	30.02	H2SO4/KM2	2	9	1	0.03331	
245959001	04-FEB-2010 20:32:00	30.19	H2SO4/KM2	2	9	1	0.03312	
245959002	04-FEB-2010 20:32:00	30.02	H2SO4/KM2	2	9	1	0.03331	
245959012	04-FEB-2010 20:32:00	30.03	H2SO4/KM2	2	9	1	0.0333	
245969001	04-FEB-2010 20:32:00	30.05	H2SO4/KM2	2	9	1	0.03328	
1202033248 MS (245969001)	04-FEB-2010 20:32:00	30.26	H2SO4/KM2	2	9	1	0.03305	
1202033249 MSD (245969001)	04-FEB-2010 20:32:00	30.04	H2SO4/KM2	2	9	1	0.03329	
245969002	04-FEB-2010 20:32:00	30.21	H2SO4/KM2	2	9	1	0.0331	
245969003	04-FEB-2010 20:32:00	30.11	H2SO4/KM2	2	9	1	0.03321	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202033247	PCB Laboratory Control	WEI00126-07	1	mL	Clean up Date: 2/4/10		
MS	1202033248	PCB Laboratory Control	WEI00126-07	1	mL	Clean up Initials: AJS		
MSD	1202033249	PCB Laboratory Control	WEI00126-07	1	mL	Verified By: AV		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UEI00108-15	1	mL	Final Solvent: Hexane		
REGNT	All	1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Acetone	1264558	150	mL			
REGNT	All	Hexane	1264562-B2	150	mL			
REGNT	All	5% Potassium Permanganate	BI202457-F	5	mL			
SOURC	All	SODIUM SULFATE	1265308	30	g			