

Friday, January 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/22/2010

TURNAROUND/REPORT DUE: 2/21/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



REQUEST NUMBER: 10-1384

These Samples are on:

LANL Request Number: 10-1384
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8082	1	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
		1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
SW-846:8260B	1	1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1384

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B						
1		1	RE14-10-7685	R	1/15/2010	
1		1	RE14-10-7686	R	1/15/2010	
1		1	RE14-10-7687	R	1/15/2010	
1		1	RE14-10-7688	R	1/15/2010	
1		1	RE14-10-7689	R	1/15/2010	
1		1	RE14-10-7691	S	1/15/2010	
2		2	RE14-10-7691	S	1/15/2010	
SW-846:8270C						
1		1	RE14-10-7679	R	1/15/2010	
1		1	RE14-10-7680	R	1/15/2010	
1		1	RE14-10-7681	R	1/15/2010	
1		1	RE14-10-7682	R	1/15/2010	
1		1	RE14-10-7683	R	1/15/2010	
1		1	RE14-10-7684	R	1/15/2010	
1		1	RE14-10-7685	R	1/15/2010	
1		1	RE14-10-7686	R	1/15/2010	
1		1	RE14-10-7687	R	1/15/2010	
1		1	RE14-10-7688	R	1/15/2010	
1		1	RE14-10-7689	R	1/15/2010	
SW-846:8321A_MOD						
1		1	RE14-10-7679	R	1/15/2010	
1		1	RE14-10-7680	R	1/15/2010	
1		1	RE14-10-7681	R	1/15/2010	
1		1	RE14-10-7682	R	1/15/2010	
1		1	RE14-10-7683	R	1/15/2010	
1		1	RE14-10-7684	R	1/15/2010	
1		1	RE14-10-7685	R	1/15/2010	
1		1	RE14-10-7686	R	1/15/2010	
1		1	RE14-10-7687	R	1/15/2010	
1		1	RE14-10-7688	R	1/15/2010	

Friday, January 22, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD		1	RE14-10-7689	R	1/15/2010	

Final Page of REQUEST NUMBER 10-1384

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1384C

LOS ALAMOS

REQUEST NUMBER: 10-1384

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE14-10-7689	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7689	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7679	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7679	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7680	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7680	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7688	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7688	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7684	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7684	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7687	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7687	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7681	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7681	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7682	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7682	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7685	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7685	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7683	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7683	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7691	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE14-10-7691	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

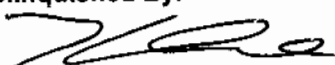
Date

Time

Received By:

Date

Time



1/22/10 3:00

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7681

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/15/2010	MEDIA:	QBT3	Alh
TIME COLLECTED (HH:MM)		1328	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-14-006	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	14-610662	↓	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	↓	METALS+U-GEL	125 ML POLY	Ice	Y	
1	↓	Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown moist sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-4 Westside of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative
 $\alpha \pm 16$ dpm
 $\text{BSG} \pm 2080$ dpm
 PID reading $\frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) TLMCFarland (Signature) TLMCFarland	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARRAZZI (Signature) [Signature]	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7680

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/15/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1316	SUB-MEDIA:		TUFF 1
PRS ID:	C-14-006	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	14-610661	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	2.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	3.1	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		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		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt, few rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-3, South West side of AOC
LA 1/15/10

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm
BX ≤ 1845 dpmPID ambient reading 0.0
0.0 ppm

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) T. McFarland (Signature) T. McFarland	Date/Time 01/15/10 1550	RECEIVED BY (Printed Name) S. MARCZAK (Signature) S. MARCZAK	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7685

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1406		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	14-610664	↓		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	Regular	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty clay, moist, roots and rocks, grass, bark

SAMPLE COMMENTS:

NA

LOCATION DESC:

6-2 east side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ± 33 dpm
 Bx ± 1935 dpm

PID reading 1.8 ppm
 ambient 0.0 ppm

HE negative

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nicholas Gallegas

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARZAY (Signature) <i>S. Marzay</i>	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7684

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1403		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	14-610663	↓		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		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	Regular	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown silty sand, some white pumice

SAMPLE COMMENTS:

NA

LOCATION DESC:

6-1, north side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 27$ dpm PID ambient 0.0
 B8 ≤ 2120 dpm reading 0.0 ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nicholas Gallegas

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARRAZZ (Signature) <i>S. MARRAZZ</i>	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7679

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	OBT3		All h
TIME COLLECTED (HH:MM)		1305		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	14-610661	↓		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 <input checked="" type="checkbox"/> NO / NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES <input checked="" type="checkbox"/> NO / NA
BOREHOLE: YES <input checked="" type="checkbox"/> NO / NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	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		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown wet silty clay

FTB RE14-10-7691

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-3, South West side of AOC
1/15/10

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm
 $\beta \leq 1852$ dpm

 PID ambient reading 0.0 ppm
 NE negative

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 1/15/10 1550	RECEIVED BY G. MAROZ AV (Printed Name) (Signature) <i>GM</i>	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7691

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/15/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1302	SUB-MEDIA:	OTHER
PRS ID: C-14-006	OK	SAMPLE TECH CODE:	QC
LOCATION ID: UNK		FIELD QC TYPE:	FTB
LOCATION TYPE: GENERIC		FIELD PREP:	NA
TOP DEPTH: 0		SAMPLE USAGE:	QC
BOTTOM DEPTH: 0		SCREEN/PORT DESC:	NA
FIELD MATRIX: S		EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA	

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

SAMPLE DESC: QC Sample of RE14-10-7679

SAMPLE COMMENTS:

FTB

LOCATION DESC:

None

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARTIN (Signature) [Signature]	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7687

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		Allh
TIME COLLECTED(HH:MM)		1439		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	14-610665	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.8		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC:

Dark brown clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

6-5, center of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 16 dpm
 BX ≤ 1769 dpm

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

HE negative

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) T. McFarland (Signature) <i>T. McFarland</i>	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARRAS (Signature) <i>S. Marras</i>	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7686

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		Alh
TIME COLLECTED (HH:MM)		1421		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	14-610664	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	4.0		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		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy clay, moist, few white pumice fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-2 east side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22 \text{ dpm}$
 $\text{BY} \leq 2100 \text{ dpm}$

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nickolas Gallegos

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy 767	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MAR 07 AY (Signature) [Signature]	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7689

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1340		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	14-610662		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	4.5		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	13m 1/15/10 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		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 14-10-7682

Orangy brown sand and white pumice fragments

SAMPLE COMMENTS:

Pumice at 3'7"

LOCATION DESC:

6-4, West side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

d ± 38 dpm

BX ± 2090 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Troy Z...	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARIT AU (Signature) [Signature]	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7688

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1447		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	14-610665		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.4	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.5	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		5	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		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown moist clayey silt, few rocks and roots

FD RE14-10-7693

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-5, center of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm
 $\text{BY} \leq 2000$ dpm
PID ambient reading $\frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MAROAN (Signature) <i>U</i>	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7682

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/15/2010	MEDIA:		QBT3
TIME COLLECTED(HH:MM)		1340	SUB-MEDIA:		TUFF 1
PRS ID:	C-14-006	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	14-610662	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	2.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	4.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		NO/NA
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		NO/NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

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

SAMPLE DESC:

Orangy brown sand and white pumice fragments
 FD RE14-10-7689

SAMPLE COMMENTS:

Pumice at 3' 7"

LOCATION DESC:

G-4 Westside of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 38 dpm

B8 ≤ 2090 dpm

PID reading 0.0
ambient 0.0 ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

LARRY A. Lopez

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy 3/2	Date/Time 11/15/10 1550	RECEIVED BY (Printed Name) S. M4R7A4 (Signature) [Signature]	Date/Time 11/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7683

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	OBT3		A11h
TIME COLLECTED (HH:MM)		1349		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	14-610663	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.3		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/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

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

SAMPLE DESC:

Brown sandy clay, slightly ~~root~~ moist, roots and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

G-1, north side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \pm 16$ dpm
 $\beta \pm 2050$ dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tray 247	Date/Time 1/15/10 1550	RECEIVED BY (Printed Name) S. MARY (Signature) M	Date/Time 1/15/10 1550
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2492

EVENT NAME: 4th Qtr. FY09 - AOC C-14-006 - Threemile Canyon

SAMPLE ID: RE14-10-7693

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/15/2010		MEDIA:	NA		ok
TIME COLLECTED (HH:MM)		1456		SUB-MEDIA:	OTHER		
PRS ID:	C-14-006	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	14-G10665		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
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		NO3NO2	250 ML POLY	Sulfuric Acid Ice (Hydrogen Sulfate) tag	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE14-10-7688

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Janet Marin</i>	Date/Time 1/20/10 09:42	RECEIVED BY (Printed Name) Sherril Sheppard (Signature) <i>Sherril Sheppard</i>	Date/Time 1/20/10 942
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



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

ARS Sample Delivery Group: ARS1-10-00096
Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment [SO])
Analysis Test Method: GPC-A-003

Request or PO Number: N/A
Date Received: 1/20/2010
Report Date: 01/21/10 16:55

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00096-001	RE15-10-8426	GROSS ALPHA	1.072	6.238	14.149	4.634	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-001	RE15-10-8426	GROSS BETA	33.047	11.160	7.637	3.292		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-002	RE15-10-8427	GROSS ALPHA	5.957	9.388	16.033	5.422	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-002	RE15-10-8427	GROSS BETA	21.316	8.652	7.811	3.365		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-003	RE15-10-8428	GROSS ALPHA	12.138	11.280	14.482	4.743	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-003	RE15-10-8428	GROSS BETA	37.269	12.300	7.843	3.387		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-004	RE15-10-8429	GROSS ALPHA	21.899	15.209	14.504	4.537		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-004	RE15-10-8429	GROSS BETA	37.388	12.307	7.529	3.233		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-005	RE15-10-8439	GROSS ALPHA	14.468	12.533	14.232	4.372		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-005	RE15-10-8439	GROSS BETA	45.682	14.274	7.863	3.386		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-006	RE15-10-7300	GROSS ALPHA	11.917	11.461	14.330	4.483	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-006	RE15-10-7300	GROSS BETA	29.455	10.461	7.650	3.293		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-007	RE15-10-7301	GROSS ALPHA	8.741	10.351	14.625	4.493	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-007	RE15-10-7301	GROSS BETA	26.698	9.841	7.677	3.299		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-008	RE15-10-7302	GROSS ALPHA	5.731	10.077	17.390	5.934	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-008	RE15-10-7302	GROSS BETA	20.964	8.618	7.966	3.438		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-009	RE15-10-7303	GROSS ALPHA	11.651	13.092	19.294	6.890	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-009	RE15-10-7303	GROSS BETA	28.967	10.464	7.987	3.452		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-010	RE15-10-7304	GROSS ALPHA	1.456	7.172	15.760	5.096	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-010	RE15-10-7304	GROSS BETA	26.857	9.905	7.895	3.396		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-011	RE15-10-7305	GROSS ALPHA	7.928	10.564	16.168	5.199	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-011	RE15-10-7305	GROSS BETA	26.712	9.888	7.820	3.366		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-012	RE15-10-7310	GROSS ALPHA	1.551	8.236	17.275	5.895	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-012	RE15-10-7310	GROSS BETA	27.643	10.079	7.966	3.438		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-013	RE15-10-7311	GROSS ALPHA	9.710	12.510	19.500	6.963	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-013	RE15-10-7311	GROSS BETA	29.923	10.666	7.997	3.456		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-014	RE15-10-7323	GROSS ALPHA	1.565	7.844	17.206	5.564	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-014	RE15-10-7323	GROSS BETA	30.372	10.739	7.964	3.425		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-015	RE15-10-7306	GROSS ALPHA	15.207	12.803	14.924	4.799		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-015	RE15-10-7306	GROSS BETA	23.469	9.247	7.834	3.372		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-016	RE15-10-7307	GROSS ALPHA	3.116	7.154	13.840	4.127	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-016	RE15-10-7307	GROSS BETA	23.256	9.008	7.771	3.354		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-017	RE14-10-7679	GROSS ALPHA	10.349	10.242	12.097	3.262	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-017	RE14-10-7679	GROSS BETA	27.869	10.050	7.573	3.261		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-018	RE14-10-7680	GROSS ALPHA	5.676	7.687	11.594	3.202	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-018	RE14-10-7680	GROSS BETA	25.021	9.377	7.489	3.209		pCi/g	1/21/2010	GJ	N/A	SO	



2609 North River Road, Port Allen, Louisiana 70767
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2 of 2

ARS Sample Delivery Group: ARS1-10-00096
Analysis Description: Gross Alpha/Beta In (Soil, Sludge, Waste, Sediment [SO])
Analysis Test Method: GPC-A-003

Request or PO Number: N/A
Date Received: 1/20/2010
Report Date: 01/21/10 16:55

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00096-019	RE14-10-7681	GROSS ALPHA	11.087	10.199	11.764	3.318	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-019	RE14-10-7681	GROSS BETA	25.906	9.556	7.436	3.201		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-020	RE14-10-7682	GROSS ALPHA	7.706	8.975	12.254	3.433	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-020	RE14-10-7682	GROSS BETA	23.040	9.146	8.117	3.514		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-021	RE14-10-7689	GROSS ALPHA	14.025	12.452	14.458	4.311	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-021	RE14-10-7689	GROSS BETA	28.685	10.400	7.745	3.323		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-022	RE14-10-7683	GROSS ALPHA	9.627	10.145	13.258	3.854	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-022	RE14-10-7683	GROSS BETA	23.954	9.198	7.710	3.331		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-023	RE14-10-7684	GROSS ALPHA	5.796	9.033	15.043	4.464	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-023	RE14-10-7684	GROSS BETA	28.900	10.372	7.885	3.400		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-024	RE14-10-7685	GROSS ALPHA	5.967	8.510	13.284	3.771	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-024	RE14-10-7685	GROSS BETA	17.448	7.837	8.096	3.520		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-025	RE14-10-7686	GROSS ALPHA	21.231	14.850	13.097	3.644		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-025	RE14-10-7686	GROSS BETA	31.409	11.280	8.723	3.818		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-026	RE14-10-7687	GROSS ALPHA	8.247	9.727	13.673	3.906	U	pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-026	RE14-10-7687	GROSS BETA	19.896	8.317	7.650	3.282		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-027	RE14-10-7688	GROSS ALPHA	14.136	11.877	12.630	3.539		pCi/g	1/21/2010	GJ	N/A	SO	
ARS1-10-00096-027	RE14-10-7688	GROSS BETA	18.839	8.415	8.561	3.744		pCi/g	1/21/2010	GJ	N/A	SO	
NOTES: Name: LATA Phone: 505-662-9080													


Project Manager Review

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

LELAP Certificate # 01949

NELAP Certificate # E87558

2 of 2

Rad Screening Data Release Form

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

RE 15-10-8426
8427
8428
8429
8439
7300
7301
7302
7303
7304
7305
7310

RE 15-10-7311
7323
7306
7307

RE 14-10-7679
7680
7681
7682
7683
7684
7685
7686
7687
7688
7689

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

.....

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

RE 15-10-8444
B28] Rinstate

RE 14-10-7691
RE 15-10-8445
RE 15-10-7331] FTB


Reason:

.....


Print Last Name McFarland


Signature [Signature]


Date 1/15/2010

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


Section I.		
REQUEST NUMBER: <u>10-1384</u>	VALIDATION DATE: <u>3/1/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Eyda Hergenreder</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input checked="" type="checkbox"/> OTHER (DESCRIBE): <u>GC/MS VOCs</u>		

Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. QUANTITATION REPORTS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. SAMPLE CHROMATOGRAMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. TICS MASS SPECTRA
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):							
1. The ICAL and continuing calibration RRF values for trichlorotrifluoroethane were <0.05. All associated sample results were NDs and, thus, were qualified R,V7b. 2. Samples RE14-10-7687 and -7683 were re-analyzed due to failed surrogate and/or IS %Rs. The re-analyses were performed beyond but within 2X the HT and only the re-analyses results were reported. The acetone, toluene and 4-isopropyltoluene results for both samples were detects and, thus, were qualified J-,V9. All other associated sample results were NDs and, thus were qualified UJ,V9. 3. The ICV and/or CCV %Ds for dichlorodifluoromethane, chloromethane, acetone, and trichlorotrifluoroethane associated with all samples were >20%. The acetone result for samples -7687 and -7683 were detects and, thus, were qualified J,V7c. All other associated sample results were NDs and, thus, were qualified UJ,V7c. 4. The bromofluorobenzene surrogate %R for the MS sample was > the laboratory UAL. Since this was a QC sample, no data were qualified as a result. 5. The MS and/or MSD %Rs for 2-hexanone and 1,1,2,2-tetrachloroethane and the MS/MSD for 1,1,2,2-tetrachloroethane were outside the laboratory acceptance limits. Since MS/MSD analyses are not required for this method, no data were qualified as a result.							
Reviewed by: <u>Mary Donovan</u>			Level: <u>I</u>		Date: <u>03/01/10</u>		
VALIDATOR'S SIGNATURE: <u></u> Eyda Hergenreder				DATE: <u>3/1/10</u>			

DATA VALIDATION COVER SHEET	
5114-1 Data Validation Cover Sheet	Records Use only  Los Alamos NATIONAL LABORATORY EST. 1942
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is ≤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 ≤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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387001	Date Received: 01/23/2010 09:20	%Moisture: 13
Client ID: RE14-10-7689	Client: LANL010	Project: LANL01004
Batch ID: 946584	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/28/2010 23:16	Inst: VOA5.1	Dilution: 1
Prep Date: 01/28/2010 15:28	Analyst: DXK1	Purge Vol: 5 mL
Data File: 012810V5SV433.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.391	1.15 UJ,V7c
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15 UJ,V7c
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.75	ug/kg	1.91	5.75 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.75	ug/kg	1.84	5.75
75-09-2	Methylene chloride	U	5.75	ug/kg	2.30	5.75
75-15-0	Carbon disulfide	U	5.75	ug/kg	1.44	5.75
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.75	ug/kg	1.72	5.75
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.75	ug/kg	1.44	5.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.75	ug/kg	1.72	5.75
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

EH
3/1/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387001	Date Received: 01/23/2010 09:20	%Moisture: 13
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7689	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/28/2010 23:16	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:28	Allquot: 5 g	Final Volume: 5 mL
Data File: 012810V5V433.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.75	ug/kg	1.84	5.75 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.6	5.93	ug/kg	0	J
	unknown siloxane	16.55	9.54	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387002	Date Received: 01/23/2010 09:20	%Moisture: 21.4
Client ID: RE14-10-7679	Client: LANL010	Project: LANL01004
Batch ID: 946584	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/28/2010 23:42	Inst: VOA5.I	Dilution: 1
Prep Date: 01/28/2010 15:29	Analyst: DXK1	Purge Vol: 5 mL
Data File: 012810V5\SV434.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.433	1.27 UJ,V7c
74-87-3	Chloromethane	U	1.27	ug/kg	0.382	1.27 UJ,V7c
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.382	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.382	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.382	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.382	1.27
67-64-1	Acetone	U	6.36	ug/kg	2.11	6.36 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
74-88-4	Iodomethane	U	6.36	ug/kg	2.04	6.36
75-09-2	Methylene chloride	U	6.36	ug/kg	2.54	6.36
75-15-0	Carbon disulfide	U	6.36	ug/kg	1.59	6.36
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.382	1.27
78-93-3	2-Butanone	U	6.36	ug/kg	1.91	6.36
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.382	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.420	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.382	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.382	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.382	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.382	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.382	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.420	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.382	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.382	1.27
108-10-1	4-Methyl-2-pentanone	U	6.36	ug/kg	1.59	6.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.382	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.382	1.27
591-78-6	2-Hexanone	U	6.36	ug/kg	1.91	6.36
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.382	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.382	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.382	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.382	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.382	1.27

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7679
 Batch ID: 946584
 Run Date: 01/28/2010 23:42
 Prep Date: 01/28/2010 15:29
 Data File: 012810V5\SV434.D

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.382	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.382	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.382	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.382	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.382	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.382	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.382	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.382	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.382	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.382	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.382	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.382	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.382	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.382	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.36	ug/kg	2.04	6.36 R,V7b
<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27

Tentatively Identified Compound Summary

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

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387003	Date Received: 01/23/2010 09:20	%Moisture: 12
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7680	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 00:08	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:30	Allquot: 5 g	Final Volume: 5 mL
Data File: 012810V55V435.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.386	1.14 UJ,V7c
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14 UJ,V7c
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.68	ug/kg	1.89	5.68 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387003	Date Received: 01/23/2010 09:20	%Moisture: 12
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7680	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 00:08	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:30	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012810V5\SV435.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.27	ug/kg	0.341	2.27
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.341	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.68	ug/kg	1.82	5.68 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387004	Date Received: 01/23/2010 09:20	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7686	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 00:34	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:31	Allquot: 5 g	Final Volume: 5 mL
Data File: 012810V5\SV436.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30 UJ,V7c
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30 UJ,V7c
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone	U	6.48	ug/kg	2.15	6.48 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.48	ug/kg	2.07	6.48
75-09-2	Methylene chloride	U	6.48	ug/kg	2.59	6.48
75-15-0	Carbon disulfide	U	6.48	ug/kg	1.62	6.48
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.48	ug/kg	1.94	6.48
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.48	ug/kg	1.62	6.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.389	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.48	ug/kg	1.94	6.48
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387004

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE14-10-7686
Batch ID: 946584
Run Date: 01/29/2010 00:34
Prep Date: 01/28/2010 15:31
Data File: 012810V5SV436.D

CAS No.	Parma name	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.389	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.48	ug/kg	2.07	6.48 R.V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	7.36	ug/kg	0	J

EH
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384

Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00

Date Received: 01/23/2010 09:20

Matrix: R

%Moisture: 21.1

Client: LANL010

Method: SW846 8260B

Project: LANL01004

SOP Ref: GL-OA-E-038

Client ID: RE14-10-7688

Batch ID: 946584

Inst: VOA5.1

Dilution: 1

Run Date: 01/29/2010 01:00

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/28/2010 15:32

Allquot: 5 g

Final Volume: 5 mL

Data File: 012810V5SV437.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27 UJ,V7c
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27 UJ,V7c
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	U	6.34	ug/kg	2.10	6.34 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.53	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.58	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE14-10-7688
Batch ID: 946584
Run Date: 01/29/2010 01:00
Prep Date: 01/28/2010 15:32
Data File: 012810V5\SV437.D

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	U	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	U	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.34	ug/kg	2.03	6.34 R,V7b
<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
007785-70-8	1R-.alpha.-Pinene	14.57	123	ug/kg	97	NJ
005989-27-5	D-Limonene	15.8	6.98	ug/kg	93	NJ
	unknown siloxane	16.54	9.19	ug/kg	0	J

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387006	Date Received: 01/23/2010 09:20	%Moisture: 12.8
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7684	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 01:26	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:33	Allquot: 5 g	Final Volume: 5 mL
Data File: 012810V5\SV438.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15 UJ,V7c
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15 UJ,V7c
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7684
 Batch ID: 946584
 Run Date: 01/29/2010 01:26
 Prep Date: 01/28/2010 15:33
 Data File: 012810V5SV438.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown siloxane	16.55	7.81	ug/kg	0	J

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7687
 Batch ID: 946584
 Run Date: 01/31/2010 17:26
 Prep Date: 01/31/2010 10:39
 Data File: 013110V5\SV715.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.36	ug/kg	0.464	1.36 UJ,V9
74-87-3	Chloromethane	HUh	1.36	ug/kg	0.409	1.36
75-01-4	Vinyl chloride	HUh	1.36	ug/kg	0.409	1.36
74-83-9	Bromomethane	HUh	1.36	ug/kg	0.409	1.36
75-00-3	Chloroethane	HUh	1.36	ug/kg	0.409	1.36
75-69-4	Trichlorofluoromethane	HUh	1.36	ug/kg	0.409	1.36
67-64-1	Acetone	HJh	3.63	ug/kg	2.27	6.82 J-,V9
75-35-4	1,1-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36 UJ,V9
74-88-4	Iodomethane	HUh	6.82	ug/kg	2.18	6.82
75-09-2	Methylene chloride	HUh	6.82	ug/kg	2.73	6.82
75-15-0	Carbon disulfide	HUh	6.82	ug/kg	1.71	6.82
156-60-5	trans-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
75-34-3	1,1-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
78-93-3	2-Butanone	HUh	6.82	ug/kg	2.05	6.82
156-59-2	cis-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
594-20-7	2,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
67-66-3	Chloroform	HUh	1.36	ug/kg	0.409	1.36
74-97-5	Bromochloromethane	HUh	1.36	ug/kg	0.450	1.36
71-55-6	1,1,1-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
563-58-6	1,1-Dichloropropene	HUh	1.36	ug/kg	0.409	1.36
56-23-5	Carbon tetrachloride	HUh	1.36	ug/kg	0.409	1.36
107-06-2	1,2-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
71-43-2	Benzene	HUh	1.36	ug/kg	0.409	1.36
79-01-6	Trichloroethylene	HUh	1.36	ug/kg	0.450	1.36
78-87-5	1,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
75-27-4	Bromodichloromethane	HUh	1.36	ug/kg	0.409	1.36
74-95-3	Dibromomethane	HUh	1.36	ug/kg	0.409	1.36
108-10-1	4-Methyl-2-pentanone	HUh	6.82	ug/kg	1.71	6.82
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36
108-88-3	Toluene	HJh	0.887	ug/kg	0.409	1.36 J-,V9
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36 UJ,V9
79-00-5	1,1,2-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
591-78-6	2-Hexanone	HUh	6.82	ug/kg	2.05	6.82
142-28-9	1,3-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
127-18-4	Tetrachloroethylene	HUh	1.36	ug/kg	0.409	1.36
124-48-1	Dibromochloromethane	HUh	1.36	ug/kg	0.409	1.36
106-93-4	1,2-Dibromoethane	HUh	1.36	ug/kg	0.409	1.36
108-90-7	Chlorobenzene	HUh	1.36	ug/kg	0.409	1.36

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7687
 Batch ID: 946584
 Run Date: 01/31/2010 17:26
 Prep Date: 01/31/2010 10:39
 Data File: 013110V55V715.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.36	ug/kg	0.409	1.36 UJ,V9
179601-23-1	m,p-Xylenes	HUh	2.73	ug/kg	0.409	2.73
95-47-6	o-Xylene	HUh	1.36	ug/kg	0.409	1.36
100-42-5	Styrene	HUh	1.36	ug/kg	0.409	1.36
75-25-2	Bromoform	HUh	1.36	ug/kg	0.409	1.36
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36
96-18-4	1,2,3-Trichloropropane	HUh	1.36	ug/kg	0.409	1.36
108-86-1	Bromobenzene	HUh	1.36	ug/kg	0.409	1.36
103-65-1	n-Propylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-49-8	2-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-82-8	Isopropylbenzene	HUh	1.36	ug/kg	0.409	1.36
108-67-8	1,3,5-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
106-43-4	4-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-06-6	tert-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-63-6	1,2,4-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
135-98-8	sec-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
99-87-6	4-Isopropyltoluene	Hh	2.29	ug/kg	0.409	1.36 J-,V9
541-73-1	1,3-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36 UJ,V9
106-46-7	1,4-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36
104-51-8	n-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.36	ug/kg	0.409	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.82	ug/kg	2.18	6.82 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36 UJ,V9
95-50-1	1,2-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36 UJ,V9

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	14.57	10.4	ug/kg	95	NJ
000079-92-5	Camphene	14.89	9.7	ug/kg	98	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387008	Date Received: 01/23/2010 09:20	%Moisture: 22.5
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7681	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 02:18	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:35	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012810V5\SV440.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.438	1.29 UJ,V7c
74-87-3	Chloromethane	U	1.29	ug/kg	0.387	1.29 UJ,V7c
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.387	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.387	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.387	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.387	1.29
67-64-1	Acetone	U	6.45	ug/kg	2.14	6.45 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
74-88-4	Iodomethane	U	6.45	ug/kg	2.06	6.45
75-09-2	Methylene chloride	U	6.45	ug/kg	2.58	6.45
75-15-0	Carbon disulfide	U	6.45	ug/kg	1.61	6.45
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.387	1.29
78-93-3	2-Butanone	U	6.45	ug/kg	1.93	6.45
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.387	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.426	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.387	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.387	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.387	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.387	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.387	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.426	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.387	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.387	1.29
108-10-1	4-Methyl-2-pentanone	U	6.45	ug/kg	1.61	6.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.387	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.387	1.29
591-78-6	2-Hexanone	U	6.45	ug/kg	1.93	6.45
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.387	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.387	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.387	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.387	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.387	1.29

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1384
 Lab Sample ID: 245387008

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7681
 Batch ID: 946584
 Run Date: 01/29/2010 02:18
 Prep Date: 01/28/2010 15:35
 Data File: 012810V55V440.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.387	1.29
179601-23-1	m,p-Xylenes	U	2.58	ug/kg	0.387	2.58
95-47-6	o-Xylene	U	1.29	ug/kg	0.387	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.387	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.387	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.387	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.387	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.387	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.387	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.387	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.387	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.387	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.387	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.387	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.45	ug/kg	2.06	6.45 R,V7b
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.387	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: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387009	Date Received: 01/23/2010 09:20	%Moisture: 12.8
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7682	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/29/2010 02:43	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/28/2010 15:36	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012810V55V441.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15 UJ,V7c
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15 UJ,V7c
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7682
 Batch ID: 946584
 Run Date: 01/29/2010 02:43
 Prep Date: 01/28/2010 15:36
 Data File: 012810V5SV441.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74 R,V7b
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

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

EH
3/1/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7685
 Batch ID: 946584
 Run Date: 01/29/2010 03:09
 Prep Date: 01/28/2010 15:37
 Data File: 012810V5\SV442.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.18	ug/kg	0.401	1.18 UJ,V7c
74-87-3	Chloromethane	U	1.18	ug/kg	0.354	1.18 UJ,V7c
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.354	1.18
74-83-9	Bromomethane	U	1.18	ug/kg	0.354	1.18
75-00-3	Chloroethane	U	1.18	ug/kg	0.354	1.18
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.354	1.18
67-64-1	Acetone	U	5.90	ug/kg	1.96	5.90 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
74-88-4	Iodomethane	U	5.90	ug/kg	1.89	5.90
75-09-2	Methylene chloride	U	5.90	ug/kg	2.36	5.90
75-15-0	Carbon disulfide	U	5.90	ug/kg	1.48	5.90
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.354	1.18
78-93-3	2-Butanone	U	5.90	ug/kg	1.77	5.90
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
67-66-3	Chloroform	U	1.18	ug/kg	0.354	1.18
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.389	1.18
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.354	1.18
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.354	1.18
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.354	1.18
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.354	1.18
71-43-2	Benzene	U	1.18	ug/kg	0.354	1.18
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.389	1.18
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.354	1.18
74-95-3	Dibromomethane	U	1.18	ug/kg	0.354	1.18
108-10-1	4-Methyl-2-pentanone	U	5.90	ug/kg	1.48	5.90
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
108-88-3	Toluene	U	1.18	ug/kg	0.354	1.18
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.354	1.18
591-78-6	2-Hexanone	U	5.90	ug/kg	1.77	5.90
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.354	1.18
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.354	1.18
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.354	1.18
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.354	1.18
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.354	1.18

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7685
 Batch ID: 946584
 Run Date: 01/29/2010 03:09
 Prep Date: 01/28/2010 15:37
 Data File: 012810V5\SV442.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.18	ug/kg	0.354	1.18
179601-23-1	m,p-Xylenes	U	2.36	ug/kg	0.354	2.36
95-47-6	o-Xylene	U	1.18	ug/kg	0.354	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.354	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.354	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.354	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.354	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.354	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.354	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.354	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.354	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.354	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.354	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.354	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.90	ug/kg	1.89	5.90 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18

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

SDG Number: 10-1384
 Lab Sample ID: 245387011

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7683
 Batch ID: 946584
 Run Date: 01/31/2010 17:52
 Prep Date: 01/31/2010 10:40
 Data File: 013110V5\SV716.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.34	ug/kg	0.456	1.34 UJ,V9
74-87-3	Chloromethane	HUh	1.34	ug/kg	0.402	1.34
75-01-4	Vinyl chloride	HUh	1.34	ug/kg	0.402	1.34
74-83-9	Bromomethane	HUh	1.34	ug/kg	0.402	1.34
75-00-3	Chloroethane	HUh	1.34	ug/kg	0.402	1.34
75-69-4	Trichlorofluoromethane	HUh	1.34	ug/kg	0.402	1.34
67-64-1	Acetone	Hh	9.73	ug/kg	2.22	6.70 J-,V9
75-35-4	1,1-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34 UJ,V9
74-88-4	Iodomethane	HUh	6.70	ug/kg	2.14	6.70
75-09-2	Methylene chloride	HUh	6.70	ug/kg	2.68	6.70
75-15-0	Carbon disulfide	HUh	6.70	ug/kg	1.67	6.70
156-60-5	trans-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
75-34-3	1,1-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
78-93-3	2-Butanone	HUh	6.70	ug/kg	2.01	6.70
156-59-2	cis-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
594-20-7	2,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
67-66-3	Chloroform	HUh	1.34	ug/kg	0.402	1.34
74-97-5	Bromochloromethane	HUh	1.34	ug/kg	0.442	1.34
71-55-6	1,1,1-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
563-58-6	1,1-Dichloropropene	HUh	1.34	ug/kg	0.402	1.34
56-23-5	Carbon tetrachloride	HUh	1.34	ug/kg	0.402	1.34
107-06-2	1,2-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
71-43-2	Benzene	HUh	1.34	ug/kg	0.402	1.34
79-01-6	Trichloroethylene	HUh	1.34	ug/kg	0.442	1.34
78-87-5	1,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
75-27-4	Bromodichloromethane	HUh	1.34	ug/kg	0.402	1.34
74-95-3	Dibromomethane	HUh	1.34	ug/kg	0.402	1.34
108-10-1	4-Methyl-2-pentanone	HUh	6.70	ug/kg	1.67	6.70
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34
108-88-3	Toluene	HJh	0.670	ug/kg	0.402	1.34 J-,V9
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34 UJ,V9
79-00-5	1,1,2-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
591-78-6	2-Hexanone	HUh	6.70	ug/kg	2.01	6.70
142-28-9	1,3-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
127-18-4	Tetrachloroethylene	HUh	1.34	ug/kg	0.402	1.34
124-48-1	Dibromochloromethane	HUh	1.34	ug/kg	0.402	1.34
106-93-4	1,2-Dibromoethane	HUh	1.34	ug/kg	0.402	1.34
108-90-7	Chlorobenzene	HUh	1.34	ug/kg	0.402	1.34

EH
3/1/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387011	Date Received: 01/23/2010 09:20	%Moisture: 25.4
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7683	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/31/2010 17:52	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/31/2010 10:40	Allquot: 5 g	Final Volume: 5 mL
Data File: 013110V5\5V716.D	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.34	ug/kg	0.402	1.34 UJ,V9
179601-23-1	m,p-Xylenes	HUh	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	HUh	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	HUh	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	HUh	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	HUh	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	HUh	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	HUh	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene	HUh	0.750	ug/kg	0.402	1.34 J-,V9
541-73-1	1,3-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34 UJ,V9
106-46-7	1,4-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.70	ug/kg	2.14	6.70 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34 UJ,V9
95-50-1	1,2-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34 UJ,V9

Tentatively Identified Compound Summary

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

EH
3/1/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: S
Lab Sample ID: 245387012	Date Received: 01/23/2010 09:20	
Client ID: RE14-10-7691	Client: LANL010	Project: LANL01004
Batch ID: 946584	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/29/2010 04:01	Inst: VOA5.I	Dilution: 1
Prep Date: 01/28/2010 15:39	Analyst: DXK1	Purge Vol: 5 mL
Data File: 012810V5SV444.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00 UJ,V7c
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00 UJ,V7c
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
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: 10-1384
Lab Sample ID: 245387012

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

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

Client ID: RE14-10-7691
Batch ID: 946584
Run Date: 01/29/2010 04:01
Prep Date: 01/28/2010 15:39
Data File: 012810V5\SV444.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

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

EH
3/1/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1384 VALIDATION DATE: 3/1/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder 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): GC/MS 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):

- The ICV and/or CCV %Ds for n-methyl-n-nitrosomethylamine, pyridine, hexachlorocyclopentadiene, 2-nitroaniline, 2-methyl-4,6-dinitrophenol and benzo(ghi)perylene were >20%. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The MSD %R for hexachlorocyclopentadiene was < the laboratory LAL but $\geq 10\%$ and the MS/MSD RPD for 4-nitrophenol was > the laboratory acceptance limit. Since MS/MSD analyses are not required for this method, no data were qualified as a result.

Reviewed by: Mary Donovan


Level: I

Date: 03/01/10


VALIDATOR'S SIGNATURE:

A handwritten signature of Eyda Hergenreder in black ink.


DATE: 3/1/10

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


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

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

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

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

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

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387002	Date Received: 01/23/2010 09:20	%Moisture: 21.4
Client ID: RE14-10-7679	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 16:13	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0413.d	Aliquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.5	422 UJ,SV7c
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422 UJ,SV7c
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl) ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	422	ug/kg	84.5	422

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387002	Date Received: 01/23/2010 09:20	%Moisture: 21.4
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7679	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 16:13	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s6b0413.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	422	ug/kg	84.5	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	845	ug/kg	160	845
132-64-9	Dibenzofuran	U	422	ug/kg	84.5	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.5	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422 UJ,SV7c
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.5	422
122-66-7	Azobenzene	U	422	ug/kg	84.5	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.5	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.45	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.5	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.5	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.5	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	486	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387003

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

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

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

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379 UJ,SV7c
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.26	156	ug/kg		J
	Unknown	2.3	206	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387003	Date Received: 01/23/2010 09:20	%Moisture: 12
Client ID: RE14-10-7680	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 17:39	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0416.d	Alliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.34	230	ug/kg		J
	Unknown Aldol Condensate	3.54	389	ug/kg		JA
	Unknown	17.37	374	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387008

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7681
Batch ID: 945501
Run Date: 02/04/2010 20:01
Prep Date: 01/26/2010 20:21
Data File: s6b0421.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429 UJ,SV7c
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429 UJ,SV7c
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl) ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	429	ug/kg	85.9	429

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387008	Date Received: 01/23/2010 09:20	%Moisture: 22.5
Client ID: RE14-10-7681	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:01	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0421.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	429	ug/kg	85.9	429
208-96-8	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
51-28-5	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
132-64-9	2,4-Dinitrophenol	U	859	ug/kg	163	859
84-66-2	Dibenzofuran	U	429	ug/kg	85.9	429
86-73-7	Diethylphthalate	U	429	ug/kg	85.9	429
7005-72-3	Fluorene	U	42.9	ug/kg	12.9	42.9
534-52-1	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
100-01-6	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429 UJ,SV7c
122-39-4	4-Nitroaniline	U	429	ug/kg	129	429
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	429	ug/kg	85.9	429
118-74-1	Azobenzene	U	429	ug/kg	85.9	429
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
84-74-2	Hexachlorobenzene	U	429	ug/kg	85.9	429
206-44-0	Phenanthrene	U	42.9	ug/kg	12.9	42.9
85-68-7	Anthracene	U	42.9	ug/kg	8.59	42.9
56-55-3	Di-n-butylphthalate	U	429	ug/kg	85.9	429
91-94-1	Fluoranthene	U	42.9	ug/kg	12.9	42.9
218-01-9	Butylbenzylphthalate	U	429	ug/kg	85.9	429
117-81-7	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
117-84-0	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
205-99-2	Chrysene	U	42.9	ug/kg	12.9	42.9
207-08-9	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
50-32-8	Di-n-octylphthalate	U	429	ug/kg	85.9	429
193-39-5	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
53-70-3	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
120-82-1	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9 UJ,SV7c
	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.33	200	ug/kg		J
	Unknown Aldol Condensate	3.54	666	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387008	Date Received: 01/23/2010 09:20	%Moisture: 22.5
Client ID: RE14-10-7681	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:01	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0421.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-80-1	Oleic Acid	11.02	306	ug/kg	83	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	214	ug/kg	99	NJ
630-02-4	Octacosane	14.61	256	ug/kg	87	NJ
	Unknown	17.36	292	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7682
Batch ID: 945501
Run Date: 02/04/2010 20:29
Prep Date: 01/26/2010 20:21
Data File: s6b0422.d

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

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387009	Date Received: 01/23/2010 09:20	%Moisture: 12.8
Client ID: RE14-10-7682	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:29	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0422.d	Allquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382 UJ,SV7c
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.3	159	ug/kg		J
	Unknown	2.34	171	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	537	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	4.3	798	ug/kg	90	NJ
	Unknown	12.02	244	ug/kg		J
	Unknown	12.22	161	ug/kg		J
	Unknown	17.37	518	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387011

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7683
Batch ID: 945501
Run Date: 02/04/2010 21:25
Prep Date: 01/26/2010 20:21
Data File: s6b0424.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	446	ug/kg	89.3	446 UJ,SV7c
108-95-2	Phenol	U	446	ug/kg	89.3	446
95-57-8	2-Chlorophenol	U	446	ug/kg	89.3	446
106-46-7	1,4-Dichlorobenzene	U	446	ug/kg	89.3	446
621-64-7	N-Nitrosodipropylamine	U	446	ug/kg	89.3	446
59-50-7	4-Chloro-3-methylphenol	U	446	ug/kg	89.3	446
83-32-9	Acenaphthene	U	44.6	ug/kg	14.7	44.6
121-14-2	2,4-Dinitrotoluene	U	446	ug/kg	44.6	446
100-02-7	4-Nitrophenol	U	446	ug/kg	147	446
87-86-5	Pentachlorophenol	U	446	ug/kg	112	446
129-00-0	Pyrene	U	44.6	ug/kg	13.4	44.6
110-86-1	Pyridine	U	446	ug/kg	89.3	446 UJ,SV7c
62-53-3	Aniline	U	446	ug/kg	134	446
111-44-4	bis(2-Chloroethyl) ether	U	446	ug/kg	89.3	446
541-73-1	1,3-Dichlorobenzene	U	446	ug/kg	89.3	446
100-51-6	Benzyl alcohol	U	446	ug/kg	134	446
95-50-1	1,2-Dichlorobenzene	U	446	ug/kg	89.3	446
108-60-1	bis(2-Chloroisopropyl) ether	U	446	ug/kg	89.3	446
95-48-7	o-Cresol	U	446	ug/kg	89.3	446
65794-96-9	m,p-Cresols	U	446	ug/kg	134	446
67-72-1	Hexachloroethane	U	446	ug/kg	89.3	446
98-95-3	Nitrobenzene	U	446	ug/kg	89.3	446
78-59-1	Isophorone	U	446	ug/kg	89.3	446
88-75-5	2-Nitrophenol	U	446	ug/kg	89.3	446
105-67-9	2,4-Dimethylphenol	U	446	ug/kg	156	446
111-91-1	bis(2-Chloroethoxy)methane	U	446	ug/kg	89.3	446
120-83-2	2,4-Dichlorophenol	U	446	ug/kg	89.3	446
65-85-0	Benzoic acid	U	893	ug/kg	223	893
91-20-3	Naphthalene	U	44.6	ug/kg	13.4	44.6
106-47-8	4-Chloroaniline	U	446	ug/kg	89.3	446
87-68-3	Hexachlorobutadiene	U	446	ug/kg	89.3	446
91-57-6	2-Methylnaphthalene	U	44.6	ug/kg	8.93	44.6
77-47-4	Hexachlorocyclopentadiene	U	446	ug/kg	89.3	446 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	446	ug/kg	89.3	446
95-95-4	2,4,5-Trichlorophenol	U	446	ug/kg	89.3	446
91-58-7	2-Chloronaphthalene	U	44.6	ug/kg	14.7	44.6
88-74-4	2-Nitroaniline	U	446	ug/kg	89.3	446 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	446	ug/kg	89.3	446

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387011	Date Received: 01/23/2010 09:20	%Moisture: 25.4
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7683	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 21:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0424.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	446	ug/kg	89.3	446
208-96-8	2,6-Dinitrotoluene	U	446	ug/kg	44.6	446
51-28-5	Acenaphthylene	U	44.6	ug/kg	13.4	44.6
132-64-9	2,4-Dinitrophenol	U	893	ug/kg	170	893
84-66-2	Dibenzofuran	U	446	ug/kg	89.3	446
86-73-7	Diethylphthalate	U	446	ug/kg	89.3	446
7005-72-3	Fluorene	U	44.6	ug/kg	13.4	44.6
534-52-1	4-Chlorophenylphenylether	U	446	ug/kg	89.3	446
100-01-6	2-Methyl-4,6-dinitrophenol	U	446	ug/kg	89.3	446 UJ,SV7c
122-39-4	4-Nitroaniline	U	446	ug/kg	134	446
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	446	ug/kg	89.3	446
118-74-1	Azobenzene	U	446	ug/kg	89.3	446
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	446	ug/kg	89.3	446
84-74-2	Hexachlorobenzene	U	446	ug/kg	89.3	446
206-44-0	Phenanthrene	U	44.6	ug/kg	13.4	44.6
85-68-7	Anthracene	U	44.6	ug/kg	8.93	44.6
56-55-3	Di-n-butylphthalate	U	446	ug/kg	89.3	446
91-94-1	Fluoranthene	U	44.6	ug/kg	13.4	44.6
218-01-9	Butylbenzylphthalate	U	446	ug/kg	89.3	446
117-81-7	Benzo(a)anthracene	U	44.6	ug/kg	13.4	44.6
117-84-0	3,3'-Dichlorobenzidine	U	446	ug/kg	134	446
205-99-2	Chrysene	U	44.6	ug/kg	13.4	44.6
207-08-9	bis(2-Ethylhexyl)phthalate	U	446	ug/kg	89.3	446
50-32-8	Di-n-octylphthalate	U	446	ug/kg	89.3	446
193-39-5	Benzo(b)fluoranthene	U	44.6	ug/kg	13.4	44.6
53-70-3	Benzo(k)fluoranthene	U	44.6	ug/kg	13.4	44.6
191-24-2	Benzo(a)pyrene	U	44.6	ug/kg	13.4	44.6
120-82-1	Indeno(1,2,3-cd)pyrene	U	44.6	ug/kg	13.4	44.6
	Dibenzo(a,h)anthracene	U	44.6	ug/kg	13.4	44.6
	Benzo(ghi)perylene	U	44.6	ug/kg	13.4	44.6 UJ,SV7c
	1,2,4-Trichlorobenzene	U	446	ug/kg	89.3	446

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	564	ug/kg		JA
13466-78-9	3-Carene	4.89	613	ug/kg	95	NJ

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387011	Date Received: 01/23/2010 09:20	%Moisture: 25.4
Client ID: RE14-10-7683	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 21:25	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0424.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Flt	Qual
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	6.81	570	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	10.25	719	ug/kg	98	NJ
	Unknown	10.47	352	ug/kg		J
	Unknown	10.77	326	ug/kg		J
17351-34-7	14-Pentadecenoic acid	11.03	1110	ug/kg	95	NJ
	Unknown	11.05	539	ug/kg		J
57-11-4	Octadecanoic acid	11.11	484	ug/kg	92	NJ
	Unknown	11.2	283	ug/kg		J
	Unknown	11.3	256	ug/kg		J
1482-93-5	Cyclohexane, hexaethylidene-	11.53	462	ug/kg	95	NJ
74663-83-5	1,5-Heptadiene, 2,5-dimethyl-3-methylene	11.76	346	ug/kg	90	NJ
	Unknown	11.87	606	ug/kg		J
506-30-9	Eicosanoic acid	11.93	482	ug/kg	91	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12	307	ug/kg	98	NJ
	Unknown	12.08	1120	ug/kg		J
	Unknown	12.15	228	ug/kg		J
	Unknown	12.23	310	ug/kg		J
	Unknown	12.37	2120	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.52	4210	ug/kg	95	NJ
	Unknown	12.56	344	ug/kg		J
	Unknown	12.69	231	ug/kg		J
	Unknown	12.92	194	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	13.65	1120	ug/kg	83	NJ
	Unknown	13.69	563	ug/kg		J
630-04-6	Hentriacontane	15.93	930	ug/kg	98	NJ
	Unknown	16.09	862	ug/kg		J
	Unknown	16.3	839	ug/kg		J
	Unknown	17.09	1130	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
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	381	ug/kg	76.1	381 UJ,SV7c
108-95-2	Phenol	U	381	ug/kg	76.1	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.1	381 UJ,SV7c
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381
95-48-7	o-Cresol	U	381	ug/kg	76.1	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381
78-59-1	Isophorone	U	381	ug/kg	76.1	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381
65-85-0	Benzoic acid	U	761	ug/kg	190	761
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.1	381 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	381	ug/kg	76.1	381

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387006	Date Received: 01/23/2010 09:20	%Moisture: 12.8
Client ID: RE14-10-7684	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 19:04	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0419.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	381	ug/kg	76.1	381
208-96-8	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
51-28-5	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
132-64-9	2,4-Dinitrophenol	U	761	ug/kg	145	761
84-66-2	Dibenzofuran	U	381	ug/kg	76.1	381
86-73-7	Diethylphthalate	U	381	ug/kg	76.1	381
7005-72-3	Fluorene	U	38.1	ug/kg	11.4	38.1
534-52-1	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381
100-01-6	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381 UJ,SV7c
122-39-4	4-Nitroaniline	U	381	ug/kg	114	381
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	381	ug/kg	76.1	381
118-74-1	Azobenzene	U	381	ug/kg	76.1	381
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	381	ug/kg	76.1	381
84-74-2	Hexachlorobenzene	U	381	ug/kg	76.1	381
206-44-0	Phenanthrene	U	38.1	ug/kg	11.4	38.1
85-68-7	Anthracene	U	38.1	ug/kg	7.61	38.1
56-55-3	Di-n-butylphthalate	U	381	ug/kg	76.1	381
91-94-1	Fluoranthene	U	38.1	ug/kg	11.4	38.1
218-01-9	Butylbenzylphthalate	U	381	ug/kg	76.1	381
117-81-7	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
117-84-0	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
205-99-2	Chrysene	U	38.1	ug/kg	11.4	38.1
207-08-9	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381
50-32-8	Di-n-octylphthalate	U	381	ug/kg	76.1	381
193-39-5	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
53-70-3	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
120-82-1	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1 UJ,SV7c
	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	163	ug/kg		J
	Unknown Aldol Condensate	3.54	438	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-1384	Date Collected:	01/15/2010 12:00	Matrix:	R
Lab Sample ID:	245387006	Date Received:	01/23/2010 09:20	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE14-10-7684	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	945501	Inst:	MSD6.I	Dilution:	1
Run Date:	02/04/2010 19:04	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	01/26/2010 20:21	Allquot:	30.14 g	Final Volume:	1 mL
Data File:	s6b0419.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		17.37	658	ug/kg	J

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387010	Date Received: 01/23/2010 09:20	%Moisture: 15.3
Client ID: RE14-10-7685	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:57	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0423.d	Aliquot: 30.19 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	391	ug/kg	78.2	391 UJ,SV7c
108-95-2	Phenol	U	391	ug/kg	78.2	391
95-57-8	2-Chlorophenol	U	391	ug/kg	78.2	391
106-46-7	1,4-Dichlorobenzene	U	391	ug/kg	78.2	391
621-64-7	N-Nitrosodipropylamine	U	391	ug/kg	78.2	391
59-50-7	4-Chloro-3-methylphenol	U	391	ug/kg	78.2	391
83-32-9	Acenaphthene	U	39.1	ug/kg	12.9	39.1
121-14-2	2,4-Dinitrotoluene	U	391	ug/kg	39.1	391
100-02-7	4-Nitrophenol	U	391	ug/kg	129	391
87-86-5	Pentachlorophenol	U	391	ug/kg	97.7	391
129-00-0	Pyrene	U	39.1	ug/kg	11.7	39.1
110-86-1	Pyridine	U	391	ug/kg	78.2	391 UJ,SV7c
62-53-3	Aniline	U	391	ug/kg	117	391
111-44-4	bis(2-Chloroethyl) ether	U	391	ug/kg	78.2	391
541-73-1	1,3-Dichlorobenzene	U	391	ug/kg	78.2	391
100-51-6	Benzyl alcohol	U	391	ug/kg	117	391
95-50-1	1,2-Dichlorobenzene	U	391	ug/kg	78.2	391
108-60-1	bis(2-Chloroisopropyl) ether	U	391	ug/kg	78.2	391
95-48-7	o-Cresol	U	391	ug/kg	78.2	391
65794-96-9	m,p-Cresols	U	391	ug/kg	117	391
67-72-1	Hexachloroethane	U	391	ug/kg	78.2	391
98-95-3	Nitrobenzene	U	391	ug/kg	78.2	391
78-59-1	Isophorone	U	391	ug/kg	78.2	391
88-75-5	2-Nitrophenol	U	391	ug/kg	78.2	391
105-67-9	2,4-Dimethylphenol	U	391	ug/kg	137	391
111-91-1	bis(2-Chloroethoxy)methane	U	391	ug/kg	78.2	391
120-83-2	2,4-Dichlorophenol	U	391	ug/kg	78.2	391
65-85-0	Benzoic acid	U	782	ug/kg	195	782
91-20-3	Naphthalene	U	39.1	ug/kg	11.7	39.1
106-47-8	4-Chloroaniline	U	391	ug/kg	78.2	391
87-68-3	Hexachlorobutadiene	U	391	ug/kg	78.2	391
91-57-6	2-Methylnaphthalene	U	39.1	ug/kg	7.82	39.1
77-47-4	Hexachlorocyclopentadiene	U	391	ug/kg	78.2	391 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	391	ug/kg	78.2	391
95-95-4	2,4,5-Trichlorophenol	U	391	ug/kg	78.2	391
91-58-7	2-Chloronaphthalene	U	39.1	ug/kg	12.9	39.1
88-74-4	2-Nitroaniline	U	391	ug/kg	78.2	391 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	391	ug/kg	78.2	391

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387010	Date Received: 01/23/2010 09:20	%Moisture: 15.3
Client ID: RE14-10-7685	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:57	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0423.d	Aliquot: 30.19 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	391	ug/kg	78.2	391
208-96-8	2,6-Dinitrotoluene	U	391	ug/kg	39.1	391
51-28-5	Acenaphthylene	U	39.1	ug/kg	11.7	39.1
132-64-9	2,4-Dinitrophenol	U	782	ug/kg	149	782
84-66-2	Dibenzofuran	U	391	ug/kg	78.2	391
86-73-7	Diethylphthalate	U	391	ug/kg	78.2	391
7005-72-3	Fluorene	U	39.1	ug/kg	11.7	39.1
534-52-1	4-Chlorophenylphenylether	U	391	ug/kg	78.2	391
100-01-6	2-Methyl-4,6-dinitrophenol	U	391	ug/kg	78.2	391 UJ,SV7c
122-39-4	4-Nitroaniline	U	391	ug/kg	117	391
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	391	ug/kg	78.2	391
118-74-1	Azobenzene	U	391	ug/kg	78.2	391
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	391	ug/kg	78.2	391
84-74-2	Hexachlorobenzene	U	391	ug/kg	78.2	391
206-44-0	Phenanthrene	U	39.1	ug/kg	11.7	39.1
85-68-7	Anthracene	U	39.1	ug/kg	7.82	39.1
56-55-3	Di-n-butylphthalate	U	391	ug/kg	78.2	391
91-94-1	Fluoranthene	U	39.1	ug/kg	11.7	39.1
218-01-9	Butylbenzylphthalate	U	391	ug/kg	78.2	391
117-81-7	Benzo(a)anthracene	U	39.1	ug/kg	11.7	39.1
117-84-0	3,3'-Dichlorobenzidine	U	391	ug/kg	117	391
205-99-2	Chrysene	U	39.1	ug/kg	11.7	39.1
207-08-9	bis(2-Ethylhexyl)phthalate	U	391	ug/kg	78.2	391
50-32-8	Di-n-octylphthalate	U	391	ug/kg	78.2	391
193-39-5	Benzo(b)fluoranthene	U	39.1	ug/kg	11.7	39.1
53-70-3	Benzo(k)fluoranthene	U	39.1	ug/kg	11.7	39.1
191-24-2	Benzo(a)pyrene	U	39.1	ug/kg	11.7	39.1
120-82-1	Indeno(1,2,3-cd)pyrene	U	39.1	ug/kg	11.7	39.1
	Dibenzo(a,h)anthracene	U	39.1	ug/kg	11.7	39.1
	Benzo(ghi)perylene	U	39.1	ug/kg	11.7	39.1 UJ,SV7c
	1,2,4-Trichlorobenzene	U	391	ug/kg	78.2	391

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.34	167	ug/kg		J
	Unknown	2.48	168	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387010	Date Received: 01/23/2010 09:20	%Moisture: 15.3
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7685	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 20:57	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0423.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate		3.54	496	ug/kg		JA
2416-20-8	Hexadecenoic acid, Z-11-		10.22	184	ug/kg	99	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4		12.46	161	ug/kg	87	NJ

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

SDG Number: 10-1384
Lab Sample ID: 245387004

Client ID: RE14-10-7686
Batch ID: 945501
Run Date: 02/04/2010 18:07
Prep Date: 01/26/2010 20:21
Data File: s6b0417.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
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	431	ug/kg	86.3	431 UJ,SV7c
108-95-2	Phenol	U	431	ug/kg	86.3	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.3	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.3	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.3	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.3	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	U	43.1	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.3	431 UJ,SV7c
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.3	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.3	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.3	431
108-60-1	bis(2-Chloroisopropyl)ether	U	431	ug/kg	86.3	431
95-48-7	o-Cresol	U	431	ug/kg	86.3	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.3	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.3	431
78-59-1	Isophorone	U	431	ug/kg	86.3	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.3	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.3	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.3	431
65-85-0	Benzoic acid	U	863	ug/kg	216	863
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.3	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.3	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.63	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.3	431 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.3	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.3	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.3	431 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	431	ug/kg	86.3	431

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

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SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387004	Date Received: 01/23/2010 09:20	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7686	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 18:07	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Allquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0417.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	431	ug/kg	86.3	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	431	ug/kg	86.3	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.3	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.3	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.3	431 UJ,SV7c
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	431	ug/kg	86.3	431
122-66-7	Azobenzene	U	431	ug/kg	86.3	431
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.3	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.3	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.63	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.3	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.3	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.3	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.3	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.3	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	182	ug/kg		J
	Unknown Aldol Condensate	3.54	512	ug/kg		JA

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387004	Date Received: 01/23/2010 09:20	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7686	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 18:07	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0417.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Flt Qual
	Unknown		17.37	215	ug/kg	J

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387007	Date Received: 01/23/2010 09:20	%Moisture: 26.7
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7687	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:33	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0420.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	455	ug/kg	90.9	455 UJ,SV7c
108-95-2	Phenol	U	455	ug/kg	90.9	455
95-57-8	2-Chlorophenol	U	455	ug/kg	90.9	455
106-46-7	1,4-Dichlorobenzene	U	455	ug/kg	90.9	455
621-64-7	N-Nitrosodipropylamine	U	455	ug/kg	90.9	455
59-50-7	4-Chloro-3-methylphenol	U	455	ug/kg	90.9	455
83-32-9	Acenaphthene	U	45.5	ug/kg	15.0	45.5
121-14-2	2,4-Dinitrotoluene	U	455	ug/kg	45.5	455
100-02-7	4-Nitrophenol	U	455	ug/kg	150	455
87-86-5	Pentachlorophenol	U	455	ug/kg	114	455
129-00-0	Pyrene	U	45.5	ug/kg	13.6	45.5
110-86-1	Pyridine	U	455	ug/kg	90.9	455 UJ,SV7c
62-53-3	Aniline	U	455	ug/kg	136	455
111-44-4	bis(2-Chloroethyl) ether	U	455	ug/kg	90.9	455
541-73-1	1,3-Dichlorobenzene	U	455	ug/kg	90.9	455
100-51-6	Benzyl alcohol	U	455	ug/kg	136	455
95-50-1	1,2-Dichlorobenzene	U	455	ug/kg	90.9	455
108-60-1	bis(2-Chloroisopropyl)ether	U	455	ug/kg	90.9	455
95-48-7	o-Cresol	U	455	ug/kg	90.9	455
65794-96-9	m,p-Cresols	U	455	ug/kg	136	455
67-72-1	Hexachloroethane	U	455	ug/kg	90.9	455
98-95-3	Nitrobenzene	U	455	ug/kg	90.9	455
78-59-1	Isophorone	U	455	ug/kg	90.9	455
88-75-5	2-Nitrophenol	U	455	ug/kg	90.9	455
105-67-9	2,4-Dimethylphenol	U	455	ug/kg	159	455
111-91-1	bis(2-Chloroethoxy)methane	U	455	ug/kg	90.9	455
120-83-2	2,4-Dichlorophenol	U	455	ug/kg	90.9	455
65-85-0	Benzoic acid	U	909	ug/kg	227	909
91-20-3	Naphthalene	U	45.5	ug/kg	13.6	45.5
106-47-8	4-Chloroaniline	U	455	ug/kg	90.9	455
87-68-3	Hexachlorobutadiene	U	455	ug/kg	90.9	455
91-57-6	2-Methylnaphthalene	U	45.5	ug/kg	9.09	45.5
77-47-4	Hexachlorocyclopentadiene	U	455	ug/kg	90.9	455 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	455	ug/kg	90.9	455
95-95-4	2,4,5-Trichlorophenol	U	455	ug/kg	90.9	455
91-58-7	2-Chloronaphthalene	U	45.5	ug/kg	15.0	45.5
88-74-4	2-Nitroaniline	U	455	ug/kg	90.9	455 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	455	ug/kg	90.9	455

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

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SDG Number: 10-1384
Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7687
Batch ID: 945501
Run Date: 02/04/2010 19:33
Prep Date: 01/26/2010 20:21
Data File: s6b0420.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	455	ug/kg	90.9	455
606-20-2	2,6-Dinitrotoluene	U	455	ug/kg	45.5	455
208-96-8	Acenaphthylene	U	45.5	ug/kg	13.6	45.5
51-28-5	2,4-Dinitrophenol	U	909	ug/kg	173	909
132-64-9	Dibenzofuran	U	455	ug/kg	90.9	455
84-66-2	Diethylphthalate	U	455	ug/kg	90.9	455
86-73-7	Fluorene	U	45.5	ug/kg	13.6	45.5
7005-72-3	4-Chlorophenylphenylether	U	455	ug/kg	90.9	455
534-52-1	2-Methyl-4,6-dinitrophenol	U	455	ug/kg	90.9	455 UJ,SV7c
100-01-6	4-Nitroaniline	U	455	ug/kg	136	455
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	455	ug/kg	90.9	455
122-66-7	Azobenzene	U	455	ug/kg	90.9	455
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	455	ug/kg	90.9	455
118-74-1	Hexachlorobenzene	U	455	ug/kg	90.9	455
85-01-8	Phenanthrene	U	45.5	ug/kg	13.6	45.5
120-12-7	Anthracene	U	45.5	ug/kg	9.09	45.5
84-74-2	Di-n-butylphthalate	U	455	ug/kg	90.9	455
206-44-0	Fluoranthene	U	45.5	ug/kg	13.6	45.5
85-68-7	Butylbenzylphthalate	U	455	ug/kg	90.9	455
56-55-3	Benzo(a)anthracene	U	45.5	ug/kg	13.6	45.5
91-94-1	3,3'-Dichlorobenzidine	U	455	ug/kg	136	455
218-01-9	Chrysene	U	45.5	ug/kg	13.6	45.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	455	ug/kg	90.9	455
117-84-0	Di-n-octylphthalate	U	455	ug/kg	90.9	455
205-99-2	Benzo(b)fluoranthene	U	45.5	ug/kg	13.6	45.5
207-08-9	Benzo(k)fluoranthene	U	45.5	ug/kg	13.6	45.5
50-32-8	Benzo(a)pyrene	U	45.5	ug/kg	13.6	45.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.5	ug/kg	13.6	45.5
53-70-3	Dibenzo(a,h)anthracene	U	45.5	ug/kg	13.6	45.5
191-24-2	Benzo(ghi)perylene	U	45.5	ug/kg	13.6	45.5 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	455	ug/kg	90.9	455

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	196	ug/kg		J
	Unknown Aldol Condensate	3.54	551	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
127-91-3	.beta.-Pinene	4.68	217	ug/kg	96	NJ
	Unknown	10.54	1020	ug/kg		J
	Unknown	11.04	927	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	420	ug/kg	84.0	420 UJ,SV7c
108-95-2	Phenol	U	420	ug/kg	84.0	420
95-57-8	2-Chlorophenol	U	420	ug/kg	84.0	420
106-46-7	1,4-Dichlorobenzene	U	420	ug/kg	84.0	420
621-64-7	N-Nitrosodipropylamine	U	420	ug/kg	84.0	420
59-50-7	4-Chloro-3-methylphenol	U	420	ug/kg	84.0	420
83-32-9	Acenaphthene	U	42.0	ug/kg	13.9	42.0
121-14-2	2,4-Dinitrotoluene	U	420	ug/kg	42.0	420
100-02-7	4-Nitrophenol	U	420	ug/kg	139	420
87-86-5	Pentachlorophenol	U	420	ug/kg	105	420
129-00-0	Pyrene	U	42.0	ug/kg	12.6	42.0
110-86-1	Pyridine	U	420	ug/kg	84.0	420 UJ,SV7c
62-53-3	Aniline	U	420	ug/kg	126	420
111-44-4	bis(2-Chloroethyl) ether	U	420	ug/kg	84.0	420
541-73-1	1,3-Dichlorobenzene	U	420	ug/kg	84.0	420
100-51-6	Benzyl alcohol	U	420	ug/kg	126	420
95-50-1	1,2-Dichlorobenzene	U	420	ug/kg	84.0	420
108-60-1	bis(2-Chloroisopropyl) ether	U	420	ug/kg	84.0	420
95-48-7	o-Cresol	U	420	ug/kg	84.0	420
65794-96-9	m,p-Cresols	U	420	ug/kg	126	420
67-72-1	Hexachloroethane	U	420	ug/kg	84.0	420
98-95-3	Nitrobenzene	U	420	ug/kg	84.0	420
78-59-1	Isophorone	U	420	ug/kg	84.0	420
88-75-5	2-Nitrophenol	U	420	ug/kg	84.0	420
105-67-9	2,4-Dimethylphenol	U	420	ug/kg	147	420
111-91-1	bis(2-Chloroethoxy)methane	U	420	ug/kg	84.0	420
120-83-2	2,4-Dichlorophenol	U	420	ug/kg	84.0	420
65-85-0	Benzoic acid	U	840	ug/kg	210	840
91-20-3	Naphthalene	U	42.0	ug/kg	12.6	42.0
106-47-8	4-Chloroaniline	U	420	ug/kg	84.0	420
87-68-3	Hexachlorobutadiene	U	420	ug/kg	84.0	420
91-57-6	2-Methylnaphthalene	U	42.0	ug/kg	8.40	42.0
77-47-4	Hexachlorocyclopentadiene	U	420	ug/kg	84.0	420 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	420	ug/kg	84.0	420
95-95-4	2,4,5-Trichlorophenol	U	420	ug/kg	84.0	420
91-58-7	2-Chloronaphthalene	U	42.0	ug/kg	13.9	42.0
88-74-4	2-Nitroaniline	U	420	ug/kg	84.0	420 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	420	ug/kg	84.0	420

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387005	Date Received: 01/23/2010 09:20	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7688	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 18:36	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s6b0418.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	420	ug/kg	84.0	420
606-20-2	2,6-Dinitrotoluene	U	420	ug/kg	42.0	420
208-96-8	Acenaphthylene	U	42.0	ug/kg	12.6	42.0
51-28-5	2,4-Dinitrophenol	U	840	ug/kg	160	840
132-64-9	Dibenzofuran	U	420	ug/kg	84.0	420
84-66-2	Diethylphthalate	U	420	ug/kg	84.0	420
86-73-7	Fluorene	U	42.0	ug/kg	12.6	42.0
7005-72-3	4-Chlorophenylphenylether	U	420	ug/kg	84.0	420
534-52-1	2-Methyl-4,6-dinitrophenol	U	420	ug/kg	84.0	420 UJ,SV7c
100-01-6	4-Nitroaniline	U	420	ug/kg	126	420
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	420	ug/kg	84.0	420
122-66-7	Azobenzene	U	420	ug/kg	84.0	420
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	420	ug/kg	84.0	420
118-74-1	Hexachlorobenzene	U	420	ug/kg	84.0	420
85-01-8	Phenanthrene	U	42.0	ug/kg	12.6	42.0
120-12-7	Anthracene	U	42.0	ug/kg	8.40	42.0
84-74-2	Di-n-butylphthalate	U	420	ug/kg	84.0	420
206-44-0	Fluoranthene	U	42.0	ug/kg	12.6	42.0
85-68-7	Butylbenzylphthalate	U	420	ug/kg	84.0	420
56-55-3	Benzo(a)anthracene	U	42.0	ug/kg	12.6	42.0
91-94-1	3,3'-Dichlorobenzidine	U	420	ug/kg	126	420
218-01-9	Chrysene	U	42.0	ug/kg	12.6	42.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	420	ug/kg	84.0	420
117-84-0	Di-n-octylphthalate	U	420	ug/kg	84.0	420
205-99-2	Benzo(b)fluoranthene	U	42.0	ug/kg	12.6	42.0
207-08-9	Benzo(k)fluoranthene	U	42.0	ug/kg	12.6	42.0
50-32-8	Benzo(a)pyrene	U	42.0	ug/kg	12.6	42.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.0	ug/kg	12.6	42.0
53-70-3	Dibenzo(a,h)anthracene	U	42.0	ug/kg	12.6	42.0
191-24-2	Benzo(ghi)perylene	U	42.0	ug/kg	12.6	42.0 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	420	ug/kg	84.0	420

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	186	ug/kg		J
	Unknown Aldol Condensate	3.54	483	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Allquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7689
Batch ID: 945501
Run Date: 02/04/2010 15:45
Prep Date: 01/26/2010 20:21
Data File: s6b0412.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	381	ug/kg	76.2	381 UJ,SV7c
108-95-2	Phenol	U	381	ug/kg	76.2	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.2	381 UJ,SV7c
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381
95-48-7	o-Cresol	U	381	ug/kg	76.2	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381
78-59-1	Isophorone	U	381	ug/kg	76.2	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381
65-85-0	Benzoic acid	U	762	ug/kg	191	762
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.2	381 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	381	ug/kg	76.2	381

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387001	Date Received: 01/23/2010 09:20	%Moisture: 13
Client ID: RE14-10-7689	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 15:45	Inst: MSD6.I	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0412.d	Aliquot: 30.16 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	381	ug/kg	76.2	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	762	ug/kg	145	762
132-64-9	Dibenzofuran	U	381	ug/kg	76.2	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.2	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.2	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.2	381 UJ,SV7c
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.2	381
122-66-7	Azobenzene	U	381	ug/kg	76.2	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.2	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.2	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.62	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.2	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.2	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.2	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.2	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.2	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	162	ug/kg		J
	Unknown Aldol Condensate	3.54	220	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387001	Date Received: 01/23/2010 09:20	%Moisture: 13
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7689	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 15:45	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.16 g	Final Volume: 1 mL
Data File: s6b0412.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		17.36	308	ug/kg		J

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1384 VALIDATION DATE: 3/1/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Eyda Hergenreder 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

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


1. The CCV %Ds for PETN and RDX were >20% with positive bias. All associated sample results were detects and, thus, were not qualified.
2. The LCS %R for tetryl was < the laboratory LAL but $\geq 10\%$. All associated sample results were NDs and, thus, were qualified UJ,HE12a. The LCS %R for PETN was > the laboratory UAL. All associated sample results were NDs and, thus, were not qualified.
3. The MS and MSD %Rs for tetryl were < the laboratory LAL but $\geq 10\%$. All associated sample results were NDs and, thus, were qualified UJ,HE12e. The MS/MSD RPD for tetryl was > the laboratory UAL. All associated sample results were NDs and, thus, were qualified UJ,HE12g.

Reviewed by: Mary Donovan Level: I Date: 03/01/10


VALIDATOR'S SIGNATURE: _____

A handwritten signature in cursive script that reads "Eyda Hergenreder". Below the signature, the name "Eyda Hergenreder" is printed in a small font.


DATE: 3/1/10

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE12c	R, HE12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

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

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208230a

Date Analyzed: 13-FEB-10 07:23

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130066.wiff

Date Analyzed: 14-FEB-10 03:13

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208233a

Date Analyzed: 13-FEB-10 08:52

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130069.wiff

Date Analyzed: 14-FEB-10 04:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1200	
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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7680

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208234a

Date Analyzed: 13-FEB-10 09:21

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7680

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130070.wiff

Date Analyzed: 14-FEB-10 04:16

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208235a

Date Analyzed: 13-FEB-10 09:51

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130071.wiff

Date Analyzed: 14-FEB-10 04:31

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208236a

Date Analyzed: 13-FEB-10 10:20

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130072.wiff

Date Analyzed: 14-FEB-10 04:47

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208237a

Date Analyzed: 13-FEB-10 10:50

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130073.wiff

Date Analyzed: 14-FEB-10 05:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Molsture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208241a

Date Analyzed: 13-FEB-10 12:49

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Moisture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130077.wiff

Date Analyzed: 14-FEB-10 06:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1610	
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: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208242a

Date Analyzed: 13-FEB-10 13:18

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140014.wiff

Date Analyzed: 14-FEB-10 17:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	404	J
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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208243a

Date Analyzed: 13-FEB-10 13:48

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140015.wiff

Date Analyzed: 14-FEB-10 17:57

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208244a

Date Analyzed: 13-FEB-10 14:17

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140016.wiff

Date Analyzed: 14-FEB-10 18:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6840	
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

EH
3/1/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208245a

Date Analyzed: 13-FEB-10 14:47

Units: ug/kg

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

*Concentration =

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

EH
3/1/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130081.wiff

Date Analyzed: 14-FEB-10 07:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	11300	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1384 VALIDATION DATE: 3/1/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. It should be noted that the MS/MSD analyses were performed on a sample from another LANL RN. Since MS/MSD analyses are not required for this method, no data were qualified as a result.

Reviewed by: Mary Donovan

Level: I

Date: 03/01/10

VALIDATOR'S SIGNATURE:

A handwritten signature of Eyda Hergenreder.

DATE: 3/1/10

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only _____



Yes No N/A (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

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1384
Lab Sample ID: 245387002Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 21.4
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	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254	U	4.21	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

EH
3/1/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1384
Lab Sample ID: 245387003Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.16 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 12
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	3.77	ug/kg	1.25	3.77	1
11104-28-2	Aroclor-1221	U	3.77	ug/kg	1.25	3.77	1
11141-16-5	Aroclor-1232	U	3.77	ug/kg	1.25	3.77	1
53469-21-9	Aroclor-1242	U	3.77	ug/kg	1.25	3.77	1
12672-29-6	Aroclor-1248	U	3.77	ug/kg	1.25	3.77	1
11097-69-1	Aroclor-1254	U	3.77	ug/kg	1.25	3.77	1
11096-82-5	Aroclor-1260	U	3.77	ug/kg	1.25	3.77	1

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1384
Lab Sample ID: 245387001Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2AJ
Analyst: JAOC
Aliquot: 30.06 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 13
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.82	ug/kg	1.27	3.82	1
11104-28-2	Aroclor-1221	U	3.82	ug/kg	1.27	3.82	1
11141-16-5	Aroclor-1232	U	3.82	ug/kg	1.27	3.82	1
53469-21-9	Aroclor-1242	U	3.82	ug/kg	1.27	3.82	1
12672-29-6	Aroclor-1248	U	3.82	ug/kg	1.27	3.82	1
11097-69-1	Aroclor-1254	U	3.82	ug/kg	1.27	3.82	1
11096-82-5	Aroclor-1260	U	3.82	ug/kg	1.27	3.82	1

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1384C

LOS ALAMOS

REQUEST NUMBER: 10-1384

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

General Engineering Laboratories, Inc.,
Charleston, SC,

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245387.1

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE14-10-7689	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7689	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7679	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7679	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7680	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7680	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7688	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7688	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7684	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7684	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7687	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7687	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7681	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7681	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7682	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7682	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7685	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7685	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7683	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7683	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7691	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE14-10-7691	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

REQUEST NUMBER: 10-1384

Friday, January 22, 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: 10-1384

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 1/22/2010

TURNAROUND/REPORT DUE: 2/21/2010


TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
		1	RE14-10-7679	R	1/15/2010	
	SW-846-8260B	1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	

Friday, January 22, 2010

Page 2 of 3

REQUEST NUMBER: 10-1384

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.8260B	1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
		1	RE14-10-7691	S	1/15/2010	
		2	RE14-10-7691	S	1/15/2010	
	SW-846.8270C	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	
		1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
	SW-846.8321A_MOD	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	
		1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	

REQUEST NUMBER: 10-1384

Friday, January 22, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE14-10-7689	R	1/15/2010	

Final Page of REQUEST NUMBER 10-1384



January 26, 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: 245387
SDG: 10-1384

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 23, 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: 10-1384
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 245387
SDG: 10-1384

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Standards Data.....	1304
Quality Control Data.....	1357
Miscellaneous Data.....	1372

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245387
SDG # : 10-1384**

January 26, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on January 23, 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 RE14-10-7691 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:

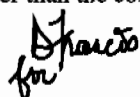
<u>Laboratory ID</u>	<u>Client ID</u>
245387001	RE14-10-7689
245387002	RE14-10-7679
245387003	RE14-10-7680
245387004	RE14-10-7686
245387005	RE14-10-7688
245387006	RE14-10-7684
245387007	RE14-10-7687
245387008	RE14-10-7681
245387009	RE14-10-7682
245387010	RE14-10-7685
245387011	RE14-10-7683
245387012	RE14-10-7691

Case Narrative

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

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

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

A handwritten signature in black ink, appearing to read "Valerie Davis" with a stylized flourish.

Valerie Davis

Project Manager

List of current GEL Certifications as of 26 January 2010

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

Chain of Custody and Supporting Documentation

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1384C

LOS ALAMOS

REQUEST NUMBER: 10-1384

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245387 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE14-10-7689	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7689	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7679	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7679	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7680	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE14-10-7680	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7686	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7688	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7688	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7684	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7684	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7687	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7687	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7681	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7681	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7682	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7682	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7685	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7685	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7683	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE14-10-7683	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE14-10-7691	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE14-10-7691	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Friday, January 22, 2010

REQUEST NUMBER: 10-1384

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: 10-1384
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/22/2010


TURNAROUND/REPORT DUE: 2/21/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
		1	RE14-10-7679	R	1/15/2010	
	SW-846:8260B	1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	

Friday, January 22, 2010

Page 2 of 3

REQUEST NUMBER: 10-1384

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
		1	RE14-10-7691	S	1/15/2010	
		2	RE14-10-7691	S	1/15/2010	
	SW-846:8270C	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	
		1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	
		1	RE14-10-7689	R	1/15/2010	
	SW-846:8321A_MOD	1	RE14-10-7679	R	1/15/2010	
		1	RE14-10-7680	R	1/15/2010	
		1	RE14-10-7681	R	1/15/2010	
		1	RE14-10-7682	R	1/15/2010	
		1	RE14-10-7683	R	1/15/2010	
		1	RE14-10-7684	R	1/15/2010	
		1	RE14-10-7685	R	1/15/2010	
		1	RE14-10-7686	R	1/15/2010	
		1	RE14-10-7687	R	1/15/2010	
		1	RE14-10-7688	R	1/15/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1384

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE14-10-7689	R	1/15/2010	

Final Page of REQUEST NUMBER 10-1384



SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCO/Work Order: 10-1384
Received By: Patricia Dover-Dent		Date Received: January 23, 2009
Suspected Hazard Information	Yes	No
COC/Samples marked as radioactive?		X
Classified Radioactive II by RSO?		X
COC/Samples marked containing PCBs?		X
Shipped as a DOT Hazardous?		X
Samples identified as Foreign Soil?		X

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 1-4 12,13,15C
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: RE14-10-7691 for 8260B the chain of custody indicates (2)-40ml vial, the lab only rec'd (1).
12 COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7849 6695 1C 7209 7849 6560 4C
 7209 7849 6776 1C 7209 7849 6559 4C
 7209 7849 6526 2C 7209 7849 6684 4C
 7209 7849 6700 2C 7209 7849 6732 12C
 7209 7849 6710 2C 7209 7849 6504 13C
 7209 7849 6548 2C 7209 7849 6743 13C
 7209 7849 6537 3C 7209 7849 6765 13C
 7209 7849 6570 3C 7209 7849 6754 15C
 7209 7849 6515 4C

Subject: Sample Receipt for 1/23/10

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

Date: Mon, 25 Jan 2010 11:55:59 -0500

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

Keith,

RN 10-1372: the lab rec'd (1) 40ml vial 8260B container for sample RE46-10-11844 instead of (2) as indicated on the COC.

RN 10-1375: the lab rec'd (1) 40ml vial 8260B container for sample RE16-10-1127 instead of (2) as indicated on the COC.

RN 10-1386: the NO3NO2 containers for samples RE14-10-7693 and RE15-10-8444 were rec'd unpreserved. The lab will preserve prior to analysis.

RN 10-1382: the lab rec'd (1) 40ml vial 8260B container for sample RE15-10-7331 instead of (2) as indicated on the COC.

RN 10-1384: the lab rec'd (1) 40ml vial 8260B container for sample RE14-10-7691 instead of (2) as indicated on the COC.

RN 10-1380: the lab rec'd (1) 40ml vial 8260B container for sample RE15-10-8445 instead of (2) as indicated on the COC.

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.

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: 22JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 656-8171
REF: 6B010AMR2A0515BYD0

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2 of 2
PSN 7209 7849 6695
Matr# 7209 7849 6684 [0201]

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

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

CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
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4 of 4
PSN 7209 7849 6526
Matr# 7209 7849 6498 [0201]

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA



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: 22JAN10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

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2040 SAVAGE RD

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PSN 7209 7849 6776

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA



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: 22JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AMR2A0515BYD0

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1 of 2
PSN 7209 7849 6776

SATURDAY ### A1
PRIORITY OVERNIGHT

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SC-US
CHS

X0 CHSA

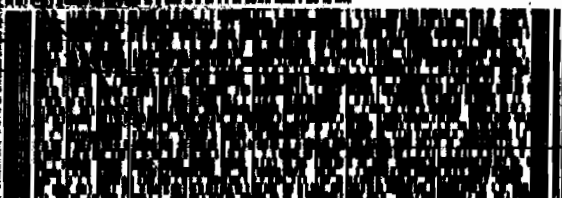


ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTGCT: 58.0 LB MAN
CRD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0



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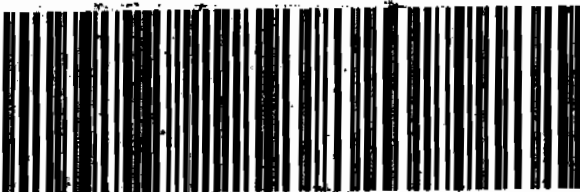
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Matrn 7209 7849 6700 0281

SATURDAY ###
PRIORITY OVERNIGHT

X0 CHSA

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LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 03

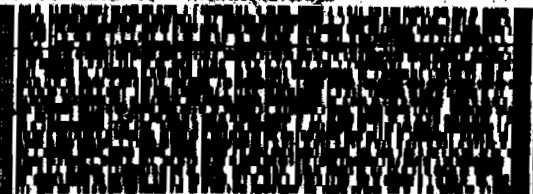
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LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0



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1 of 3
TRKH 0201 7209 7849 6537

SATURDAY ###
PRIORITY OVERNIGHT

MASTER

X0 CHSA

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

SHIP DATE: 22JAN18
ACTGCT: 58.0 LB MAN
CRD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
REF: 68010AMR2A0515BYD0



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NPSN 0283 7209 7849 6548
Matrn 7209 7849 6537 0281

SATURDAY ###
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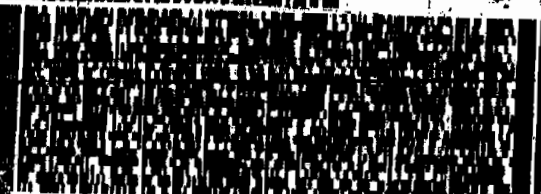


ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTGCT: 58.0 LB MAN
CRD: 0014176/CAFE2449
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR3A0352VA00



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2 of 2
NPSN 0283 7209 7849 6570

SATURDAY ###
PRIORITY OVERNIGHT

Matrn 7209 7849 6560 0201

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LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

UNIT: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

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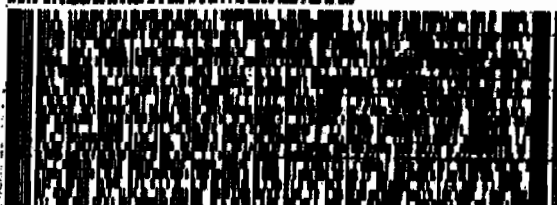
VALERIE DAVIS
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Matr# 7209 7849 6490 0201

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1 of 2
NPS# 7209 7849 6560
0211

SATURDAY ### A1
PRIORITY OVERNIGHT

MASTER #

X0 CHSA

29407
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CHS



ORIGIN ID: SAFA (506) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

SHIP DATE: 22JAN10
ACTWGT: 48.13 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

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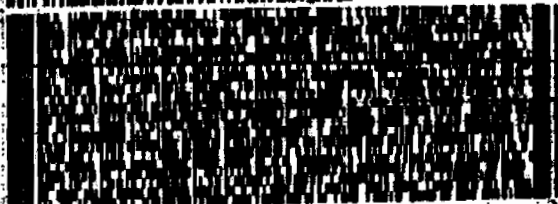
VALERIE DAVIS
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REF: 6B010AMR2A0515BYD0

UNIT: 0014176/CAFE2449



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ORIGIN ID: SAFA (506) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

SHIP DATE: 22JAN10
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

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GENERAL ENGINEERING LAB
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REF: 6B010AMR2A0515BYD0

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3 of 3
NPS# 7209 7849 6559
0263

SATURDAY ### A1
PRIORITY OVERNIGHT

Matr# 7209 7849 6537 0201

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1 of 2
NPS# 7209 7849 6684
0211

SATURDAY ### A1
PRIORITY OVERNIGHT

MASTER #

X0 CHSA

29407
SC-US
CHS



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTNCT: 60-9 LB MAN
CAD: 0014176/CAFE2449

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2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 68010ANR2A0515BYD0

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7209 7849 6732

SATURDAY ### A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 685-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTNCT: 60-9 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 68010ANR3A0352VA00

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2 of 2
7209 7849 6743

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

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LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 68010ANR2A0515BYD0

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2 of 4

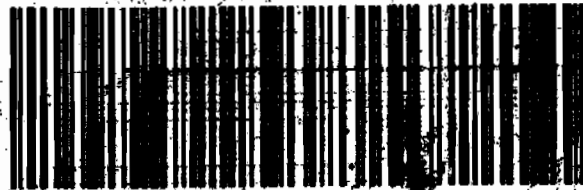
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7209 7849 6500 (0201)

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (505) 685-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTNCT: 60-9 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010ANR2A0515BYD0

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2 of 2
7209 7849 6765

7209 7849 6754 (0201)

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



SHIP DATE: 22JAN18
ACTWGT: 22.0 LB MAN
CNO: 0014176/CAPE2448

BILL SENDER

15c

(843) 556-9171

REF: 68010AMR2A0515BYD0



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SATURDAY ### A1 2
PRIORITY OVERNIGHT

X0 CHSA

2940

SC-1
CHS

DATE 11/18/1941

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 10-1384**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 946584
Prep Batch Number: 946583

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
245387001	RE14-10-7689
245387002	RE14-10-7679
245387003	RE14-10-7680
245387004	RE14-10-7686
245387005	RE14-10-7688
245387006	RE14-10-7684
245387007	RE14-10-7687
245387008	RE14-10-7681
245387009	RE14-10-7682
245387010	RE14-10-7685
245387011	RE14-10-7683
245387012	RE14-10-7691
1202027522	Method Blank (MB)
1202027523	Laboratory Control Sample (LCS)
1202027526	Laboratory Control Sample (LCS)
1202040395	Method Blank (MB)
1202040396	Laboratory Control Sample (LCS)
1202040397	Laboratory Control Sample (LCS)
1202027524	245387001(RE14-10-7689) Post Spike (PS)
1202027525	245387001(RE14-10-7689) 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 245387 001, 002, 003, 004, 005, 006, 007, 008, 009, 010 and 011 in this SDG were analyzed on an "dry weight" basis. Samples 245387 012 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

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

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

Calibration Information

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

The surrogate recovery, in the following sample, was above the acceptance limits. Sample re-analysis confirmed matrix interference: 1202027524 (RE14-10-7689). See DER# 789858.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245387001 (RE14-10-7689) 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# 789858.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries were not all within the acceptance limits. See DER# 789858.

Relative Percent Difference (RPD) Statement

The RPD between the matrix spike pair were not all within the acceptance limits. See DER# 789858.

Internal Standard (ISTD) Acceptance

In the following sample, internal standard response was outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 245387011 (RE14-10-7683). See DER# 789858.

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. The following samples were initially analyzed within holding, but due to surrogate recoveries / internal standard responses being outside the acceptance limits, the samples were re-analyzed outside holding: 1202027524 (RE14-10-7689), 1202027525 (RE14-10-7689), 245387007 (RE14-10-7687) and 245387011 (RE14-10-7683). See DER# 789858.

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

The samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis: 245387007 (RE14-10-7687) and 245387011 (RE14-10-7683).

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: 789858

Manual Integrations

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

TIC Comment

The tentatively identified compounds included some silanols. These compounds were due to column or septum bleed and were not native to the affected samples. 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
VOA5.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5975	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

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

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

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

Client SDG: 10-1384 GEL Work Order: 245387

The Qualifiers in this report are defined as follows:

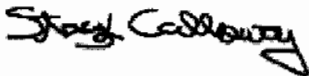
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- h Preparation or preservation holding time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

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: 18 FEB 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387001
 Client ID: RE14-10-7689
 Batch ID: 946584
 Run Date: 01/28/2010 23:16
 Prep Date: 01/28/2010 15:28
 Data File: 012810V55V433.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 13
 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	1.15	ug/kg	0.391	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.75	ug/kg	1.91	5.75
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.75	ug/kg	1.84	5.75
75-09-2	Methylene chloride	U	5.75	ug/kg	2.30	5.75
75-15-0	Carbon disulfide	U	5.75	ug/kg	1.44	5.75
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.75	ug/kg	1.72	5.75
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.75	ug/kg	1.44	5.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.75	ug/kg	1.72	5.75
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387001

Client ID: RE14-10-7689
Batch ID: 946584
Run Date: 01/28/2010 23:16
Prep Date: 01/28/2010 15:28
Data File: 012810V5V433.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 13
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	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.75	ug/kg	1.84	5.75
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.6	5.93	ug/kg	0	J
	unknown siloxane	16.55	9.54	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387002
 Client ID: RE14-10-7679
 Batch ID: 946584
 Run Date: 01/28/2010 23:42
 Prep Date: 01/28/2010 15:29
 Data File: 012810V5SV434.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXX1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.4
 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	1.27	ug/kg	0.433	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.382	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.382	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.382	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.382	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.382	1.27
67-64-1	Acetone	U	6.36	ug/kg	2.11	6.36
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
74-88-4	Iodomethane	U	6.36	ug/kg	2.04	6.36
75-09-2	Methylene chloride	U	6.36	ug/kg	2.54	6.36
75-15-0	Carbon disulfide	U	6.36	ug/kg	1.59	6.36
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.382	1.27
78-93-3	2-Butanone	U	6.36	ug/kg	1.91	6.36
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.382	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.420	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.382	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.382	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.382	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.382	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.382	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.420	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.382	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.382	1.27
108-10-1	4-Methyl-2-pentanone	U	6.36	ug/kg	1.59	6.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.382	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.382	1.27
591-78-6	2-Hexanone	U	6.36	ug/kg	1.91	6.36
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.382	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.382	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.382	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.382	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.382	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387002
 Client ID: RE14-10-7679
 Batch ID: 946584
 Run Date: 01/28/2010 23:42
 Prep Date: 01/28/2010 15:29
 Data File: 012810V55V434.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.382	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.382	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.382	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.382	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.382	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.382	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.382	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.382	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.382	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.382	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.382	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.382	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.382	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.382	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.36	ug/kg	2.04	6.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27

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: 10-1384
 Lab Sample ID: 245387003
 Client ID: RE14-10-7680
 Batch ID: 946584
 Run Date: 01/29/2010 00:08
 Prep Date: 01/28/2010 15:30
 Data File: 012810V5SV435.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12
 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	1.14	ug/kg	0.386	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.68	ug/kg	1.89	5.68
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387003

Client ID: RE14-10-7680
Batch ID: 946584
Run Date: 01/29/2010 00:08
Prep Date: 01/28/2010 15:30
Data File: 012810V5V435.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 12
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	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.27	ug/kg	0.341	2.27
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.341	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.68	ug/kg	1.82	5.68
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

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: 10-1384
 Lab Sample ID: 245387004
 Client ID: RE14-10-7686
 Batch ID: 946584
 Run Date: 01/29/2010 00:34
 Prep Date: 01/28/2010 15:31
 Data File: 012810V55V436.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone	U	6.48	ug/kg	2.15	6.48
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.48	ug/kg	2.07	6.48
75-09-2	Methylene chloride	U	6.48	ug/kg	2.59	6.48
75-15-0	Carbon disulfide	U	6.48	ug/kg	1.62	6.48
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.48	ug/kg	1.94	6.48
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.48	ug/kg	1.62	6.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.389	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.48	ug/kg	1.94	6.48
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387004

 Client ID: RE14-10-7686
 Batch ID: 946584
 Run Date: 01/29/2010 00:34
 Prep Date: 01/28/2010 15:31
 Data File: 012810V5SV436.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.389	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.48	ug/kg	2.07	6.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	7.36	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387005

 Client ID: RE14-10-7688
 Batch ID: 946584
 Run Date: 01/29/2010 01:00
 Prep Date: 01/28/2010 15:32
 Data File: 012810V5SV437.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	U	6.34	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.53	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.58	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387005

Client ID: RE14-10-7688
Batch ID: 946584
Run Date: 01/29/2010 01:00
Prep Date: 01/28/2010 15:32
Data File: 012810V5V437.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	U	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	U	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.34	ug/kg	2.03	6.34
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	14.57	123	ug/kg	97	NJ
005989-27-5	D-Limonene	15.8	6.98	ug/kg	93	NJ
	unknown siloxane	16.54	9.19	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7684
 Batch ID: 946584
 Run Date: 01/29/2010 01:26
 Prep Date: 01/28/2010 15:33
 Data File: 012810V5\5V438.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387006

 Client ID: RE14-10-7684
 Batch ID: 946584
 Run Date: 01/29/2010 01:26
 Prep Date: 01/28/2010 15:33
 Data File: 012810V55V438.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 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	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	7.81	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387007

 Client ID: RE14-10-7687
 Batch ID: 946584
 Run Date: 01/31/2010 17:26
 Prep Date: 01/31/2010 10:39
 Data File: 013110V5SV715.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.36	ug/kg	0.464	1.36
74-87-3	Chloromethane	HUh	1.36	ug/kg	0.409	1.36
75-01-4	Vinyl chloride	HUh	1.36	ug/kg	0.409	1.36
74-83-9	Bromomethane	HUh	1.36	ug/kg	0.409	1.36
75-00-3	Chloroethane	HUh	1.36	ug/kg	0.409	1.36
75-69-4	Trichlorofluoromethane	HUh	1.36	ug/kg	0.409	1.36
67-64-1	Acetone	HJh	3.63	ug/kg	2.27	6.82
75-35-4	1,1-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
74-88-4	Iodomethane	HUh	6.82	ug/kg	2.18	6.82
75-09-2	Methylene chloride	HUh	6.82	ug/kg	2.73	6.82
75-15-0	Carbon disulfide	HUh	6.82	ug/kg	1.71	6.82
156-60-5	trans-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
75-34-3	1,1-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
78-93-3	2-Butanone	HUh	6.82	ug/kg	2.05	6.82
156-59-2	cis-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
594-20-7	2,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
67-66-3	Chloroform	HUh	1.36	ug/kg	0.409	1.36
74-97-5	Bromochloromethane	HUh	1.36	ug/kg	0.450	1.36
71-55-6	1,1,1-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
563-58-6	1,1-Dichloropropene	HUh	1.36	ug/kg	0.409	1.36
56-23-5	Carbon tetrachloride	HUh	1.36	ug/kg	0.409	1.36
107-06-2	1,2-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
71-43-2	Benzene	HUh	1.36	ug/kg	0.409	1.36
79-01-6	Trichloroethylene	HUh	1.36	ug/kg	0.450	1.36
78-87-5	1,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
75-27-4	Bromodichloromethane	HUh	1.36	ug/kg	0.409	1.36
74-95-3	Dibromomethane	HUh	1.36	ug/kg	0.409	1.36
108-10-1	4-Methyl-2-pentanone	HUh	6.82	ug/kg	1.71	6.82
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36
108-88-3	Toluene	HJh	0.887	ug/kg	0.409	1.36
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36
79-00-5	1,1,2-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
591-78-6	2-Hexanone	HUh	6.82	ug/kg	2.05	6.82
142-28-9	1,3-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
127-18-4	Tetrachloroethylene	HUh	1.36	ug/kg	0.409	1.36
124-48-1	Dibromochloromethane	HUh	1.36	ug/kg	0.409	1.36
106-93-4	1,2-Dibromoethane	HUh	1.36	ug/kg	0.409	1.36
108-90-7	Chlorobenzene	HUh	1.36	ug/kg	0.409	1.36

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387007

Client ID: RE14-10-7687
Batch ID: 946584
Run Date: 01/31/2010 17:26
Prep Date: 01/31/2010 10:39
Data File: 013110V5SV715.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 26.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.36	ug/kg	0.409	1.36
179601-23-1	m,p-Xylenes	HUh	2.73	ug/kg	0.409	2.73
95-47-6	o-Xylene	HUh	1.36	ug/kg	0.409	1.36
100-42-5	Styrene	HUh	1.36	ug/kg	0.409	1.36
75-25-2	Bromoform	HUh	1.36	ug/kg	0.409	1.36
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36
96-18-4	1,2,3-Trichloropropane	HUh	1.36	ug/kg	0.409	1.36
108-86-1	Bromobenzene	HUh	1.36	ug/kg	0.409	1.36
103-65-1	n-Propylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-49-8	2-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-82-8	Isopropylbenzene	HUh	1.36	ug/kg	0.409	1.36
108-67-8	1,3,5-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
106-43-4	4-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-06-6	tert-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-63-6	1,2,4-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
135-98-8	sec-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
99-87-6	4-Isopropyltoluene	Hh	2.29	ug/kg	0.409	1.36
541-73-1	1,3-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36
106-46-7	1,4-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36
104-51-8	n-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.36	ug/kg	0.409	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.82	ug/kg	2.18	6.82
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36
95-50-1	1,2-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R- α -Pinene	14.57	10.4	ug/kg	95	NJ
000079-92-5	Camphene	14.89	9.7	ug/kg	98	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387008

Client ID: RE14-10-7681
Batch ID: 946584
Run Date: 01/29/2010 02:18
Prep Date: 01/28/2010 15:35
Data File: 012810V5\5V440.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.5
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	0.387	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.387	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.387	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.387	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.387	1.29
67-64-1	Acetone	U	6.45	ug/kg	2.14	6.45
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
74-88-4	Iodomethane	U	6.45	ug/kg	2.06	6.45
75-09-2	Methylene chloride	U	6.45	ug/kg	2.58	6.45
75-15-0	Carbon disulfide	U	6.45	ug/kg	1.61	6.45
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.387	1.29
78-93-3	2-Butanone	U	6.45	ug/kg	1.93	6.45
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.387	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.426	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.387	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.387	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.387	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.387	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.387	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.426	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.387	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.387	1.29
108-10-1	4-Methyl-2-pentanone	U	6.45	ug/kg	1.61	6.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.387	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.387	1.29
591-78-6	2-Hexanone	U	6.45	ug/kg	1.93	6.45
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.387	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.387	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.387	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.387	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.387	1.29

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387008

Client ID: RE14-10-7681
Batch ID: 946584
Run Date: 01/29/2010 02:18
Prep Date: 01/28/2010 15:35
Data File: 012810V5SV440.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXX1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.5
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	1.29	ug/kg	0.387	1.29
179601-23-1	m,p-Xylenes	U	2.58	ug/kg	0.387	2.58
95-47-6	o-Xylene	U	1.29	ug/kg	0.387	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.387	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.387	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.387	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.387	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.387	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.387	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.387	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.387	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.387	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.387	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.387	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.45	ug/kg	2.06	6.45
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.387	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: 10-1384
 Lab Sample ID: 245387009
 Client ID: RE14-10-7682
 Batch ID: 946584
 Run Date: 01/29/2010 02:43
 Prep Date: 01/28/2010 15:36
 Data File: 012810V55V441.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 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	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387009
 Client ID: RE14-10-7682
 Batch ID: 946584
 Run Date: 01/29/2010 02:43
 Prep Date: 01/28/2010 15:36
 Data File: 012810V55V441.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 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	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

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: 10-1384
 Lab Sample ID: 245387010
 Client ID: RE14-10-7685
 Batch ID: 946584
 Run Date: 01/29/2010 03:09
 Prep Date: 01/28/2010 15:37
 Data File: 012810V5V442.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.3
 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	1.18	ug/kg	0.401	1.18
74-87-3	Chloromethane	U	1.18	ug/kg	0.354	1.18
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.354	1.18
74-83-9	Bromomethane	U	1.18	ug/kg	0.354	1.18
75-00-3	Chloroethane	U	1.18	ug/kg	0.354	1.18
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.354	1.18
67-64-1	Acetone	U	5.90	ug/kg	1.96	5.90
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
74-88-4	Iodomethane	U	5.90	ug/kg	1.89	5.90
75-09-2	Methylene chloride	U	5.90	ug/kg	2.36	5.90
75-15-0	Carbon disulfide	U	5.90	ug/kg	1.48	5.90
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.354	1.18
78-93-3	2-Butanone	U	5.90	ug/kg	1.77	5.90
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
67-66-3	Chloroform	U	1.18	ug/kg	0.354	1.18
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.389	1.18
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.354	1.18
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.354	1.18
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.354	1.18
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.354	1.18
71-43-2	Benzene	U	1.18	ug/kg	0.354	1.18
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.389	1.18
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.354	1.18
74-95-3	Dibromomethane	U	1.18	ug/kg	0.354	1.18
108-10-1	4-Methyl-2-pentanone	U	5.90	ug/kg	1.48	5.90
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
108-88-3	Toluene	U	1.18	ug/kg	0.354	1.18
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.354	1.18
591-78-6	2-Hexanone	U	5.90	ug/kg	1.77	5.90
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.354	1.18
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.354	1.18
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.354	1.18
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.354	1.18
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.354	1.18

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387010

Client ID: RE14-10-7685
Batch ID: 946584
Run Date: 01/29/2010 03:09
Prep Date: 01/28/2010 15:37
Data File: 012810V5V442.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 15.3
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	1.18	ug/kg	0.354	1.18
179601-23-1	m,p-Xylenes	U	2.36	ug/kg	0.354	2.36
95-47-6	o-Xylene	U	1.18	ug/kg	0.354	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.354	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.354	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.354	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.354	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.354	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.354	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.354	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.354	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.354	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.354	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.354	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.90	ug/kg	1.89	5.90
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18

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: 10-1384
Lab Sample ID: 245387011

Client ID: RE14-10-7683
Batch ID: 946584
Run Date: 01/31/2010 17:52
Prep Date: 01/31/2010 10:40
Data File: 013110V55V716.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 25.4
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	HUh	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	HUh	1.34	ug/kg	0.402	1.34
75-01-4	Vinyl chloride	HUh	1.34	ug/kg	0.402	1.34
74-83-9	Bromomethane	HUh	1.34	ug/kg	0.402	1.34
75-00-3	Chloroethane	HUh	1.34	ug/kg	0.402	1.34
75-69-4	Trichlorofluoromethane	HUh	1.34	ug/kg	0.402	1.34
67-64-1	Acetone	Hh	9.73	ug/kg	2.22	6.70
75-35-4	1,1-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
74-88-4	Iodomethane	HUh	6.70	ug/kg	2.14	6.70
75-09-2	Methylene chloride	HUh	6.70	ug/kg	2.68	6.70
75-15-0	Carbon disulfide	HUh	6.70	ug/kg	1.67	6.70
156-60-5	trans-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
75-34-3	1,1-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
78-93-3	2-Butanone	HUh	6.70	ug/kg	2.01	6.70
156-59-2	cis-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
594-20-7	2,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
67-66-3	Chloroform	HUh	1.34	ug/kg	0.402	1.34
74-97-5	Bromochloromethane	HUh	1.34	ug/kg	0.442	1.34
71-55-6	1,1,1-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
563-58-6	1,1-Dichloropropene	HUh	1.34	ug/kg	0.402	1.34
56-23-5	Carbon tetrachloride	HUh	1.34	ug/kg	0.402	1.34
107-06-2	1,2-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
71-43-2	Benzene	HUh	1.34	ug/kg	0.402	1.34
79-01-6	Trichloroethylene	HUh	1.34	ug/kg	0.442	1.34
78-87-5	1,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
75-27-4	Bromodichloromethane	HUh	1.34	ug/kg	0.402	1.34
74-95-3	Dibromomethane	HUh	1.34	ug/kg	0.402	1.34
108-10-1	4-Methyl-2-pentanone	HUh	6.70	ug/kg	1.67	6.70
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34
108-88-3	Toluene	HJh	0.670	ug/kg	0.402	1.34
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34
79-00-5	1,1,2-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
591-78-6	2-Hexanone	HUh	6.70	ug/kg	2.01	6.70
142-28-9	1,3-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
127-18-4	Tetrachloroethylene	HUh	1.34	ug/kg	0.402	1.34
124-48-1	Dibromochloromethane	HUh	1.34	ug/kg	0.402	1.34
106-93-4	1,2-Dibromoethane	HUh	1.34	ug/kg	0.402	1.34
108-90-7	Chlorobenzene	HUh	1.34	ug/kg	0.402	1.34

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387011
 Client ID: RE14-10-7683
 Batch ID: 946584
 Run Date: 01/31/2010 17:52
 Prep Date: 01/31/2010 10:40
 Data File: 013110V5SV716.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.4
 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	HUh	1.34	ug/kg	0.402	1.34
179601-23-1	m,p-Xylenes	HUh	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	HUh	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	HUh	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	HUh	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	HUh	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	HUh	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	HUh	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene	HJh	0.750	ug/kg	0.402	1.34
541-73-1	1,3-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34
106-46-7	1,4-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.70	ug/kg	2.14	6.70
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34
95-50-1	1,2-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34

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: 10-1384
 Lab Sample ID: 245387012
 Client ID: RE14-10-7691
 Batch ID: 946584
 Run Date: 01/29/2010 04:01
 Prep Date: 01/28/2010 15:39
 Data File: 012810V55V444.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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: 10-1384
Lab Sample ID: 245387012

Client ID: RE14-10-7691
Batch ID: 946584
Run Date: 01/29/2010 04:01
Prep Date: 01/28/2010 15:39
Data File: 012810V5V444.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: S

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

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

Tentatively Identified Compound Summary

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

Quality Control Summary

Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1384

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202027523	LCS for batch 946583	108	102	105
1202027526	LCS for batch 946583	105	101	111
1202027522	MB for batch 946583	110	103	113
245387001	RE14-10-7689	112	99	115
245387002	RE14-10-7679	104	105	127
245387003	RE14-10-7680	106	100	112
245387004	RE14-10-7686	105	101	115
245387005	RE14-10-7688	105	102	113
245387006	RE14-10-7684	110	103	117
245387008	RE14-10-7681	111	99	111
245387009	RE14-10-7682	114	98	111
245387010	RE14-10-7685	107	102	118
245387012	RE14-10-7691	109	101	110
1202040396	LCS for batch 946583	106	98	104
1202040397	LCS for batch 946583	110	100	114
1202040395	MB for batch 946583	105	100	111
245387007	RE14-10-7687	102	102	127
245387011	RE14-10-7683	108	105	128
1202027524	RE14-10-7689PS	108	95	135 *
1202027525	RE14-10-7689PSD	112	96	106

Surrogate**Acceptance Limits**

DCED4 = 1,2-Dichloroethane-d4

(68%-131%)

TOL = Toluene-d8

(75%-129%)

BFB = Bromofluorobenzene

(68%-133%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202027523

Instrument: VOA5.I

Analysis Date: 01/28/2010 21:59

Dilution: 1

Analyst: DXK1

Prep Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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	28.8	58	33-155
74-87-3	LCS Chloromethane	50.0	0.0	44.8	90	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	44.5	89	61-128
74-83-9	LCS Bromomethane	50.0	0.0	43.1	86	63-126
75-00-3	LCS Chloroethane	50.0	0.0	41.4	83	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	40.6	81	67-151
67-64-1	LCS Acetone	250	0.0	237	95	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	49.4	99	70-125
74-88-4	LCS Iodomethane	250	0.0	193	77	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	41.6	83	72-127
75-15-0	LCS Carbon disulfide	250	0.0	220	88	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	46.7	93	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	46.6	93	75-120
78-93-3	LCS 2-Butanone	250	0.0	249	99	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	48.1	96	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	38.7	77	74-135
67-66-3	LCS Chloroform	50.0	0.0	46.2	92	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	40.0	80	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	41.3	83	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	44.8	90	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	41.6	83	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	51.0	102	72-120

Volatile

Page 2 of 3

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202027523

Instrument: VOA5.I

Analysis Date: 01/28/2010 21:59

Dilution: 1

Analyst: DXK1

Prep Batch ID: 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	44.3	89	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	43.3	87	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	49.2	98	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	48.5	97	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	45.1	90	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	251	101	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	46.5	93	80-125
108-88-3	LCS Toluene	50.0	0.0	45.0	90	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	49.8	100	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	47.4	95	76-120
591-78-6	LCS 2-Hexanone	250	0.0	247	99	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	49.4	99	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	38.1	76	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	44.7	89	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	45.4	91	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	43.1	86	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	46.6	93	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	90.2	90	74-120
95-47-6	LCS o-Xylene	50.0	0.0	46.5	93	74-120
100-42-5	LCS Styrene	50.0	0.0	50.1	100	76-125
75-25-2	LCS Bromoform	50.0	0.0	43.9	88	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	47.5	95	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202027523

Instrument: VOA5.I

Analysis Date: 01/28/2010 21:59

Dilution: 1

Analyst: DXK1

Prep Batch ID: 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	46.2	92	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	43.4	87	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	48.5	97	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	46.5	93	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	46.9	94	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	49.4	99	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	47.0	94	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	43.0	86	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	47.5	95	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	45.4	91	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	45.1	90	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	41.6	83	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	41.1	82	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	46.6	93	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	40.0	80	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	45.8	92	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	42.0	84	74-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 6

SDG Number: 10-1384

Sample Type: Post Spike

Client ID: RE14-10-7689PS

Matrix: R

Lab Sample ID: 1202027524

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 18:44

Dilution: 1

Analyst: DXK1

Prep Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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	31.6	63	25-149
74-87-3	PS Chloromethane	50.0	0.00 U	49.8	100	39-140
75-01-4	PS Vinyl chloride	50.0	0.00 U	49.2	98	47-129
74-83-9	PS Bromomethane	50.0	0.00 U	39.2	78	31-135
75-00-3	PS Chloroethane	50.0	0.00 U	40.4	81	53-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00 U	40.1	80	51-151
67-64-1	PS Acetone	250	0.00 U	147	59	21-153
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00 U	47.6	95	61-125
74-88-4	PS Iodomethane	250	0.00 U	168	67	53-142
75-09-2	PS Methylene chloride	50.0	0.00 U	38.5	77	59-136
75-15-0	PS Carbon disulfide	250	0.00 U	208	83	46-129
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00 U	44.7	89	56-126
75-34-3	PS 1,1-Dichloroethane	50.0	0.00 U	42.9	86	62-125
78-93-3	PS 2-Butanone	250	0.00 U	160	64	26-152
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00 U	44.6	89	60-130
594-20-7	PS 2,2-Dichloropropane	50.0	0.00 U	37.5	75	55-135
67-66-3	PS Chloroform	50.0	0.00 U	43.2	86	60-127
74-97-5	PS Bromochloromethane	50.0	0.00 U	37.5	75	61-131
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00 U	40.1	80	59-131
563-58-6	PS 1,1-Dichloropropene	50.0	0.00 U	42.7	85	57-128
56-23-5	PS Carbon tetrachloride	50.0	0.00 U	39.1	78	58-136
107-06-2	PS 1,2-Dichloroethane	50.0	0.00 U	49.1	98	58-126

Volatile

Page 2 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Post Spike

Client ID: RE14-10-7689PS

Matrix: R

Lab Sample ID: 1202027524

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 18:44

Dilution: 1

Analyst: DXK1

Prep Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS Benzene	50.0	0.00	U	41.5	83	56-123
79-01-6	PS Trichloroethylene	50.0	0.00	U	40.8	82	51-137
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U	46.8	94	60-126
75-27-4	PS Bromodichloromethane	50.0	0.00	U	45.6	91	55-138
74-95-3	PS Dibromomethane	50.0	0.00	U	44.1	88	60-132
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U	192	77	58-136
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U	39.1	78	54-133
108-88-3	PS Toluene	50.0	0.00	U	41.3	83	52-128
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U	43.7	87	53-137
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U	44.6	89	59-130
591-78-6	PS 2-Hexanone	250	0.00	U	61.8	25 *	31-148
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U	45.6	91	57-127
127-18-4	PS Tetrachloroethylene	50.0	0.00	U	33.4	67	51-128
124-48-1	PS Dibromochloromethane	50.0	0.00	U	41.5	83	59-139
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U	42.4	85	57-133
108-90-7	PS Chlorobenzene	50.0	0.00	U	38.8	78	53-122
100-41-4	PS Ethylbenzene	50.0	0.00	U	42.0	84	51-125
179601-23-1	PS m,p-Xylenes	100	0.00	U	79.2	79	50-126
95-47-6	PS o-Xylene	50.0	0.00	U	41.9	84	52-127
100-42-5	PS Styrene	50.0	0.00	U	43.2	86	49-135
75-25-2	PS Bromoform	50.0	0.00	U	40.1	80	57-149
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U	65.1	130 *	63-127

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1384

Sample Type: Post Spike

Client ID: RE14-10-7689PS

Matrix: R

Lab Sample ID: 1202027524

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 18:44

Dilution: 1

Analyst: DXK1

Pren Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS 1,2,3-Trichloropropane	50.0	0.00 U	48.0	96	57-149
108-86-1	PS Bromobenzene	50.0	0.00 U	39.8	80	49-131
103-65-1	PS n-Propylbenzene	50.0	0.00 U	44.2	88	40-136
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	42.8	86	44-135
98-82-8	PS Isopropylbenzene	50.0	0.00 U	41.8	84	44-140
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	44.8	90	42-140
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	41.0	82	44-132
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	39.0	78	42-142
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	41.5	83	43-137
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	40.0	80	39-139
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	32.5	65	38-145
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	35.2	70	43-129
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	34.8	70	44-125
104-51-8	PS n-Butylbenzene	50.0	0.00 U	38.5	77	36-141
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	39.4	79	47-151
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	41.0	82	59-131
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	35.7	71	43-129

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-1384

Sample Type: Post Spike Duplicate

Client ID: RE14-10-7689PSD

Matrix: R

Lab Sample ID: 1202027525

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 19:10

Dilution: 1

Analyst: DXK1

Pren Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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 28.7	57	25-149	10	0-25
74-87-3	PSD Chloromethane	50.0	0.00	U 44.9	90	39-140	10	0-25
75-01-4	PSD Vinyl chloride	50.0	0.00	U 45.0	90	47-129	9	0-25
74-83-9	PSD Bromomethane	50.0	0.00	U 35.0	70	31-135	11	0-25
75-00-3	PSD Chloroethane	50.0	0.00	U 36.5	73	53-128	10	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 37.4	75	51-151	7	0-25
67-64-1	PSD Acetone	250	0.00	U 129	52	21-153	13	0-25
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 43.4	87	61-125	9	0-25
74-88-4	PSD Iodomethane	250	0.00	U 151	60	53-142	11	0-25
75-09-2	PSD Methylene chloride	50.0	0.00	U 34.3	69	59-136	12	0-25
75-15-0	PSD Carbon disulfide	250	0.00	U 194	78	46-129	7	0-25
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 40.8	82	56-126	9	0-25
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 37.9	76	62-125	12	0-25
78-93-3	PSD 2-Butanone	250	0.00	U 147	59	26-152	9	0-25
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 39.7	79	60-130	11	0-25
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 34.1	68	55-135	10	0-25
67-66-3	PSD Chloroform	50.0	0.00	U 38.5	77	60-127	12	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 32.7	65	61-131	14	0-25
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 36.6	73	59-131	9	0-25
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 40.0	80	57-128	7	0-25
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 36.1	72	58-136	8	0-25
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 42.7	85	58-126	14	0-25

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Post Spike Duplicate

Client ID: RE14-10-7689PSD

Matrix: R

Lab Sample ID: 1202027525

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 19:10

Dilution: 1

Analyst: DXK1

Prep Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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	37.0	74	56-123	11	0-25
79-01-6	PSD Trichloroethylene	50.0	0.00	U	37.6	75	51-137	8	0-25
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U	40.2	80	60-126	15	0-25
75-27-4	PSD Bromodichloromethane	50.0	0.00	U	40.7	81	55-138	11	0-25
74-95-3	PSD Dibromomethane	50.0	0.00	U	38.2	76	60-132	14	0-25
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U	181	72	58-136	6	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U	34.3	69	54-133	13	0-25
108-88-3	PSD Toluene	50.0	0.00	U	37.5	75	52-128	9	0-25
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U	38.8	78	53-137	12	0-25
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U	39.6	79	59-130	12	0-25
591-78-6	PSD 2-Hexanone	250	0.00	U	48.5	19 *	31-148	24	0-25
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U	39.7	79	57-127	14	0-25
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U	31.3	63	51-128	7	0-25
124-48-1	PSD Dibromochloromethane	50.0	0.00	U	36.2	72	59-139	14	0-25
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U	37.0	74	57-133	14	0-25
108-90-7	PSD Chlorobenzene	50.0	0.00	U	34.7	69	53-122	11	0-25
100-41-4	PSD Ethylbenzene	50.0	0.00	U	38.2	76	51-125	10	0-25
179601-23-1	PSD m,p-Xylenes	100	0.00	U	71.8	72	50-126	10	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U	37.2	74	52-127	12	0-25
100-42-5	PSD Styrene	50.0	0.00	U	37.4	75	49-135	14	0-25
75-25-2	PSD Bromoform	50.0	0.00	U	35.0	70	57-149	14	0-25
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U	41.3	83	63-127	45 *	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 6

SDG Number: 10-1384

Sample Type: Post Spike Duplicate

Client ID: RE14-10-7689PSD

Matrix: R

Lab Sample ID:1202027525

%Moisture: 13

Instrument: VOA5.I

Analysis Date: 01/31/2010 19:10

Dilution: 1

Analyst: DXK1

Pren Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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 40.7	81	57-149	17	0-25
108-86-1	PSD Bromobenzene	50.0	0.00	U 33.1	66	49-131	18	0-25
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 38.3	77	40-136	15	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 36.5	73	44-135	16	0-25
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 37.8	76	44-140	10	0-25
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 38.7	77	42-140	15	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 35.9	72	44-132	13	0-25
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 33.9	68	42-142	14	0-25
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 36.3	73	43-137	13	0-25
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 34.9	70	39-139	14	0-25
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 29.0	58	38-145	11	0-25
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 30.5	61	43-129	14	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 30.5	61	44-125	13	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 34.0	68	36-141	12	0-25
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 34.5	69	47-151	13	0-25
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 36.2	72	59-131	13	0-25
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 30.7	61	43-129	15	0-25

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID:1202027526

Instrument: VOA5.I

Analysis Date: 01/28/2010 22:25

Dilution: 1

Analyst: DXK1

Prep Batch ID 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	308	123	52-139

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202040396

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Pren Batch ID: 946583

Purge Vol: 5 mL

Batch ID: 946584

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	39.0	78	33-155
74-87-3	LCS Chloromethane	50.0	0.0	52.0	104	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	54.9	110	61-128
74-83-9	LCS Bromomethane	50.0	0.0	49.3	99	63-126
75-00-3	LCS Chloroethane	50.0	0.0	46.8	94	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	50.3	101	67-151
67-64-1	LCS Acetone	250	0.0	228	91	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	58.0	116	70-125
74-88-4	LCS Iodomethane	250	0.0	211	85	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	44.2	88	72-127
75-15-0	LCS Carbon disulfide	250	0.0	258	103	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	52.9	106	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	51.8	104	75-120
78-93-3	LCS 2-Butanone	250	0.0	235	94	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	52.5	105	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	49.4	99	74-135
67-66-3	LCS Chloroform	50.0	0.0	50.7	101	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	43.1	86	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	49.1	98	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	52.4	105	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	49.7	99	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	55.2	110	72-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202040396

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Pren Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	48.7	97	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	49.0	98	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	53.3	107	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	52.9	106	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	48.7	97	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	288	115	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	51.3	103	80-125
108-88-3	LCS Toluene	50.0	0.0	49.0	98	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	54.9	110	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	49.1	98	76-120
591-78-6	LCS 2-Hexanone	250	0.0	264	106	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	51.9	104	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	43.5	87	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	48.1	96	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	48.0	96	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	46.4	93	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	51.9	104	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	99.4	99	74-120
95-47-6	LCS o-Xylene	50.0	0.0	50.7	101	74-120
100-42-5	LCS Styrene	50.0	0.0	53.7	107	76-125
75-25-2	LCS Bromoform	50.0	0.0	47.8	96	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	52.0	104	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202040396

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Prep Batch II 946583

Purge Vol: 5 mL

Batch ID: 946584

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	49.9	100	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	45.5	91	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	54.9	110	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	51.0	102	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	52.3	105	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	54.9	110	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	51.6	103	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	47.4	95	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	52.4	105	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	51.3	103	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	50.9	102	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	45.1	90	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	44.5	89	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	54.5	109	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	47.1	94	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	48.9	98	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	44.6	89	74-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946583

Matrix: SOIL

Lab Sample ID: 1202040397

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:41

Dilution: 1

Analyst: DXK1

Prep Batch ID: 946583

Purge Vol: 5 mL

Batch ID: 946584

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	325	130	52-139

Method Blank Summary

Page 1 of 1

SDG Number:	10-1384	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 946583	Instrument ID:	VOA5.J	Data File:	012810V5\5V432B3.D
Lab Sample ID:	1202027522	Prep Date:	01/28/2010 08:00	Analyzed:	01/28/10 22:50
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 946583	1202027523	012810V5\5V430L3.D	01/28/10	2159
02 LCS for batch 946583	1202027526	012810V5\5V431S3.D	01/28/10	2225
03 RE14-10-7689	245387001	012810V5\5V433.D	01/28/10	2316
04 RE14-10-7679	245387002	012810V5\5V434.D	01/28/10	2342
05 RE14-10-7680	245387003	012810V5\5V435.D	01/29/10	0008
06 RE14-10-7686	245387004	012810V5\5V436.D	01/29/10	0034
07 RE14-10-7688	245387005	012810V5\5V437.D	01/29/10	0100
08 RE14-10-7684	245387006	012810V5\5V438.D	01/29/10	0126
09 RE14-10-7681	245387008	012810V5\5V440.D	01/29/10	0218
10 RE14-10-7682	245387009	012810V5\5V441.D	01/29/10	0243
11 RE14-10-7685	245387010	012810V5\5V442.D	01/29/10	0309
12 RE14-10-7691	245387012	012810V5\5V444.D	01/29/10	0401

Method Blank Summary

Page 1 of 1

SDG Number:	10-1384	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 946583	Instrument ID:	VOA5.I	Data File:	013110V5SV705B3.D
Lab Sample ID:	1202040395	Prep Date:	01/31/2010 08:00	Analyzed:	01/31/10 13:07
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 946583	1202040396	013110V5SV703L3.D	01/31/10	1215
02 LCS for batch 946583	1202040397	013110V5SV704S3.D	01/31/10	1241
03 RE14-10-7687	245387007	013110V5SV715.D	01/31/10	1726
04 RE14-10-7683	245387011	013110V5SV716.D	01/31/10	1752
05 RE14-10-7689PS	1202027524	013110V5SV718.D	01/31/10	1844
06 RE14-10-7689PSD	1202027525	013110V5SV719.D	01/31/10	1910

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date/Time: 08-JAN-10 13:05

Column Description: DB-624

Lab File ID 010810V5\5S505.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	80.9
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	95.3
177	5.0 - 9.0% of mass 176	6.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W5VM100108-01	010810V5\5S506.D	08-JAN-10 13:40
ICALMIX[A]	W5VM100108-02	010810V5\5S507.D	08-JAN-10 14:05
ICALMIX[A]	W5VM100108-03	010810V5\5S508.D	08-JAN-10 14:31
ICALMIX[A]	W5VM100108-04	010810V5\5S509.D	08-JAN-10 14:57
ICALMIX[A]	W5VM100108-05	010810V5\5S511.D	08-JAN-10 15:23
ICALMIX[A]	W5VM100108-06	010810V5\5S512.D	08-JAN-10 15:49
ICALMIX[A]	W5VM100108-07	010810V5\5S513.D	08-JAN-10 16:14
ICALMIX[A]	W5VM100108-08	010810V5\5S515.D	08-JAN-10 17:06
ICALMIX[B]	W5VM100108-11	010810V5\5S518.D	08-JAN-10 18:24
ICALMIX[B]	W5VM100108-12	010810V5\5S519.D	08-JAN-10 18:50
ICALMIX[B]	W5VM100108-13	010810V5\5S520.D	08-JAN-10 19:16
ICALMIX[B]	W5VM100108-14	010810V5\5S521.D	08-JAN-10 19:42
ICALMIX[B]	W5VM100108-15	010810V5\5S522.D	08-JAN-10 20:07
ICALMIX[B]	W5VM100108-16	010810V5\5S523.D	08-JAN-10 20:33
ICALMIX[B]	W5VM100108-17	010810V5\5S524.D	08-JAN-10 20:59
ICVMIX[B]01	W5VM100108-18	010810V5\5S526.D	08-JAN-10 21:50

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date/Time: 11-JAN-10 10:13

Column Description: DB-624

Lab File ID 011110V5\5T102.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	42.7
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	87.3
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	6.5

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
ICVMIX[A]02	W5VM100111-01	011110V5\5T103.D	11-JAN-10 10:39

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date/Time: 28-JAN-10 21:33

Column Description: DB-624

Lab File ID 012810V5\5V429BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	24.9
75	30.0 - 60.0% of mass 95	49.1
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	71.3
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	96.2
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]01	W5VM100128-04	012810V5\5V429.D	28-JAN-10 21:33
BLK01LCS	1202027523	012810V5\5V430L3.D	28-JAN-10 21:59
CCVMIX[B]02	W5VM100128-06	012810V5\5V431.D	28-JAN-10 22:25
BLK01SLCS	1202027526	012810V5\5V431S3.D	28-JAN-10 22:25
BLK01	1202027522	012810V5\5V432B3.D	28-JAN-10 22:50
RE14-10-7689	245387001	012810V5\5V433.D	28-JAN-10 23:16
RE14-10-7679	245387002	012810V5\5V434.D	28-JAN-10 23:42
RE14-10-7680	245387003	012810V5\5V435.D	29-JAN-10 00:08
RE14-10-7686	245387004	012810V5\5V436.D	29-JAN-10 00:34
RE14-10-7688	245387005	012810V5\5V437.D	29-JAN-10 01:00
RE14-10-7684	245387006	012810V5\5V438.D	29-JAN-10 01:26
RE14-10-7681	245387008	012810V5\5V440.D	29-JAN-10 02:18
RE14-10-7682	245387009	012810V5\5V441.D	29-JAN-10 02:43
RE14-10-7685	245387010	012810V5\5V442.D	29-JAN-10 03:09
RE14-10-7691	245387012	012810V5\5V444.D	29-JAN-10 04:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date/Time: 31-JAN-10 11:23

Column Description: DB-624

Lab File ID 013110V5\5V701.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	26.9
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.3
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	96.2
177	5.0 - 9.0% of mass 176	6.4

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]06	W5VM100131-02	013110V5\5V703.D	31-JAN-10 12:15
BLK02LCS	1202040396	013110V5\5V703L3.D	31-JAN-10 12:15
CCVMIX[B]08	W5VM100131-03	013110V5\5V704.D	31-JAN-10 12:41
BLK02SLCS	1202040397	013110V5\5V704S3.D	31-JAN-10 12:41
BLK02	1202040395	013110V5\5V705B3.D	31-JAN-10 13:07
RE14-10-7687	245387007	013110V5\5V715.D	31-JAN-10 17:26
RE14-10-7683	245387011	013110V5\5V716.D	31-JAN-10 17:52
RE14-10-7689MS	1202027524	013110V5\5V718.D	31-JAN-10 18:44
RE14-10-7689MSD	1202027525	013110V5\5V719.D	31-JAN-10 19:10

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1384

Instrument: VOA5.I

STD Analysis Time: 28-JAN-10 21:33

GC Column: DB-624

Data File: C:\msdchem\1\DATA\012810V5\5V429.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1851377		10.4	1253940		13.6	633883		16.0
Upper Limit	3702754		10.9	2507880		14.1	1267766		16.5
Lower Limit	925689		9.88	626970		13.1	316942		15.5
Sample ID									
BLK01LCS	1923034		10.4	1294424		13.6	646466		16.0
BLK01SLCS	1999466		10.4	1298190		13.6	608332		16.0
BLK01	1794425		10.4	1164805		13.6	527282		16.0
RE14-10-7689	1645220		10.4	1068983		13.6	467304		16.0
RE14-10-7679	1708147		10.4	1034847		13.6	370959		16.0
RE14-10-7680	1653160		10.4	1065424		13.6	466631		16.0
RE14-10-7686	1633328		10.4	1041013		13.6	436081		16.0
RE14-10-7688	1609416		10.4	1028886		13.6	450819		16.0
RE14-10-7684	1589451		10.4	1013435		13.6	435511		16.0
RE14-10-7681	1524242		10.4	990060		13.6	433203		16.0
RE14-10-7682	1533311		10.4	999693		13.6	455353		16.0
RE14-10-7685	1488933		10.4	924980		13.6	366769		16.0
RE14-10-7691	1473666		10.4	952978		13.6	418334		16.0

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: 10-1384

Instrument: VOA5.I

STD Analysis Time: 31-JAN-10 12:15

GC Column: DB-624

Data File: C:\msdchem\1\DATA\013110V5\SV703.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1860482		10.4	1273384		13.6	641523		16.0
Upper Limit	3720964		10.9	2546768		14.1	1283046		16.5
Lower Limit	930241		9.88	636692		13.1	320762		15.5
Sample ID									
BLK02LCS	1860482		10.4	1273384		13.6	641523		16.0
BLK02SLCS	1846900		10.4	1231006		13.6	587419		16.0
BLK02	1748987		10.4	1142688		13.6	525209		16.0
RE14-10-7687	1433283		10.4	881155		13.6	322507		16.0
RE14-10-7683	1378231		10.4	815189		13.6	288343	*	16.0
RE14-10-7689MS	1612985		10.4	1099520		13.6	546510		16.0
RE14-10-7689MSD	1683206		10.4	1128027		13.6	566703		16.0

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387001

 Client ID: RE14-10-7689
 Batch ID: 946584
 Run Date: 01/28/2010 23:16
 Prep Date: 01/28/2010 15:28
 Data File: 012810V55V433.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 13
 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	1.15	ug/kg	0.391	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.75	ug/kg	1.91	5.75
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.75	ug/kg	1.84	5.75
75-09-2	Methylene chloride	U	5.75	ug/kg	2.30	5.75
75-15-0	Carbon disulfide	U	5.75	ug/kg	1.44	5.75
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.75	ug/kg	1.72	5.75
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.75	ug/kg	1.44	5.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.75	ug/kg	1.72	5.75
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387001
 Client ID: RE14-10-7689
 Batch ID: 946584
 Run Date: 01/28/2010 23:16
 Prep Date: 01/28/2010 15:28
 Data File: 012810V55V433.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 13
 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	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.75	ug/kg	1.84	5.75
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.6	5.93	ug/kg	0	J
	unknown siloxane	16.55	9.54	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
InstName : VOA5
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 29 10:18:06 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	

Internal Standards								Dev(Min)
1) Fluorobenzene	10.379	10.375	1.000	96	1645220	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1068983	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	467304	50.00	ug/L	0.00
82) B Fluorobenzene	10.379	10.375	1.000	96	1645220	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1068983	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	467304	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.022	10.021	0.966	65	426481	55.77	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 111.54%			
43) Toluene-d8	12.020	12.016	0.887	98	1438629	49.35	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 98.70%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	514318	57.68	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 115.36%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.061	5.051	0.488	50	327	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.104	7.100	0.684	43	4041	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.687	7.450	0.741	41	385	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.507	7.511	0.723	76	643	N.D.		
15) Methylene chloride	7.705	7.691	0.742	84	4889	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.098	9.077	0.877	43	108	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.113	10.127	0.974	78	232	N.D.		
32) Cyclohexene	10.361	10.248	0.998	67	128	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
InstName : VOA5
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 29 10:18:06 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	962	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	12.649	12.631	0.934	43	135	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	13.572	13.579	1.002	112	110	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.632	13.639	1.006	91	258	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	14.187	14.184	1.047	104	771	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.601	14.537	0.915	105	5134	N.D.	
62) 1,1,2,2-Tetrachloroethane	14.601	14.810	0.915	83	568	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.958	14.965	0.937	91	297	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	15.216	15.216	0.953	91	383	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.535	15.527	0.973	105	356	N.D.	
71) sec-Butylbenzene	15.701	15.711	0.984	105	119	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.991	15.991	1.002	146	599	N.D.	
75) n-Butylbenzene	16.104	16.277	1.009	91	131	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.386	18.371	1.152	180	130	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.762	18.762	1.176	128	1433	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.687	7.546	0.741	41	385	N.D.	
89) tert-Butyl Alcohol	7.684	7.673	0.740	59	717	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	9.098	9.088	0.877	43	108	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
InstName : VOA5
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 29 10:18:06 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.456	9.332	0.911	41	254	N.D.	
97) Tetrahydrofuran	9.466	9.466	0.912	42	1590	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.490	16.497	1.033	45	113	N.D.	

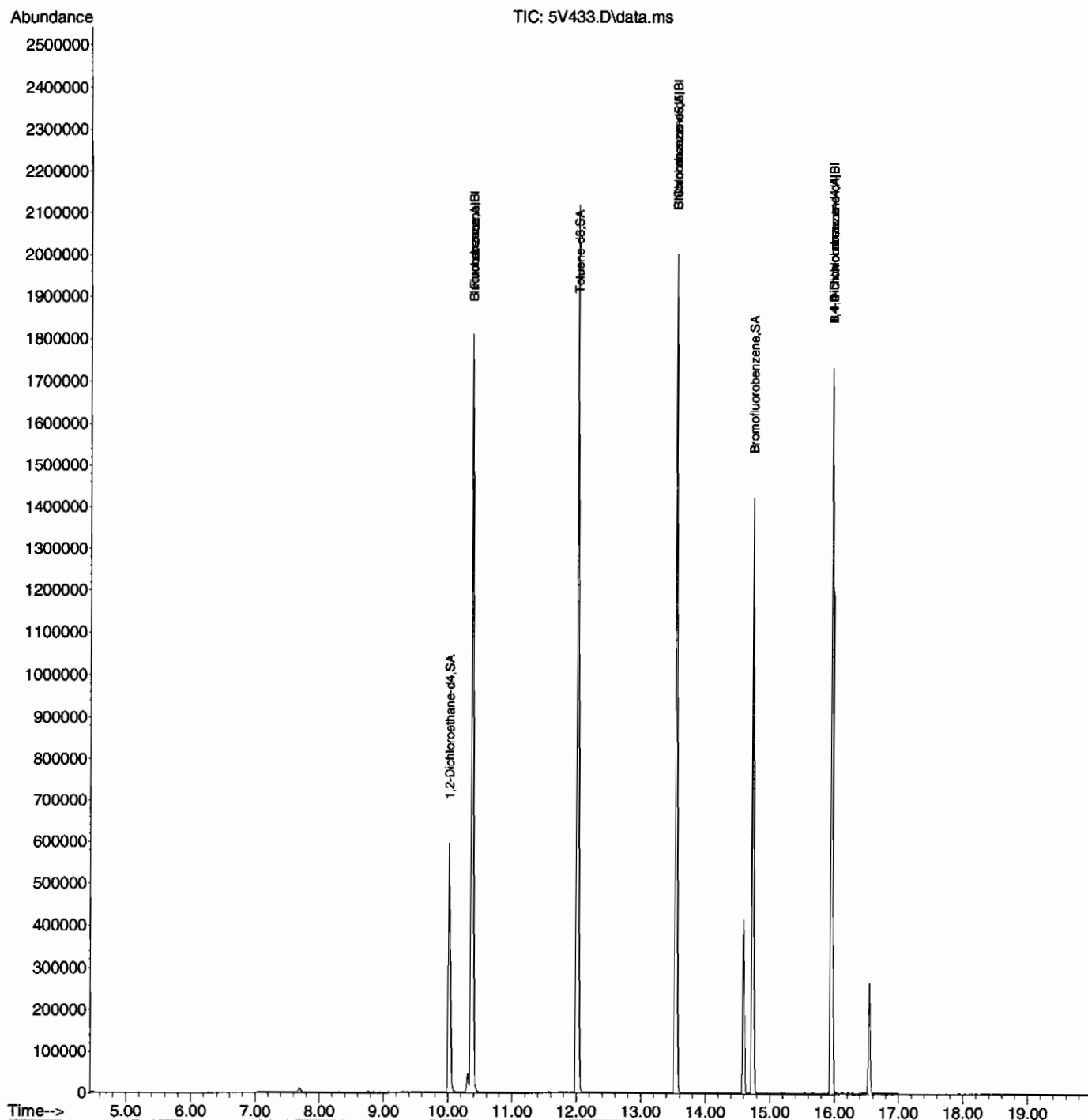
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

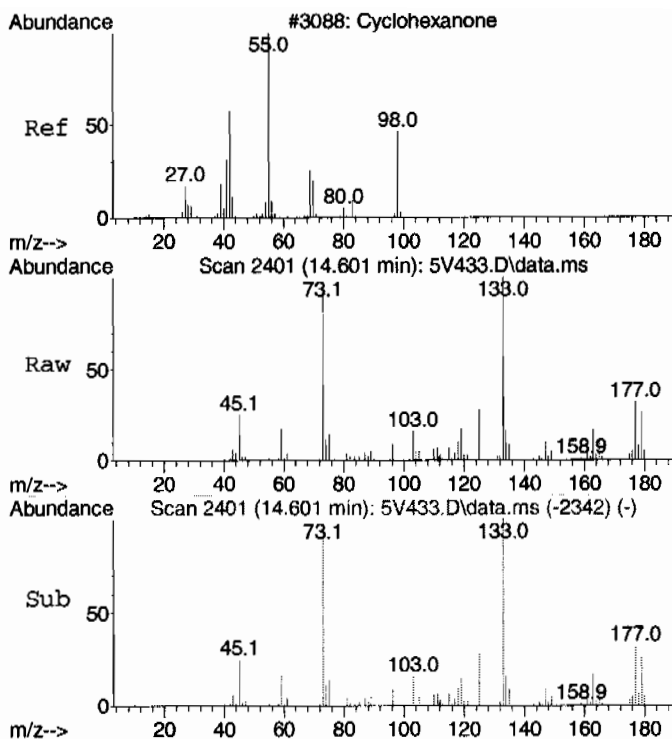
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
InstName : VOA5
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 29 10:18:06 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

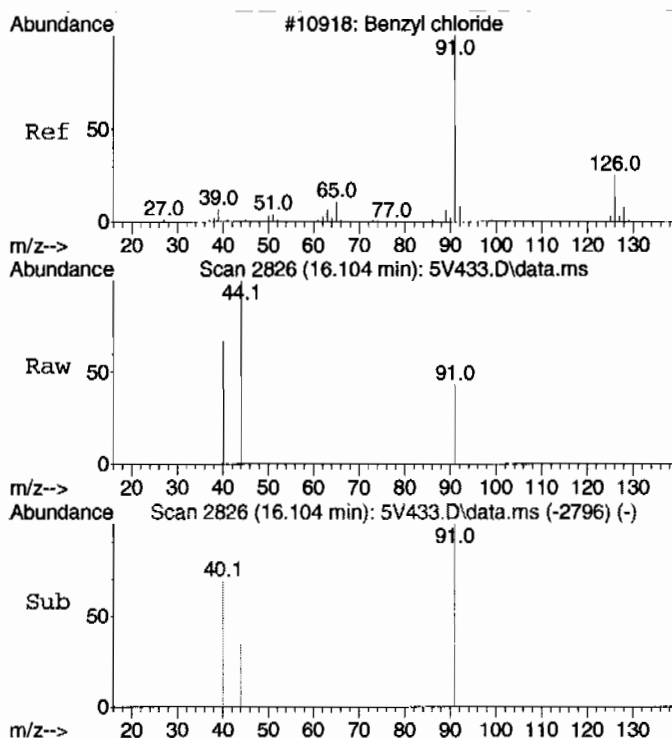
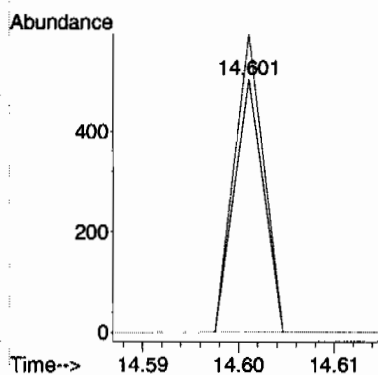
SubList :





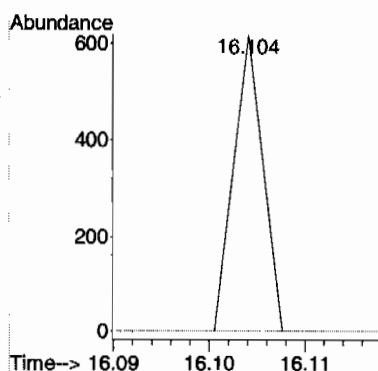
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 28.29 ug/L
RT: 14.601 min Scan# 2401
Delta R.T. -0.092 min
Lab File: 5V433.D
Acq: 28 Jan 2010 11:16 pm

Tgt Ion	Ratio	Lower	Upper
42	100		
55	118.7	104.7	164.7
98	0.0	21.5	81.5#



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.48 ug/L
RT: 16.104 min Scan# 2826
Delta R.T. 0.004 min
Lab File: 5V433.D
Acq: 28 Jan 2010 11:16 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	51.6
65	0.0	0.0	41.9



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

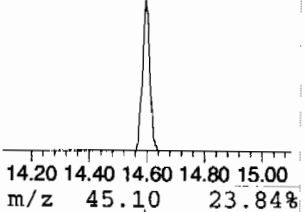
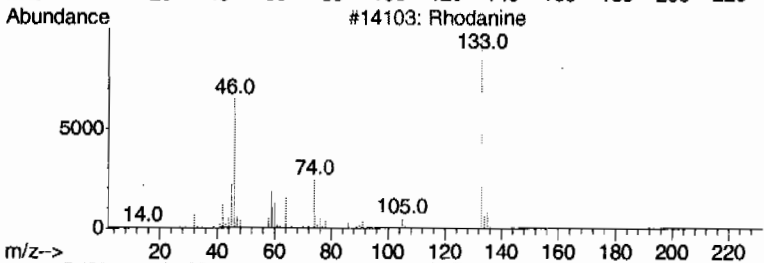
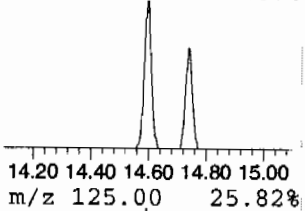
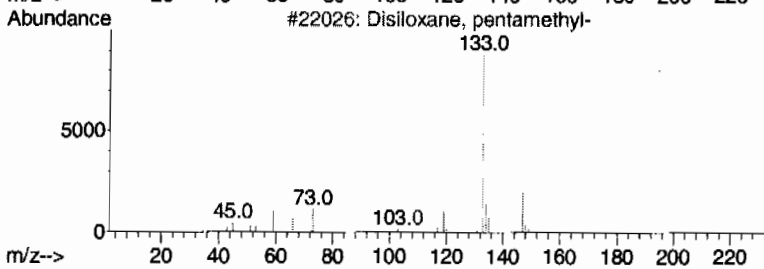
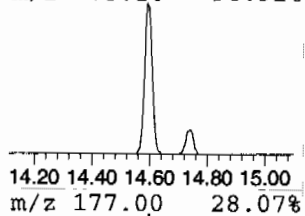
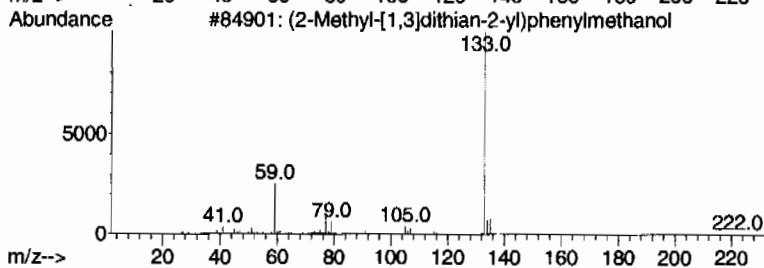
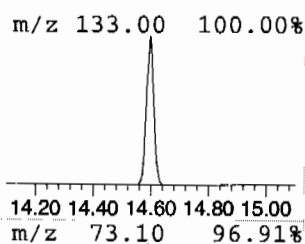
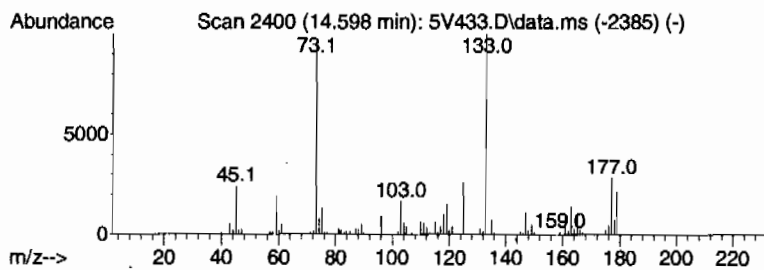
SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.	
14.598	5.16 ug/L	373296	B Chlorobenzene-d5	13.547	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(2-Methyl-[1,3]dithian-2-yl)phen...	240	C12H16OS2	078349-00-5	25
2	Disiloxane, pentamethyl-	148	C5H16OSi2	001438-82-0	23
3	Rhodanine	133	C3H3NOS2	000141-84-4	17
4	1-Propanone, 2-chloro-1-(2,5-dim...	210	C12H15ClO	054965-52-5	12
5	Benzene, 1-ethyl-4-(1-methylethyl)-	148	C11H16	004218-48-8	12



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

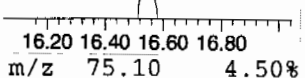
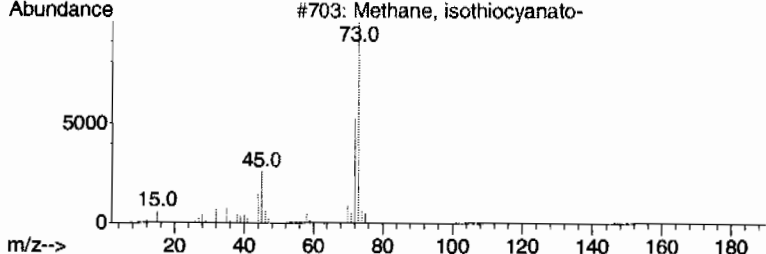
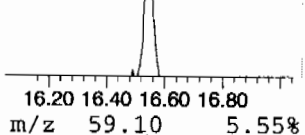
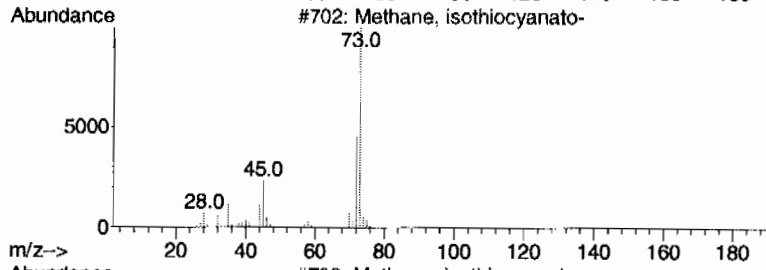
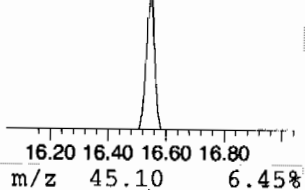
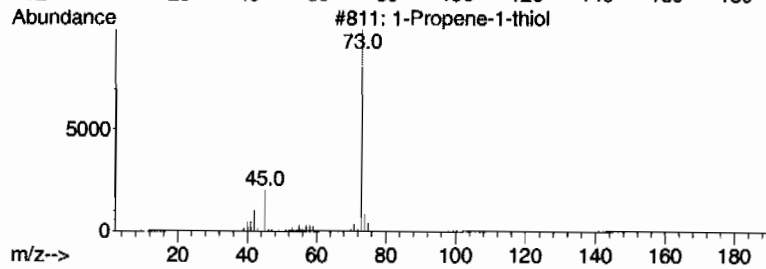
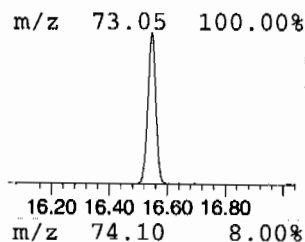
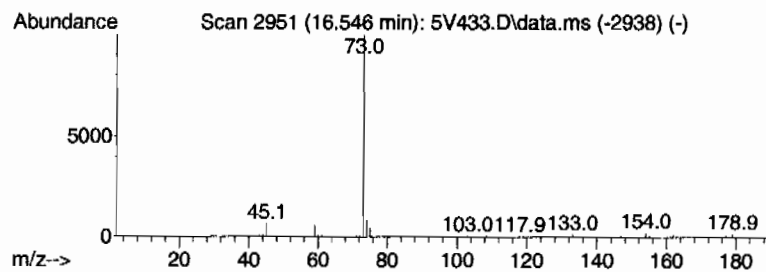
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 3 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.546	8.30 ug/L	507576	B 1,4-Dichlorobenzene-d4	15.959

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene-1-thiol	74	C3H6S	000925-89-3	7
2	Methane, isothiocyanato-	73	C2H3NS	000556-61-6	4
3	Methane, isothiocyanato-	73	C2H3NS	000556-61-6	4
4	N-Ethylformamide	73	C3H7NO	000627-45-2	4
5	Methane, isothiocyanato-	73	C2H3NS	000556-61-6	4



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V433.D
Acq On : 28 Jan 2010 11:16 pm
Operator : DXK1
Sample : |245387001|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.598	5.2	ug/L	373296	4	13.547	3619710	50.0
unknown siloxane	16.546	8.3	ug/L	507576	6	15.959	3057030	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387002
 Client ID: RE14-10-7679
 Batch ID: 946584
 Run Date: 01/28/2010 23:42
 Prep Date: 01/28/2010 15:29
 Data File: 012810V55V434.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.4
 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	1.27	ug/kg	0.433	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.382	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.382	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.382	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.382	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.382	1.27
67-64-1	Acetone	U	6.36	ug/kg	2.11	6.36
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
74-88-4	Iodomethane	U	6.36	ug/kg	2.04	6.36
75-09-2	Methylene chloride	U	6.36	ug/kg	2.54	6.36
75-15-0	Carbon disulfide	U	6.36	ug/kg	1.59	6.36
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.382	1.27
78-93-3	2-Butanone	U	6.36	ug/kg	1.91	6.36
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.382	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.382	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.420	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.382	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.382	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.382	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.382	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.382	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.420	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.382	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.382	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.382	1.27
108-10-1	4-Methyl-2-pentanone	U	6.36	ug/kg	1.59	6.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.382	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.382	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.382	1.27
591-78-6	2-Hexanone	U	6.36	ug/kg	1.91	6.36
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.382	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.382	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.382	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.382	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.382	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387002
 Client ID: RE14-10-7679
 Batch ID: 946584
 Run Date: 01/28/2010 23:42
 Prep Date: 01/28/2010 15:29
 Data File: 012810V5\SV434.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.4
 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	1.27	ug/kg	0.382	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.382	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.382	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.382	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.382	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.382	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.382	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.382	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.382	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.382	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.382	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.382	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.382	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.382	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.382	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.382	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.36	ug/kg	2.04	6.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.382	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.382	1.27

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\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
InstName : VOA5
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 29 10:18:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.375	10.375	1.000	96	1708147	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1034847	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	370959	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1708147	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1034847	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	370959	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	412678	51.98	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 103.96%			
43) Toluene-d8	12.016	12.016	0.887	98	1479575	52.42	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 104.84%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	448348	63.34	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 126.68%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.021	5.051	0.484	50	154	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.107	7.100	0.685	43	705	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.610	7.450	0.733	41	139	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.511	7.511	0.724	76	117	N.D.		
15) Methylene chloride	7.698	7.691	0.742	84	3193	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	9.830	9.830	0.948	56	284	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.127	10.127	0.976	78	117	N.D.		
32) Cyclohexene	10.364	10.248	0.999	67	107	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
InstName : VOA5
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 29 10:18:16 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	1493	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.646	13.639	1.007	91	141	N.D.	
55) m,p-Xylenes	13.752	13.749	1.015	106	126	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.559	14.537	0.912	105	554	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.891	14.965	0.933	91	115	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	15.181	15.216	0.951	91	856	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.595	15.527	0.977	105	121	N.D.	
71) sec-Butylbenzene	15.595	15.711	0.977	105	121	N.D.	
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	653	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	252	N.D.	
75) n-Butylbenzene	16.291	16.277	1.021	91	110	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.777	18.762	1.177	128	844	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.610	7.546	0.733	41	139	N.D.	
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
InstName : VOA5
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 29 10:18:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	9.473	9.466	0.913	42	107	N.D.	
98) Isobutyl alcohol	9.834	9.770	0.948	41	140	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.546	16.497	1.037	45	2632	N.D.	

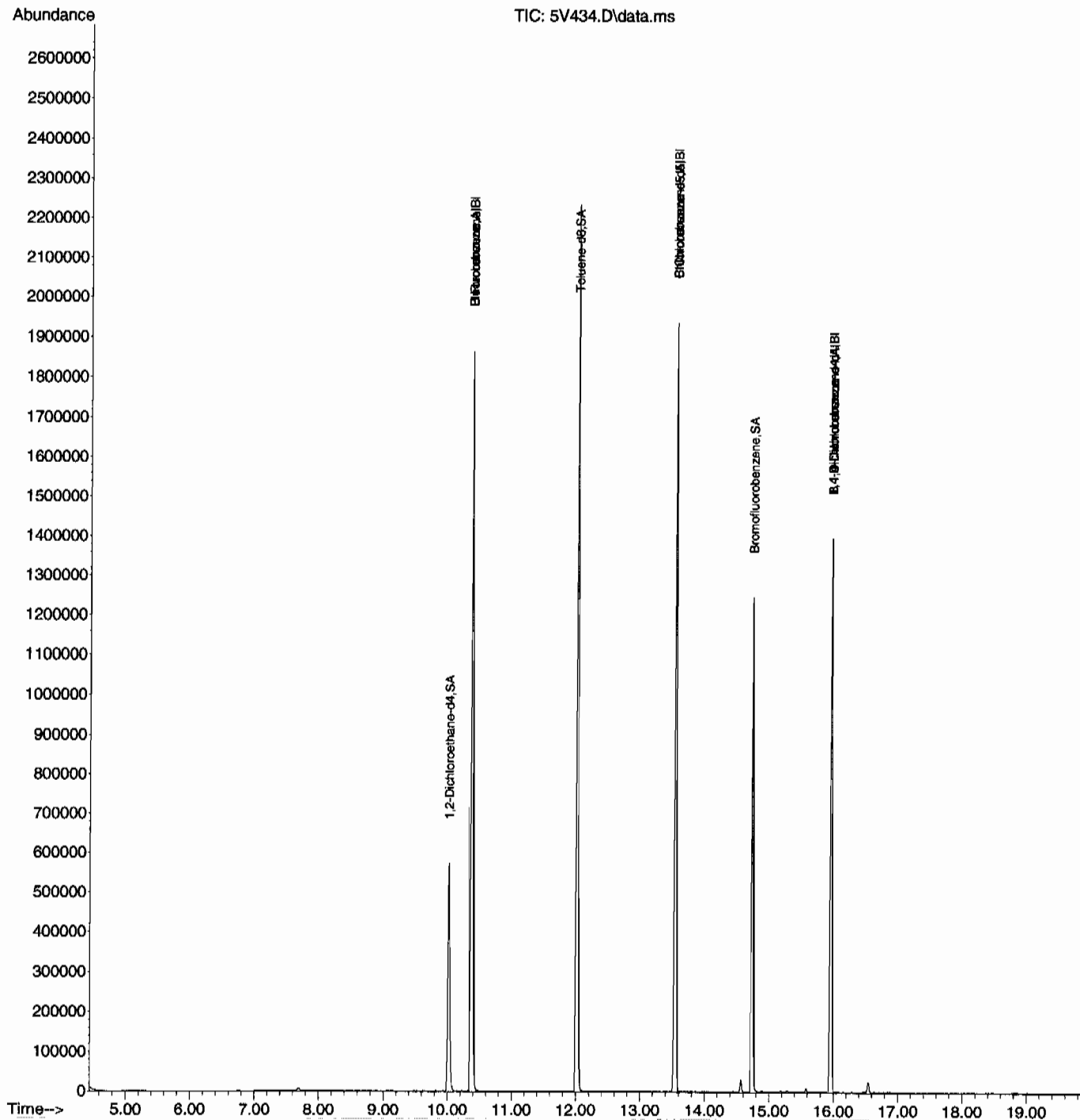
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

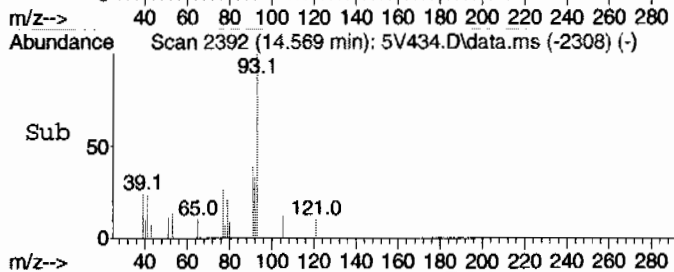
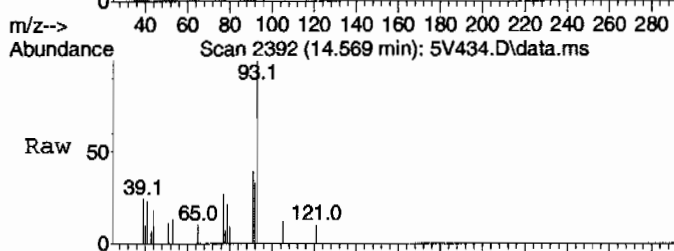
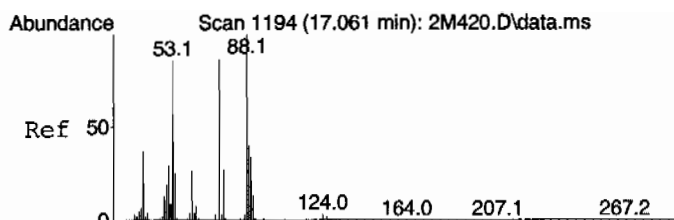
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
InstName : VOA5
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 29 10:18:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

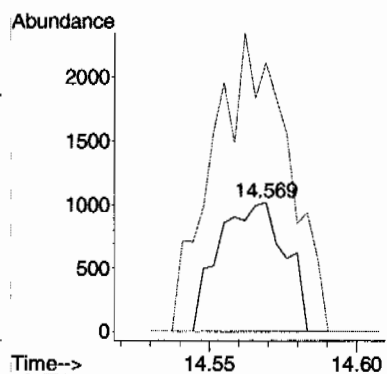
SubList :





#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 1.15 ug/L
 RT: 14.569 min Scan# 2392
 Delta R.T. -0.004 min
 Lab File: 5V434.D
 Acq: 28 Jan 2010 11:42 pm

Tgt Ion	Resp	Lower	Upper
53	100		
88	0.0	50.2	110.2#
77	256.4	0.0	59.6#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V434.D
Acq On : 28 Jan 2010 11:42 pm
Operator : DXK1
Sample : |245387002|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387003

 Client ID: RE14-10-7680
 Batch ID: 946584
 Run Date: 01/29/2010 00:08
 Prep Date: 01/28/2010 15:30
 Data File: 012810V55V435.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12
 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	1.14	ug/kg	0.386	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.68	ug/kg	1.89	5.68
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387003

 Client ID: RE14-10-7680
 Batch ID: 946584
 Run Date: 01/29/2010 00:08
 Prep Date: 01/28/2010 15:30
 Data File: 012810V5V435.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12
 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	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.27	ug/kg	0.341	2.27
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.341	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.68	ug/kg	1.82	5.68
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

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\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
InstName : VOA5
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 29 10:18:23 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1653160	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1065424	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	466631	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1653160	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1065424	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	466631	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	405486	52.77	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 105.54%			
43) Toluene-d8	12.019	12.016	0.887	98	1458543	50.20	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 100.40%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	499859	56.14	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 112.28%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.041	5.051	0.486	50	169	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.100	7.100	0.684	43	126	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	0.000	7.450	0.000		0	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.503	7.511	0.723	76	773	N.D.		
15) Methylene chloride	7.691	7.691	0.741	84	6246	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.124	10.127	0.976	78	111	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
InstName : VOA5
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 29 10:18:23 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	699	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	12.649	12.631	0.934	43	110	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.635	13.639	1.007	91	264	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	14.177	14.184	1.046	104	116	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.597	14.537	0.914	105	1842	N.D.	
62) 1,1,2,2-Tetrachloroethane	14.739	14.810	0.923	83	111	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.969	14.965	0.938	91	116	N.D.	
66) 1,3,5-Trimethylbenzene	15.110	15.114	0.947	105	127	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.784	18.762	1.177	128	538	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.705	7.546	0.743	41	111	N.D.	
89) tert-Butyl Alcohol	7.680	7.673	0.740	59	122	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
InstName : VOA5
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 29 10:18:23 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	9.484	9.466	0.914	42	108	N.D.	
98) Isobutyl alcohol	9.989	9.770	0.963	41	116	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

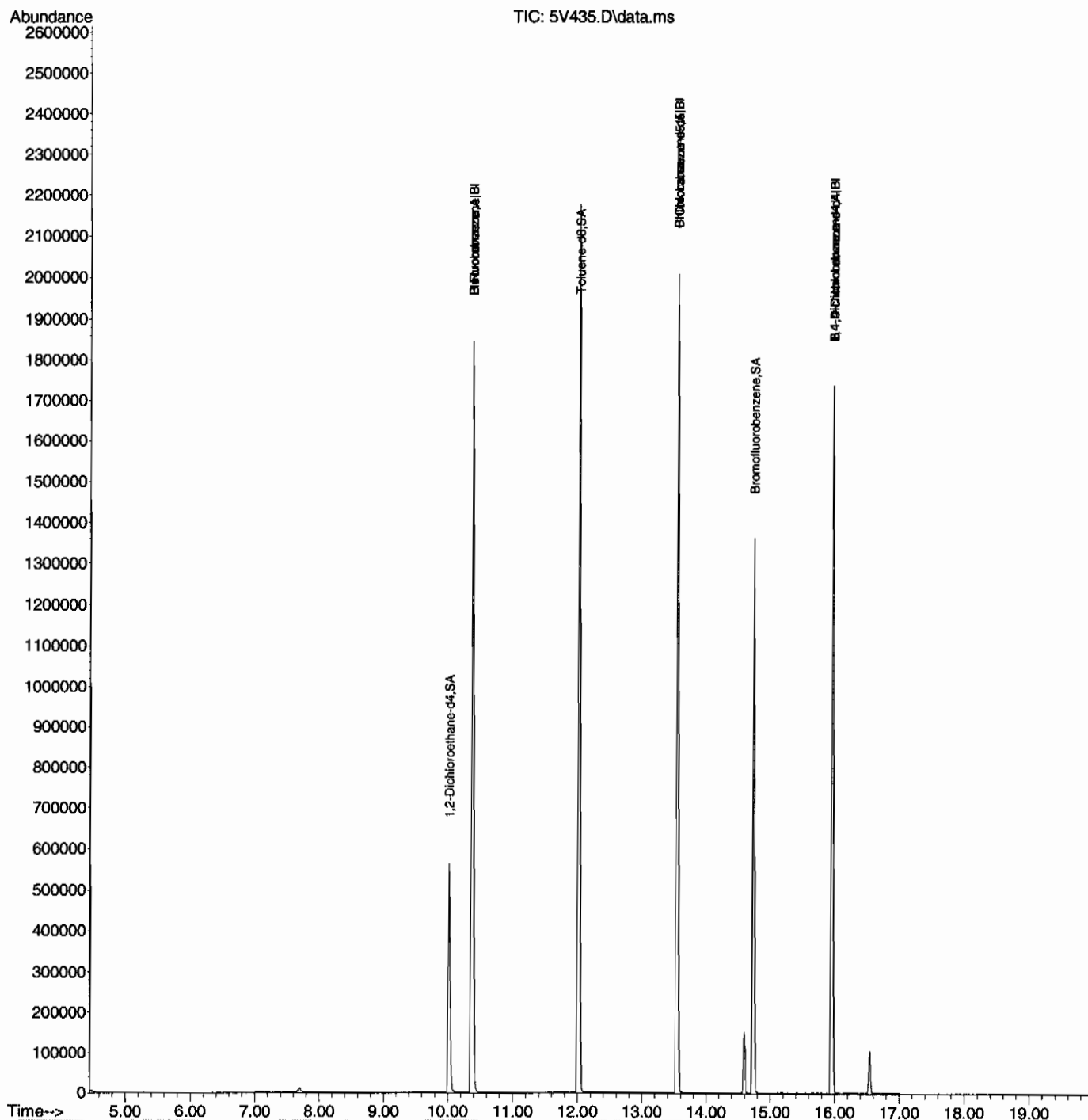
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

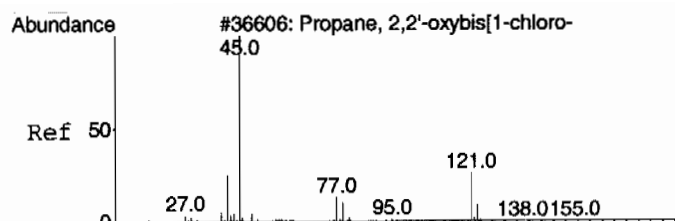
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
InstName : VOA5
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

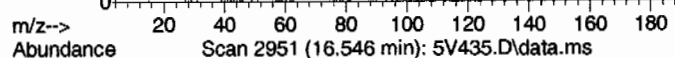
Quant Time: Jan 29 10:18:23 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

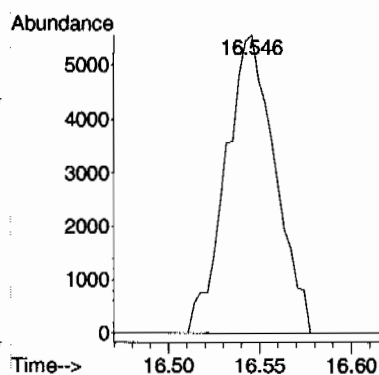
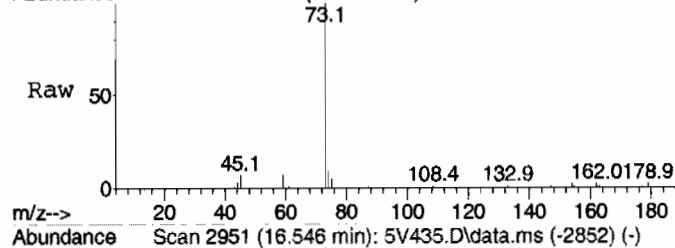




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 3.38 ug/L
RT: 16.546 min Scan# 2951
Delta R.T. 0.049 min
Lab File: 5V435.D
Acq: 29 Jan 2010 12:08 am



Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	49.2



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V435.D
Acq On : 29 Jan 2010 12:08 am
Operator : DXK1
Sample : |245387003|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

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

SDG Number: 10-1384
 Lab Sample ID: 245387004
 Client ID: RE14-10-7686
 Batch ID: 946584
 Run Date: 01/29/2010 00:34
 Prep Date: 01/28/2010 15:31
 Data File: 012810V55V436.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone	U	6.48	ug/kg	2.15	6.48
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.48	ug/kg	2.07	6.48
75-09-2	Methylene chloride	U	6.48	ug/kg	2.59	6.48
75-15-0	Carbon disulfide	U	6.48	ug/kg	1.62	6.48
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.48	ug/kg	1.94	6.48
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.48	ug/kg	1.62	6.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.389	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.48	ug/kg	1.94	6.48
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387004

Client ID: RE14-10-7686
Batch ID: 946584
Run Date: 01/29/2010 00:34
Prep Date: 01/28/2010 15:31
Data File: 012810V5V436.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.389	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.48	ug/kg	2.07	6.48
630-20-6	Trichlorotrifluoroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	7.36	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
InstName : VOA5
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 29 10:18:32 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1633328	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1041013	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	436081	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1633328	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1041013	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	436081	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	397663	52.38	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 104.76%			
43) Toluene-d8	12.016	12.016	0.887	98	1431640	50.43	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 100.86%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	479441	57.62	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 115.24%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.031	5.051	0.485	50	152	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.097	7.100	0.684	43	148	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.677	7.450	0.740	41	143	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.504	7.511	0.723	76	551	N.D.		
15) Methylene chloride	7.698	7.691	0.742	84	9926	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	0.000	10.127	0.000		0	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
InstName : VOA5
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 29 10:18:32 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.090	12.090	0.892	91	1320	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	13.583	13.579	1.003	112	108	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.544	13.639	1.000	91	2004	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.739	14.537	0.924	105	213	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.813	14.965	0.928	91	416	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.821	15.832	0.991	119	110	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	113	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.769	18.762	1.176	128	484	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.677	7.546	0.740	41	143	N.D.	
89) tert-Butyl Alcohol	7.677	7.673	0.740	59	108	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
InstName : VOA5
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 29 10:18:32 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.466	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed

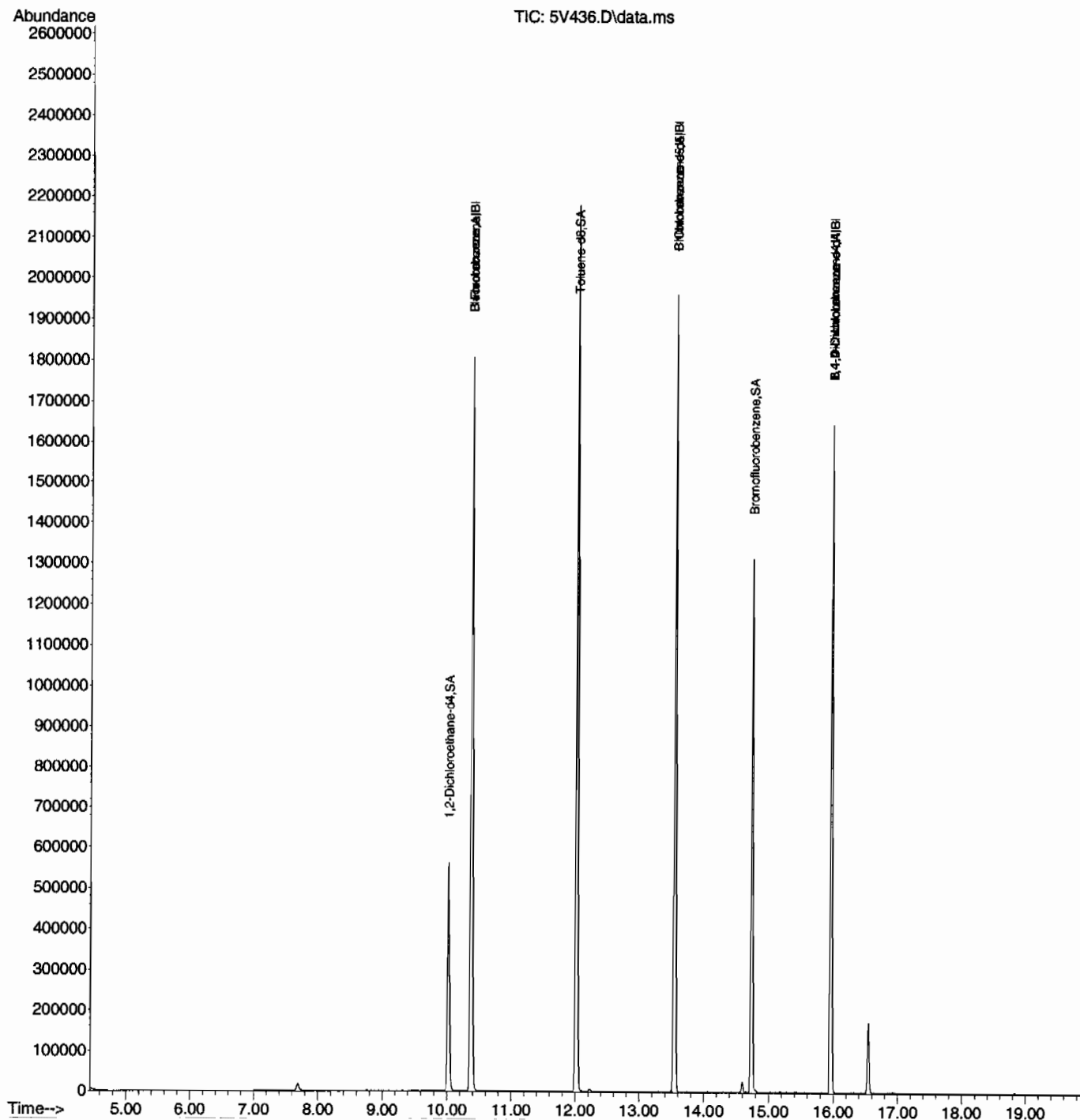
(E) = Over the calibration range (d) = deleted

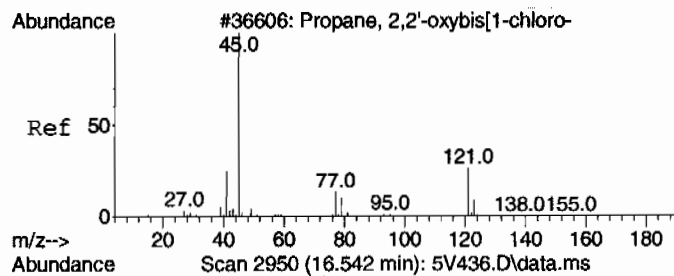
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
InstName : VOA5
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 29 10:18:32 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

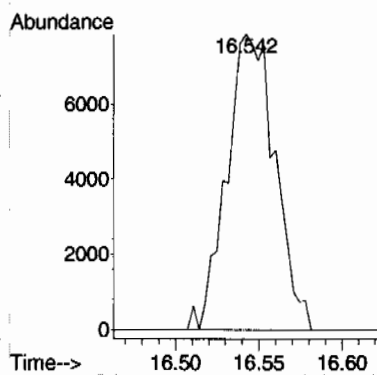
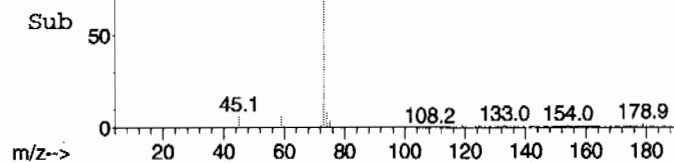
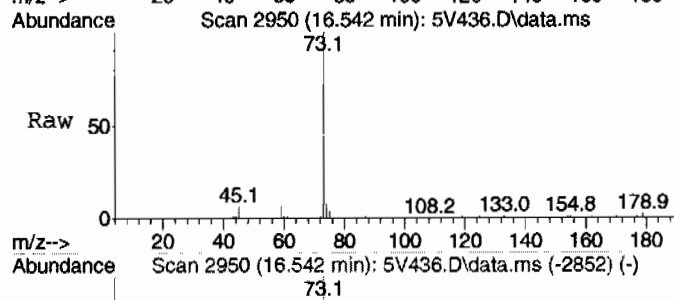
SubList :





#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 5.43 ug/L
 RT: 16.542 min Scan# 2950
 Delta R.T. 0.045 min
 Lab File: 5V436.D
 Acq: 29 Jan 2010 12:34 am

Tgt Ion: 45 Resp: 15777
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 49.2



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

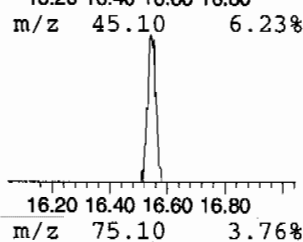
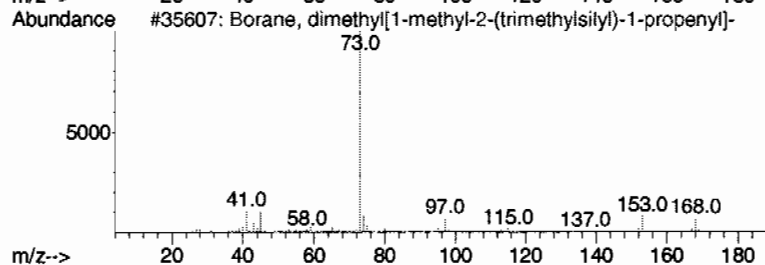
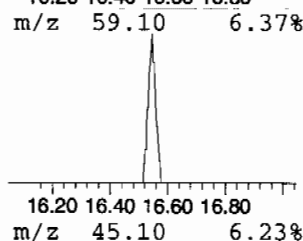
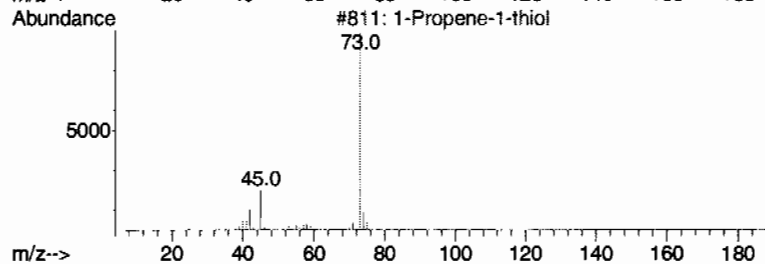
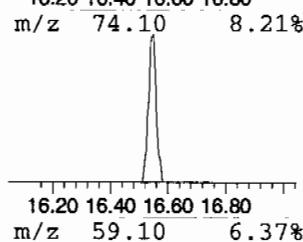
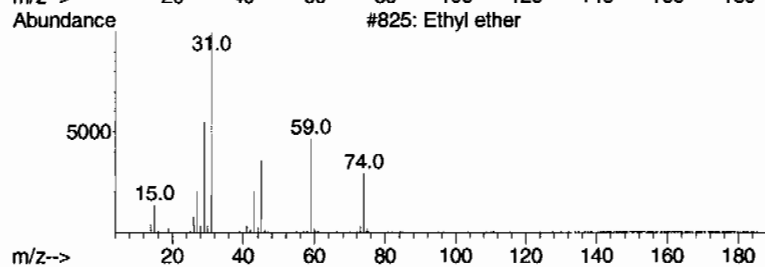
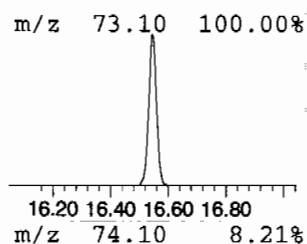
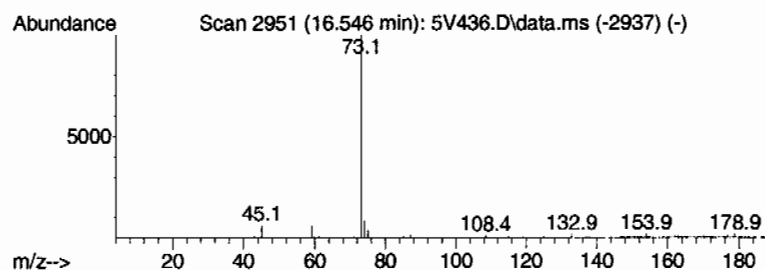
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD		R.T.	
16.546	5.68 ug/L	327395	B 1,4-Dichlorobenzene-d4		15.959	
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Ethyl ether	74	C4H10O	000060-29-7	5
2		1-Propene-1-thiol	74	C3H6S	000925-89-3	4
3		Borane, dimethyl[1-methyl-2-(tri...	168	C9H21BSi	062108-35-4	4
4		Silane, butyltrimethyl-	130	C7H18Si	001000-49-3	4
5		Cyclopropane, 2-methylene-1-pent...	196	C12H24Si	167300-47-2	4



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V436.D
Acq On : 29 Jan 2010 12:34 am
Operator : DXK1
Sample : |245387004|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	16.546	5.7	ug/L	327395	6	15.959	2879830	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387005
 Client ID: RE14-10-7688
 Batch ID: 946584
 Run Date: 01/29/2010 01:00
 Prep Date: 01/28/2010 15:32
 Data File: 012810V55V437.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	U	6.34	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.53	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.58	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	U	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387005

 Client ID: RE14-10-7688
 Batch ID: 946584
 Run Date: 01/29/2010 01:00
 Prep Date: 01/28/2010 15:32
 Data File: 012810V5V437.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	U	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	U	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.34	ug/kg	2.03	6.34
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	14.57	123	ug/kg	97	NJ
005989-27-5	D-Limonene	15.8	6.98	ug/kg	93	NJ
	unknown siloxane	16.54	9.19	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
InstName : VOA5
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 29 10:18:56 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1609416	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1028886	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	450819	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1609416	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1028886	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	450819	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	391848	52.39	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 104.78%			
43) Toluene-d8	12.016	12.016	0.887	98	1424358	50.76	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 101.52%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	485100	56.39	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 112.78%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.071	5.051	0.489	50	166	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.104	7.100	0.685	43	993	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.687	7.450	0.741	41	112	N.D.		
13) Methyl acetate	7.588	7.493	0.731	43	112	N.D.		
14) Carbon disulfide	7.510	7.511	0.724	76	278	N.D.		
15) Methylene chloride	7.687	7.691	0.741	84	3175	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	9.823	9.830	0.947	56	106	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.028	10.103	0.967	62	126	N.D.		
31) Benzene	0.000	10.127	0.000		0	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
InstName : VOA5
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 29 10:18:56 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	3725	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.551	13.639	1.000	91	1864	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.537	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.965	14.965	0.938	91	227	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	15.273	15.216	0.957	91	3147	N.D.	
69) tert-Butylbenzene	15.563	15.489	0.975	134	110	N.D.	
70) 1,2,4-Trimethylbenzene	15.577	15.527	0.976	105	2503	N.D.	
71) sec-Butylbenzene	15.577	15.711	0.976	105	2503	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	16.284	16.277	1.020	91	108	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.769	18.762	1.176	128	480	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.687	7.546	0.741	41	112	N.D.	
89) tert-Butyl Alcohol	7.684	7.673	0.741	59	116	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
InstName : VOA5
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 29 10:18:56 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.473	9.332	0.913	41	127	N.D.	
97) Tetrahydrofuran	9.477	9.466	0.913	42	124	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.834	14.856	0.929	53	601	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed

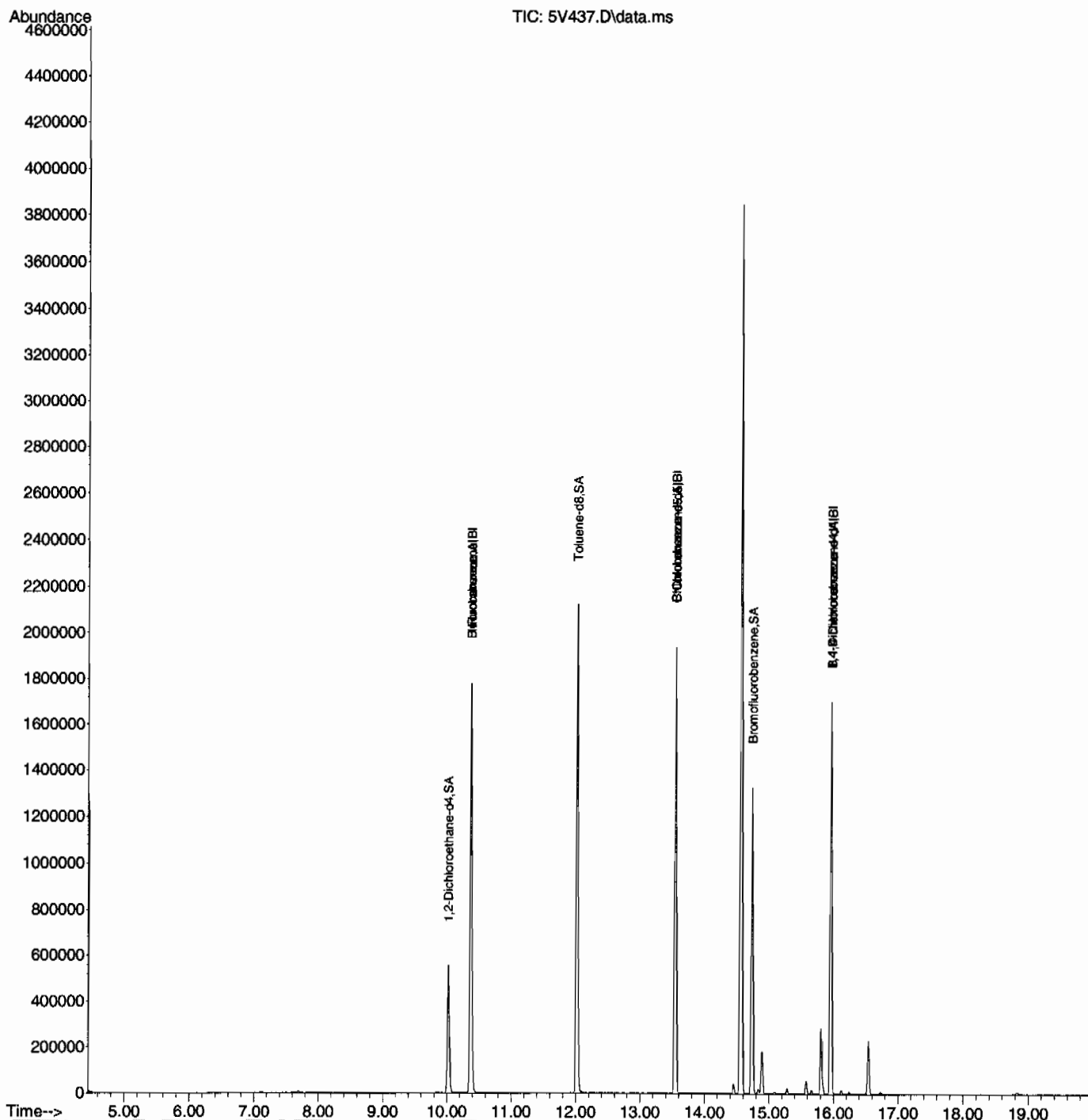
(E) = Over the calibration range (d) = deleted

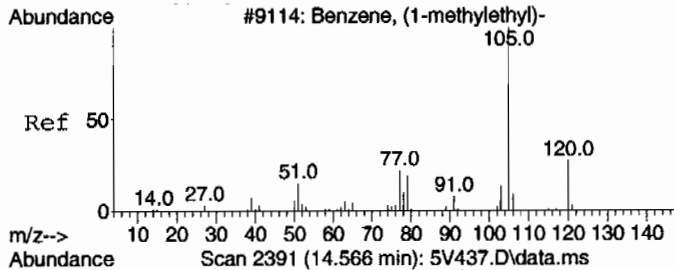
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
InstName : VOA5
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 29 10:18:56 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

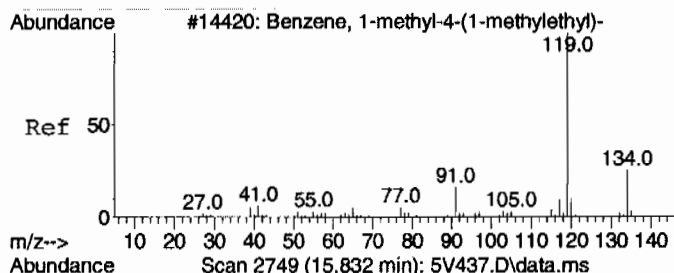
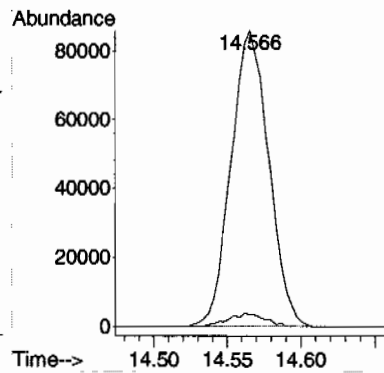
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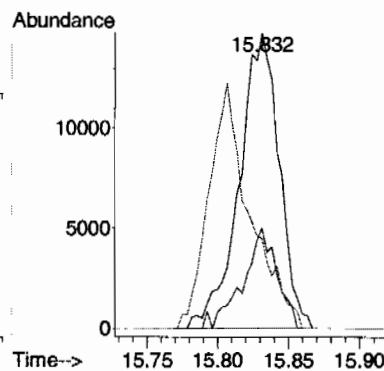
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 7.45 ug/L
RT: 14.566 min Scan# 2391
Delta R.T. 0.029 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

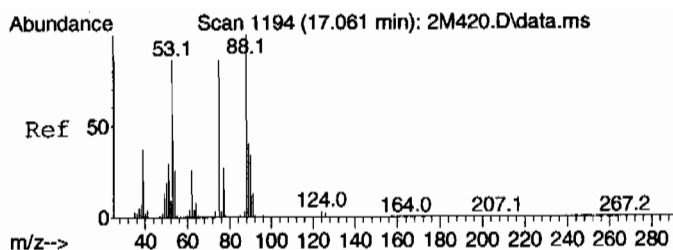
Tgt Ion	Ratio	Lower	Upper
105	100		
120	4.4	0.0	57.9



#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 1.64 ug/L
RT: 15.832 min Scan# 2749
Delta R.T. -0.000 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

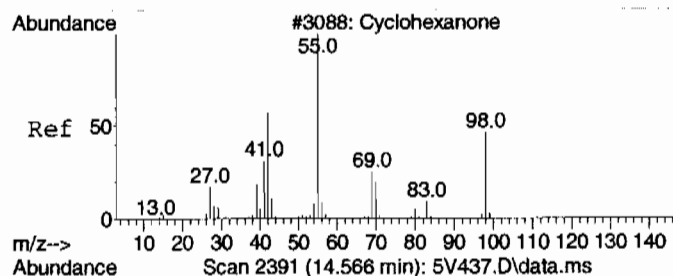
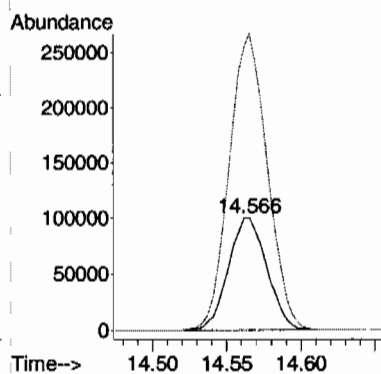
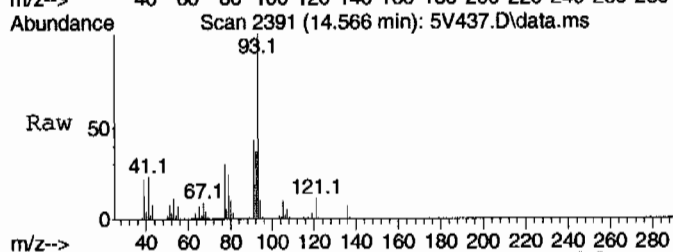
Tgt Ion	Ratio	Lower	Upper
119	100		
134	29.1	0.0	58.7
91	85.8	0.0	51.7#





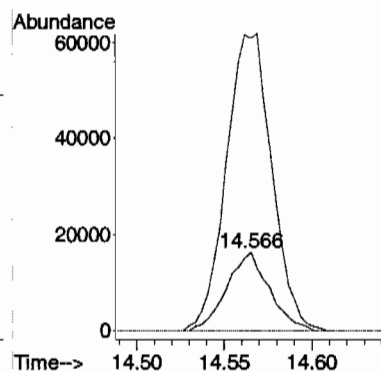
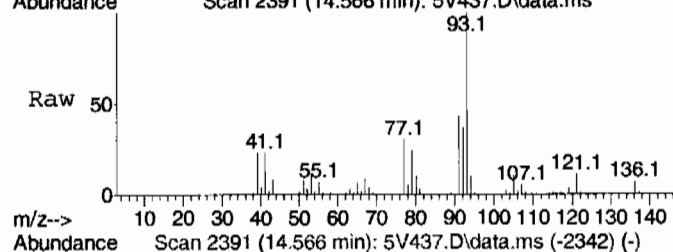
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 104.57 ug/L
RT: 14.566 min Scan# 2391
Delta R.T. -0.007 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

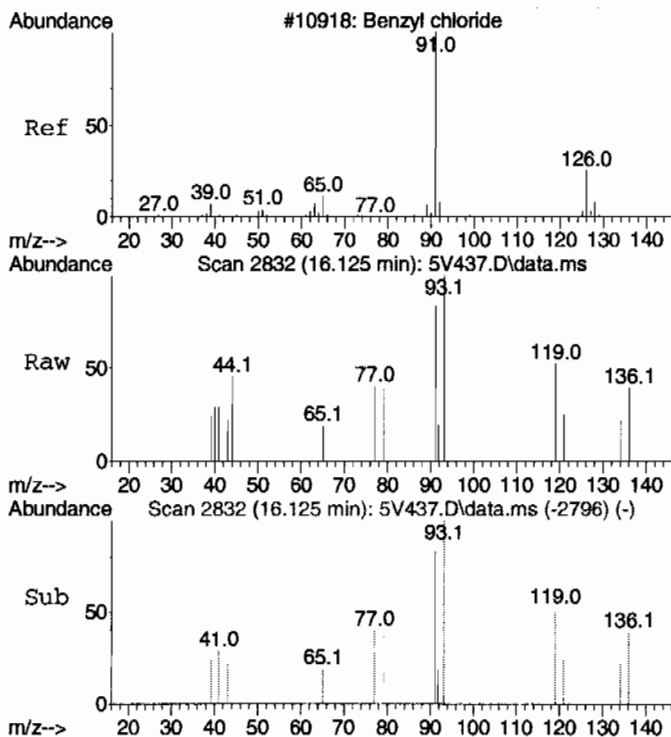
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	50.2	110.2#
77	263.2	0.0	59.6#



#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 80.07 ug/L
RT: 14.566 min Scan# 2391
Delta R.T. -0.127 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

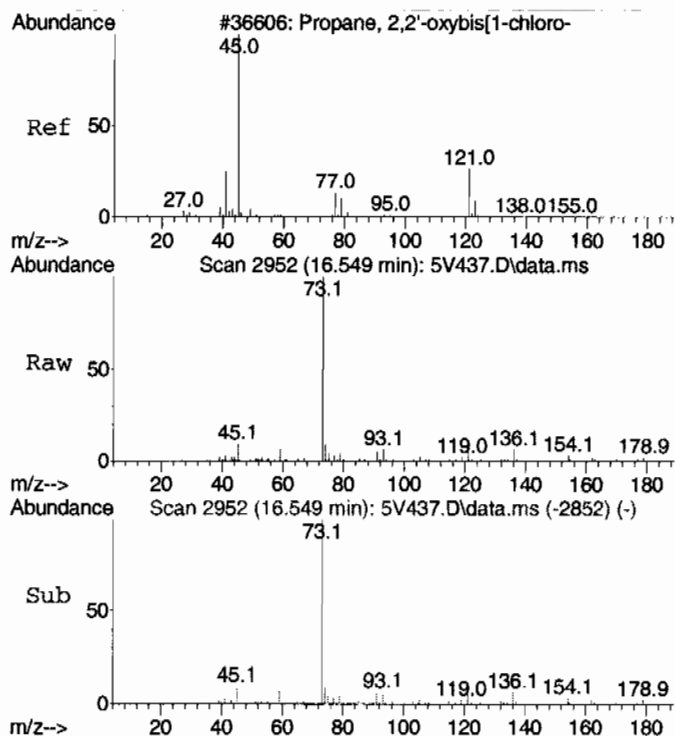
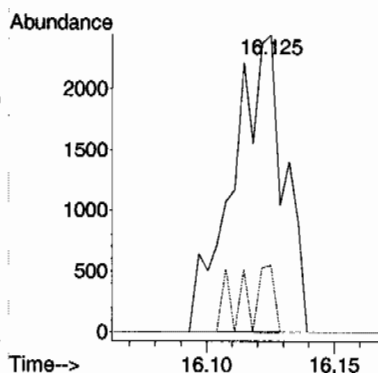
Tgt Ion	Ratio	Lower	Upper
42	100		
55	407.6	104.7	164.7#
98	0.0	21.5	81.5#





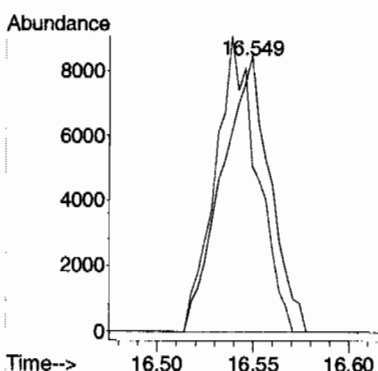
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.84 ug/L
RT: 16.125 min Scan# 2832
Delta R.T. 0.025 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	51.6
65	9.9	0.0	41.9



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl) ether
Concen: 4.89 ug/L
RT: 16.549 min Scan# 2952
Delta R.T. 0.052 min
Lab File: 5V437.D
Acq: 29 Jan 2010 1:00 am

Tgt Ion	Ratio	Lower	Upper
45	100		
121	93.8	0.0	49.2#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

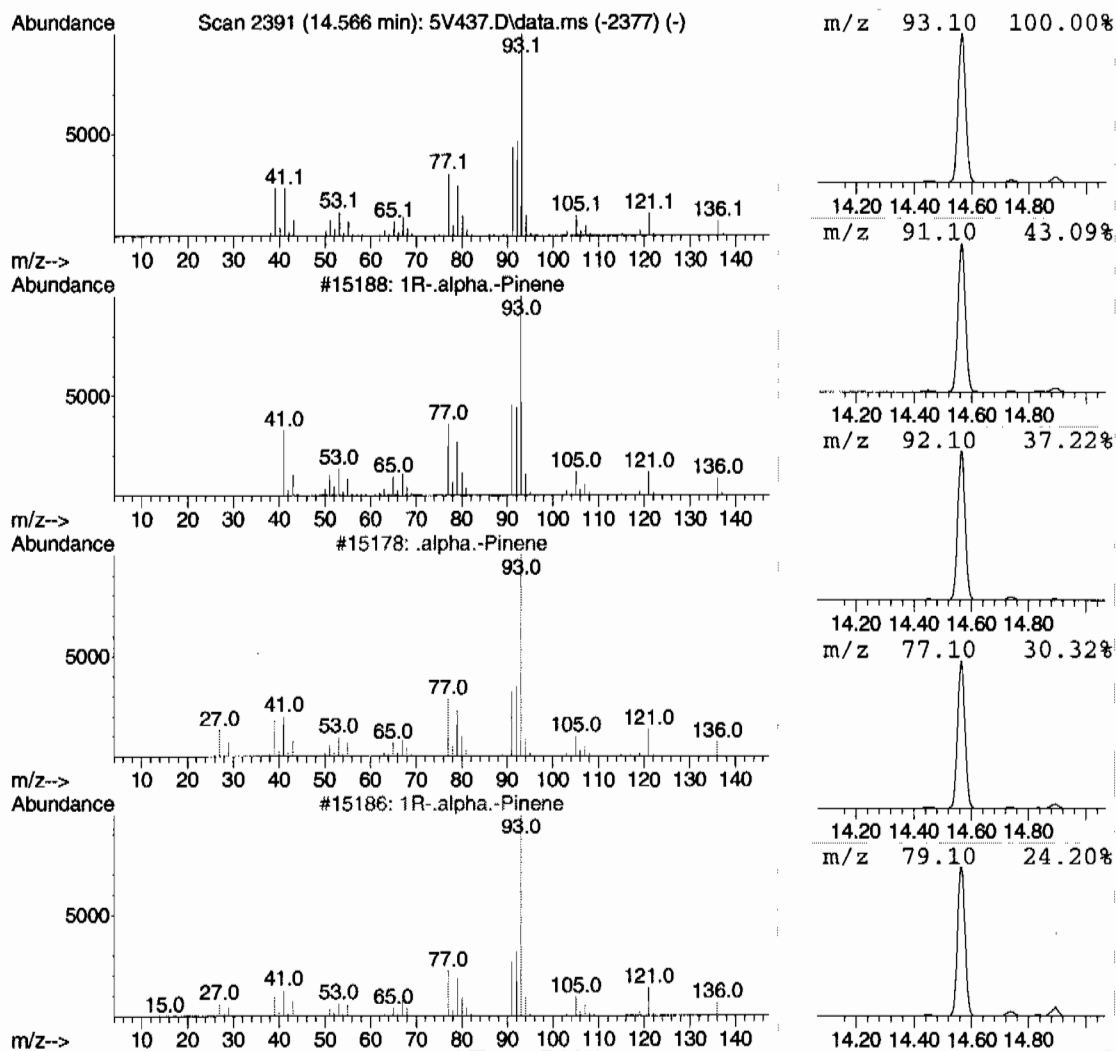
SubList :

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

Peak Number 1 1R-.alpha.-Pinene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.566	97.01 ug/L	6854630	B Chlorobenzene-d5	13.547

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2			.alpha.-Pinene	136	C10H16	000080-56-8	96
3			1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
4			Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94
5			.alpha.-Pinene	136	C10H16	000080-56-8	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

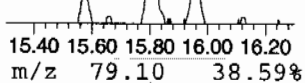
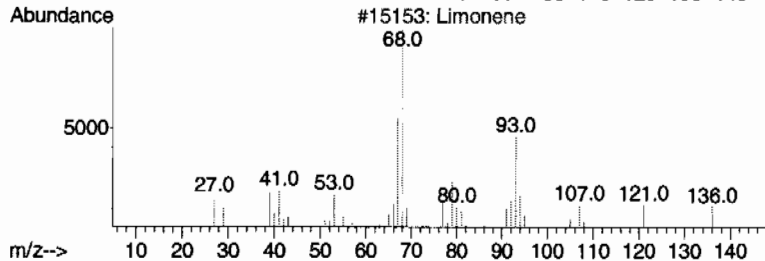
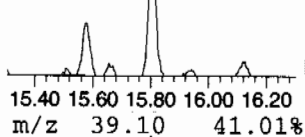
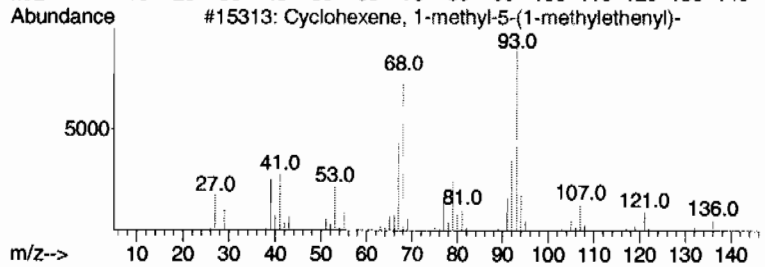
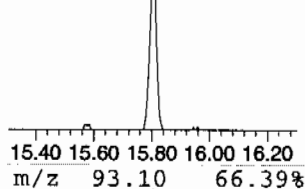
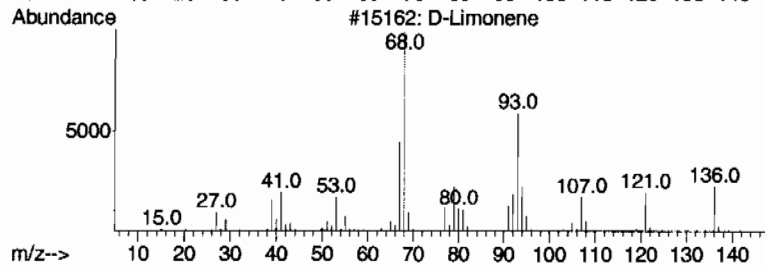
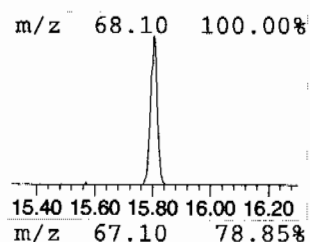
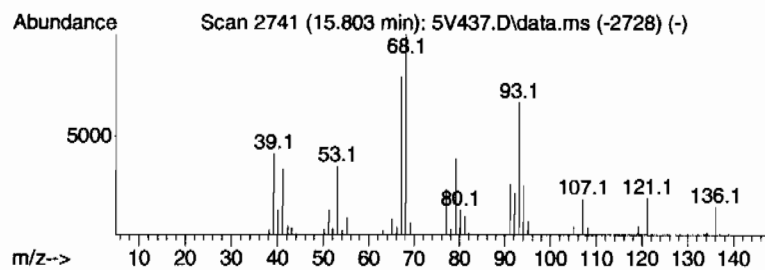
SubList :

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

Peak Number 2 D-Limonene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.803	5.51 ug/L	325771	1,4-Dichlorobenzene-d4	15.962

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			D-Limonene	136	C10H16	005989-27-5	93
2			Cyclohexene, 1-methyl-5-(1-methy...	136	C10H16	013898-73-2	90
3			Limonene	136	C10H16	000138-86-3	89
4			D-Limonene	136	C10H16	005989-27-5	76
5			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	007705-14-8	76



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

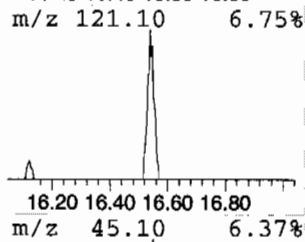
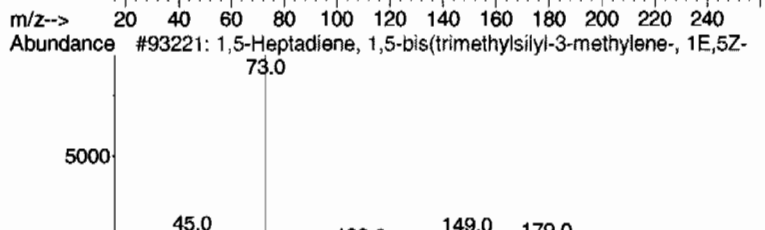
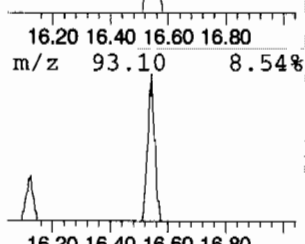
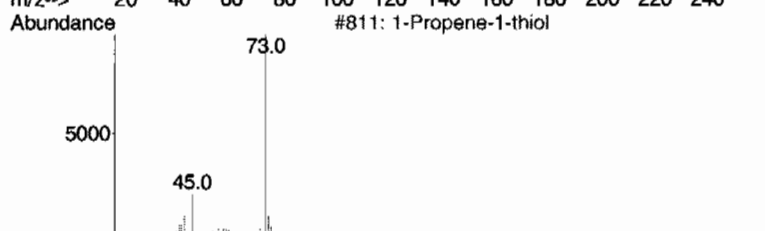
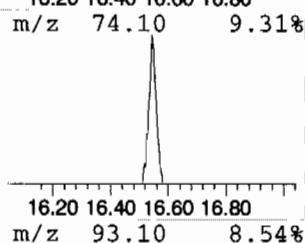
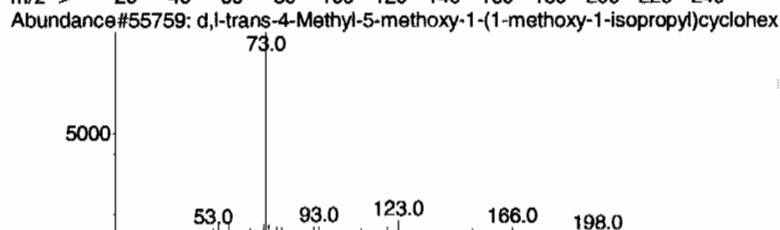
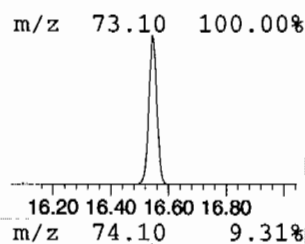
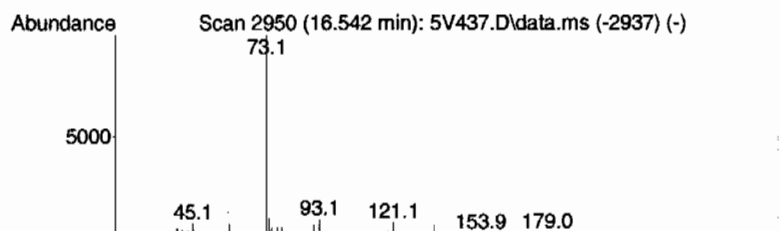
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 3 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD		R.T.	
16.542	7.25 ug/L	428846	B 1,4-Dichlorobenzene-d4		15.962	
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		d,l-trans-4-Methyl-5-methoxy-1-(...	198	C12H22O2	124547-59-7	33
2		1-Propene-1-thiol	74	C3H6S	000925-89-3	25
3		1,5-Heptadiene, 1,5-bis(trimethy...	252	C14H28Si2	1000153-97-1	9
4		1,3-Dioxolane, 2-(1-bromoethyl)-	180	C5H9BrO2	005267-73-2	9
5		1-Ethenyl-3-(1-hexenyl)-4-trimet...	250	C16H30Si	220399-93-9	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V437.D
Acq On : 29 Jan 2010 1:00 am
Operator : DXK1
Sample : |245387005|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
1R-.alpha.-Pinene	14.566	97.0	ug/L	6854630	4	13.547	3532840	50.0
D-Limonene	15.803	5.5	ug/L	325771	5	15.962	2956570	50.0
unknown siloxane	16.542	7.3	ug/L	428846	6	15.962	2956570	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387006

 Client ID: RE14-10-7684
 Batch ID: 946584
 Run Date: 01/29/2010 01:26
 Prep Date: 01/28/2010 15:33
 Data File: 012810V55V438.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 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	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387006
 Client ID: RE14-10-7684
 Batch ID: 946584
 Run Date: 01/29/2010 01:26
 Prep Date: 01/28/2010 15:33
 Data File: 012810V55V438.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 12.8
 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	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	7.81	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
InstName : VOA5
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 29 10:19:08 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.375	10.375	1.000	96	1589451	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1013435	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	435511	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1589451	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1013435	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	435511	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	406238	54.99	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	109.98%			
43) Toluene-d8	12.019	12.016	0.887	98	1416572	51.25	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	102.50%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	486790	58.58	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	117.16%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.061	5.051	0.488	50	157	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.104	7.100	0.685	43	164	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.680	7.450	0.740	41	111	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.514	7.511	0.724	76	525	N.D.		
15) Methylene chloride	7.687	7.691	0.741	84	6052	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	8.306	8.458	0.801	43	248	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.371	10.127	1.000	78	1678	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
InstName : VOA5
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 29 10:19:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.097	12.090	0.893	91	122	N.D.	
45) trans-1,3-Dichloroprop...	12.221	12.239	0.902	75	112	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.636	13.639	1.007	91	108	N.D.	
55) m,p-Xylenes	13.752	13.749	1.015	106	159	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.594	14.537	0.914	105	3456	N.D.	
62) 1,1,2,2-Tetrachloroethane	14.587	14.810	0.914	83	375	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.785	14.965	0.926	91	7026	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.959	15.832	1.000	119	109	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.769	18.762	1.176	128	647	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.680	7.546	0.740	41	111	N.D.	
89) tert-Butyl Alcohol	7.677	7.673	0.740	59	261	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
InstName : VOA5
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 29 10:19:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.466	9.332	0.912	41	1499	N.D.	
97) Tetrahydrofuran	9.463	9.466	0.912	42	1120	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.767	14.573	0.925	53	1038	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

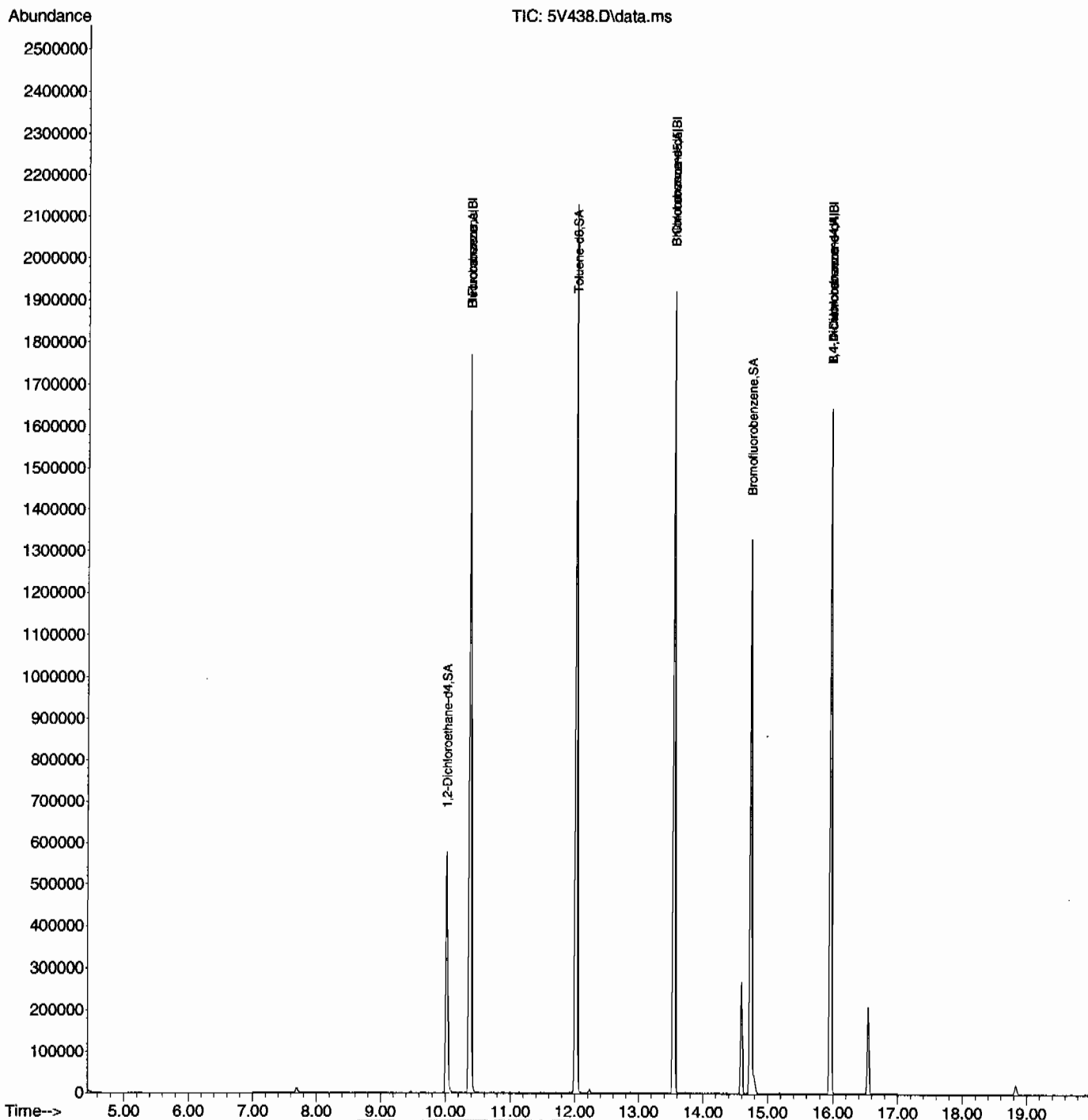
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

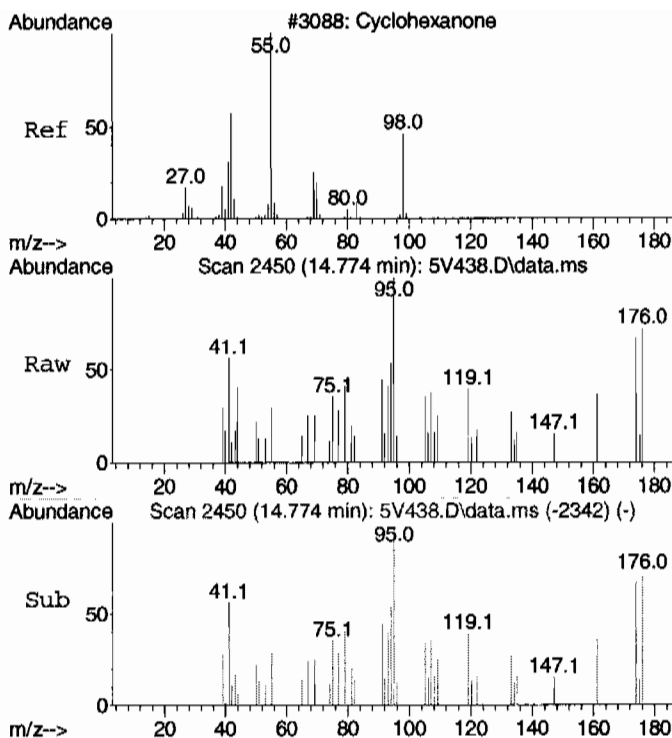
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
InstName : VOA5
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 29 10:19:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

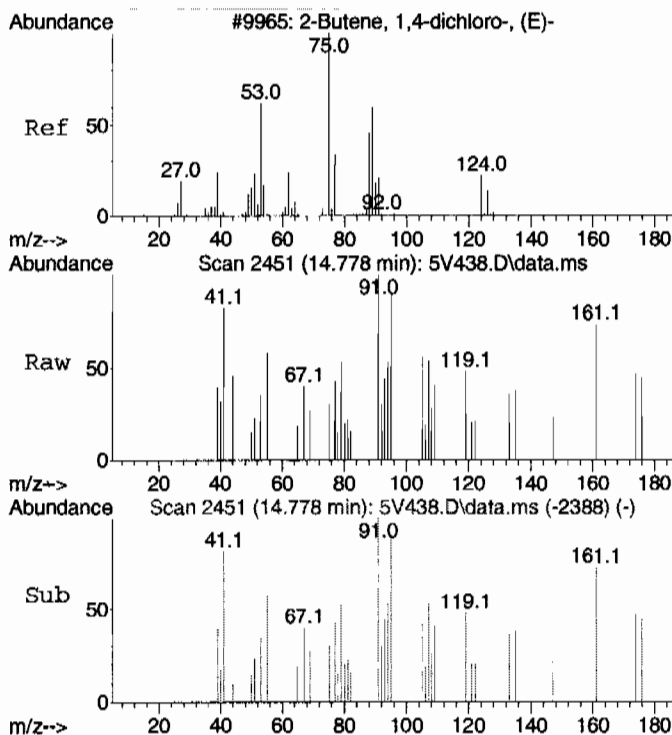
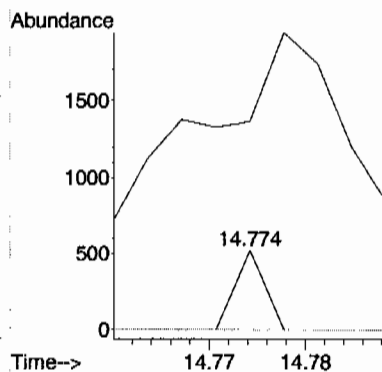
SubList :





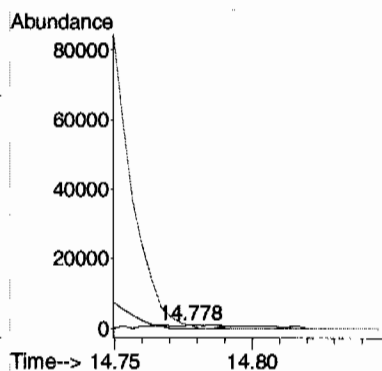
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 28.31 ug/L
RT: 14.774 min Scan# 2450
Delta R.T. 0.081 min
Lab File: 5V438.D
Acq: 29 Jan 2010 1:26 am

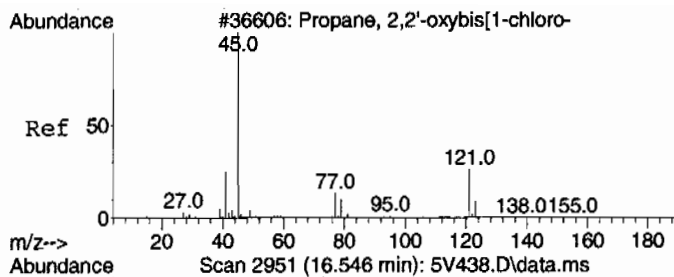
Tgt Ion: 42 Resp: 111
Ion Ratio Lower Upper
42 100
55 2089.2 104.7 164.7#
98 0.0 21.5 81.5#



#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 1.30 ug/L
RT: 14.778 min Scan# 2451
Delta R.T. -0.078 min
Lab File: 5V438.D
Acq: 29 Jan 2010 1:26 am

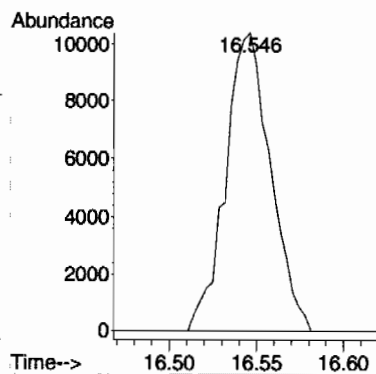
Tgt Ion: 53 Resp: 2059
Ion Ratio Lower Upper
53 100
88 0.0 7.6 67.6#
75 6.2 86.0 146.0#





#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl) ether
 Concen: 6.44 ug/L
 RT: 16.546 min Scan# 2951
 Delta R.T. 0.049 min
 Lab File: 5V438.D
 Acq: 29 Jan 2010 1:26 am

Tgt Ion: 45 Resp: 18700
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 49.2



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

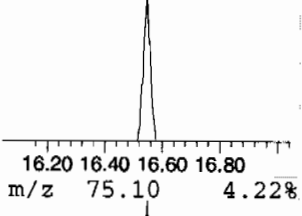
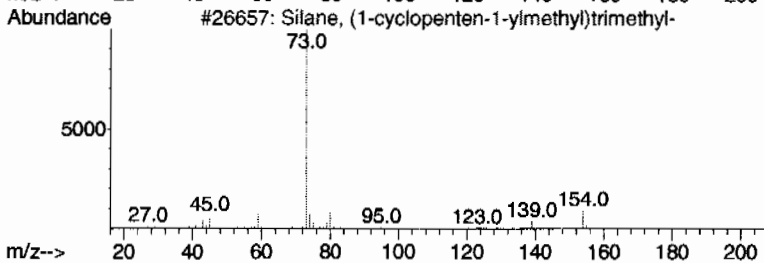
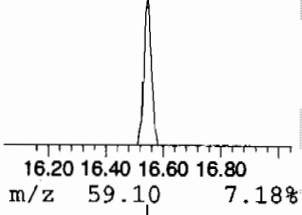
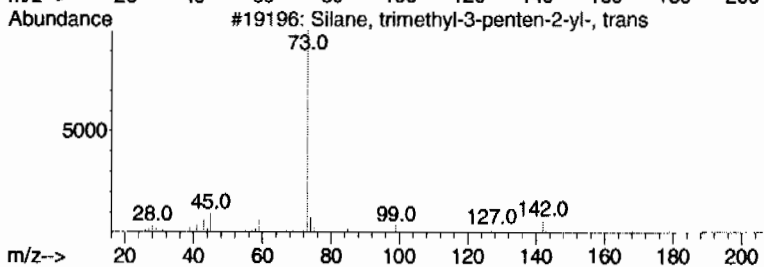
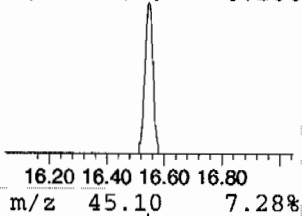
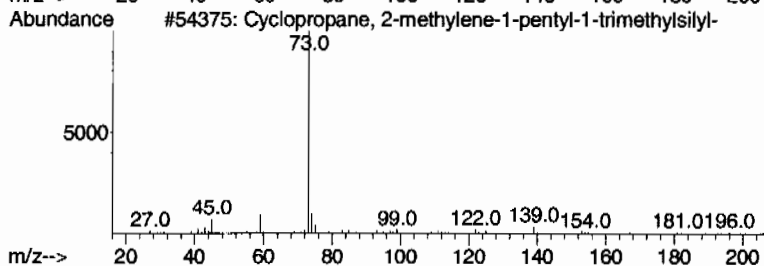
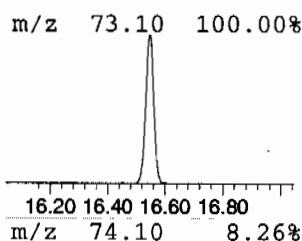
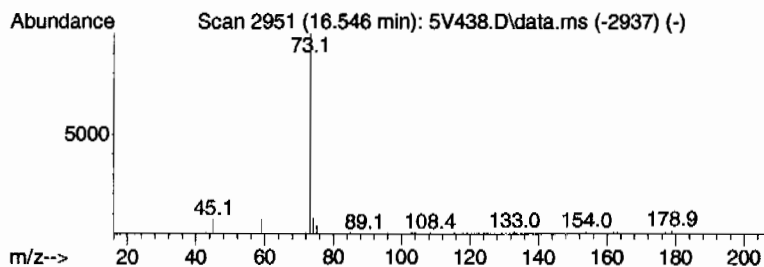
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.		
16.546	6.81 ug/L	391499	B 1,4-Dichlorobenzene-d4	15.959		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclopropane, 2-methylene-1-pent...	196	C12H24Si	167300-47-2	42
2		Silane, trimethyl-3-penten-2-yl-...	142	C8H18Si	053264-56-5	9
3		Silane, (1-cyclopenten-1-ylmethy...	154	C9H18Si	075311-60-3	9
4		1-Propene-1-thiol	74	C3H6S	000925-89-3	7
5		Ethyl ether	74	C4H10O	000060-29-7	5



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V438.D
Acq On : 29 Jan 2010 1:26 am
Operator : DXK1
Sample : |245387006|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	16.546	6.8	ug/L	391499	6	15.959	2874210	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387008
 Client ID: RE14-10-7681
 Batch ID: 946584
 Run Date: 01/29/2010 02:18
 Prep Date: 01/28/2010 15:35
 Data File: 012810V55V440.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.5
 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	0.387	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.387	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.387	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.387	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.387	1.29
67-64-1	Acetone	U	6.45	ug/kg	2.14	6.45
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
74-88-4	Iodomethane	U	6.45	ug/kg	2.06	6.45
75-09-2	Methylene chloride	U	6.45	ug/kg	2.58	6.45
75-15-0	Carbon disulfide	U	6.45	ug/kg	1.61	6.45
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.387	1.29
78-93-3	2-Butanone	U	6.45	ug/kg	1.93	6.45
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.387	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.387	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.426	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.387	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.387	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.387	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.387	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.387	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.426	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.387	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.387	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.387	1.29
108-10-1	4-Methyl-2-pentanone	U	6.45	ug/kg	1.61	6.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.387	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.387	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.387	1.29
591-78-6	2-Hexanone	U	6.45	ug/kg	1.93	6.45
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.387	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.387	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.387	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.387	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.387	1.29

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387008

 Client ID: RE14-10-7681
 Batch ID: 946584
 Run Date: 01/29/2010 02:18
 Prep Date: 01/28/2010 15:35
 Data File: 012810V55V440.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.5
 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	1.29	ug/kg	0.387	1.29
179601-23-1	m,p-Xylenes	U	2.58	ug/kg	0.387	2.58
95-47-6	o-Xylene	U	1.29	ug/kg	0.387	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.387	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.387	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.387	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.387	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.387	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.387	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.387	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.387	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.387	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.387	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.387	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.387	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.387	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.387	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.45	ug/kg	2.06	6.45
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.387	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.387	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\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
InstName : VOA5
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 29 10:20:15 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1524242	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	990060	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	433203	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1524242	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	990060	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	433203	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	391694	55.29	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 110.58%			
43) Toluene-d8	12.019	12.016	0.887	98	1340687	49.65	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 99.30%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	458293	55.44	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 110.88%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.091	5.051	0.491	50	344	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.104	7.100	0.685	43	3041	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.680	7.450	0.740	41	111	N.D.		
13) Methyl acetate	7.677	7.493	0.740	43	120	N.D.		
14) Carbon disulfide	7.503	7.511	0.723	76	563	N.D.		
15) Methylene chloride	7.698	7.691	0.742	84	6516	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.039	10.103	0.968	62	117	N.D.		
31) Benzene	10.375	10.127	1.000	78	1670	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0m	N.D.	d	
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
InstName : VOA5
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 29 10:20:15 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	4943	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.547	13.639	1.000	91	1604	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.537	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.742	14.965	0.924	91	1202	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.534	15.527	0.973	105	106	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	119	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.754	18.762	1.175	128	129	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.680	7.546	0.740	41	111	N.D.	
89) tert-Butyl Alcohol	7.673	7.673	0.740	59	146	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
InstName : VOA5
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 29 10:20:15 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.466	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.546	16.497	1.037	45	431	N.D.	

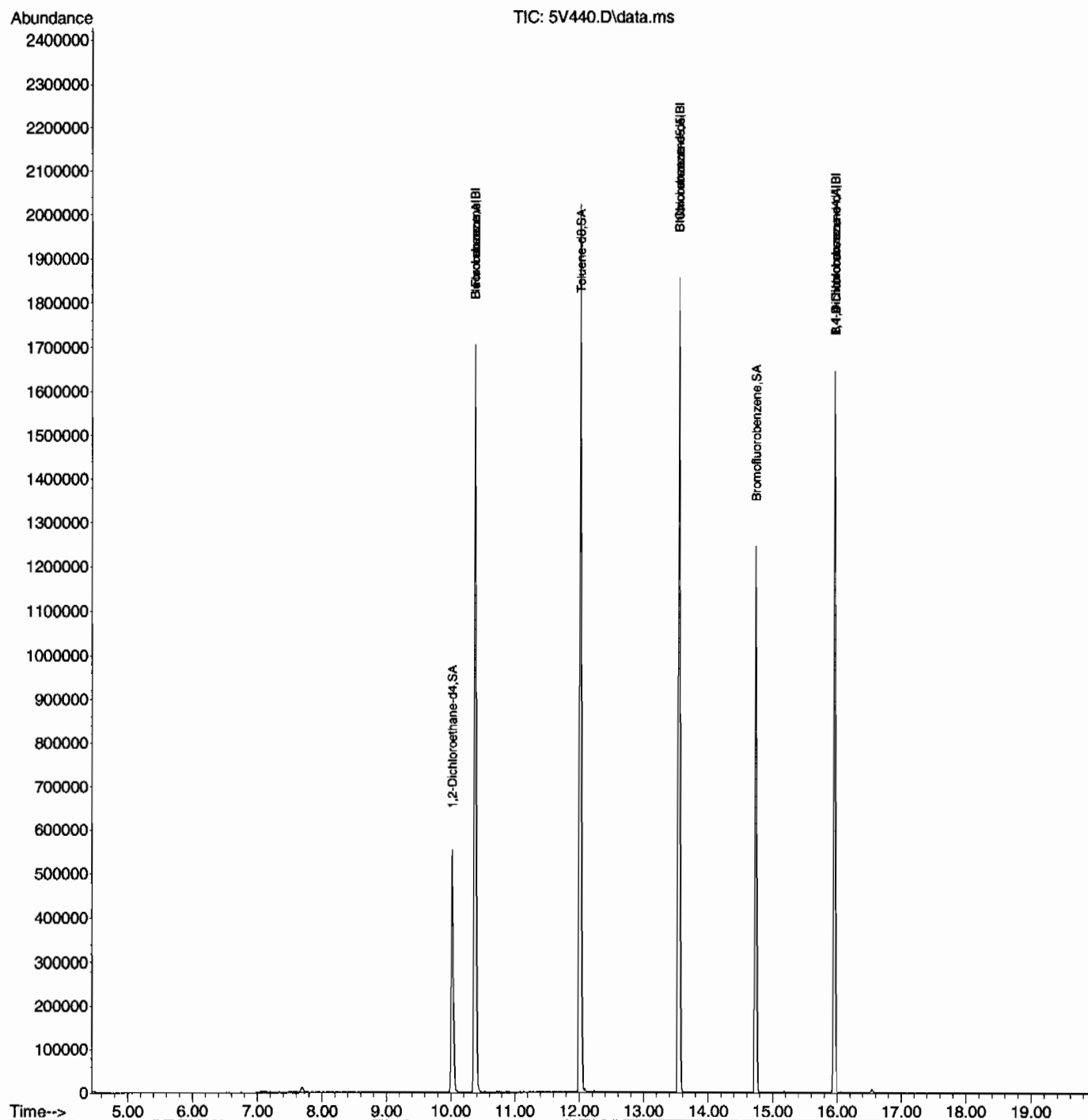
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

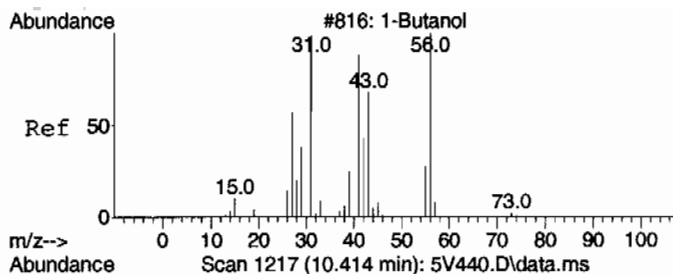
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
InstName : VOA5
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 29 10:20:15 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

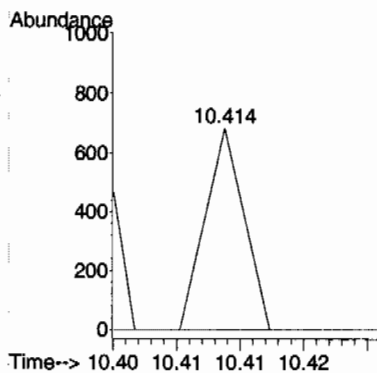
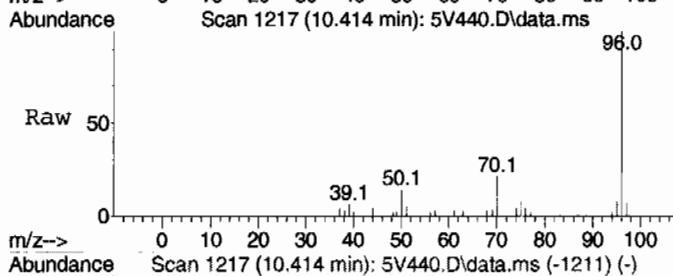
SubList :





#33 BEFORE analyst DELETION
 n-Butyl alcohol
 Concen: 98.31 ug/L
 RT: 10.414 min Scan# 1217
 Delta R.T. -0.046 min
 Lab File: 5V440.D
 Acq: 29 Jan 2010 2:18 am

Tgt Ion	Ratio	Lower	Upper
56	100		
41	0.0	47.2	107.2#
43	0.0	31.2	91.2#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V440.D
Acq On : 29 Jan 2010 2:18 am
Operator : DXK1
Sample : |245387008|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

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

SDG Number: 10-1384
 Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE14-10-7682
 Batch ID: 946584
 Run Date: 01/29/2010 02:43
 Prep Date: 01/28/2010 15:36
 Data File: 012810V55V441.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387009

Client ID: RE14-10-7682
Batch ID: 946584
Run Date: 01/29/2010 02:43
Prep Date: 01/28/2010 15:36
Data File: 012810V5V441.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 12.8
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	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

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\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
InstName : VOA5
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 29 10:20:27 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.375	10.375	1.000	96	1533311	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	999693	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	455353	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1533311	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	999693	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	455353	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	406445	57.03	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	114.06%			
43) Toluene-d8	12.020	12.016	0.887	98	1340262	49.16	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	98.32%			
61) Bromofluorobenzene	14.735	14.739	0.923	95	481976	55.47	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	110.94%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.031	5.051	0.485	50	201	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.111	7.100	0.685	43	1333	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.656	7.450	0.738	41	117	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.511	7.511	0.724	76	426	N.D.		
15) Methylene chloride	7.695	7.691	0.742	84	3679	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	0.000	9.077	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.375	10.127	1.000	78	1555	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
InstName : VOA5
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 29 10:20:27 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.090	12.090	0.892	91	510	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.540	13.639	0.999	91	1938	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.590	14.537	0.914	105	457	N.D.	
62) 1,1,2,2-Tetrachloroethane	14.605	14.810	0.915	83	171	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.753	14.965	0.924	91	125	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.762	18.762	1.176	128	228	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.656	7.546	0.738	41	117	N.D.	
89) tert-Butyl Alcohol	7.673	7.673	0.740	59	292	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.088	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
InstName : VOA5
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 29 10:20:27 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.477	9.332	0.913	41	1152	N.D.	
97) Tetrahydrofuran	9.473	9.466	0.913	42	2736	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed

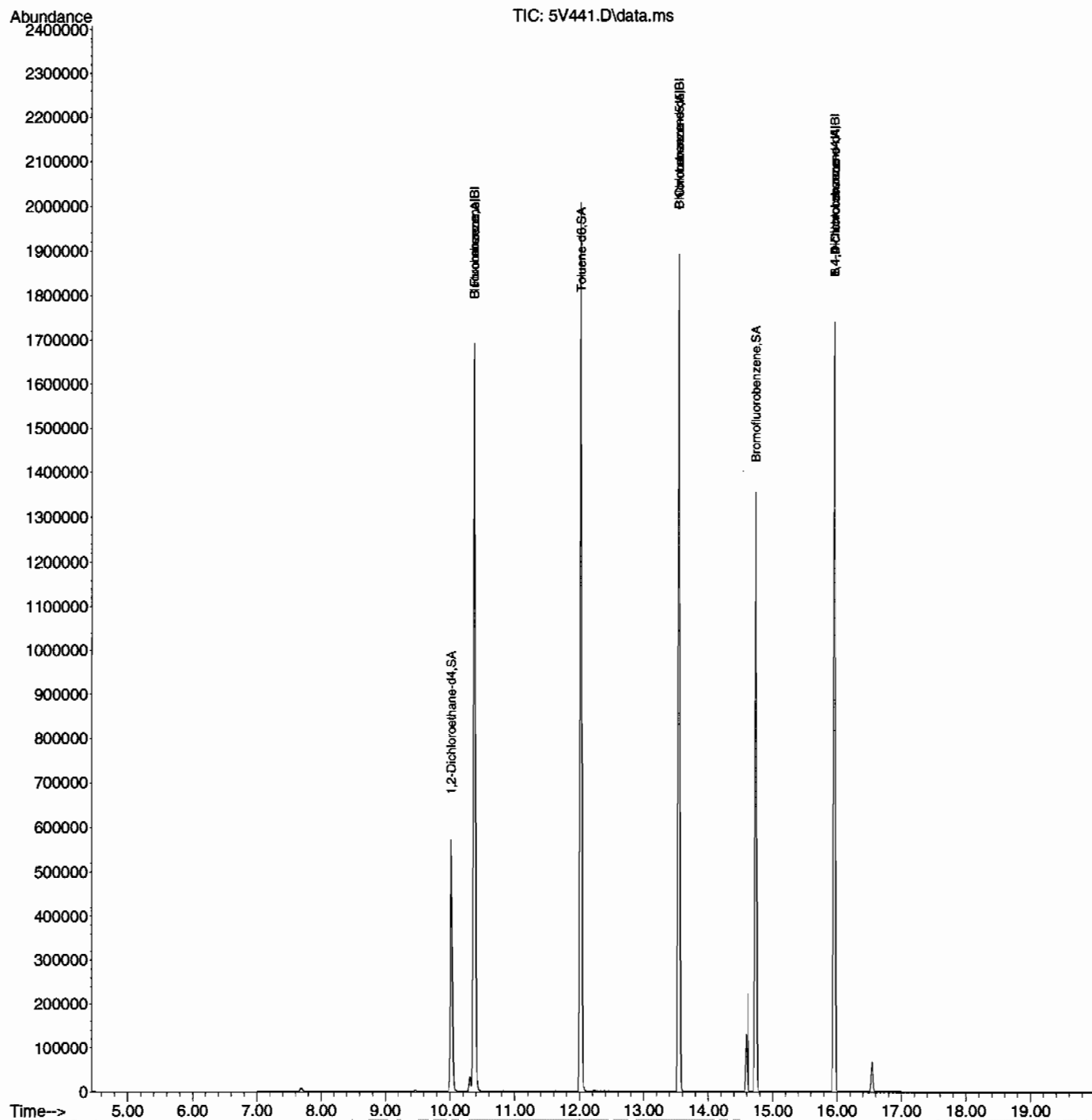
(E) = Over the calibration range (d) = deleted

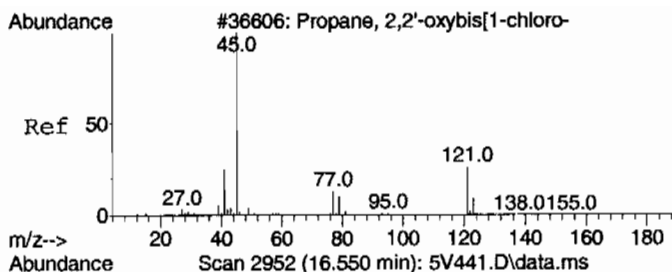
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
InstName : VOA5
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 29 10:20:27 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

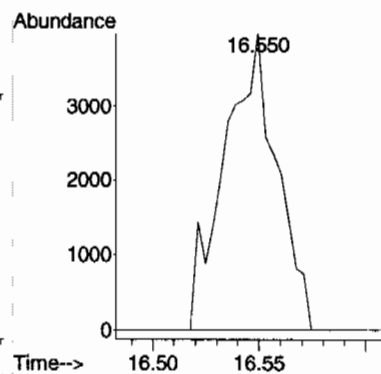
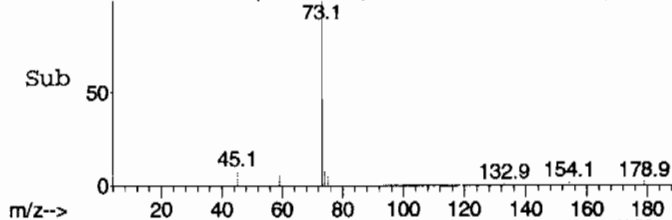
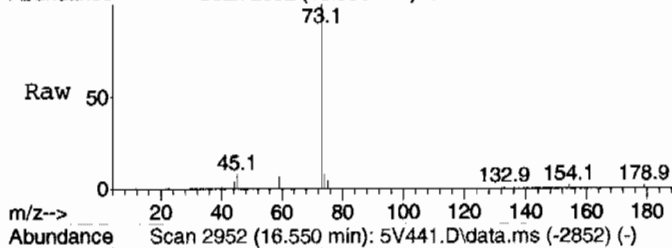
SubList :





#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.22 ug/L
RT: 16.550 min Scan# 2952
Delta R.T. 0.053 min
Lab File: 5V441.D
Acq: 29 Jan 2010 2:43 am

Tgt Ion: 45 Resp: 6751
Ion Ratio Lower Upper
45 100
121 0.0 0.0 49.2



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V441.D
Acq On : 29 Jan 2010 2:43 am
Operator : DXK1
Sample : |245387009|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

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

SDG Number: 10-1384
 Lab Sample ID: 245387010
 Client ID: RE14-10-7685
 Batch ID: 946584
 Run Date: 01/29/2010 03:09
 Prep Date: 01/28/2010 15:37
 Data File: 012810V5\5V442.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.3
 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	1.18	ug/kg	0.401	1.18
74-87-3	Chloromethane	U	1.18	ug/kg	0.354	1.18
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.354	1.18
74-83-9	Bromomethane	U	1.18	ug/kg	0.354	1.18
75-00-3	Chloroethane	U	1.18	ug/kg	0.354	1.18
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.354	1.18
67-64-1	Acetone	U	5.90	ug/kg	1.96	5.90
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
74-88-4	Iodomethane	U	5.90	ug/kg	1.89	5.90
75-09-2	Methylene chloride	U	5.90	ug/kg	2.36	5.90
75-15-0	Carbon disulfide	U	5.90	ug/kg	1.48	5.90
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.354	1.18
78-93-3	2-Butanone	U	5.90	ug/kg	1.77	5.90
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.354	1.18
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
67-66-3	Chloroform	U	1.18	ug/kg	0.354	1.18
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.389	1.18
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.354	1.18
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.354	1.18
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.354	1.18
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.354	1.18
71-43-2	Benzene	U	1.18	ug/kg	0.354	1.18
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.389	1.18
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.354	1.18
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.354	1.18
74-95-3	Dibromomethane	U	1.18	ug/kg	0.354	1.18
108-10-1	4-Methyl-2-pentanone	U	5.90	ug/kg	1.48	5.90
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
108-88-3	Toluene	U	1.18	ug/kg	0.354	1.18
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.354	1.18
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.354	1.18
591-78-6	2-Hexanone	U	5.90	ug/kg	1.77	5.90
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.354	1.18
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.354	1.18
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.354	1.18
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.354	1.18
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.354	1.18

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 245387010

Client ID: RE14-10-7685
Batch ID: 946584
Run Date: 01/29/2010 03:09
Prep Date: 01/28/2010 15:37
Data File: 012810V55V442.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 15.3
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	1.18	ug/kg	0.354	1.18
179601-23-1	m,p-Xylenes	U	2.36	ug/kg	0.354	2.36
95-47-6	o-Xylene	U	1.18	ug/kg	0.354	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.354	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.354	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.354	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.354	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.354	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.354	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.354	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.354	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.354	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.354	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.354	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.354	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.354	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.90	ug/kg	1.89	5.90
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.354	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.354	1.18

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\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
InstName : VOA5
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 29 10:05:42 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1488933	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	924980	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	366769	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1488933	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	924980	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	366769	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.025	10.021	0.966	65	371023	53.62	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 107.24%			
43) Toluene-d8	12.016	12.016	0.887	98	1291174	51.18	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 102.36%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	411848	58.85	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 117.70%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.051	5.051	0.487	50	152	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.100	7.100	0.684	43	166	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.698	7.450	0.742	41	106	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.511	7.511	0.724	76	242	N.D.		
15) Methylene chloride	7.691	7.691	0.741	84	3019	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.091	9.077	0.876	43	107	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.375	10.127	1.000	78	1559	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
InstName : VOA5
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 29 10:05:42 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	0.000	12.090	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.551	13.639	1.000	91	1735	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.537	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.785	14.965	0.926	91	352	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.762	18.762	1.176	128	151	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.698	7.546	0.742	41	106	N.D.	
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	9.091	9.088	0.876	43	107	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
InstName : VOA5
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 29 10:05:42 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	9.466	9.466	0.912	42	139	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.539	16.497	1.036	45	3080	N.D.	

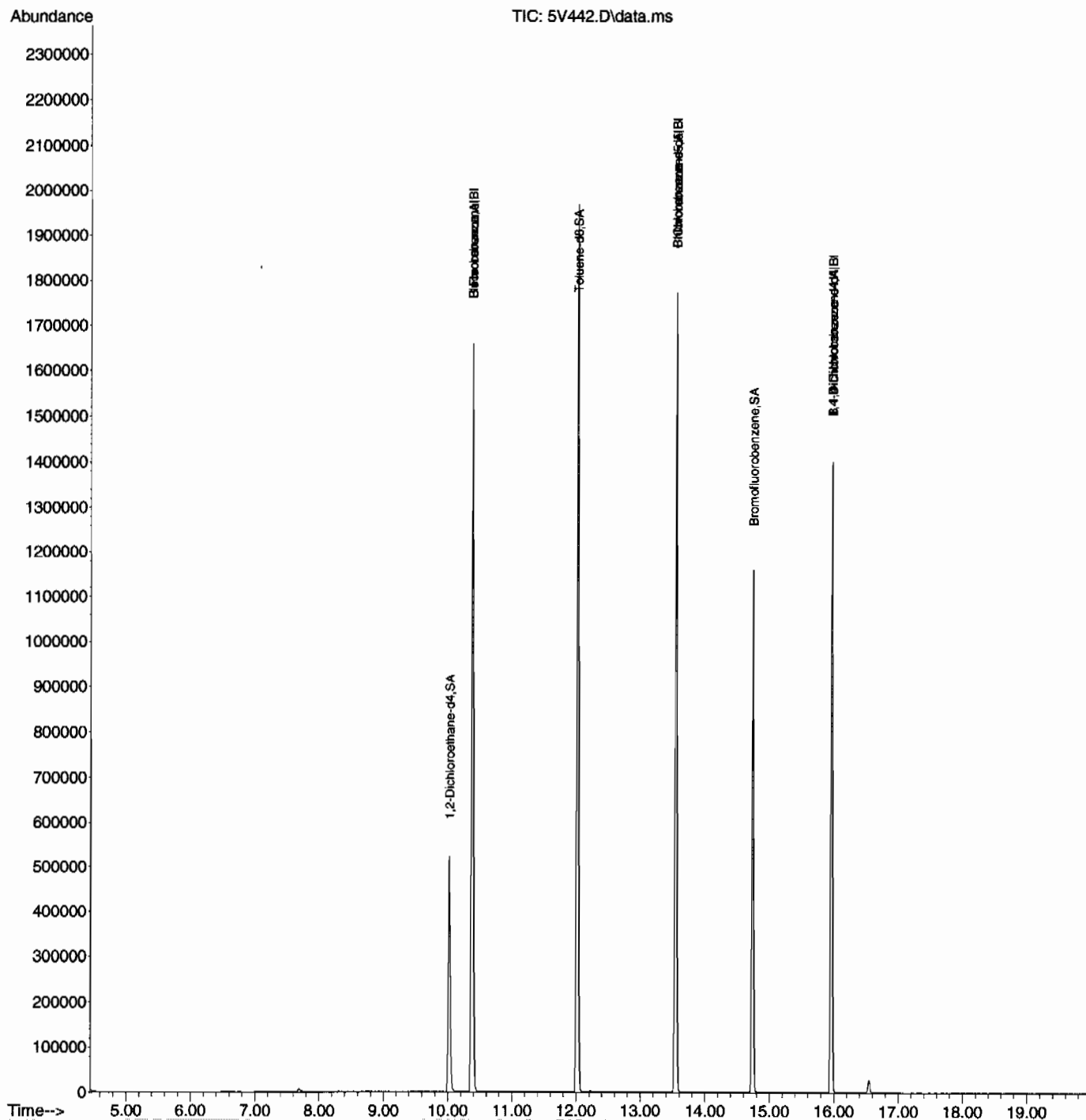
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
InstName : VOA5
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 29 10:05:42 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V442.D
Acq On : 29 Jan 2010 3:09 am
Operator : DXK1
Sample : |245387010|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

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

SDG Number: 10-1384
Lab Sample ID: 245387012

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

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

Client ID: RE14-10-7691
Batch ID: 946584
Run Date: 01/29/2010 04:01
Prep Date: 01/28/2010 15:39
Data File: 012810V5SV444.D

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

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1384
Lab Sample ID: 245387012

Client ID: RE14-10-7691
Batch ID: 946584
Run Date: 01/29/2010 04:01
Prep Date: 01/28/2010 15:39
Data File: 012810V5SV444.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: S

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
InstName : VOA5
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 29 10:05:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1473666	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	952978	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	418334	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1473666	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	952978	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	418334	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.022	10.021	0.966	65	371727	54.27	ug/L	0.00
Spiked Amount 50.000	Range 68	- 131	Recovery	=	108.54%			
43) Toluene-d8	12.016	12.016	0.887	98	1313773	50.55	ug/L	0.00
Spiked Amount 50.000	Range 75	- 129	Recovery	=	101.10%			
61) Bromofluorobenzene	14.736	14.739	0.923	95	438178	54.89	ug/L	0.00
Spiked Amount 50.000	Range 68	- 133	Recovery	=	109.78%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.041	5.051	0.486	50	340	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.111	7.100	0.685	43	3205	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	0.000	7.450	0.000		0	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.507	7.511	0.724	76	467	N.D.		
15) Methylene chloride	7.695	7.691	0.742	84	3681	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.458	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.070	9.077	0.874	43	284	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.379	10.127	1.000	78	1415	N.D.		
32) Cyclohexene	10.361	10.248	0.999	67	115	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
InstName : VOA5
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 29 10:05:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	235	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	12.631	12.631	0.932	43	367	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.632	13.639	1.006	91	133	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.750	14.537	0.924	105	108	N.D.	
62) 1,1,2,2-Tetrachloroethane	14.743	14.810	0.924	83	121	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.732	14.965	0.923	91	1163	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.216	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	15.711	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	0.000	18.762	0.000		0	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	0.000	7.546	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.	
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	9.084	9.088	0.876	43	1149	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
InstName : VOA5
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 29 10:05:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	9.463	9.466	0.912	42	109	N.D.	
98) Isobutyl alcohol	0.000	9.770	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.539	16.497	1.036	45	820	N.D.	

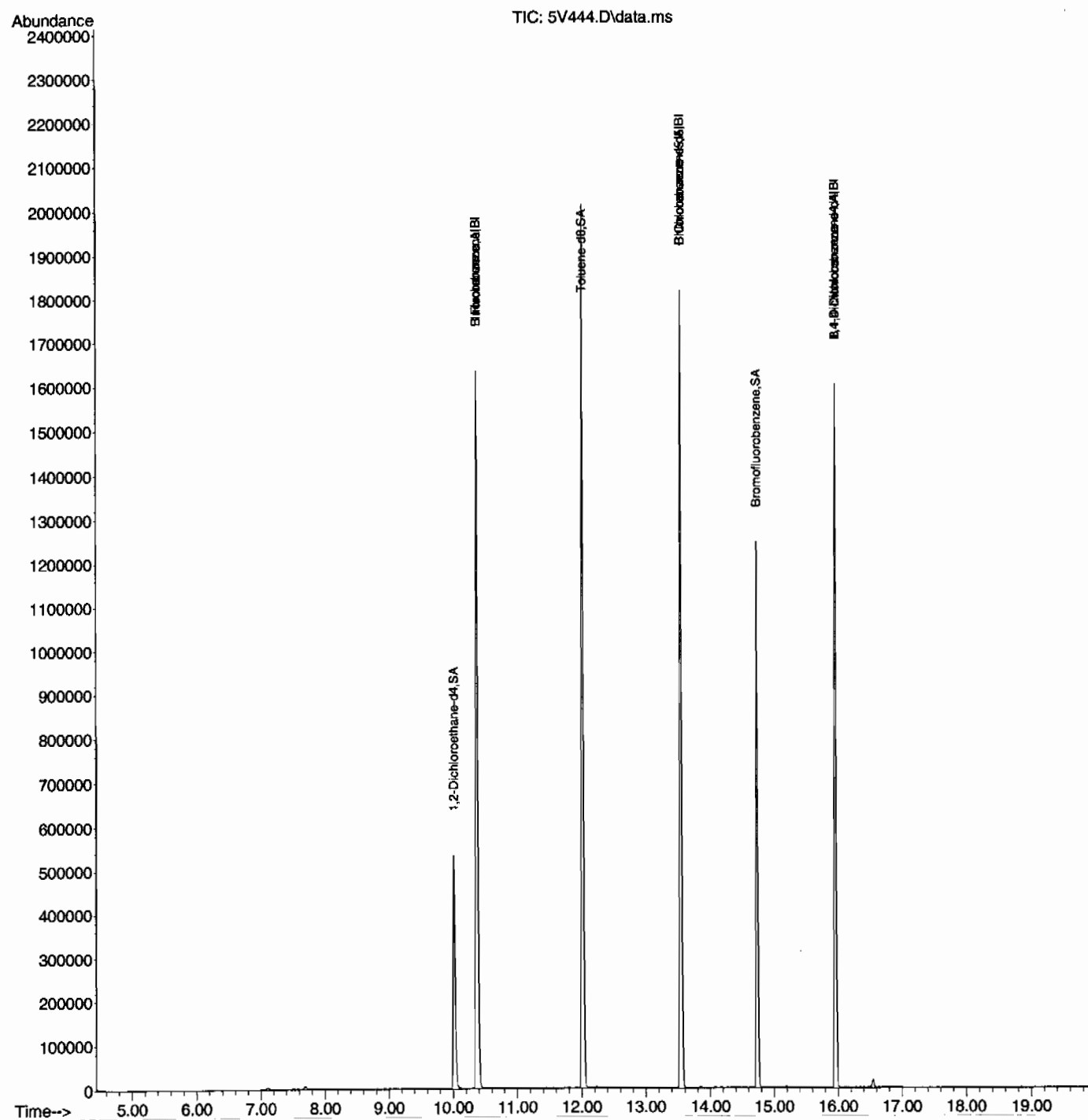
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
InstName : VOA5
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 29 10:05:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V444.D
Acq On : 29 Jan 2010 4:01 am
Operator : DXK1
Sample : |245387012|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387007
 Client ID: RE14-10-7687
 Batch ID: 946584
 Run Date: 01/31/2010 17:26
 Prep Date: 01/31/2010 10:39
 Data File: 013110V55V715.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.36	ug/kg	0.464	1.36
74-87-3	Chloromethane	HUh	1.36	ug/kg	0.409	1.36
75-01-4	Vinyl chloride	HUh	1.36	ug/kg	0.409	1.36
74-83-9	Bromomethane	HUh	1.36	ug/kg	0.409	1.36
75-00-3	Chloroethane	HUh	1.36	ug/kg	0.409	1.36
75-69-4	Trichlorofluoromethane	HUh	1.36	ug/kg	0.409	1.36
67-64-1	Acetone	HJh	3.63	ug/kg	2.27	6.82
75-35-4	1,1-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
74-88-4	Iodomethane	HUh	6.82	ug/kg	2.18	6.82
75-09-2	Methylene chloride	HUh	6.82	ug/kg	2.73	6.82
75-15-0	Carbon disulfide	HUh	6.82	ug/kg	1.71	6.82
156-60-5	trans-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
75-34-3	1,1-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
78-93-3	2-Butanone	HUh	6.82	ug/kg	2.05	6.82
156-59-2	cis-1,2-Dichloroethylene	HUh	1.36	ug/kg	0.409	1.36
594-20-7	2,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
67-66-3	Chloroform	HUh	1.36	ug/kg	0.409	1.36
74-97-5	Bromochloromethane	HUh	1.36	ug/kg	0.450	1.36
71-55-6	1,1,1-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
563-58-6	1,1-Dichloropropene	HUh	1.36	ug/kg	0.409	1.36
56-23-5	Carbon tetrachloride	HUh	1.36	ug/kg	0.409	1.36
107-06-2	1,2-Dichloroethane	HUh	1.36	ug/kg	0.409	1.36
71-43-2	Benzene	HUh	1.36	ug/kg	0.409	1.36
79-01-6	Trichloroethylene	HUh	1.36	ug/kg	0.450	1.36
78-87-5	1,2-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
75-27-4	Bromodichloromethane	HUh	1.36	ug/kg	0.409	1.36
74-95-3	Dibromomethane	HUh	1.36	ug/kg	0.409	1.36
108-10-1	4-Methyl-2-pentanone	HUh	6.82	ug/kg	1.71	6.82
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36
108-88-3	Toluene	HJh	0.887	ug/kg	0.409	1.36
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.36	ug/kg	0.409	1.36
79-00-5	1,1,2-Trichloroethane	HUh	1.36	ug/kg	0.409	1.36
591-78-6	2-Hexanone	HUh	6.82	ug/kg	2.05	6.82
142-28-9	1,3-Dichloropropane	HUh	1.36	ug/kg	0.409	1.36
127-18-4	Tetrachloroethylene	HUh	1.36	ug/kg	0.409	1.36
124-48-1	Dibromochloromethane	HUh	1.36	ug/kg	0.409	1.36
106-93-4	1,2-Dibromoethane	HUh	1.36	ug/kg	0.409	1.36
108-90-7	Chlorobenzene	HUh	1.36	ug/kg	0.409	1.36

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387007

 Client ID: RE14-10-7687
 Batch ID: 946584
 Run Date: 01/31/2010 17:26
 Prep Date: 01/31/2010 10:39
 Data File: 013110V55V715.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.36	ug/kg	0.409	1.36
179601-23-1	m,p-Xylenes	HUh	2.73	ug/kg	0.409	2.73
95-47-6	o-Xylene	HUh	1.36	ug/kg	0.409	1.36
100-42-5	Styrene	HUh	1.36	ug/kg	0.409	1.36
75-25-2	Bromoform	HUh	1.36	ug/kg	0.409	1.36
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36
96-18-4	1,2,3-Trichloropropane	HUh	1.36	ug/kg	0.409	1.36
108-86-1	Bromobenzene	HUh	1.36	ug/kg	0.409	1.36
103-65-1	n-Propylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-49-8	2-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-82-8	Isopropylbenzene	HUh	1.36	ug/kg	0.409	1.36
108-67-8	1,3,5-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
106-43-4	4-Chlorotoluene	HUh	1.36	ug/kg	0.409	1.36
98-06-6	tert-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
95-63-6	1,2,4-Trimethylbenzene	HUh	1.36	ug/kg	0.409	1.36
135-98-8	sec-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
99-87-6	4-Isopropyltoluene	Hh	2.29	ug/kg	0.409	1.36
541-73-1	1,3-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36
106-46-7	1,4-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36
104-51-8	n-Butylbenzene	HUh	1.36	ug/kg	0.409	1.36
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.36	ug/kg	0.409	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.82	ug/kg	2.18	6.82
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.36	ug/kg	0.409	1.36
95-50-1	1,2-Dichlorobenzene	HUh	1.36	ug/kg	0.409	1.36

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R- α -Pinene	14.57	10.4	ug/kg	95	NJ
000079-92-5	Camphene	14.89	9.7	ug/kg	98	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
InstName : VOA5
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 09:51:39 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1433283	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	881155	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	322507	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1433283	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	881155	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	322507	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	339578	50.98	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	101.96%			
43) Toluene-d8	12.016	12.016	0.887	98	1227057	51.06	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	102.12%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	390962	63.53	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	127.06%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.283	5.051	0.509	50	162	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.104	7.100	0.685	43	14272	2.66	ug/L	74
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0m	N.D.	d	
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	0.000	7.450	0.000		0	N.D.		
13) Methyl acetate	7.486	7.493	0.722	43	118	N.D.		
14) Carbon disulfide	7.507	7.511	0.724	76	1206	N.D.		
15) Methylene chloride	7.698	7.691	0.742	84	3949	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	8.324	8.458	0.802	43	2505	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.088	9.077	0.876	43	5330	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.124	10.127	0.976	78	236	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
InstName : VOA5
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 09:51:39 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.		
44) Toluene	12.094	12.090	0.893	91	13651	0.65 ug/L		97
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.		
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.		
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.		
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.		
54) Ethylbenzene	13.540	13.639	0.999	91	1910	N.D.		
55) m,p-Xylenes	13.752	13.749	1.015	106	113	N.D.		
56) o-Xylene	14.180	14.184	1.047	106	236	N.D.		
57) Styrene	0.000	14.184	0.000		0	N.D.		
59) Bromoform	0.000	14.445	0.000		0	N.D.		
60) Isopropylbenzene	0.000	14.537	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.		
64) Bromobenzene	0.000	14.951	0.000		0	N.D.		
65) n-Propylbenzene	0.000	14.965	0.000		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.181	15.114	0.951	105	118	N.D.		
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	15.216	0.000		0m	N.D.	d	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.524	15.527	0.973	105	416	N.D.		
71) sec-Butylbenzene	15.803	15.711	0.990	105	112	N.D.		
72) 4-Isopropyltoluene	15.835	15.832	0.992	119	21241	1.68 ug/L		84
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.		
75) n-Butylbenzene	16.125	16.277	1.010	91	947	N.D.		
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.		
80) Naphthalene	18.754	18.762	1.175	128	114	N.D.		
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	0.000	6.924	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000	7.175	0.000		0m	N.D.	d	
88) Allyl chloride	7.705	7.546	0.743	41	625	N.D.		
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.		
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.		
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.088	9.088	0.876	43	5330	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
InstName : VOA5
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 09:51:39 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.332	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.466	0.000		0	N.D.	
98) Isobutyl alcohol	9.774	9.770	0.942	41	1610	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.542	16.497	1.037	45	1591	N.D.	

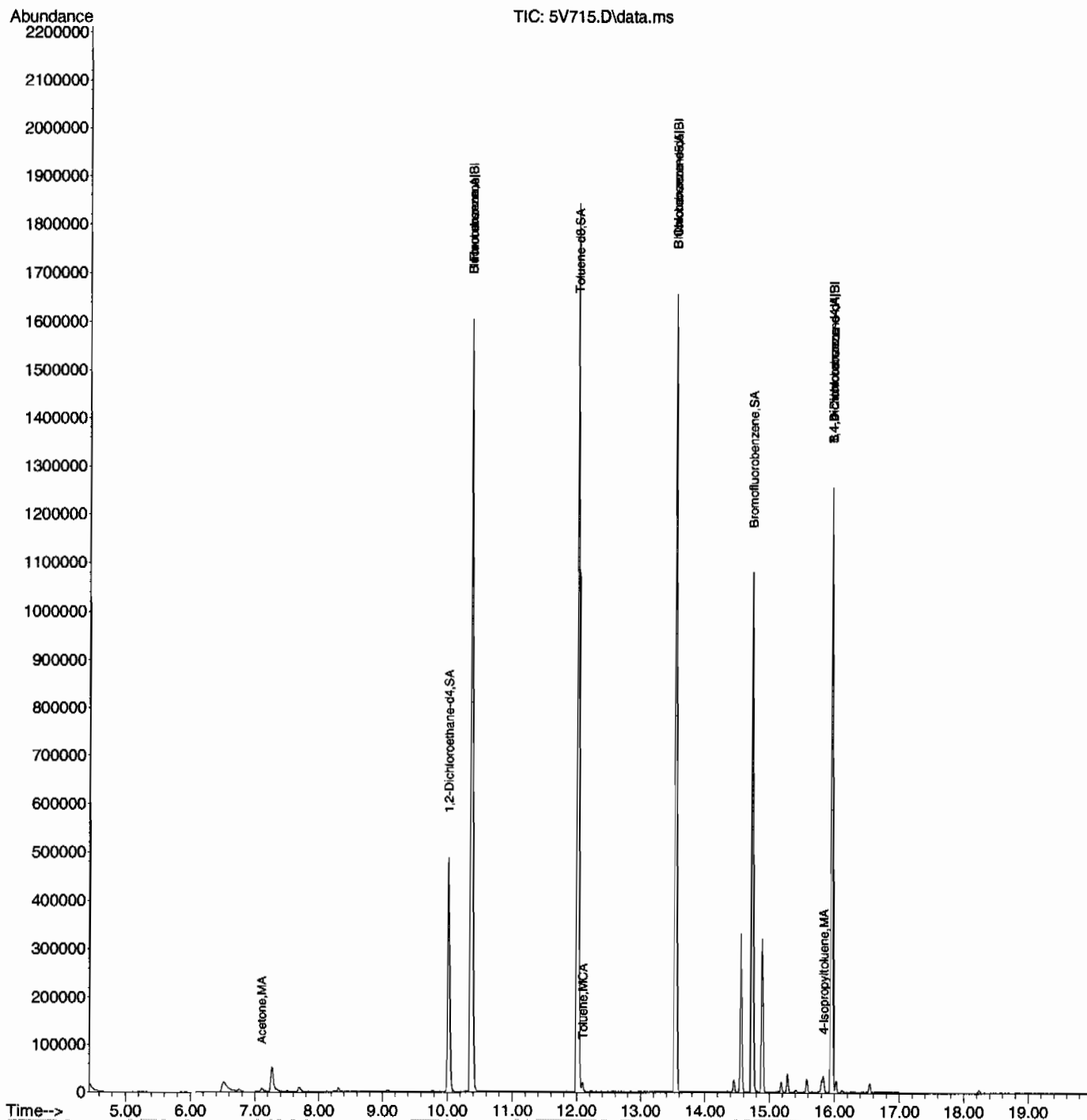
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

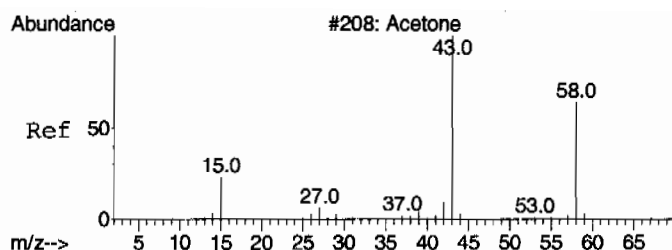
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
InstName : VOA5
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 09:51:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

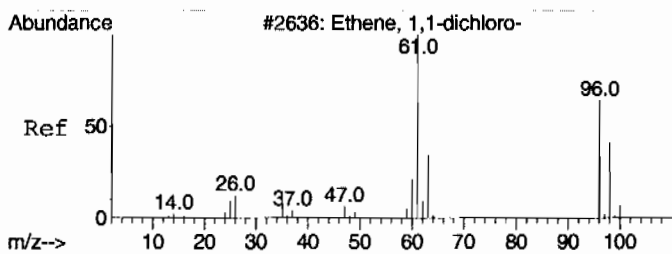
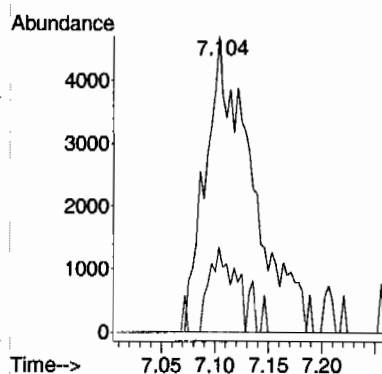
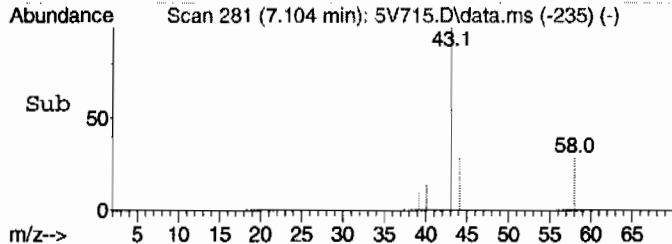
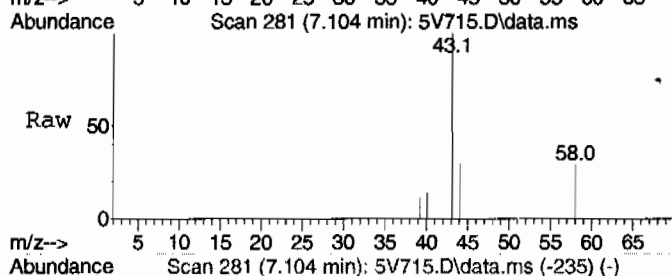
SubList :





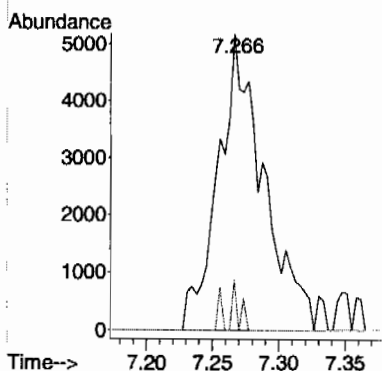
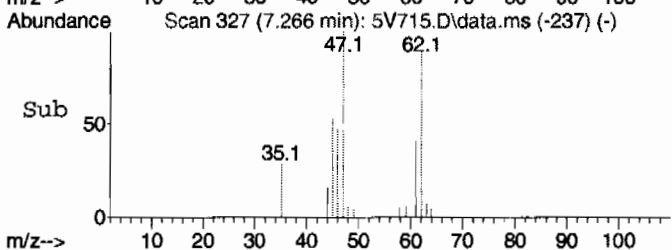
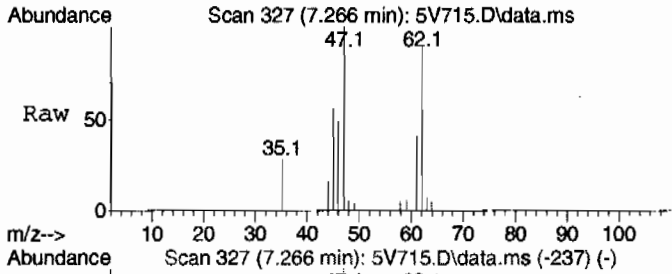
#9
Acetone
Concen: 2.66 ug/L
RT: 7.104 min Scan# 281
Delta R.T. 0.004 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

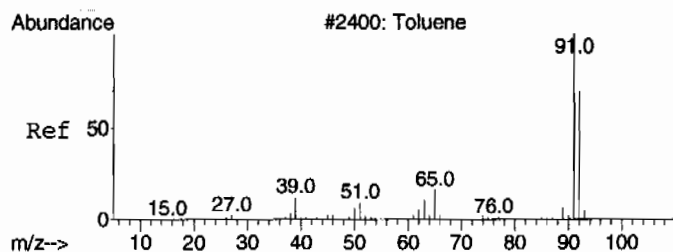
Tgt Ion: 43 Resp: 14272
Ion Ratio Lower Upper
43 100
58 15.3 0.0 59.5



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 1.82 ug/L
RT: 7.266 min Scan# 327
Delta R.T. 0.141 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

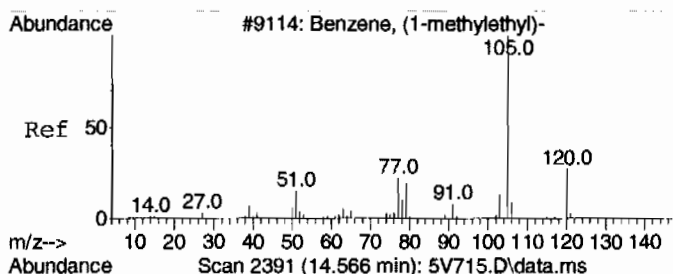
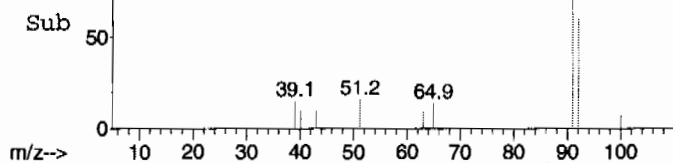
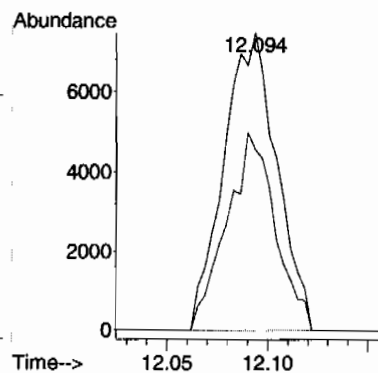
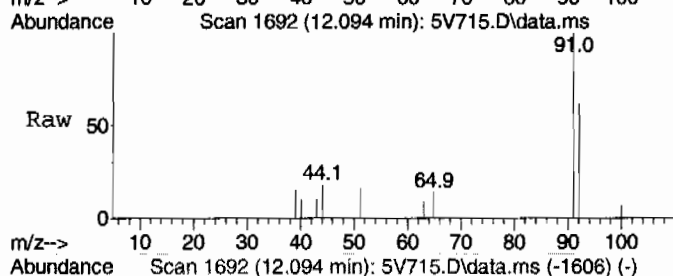
Tgt Ion: 61 Resp: 12138
Ion Ratio Lower Upper
61 100
96 0.0 27.1 87.1#
63 2.4 0.9 60.9





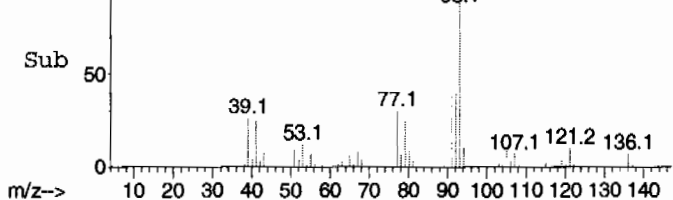
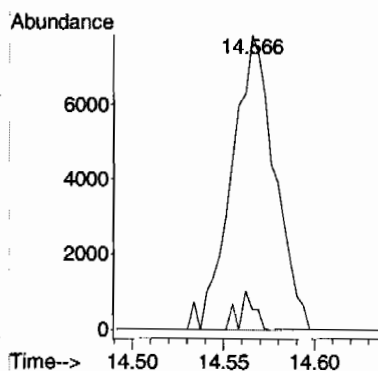
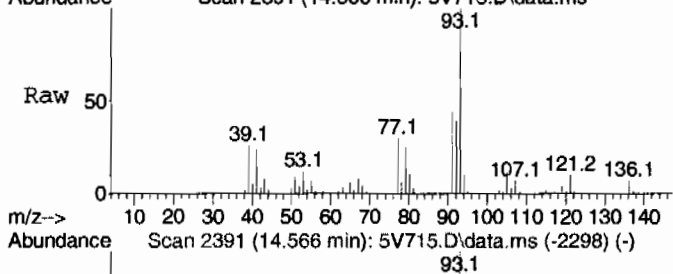
#44
Toluene
Concen: 0.65 ug/L
RT: 12.094 min Scan# 1692
Delta R.T. 0.004 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

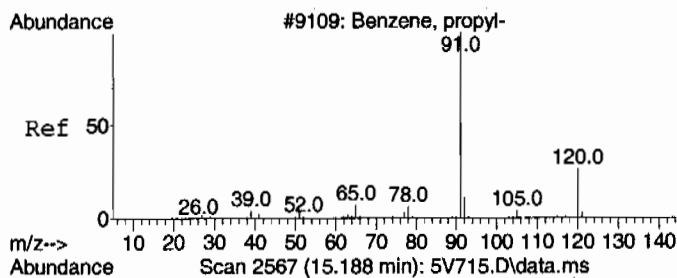
Tgt Ion: 91 Resp: 13651
Ion Ratio Lower Upper
91 100
92 61.2 28.7 88.7



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.89 ug/L
RT: 14.566 min Scan# 2391
Delta R.T. 0.029 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

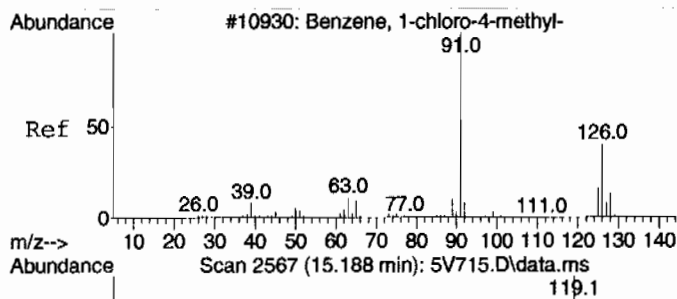
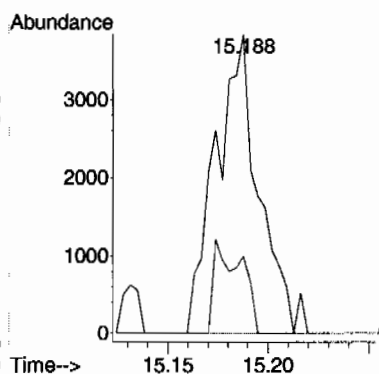
Tgt Ion: 105 Resp: 12942
Ion Ratio Lower Upper
105 100
120 4.5 0.0 57.9





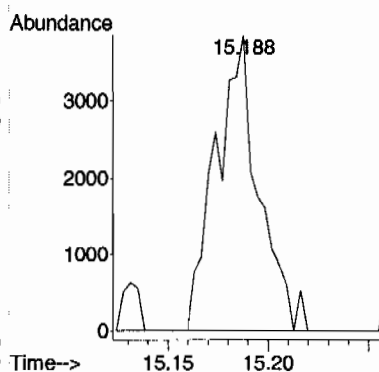
#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 0.33 ug/L
RT: 15.188 min Scan# 2567
Delta R.T. 0.223 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

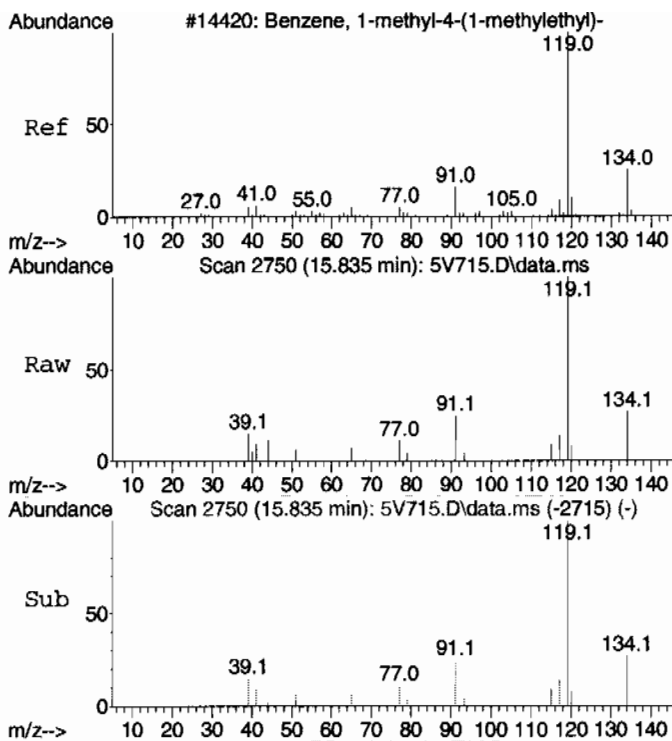
Tgt Ion: 91 Resp: 5806
Ion Ratio Lower Upper
91 100
120 19.9 0.0 53.6



#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.53 ug/L
RT: 15.188 min Scan# 2567
Delta R.T. -0.028 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

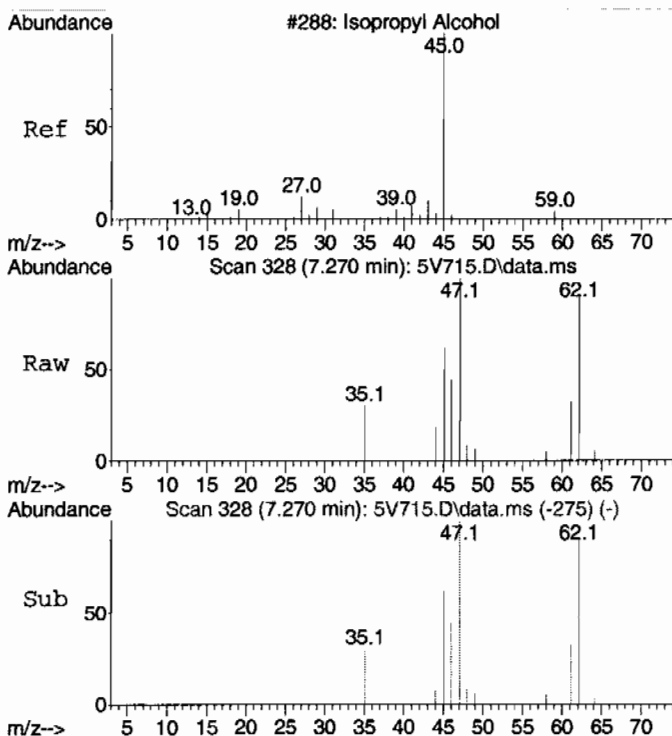
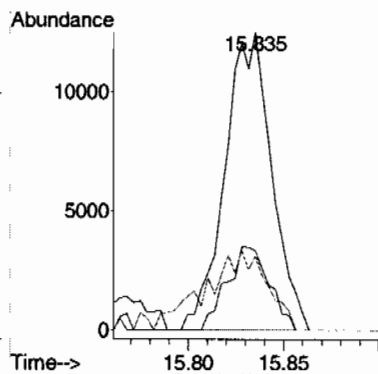
Tgt Ion: 91 Resp: 5806
Ion Ratio Lower Upper
91 100
126 0.0 3.9 63.9#





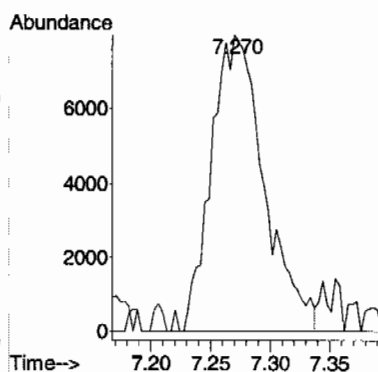
#72
4-Isopropyltoluene
Concen: 1.68 ug/L
RT: 15.835 min Scan# 2750
Delta R.T. 0.003 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

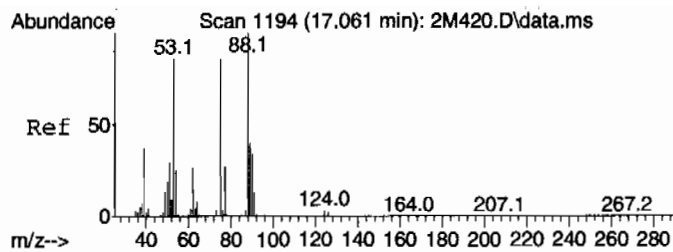
Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.4	0.0	58.7
91	35.4	0.0	51.7



#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 58.02 ug/L
RT: 7.270 min Scan# 328
Delta R.T. 0.095 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

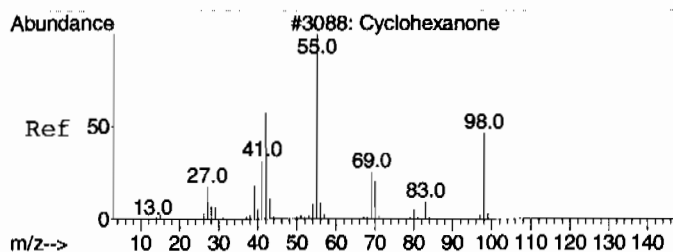
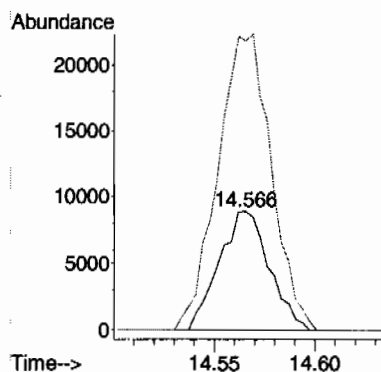
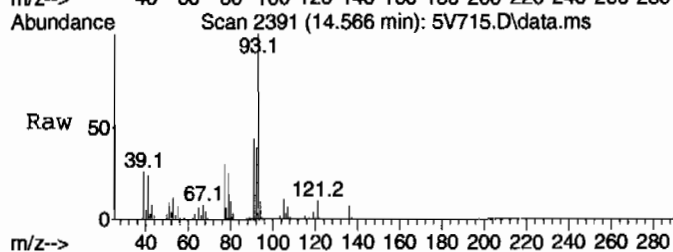
Tgt Ion	Ratio	Lower	Upper
45	100		
43	0.5	0.0	50.1





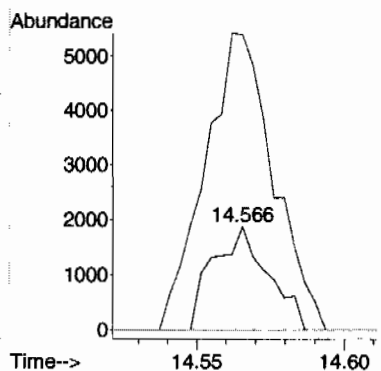
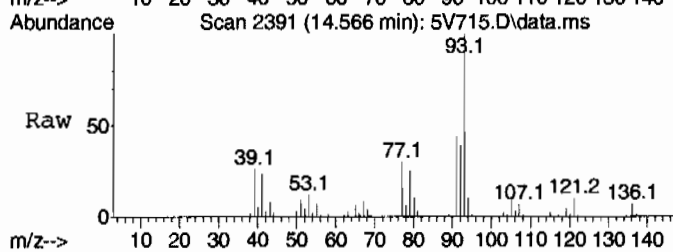
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 12.57 ug/L
 RT: 14.566 min Scan# 2391
 Delta R.T. -0.007 min
 Lab File: 5V715.D
 Acq: 31 Jan 2010 5:26 pm

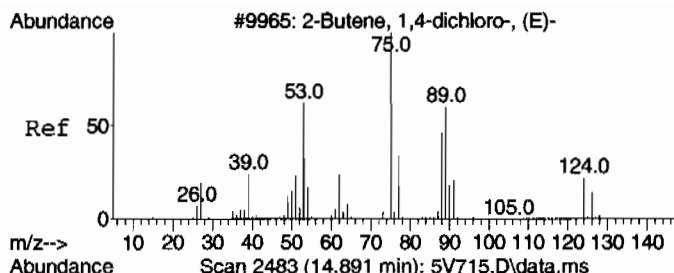
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	50.2	110.2#
77	266.6	0.0	59.6#



#108 BEFORE analyst DELETION
 Cyclohexanone
 Concen: 34.60 ug/L
 RT: 14.566 min Scan# 2391
 Delta R.T. -0.127 min
 Lab File: 5V715.D
 Acq: 31 Jan 2010 5:26 pm

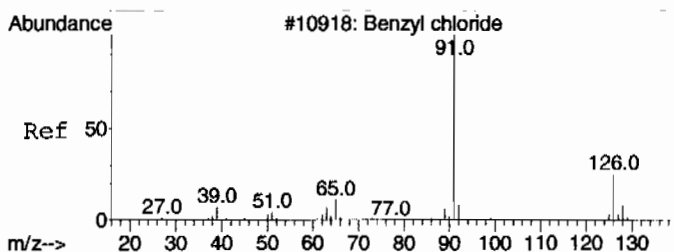
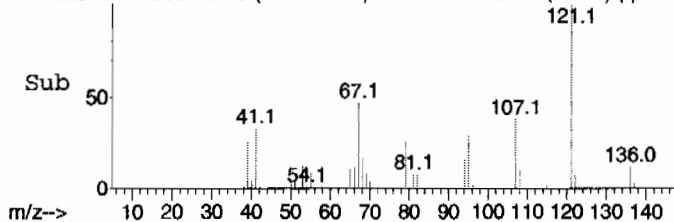
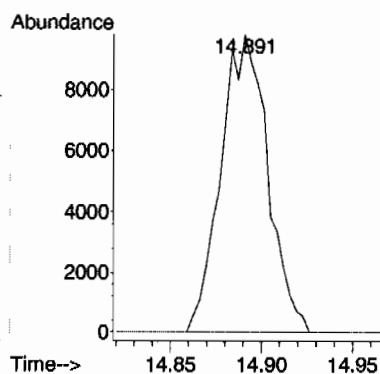
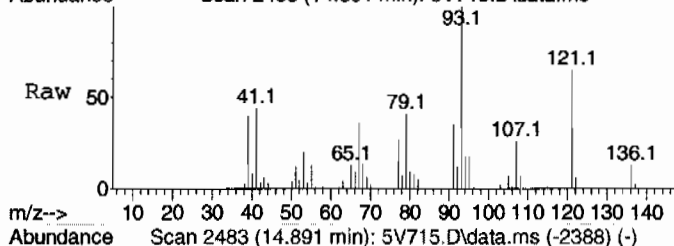
Tgt Ion	Ratio	Lower	Upper
42	100		
55	358.4	104.7	164.7#
98	0.0	21.5	81.5#





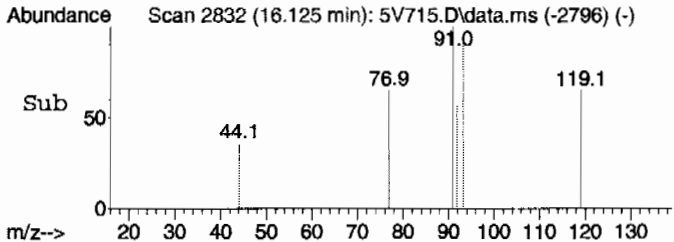
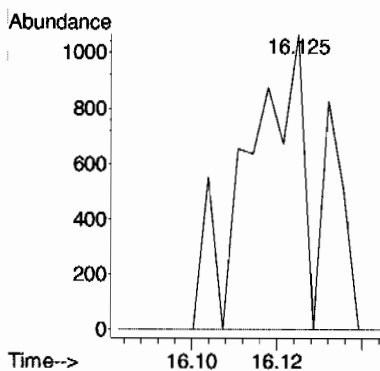
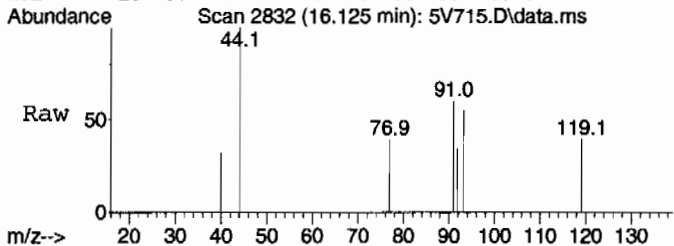
#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 15.08 ug/L
RT: 14.891 min Scan# 2483
Delta R.T. 0.035 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

Tgt Ion: 53 Resp: 17655
Ion Ratio Lower Upper
53 100
88 0.0 7.6 67.6#
75 0.0 86.0 146.0#



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.61 ug/L
RT: 16.125 min Scan# 2832
Delta R.T. 0.025 min
Lab File: 5V715.D
Acq: 31 Jan 2010 5:26 pm

Tgt Ion: 91 Resp: 947
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.6
65 0.0 0.0 41.9



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

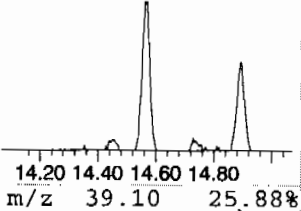
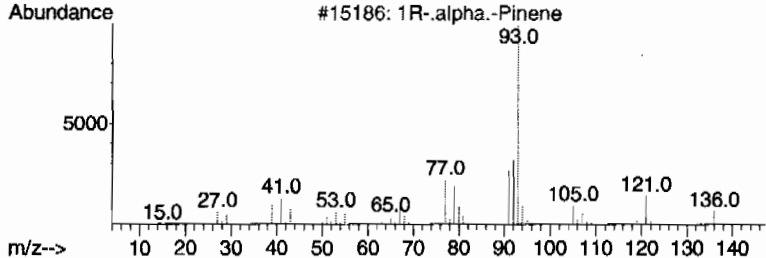
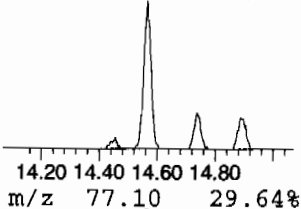
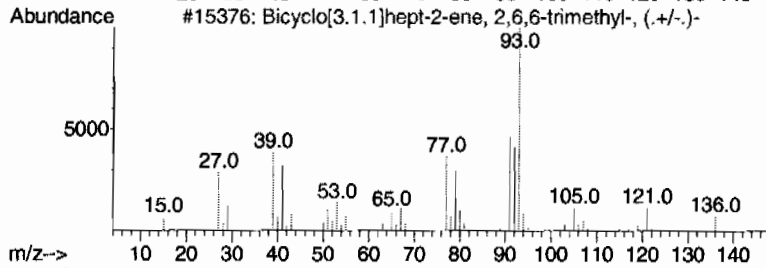
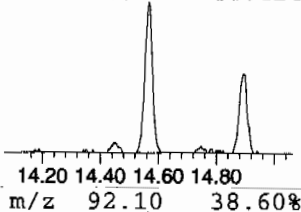
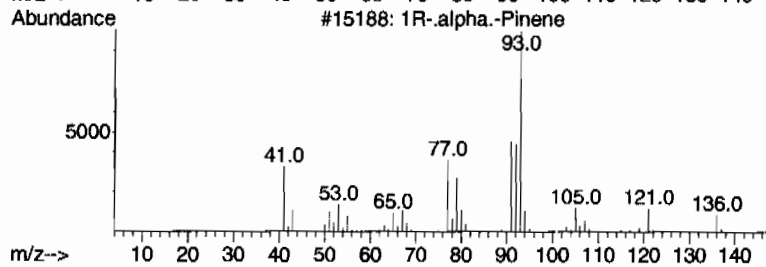
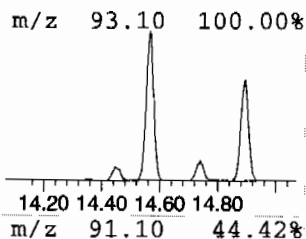
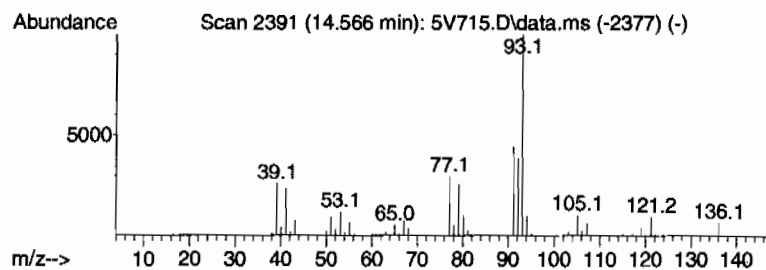
SubList :

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

Peak Number 1 1R-.alpha.-Pinene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.566	7.61 ug/L	466788	B Chlorobenzene-d5	13.547

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
2		Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94
3		1R-.alpha.-Pinene	136	C10H16	007785-70-8	93
4		.alpha.-Pinene	136	C10H16	000080-56-8	93
5		.alpha.-Pinene	136	C10H16	000080-56-8	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

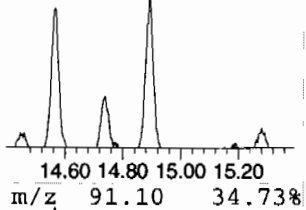
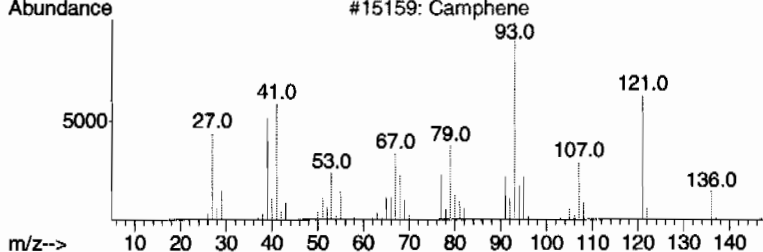
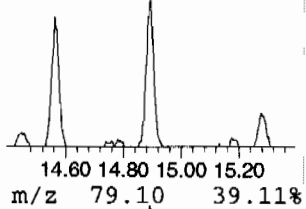
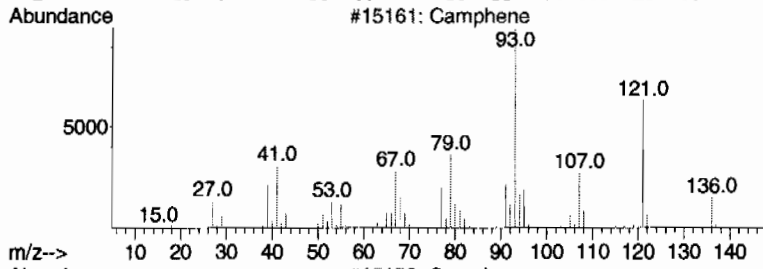
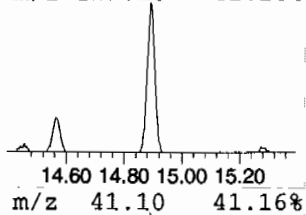
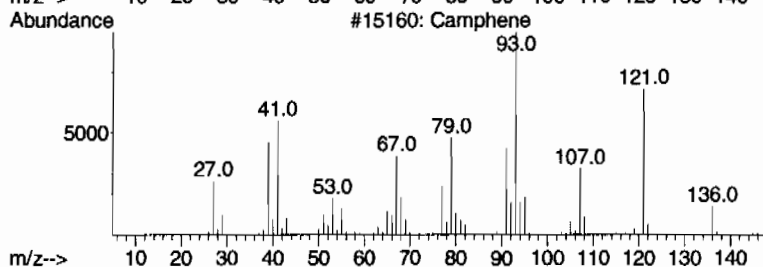
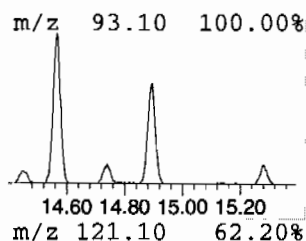
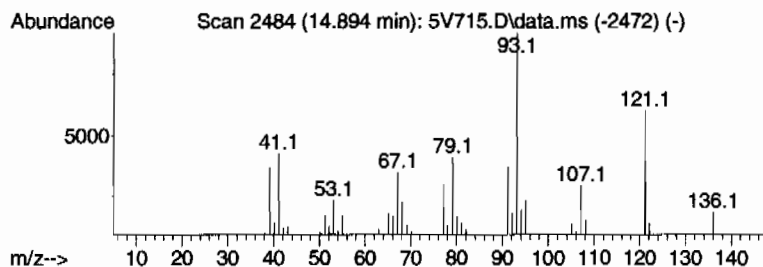
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 2 Camphene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.	
14.894	7.11 ug/L	309468	1,4-Dichlorobenzene-d4	15.959	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphene	136	C10H16	000079-92-5	98
2	Camphene	136	C10H16	000079-92-5	97
3	Camphene	136	C10H16	000079-92-5	96
4	Bicyclo[2.2.1]heptane, 2,2-dimet...	136	C10H16	005794-04-7	95
5	Camphene	136	C10H16	000079-92-5	91



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V715.D
Acq On : 31 Jan 2010 5:26 pm
Operator : DXK1
Sample : |245387007|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
1R-.alpha.-Pinene	14.566	7.6	ug/L	466788	4	13.547	3065420	50.0
Camphene	14.894	7.1	ug/L	309468	5	15.959	2177350	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387011

Client ID: RE14-10-7683
Batch ID: 946584
Run Date: 01/31/2010 17:52
Prep Date: 01/31/2010 10:40
Data File: 013110V55V716.D

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 25.4
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	HUh	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	HUh	1.34	ug/kg	0.402	1.34
75-01-4	Vinyl chloride	HUh	1.34	ug/kg	0.402	1.34
74-83-9	Bromomethane	HUh	1.34	ug/kg	0.402	1.34
75-00-3	Chloroethane	HUh	1.34	ug/kg	0.402	1.34
75-69-4	Trichlorofluoromethane	HUh	1.34	ug/kg	0.402	1.34
67-64-1	Acetone	Hh	9.73	ug/kg	2.22	6.70
75-35-4	1,1-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
74-88-4	Iodomethane	HUh	6.70	ug/kg	2.14	6.70
75-09-2	Methylene chloride	HUh	6.70	ug/kg	2.68	6.70
75-15-0	Carbon disulfide	HUh	6.70	ug/kg	1.67	6.70
156-60-5	trans-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
75-34-3	1,1-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
78-93-3	2-Butanone	HUh	6.70	ug/kg	2.01	6.70
156-59-2	cis-1,2-Dichloroethylene	HUh	1.34	ug/kg	0.402	1.34
594-20-7	2,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
67-66-3	Chloroform	HUh	1.34	ug/kg	0.402	1.34
74-97-5	Bromochloromethane	HUh	1.34	ug/kg	0.442	1.34
71-55-6	1,1,1-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
563-58-6	1,1-Dichloropropene	HUh	1.34	ug/kg	0.402	1.34
56-23-5	Carbon tetrachloride	HUh	1.34	ug/kg	0.402	1.34
107-06-2	1,2-Dichloroethane	HUh	1.34	ug/kg	0.402	1.34
71-43-2	Benzene	HUh	1.34	ug/kg	0.402	1.34
79-01-6	Trichloroethylene	HUh	1.34	ug/kg	0.442	1.34
78-87-5	1,2-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
75-27-4	Bromodichloromethane	HUh	1.34	ug/kg	0.402	1.34
74-95-3	Dibromomethane	HUh	1.34	ug/kg	0.402	1.34
108-10-1	4-Methyl-2-pentanone	HUh	6.70	ug/kg	1.67	6.70
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34
108-88-3	Toluene	HJh	0.670	ug/kg	0.402	1.34
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.34	ug/kg	0.402	1.34
79-00-5	1,1,2-Trichloroethane	HUh	1.34	ug/kg	0.402	1.34
591-78-6	2-Hexanone	HUh	6.70	ug/kg	2.01	6.70
142-28-9	1,3-Dichloropropane	HUh	1.34	ug/kg	0.402	1.34
127-18-4	Tetrachloroethylene	HUh	1.34	ug/kg	0.402	1.34
124-48-1	Dibromochloromethane	HUh	1.34	ug/kg	0.402	1.34
106-93-4	1,2-Dibromoethane	HUh	1.34	ug/kg	0.402	1.34
108-90-7	Chlorobenzene	HUh	1.34	ug/kg	0.402	1.34

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 245387011
 Client ID: RE14-10-7683
 Batch ID: 946584
 Run Date: 01/31/2010 17:52
 Prep Date: 01/31/2010 10:40
 Data File: 013110V5SV716.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXX1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.4
 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	HUh	1.34	ug/kg	0.402	1.34
179601-23-1	m,p-Xylenes	HUh	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	HUh	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	HUh	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	HUh	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	HUh	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	HUh	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	HUh	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	HUh	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	HUh	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene	HJh	0.750	ug/kg	0.402	1.34
541-73-1	1,3-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34
106-46-7	1,4-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	HUh	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.70	ug/kg	2.14	6.70
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.34	ug/kg	0.402	1.34
95-50-1	1,2-Dichlorobenzene	HUh	1.34	ug/kg	0.402	1.34

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\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
InstName : VOA5
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 09:52:14 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1378231	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	815189	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	288343	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1378231	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	815189	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	288343	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	344618	53.80	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 107.60%			
43) Toluene-d8	12.016	12.016	0.887	98	1165436	52.42	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 104.84%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	351264	63.84	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 127.68%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.202	5.051	0.501	50	173	N.D.		
4) Vinyl chloride	0.000	5.283	0.000		0	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.111	7.100	0.685	43	37530	7.26	ug/L	86
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0m	N.D.	d	
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	0.000	7.450	0.000		0	N.D.		
13) Methyl acetate	7.702	7.493	0.742	43	1643	N.D.		
14) Carbon disulfide	7.514	7.511	0.724	76	498	N.D.		
15) Methylene chloride	7.694	7.691	0.742	84	2553	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	8.313	8.458	0.801	43	2899	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.088	9.077	0.876	43	5432	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	9.834	9.830	0.948	56	132	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.124	10.127	0.976	78	146	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0m	N.D.	d	
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
InstName : VOA5
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 09:52:14 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.		
44) Toluene	12.083	12.090	0.892	91	9768	0.50 ug/L		95
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.		
47) 2-Hexanone	0.000	12.631	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.		
50) Dibromochloromethane	0.000	12.928	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.		
52) Chlorobenzene	0.000	13.579	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.		
54) Ethylbenzene	13.544	13.639	1.000	91	1628	N.D.		
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.		
56) o-Xylene	0.000	14.184	0.000		0	N.D.		
57) Styrene	0.000	14.184	0.000		0	N.D.		
59) Bromoform	0.000	14.445	0.000		0	N.D.		
60) Isopropylbenzene	0.000	14.537	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.		
64) Bromobenzene	0.000	14.951	0.000		0	N.D.		
65) n-Propylbenzene	15.185	14.965	0.951	91	4490	N.D.		
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	15.216	0.000		0m	N.D.	d	
69) tert-Butylbenzene	15.577	15.489	0.976	134	110	N.D.		
70) 1,2,4-Trimethylbenzene	15.584	15.527	0.976	105	2614	N.D.		
71) sec-Butylbenzene	15.584	15.711	0.976	105	2614	N.D.		
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	6363	0.56 ug/L		87
73) 1,3-Dichlorobenzene	0.000	15.902	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000	15.991	0.000		0	N.D.		
75) n-Butylbenzene	0.000	16.277	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000	16.422	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000	18.371	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.		
80) Naphthalene	18.769	18.762	1.176	128	253	N.D.		
81) 1,2,3-Trichlorobenzene	0.000	19.116	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	0.000	6.924	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.196	7.175	0.694	45	4829	N.D.		
88) Allyl chloride	7.705	7.546	0.743	41	136	N.D.		
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.		
90) Acrylonitrile	0.000	7.928	0.000		0	N.D.		
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.088	9.088	0.876	43	5432	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
InstName : VOA5
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 09:52:14 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.463	9.332	0.912	41	166	N.D.	
97) Tetrahydrofuran	9.477	9.466	0.913	42	1132	N.D.	
98) Isobutyl alcohol	9.827	9.770	0.947	41	118	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	14.856	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.528	16.497	1.035	45	186	N.D.	

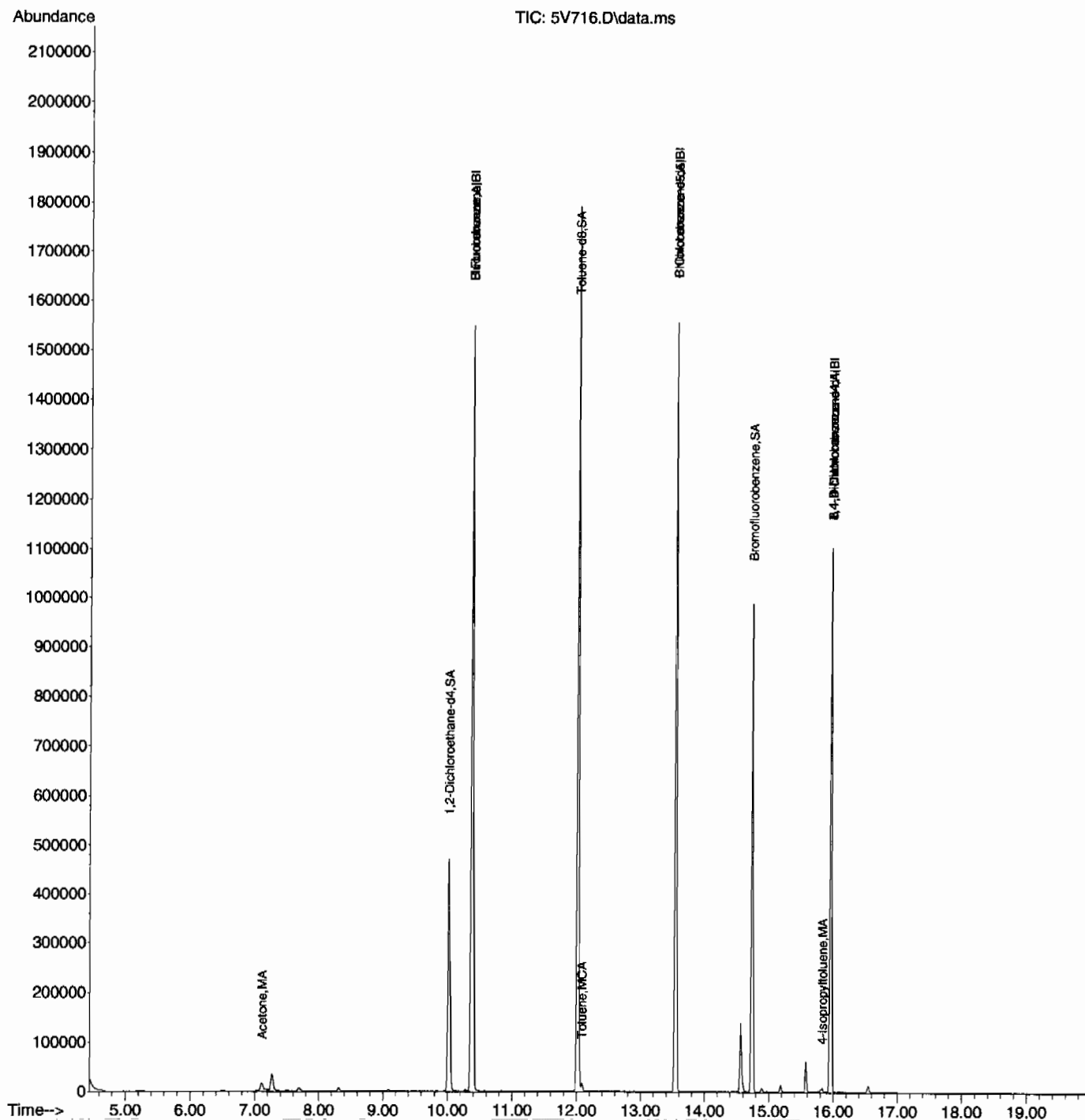
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

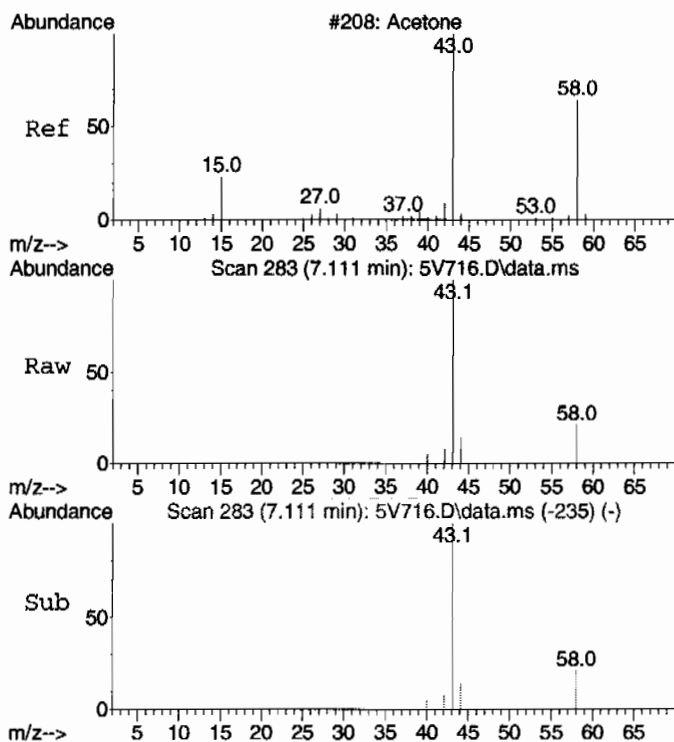
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
InstName : VOA5
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 09:52:14 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

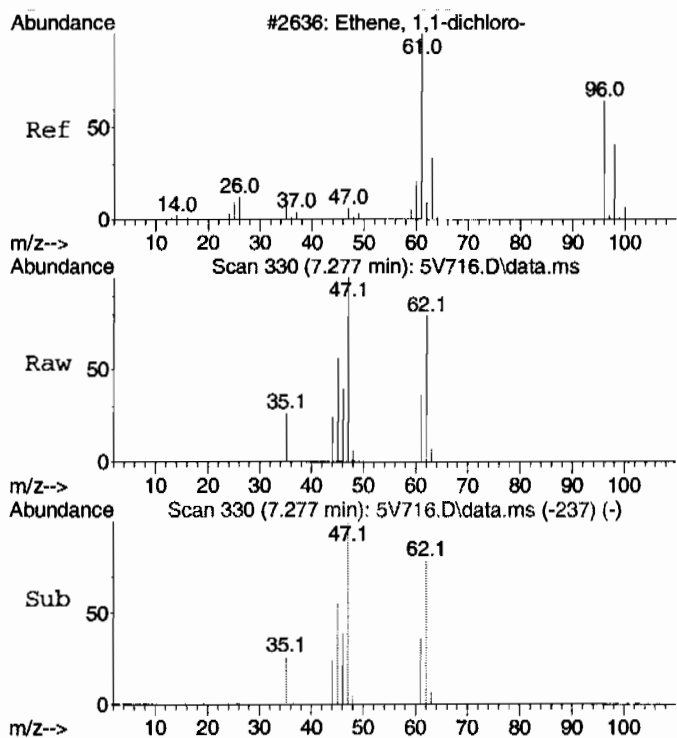
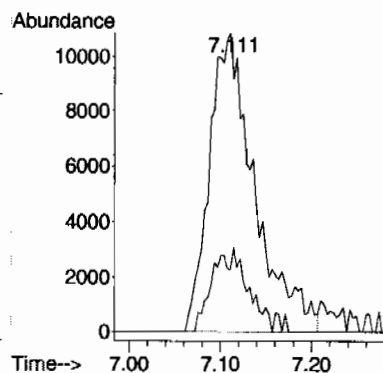
SubList :





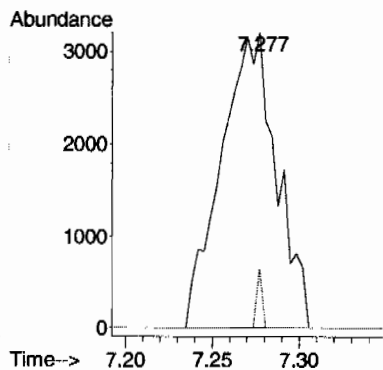
#9
Acetone
Concen: 7.26 ug/L
RT: 7.111 min Scan# 283
Delta R.T. 0.011 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

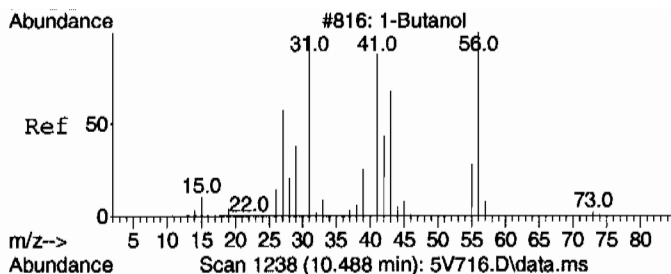
Tgt Ion	Resp	Lower	Upper
43	100		
58	22.2	0.0	59.5



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 1.11 ug/L
RT: 7.277 min Scan# 330
Delta R.T. 0.152 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

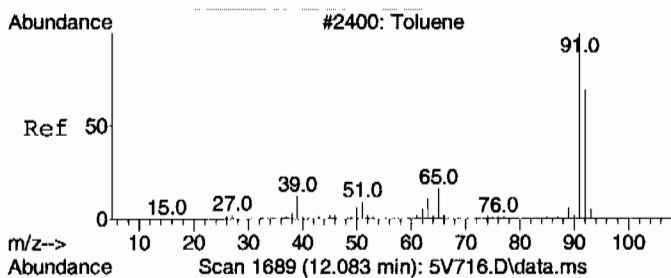
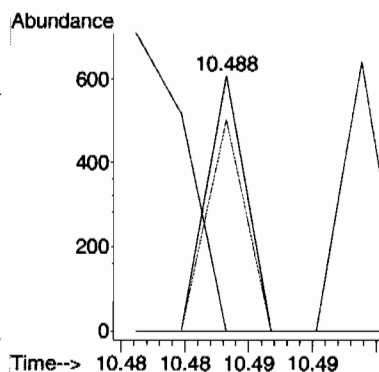
Tgt Ion	Resp	Lower	Upper
61	100		
96	0.0	27.1	87.1#
63	2.0	0.9	60.9





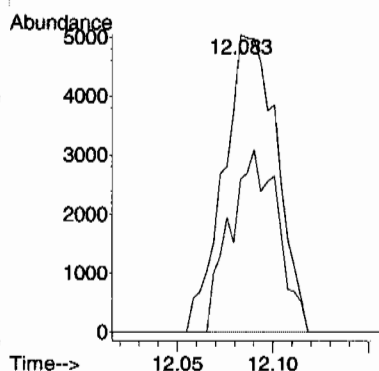
#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 98.30 ug/L
RT: 10.488 min Scan# 1238
Delta R.T. 0.028 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

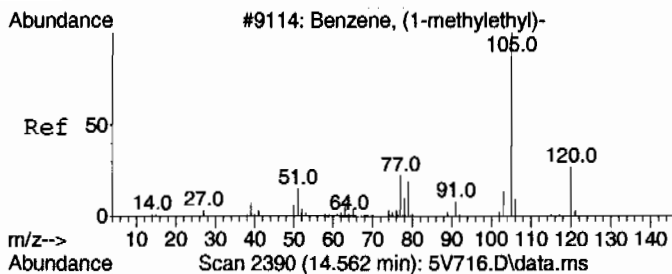
Tgt Ion: 56 Resp: 129
Ion Ratio Lower Upper
56 100
41 105.4 47.2 107.2
43 82.9 31.2 91.2



#44
Toluene
Concen: 0.50 ug/L
RT: 12.083 min Scan# 1689
Delta R.T. -0.007 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

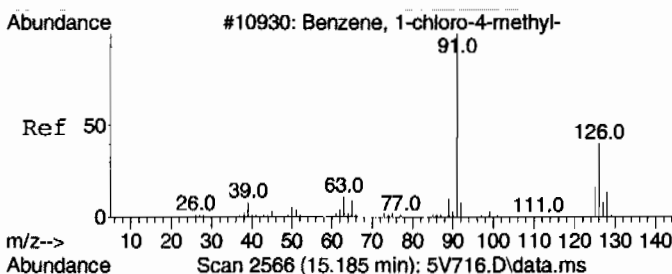
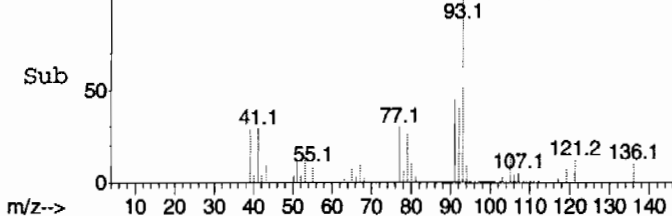
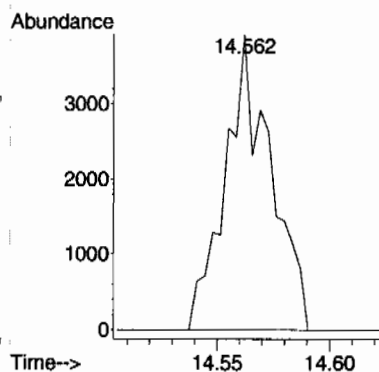
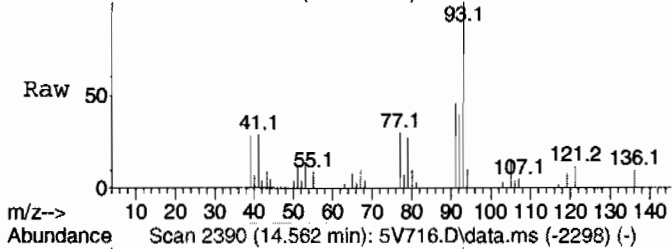
Tgt Ion: 91 Resp: 9768
Ion Ratio Lower Upper
91 100
92 55.2 28.7 88.7





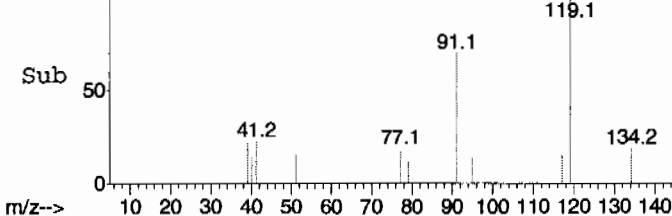
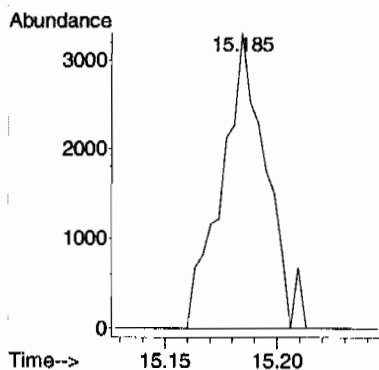
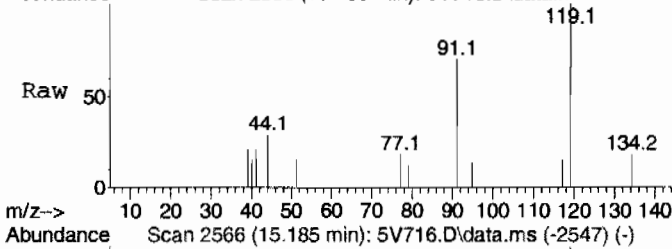
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.42 ug/L
RT: 14.562 min Scan# 2390
Delta R.T. 0.025 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

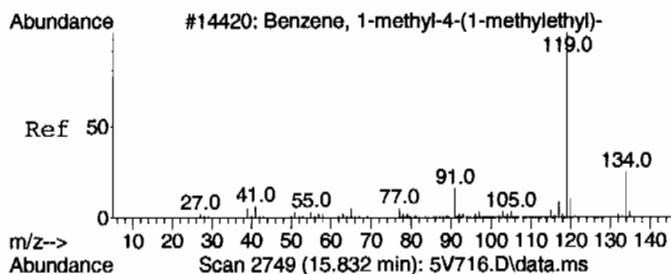
Tgt Ion: 105 Resp: 5483
Ion Ratio Lower Upper
105 100
120 0.0 0.0 57.9



#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.46 ug/L
RT: 15.185 min Scan# 2566
Delta R.T. -0.031 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

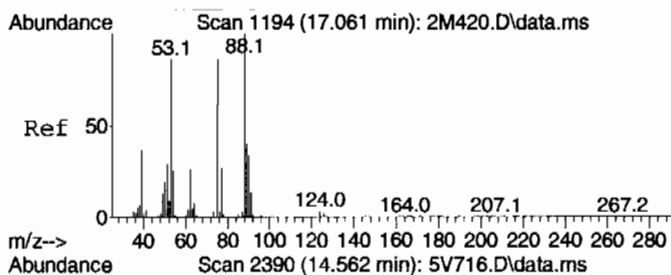
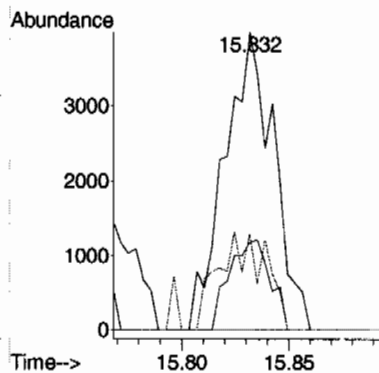
Tgt Ion: 91 Resp: 4490
Ion Ratio Lower Upper
91 100
126 0.0 3.9 63.9#





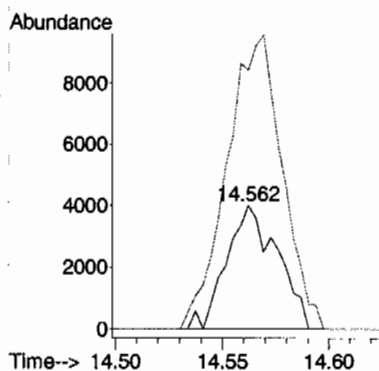
#72
4-Isopropyltoluene
Concen: 0.56 ug/L
RT: 15.832 min Scan# 2749
Delta R.T. -0.000 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

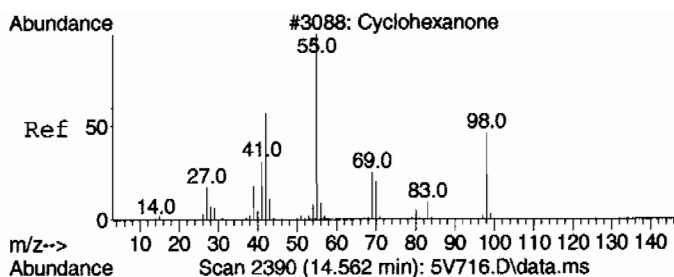
Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.5	0.0	58.7
91	32.1	0.0	51.7



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 6.05 ug/L
RT: 14.562 min Scan# 2390
Delta R.T. -0.011 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

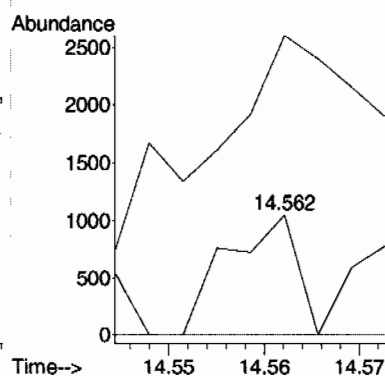
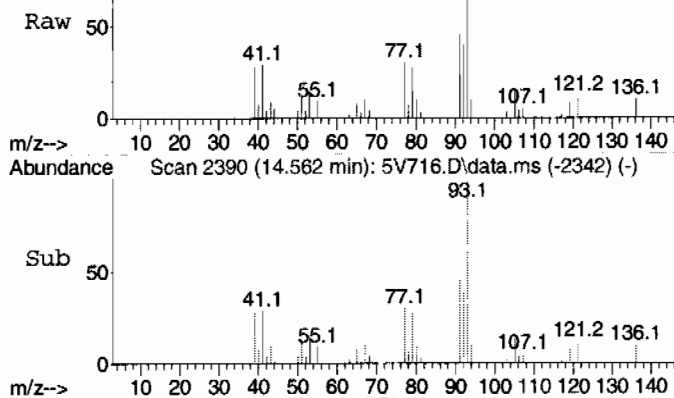
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	50.2	110.2#
77	260.8	0.0	59.6#





#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 29.70 ug/L
RT: 14.562 min Scan# 2390
Delta R.T. -0.131 min
Lab File: 5V716.D
Acq: 31 Jan 2010 5:52 pm

Tgt Ion: 42 Resp: 538
Ion Ratio Lower Upper
42 100
55 823.0 104.7 164.7#
98 0.0 21.5 81.5#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V716.D
Acq On : 31 Jan 2010 5:52 pm
Operator : DXK1
Sample : |245387011|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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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 VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\010810V5\5S515.D

Injection Date	Mix	Calibration File
8 Jan 2010 5:06 pm	A	C:\msdchem\1\DATA\010810V5\5S515.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\010810V5\5S518.D

Injection Date	Mix	Calibration File
8 Jan 2010 1:40 pm	A	C:\msdchem\1\DATA\010810V5\5S506.D
8 Jan 2010 6:24 pm	B	C:\msdchem\1\DATA\010810V5\5S518.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\010810V5\5S519.D

Injection Date	Mix	Calibration File
8 Jan 2010 2:05 pm	A	C:\msdchem\1\DATA\010810V5\5S507.D
8 Jan 2010 6:50 pm	B	C:\msdchem\1\DATA\010810V5\5S519.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\010810V5\5S520.D

Injection Date	Mix	Calibration File
8 Jan 2010 2:31 pm	A	C:\msdchem\1\DATA\010810V5\5S508.D
8 Jan 2010 7:16 pm	B	C:\msdchem\1\DATA\010810V5\5S520.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\010810V5\5S521.D

Injection Date	Mix	Calibration File
8 Jan 2010 2:57 pm	A	C:\msdchem\1\DATA\010810V5\5S509.D
8 Jan 2010 7:42 pm	B	C:\msdchem\1\DATA\010810V5\5S521.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\010810V5\5S522.D

Injection Date	Mix	Calibration File
8 Jan 2010 3:23 pm	A	C:\msdchem\1\DATA\010810V5\5S511.D
8 Jan 2010 8:07 pm	B	C:\msdchem\1\DATA\010810V5\5S522.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\010810V5\5S523.D

Injection Date	Mix	Calibration File
8 Jan 2010 3:49 pm	A	C:\msdchem\1\DATA\010810V5\5S512.D
8 Jan 2010 8:33 pm	B	C:\msdchem\1\DATA\010810V5\5S523.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\010810V5\5S524.D

Injection Date	Mix	Calibration File
8 Jan 2010 4:14 pm	A	C:\msdchem\1\DATA\010810V5\5S513.D
8 Jan 2010 8:59 pm	B	C:\msdchem\1\DATA\010810V5\5S524.D

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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	177492	2340 379470	7607	20085	35752	72311		LINR		0.9989
-0.0004	| 0.1082 | 0.00										
3)MPA	Chloromethane	0.2282941	0.2654872 0.2298656	0.2457297	0.2589139	0.2546362	0.2387123	0.2459	AVRG		5.8641
4)MCA	Vinyl chloride	0.2036642	0.2274156 0.2057360	0.2215468	0.2278750	0.2310622	0.2194092	0.2195	AVRG		4.9583
5)MA	Bromomethane	0.1525237	0.1452190 0.1587163	0.1530936	0.1644957	0.1597628	0.1581118	0.1560	AVRG		4.0115
6)MA	Chloroethane	0.1441700	0.1405792 0.1504267	0.1363793	0.1574374	0.1558609	0.1504196	0.1479	AVRG		5.2903
7)MA	Trichlorofluoromethane	0.2095063	0.1978556 0.2160745	0.2170444	0.2190664	0.2325234	0.2204643	0.2161	AVRG		4.9080
8)MA	Ethyl ether	0.1825733	0.1809861 0.1939374	0.1764935	0.1811904	0.1841504	0.1813892	0.1830	AVRG		2.9381
9)MA	Acetone	0.1787143	0.2192482 0.1819607	0.1878532	0.1807430	0.1947687	0.1688123	0.1874	AVRG		8.6124
10)MCA	1,1-Dichloroethylene	0.2538833	0.2249881 0.2706837	0.1857993	0.2192244	0.2438270	0.2335377	0.2331	AVRG		11.6886
11)MA	Iodomethane	0.2793988	0.2961596 0.2928487	0.2647750	0.2744143	0.2888108	0.2575681	0.2791	AVRG		5.2022
12)MA	Acetonitrile	0.0301808	0.0351303 0.0299262	0.0286696	0.0308680	0.0328442	0.0291327	0.0310	AVRG		7.3657
13)MA	Methyl acetate	0.1852170	0.2087885 0.1852844	0.1879014	0.1883663	0.1874438	0.1693328	0.1875	AVRG		6.1371
14)MA	Carbon disulfide	0.5470618	0.5696852 0.5804955	0.5228732	0.5337503	0.5744706	0.4865620	0.5450	AVRG		6.1650
15)MA	Methylene chloride	0.1978243	0.2067856	0.2541471	0.2197046	0.2103646	0.1907477	0.2133	AVRG		10.5032
16)MA	tert-Butyl methyl ether	0.4147694	0.4302491 0.4240451	0.4062469	0.4030751	0.4290703	0.3823335	0.4128	AVRG		4.1549

Response Factor Report VOA5
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 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
17)MA	trans-1,2-Dichloroethylene	0.2626134	0.2609702 0.2759295	0.2438023	0.2465729	0.2686014	0.2521579	0.2587	AVRG		4.5392
18)MA	Vinyl acetate	0.4670416	0.4074307 0.4684276	0.4242290	0.4452909	0.5161669	0.5048961	0.4619	AVRG		8.6253
19)MPA	1,1-Dichloroethane	0.3297755	0.3325043 0.3399312	0.3116833	0.3262931	0.3414296	0.3151054	0.3281	AVRG		3.4784
20)MA	2-Butanone	0.2125314	0.2344154 0.2237327	0.2033930	0.2061188	0.2201018	0.2025915	0.2147	AVRG		5.5512
21)MA	cis-1,2-Dichloroethylene	0.2913185	0.3009162 0.3014225	0.2858891	0.2941675	0.3012226	0.2799548	0.2936	AVRG		2.8636
22)MA	2,2-Dichloropropane	0.1646744	0.1817543 0.1724728	0.1458507	0.1622082	0.1674530	0.1579975	0.1646	AVRG		6.8598
23)MA	Bromochloromethane	0.0991148	0.1093598 0.1013362	0.0908593	0.0981653	0.0988674	0.0935860	0.0988	AVRG		5.9717
24)MCA	Chloroform	0.2976335	0.3126235 0.3110908	0.2817633	0.3043789	0.3072980	0.2901339	0.3007	AVRG		3.8083
25)MA	1,1,1-Trichloroethane	0.2142529	0.2057526 0.2221108	0.1996676	0.2034838	0.2172198	0.2065190	0.2099	AVRG		3.8718
26)MA	Cyclohexane	0.3034751	0.3227022 0.3140283	0.2865065	0.3023758	0.3169315	0.2873290	0.3048	AVRG		4.6410
27)MA	1,1-Dichloropropene	0.2340935	0.2389999 0.2406632	0.2171800	0.2219731	0.2369135	0.2198693	0.2300	AVRG		4.3147
28)MA	Carbon tetrachloride	0.1924722	0.1802793 0.2034554	0.1664499	0.1780246	0.1906617	0.1810536	0.1846	AVRG		6.4775
29)SA	1,2-Dichloroethane-d4	0.2266622	0.2359376 0.2285876	0.2306435	0.2362458	0.2395776	0.2290443	0.2324	AVRG		2.0833
30)MA	1,2-Dichloroethane	0.2398935	0.2551934 0.2460069	0.2397819	0.2439252	0.2519777	0.2365536	0.2448	AVRG		2.7861
31)MA	Benzene	0.7636980	0.8284492 0.7894428	0.7578336	0.7724384	0.7867736	0.7358136	0.7763	AVRG		3.7759

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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	0.3725051	0.3660897	0.3249493	0.3547349	0.3676622	0.3467316	0.3600	AVRG		5.6023
33)MA	n-Butyl alcohol	8127	15859	33404	85918	214645	447479		LINR	#	0.9996
	-0.0146 | 0.0075 | 0.00	1262472	2574494								
34)MA	Trichloroethylene		0.1813548	0.1734519	0.1779993	0.1800827	0.1761458	0.1800	AVRG		2.6406
		0.1825334	0.1880934								
35)MA	1,2-Dichloropropane		0.2039397	0.1900155	0.1965266	0.2052808	0.1983974	0.2011	AVRG		3.2215
		0.2049485	0.2088780								
36)MA	Methylcyclohexane		0.3357307	0.2943667	0.3099144	0.3241581	0.3033099	0.3172	AVRG		4.7181
		0.3245596	0.3286407								
37)MA	Dibromomethane		0.1023847	0.1014450	0.1054385	0.1085408	0.1048568	0.1056	AVRG		2.9507
		0.1066846	0.1101054								
38)MA	Bromodichloromethane		0.2064593	0.1904522	0.2119007	0.2192030	0.2185651	0.2162	AVRG		7.3194
		0.2257271	0.2411172								
39)MA	2-Chloroethylvinyl ether		0.0952927	0.0962952	0.1317871	0.1121050	0.1122357	0.1115	AVRG		11.3384
		0.1152453	0.1177567								
40)MA	cis-1,3-Dichloropropylene		0.2594646	0.2591614	0.2711790	0.2829472	0.2844347	0.2816	AVRG		7.2297
		0.3006928	0.3133904								
42)MA	4-Methyl-2-pentanone		0.1262814	0.1178461	0.1259550	0.1397557	0.1336108	0.1323	AVRG		6.9588
		0.1405361	0.1422055								
43)SA	Toluene-d8		1.3603023	1.3537887	1.3868622	1.3856492	1.3578207	1.3636	AVRG		1.2293
		1.3598352	1.3411479								
44)MA	Toluene		1.3054266	1.1978198	1.1643270	1.2142143	1.1450555	1.1974	AVRG		4.3936
		1.1741949	1.1806311								
45)MA	trans-1,3-Dichloropropyl		0.3368120	0.3151689	0.3390693	0.3580129	0.3620809	0.3566	AVRG		8.1564
		0.3865274	0.3982106								
46)MA	1,1,2-Trichloroethane		0.2103373	0.1833741	0.1927111	0.2046970	0.1979341	0.1993	AVRG		4.5027
		0.2017597	0.2045388								
47)MA	2-Hexanone		0.3647691	0.3467987	0.3717753	0.4147972	0.3953495	0.3918	AVRG		8.0006
		0.4198327	0.4293756								

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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
48) MA	1,3-Dichloropropane	0.4218932	0.4231346 0.4151334	0.4209349	0.4241582	0.4324170	0.4158145	0.4219	AVRG		1.3717
49) MA	Tetrachloroethylene	0.2199141	0.2418791 0.2237514	0.2161599	0.2217201	0.2248894	0.2152654	0.2234	AVRG		3.9933
50) MA	Dibromochloromethane	0.2599069	0.2133245 0.2718974	0.2099026	0.2344721	0.2411463	0.2428912	0.2391	AVRG		9.4544
51) MA	1,2-Dibromoethane	0.2353970	0.1992230 0.2402204	0.2100546	0.2231873	0.2258006	0.2301785	0.2234	AVRG		6.4372
52) MA	Chlorobenzene	0.7423830	0.8241285 0.7534998	0.7538328	0.7504302	0.7587789	0.7366442	0.7600	AVRG		3.8520
53) MA	1,1,1,2-Tetrachloroethane	0.2554985	0.2434166 0.2628426	0.2194623	0.2456029	0.2467502	0.2457009	0.2456	AVRG		5.4740
54) MA	Ethylbenzene	1.2908296	1.2902707 1.2937762	1.2111166	1.2257685	1.2796337	1.2443953	1.2623	AVRG		2.7372
55) MA	m,p-Xylenes	0.5194769	0.5255796 0.5179842	0.4836819	0.4994973	0.5099817	0.5007144	0.5081	AVRG		2.8530
56) MA	o-Xylene	0.5083785	0.4600359 0.5083754	0.4480934	0.4807452	0.5118658	0.4931835	0.4872	AVRG		5.1989
57) MA	Styrene	0.8569223	0.6782367 0.8648429	0.6513041	0.7253519	0.7824841	0.7946321	0.7648	AVRG		10.8907
59) MA	Bromoform	0.3047952	0.2663349 0.3269764	0.2508676	0.2489458	0.2761669	0.2884635	0.2804	AVRG		10.2000
60) MA	Isopropylbenzene	2.3296240	2.2568196 2.3253400	2.1697409	2.2368178	2.2934068	2.2577786	2.2671	AVRG		2.4547
61) SA	Bromofluorobenzene	0.9409832	0.9624044 0.9419742	0.9624167	0.9700651	0.9526554	0.9482525	0.9541	AVRG		1.1705
62) MA	1,1,2,2-Tetrachloroethane	0.5808242	0.5842296 0.5934897	0.5484485	0.5767767	0.5885986	0.5748650	0.5782	AVRG		2.5296
63) MA	1,2,3-Trichloropropane	0.1553798	0.1480405 0.1573292	0.1542340	0.1583400	0.1586045	0.1580088	0.1557	AVRG		2.4075

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Last Update : Mon Jan 11 08:56:29 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	1	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
		m1	m2	6	7								
64) MA	Bromobenzene			0.5803109	0.6388071	0.5793797	0.5982328	0.5895839	0.5770215	0.5915	AVRG		3.7629
65) MA	n-Propylbenzene			2.7777303	2.7268071	2.6797891	2.6570670	2.7521726	2.6965183	2.7200	AVRG		1.6065
66) MA	1,3,5-Trimethylbenzene			1.9348697	1.7912293	1.7241292	1.8352801	1.9130821	1.8775470	1.8565	AVRG		4.1686
67) MA	2-Chlorotoluene			0.5740853	0.5580186	0.5584916	0.5820415	0.5834570	0.5611863	0.5684	AVRG		1.9672
68) MA	4-Chlorotoluene			1.6837817	1.7615695	1.6538694	1.6858989	1.6878349	1.6483747	1.6879	AVRG		2.1905
69) MA	tert-Butylbenzene			0.4429995	0.4485186	0.4105029	0.4318144	0.4436306	0.4351547	0.4370	AVRG		2.9954
70) MA	1,2,4-Trimethylbenzene			2.0008575	2.0021183	1.7167445	1.8955056	1.9283332	1.9421310	1.9069	AVRG		5.1502
71) MA	sec-Butylbenzene			2.5810901	2.5187573	2.3496736	2.4396235	2.5602922	2.4735990	2.4975	AVRG		3.3091
72) MA	4-Isopropyltoluene			2.0923104	1.8333911	1.7781849	1.9233657	2.0326068	1.9938863	1.9630	AVRG		6.2567
73) MA	1,3-Dichlorobenzene			1.1333956	1.2398497	1.1244523	1.1301985	1.1388626	1.1247180	1.1478	AVRG		3.5863
74) MA	1,4-Dichlorobenzene			1.1511797	1.3518500	1.2143764	1.1759416	1.1650179	1.1392703	1.1933	AVRG		6.1981
75) MA	n-Butylbenzene			2.0197327	1.8208891	1.7306699	1.8037779	1.9241934	1.9259811	1.8927	AVRG		5.8929
76) MA	1,2-Dichlorobenzene			1.0810824	1.1275045	1.0945760	1.0845073	1.0864857	1.0714280	1.0919	AVRG		1.6420
77) MA	1,2-Dibromo-3-chloroprop			0.1137244	0.0998433	0.0977730	0.0957497	0.1039176	0.1045495	0.1056	AVRG		9.3588
78) MA	1,2,4-Trichlorobenzene			0.7851531	0.7339083	0.6848749	0.7435403	0.7590099	0.7684634	0.7548	AVRG		5.2713

Response Factor Report VOA5
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Last Update : Mon Jan 11 08:56:29 2010
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
b	m1 | m2	6	7								
79) MA	Hexachlorobutadiene	0.4404484	0.4317919 0.4361762	0.4066207	0.4075274	0.4174422	0.4204530	0.4229	AVRG		3.2021
80) MA	Naphthalene	1.8510303	1.4709204 1.8946562	1.4595894	1.5204817	1.6967024	1.7378801	1.6616	AVRG		10.8310
81) MA	1,2,3-Trichlorobenzene	0.6828319	0.6198386 0.6989836	0.5916593	0.6161675	0.6658061	0.6722564	0.6496	AVRG		6.1827
83) B	Chlorotrifluoroethylene	0.1017979	0.0812634 0.1105826	0.1001070	0.0885625	0.0873287	0.1134004	0.0976	AVRG		12.5248
84) B	2-Chloro-1,1,1-trifluoro	0.2111319	0.1920832 0.2074648	0.2074643	0.1982370	0.1941973	0.2006302	0.2016	AVRG		3.6070
85) B	Acrolein	0.0233536	0.0311225 0.0255589	0.0276138	0.0288597	0.0255727	0.0244949	0.0267	AVRG		10.1226
86) B	Trichlorotrifluoroethane	0.0403944	0.0261870 0.0429467	0.0390746	0.0371082	0.0414136	0.0402636	0.0382	AVRG		14.6620
87) B	Isopropyl Alcohol	0.0157291	0.0132320 0.0177188	0.0120625	0.0145641	0.0147163	0.0161722	0.0149	AVRG		12.6372
88) B	Allyl chloride	0.3195784	0.3142778 0.3335062	0.3137850	0.3138401	0.3125867	0.3098713	0.3168	AVRG		2.5016
89) B	tert-Butyl Alcohol	0.0210624	0.0187408 0.0234482	0.0178554	0.0193253	0.0197551	0.0218027	0.0203	AVRG		9.5262
90) B	Acrylonitrile	0.0766984	0.0696567 0.0812049	0.0679702	0.0766522	0.0775402	0.0788102	0.0755	AVRG		6.4265
91) B	Isopropyl ether	0.7977431	0.6749144 0.8488001	0.7438972	0.7512602	0.7463190	0.7692851	0.7617	AVRG		7.0159
92) B	2-Chloro-1,3-butadiene	0.2610890	0.2136173 0.2767700	0.2269519	0.2454530	0.2463628	0.2446208	0.2450	AVRG		8.4662
93) B	Ethyl tert-butyl ether	0.5466319	0.4636149 0.5935835	0.5000680	0.5136506	0.5116460	0.5368159	0.5237	AVRG		7.7939
94) B	Ethyl acetate	0.2264389	0.2499637 0.2367210	0.2108485	0.2257773	0.2269925	0.2322419	0.2299	AVRG		5.1932

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 m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
95)B	Propionitrile	0.0301574	0.0240500 0.0315788	0.0220309	0.0286188	0.0302604	0.0310657	0.0283	AVRG		13.1762
96)B	Methacrylonitrile	0.1411254	0.1282213 0.1471095	0.1266668	0.1387552	0.1415413	0.1436904	0.1382	AVRG		5.6232
97)B	Tetrahydrofuran	0.0714558	0.0727661 0.0742141	0.0687995	0.0727258	0.0718850	0.0748852	0.0724	AVRG		2.7528
98)B	Isobutyl alcohol	0.0089052	0.0077854 0.0095531	0.0070949	0.0081366	0.0084172	0.0091191	0.0084	AVRG	#	9.9791
99)B	Methyl tert-amyl ether	0.4657519	0.4007763 0.5029949	0.4164557	0.4248282	0.4389278	0.4585908	0.4440	AVRG		7.7940
100)B	Methyl methacrylate	0.1363513	0.1125668 0.1389626	0.1115240	0.1261373	0.1311181	0.1352273	0.1274	AVRG		8.8482
101)B	1,4-Dioxane	0.0018760	0.0014925 0.0020574	0.0017683	0.0018487	0.0018537	0.0020104	0.0018	AVRG	#	9.9916
102)B	2-Nitropropane -0.0109 | 0.0687 | 0.00	534767	7542 1155866	14139	42649	92496	202250		LINR		0.9988
104)B	Ethyl methacrylate	0.3616494	0.2933895 0.3516777	0.2947180	0.3349716	0.3535748	0.3654809	0.3365	AVRG		9.0798
106)B	1-Chlorohexane	0.5239404	0.4625887 0.5252741	0.4687767	0.4979576	0.4978088	0.5039134	0.4972	AVRG		4.8959
107)B	cis-1,4-Dichloro-2-buten	0.2082263	0.1647392 0.2173874	0.1582413	0.1832733	0.1939345	0.2002780	0.1894	AVRG		11.5915
108)B	Cyclohexanone -0.0326 | 0.0581 | 0.00	872875	9493	19548	63614	140600	333688		LINR		0.9992
109)B	trans-1,4-Dichloro-2-but	0.1942590	0.1573282 0.2011104	0.1631469	0.1774183	0.1846363	0.1928108	0.1815	AVRG		9.0599
110)B	Pentachloroethane	0.2128169	0.1850355 0.2071820	0.1733272	0.2086050	0.2100927	0.1958114	0.1990	AVRG		7.5032
111)B	Benzyl chloride -0.0909 | 1.0169 | 0.00	3059465	41965 6410200	83071	252023	541021	1139942		LINR		0.9999

Response Factor Report VOA5
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 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	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
	m1 | m2	7								
912)B	bis(2-Chloroisopropyl)et	0.2951284	0.2694040	0.3704000	0.3433998	0.3581821	0.3332	AVRG		11.0104
		0.3502019								

Page 910 of 1391
(#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date 08-JAN-10 21:50

Data File: 010810V5\SS526.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100108-18 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.2324	0.2279		.01		-1.93632	30		Averaged
SToluene-d8	1.3636	1.29954		.01		-4.69786	30		Averaged
SBromofluorobenzene	0.9541	0.9624		.01		0.86993	30		Averaged
Chlorotrifluoroethylene	0.0976	0.08552		.01		-12.37705	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.2016	0.20198		.01		0.18849	30		Averaged
Acrolein	0.0267	0.0188		.01		-29.58801	30		Averaged
Trichlorotrifluoroethane	0.0382	0.03576		.01		-6.38743	30		Averaged
Isopropyl Alcohol	0.0149	0.01676		.01		12.48322	40		Averaged
Allyl chloride	0.3168	0.27462		.01		-13.31439	30		Averaged
tert-Butyl Alcohol	0.0203	0.02189		.01		7.83251	40		Averaged
Acrylonitrile	0.0755	0.06991		.01		-7.40397	30		Averaged
Isopropyl ether	0.7617	0.78583		.01		3.16791	30		Averaged
2-Chloro-1,3-butadiene	0.245	0.21519		.01		-12.16735	30		Averaged
Ethyl tert-butyl ether	0.5237	0.54161		.01		3.4199	30		Averaged
Ethyl acetate	0.2299	0.1938		.01		-15.70248	40		Averaged
Propionitrile	0.0283	0.0264		.01		-6.71378	30		Averaged
Methacrylonitrile	0.1382	0.12508		.01		-9.49349	30		Averaged
Tetrahydrofuran	0.0724	0.0647		.01		-10.63536	30		Averaged
Isobutyl alcohol	0.0084	0.00764		.01		-9.04762	40		Averaged
Methyl tert-amyl ether	0.444	0.46578		.01		4.90541	30		Averaged
Methyl methacrylate	0.1274	0.11973		.01		-6.02041	30		Averaged
1,4-Dioxane	0.0018	0.00167		.01		-7.22222	40		Averaged
2-Nitropropane	250	209.47	250			-16.212	30		Linear
Ethyl methacrylate	0.3365	0.3209		.01		-4.63596	30		Averaged
1-Chlorohexane	0.4972	0.50574		.01		1.71762	30		Averaged
cis-1,4-Dichloro-2-butene	0.1894	0.18841		.01		-0.5227	30		Averaged
Cyclohexanone	1250	430.53	1250			-65.5576	40	*	Linear
trans-1,4-Dichloro-2-butene	0.1815	0.17818		.01		-1.8292	30		Averaged
Pentachloroethane	0.199	0.17851		.01		-10.29648	30		Averaged
Benzyl chloride	250	195.52	250			-21.792	30		Linear
bis(2-Chloroisopropyl)ether	0.3332	0.30719		.01		-7.80612	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\
Data File : 5S526.D
Acq On : 8 Jan 2010 9:50 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100108-18|ICV|1|VOA|1|
Misc : ICV 5mL N/A MIX[B]
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

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

Internal Standards						
1) Fluorobenzene	10.375	96	1702056	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	117	1195743	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	152	626055	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	96	1702056	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	117	1195743	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	152	626055	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	10.021	65	387895	49.03	ug/L	0.00
43) Toluene-d8	12.016	98	1553916	47.65	ug/L	0.00
61) Bromofluorobenzene	14.739	95	602518	50.43	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.598		0m	N.D.	d	
3) Chloromethane	5.253		0m	N.D.	d	
4) Vinyl chloride	5.404		0m	N.D.	d	
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	7.100		0m	N.D.	d	
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	7.366		0m	N.D.	d	
12) Acetonitrile	7.433		0m	N.D.	d	
13) Methyl acetate	7.493		0m	N.D.	d	
14) Carbon disulfide	7.549		0m	N.D.	d	
15) Methylene chloride	7.684		0m	N.D.	d	
16) tert-Butyl methyl ether	7.981		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	8.480		0m	N.D.	d	
19) 1,1-Dichloroethane	8.614		0m	N.D.	d	
20) 2-Butanone	9.088		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.091		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.452		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.866		0m	N.D.	d	
27) 1,1-Dichloropropene	9.763		0m	N.D.	d	
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.103		0m	N.D.	d	
31) Benzene	10.127		0m	N.D.	d	
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	10.467		0m	N.D.	d	
34) Trichloroethylene	10.764		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	11.019		0m	N.D.	d	
37) Dibromomethane	0.000		0	N.D.		
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.461		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\
Data File : 5S526.D
Acq On : 8 Jan 2010 9:50 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100108-18|ICV|1|VOA|1|
Misc : ICV 5mL N/A MIX[B]
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010.

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.793		0m	N.D.	d	
44) Toluene	12.094		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.239		0m	N.D.	d	
46) 1,1,2-Trichloroethane	12.688		0m	N.D.	d	
47) 2-Hexanone	12.631		0m	N.D.	d	
48) 1,3-Dichloropropane	12.702		0m	N.D.	d	
49) Tetrachloroethylene	12.688		0m	N.D.	d	
50) Dibromochloromethane	12.691		0m	N.D.	d	
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	13.579		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.636		0m	N.D.	d	
55) m,p-Xylenes	13.756		0m	N.D.	d	
56) o-Xylene	14.187		0m	N.D.	d	
57) Styrene	14.191		0m	N.D.	d	
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.534		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.856		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	14.962		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.114		0m	N.D.	d	
67) 2-Chlorotoluene	15.121		0m	N.D.	d	
68) 4-Chlorotoluene	15.220		0m	N.D.	d	
69) tert-Butylbenzene	15.559		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.528		0m	N.D.	d	
71) sec-Butylbenzene	15.704		0m	N.D.	d	
72) 4-Isopropyltoluene	15.825		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.909		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.991		0m	N.D.	d	
75) n-Butylbenzene	16.277		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.422		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	18.371		0m	N.D.	d	
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.762		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.116		0m	N.D.	d	
83) Chlorotrifluoroethylene	4.608	116	436664	131.46	ug/L	99
84) 2-Chloro-1,1,1-trifluo...	5.414	118	1031356	150.28	ug/L	99
85) Acrolein	6.914	56	159996	176.34	ug/L #	66
86) Trichlorotrifluoroethane	7.079	85	304328	234.04	ug/L	99
87) Isopropyl Alcohol	7.175	45	1426525	2815.31	ug/L	99
88) Allyl chloride	7.546	41	2337054	216.73	ug/L	98
89) tert-Butyl Alcohol	7.673	59	1862673	2697.57	ug/L	97
90) Acrylonitrile	7.924	53	594927	231.47	ug/L	98
91) Isopropyl ether	8.483	45	1337518	51.58	ug/L	98
92) 2-Chloro-1,3-butadiene	8.614	53	366267	43.92	ug/L	94
93) Ethyl tert-butyl ether	8.886	59	921854	51.71	ug/L	97
94) Ethyl acetate	9.088	43	1649323	210.79	ug/L	98
95) Propionitrile	9.151	54	224684	233.63	ug/L	100
96) Methacrylonitrile	9.332	41	1064443	226.33	ug/L	100
97) Tetrahydrofuran	9.463	42	550589	223.43	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\
Data File : 5S526.D
Acq On : 8 Jan 2010 9:50 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100108-18|ICV|1|VOA|1|
Misc : ICV 5mL N/A MIX[B]
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.770	41	650537	2266.88	ug/L	96
99) Methyl tert-amyl ether	10.138	73	792780	52.45	ug/L	95
100) Methyl methacrylate	10.969	69	1018925	234.92	ug/L	97
101) 1,4-Dioxane	11.086	88	142218	2265.80	ug/L	93
102) 2-Nitropropane	11.447	43	471321	209.47	ug/L	96
104) Ethyl methacrylate	12.235	69	1918566	238.41	ug/L	99
106) 1-Chlorohexane	13.438	55	316620	50.86	ug/L	94
107) cis-1,4-Dichloro-2-butene	14.573	53	589769	248.64	ug/L	92
108) Cyclohexanone	14.689	42	292637	430.53	ug/L	98
109) trans-1,4-Dichloro-2-b...	14.856	53	557739	245.38	ug/L	97
110) Pentachloroethane	15.563	167	558797	224.28	ug/L	100
111) Benzyl chloride	16.100	91	2432609	195.52	ug/L	100
112) bis(2-Chloroisopropyl)...	16.496	45	961585	230.49	ug/L	96

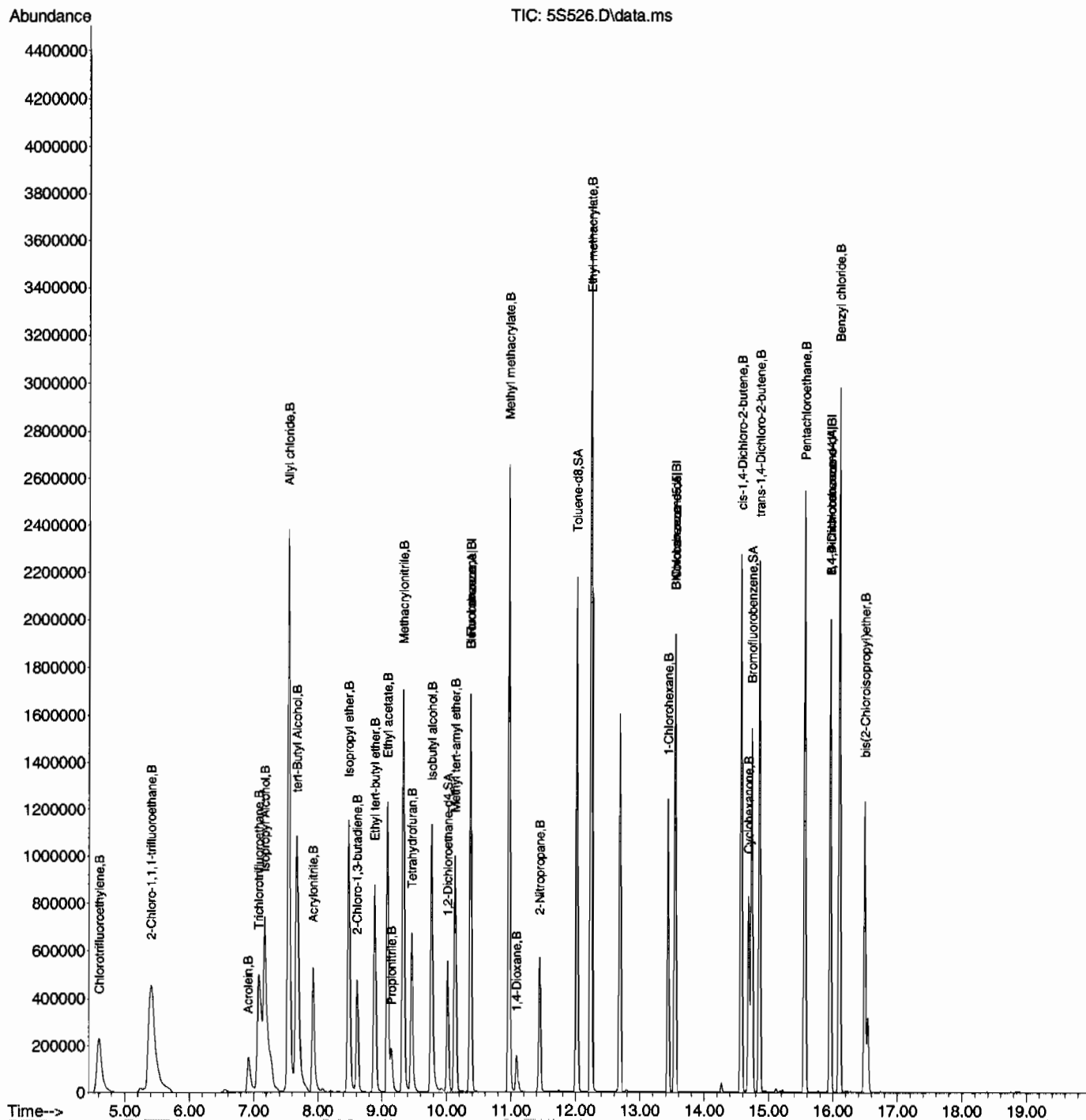
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\
Data File : 5S526.D
Acq On : 8 Jan 2010 9:50 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100108-18|ICV|1|VOA|1|
Misc : ICV 5mL N/A MIX[B]
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Page 1 of 3

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V5\5T103.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100111-01 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.2324	0.22184		.01		-4.54389	30		Averaged	
S Toluene-d8	1.3636	1.31648		.01		-3.45556	30		Averaged	
S Bromofluorobenzene	0.9541	0.93976		.01		-1.50299	30		Averaged	
Dichlorodifluoromethane	50	35.61	50			-28.78	30		Linear	
Chloromethane	0.2459	0.18973		.1		-22.84262	30		Averaged	spcc
Vinyl chloride	0.2195	0.18639		.01		-15.08428	20		Averaged	ccc
Bromomethane	0.156	0.14412		.01		-7.61538	30		Averaged	
Chloroethane	0.1479	0.13592		.01		-8.10007	30		Averaged	
Trichlorofluoromethane	0.2161	0.20021		.01		-7.35308	30		Averaged	
Ethyl ether	0.183	0.16789		.01		-8.25683	30		Averaged	
Acetone	0.1874	0.14518		.01		-22.52935	40		Averaged	
1,1-Dichloroethylene	0.2331	0.24127		.01		3.50493	20		Averaged	ccc
Iodomethane	0.2791	0.26132		.01		-6.37048	30		Averaged	
Acetonitrile	0.031	0.02908		.01		-6.19355	30		Averaged	
Methyl acetate	0.1875	0.16961		.01		-9.54133	40		Averaged	
Carbon disulfide	0.545	0.54934		.01		0.79633	30		Averaged	
Methylene chloride	0.2133	0.18937		.01		-11.21894	30		Averaged	
tert-Butyl methyl ether	0.4128	0.36891		.01		-10.63227	30		Averaged	
trans-1,2-Dichloroethylene	0.2587	0.25892		.01		0.08504	30		Averaged	
Vinyl acetate	0.4619	0.49912		.01		8.05802	40		Averaged	
1,1-Dichloroethane	0.3281	0.32541		.1		-0.81987	30		Averaged	spcc
2-Butanone	0.2147	0.1737		.01		-19.09641	40		Averaged	
cis-1,2-Dichloroethylene	0.2936	0.28593		.01		-2.6124	30		Averaged	
2,2-Dichloropropane	0.1646	0.16845		.01		2.339	30		Averaged	
Bromochloromethane	0.0988	0.09279		.01		-6.083	30		Averaged	
Chloroform	0.3007	0.2974		.01		-1.09744	20		Averaged	ccc
1,1,1-Trichloroethane	0.2099	0.21783		.01		3.77799	30		Averaged	
Cyclohexane	0.3048	0.31022		.01		1.77822	30		Averaged	
1,1-Dichloropropene	0.23	0.23919		.01		3.99565	30		Averaged	
Carbon tetrachloride	0.1846	0.20083		.01		8.79198	30		Averaged	
1,2-Dichloroethane	0.2448	0.23022		.01		-5.95588	30		Averaged	
Benzene	0.7763	0.76366		.01		-1.62824	30		Averaged	
Cyclohexene	0.36	0.37357		.01		3.76944	30		Averaged	
n-Butyl alcohol	5000	4983.33	5000			-0.3334	40		Linear	
Trichloroethylene	0.18	0.18334		.01		1.85556	30		Averaged	
1,2-Dichloropropane	0.2011	0.19867		.01		-1.20835	20		Averaged	ccc
Methylcyclohexane	0.3172	0.33005		.01		4.05107	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V5\5T103.D

Init. Cal. Date(s) 08-JAN-10 13:40

08-JAN-10 20:59

Lab Sample ID W5VM100111-01

Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1056	0.10165		.01		-3.74053	30		Averaged	
Bromodichloromethane	0.2162	0.22324		.01		3.25624	30		Averaged	
2-Chloroethylvinyl ether	0.1115	0.09491		.01		-14.87892	30		Averaged	
cis-1,3-Dichloropropylene	0.2816	0.28697		.01		1.90696	30		Averaged	
4-Methyl-2-pentanone	0.1323	0.12908		.01		-2.43386	40		Averaged	
Toluene	1.1974	1.16776		.01		-2.47536	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3566	0.36886		.01		3.43803	30		Averaged	
1,1,2-Trichloroethane	0.1993	0.18945		.01		-4.9423	30		Averaged	
2-Hexanone	0.3918	0.33739		.01		-13.88719	40		Averaged	
1,3-Dichloropropane	0.4219	0.39766		.01		-5.74544	30		Averaged	
Tetrachloroethylene	0.2234	0.22609		.01		1.20412	30		Averaged	
Dibromochloromethane	0.2391	0.24741		.01		3.47553	30		Averaged	
1,2-Dibromoethane	0.2234	0.22443		.01		0.46106	30		Averaged	
Chlorobenzene	0.76	0.73604		.3		-3.15263	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.2456	0.25103		.01		2.21091	30		Averaged	
Ethylbenzene	1.2623	1.28309		.01		1.64699	20		Averaged	ccc
m,p-Xylenes	0.5081	0.51866		.01		2.07833	30		Averaged	
o-Xylene	0.4872	0.50403		.01		3.45443	30		Averaged	
Styrene	0.7648	0.82729		.01		8.17076	30		Averaged	
Bromoform	0.2804	0.29851		.1		6.45863	30		Averaged	spcc
Isopropylbenzene	2.2671	2.35729		.01		3.97821	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5782	0.56257		.3		-2.70322	30		Averaged	spcc
1,2,3-Trichloropropane	0.1557	0.15346		.01		-1.43866	30		Averaged	
Bromobenzene	0.5915	0.56692		.01		-4.15554	30		Averaged	
n-Propylbenzene	2.72	2.78647		.01		2.44375	30		Averaged	
1,3,5-Trimethylbenzene	1.8565	1.93377		.01		4.16213	30		Averaged	
2-Chlorotoluene	0.5684	0.57046		.01		0.36242	30		Averaged	
4-Chlorotoluene	1.6879	1.68139		.01		-0.38569	30		Averaged	
tert-Butylbenzene	0.437	0.44726		.01		2.34783	30		Averaged	
1,2,4-Trimethylbenzene	1.9069	1.98973		.01		4.3437	30		Averaged	
sec-Butylbenzene	2.4975	2.59908		.01		4.06727	30		Averaged	
4-Isopropyltoluene	1.963	2.08912		.01		6.42486	30		Averaged	
1,3-Dichlorobenzene	1.1478	1.12497		.01		-1.98902	30		Averaged	
1,4-Dichlorobenzene	1.1933	1.14148		.01		-4.34258	30		Averaged	
n-Butylbenzene	1.8927	2.02771		.01		7.1332	30		Averaged	
1,2-Dichlorobenzene	1.0919	1.0614		.01		-2.7933	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1056	0.11508		.01		8.97727	30		Averaged	

Continuing Calibration Summary

Page 3 of 3

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V5\5T103.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100111-01 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7548	0.76956		.01		1.95548	30		Averaged
Hexachlorobutadiene	0.4229	0.43388		.01		2.59636	30		Averaged
Naphthalene	1.6616	1.76172		.01		6.02552	30		Averaged
1,2,3-Trichlorobenzene	0.6496	0.68253		.01		5.06927	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\
Data File : 5T103.D
Acq On : 11 Jan 2010 10:39 am
Operator : DXK1
InstName : VOA5
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5mL N/A MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	10.375	96	1767464	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	117	1245156	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	152	665347	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	96	1767464	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	117	1245156	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	152	665347	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	10.021	65	392093	47.73	ug/L	0.00
43) Toluene-d8	12.016	98	1639227	48.27	ug/L	0.00
61) Bromofluorobenzene	14.739	95	625267	49.25	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.689	85	135452	35.61	ug/L	99
3) Chloromethane	5.051	50	335339	38.57	ug/L	98
4) Vinyl chloride	5.283	62	329435	42.45	ug/L	100
5) Bromomethane	5.877	94	254721	46.19	ug/L	100
6) Chloroethane	6.018	64	240225	45.95	ug/L	98
7) Trichlorofluoromethane	6.391	101	353866	46.33	ug/L	100
8) Ethyl ether	6.733	59	296737	45.88	ug/L	97
9) Acetone	7.097	43	1282957	193.63	ug/L	100
10) 1,1-Dichloroethylene	7.122	61	426428	51.74	ug/L	96
11) Iodomethane	7.369	142	2309321	234.04	ug/L	98
12) Acetonitrile	7.447	41	1284899	1173.88	ug/L	100
13) Methyl acetate	7.493	43	1498896	226.17	ug/L	99
14) Carbon disulfide	7.507	76	4854701	252.00	ug/L	99
15) Methylene chloride	7.691	84	334701	44.40	ug/L	95
16) tert-Butyl methyl ether	7.981	73	652032	44.68	ug/L	97
17) trans-1,2-Dichloroethy...	8.030	61	457626	50.05	ug/L	96
18) Vinyl acetate	8.455	43	4410847	270.13	ug/L	98
19) 1,1-Dichloroethane	8.508	63	575146	49.59	ug/L	99
20) 2-Butanone	9.077	43	1535049	202.26	ug/L	98
21) cis-1,2-Dichloroethylene	9.144	61	505367	48.70	ug/L	94
22) 2,2-Dichloropropane	9.169	77	297726	51.16	ug/L	93
23) Bromochloromethane	9.417	128	164001	46.98	ug/L	93
24) Chloroform	9.448	83	525646	49.45	ug/L	100
25) 1,1,1-Trichloroethane	9.731	97	385011	51.90	ug/L	97
26) Cyclohexane	9.827	56	548301	50.89	ug/L	95
27) 1,1-Dichloropropene	9.887	75	422762	52.01	ug/L	98
28) Carbon tetrachloride	9.926	117	354955	54.39	ug/L	99
30) 1,2-Dichloroethane	10.103	62	406905	47.03	ug/L	99
31) Benzene	10.127	78	1349740	49.18	ug/L	99
32) Cyclohexene	10.244	67	660265	51.88	ug/L	96
33) n-Butyl alcohol	10.456	56	1287647	4983.33	ug/L	100
34) Trichloroethylene	10.768	95	324040	50.94	ug/L	99
35) 1,2-Dichloropropane	11.004	63	351133	49.38	ug/L	100
36) Methylcyclohexane	11.019	83	583356	52.02	ug/L	96
37) Dibromomethane	11.142	93	179670	48.12	ug/L	99
38) Bromodichloromethane	11.252	83	394572	51.63	ug/L	100
39) 2-Chloroethylvinyl ether	11.468	63	838708	212.73	ug/L	98
40) cis-1,3-Dichloropropylene	11.701	75	507210	50.95	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\
Data File : 5T103.D
Acq On : 11 Jan 2010 10:39 am
Operator : DXK1
InstName : VOA5
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5mL N/A MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.782	58	803647	243.90	ug/L	99
44) Toluene	12.090	91	1454040	48.76	ug/L	99
45) trans-1,3-Dichloroprop...	12.239	75	459287	51.73	ug/L	97
46) 1,1,2-Trichloroethane	12.461	83	235899	47.52	ug/L	98
47) 2-Hexanone	12.631	43	2100507	215.27	ug/L	99
48) 1,3-Dichloropropane	12.652	76	495153	47.12	ug/L	84
49) Tetrachloroethylene	12.691	164	281518	50.61	ug/L	100
50) Dibromochloromethane	12.925	129	308063	51.74	ug/L	99
51) 1,2-Dibromoethane	13.094	107	279447	50.22	ug/L	99
52) Chlorobenzene	13.579	112	916483	48.43	ug/L	98
53) 1,1,1,2-Tetrachloroethane	13.632	131	312570	51.10	ug/L	98
54) Ethylbenzene	13.636	91	1597647	50.83	ug/L	99
55) m,p-Xylenes	13.745	106	1291617	102.07	ug/L	99
56) o-Xylene	14.180	106	627594	51.72	ug/L	100
57) Styrene	14.180	104	1030110	54.08	ug/L	100
59) Bromoform	14.445	173	198613	53.24	ug/L	99
60) Isopropylbenzene	14.537	105	1568416	51.99	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.810	83	374301	48.65	ug/L	100
63) 1,2,3-Trichloropropane	14.898	110	102105	49.28	ug/L	90
64) Bromobenzene	14.951	156	377196	47.92	ug/L	99
65) n-Propylbenzene	14.962	91	1853968	51.22	ug/L	99
66) 1,3,5-Trimethylbenzene	15.114	105	1286629	52.08	ug/L	100
67) 2-Chlorotoluene	15.117	126	379552	50.18	ug/L	99
68) 4-Chlorotoluene	15.216	91	1118707	49.81	ug/L	100
69) tert-Butylbenzene	15.485	134	297583	51.18	ug/L	98
70) 1,2,4-Trimethylbenzene	15.527	105	1323858	52.17	ug/L	99
71) sec-Butylbenzene	15.711	105	1729291	52.03	ug/L	100
72) 4-Isopropyltoluene	15.832	119	1389993	53.21	ug/L	99
73) 1,3-Dichlorobenzene	15.902	146	748494	49.00	ug/L	99
74) 1,4-Dichlorobenzene	15.987	146	759482	47.83	ug/L	100
75) n-Butylbenzene	16.277	91	1349133	53.57	ug/L	99
76) 1,2-Dichlorobenzene	16.419	146	706200	48.60	ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.293	157	76570	54.49	ug/L	97
78) 1,2,4-Trichlorobenzene	18.371	180	512027	50.98	ug/L	100
79) Hexachlorobutadiene	18.548	225	288678	51.29	ug/L	98
80) Naphthalene	18.762	128	1172155	53.01	ug/L	100
81) 1,2,3-Trichlorobenzene	19.109	180	454118	52.53	ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	7.168		0m	N.D.	d	
88) Allyl chloride	7.447		0m	N.D.	d	
89) tert-Butyl Alcohol	7.698		0m	N.D.	d	
90) Acrylonitrile	7.988		0m	N.D.	d	
91) Isopropyl ether	8.451		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.610		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	9.077		0m	N.D.	d	
95) Propionitrile	9.077		0m	N.D.	d	
96) Methacrylonitrile	9.169		0m	N.D.	d	
97) Tetrahydrofuran	9.466		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\
Data File : 5T103.D
Acq On : 11 Jan 2010 10:39 am
Operator : DXK1
InstName : VOA5
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5mL N/A MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.562		0m	N.D.	d	
99) Methyl tert-amyl ether	10.124		0m	N.D.	d	
100) Methyl methacrylate	11.012		0m	N.D.	d	
101) 1,4-Dioxane	11.132		0m	N.D.	d	
102) 2-Nitropropane	11.192		0m	N.D.	d	
104) Ethyl methacrylate	12.235		0m	N.D.	d	
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.541		0m	N.D.	d	
108) Cyclohexanone	14.700		0m	N.D.	d	
109) trans-1,4-Dichloro-2-b...	14.849		0m	N.D.	d	
110) Pentachloroethane	15.563		0m	N.D.	d	
111) Benzyl chloride	16.100		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.500		0m	N.D.	d	

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

GEL Laboratories, LLC

ALS Vial : 3 Sample Multiplier: 1

SubList :



Continuing Calibration Summary

Client SDG: 10-1384

Instrument ID: VOA5.1

Injection Date 28-JAN-10 21:33

Data File: 012810V5V429.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100128-04 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.2324	0.25228		.01		8.55422	30		Averaged	
S Toluene-d8	1.3636	1.39776		.01		2.50513	30		Averaged	
S Bromofluorobenzene	0.9541	1.00024		.01		4.83597	30		Averaged	
Dichlorodifluoromethane	50	39.8	50			-20.4	30		Linear	
Chloromethane	0.2459	0.28164		.1		14.53436	30		Averaged	spcc
Vinyl chloride	0.2195	0.23322		.01		6.25057	20		Averaged	ccc
Bromomethane	0.156	0.1539		.01		-1.34615	30		Averaged	
Chloroethane	0.1479	0.14209		.01		-3.92833	30		Averaged	
Trichlorofluoromethane	0.2161	0.19673		.01		-8.96344	30		Averaged	
Ethyl ether	0.183	0.1895		.01		3.55191	30		Averaged	
Acetone	0.1874	0.19135		.01		2.10779	40		Averaged	
1,1-Dichloroethylene	0.2331	0.27802		.01		19.2707	20		Averaged	ccc
Iodomethane	0.2791	0.25825		.01		-7.47044	30		Averaged	
Acetonitrile	0.031	0.03325		.01		7.25806	30		Averaged	
Methyl acetate	0.1875	0.21088		.01		12.46933	40		Averaged	
Carbon disulfide	0.545	0.55564		.01		1.95229	30		Averaged	
Methylene chloride	0.2133	0.20337		.01		-4.65541	30		Averaged	
tert-Butyl methyl ether	0.4128	0.37887		.01		-8.21948	30		Averaged	
trans-1,2-Dichloroethylene	0.2587	0.28161		.01		8.85582	30		Averaged	
Vinyl acetate	0.4619	0.46578		.01		0.84001	40		Averaged	
1,1-Dichloroethane	0.3281	0.35089		.1		6.94605	30		Averaged	spcc
2-Butanone	0.2147	0.23538		.01		9.63204	40		Averaged	
cis-1,2-Dichloroethylene	0.2936	0.32073		.01		9.24046	30		Averaged	
2,2-Dichloropropane	0.1646	0.14667		.01		-10.89307	30		Averaged	
Bromochloromethane	0.0988	0.08961		.01		-9.30162	30		Averaged	
Chloroform	0.3007	0.31301		.01		4.09378	20		Averaged	ccc
1,1,1-Trichloroethane	0.2099	0.19998		.01		-4.72606	30		Averaged	
Cyclohexane	0.3048	0.30087		.01		-1.28937	30		Averaged	
1,1-Dichloropropene	0.23	0.23421		.01		1.83043	30		Averaged	
Carbon tetrachloride	0.1846	0.17607		.01		-4.6208	30		Averaged	
1,2-Dichloroethane	0.2448	0.28076		.01		14.68954	30		Averaged	
Benzene	0.7763	0.7868		.01		1.35257	30		Averaged	
Cyclohexene	0.36	0.3754		.01		4.27778	30		Averaged	
n-Butyl alcohol	5000	5223.03	5000			4.4606	40		Linear	
Trichloroethylene	0.18	0.18213		.01		1.18333	30		Averaged	
1,2-Dichloropropane	0.2011	0.22584		.01		12.30234	20		Averaged	ccc
Methylcyclohexane	0.3172	0.29009		.01		-8.54666	30		Averaged	

Continuing Calibration Summary

Page 2 of 3

Instrument ID: VOA5.I

Injection Date 28-JAN-10 21:33

Data File: 012810V5\5V429.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100128-04 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1056	0.108		.01		2.27273	30		Averaged	
Bromodichloromethane	0.2162	0.2385		.01		10.31452	30		Averaged	
2-Chloroethylvinyl ether	0.1115	0.09033		.01		-18.98655	30		Averaged	
cis-1,3-Dichloropropylene	0.2816	0.29808		.01		5.85227	30		Averaged	
4-Methyl-2-pentanone	0.1323	0.14791		.01		11.79894	40		Averaged	
Toluene	1.1974	1.22573		.01		2.36596	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3566	0.40053		.01		12.31913	30		Averaged	
1,1,2-Trichloroethane	0.1993	0.20693		.01		3.8284	30		Averaged	
2-Hexanone	0.3918	0.46176		.01		17.85605	40		Averaged	
1,3-Dichloropropane	0.4219	0.46605		.01		10.46457	30		Averaged	
Tetrachloroethylene	0.2234	0.19374		.01		-13.27663	30		Averaged	
Dibromochloromethane	0.2391	0.24273		.01		1.51819	30		Averaged	
1,2-Dibromoethane	0.2234	0.22609		.01		1.20412	30		Averaged	
Chlorobenzene	0.76	0.73026		.3		-3.91316	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.2456	0.25784		.01		4.98371	30		Averaged	
Ethylbenzene	1.2623	1.33915		.01		6.08809	20		Averaged	ccc
m,p-Xylenes	0.5081	0.52351		.01		3.03287	30		Averaged	
o-Xylene	0.4872	0.52196		.01		7.13465	30		Averaged	
Styrene	0.7648	0.87614		.01		14.55805	30		Averaged	
Bromoform	0.2804	0.27715		.1		-1.15906	30		Averaged	spcc
Isopropylbenzene	2.2671	2.41136		.01		6.3632	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5782	0.60936		.3		5.38914	30		Averaged	spcc
1,2,3-Trichloropropane	0.1557	0.15693		.01		0.78998	30		Averaged	
Bromobenzene	0.5915	0.56041		.01		-5.25613	30		Averaged	
n-Propylbenzene	2.72	3.00782		.01		10.58162	30		Averaged	
1,3,5-Trimethylbenzene	1.8565	2.08248		.01		12.17237	30		Averaged	
2-Chlorotoluene	0.5684	0.59275		.01		4.28395	30		Averaged	
4-Chlorotoluene	1.6879	1.77011		.01		4.87055	30		Averaged	
tert-Butylbenzene	0.437	0.42293		.01		-3.21968	30		Averaged	
1,2,4-Trimethylbenzene	1.9069	2.06222		.01		8.14516	30		Averaged	
sec-Butylbenzene	2.4975	2.58669		.01		3.57117	30		Averaged	
4-Isopropyltoluene	1.963	2.02096		.01		2.95262	30		Averaged	
1,3-Dichlorobenzene	1.1478	1.06386		.01		-7.31312	30		Averaged	
1,4-Dichlorobenzene	1.1933	1.08607		.01		-8.98601	30		Averaged	
n-Butylbenzene	1.8927	2.00909		.01		6.14942	30		Averaged	
1,2-Dichlorobenzene	1.0919	1.0077		.01		-7.71133	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1056	0.09653		.01		-8.58902	30		Averaged	

Continuing Calibration Summary

Page 3 of 3

Instrument ID: VOA5.I

Injection Date 28-JAN-10 21:33

Data File: 012810V5\5V429.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100128-04 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7548	0.65086		.01		-13.77054	30		Averaged
Hexachlorobutadiene	0.4229	0.35454		.01		-16.16458	30		Averaged
Naphthalene	1.6616	1.70072		.01		2.35436	30		Averaged
1,2,3-Trichlorobenzene	0.6496	0.598		.01		-7.94335	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V429.D
Acq On : 28 Jan 2010 9:33 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL N/A MIX[A]
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 29 09:56:41 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.378	10.375	1.000	96	1851377	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1253940	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	633883	50.00	ug/L	0.00
82) B Fluorobenzene	10.378	10.375	1.000	96	1851377	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1253940	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	633883	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	467065	54.28	ug/L	0.00
43) Toluene-d8	12.016	12.016	0.887	98	1752702	51.25	ug/L	0.00
61) Bromofluorobenzene	14.739	14.739	0.924	95	634033	52.42	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.699	4.689	0.453	85	158691	39.80	ug/L	100
3) Chloromethane	5.061	5.051	0.488	50	521430	57.26	ug/L	100
4) Vinyl chloride	5.262	5.283	0.507	62	431772	53.12	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	284925	49.33	ug/L	100
6) Chloroethane	6.018	6.018	0.580	64	263060	48.04	ug/L	99
7) Trichlorofluoromethane	6.400	6.391	0.617	101	364227	45.52	ug/L	98
8) Ethyl ether	6.733	6.733	0.649	59	350830	51.79	ug/L	100
9) Acetone	7.100	7.100	0.684	43	1771300	255.21	ug/L	95
10) 1,1-Dichloroethylene	7.125	7.125	0.687	61	514723	59.63	ug/L	97
11) Iodomethane	7.369	7.373	0.710	142	2390634	231.30	ug/L	94
12) Acetonitrile	7.450	7.450	0.718	41	1539006	1342.30	ug/L	99
13) Methyl acetate	7.493	7.493	0.722	43	1952095	281.21	ug/L	98
14) Carbon disulfide	7.507	7.511	0.723	76	5143472	254.89	ug/L	100
15) Methylene chloride	7.687	7.691	0.741	84	376510	47.68	ug/L	94
16) tert-Butyl methyl ether	7.984	7.984	0.769	73	701430	45.89	ug/L	100
17) trans-1,2-Dichloroethy...	8.034	8.030	0.774	61	521358	54.43	ug/L	95
18) Vinyl acetate	8.458	8.458	0.815	43	4311661	252.09	ug/L	98
19) 1,1-Dichloroethane	8.511	8.511	0.820	63	649626	53.47	ug/L	100
20) 2-Butanone	9.077	9.077	0.875	43	2178921	274.09	ug/L	96
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	593788	54.63	ug/L	97
22) 2,2-Dichloropropane	9.169	9.173	0.883	77	271537	44.54	ug/L	88
23) Bromochloromethane	9.420	9.417	0.908	128	165905	45.37	ug/L	# 82
24) Chloroform	9.452	9.452	0.911	83	579507	52.05	ug/L	100
25) 1,1,1-Trichloroethane	9.731	9.735	0.938	97	370245	47.65	ug/L	98
26) Cyclohexane	9.830	9.830	0.947	56	557020	49.36	ug/L	98
27) 1,1-Dichloropropene	9.887	9.887	0.953	75	433613	50.93	ug/L	89
28) Carbon tetrachloride	9.929	9.929	0.957	117	325972	47.68	ug/L	99
30) 1,2-Dichloroethane	10.103	10.103	0.973	62	519784	57.35	ug/L	100
31) Benzene	10.127	10.127	0.976	78	1456665	50.67	ug/L	97
32) Cyclohexene	10.248	10.248	0.987	67	695006	52.14	ug/L	98
33) n-Butyl alcohol	10.456	10.460	1.007	56	1414954	5223.03	ug/L	95
34) Trichloroethylene	10.767	10.768	1.037	95	337196	50.61	ug/L	94
35) 1,2-Dichloropropane	11.004	11.004	1.060	63	418121	56.14	ug/L	100
36) Methylcyclohexane	11.015	11.019	1.061	83	537064	45.72	ug/L	96
37) Dibromomethane	11.142	11.146	1.074	93	199943	51.12	ug/L	90
38) Bromodichloromethane	11.252	11.256	1.084	83	441558	55.16	ug/L	99
39) 2-Chloroethylvinyl ether	11.468	11.468	1.105	63	836173	202.48	ug/L	98
40) cis-1,3-Dichloropropylene	11.701	11.705	1.127	75	551866	52.92	ug/L	91

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V429.D
Acq On : 28 Jan 2010 9:33 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL N/A MIX[A]
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 29 09:56:41 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	927347	279.47	ug/L	91
44) Toluene	12.090	12.090	0.892	91	1536993	51.18	ug/L	100
45) trans-1,3-Dichloroprop...	12.242	12.239	0.904	75	502239	56.17	ug/L	92
46) 1,1,2-Trichloroethane	12.461	12.465	0.920	83	259479	51.91	ug/L	99
47) 2-Hexanone	12.635	12.631	0.933	43	2895077	294.63	ug/L	96
48) 1,3-Dichloropropane	12.652	12.656	0.934	76	584393	55.23	ug/L	98
49) Tetrachloroethylene	12.691	12.691	0.937	164	242935	43.37	ug/L	93
50) Dibromochloromethane	12.925	12.928	0.954	129	304375	50.76	ug/L	100
51) 1,2-Dibromoethane	13.094	13.094	0.967	107	283505	50.59	ug/L	99
52) Chlorobenzene	13.582	13.579	1.003	112	915702	48.05	ug/L	97
53) 1,1,1,2-Tetrachloroethane	13.635	13.636	1.007	131	323320	52.49	ug/L	97
54) Ethylbenzene	13.639	13.639	1.007	91	1679213	53.05	ug/L	98
55) m,p-Xylenes	13.745	13.749	1.015	106	1312896	103.03	ug/L	93
56) o-Xylene	14.180	14.184	1.047	106	654506	53.56	ug/L	92
57) Styrene	14.184	14.184	1.047	104	1098624	57.28	ug/L	94
59) Bromoform	14.445	14.445	0.905	173	175679	49.43	ug/L	99
60) Isopropylbenzene	14.537	14.537	0.911	105	1528522	53.18	ug/L	98
62) 1,1,2,2-Tetrachloroethane	14.813	14.810	0.928	83	386264	52.70	ug/L	100
63) 1,2,3-Trichloropropane	14.901	14.898	0.934	110	99476	50.39	ug/L	98
64) Bromobenzene	14.954	14.951	0.937	156	355232	47.37	ug/L	87
65) n-Propylbenzene	14.962	14.965	0.938	91	1906607	55.29	ug/L	98
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	1320050	56.09	ug/L	97
67) 2-Chlorotoluene	15.117	15.117	0.947	126	375737	52.14	ug/L	86
68) 4-Chlorotoluene	15.216	15.216	0.953	91	1122042	52.44	ug/L	96
69) tert-Butylbenzene	15.488	15.489	0.971	134	268091	48.40	ug/L #	87
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973	105	1307206	54.07	ug/L	97
71) sec-Butylbenzene	15.711	15.711	0.984	105	1639660	51.79	ug/L	98
72) 4-Isopropyltoluene	15.831	15.832	0.992	119	1281051	51.48	ug/L	97
73) 1,3-Dichlorobenzene	15.902	15.902	0.996	146	674363	46.34	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	688441	45.51	ug/L	99
75) n-Butylbenzene	16.277	16.277	1.020	91	1273526	53.08	ug/L	98
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	638766	46.14	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.293	17.293	1.084	157	61188	45.71	ug/L	90
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	412572	43.11	ug/L	100
79) Hexachlorobutadiene	18.548	18.548	1.162	225	224740	41.92	ug/L	98
80) Naphthalene	18.762	18.762	1.176	128	1078055	51.18	ug/L	99
81) 1,2,3-Trichlorobenzene	19.108	19.116	1.197	180	379064	46.03	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	6.934	6.924	0.668		0m	N.D. d		
86) Trichlorotrifluoroethane	7.082	7.079	0.682		0m	N.D. d		
87) Isopropyl Alcohol	7.150	7.175	0.689		0m	N.D. d		
88) Allyl chloride	7.450	7.546	0.718		0m	N.D. d		
89) tert-Butyl Alcohol	7.708	7.673	0.743		0m	N.D. d		
90) Acrylonitrile	7.935	7.928	0.765		0m	N.D. d		
91) Isopropyl ether	8.458	8.483	0.815		0m	N.D. d		
92) 2-Chloro-1,3-butadiene	8.617	8.617	0.830		0m	N.D. d		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.077	9.088	0.875		0m	N.D. d		
95) Propionitrile	9.151	9.148	0.882		0m	N.D. d		
96) Methacrylonitrile	9.335	9.332	0.899		0m	N.D. d		
97) Tetrahydrofuran	9.459	9.466	0.911		0m	N.D. d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V429.D
Acq On : 28 Jan 2010 9:33 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL N/A MIX[A]
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 29 09:56:41 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

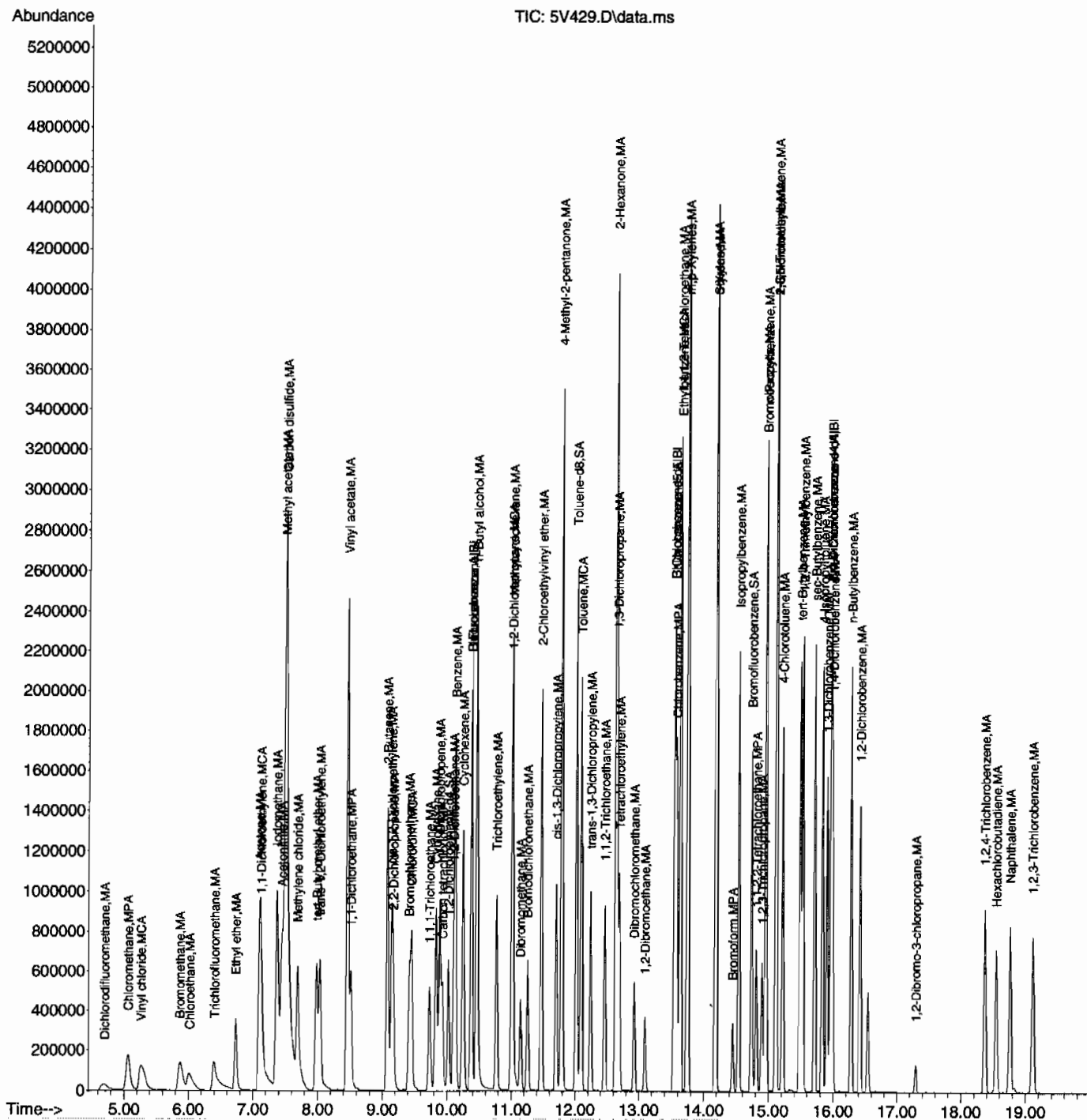
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	9.830	9.770	0.947		0m	N.D.	d
99) Methyl tert-amyl ether	10.127	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.018	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.146	11.089	1.074		0m	N.D.	d
102) 2-Nitropropane	11.567	11.443	1.114		0m	N.D.	d
104) Ethyl methacrylate	12.235	12.235	0.903		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.537	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.696	14.693	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.859	14.856	0.931		0m	N.D.	d
110) Pentachloroethane	15.570	15.559	0.976		0m	N.D.	d
111) Benzyl chloride	16.097	16.100	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.496	16.497	1.034		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\012810V5\  
Data File : 5V429.D  
Acq On : 28 Jan 2010 9:33 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-04|CCV|1|VOA|1|VOA8260BL|  
Misc : CCV 5mL N/A MIX[A]  
ALS Vial : 29 Sample Multiplier: 1
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SubList :



Continuing Calibration Summary

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date: 28-JAN-10 22:25

Data File: 012810V5\5V431.D

Init. Cal. Date(s): 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID: W5VM100128-06

Quant Type: ISTD

Method: VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.2324	0.2432		.01		4.64716	30		Averaged
S Toluene-d8	1.3636	1.37519		.01		0.84996	30		Averaged
S Bromofluorobenzene	0.9541	1.06097		.01		11.20113	30		Averaged
Acrolein	0.0267	0.02003		.01		-24.98127	30		Averaged
Trichlorotrifluoroethane	0.0382	0.04705		.01		23.16754	30		Averaged
Allyl chloride	0.3168	0.34633		.01		9.32134	30		Averaged
Acrylonitrile	0.0755	0.07591		.01		0.54305	30		Averaged
2-Chloro-1,3-butadiene	0.245	0.27402		.01		11.8449	30		Averaged
Ethyl acetate	0.2299	0.22665		.01		-1.41366	40		Averaged
Propionitrile	0.0283	0.02966		.01		4.80565	30		Averaged
Methacrylonitrile	0.1382	0.1504		.01		8.82779	30		Averaged
Tetrahydrofuran	0.0724	0.07615		.01		5.17956	30		Averaged
Isobutyl alcohol	0.0084	0.00934		.01		11.19048	40		Averaged
Methyl methacrylate	0.1274	0.1355		.01		6.35793	30		Averaged
1,4-Dioxane	0.0018	0.00187		.01		3.88889	40		Averaged
2-Nitropropane	250	252.69	250			1.076	30		Linear
Ethyl methacrylate	0.3365	0.40909		.01		21.57207	30		Averaged
cis-1,4-Dichloro-2-butene	0.1894	0.26537		.01		40.11088	30	*	Averaged
Cyclohexanone	1250	668.94	1250			-46.4848	40	*	Linear
trans-1,4-Dichloro-2-butene	0.1815	0.25115		.01		38.37466	30	*	Averaged
Pentachloroethane	0.199	0.16577		.01		-16.69849	30		Averaged
Benzyl chloride	250	233.36	250			-6.656	30		Linear
bis(2-Chloroisopropyl)ether	0.3332	0.36613		.01		9.88295	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-06|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:45 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1999466	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1298190	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	608332	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1999466	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1298190	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	608332	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	486267	52.33	ug/L	0.00
43) Toluene-d8	12.016	12.016	0.887	98	1785262	50.42	ug/L	0.00
61) Bromofluorobenzene	14.739	14.739	0.924	95	645420	55.60	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.061	5.051	0.488		0m	N.D.	d	
4) Vinyl chloride	5.293	5.283	0.510		0m	N.D.	d	
5) Bromomethane	5.867	5.877	0.565		0m	N.D.	d	
6) Chloroethane	6.048	6.018	0.583		0m	N.D.	d	
7) Trichlorofluoromethane	6.401	6.391	0.617		0m	N.D.	d	
8) Ethyl ether	6.743	6.733	0.650		0m	N.D.	d	
9) Acetone	7.104	7.100	0.685		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.118	7.125	0.686		0m	N.D.	d	
11) Iodomethane	7.373	7.373	0.711		0m	N.D.	d	
12) Acetonitrile	7.479	7.450	0.721		0m	N.D.	d	
13) Methyl acetate	7.500	7.493	0.723		0m	N.D.	d	
14) Carbon disulfide	7.550	7.511	0.728		0m	N.D.	d	
15) Methylene chloride	7.691	7.691	0.741		0m	N.D.	d	
16) tert-Butyl methyl ether	7.988	7.984	0.770		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.023	8.030	0.773		0m	N.D.	d	
18) Vinyl acetate	8.465	8.458	0.816		0m	N.D.	d	
19) 1,1-Dichloroethane	8.504	8.511	0.820		0m	N.D.	d	
20) 2-Butanone	9.091	9.077	0.876		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.091	9.144	0.876		0m	N.D.	d	
22) 2,2-Dichloropropane	9.176	9.173	0.884		0m	N.D.	d	
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	9.459	9.452	0.912		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.742	9.735	0.939		0m	N.D.	d	
26) Cyclohexane	9.876	9.830	0.952		0m	N.D.	d	
27) 1,1-Dichloropropene	9.891	9.887	0.953		0m	N.D.	d	
28) Carbon tetrachloride	9.930	9.929	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	10.099	10.103	0.973		0m	N.D.	d	
31) Benzene	10.131	10.127	0.976		0m	N.D.	d	
32) Cyclohexene	10.248	10.248	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.467	10.460	1.009		0m	N.D.	d	
34) Trichloroethylene	10.771	10.768	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	11.008	11.004	1.061		0m	N.D.	d	
36) Methylcyclohexane	11.005	11.019	1.061		0m	N.D.	d	
37) Dibromomethane	11.132	11.146	1.073		0m	N.D.	d	
38) Bromodichloromethane	11.259	11.256	1.085		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.468	11.468	1.105		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.708	11.705	1.129		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-06|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:45 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	11.790	11.786	0.870		0m	N.D.	d
44) Toluene	12.094	12.090	0.893		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.228	12.239	0.903		0m	N.D.	d
46) 1,1,2-Trichloroethane	12.472	12.465	0.921		0m	N.D.	d
47) 2-Hexanone	12.635	12.631	0.933		0m	N.D.	d
48) 1,3-Dichloropropane	12.653	12.656	0.934		0m	N.D.	d
49) Tetrachloroethylene	12.688	12.691	0.937		0m	N.D.	d
50) Dibromochloromethane	12.928	12.928	0.954		0m	N.D.	d
51) 1,2-Dibromoethane	13.091	13.094	0.966		0m	N.D.	d
52) Chlorobenzene	13.586	13.579	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	13.629	13.636	1.006		0m	N.D.	d
54) Ethylbenzene	13.639	13.639	1.007		0m	N.D.	d
55) m,p-Xylenes	13.749	13.749	1.015		0m	N.D.	d
56) o-Xylene	14.180	14.184	1.047		0m	N.D.	d
57) Styrene	14.187	14.184	1.047		0m	N.D.	d
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.541	14.537	0.911		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	14.813	14.810	0.928		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	14.951	14.951	0.937		0m	N.D.	d
65) n-Propylbenzene	14.969	14.965	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.110	15.114	0.947		0m	N.D.	d
67) 2-Chlorotoluene	15.117	15.117	0.947		0m	N.D.	d
68) 4-Chlorotoluene	15.220	15.216	0.954		0m	N.D.	d
69) tert-Butylbenzene	15.489	15.489	0.971		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.524	15.527	0.973		0m	N.D.	d
71) sec-Butylbenzene	15.711	15.711	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	15.832	15.832	0.992		0m	N.D.	d
73) 1,3-Dichlorobenzene	15.906	15.902	0.997		0m	N.D.	d
74) 1,4-Dichlorobenzene	15.987	15.991	1.002		0m	N.D.	d
75) n-Butylbenzene	16.277	16.277	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.419	16.422	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.378	18.371	1.152		0m	N.D.	d
79) Hexachlorobutadiene	18.555	18.548	1.163		0m	N.D.	d
80) Naphthalene	18.762	18.762	1.176		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.109	19.116	1.197		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	6.924	6.924	0.667	56	200275	187.90 ug/L	93
86) Trichlorotrifluoroethane	7.079	7.079	0.682	85	470408	307.95 ug/L	93
87) Isopropyl Alcohol	7.281	7.175	0.702	45	1022	N.D.	
88) Allyl chloride	7.550	7.546	0.728	41	3462391	273.32 ug/L	95
89) tert-Butyl Alcohol	7.691	7.673	0.741	59	161	N.D.	
90) Acrylonitrile	7.928	7.928	0.764	53	758858	251.33 ug/L	99
91) Isopropyl ether	8.480	8.483	0.817	45	215	N.D.	
92) 2-Chloro-1,3-butadiene	8.621	8.617	0.831	53	547891	55.93 ug/L	94
93) Ethyl tert-butyl ether	9.084	8.890	0.876	59	623	N.D.	
94) Ethyl acetate	9.091	9.088	0.876	43	2265853	246.51 ug/L	99
95) Propionitrile	9.152	9.148	0.882	54	296501	262.44 ug/L	99
96) Methacrylonitrile	9.332	9.332	0.899	41	1503607	272.15 ug/L	98
97) Tetrahydrofuran	9.463	9.466	0.912	42	761291	262.98 ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-06|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:45 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	9.770	9.770	0.942	41	933600	2769.35	ug/L	98
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.		
100) Methyl methacrylate	10.973	10.969	1.058	69	1354649	265.87	ug/L	92
101) 1,4-Dioxane	11.089	11.089	1.069	88	187097	2537.42	ug/L	94
102) 2-Nitropropane	11.447	11.443	1.103	43	672415	252.69	ug/L	99
104) Ethyl methacrylate	12.235	12.235	0.903	69	2655399	303.94	ug/L	94
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.573	14.573	0.913	53	807154	350.20	ug/L	98
108) Cyclohexanone	14.693	14.693	0.921	42	452815	668.94	ug/L	92
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	763921	345.88	ug/L	91
110) Pentachloroethane	15.559	15.559	0.975	167	504202	208.27	ug/L	91
111) Benzyl chloride	16.101	16.100	1.009	91	2831914	233.36	ug/L	96
112) bis(2-Chloroisopropyl)...	16.497	16.497	1.034	45	1113642	274.71	ug/L	97

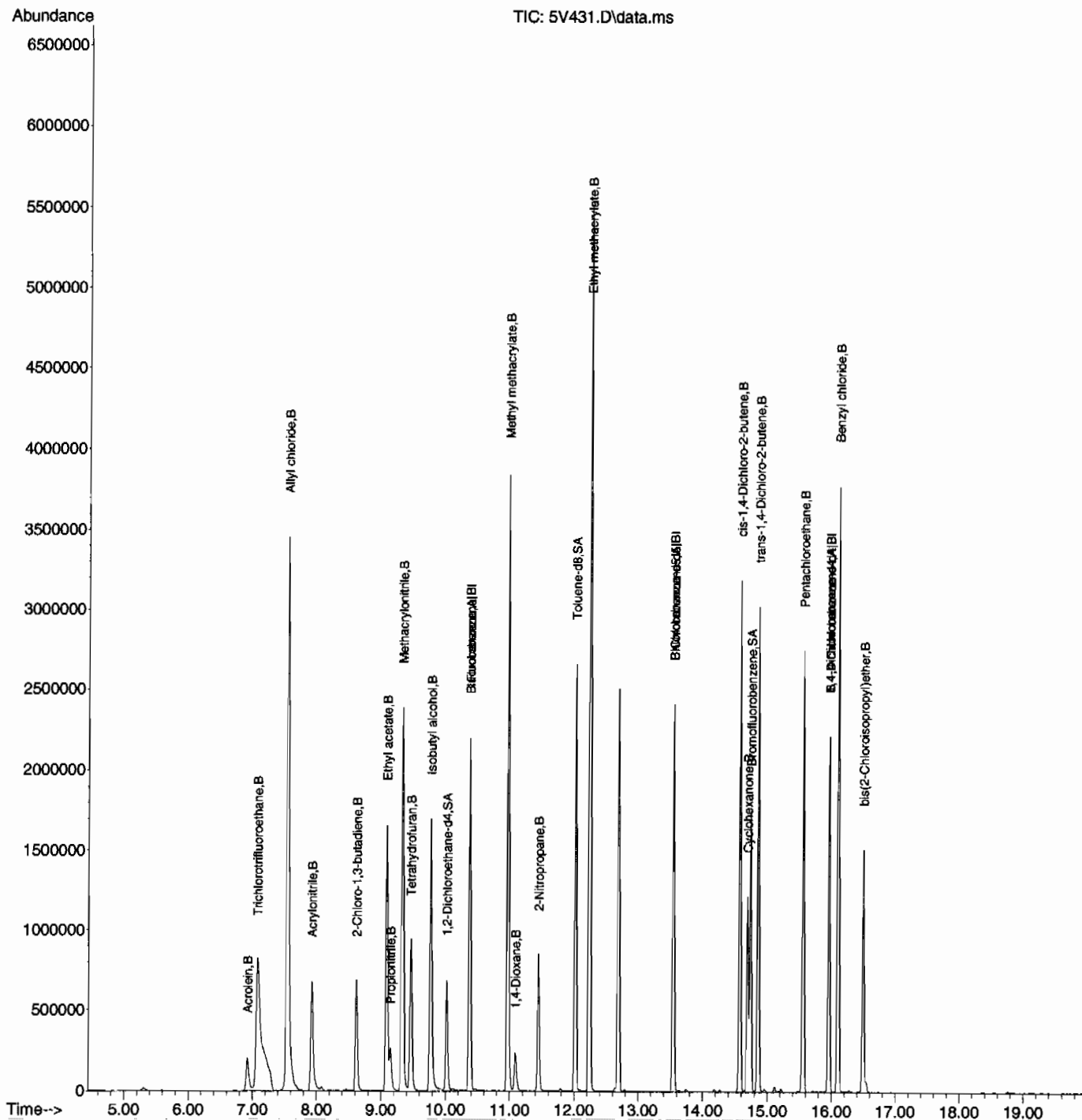
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100128-06|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:45 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:15

Data File: 013110V5V703.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100131-02

Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.2324	0.24615		.01		5.91652	30		Averaged	
SToluene-d8	1.3636	1.34231		.01		-1.56131	30		Averaged	
SBromofluorobenzene	0.9541	0.99437		.01		4.22073	30		Averaged	
Dichlorodifluoromethane	50	39.02	50			-21.96	30		Linear	
Chloromethane	0.2459	0.25565		.1		3.96503	30		Averaged	spcc
Vinyl chloride	0.2195	0.24104		.01		9.81321	20		Averaged	ccc
Bromomethane	0.156	0.15378		.01		-1.42308	30		Averaged	
Chloroethane	0.1479	0.13852		.01		-6.34212	30		Averaged	
Trichlorofluoromethane	0.2161	0.21733		.01		0.56918	30		Averaged	
Ethyl ether	0.183	0.18416		.01		0.63388	30		Averaged	
Acetone	0.1874	0.17062		.01		-8.95411	40		Averaged	
1,1-Dichloroethylene	0.2331	0.27053		.01		16.05749	20		Averaged	ccc
Iodomethane	0.2791	0.23608		.01		-15.41383	30		Averaged	
Acetonitrile	0.031	0.03389		.01		9.32258	30		Averaged	
Methyl acetate	0.1875	0.20357		.01		8.57067	40		Averaged	
Carbon disulfide	0.545	0.56311		.01		3.32294	30		Averaged	
Methylene chloride	0.2133	0.18853		.01		-11.61275	30		Averaged	
tert-Butyl methyl ether	0.4128	0.36791		.01		-10.87452	30		Averaged	
trans-1,2-Dichloroethylene	0.2587	0.27381		.01		5.84074	30		Averaged	
Vinyl acetate	0.4619	0.5979		.01		29.4436	40		Averaged	
1,1-Dichloroethane	0.3281	0.34006		.1		3.64523	30		Averaged	spcc
2-Butanone	0.2147	0.20219		.01		-5.82673	40		Averaged	
cis-1,2-Dichloroethylene	0.2936	0.30832		.01		5.01362	30		Averaged	
2,2-Dichloropropane	0.1646	0.16273		.01		-1.13609	30		Averaged	
Bromochloromethane	0.0988	0.08505		.01		-13.917	30		Averaged	
Chloroform	0.3007	0.30476		.01		1.35018	20		Averaged	ccc
1,1,1-Trichloroethane	0.2099	0.20611		.01		-1.80562	30		Averaged	
Cyclohexane	0.3048	0.31854		.01		4.50787	30		Averaged	
1,1-Dichloropropene	0.23	0.24105		.01		4.80435	30		Averaged	
Carbon tetrachloride	0.1846	0.18341		.01		-0.64464	30		Averaged	
1,2-Dichloroethane	0.2448	0.27014		.01		10.35131	30		Averaged	
Benzene	0.7763	0.75541		.01		-2.69097	30		Averaged	
Cyclohexene	0.36	0.36357		.01		0.99167	30		Averaged	
n-Butyl alcohol	5000	5579.92	5000			11.5984	40		Linear	
Trichloroethylene	0.18	0.17647		.01		-1.96111	30		Averaged	
1,2-Dichloropropane	0.2011	0.21423		.01		6.52909	20		Averaged	ccc
Methylcyclohexane	0.3172	0.30136		.01		-4.99369	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date 31-JAN-10 12:15

Data File: 013110V5\SV703.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100131-02 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Dibromomethane	0.1056	0.10291		.01		-2.54735	30		Averaged
Bromodichloromethane	0.2162	0.22869		.01		5.77706	30		Averaged
2-Chloroethylvinyl ether	0.1115	0.11127		.01		-0.20628	30		Averaged
cis-1,3-Dichloropropylene	0.2816	0.28885		.01		2.57457	30		Averaged
4-Methyl-2-pentanone	0.1323	0.1525		.01		15.26833	40		Averaged
Toluene	1.1974	1.17377		.01		-1.97344	20		Averaged
trans-1,3-Dichloropropylene	0.3566	0.39136		.01		9.74762	30		Averaged
1,1,2-Trichloroethane	0.1993	0.1956		.01		-1.8565	30		Averaged
2-Hexanone	0.3918	0.41452		.01		5.79888	40		Averaged
1,3-Dichloropropane	0.4219	0.43785		.01		3.78052	30		Averaged
Tetrachloroethylene	0.2234	0.19432		.01		-13.01701	30		Averaged
Dibromochloromethane	0.2391	0.22997		.01		-3.81849	30		Averaged
1,2-Dibromoethane	0.2234	0.21432		.01		-4.06446	30		Averaged
Chlorobenzene	0.76	0.70524		.3		-7.20526	30		Averaged
1,1,1,2-Tetrachloroethane	0.2456	0.24028		.01		-2.16612	30		Averaged
Ethylbenzene	1.2623	1.30902		.01		3.70118	20		Averaged
m,p-Xylenes	0.5081	0.5053		.01		-0.55107	30		Averaged
o-Xylene	0.4872	0.49416		.01		1.42857	30		Averaged
Styrene	0.7648	0.82193		.01		7.46993	30		Averaged
Bromoform	0.2804	0.26781		.1		-4.49001	30		Averaged
Isopropylbenzene	2.2671	2.37156		.01		4.60765	30		Averaged
1,1,2,2-Tetrachloroethane	0.5782	0.60176		.3		4.07471	30		Averaged
1,2,3-Trichloropropane	0.1557	0.15531		.01		-0.25048	30		Averaged
Bromobenzene	0.5915	0.53827		.01		-8.99915	30		Averaged
n-Propylbenzene	2.72	2.98815		.01		9.85846	30		Averaged
1,3,5-Trimethylbenzene	1.8565	2.03897		.01		9.82871	30		Averaged
2-Chlorotoluene	0.5684	0.58014		.01		2.06545	30		Averaged
4-Chlorotoluene	1.6879	1.74135		.01		3.16666	30		Averaged
tert-Butylbenzene	0.437	0.41463		.01		-5.11899	30		Averaged
1,2,4-Trimethylbenzene	1.9069	1.99735		.01		4.7433	30		Averaged
sec-Butylbenzene	2.4975	2.56081		.01		2.53493	30		Averaged
4-Isopropyltoluene	1.963	1.99931		.01		1.84972	30		Averaged
1,3-Dichlorobenzene	1.1478	1.03436		.01		-9.88325	30		Averaged
1,4-Dichlorobenzene	1.1933	1.06123		.01		-11.06763	30		Averaged
n-Butylbenzene	1.8927	2.06114		.01		8.89946	30		Averaged
1,2-Dichlorobenzene	1.0919	0.97477		.01		-10.72717	30		Averaged
1,2-Dibromo-3-chloropropane	0.1056	0.09943		.01		-5.8428	30		Averaged

Continuing Calibration Summary

Page 3 of 3

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:15

Data File: 013110V5\5V703.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100131-02 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7548	0.68025		.01		-9.87679	30		Averaged
Hexachlorobutadiene	0.4229	0.36553		.01		-13.56585	30		Averaged
Naphthalene	1.6616	1.70807		.01		2.7967	30		Averaged
1,2,3-Trichlorobenzene	0.6496	0.61844		.01		-4.7968	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1860482	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1273384	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	641523	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1860482	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1273384	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	641523	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	457956	52.96	ug/L	0.00
43) Toluene-d8	12.016	12.016	0.887	98	1709272	49.22	ug/L	0.00
61) Bromofluorobenzene	14.739	14.739	0.924	95	637912	52.11	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.678	4.689	0.451	85	156317	39.02	ug/L	99
3) Chloromethane	5.061	5.051	0.488	50	475628	51.97	ug/L	98
4) Vinyl chloride	5.283	5.283	0.509	62	448458	54.90	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	286111	49.29	ug/L	99
6) Chloroethane	6.008	6.018	0.579	64	257715	46.83	ug/L	100
7) Trichlorofluoromethane	6.390	6.391	0.616	101	404345	50.29	ug/L	99
8) Ethyl ether	6.733	6.733	0.649	59	342619	50.33	ug/L	98
9) Acetone	7.100	7.100	0.684	43	1587156	227.56	ug/L	95
10) 1,1-Dichloroethylene	7.121	7.125	0.686	61	503316	58.02	ug/L	97
11) Iodomethane	7.365	7.373	0.710	142	2196110	211.44	ug/L	93
12) Acetonitrile	7.454	7.450	0.718	41	1576121	1367.95	ug/L	99
13) Methyl acetate	7.493	7.493	0.722	43	1893666	271.46	ug/L	98
14) Carbon disulfide	7.507	7.511	0.724	76	5238310	258.32	ug/L	100
15) Methylene chloride	7.691	7.691	0.741	84	350760	44.20	ug/L	94
16) tert-Butyl methyl ether	7.981	7.984	0.769	73	684499	44.56	ug/L	99
17) trans-1,2-Dichloroethy...	8.030	8.030	0.774	61	509418	52.93	ug/L	96
18) Vinyl acetate	8.455	8.458	0.815	43	5561891	323.59	ug/L	98
19) 1,1-Dichloroethane	8.508	8.511	0.820	63	632667	51.82	ug/L	99
20) 2-Butanone	9.073	9.077	0.875	43	1880881	235.44	ug/L	97
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	573626	52.51	ug/L	96
22) 2,2-Dichloropropane	9.169	9.173	0.884	77	302764	49.42	ug/L	93
23) Bromochloromethane	9.417	9.417	0.908	128	158239	43.06	ug/L	# 85
24) Chloroform	9.452	9.452	0.911	83	567009	50.68	ug/L	100
25) 1,1,1-Trichloroethane	9.731	9.735	0.938	97	383465	49.11	ug/L	97
26) Cyclohexane	9.830	9.830	0.948	56	592633	52.26	ug/L	99
27) 1,1-Dichloropropene	9.887	9.887	0.953	75	448461	52.41	ug/L	90
28) Carbon tetrachloride	9.929	9.929	0.957	117	341234	49.67	ug/L	99
30) 1,2-Dichloroethane	10.103	10.103	0.974	62	502589	55.18	ug/L	100
31) Benzene	10.124	10.127	0.976	78	1405429	48.65	ug/L	98
32) Cyclohexene	10.248	10.248	0.988	67	676420	50.49	ug/L	96
33) n-Butyl alcohol	10.456	10.460	1.008	56	1520923	5579.92	ug/L	96
34) Trichloroethylene	10.764	10.768	1.037	95	328320	49.03	ug/L	95
35) 1,2-Dichloropropane	11.008	11.004	1.061	63	398575	53.25	ug/L	100
36) Methylcyclohexane	11.019	11.019	1.062	83	560671	47.50	ug/L	96
37) Dibromomethane	11.142	11.146	1.074	93	191470	48.71	ug/L	89
38) Bromodichloromethane	11.252	11.256	1.085	83	425481	52.89	ug/L	100
39) 2-Chloroethylvinyl ether	11.464	11.468	1.105	63	1035074	249.41	ug/L	99
40) cis-1,3-Dichloropropylene	11.701	11.705	1.128	75	537398	51.29	ug/L	91

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	970953	288.14	ug/L	92
44) Toluene	12.090	12.090	0.892	91	1494663	49.01	ug/L	99
45) trans-1,3-Dichloroprop...	12.239	12.239	0.903	75	498348	54.88	ug/L	91
46) 1,1,2-Trichloroethane	12.461	12.465	0.920	83	249077	49.06	ug/L	99
47) 2-Hexanone	12.631	12.631	0.932	43	2639206	264.49	ug/L	97
48) 1,3-Dichloropropane	12.652	12.656	0.934	76	557555	51.89	ug/L	97
49) Tetrachloroethylene	12.691	12.691	0.937	164	247444	43.50	ug/L	94
50) Dibromochloromethane	12.928	12.928	0.954	129	292840	48.10	ug/L	100
51) 1,2-Dibromoethane	13.094	13.094	0.967	107	272912	47.96	ug/L	100
52) Chlorobenzene	13.579	13.579	1.002	112	898041	46.40	ug/L	96
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006	131	305969	48.91	ug/L	98
54) Ethylbenzene	13.635	13.639	1.007	91	1666881	51.85	ug/L	97
55) m,p-Xylenes	13.745	13.749	1.015	106	1286872	99.44	ug/L	93
56) o-Xylene	14.180	14.184	1.047	106	629253	50.71	ug/L	92
57) Styrene	14.184	14.184	1.047	104	1046638	53.73	ug/L	93
59) Bromoform	14.445	14.445	0.905	173	171804	47.76	ug/L	100
60) Isopropylbenzene	14.537	14.537	0.911	105	1521409	52.30	ug/L	98
62) 1,1,2,2-Tetrachloroethane	14.809	14.810	0.928	83	386040	52.04	ug/L	100
63) 1,2,3-Trichloropropane	14.901	14.898	0.934	110	99637	49.87	ug/L	98
64) Bromobenzene	14.951	14.951	0.937	156	345315	45.50	ug/L	87
65) n-Propylbenzene	14.962	14.965	0.938	91	1916968	54.93	ug/L	97
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	1308045	54.92	ug/L	97
67) 2-Chlorotoluene	15.117	15.117	0.947	126	372171	51.03	ug/L #	85
68) 4-Chlorotoluene	15.216	15.216	0.953	91	1117117	51.58	ug/L	95
69) tert-Butylbenzene	15.488	15.489	0.971	134	265994	47.44	ug/L #	87
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973	105	1281349	52.37	ug/L	96
71) sec-Butylbenzene	15.711	15.711	0.984	105	1642820	51.27	ug/L	98
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	1282602	50.92	ug/L	97
73) 1,3-Dichlorobenzene	15.902	15.902	0.996	146	663566	45.06	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	680803	44.47	ug/L	98
75) n-Butylbenzene	16.277	16.277	1.020	91	1322266	54.45	ug/L	97
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	625338	44.64	ug/L	97
77) 1,2-Dibromo-3-chloropr...	17.293	17.293	1.084	157	63788	47.08	ug/L	91
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	436395	45.06	ug/L	99
79) Hexachlorobutadiene	18.548	18.548	1.162	225	234495	43.21	ug/L	98
80) Naphthalene	18.762	18.762	1.176	128	1095763	51.40	ug/L	100
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198	180	396744	47.60	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	6.924	6.924	0.667		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.146	7.175	0.689		0m	N.D.	d	
88) Allyl chloride	7.454	7.546	0.718		0m	N.D.	d	
89) tert-Butyl Alcohol	7.698	7.673	0.742		0m	N.D.	d	
90) Acrylonitrile	7.974	7.928	0.769		0m	N.D.	d	
91) Isopropyl ether	8.451	8.483	0.815		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.617	8.617	0.831		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.073	9.088	0.875		0m	N.D.	d	
95) Propionitrile	9.073	9.148	0.875		0m	N.D.	d	
96) Methacrylonitrile	9.268	9.332	0.893		0m	N.D.	d	
97) Tetrahydrofuran	9.455	9.466	0.911		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	9.650	9.770	0.930		0m	N.D.	d
99) Methyl tert-amyl ether	10.124	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.015	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.146	11.089	1.074		0m	N.D.	d
102) 2-Nitropropane	11.666	11.443	1.124		0m	N.D.	d
104) Ethyl methacrylate	12.242	12.235	0.904		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.537	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.700	14.693	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.855	14.856	0.931		0m	N.D.	d
110) Pentachloroethane	15.559	15.559	0.975		0m	N.D.	d
111) Benzyl chloride	16.097	16.100	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.546	16.497	1.037		0m	N.D.	d

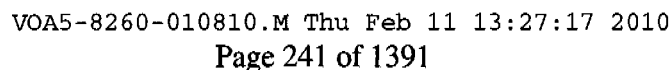
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

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Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703.D
Acq On    : 31 Jan 2010  12:15 pm
Operator  : DXK1
InstName  : VOA5
Sample    : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|
Misc      : CCV 5g N/A SOIL MIX[A]
ALS Vial  : 3      Sample Multiplier: 1

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SubList :



Continuing Calibration Summary

Client SDG: 10-1384

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:41

Data File: 013110V5V704.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100131-03 Quant Type ISTD

Method:VOA5-8260-010810.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.2324	0.25538		.01		9.88812	30		Averaged
SToluene-d8	1.3636	1.36106		.01		-0.18627	30		Averaged
SBromofluorobenzene	0.9541	1.08633		.01		13.85913	30		Averaged
Acrolein	0.0267	0.02441		.01		-8.57678	30		Averaged
Trichlorotrifluoroethane	0.0382	0.04967		.01		30.02618	30	*	Averaged
Allyl chloride	0.3168	0.36108		.01		13.97727	30		Averaged
Acrylonitrile	0.0755	0.08278		.01		9.64238	30		Averaged
2-Chloro-1,3-butadiene	0.245	0.29753		.01		21.44082	30		Averaged
Ethyl acetate	0.2299	0.25731		.01		11.92258	40		Averaged
Propionitrile	0.0283	0.03325		.01		17.49117	30		Averaged
Methacrylonitrile	0.1382	0.16569		.01		19.89146	30		Averaged
Tetrahydrofuran	0.0724	0.08532		.01		17.8453	30		Averaged
Isobutyl alcohol	0.0084	0.01103		.01		31.30952	40		Averaged
Methyl methacrylate	0.1274	0.14959		.01		17.41758	30		Averaged
1,4-Dioxane	0.0018	0.00211		.01		17.22222	40		Averaged
2-Nitropropane	250	293.03	250			17.212	30		Linear
Ethyl methacrylate	0.3365	0.44048		.01		30.90045	30	*	Averaged
cis-1,4-Dichloro-2-butene	0.1894	0.29829		.01		57.49208	30	*	Averaged
Cyclohexanone	1250	729.58	1250			-41.6336	40	*	Linear
trans-1,4-Dichloro-2-butene	0.1815	0.28503		.01		57.04132	30	*	Averaged
Pentachloroethane	0.199	0.32022		.01		60.91457	30	*	Averaged
Benzyl chloride	250	313.24	250			25.296	30		Linear
bis(2-Chloroisopropyl)ether	0.3332	0.446		.01		33.85354	30	*	Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.375	10.375	1.000	96	1846900	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1231006	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	587419	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1846900	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1231006	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	587419	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	471662	54.95	ug/L	0.00
43) Toluene-d8	12.016	12.016	0.887	98	1675476	49.91	ug/L	0.00
61) Bromofluorobenzene	14.739	14.739	0.923	95	638128	56.93	ug/L	0.00
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.041	5.051	0.486		0m	N.D.	d	
4) Vinyl chloride	5.303	5.283	0.511		0m	N.D.	d	
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	6.733	6.733	0.649		0m	N.D.	d	
9) Acetone	7.100	7.100	0.684		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.111	7.125	0.685		0m	N.D.	d	
11) Iodomethane	7.369	7.373	0.710		0m	N.D.	d	
12) Acetonitrile	7.447	7.450	0.718		0m	N.D.	d	
13) Methyl acetate	7.503	7.493	0.723		0m	N.D.	d	
14) Carbon disulfide	7.549	7.511	0.728		0m	N.D.	d	
15) Methylene chloride	7.694	7.691	0.742		0m	N.D.	d	
16) tert-Butyl methyl ether	7.977	7.984	0.769		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.030	8.030	0.774		0m	N.D.	d	
18) Vinyl acetate	8.614	8.458	0.830		0m	N.D.	d	
19) 1,1-Dichloroethane	8.511	8.511	0.820		0m	N.D.	d	
20) 2-Butanone	9.091	9.077	0.876		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.091	9.144	0.876		0m	N.D.	d	
22) 2,2-Dichloropropane	9.176	9.173	0.884		0m	N.D.	d	
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	9.456	9.452	0.911		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.738	9.735	0.939		0m	N.D.	d	
26) Cyclohexane	9.774	9.830	0.942		0m	N.D.	d	
27) 1,1-Dichloropropene	9.880	9.887	0.952		0m	N.D.	d	
28) Carbon tetrachloride	9.933	9.929	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	10.103	10.103	0.974		0m	N.D.	d	
31) Benzene	10.124	10.127	0.976		0m	N.D.	d	
32) Cyclohexene	10.255	10.248	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.467	10.460	1.009		0m	N.D.	d	
34) Trichloroethylene	10.771	10.768	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	11.008	11.004	1.061		0m	N.D.	d	
36) Methylcyclohexane	11.015	11.019	1.062		0m	N.D.	d	
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		
38) Bromodichloromethane	11.259	11.256	1.085		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.475	11.468	1.106		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.698	11.705	1.127		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	11.782	11.786	0.870		0m	N.D.	d
44) Toluene	12.094	12.090	0.893		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.242	12.239	0.904		0m	N.D.	d
46) 1,1,2-Trichloroethane	12.461	12.465	0.920		0m	N.D.	d
47) 2-Hexanone	12.635	12.631	0.933		0m	N.D.	d
48) 1,3-Dichloropropane	12.649	12.656	0.934		0m	N.D.	d
49) Tetrachloroethylene	12.691	12.691	0.937		0m	N.D.	d
50) Dibromochloromethane	12.935	12.928	0.955		0m	N.D.	d
51) 1,2-Dibromoethane	13.098	13.094	0.967		0m	N.D.	d
52) Chlorobenzene	13.582	13.579	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006		0m	N.D.	d
54) Ethylbenzene	13.639	13.639	1.007		0m	N.D.	d
55) m,p-Xylenes	13.749	13.749	1.015		0m	N.D.	d
56) o-Xylene	14.184	14.184	1.047		0m	N.D.	d
57) Styrene	14.187	14.184	1.047		0m	N.D.	d
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.541	14.537	0.911		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	14.803	14.810	0.927		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	14.955	14.951	0.937		0m	N.D.	d
65) n-Propylbenzene	14.965	14.965	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.110	15.114	0.947		0m	N.D.	d
67) 2-Chlorotoluene	15.117	15.117	0.947		0m	N.D.	d
68) 4-Chlorotoluene	15.216	15.216	0.953		0m	N.D.	d
69) tert-Butylbenzene	15.481	15.489	0.970		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973		0m	N.D.	d
71) sec-Butylbenzene	15.708	15.711	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	15.832	15.832	0.992		0m	N.D.	d
73) 1,3-Dichlorobenzene	15.909	15.902	0.997		0m	N.D.	d
74) 1,4-Dichlorobenzene	15.987	15.991	1.002		0m	N.D.	d
75) n-Butylbenzene	16.277	16.277	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.419	16.422	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151		0m	N.D.	d
79) Hexachlorobutadiene	18.555	18.548	1.162		0m	N.D.	d
80) Naphthalene	18.769	18.762	1.176		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	6.924	6.924	0.667	56	225398	228.94	ug/L 87
86) Trichlorotrifluoroethane	7.086	7.079	0.683	85	458713	325.10	ug/L 87
87) Isopropyl Alcohol	7.337	7.175	0.707	45	249	N.D.	
88) Allyl chloride	7.549	7.546	0.728	41	3334391	284.96	ug/L 94
89) tert-Butyl Alcohol	7.666	7.673	0.739	59	116	N.D.	
90) Acrylonitrile	7.931	7.928	0.764	53	764421	274.09	ug/L 99
91) Isopropyl ether	8.487	8.483	0.818	45	298	N.D.	
92) 2-Chloro-1,3-butadiene	8.621	8.617	0.831	53	549517	60.73	ug/L 95
93) Ethyl tert-butyl ether	9.091	8.890	0.876	59	1184	N.D.	
94) Ethyl acetate	9.091	9.088	0.876	43	2376127	279.86	ug/L 98
95) Propionitrile	9.155	9.148	0.882	54	307039	294.22	ug/L 100
96) Methacrylonitrile	9.332	9.332	0.899	41	1530082	299.82	ug/L 98
97) Tetrahydrofuran	9.466	9.466	0.912	42	787907	294.66	ug/L 98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	9.770	9.770	0.942	41	1018523	3270.83	ug/L	98
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.		
100) Methyl methacrylate	10.973	10.969	1.058	69	1381395	293.52	ug/L	92
101) 1,4-Dioxane	11.089	11.089	1.069	88	194686	2858.46	ug/L	98
102) 2-Nitropropane	11.446	11.443	1.103	43	723452	293.03	ug/L	99
104) Ethyl methacrylate	12.235	12.235	0.903	69	2711172	327.26	ug/L	94
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.573	14.573	0.913	53	876111	393.65	ug/L	97
108) Cyclohexanone	14.689	14.693	0.920	42	478621	729.58	ug/L	91
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	837163	392.54	ug/L	90
110) Pentachloroethane	15.559	15.559	0.975	167	940528	402.33	ug/L	92
111) Benzyl chloride	16.100	16.100	1.009	91	3688889	313.24	ug/L	97
112) bis(2-Chloroisopropyl)...	16.496	16.497	1.033	45	1309938	334.64	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

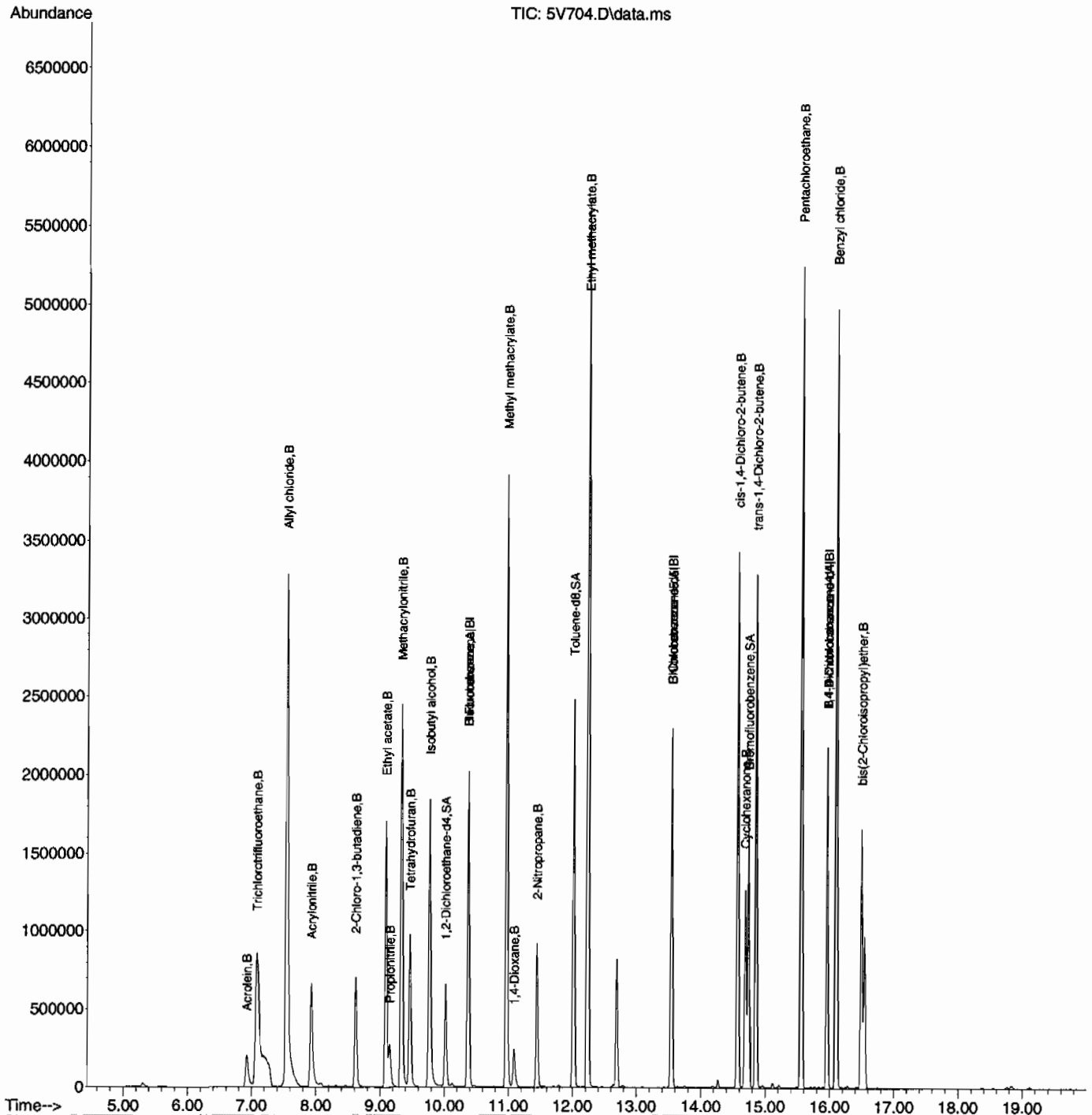
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|
Misc : CCV 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



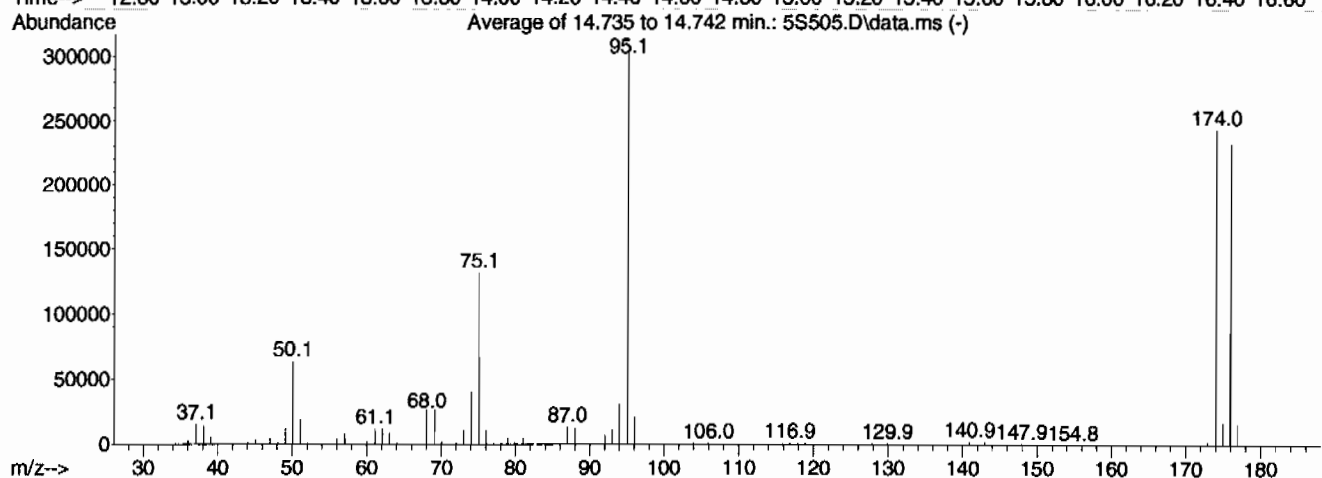
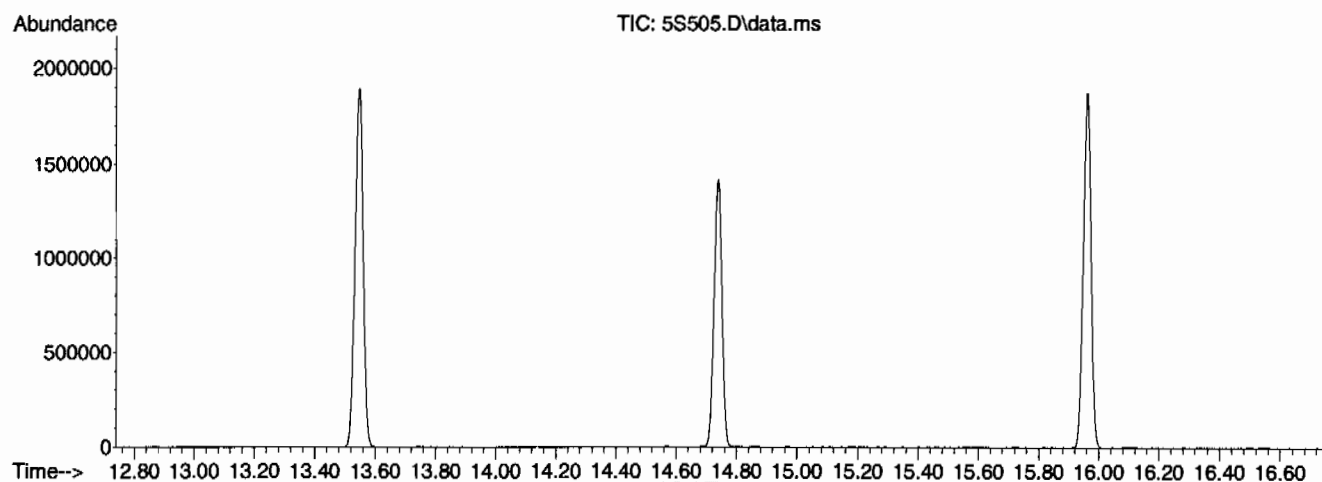
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\
Data File : 5S505.D
Acq On : 8 Jan 2010 1:05 pm
Operator : DXK1
Sample : |UVM091117-02|BFB|1|VOA|1|
Misc : GEL 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Title : Volatile Organics 8260B SubList :
Last Update : Mon Jan 11 08:56:29 2010



AutoFind: Scans 2439, 2440, 2441; Background Corrected with Scan 2425

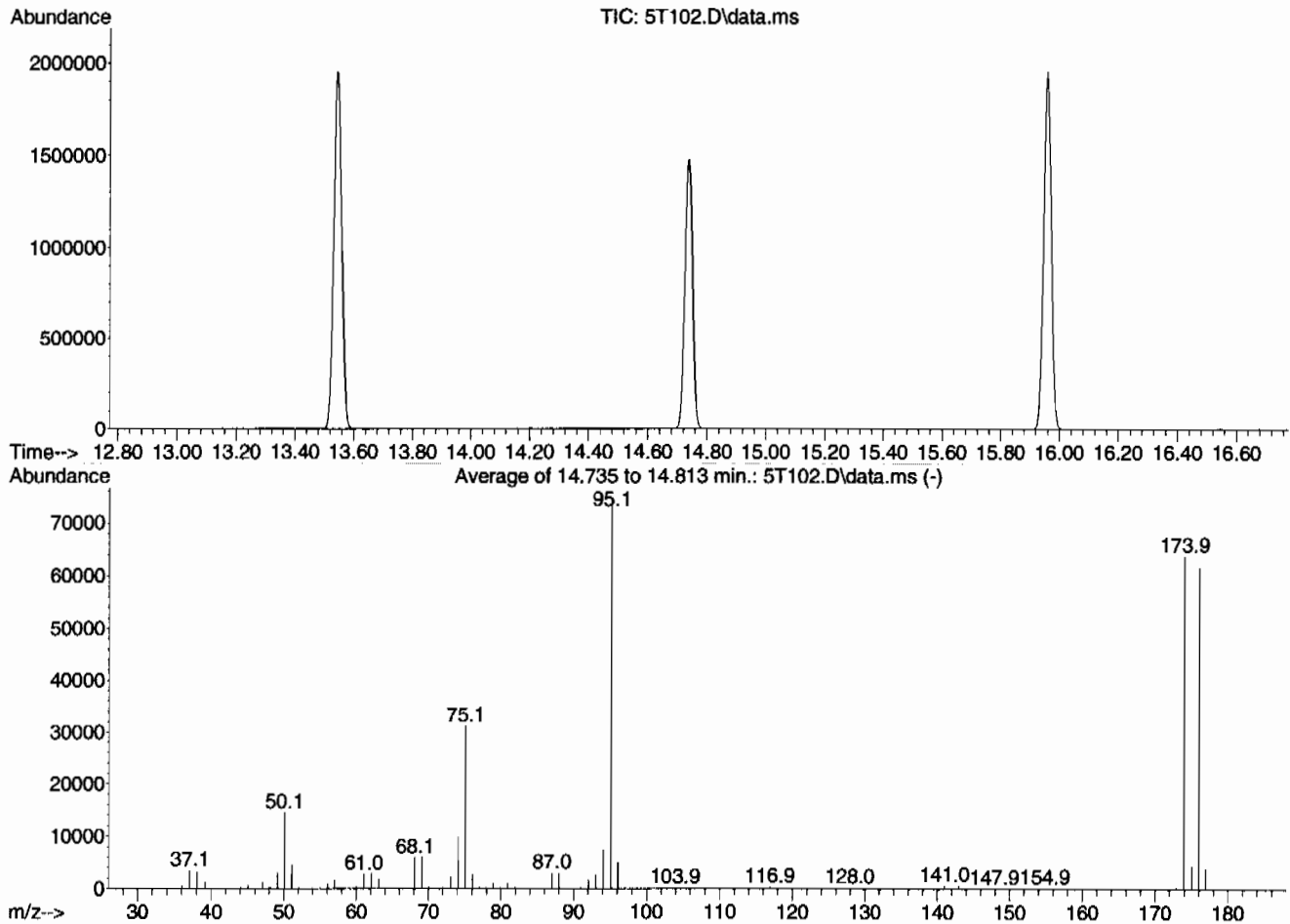
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	63680	PASS
75	95	30	60	43.7	132048	PASS
95	95	100	100	100.0	301888	PASS
96	95	5	9	6.8	20637	PASS
173	174	0.00	2	0.7	1750	PASS
174	95	50	100	80.9	244224	PASS
175	174	5	9	7.1	17424	PASS
176	174	95	101	95.3	232725	PASS
177	176	5	9	6.6	15330	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\
Data File : 5T102.D
Acq On : 11 Jan 2010 10:13 am
Operator : DXK1
Sample : |UVM091117-02|BFB|1|VOA|1|
Misc : GEL 5mL N/A
ALS Vial : 2 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Title : Volatile Organics 8260B SubList :
Last Update : Mon Jan 11 08:56:29 2010



Spectrum Information: Average of 14.735 to 14.813 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	14365	PASS
75	95	30	60	42.7	31141	PASS
95	95	100	100	100.0	73000	PASS
96	95	5	9	6.8	4941	PASS
173	174	0.00	2	0.6	404	PASS
174	95	50	100	87.3	63742	PASS
175	174	5	9	6.8	4364	PASS
176	174	95	101	96.7	61653	PASS
177	176	5	9	6.5	3989	PASS

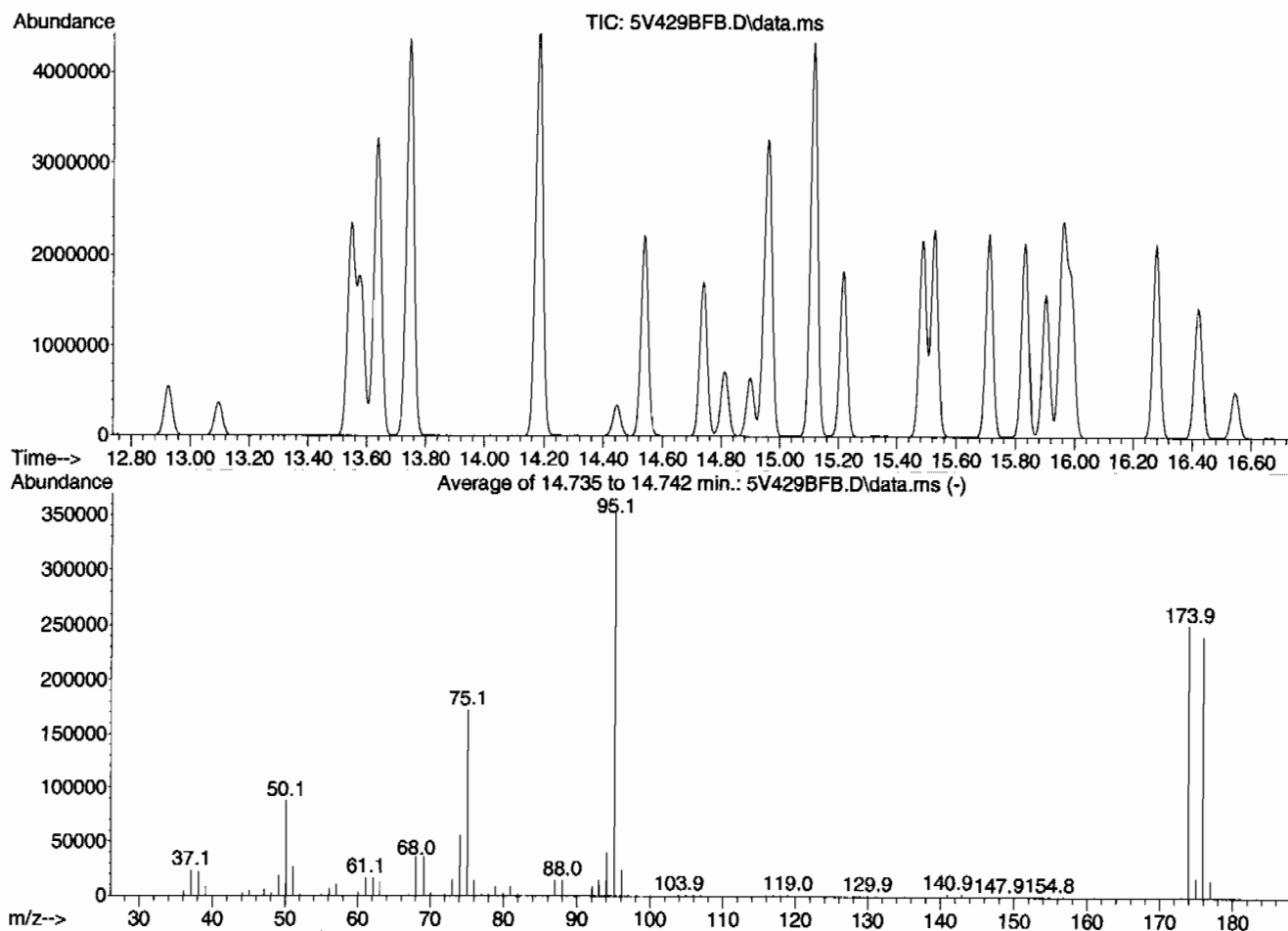
Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V429BFB.D
Acq On : 28 Jan 2010 9:33 pm
Operator : DXK1
Sample : |W5VM100128-04|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A MIX[A]
ALS Vial : 29 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Title : Volatile Organics 8260B
Last Update : Mon Jan 11 08:56:29 2010

SubList :



AutoFind: Scans 2439, 2440, 2441; Background Corrected with Scan 2425

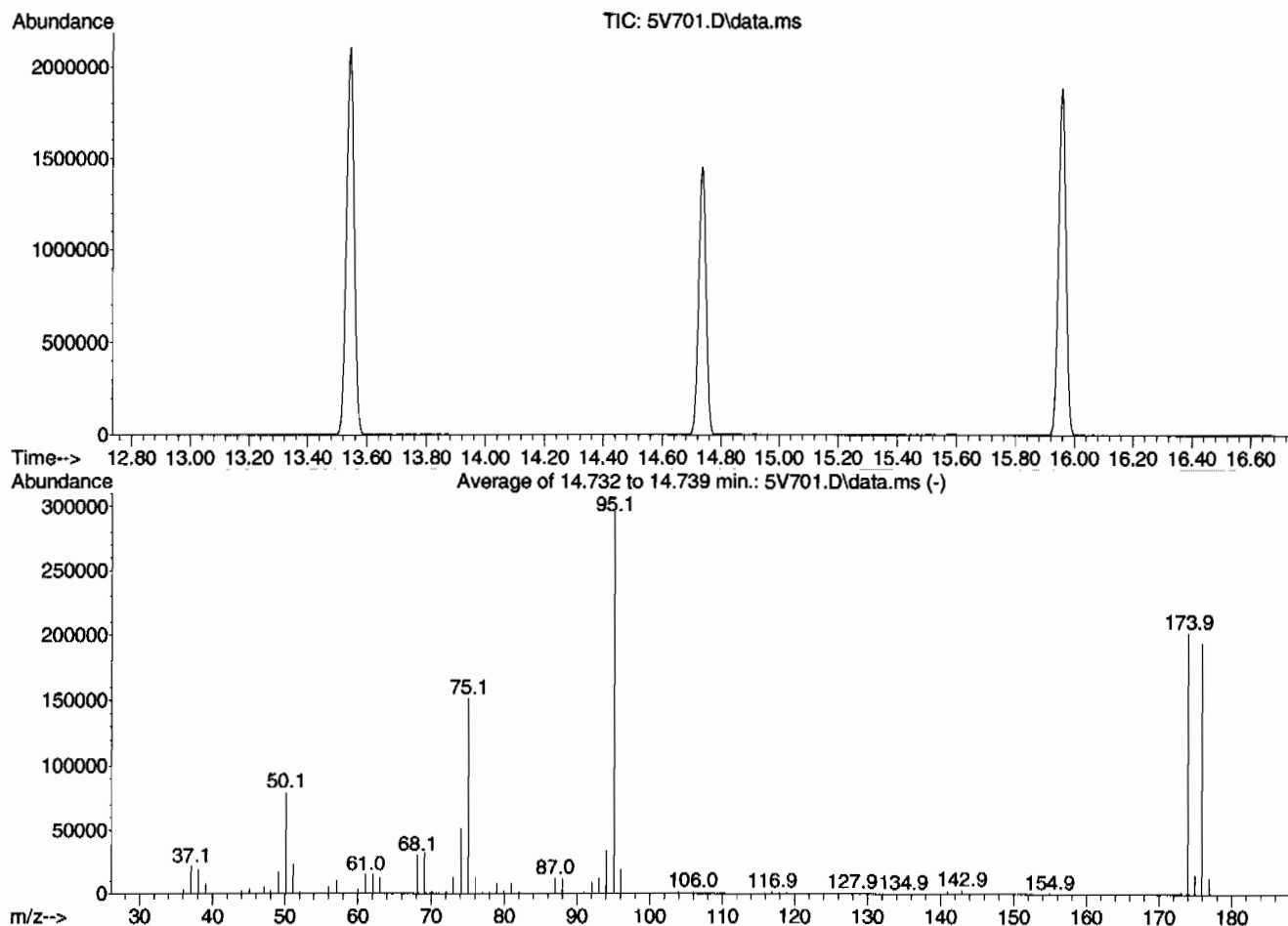
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.9	87693	PASS
75	95	30	60	49.1	172800	PASS
95	95	100	100	100.0	351744	PASS
96	95	5	9	6.9	24149	PASS
173	174	0.00	2	0.6	1580	PASS
174	95	50	100	71.3	250816	PASS
175	174	5	9	7.2	18018	PASS
176	174	95	101	96.2	241237	PASS
177	176	5	9	6.5	15685	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V701.D
Acq On : 31 Jan 2010 11:23 am
Operator : DXK1
Sample : |UVM091216-10|BFB|1|VOA|1|
Misc : GEL 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Title : Volatile Organics 8260B SubList :
Last Update : Mon Jan 11 08:56:29 2010



AutoFind: Scans 2438, 2439, 2440; Background Corrected with Scan 2424

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.9	79459	PASS
75	95	30	60	51.1	151061	PASS
95	95	100	100	100.0	295829	PASS
96	95	5	9	6.6	19539	PASS
173	174	0.00	2	0.7	1510	PASS
174	95	50	100	68.3	202197	PASS
175	174	5	9	7.4	15060	PASS
176	174	95	101	96.2	194603	PASS
177	176	5	9	6.4	12465	PASS

**Volatile
Certificate of Analysis
Sample Summary**

Page 1 of 2

SDG Number: 10-1384
Lab Sample ID: 1202027522
Client Sample: QC for batch 946583
Client ID: MB for batch 946583
Batch ID: 946584
Run Date: 01/28/2010 22:50
Prep Date: 01/28/2010 08:00
Data File: 012810V5SV432B3.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

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

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
 Lab Sample ID: 1202027522
 Client Sample: QC for batch 946583
 Client ID: MB for batch 946583
 Batch ID: 946584
 Run Date: 01/28/2010 22:50
 Prep Date: 01/28/2010 08:00
 Data File: 012810V55V432B3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 29 09:59:20 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1794425	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1164805	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	527282	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1794425	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1164805	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	527282	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	459484	55.09	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 110.18%			
43) Toluene-d8	12.016	12.016	0.887	98	1641277	51.67	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 103.34%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	566831	56.34	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 112.68%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.061	5.051	0.488	50	1313	N.D.		
4) Vinyl chloride	5.283	5.283	0.509	62	173	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.107	7.100	0.685	43	1644	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.468	7.450	0.720	41	272	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.507	7.511	0.724	76	1311	N.D.		
15) Methylene chloride	7.698	7.691	0.742	84	3313	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	8.310	8.458	0.801	43	546	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.088	9.077	0.876	43	2063	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.371	10.127	1.000	78	1941	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 29 09:59:20 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.090	12.090	0.892	91	849	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	12.638	12.631	0.933	43	1097	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	12.695	12.691	0.937	164	262	N.D.	
50) Dibromochloromethane	12.698	12.928	0.937	129	109	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	13.579	13.579	1.002	112	565	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.639	13.639	1.007	91	536	N.D.	
55) m,p-Xylenes	0.000	13.749	0.000		0	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	0.000	14.184	0.000		0	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.749	14.537	0.924	105	122	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.972	14.965	0.938	91	816	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	15.223	15.216	0.954	91	662	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973	105	383	N.D.	
71) sec-Butylbenzene	15.701	15.711	0.984	105	113	N.D.	
72) 4-Isopropyltoluene	0.000	15.832	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	15.895	15.902	0.996	146	703	N.D.	
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	502	N.D.	
75) n-Butylbenzene	16.277	16.277	1.020	91	149	N.D.	
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	135	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	321	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.762	18.762	1.175	128	2062	N.D.	
81) 1,2,3-Trichlorobenzene	19.109	19.116	1.197	180	619	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.539	7.546	0.727	41	1263	N.D.	
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.	
90) Acrylonitrile	7.956	7.928	0.767	53	113	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	9.088	9.088	0.876	43	2063	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 29 09:59:20 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.328	9.332	0.899	41	148	N.D.	
97) Tetrahydrofuran	9.463	9.466	0.912	42	392	N.D.	
98) Isobutyl alcohol	9.774	9.770	0.942	41	125	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	10.973	10.969	1.058	69	115	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	12.242	12.235	0.904	69	2139	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.573	14.573	0.913	53	111	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	790	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.493	16.497	1.033	45	2421	N.D.	

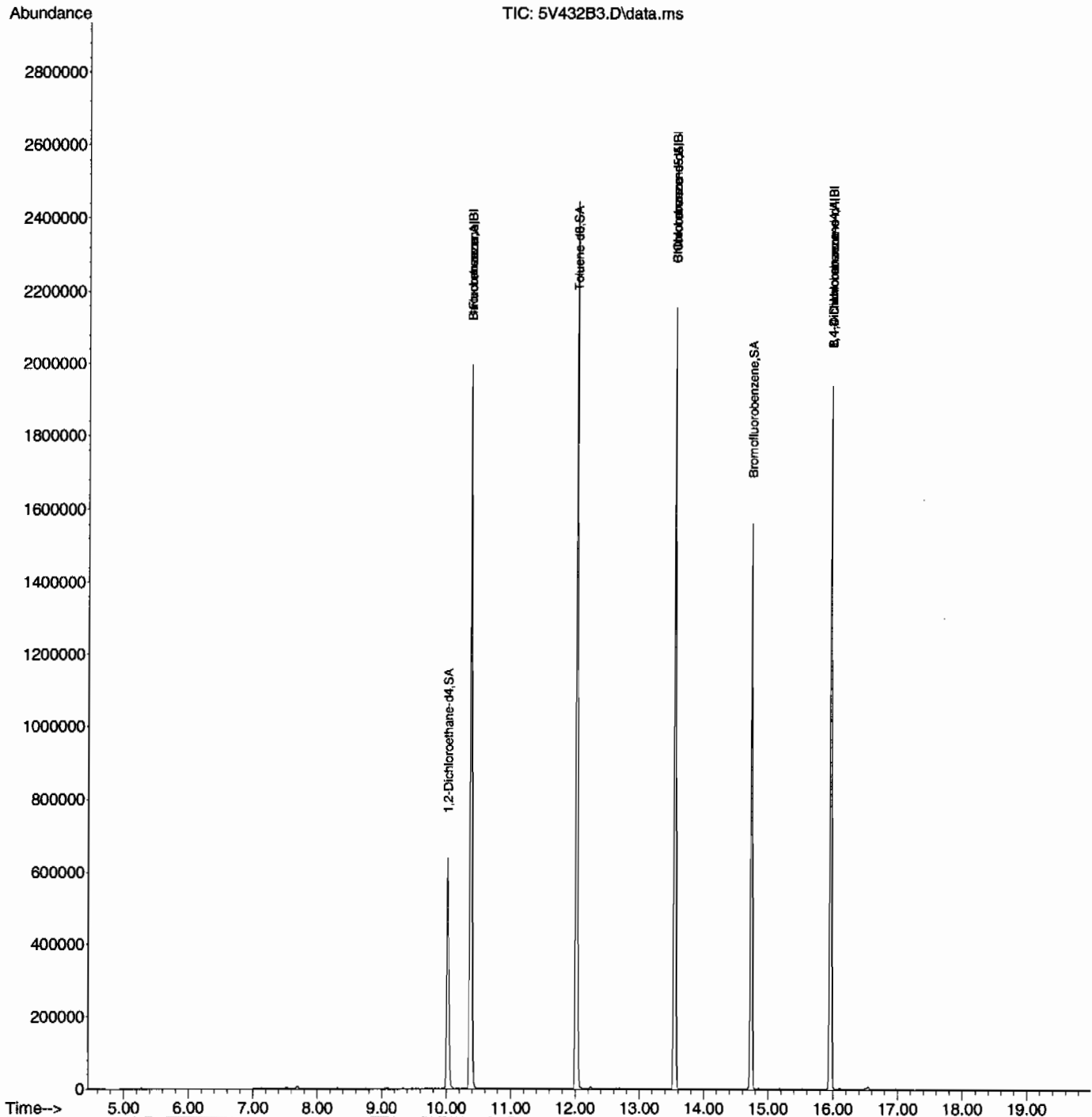
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

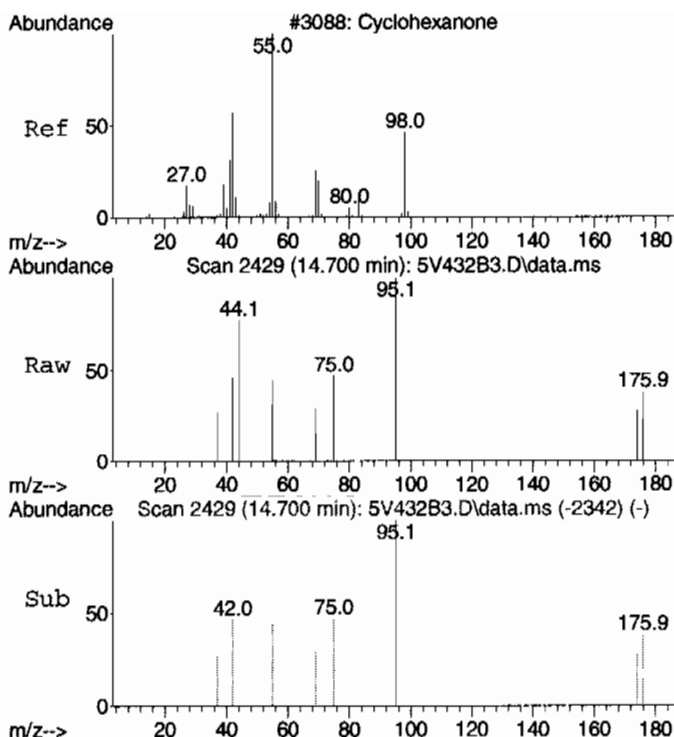
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 29 09:59:20 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

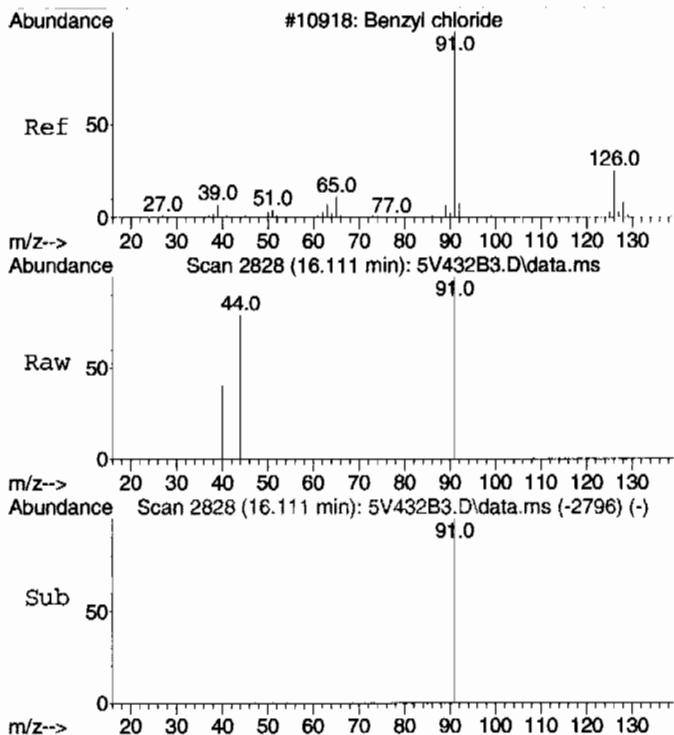
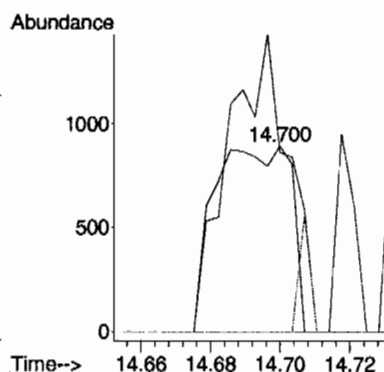
SubList :





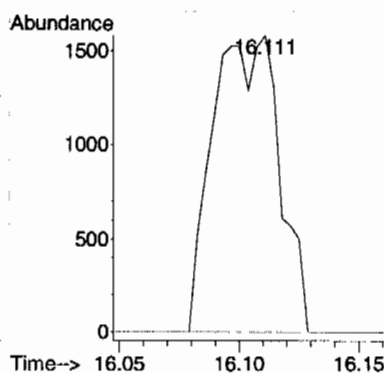
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 30.31 ug/L
RT: 14.700 min Scan# 2429
Delta R.T. 0.007 min
Lab File: 5V432B3.D
Acq: 28 Jan 2010 10:50 pm

Tgt Ion: 42 Resp: 1358
Ion Ratio Lower Upper
42 100
55 126.6 104.7 164.7
98 8.7 21.5 81.5#



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.75 ug/L
RT: 16.111 min Scan# 2828
Delta R.T. 0.011 min
Lab File: 5V432B3.D
Acq: 28 Jan 2010 10:50 pm

Tgt Ion: 91 Resp: 3070
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.6
65 0.0 0.0 41.9



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V432B3.D
Acq On : 28 Jan 2010 10:50 pm
Operator : DXK1
Sample : |1202027522|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

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

Page 1 of 2

SDG Number: 10-1384
Lab Sample ID: 1202040395
Client Sample: QC for batch 946583
Client ID: MB for batch 946583
Batch ID: 946584
Run Date: 01/31/2010 13:07
Prep Date: 01/31/2010 08:00
Data File: 013110V5SV705B3.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5I
Analyst: DXK1
Aliquot: 5 g
Column: DB-624

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

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
 Lab Sample ID: 1202040395
 Client Sample: QC for batch 946583
 Client ID: MB for batch 946583
 Batch ID: 946584
 Run Date: 01/31/2010 13:07
 Prep Date: 01/31/2010 08:00
 Data File: 013110V55V705B3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 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
630-20-6	Trichlorotrifluoroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.55	10.3	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1748987	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1142688	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	525209	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1748987	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1142688	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	525209	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	428366	52.70	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	105.40%			
43) Toluene-d8	12.016	12.016	0.887	98	1560250	50.07	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	100.14%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	554163	55.29	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	110.58%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.071	5.051	0.489	50	1822	N.D.		
4) Vinyl chloride	5.283	5.283	0.509	62	189	N.D.		
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	0.000	6.733	0.000		0	N.D.		
9) Acetone	7.111	7.100	0.685	43	3503	N.D.		
10) 1,1-Dichloroethylene	0.000	7.125	0.000		0	N.D.		
11) Iodomethane	0.000	7.373	0.000		0	N.D.		
12) Acetonitrile	7.440	7.450	0.717	41	141	N.D.		
13) Methyl acetate	0.000	7.493	0.000		0	N.D.		
14) Carbon disulfide	7.521	7.511	0.725	76	4576	N.D.		
15) Methylene chloride	7.687	7.691	0.741	84	5465	N.D.		
16) tert-Butyl methyl ether	0.000	7.984	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.030	0.000		0	N.D.		
18) Vinyl acetate	8.462	8.458	0.816	43	502	N.D.		
19) 1,1-Dichloroethane	0.000	8.511	0.000		0	N.D.		
20) 2-Butanone	9.095	9.077	0.877	43	1894	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.144	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.173	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	0.000	9.452	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.735	0.000		0	N.D.		
26) Cyclohexane	0.000	9.830	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.887	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.929	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.103	0.000		0	N.D.		
31) Benzene	10.131	10.127	0.976	78	111	N.D.		
32) Cyclohexene	0.000	10.248	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.460	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.768	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.004	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.019	0.000		0	N.D.		
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.256	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.468	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.705	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.786	0.000		0	N.D.	
44) Toluene	12.094	12.090	0.893	91	787	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.239	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.465	0.000		0	N.D.	
47) 2-Hexanone	12.642	12.631	0.933	43	443	N.D.	
48) 1,3-Dichloropropane	0.000	12.656	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.691	0.000		0	N.D.	
50) Dibromochloromethane	12.691	12.928	0.937	129	112	N.D.	
51) 1,2-Dibromoethane	0.000	13.094	0.000		0	N.D.	
52) Chlorobenzene	13.583	13.579	1.003	112	253	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.636	0.000		0	N.D.	
54) Ethylbenzene	13.639	13.639	1.007	91	218	N.D.	
55) m,p-Xylenes	13.745	13.749	1.015	106	124	N.D.	
56) o-Xylene	0.000	14.184	0.000		0	N.D.	
57) Styrene	14.187	14.184	1.047	104	117	N.D.	
59) Bromoform	0.000	14.445	0.000		0	N.D.	
60) Isopropylbenzene	14.530	14.537	0.910	105	229	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.810	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.	
64) Bromobenzene	0.000	14.951	0.000		0	N.D.	
65) n-Propylbenzene	14.969	14.965	0.938	91	723	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.114	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.117	0.000		0	N.D.	
68) 4-Chlorotoluene	15.213	15.216	0.953	91	513	N.D.	
69) tert-Butylbenzene	0.000	15.489	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.588	15.527	0.977	105	269	N.D.	
71) sec-Butylbenzene	15.701	15.711	0.984	105	151	N.D.	
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	156	N.D.	
73) 1,3-Dichlorobenzene	15.895	15.902	0.996	146	107	N.D.	
74) 1,4-Dichlorobenzene	16.005	15.991	1.003	146	107	N.D.	
75) n-Butylbenzene	16.281	16.277	1.020	91	723	N.D.	
76) 1,2-Dichlorobenzene	16.412	16.422	1.028	146	121	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.378	18.371	1.152	180	795	N.D.	
79) Hexachlorobutadiene	0.000	18.548	0.000		0	N.D.	
80) Naphthalene	18.762	18.762	1.176	128	2606	N.D.	
81) 1,2,3-Trichlorobenzene	19.109	19.116	1.197	180	603	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.	
85) Acrolein	0.000	6.924	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.175	0.000		0	N.D.	
88) Allyl chloride	7.542	7.546	0.727	41	262	N.D.	
89) tert-Butyl Alcohol	0.000	7.673	0.000		0	N.D.	
90) Acrylonitrile	7.946	7.928	0.766	53	369	N.D.	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.	
94) Ethyl acetate	9.095	9.088	0.877	43	1894	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.148	0.000		0	N.D.	
96) Methacrylonitrile	9.342	9.332	0.900	41	546	N.D.	
97) Tetrahydrofuran	9.459	9.466	0.912	42	273	N.D.	
98) Isobutyl alcohol	9.767	9.770	0.941	41	131	N.D.	
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.	
100) Methyl methacrylate	0.000	10.969	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.089	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.443	0.000		0	N.D.	
104) Ethyl methacrylate	12.239	12.235	0.903	69	1915	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	14.573	0.000		0	N.D.	
108) Cyclohexanone	0.000	14.693	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	252	N.D.	
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.100	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000	16.497	0.000		0m	N.D.	d

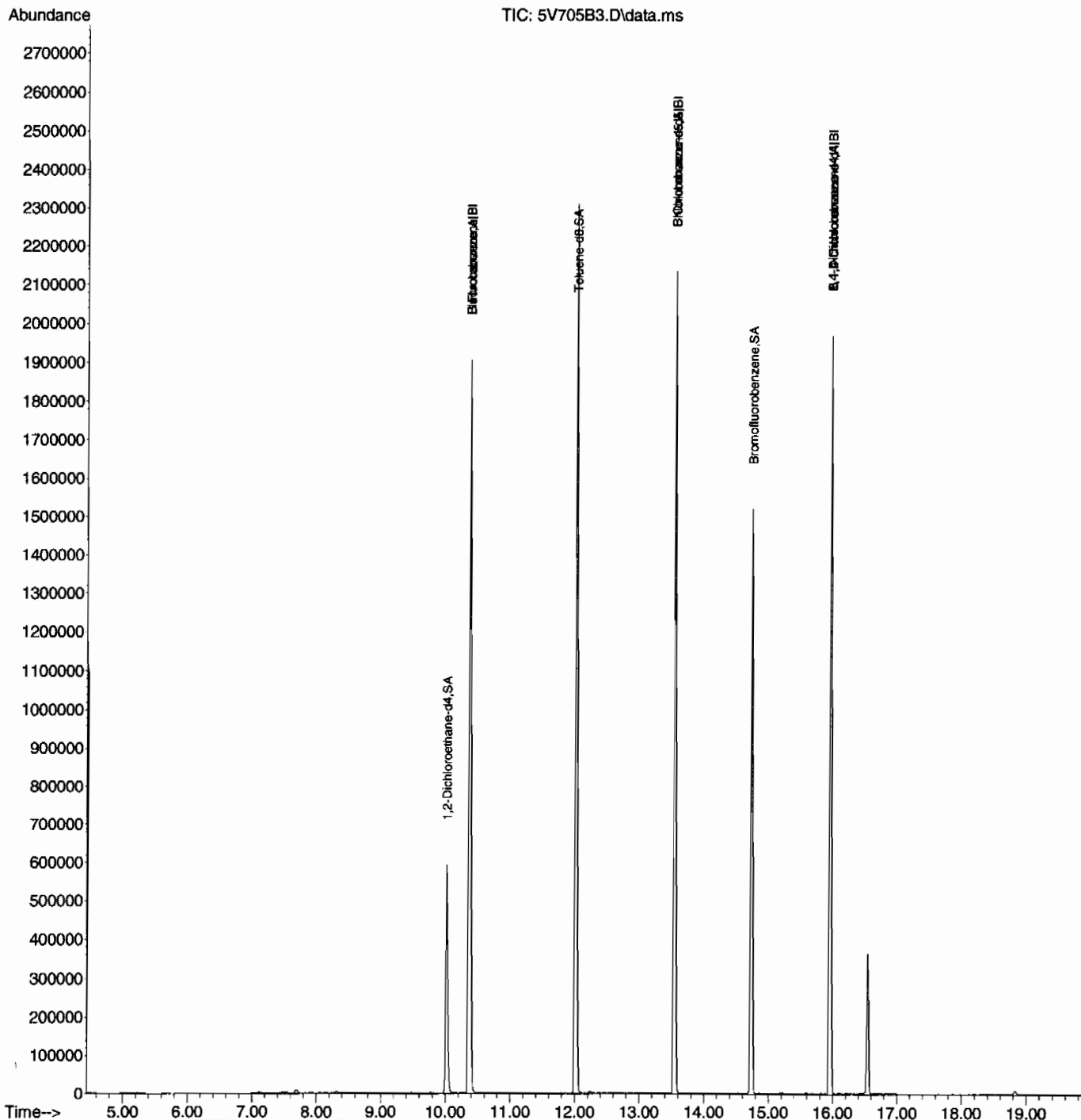
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

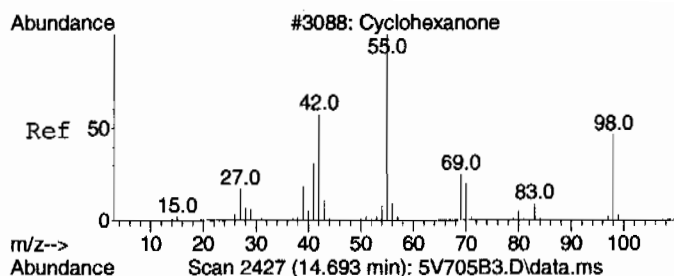
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

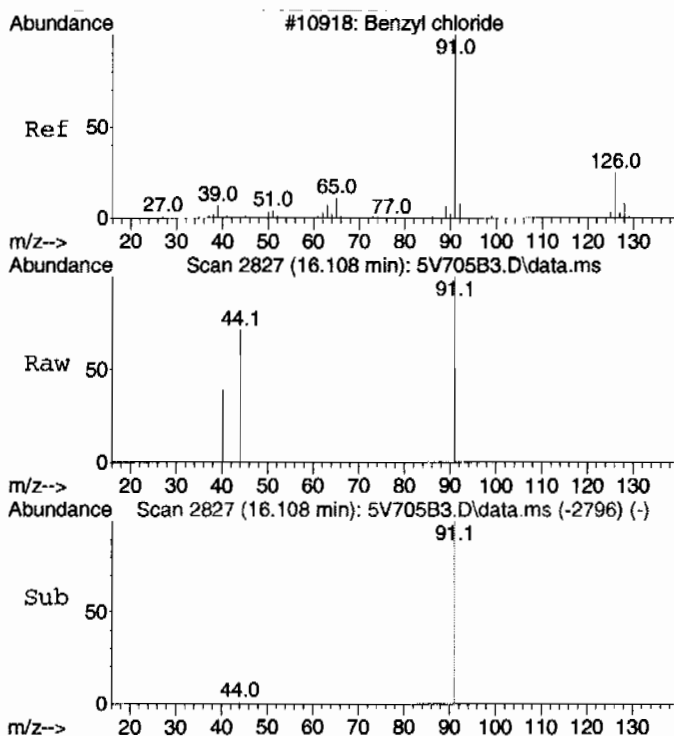
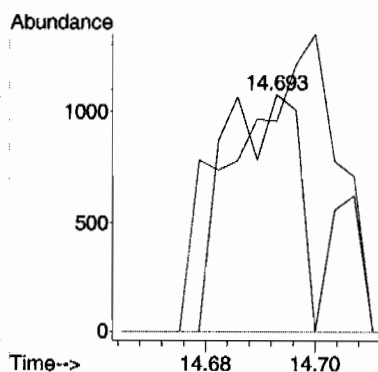
SubList :





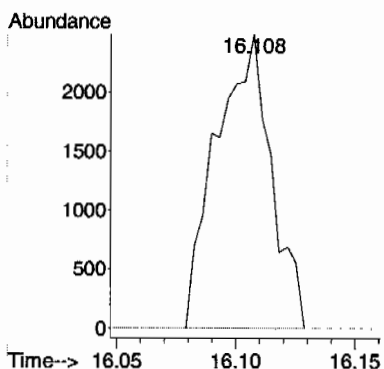
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 29.77 ug/L
RT: 14.693 min Scan# 2427
Delta R.T. -0.000 min
Lab File: 5V705B3.D
Acq: 31 Jan 2010 1:07 pm

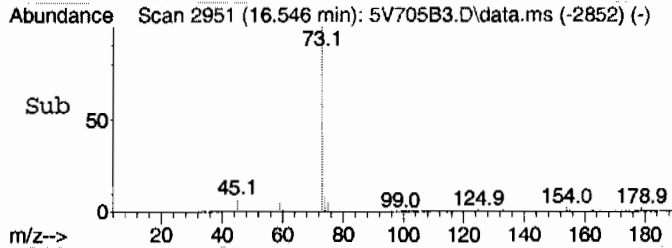
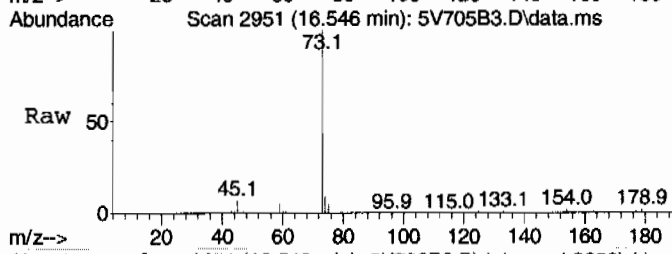
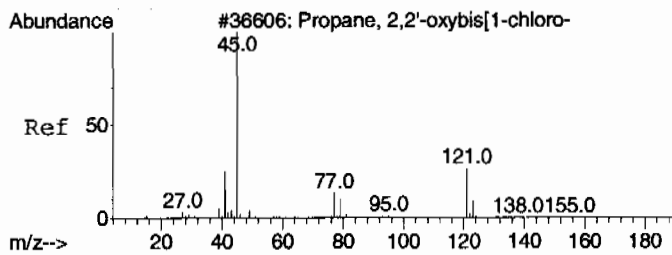
Tgt Ion: 42 Resp: 1020
Ion Ratio Lower Upper
42 100
55 172.4 104.7 164.7#
98 0.0 21.5 81.5#



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.84 ug/L
RT: 16.108 min Scan# 2827
Delta R.T. 0.008 min
Lab File: 5V705B3.D
Acq: 31 Jan 2010 1:07 pm

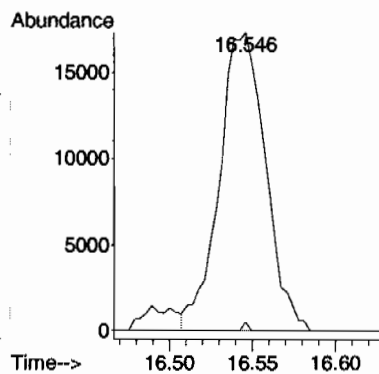
Tgt Ion: 91 Resp: 3963
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.6
65 0.0 0.0 41.9





#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 9.56 ug/L
 RT: 16.546 min Scan# 2951
 Delta R.T. 0.049 min
 Lab File: 5V705B3.D
 Acq: 31 Jan 2010 1:07 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.3	0.0	49.2



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

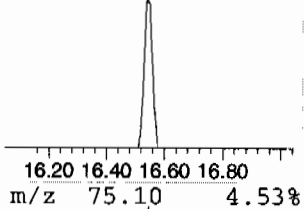
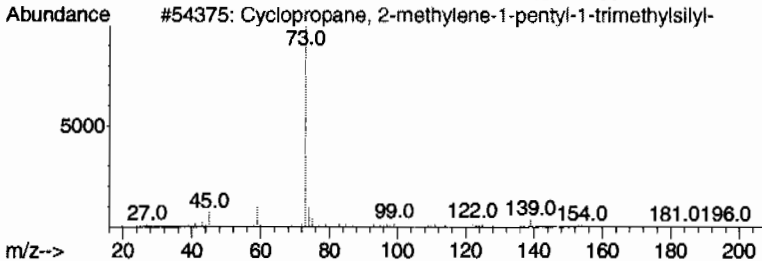
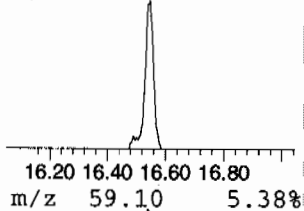
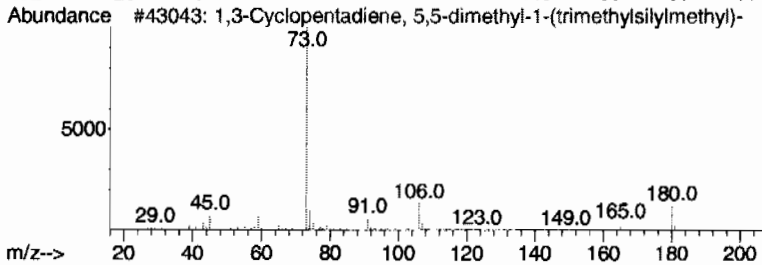
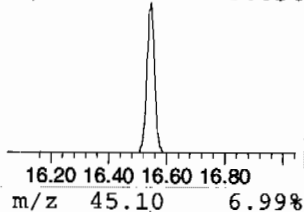
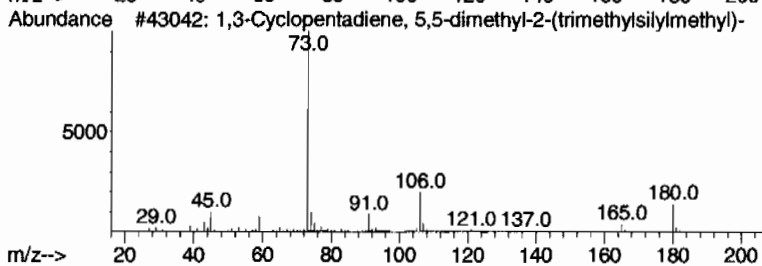
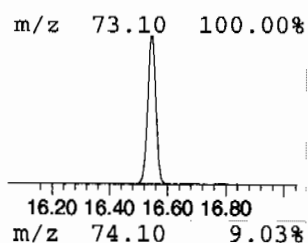
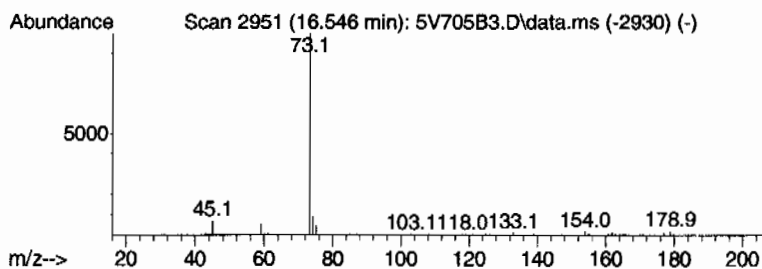
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD		R.T.	
16.546	10.32 ug/L	709484	B 1,4-Dichlorobenzene-d4		15.959	
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1,3-Cyclopentadiene, 5,5-dimethy...	180	C11H20Si	1000163-64-8	38
2		1,3-Cyclopentadiene, 5,5-dimethy...	180	C11H20Si	1000163-65-0	38
3		Cyclopropane, 2-methylene-1-pent...	196	C12H24Si	167300-47-2	9
4		Silane, trimethyl-3-penten-2-yl...	142	C8H18Si	053264-56-5	9
5		Silane, 1,4-butanediylbis[trimet...	202	C10H26Si2	018001-81-5	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V705B3.D
Acq On : 31 Jan 2010 1:07 pm
Operator : DXK1
Sample : |1202040395|946584|1|VOA|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	16.546	10.3	ug/L	709484	6	15.959	3437630	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 1202027523
 Client Sample: QC for batch 946583
 Client ID: LCS for batch 946583
 Batch ID: 946584
 Run Date: 01/28/2010 21:59
 Prep Date: 01/28/2010 08:00
 Data File: 012810V55V430L3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		28.8	ug/kg	0.340	1.00
74-87-3	Chloromethane		44.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		44.5	ug/kg	0.300	1.00
74-83-9	Bromomethane		43.1	ug/kg	0.300	1.00
75-00-3	Chloroethane		41.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		40.6	ug/kg	0.300	1.00
67-64-1	Acetone		237	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		49.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		193	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.6	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		220	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		46.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		249	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		48.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		38.7	ug/kg	0.300	1.00
67-66-3	Chloroform		46.2	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		40.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		41.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		44.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		41.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		51.0	ug/kg	0.300	1.00
71-43-2	Benzene		44.3	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		43.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		49.2	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		48.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.1	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		251	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		45.0	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		49.8	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		47.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		247	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		38.1	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		44.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		43.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1384
Lab Sample ID: 1202027523
Client Sample: QC for batch 946583
Client ID: LCS for batch 946583
Batch ID: 946584
Run Date: 01/28/2010 21:59
Prep Date: 01/28/2010 08:00
Data File: 012810V5V430L3.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
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		46.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		90.2	ug/kg	0.300	2.00
95-47-6	o-Xylene		46.5	ug/kg	0.300	1.00
100-42-5	Styrene		50.1	ug/kg	0.300	1.00
75-25-2	Bromoform		43.9	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.2	ug/kg	0.300	1.00
108-86-1	Bromobenzene		43.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		46.5	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		49.4	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		47.0	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		43.0	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		47.5	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.4	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		41.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		46.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		40.0	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		45.8	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.0	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V430L3.D
Acq On : 28 Jan 2010 9:59 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027523|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 29 09:56:43 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1923034	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1294424	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	646466	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1923034	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1294424	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	646466	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	481240	53.84	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	107.68%			
43) Toluene-d8	12.016	12.016	0.887	98	1800966	51.02	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	102.04%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	650575	52.74	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	105.48%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.689	4.689	0.452	85	119198	28.83	ug/L	98
3) Chloromethane	5.051	5.051	0.487	50	423812	44.80	ug/L	99
4) Vinyl chloride	5.273	5.283	0.508	62	375931	44.52	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	258342	43.06	ug/L	100
6) Chloroethane	6.018	6.018	0.580	64	235637	41.43	ug/L	100
7) Trichlorofluoromethane	6.401	6.391	0.617	101	337688	40.63	ug/L	99
8) Ethyl ether	6.733	6.733	0.649	59	316781	45.02	ug/L	98
9) Acetone	7.104	7.100	0.685	43	1708379	236.97	ug/L	94
10) 1,1-Dichloroethylene	7.129	7.125	0.687	61	442979	49.40	ug/L	97
11) Iodomethane	7.373	7.373	0.711	142	2067857	192.61	ug/L	94
12) Acetonitrile	7.458	7.450	0.719	41	1457032	1223.45	ug/L	99
13) Methyl acetate	7.497	7.493	0.723	43	1739436	241.24	ug/L	98
14) Carbon disulfide	7.511	7.511	0.724	76	4610437	219.96	ug/L	100
15) Methylene chloride	7.691	7.691	0.741	84	341267	41.61	ug/L	95
16) tert-Butyl methyl ether	7.985	7.984	0.770	73	658312	41.46	ug/L	100
17) trans-1,2-Dichloroethy...	8.034	8.030	0.774	61	464260	46.67	ug/L	96
18) Vinyl acetate	8.458	8.458	0.815	43	4375458	246.28	ug/L	98
19) 1,1-Dichloroethane	8.511	8.511	0.820	63	588210	46.61	ug/L	100
20) 2-Butanone	9.077	9.077	0.875	43	2051975	248.50	ug/L	97
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	542485	48.05	ug/L	97
22) 2,2-Dichloropropane	9.169	9.173	0.884	77	245021	38.70	ug/L	88
23) Bromochloromethane	9.424	9.417	0.908	128	151896	39.99	ug/L	# 84
24) Chloroform	9.456	9.452	0.911	83	533825	46.16	ug/L	100
25) 1,1,1-Trichloroethane	9.735	9.735	0.938	97	333479	41.32	ug/L	98
26) Cyclohexane	9.831	9.830	0.948	56	510482	43.55	ug/L	93
27) 1,1-Dichloropropene	9.891	9.887	0.953	75	396049	44.78	ug/L	89
28) Carbon tetrachloride	9.926	9.929	0.957	117	295530	41.62	ug/L	99
30) 1,2-Dichloroethane	10.106	10.103	0.974	62	480081	51.00	ug/L	99
31) Benzene	10.128	10.127	0.976	78	1321137	44.25	ug/L	97
32) Cyclohexene	10.248	10.248	0.988	67	596509	43.08	ug/L	97
33) n-Butyl alcohol	10.460	10.460	1.008	56	1295450	4615.30	ug/L	95
34) Trichloroethylene	10.768	10.768	1.038	95	299807	43.32	ug/L	96
35) 1,2-Dichloropropane	11.008	11.004	1.061	63	380940	49.24	ug/L	100
36) Methylcyclohexane	11.019	11.019	1.062	83	481858	39.49	ug/L	96
37) Dibromomethane	11.143	11.146	1.074	93	183063	45.06	ug/L	91

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V430L3.D
Acq On : 28 Jan 2010 9:59 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027523|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 29 09:56:43 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.256	11.256	1.085	83	403552	48.53	ug/L	100
39) 2-Chloroethylvinyl ether	11.468	11.468	1.105	63	797063	185.81	ug/L	98
40) cis-1,3-Dichloropropylene	11.701	11.705	1.128	75	503147	46.45	ug/L	91
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	861464	251.49	ug/L	92
44) Toluene	12.090	12.090	0.892	91	1395063	45.00	ug/L	99
45) trans-1,3-Dichloroprop...	12.242	12.239	0.904	75	459890	49.82	ug/L	92
46) 1,1,2-Trichloroethane	12.462	12.465	0.920	83	244638	47.41	ug/L	97
47) 2-Hexanone	12.631	12.631	0.932	43	2508104	247.26	ug/L	96
48) 1,3-Dichloropropane	12.653	12.656	0.934	76	539113	49.36	ug/L	95
49) Tetrachloroethylene	12.691	12.691	0.937	164	220577	38.14	ug/L	95
50) Dibromochloromethane	12.925	12.928	0.954	129	276895	44.74	ug/L	99
51) 1,2-Dibromoethane	13.098	13.094	0.967	107	262702	45.42	ug/L	99
52) Chlorobenzene	13.579	13.579	1.002	112	848088	43.11	ug/L	96
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006	131	291107	45.78	ug/L	98
54) Ethylbenzene	13.639	13.639	1.007	91	1522311	46.59	ug/L	98
55) m,p-Xylenes	13.745	13.749	1.015	106	1186774	90.22	ug/L	94
56) o-Xylene	14.180	14.184	1.047	106	586094	46.46	ug/L	92
57) Styrene	14.184	14.184	1.047	104	992135	50.11	ug/L	94
59) Bromoform	14.445	14.445	0.905	173	159171	43.91	ug/L	99
60) Isopropylbenzene	14.537	14.537	0.911	105	1375331	46.92	ug/L	98
62) 1,1,2,2-Tetrachloroethane	14.813	14.810	0.928	83	355060	47.50	ug/L	99
63) 1,2,3-Trichloropropane	14.902	14.898	0.934	110	93016	46.20	ug/L	98
64) Bromobenzene	14.951	14.951	0.937	156	331567	43.35	ug/L	89
65) n-Propylbenzene	14.962	14.965	0.937	91	1705096	48.48	ug/L	97
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	1186299	49.42	ug/L	96
67) 2-Chlorotoluene	15.117	15.117	0.947	126	341888	46.52	ug/L #	85
68) 4-Chlorotoluene	15.216	15.216	0.953	91	1024945	46.97	ug/L	97
69) tert-Butylbenzene	15.489	15.489	0.970	134	242744	42.97	ug/L #	89
70) 1,2,4-Trimethylbenzene	15.528	15.527	0.973	105	1170360	47.47	ug/L	97
71) sec-Butylbenzene	15.711	15.711	0.984	105	1466216	45.41	ug/L	98
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	1143723	45.06	ug/L	97
73) 1,3-Dichlorobenzene	15.902	15.902	0.996	146	616718	41.56	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	633803	41.08	ug/L	98
75) n-Butylbenzene	16.277	16.277	1.020	91	1141400	46.64	ug/L	98
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	592400	41.96	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.294	17.293	1.083	157	54605	40.00	ug/L	91
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	372612	38.18	ug/L	98
79) Hexachlorobutadiene	18.548	18.548	1.162	225	199751	36.53	ug/L	99
80) Naphthalene	18.762	18.762	1.175	128	947589	44.11	ug/L	100
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198	180	345946	41.19	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	0.000	6.924	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.136	7.175	0.688		0m	N.D. d		
88) Allyl chloride	7.458	7.546	0.719		0m	N.D. d		
89) tert-Butyl Alcohol	7.702	7.673	0.742		0m	N.D. d		
90) Acrylonitrile	7.977	7.928	0.769		0m	N.D. d		
91) Isopropyl ether	8.458	8.483	0.815		0m	N.D. d		
92) 2-Chloro-1,3-butadiene	8.607	8.617	0.830		0m	N.D. d		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.077	9.088	0.875		0m	N.D. d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V430L3.D
Acq On : 28 Jan 2010 9:59 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027523|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 29 09:56:43 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.077	9.148	0.875		0m	N.D.	d
96) Methacrylonitrile	9.342	9.332	0.900		0m	N.D.	d
97) Tetrahydrofuran	9.459	9.466	0.912		0m	N.D.	d
98) Isobutyl alcohol	9.767	9.770	0.941		0m	N.D.	d
99) Methyl tert-amyl ether	10.124	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.015	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.143	11.089	1.074		0m	N.D.	d
102) 2-Nitropropane	11.348	11.443	1.094		0m	N.D.	d
104) Ethyl methacrylate	12.242	12.235	0.904		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.541	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.537	14.693	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.965	14.856	0.938		0m	N.D.	d
110) Pentachloroethane	15.563	15.559	0.975		0m	N.D.	d
111) Benzyl chloride	16.093	16.100	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.493	16.497	1.033		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(E) = Over the calibration range (d) = deleted

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 1202027526
 Client Sample: QC for batch 946583
 Client ID: LCS for batch 946583
 Batch ID: 946584
 Run Date: 01/28/2010 22:25
 Prep Date: 01/28/2010 08:00
 Data File: 012810V55V431S3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

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

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
Lab Sample ID: 1202027526
Client Sample: QC for batch 946583
Client ID: LCS for batch 946583
Batch ID: 946584
Run Date: 01/28/2010 22:25
Prep Date: 01/28/2010 08:00
Data File: 012810V55V431S3.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: DXK1
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		308	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431S3.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027526|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:47 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1999466	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1298190	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	608332	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1999466	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1298190	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	608332	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	486267	52.33	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 104.66%			
43) Toluene-d8	12.016	12.016	0.887	98	1785262	50.42	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 100.84%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	645420	55.60	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 111.20%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.061	5.051	0.488		0m	N.D.	d	
4) Vinyl chloride	5.293	5.283	0.510		0m	N.D.	d	
5) Bromomethane	5.867	5.877	0.565		0m	N.D.	d	
6) Chloroethane	6.048	6.018	0.583		0m	N.D.	d	
7) Trichlorofluoromethane	6.401	6.391	0.617		0m	N.D.	d	
8) Ethyl ether	6.743	6.733	0.650		0m	N.D.	d	
9) Acetone	7.104	7.100	0.685		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.118	7.125	0.686		0m	N.D.	d	
11) Iodomethane	7.373	7.373	0.711		0m	N.D.	d	
12) Acetonitrile	7.479	7.450	0.721		0m	N.D.	d	
13) Methyl acetate	7.500	7.493	0.723		0m	N.D.	d	
14) Carbon disulfide	7.550	7.511	0.728		0m	N.D.	d	
15) Methylene chloride	7.691	7.691	0.741		0m	N.D.	d	
16) tert-Butyl methyl ether	7.988	7.984	0.770		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.023	8.030	0.773		0m	N.D.	d	
18) Vinyl acetate	8.465	8.458	0.816		0m	N.D.	d	
19) 1,1-Dichloroethane	8.504	8.511	0.820		0m	N.D.	d	
20) 2-Butanone	9.091	9.077	0.876		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.091	9.144	0.876		0m	N.D.	d	
22) 2,2-Dichloropropane	9.176	9.173	0.884		0m	N.D.	d	
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	9.459	9.452	0.912		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.742	9.735	0.939		0m	N.D.	d	
26) Cyclohexane	9.876	9.830	0.952		0m	N.D.	d	
27) 1,1-Dichloropropene	9.891	9.887	0.953		0m	N.D.	d	
28) Carbon tetrachloride	9.930	9.929	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	10.099	10.103	0.973		0m	N.D.	d	
31) Benzene	10.131	10.127	0.976		0m	N.D.	d	
32) Cyclohexene	10.248	10.248	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.467	10.460	1.009		0m	N.D.	d	
34) Trichloroethylene	10.771	10.768	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	11.008	11.004	1.061		0m	N.D.	d	
36) Methylcyclohexane	11.005	11.019	1.061		0m	N.D.	d	
37) Dibromomethane	11.132	11.146	1.073		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431S3.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027526|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:47 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.259	11.256	1.085		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.468	11.468	1.105		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.708	11.705	1.129		0m	N.D.	d	
42) 4-Methyl-2-pentanone	11.790	11.786	0.870		0m	N.D.	d	
44) Toluene	12.094	12.090	0.893		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.228	12.239	0.903		0m	N.D.	d	
46) 1,1,2-Trichloroethane	12.472	12.465	0.921		0m	N.D.	d	
47) 2-Hexanone	12.635	12.631	0.933		0m	N.D.	d	
48) 1,3-Dichloropropane	12.653	12.656	0.934		0m	N.D.	d	
49) Tetrachloroethylene	12.688	12.691	0.937		0m	N.D.	d	
50) Dibromochloromethane	12.928	12.928	0.954		0m	N.D.	d	
51) 1,2-Dibromoethane	13.091	13.094	0.966		0m	N.D.	d	
52) Chlorobenzene	13.586	13.579	1.003		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	13.629	13.636	1.006		0m	N.D.	d	
54) Ethylbenzene	13.639	13.639	1.007		0m	N.D.	d	
55) m,p-Xylenes	13.749	13.749	1.015		0m	N.D.	d	
56) o-Xylene	14.180	14.184	1.047		0m	N.D.	d	
57) Styrene	14.187	14.184	1.047		0m	N.D.	d	
59) Bromoform	0.000	14.445	0.000		0	N.D.		
60) Isopropylbenzene	14.541	14.537	0.911		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.813	14.810	0.928		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.		
64) Bromobenzene	14.951	14.951	0.937		0m	N.D.	d	
65) n-Propylbenzene	14.969	14.965	0.938		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.110	15.114	0.947		0m	N.D.	d	
67) 2-Chlorotoluene	15.117	15.117	0.947		0m	N.D.	d	
68) 4-Chlorotoluene	15.220	15.216	0.954		0m	N.D.	d	
69) tert-Butylbenzene	15.489	15.489	0.971		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.524	15.527	0.973		0m	N.D.	d	
71) sec-Butylbenzene	15.711	15.711	0.984		0m	N.D.	d	
72) 4-Isopropyltoluene	15.832	15.832	0.992		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.906	15.902	0.997		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.987	15.991	1.002		0m	N.D.	d	
75) n-Butylbenzene	16.277	16.277	1.020		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.419	16.422	1.029		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	18.378	18.371	1.152		0m	N.D.	d	
79) Hexachlorobutadiene	18.555	18.548	1.163		0m	N.D.	d	
80) Naphthalene	18.762	18.762	1.176		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.109	19.116	1.197		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	6.924	6.924	0.667	56	200275	187.90	ug/L	93
86) Trichlorotrifluoroethane	7.079	7.079	0.682	85	470408	307.95	ug/L	93
87) Isopropyl Alcohol	7.281	7.175	0.702	45	1022	N.D.		
88) Allyl chloride	7.550	7.546	0.728	41	3462391	273.32	ug/L	95
89) tert-Butyl Alcohol	7.691	7.673	0.741	59	161	N.D.		
90) Acrylonitrile	7.928	7.928	0.764	53	758858	251.33	ug/L	99
91) Isopropyl ether	8.480	8.483	0.817	45	215	N.D.		
92) 2-Chloro-1,3-butadiene	8.621	8.617	0.831	53	547891	55.93	ug/L	94
93) Ethyl acet-butyl ether	9.084	8.890	0.876	59	623	N.D.		
94) Ethyl acetate	9.091	9.088	0.876	43	2265853	246.51	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431S3.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027526|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:47 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	9.152	9.148	0.882	54	296501	262.44	ug/L	99
96) Methacrylonitrile	9.332	9.332	0.899	41	1503607	272.15	ug/L	98
97) Tetrahydrofuran	9.463	9.466	0.912	42	761291	262.98	ug/L	97
98) Isobutyl alcohol	9.770	9.770	0.942	41	933600	2769.35	ug/L	98
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.		
100) Methyl methacrylate	10.973	10.969	1.058	69	1354649	265.87	ug/L	92
101) 1,4-Dioxane	11.089	11.089	1.069	88	187097	2537.42	ug/L	94
102) 2-Nitropropane	11.447	11.443	1.103	43	672415	252.69	ug/L	99
104) Ethyl methacrylate	12.235	12.235	0.903	69	2655399	303.94	ug/L	94
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.573	14.573	0.913	53	807154	350.20	ug/L	98
108) Cyclohexanone	14.693	14.693	0.921	42	452815	668.94	ug/L	92
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	763921	345.88	ug/L	91
110) Pentachloroethane	15.559	15.559	0.975	167	504202	208.27	ug/L	91
111) Benzyl chloride	16.101	16.100	1.009	91	2831914	233.36	ug/L	96
112) bis(2-Chloroisopropyl)...	16.497	16.497	1.034	45	1113642	274.71	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

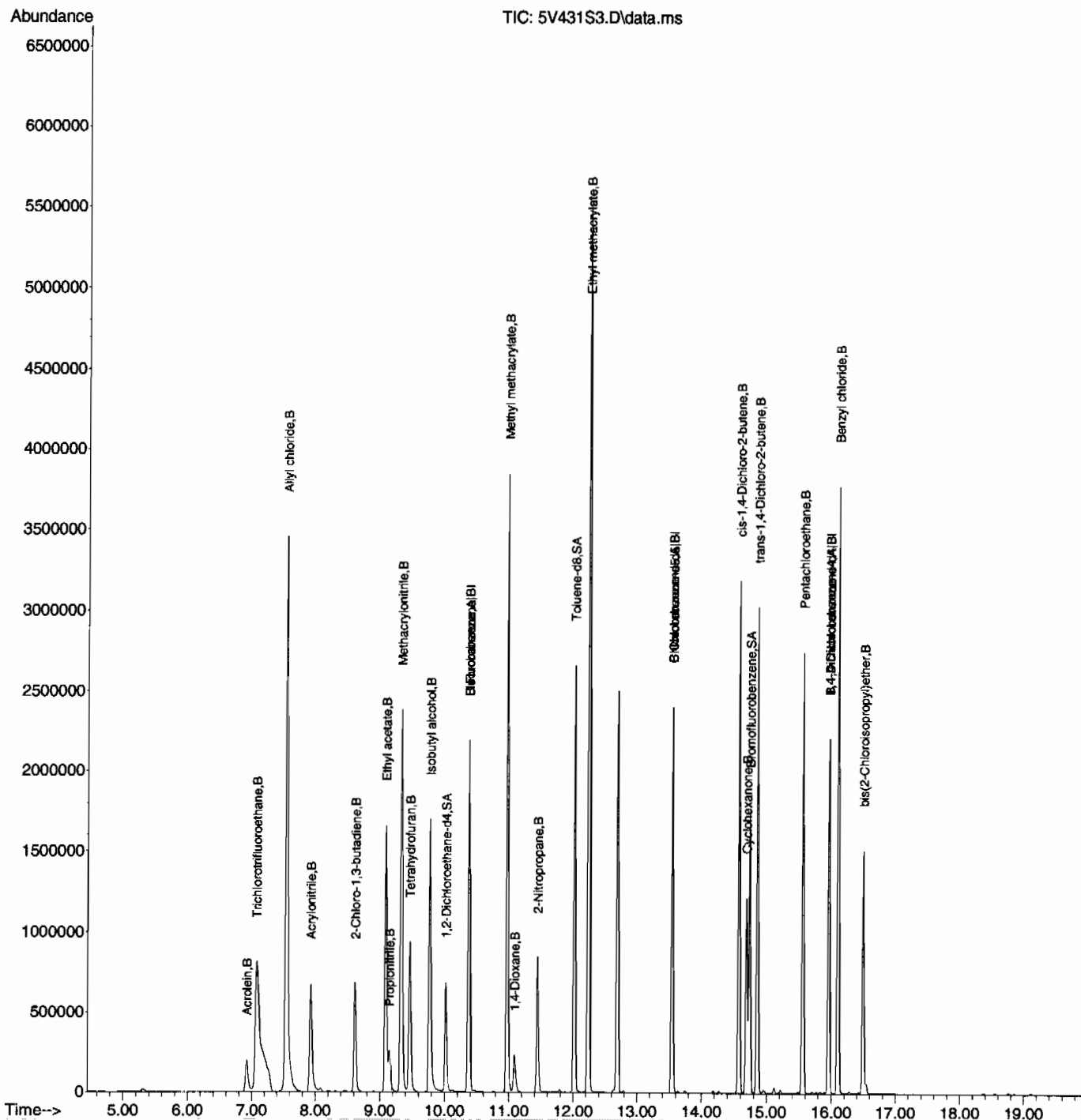
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\
Data File : 5V431S3.D
Acq On : 28 Jan 2010 10:25 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027526|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 29 09:56:47 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 1202040396
 Client Sample: QC for batch 946583
 Client ID: LCS for batch 946583
 Batch ID: 946584
 Run Date: 01/31/2010 12:15
 Prep Date: 01/31/2010 08:00
 Data File: 013110V5SV703L3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		39.0	ug/kg	0.340	1.00
74-87-3	Chloromethane		52.0	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		54.9	ug/kg	0.300	1.00
74-83-9	Bromomethane		49.3	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		50.3	ug/kg	0.300	1.00
67-64-1	Acetone		228	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		58.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		211	ug/kg	1.60	5.00
75-09-2	Methylene chloride		44.2	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		258	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		52.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		51.8	ug/kg	0.300	1.00
78-93-3	2-Butanone		235	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		52.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.4	ug/kg	0.300	1.00
67-66-3	Chloroform		50.7	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		43.1	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		49.1	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		52.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		49.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		55.2	ug/kg	0.300	1.00
71-43-2	Benzene		48.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		49.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		53.3	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		52.9	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		288	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		51.3	ug/kg	0.300	1.00
108-88-3	Toluene		49.0	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		54.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		49.1	ug/kg	0.300	1.00
591-78-6	2-Hexanone		264	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		51.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		43.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		48.1	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		48.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.4	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384
 Lab Sample ID: 1202040396
 Client Sample: QC for batch 946583
 Client ID: LCS for batch 946583
 Batch ID: 946584
 Run Date: 01/31/2010 12:15
 Prep Date: 01/31/2010 08:00
 Data File: 013110V55V703L3.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 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		51.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		99.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.7	ug/kg	0.300	1.00
100-42-5	Styrene		53.7	ug/kg	0.300	1.00
75-25-2	Bromoform		47.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		52.0	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		49.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		45.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		54.9	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		51.0	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		52.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		54.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		47.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		52.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		51.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		50.9	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		45.1	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		44.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		54.5	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.1	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		48.9	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.6	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703L3.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040396|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1860482	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1273384	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	641523	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1860482	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1273384	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	641523	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	457956	52.96	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 105.92%			
43) Toluene-d8	12.016	12.016	0.887	98	1709272	49.22	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 98.44%			
61) Bromofluorobenzene	14.739	14.739	0.924	95	637912	52.11	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 104.22%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.678	4.689	0.451	85	156317	39.02	ug/L	99
3) Chloromethane	5.061	5.051	0.488	50	475628	51.97	ug/L	98
4) Vinyl chloride	5.283	5.283	0.509	62	448458	54.90	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	286111	49.29	ug/L	99
6) Chloroethane	6.008	6.018	0.579	64	257715	46.83	ug/L	100
7) Trichlorofluoromethane	6.390	6.391	0.616	101	404345	50.29	ug/L	99
8) Ethyl ether	6.733	6.733	0.649	59	342619	50.33	ug/L	98
9) Acetone	7.100	7.100	0.684	43	1587156	227.56	ug/L	95
10) 1,1-Dichloroethylene	7.121	7.125	0.686	61	503316	58.02	ug/L	97
11) Iodomethane	7.365	7.373	0.710	142	2196110	211.44	ug/L	93
12) Acetonitrile	7.454	7.450	0.718	41	1576121	1367.95	ug/L	99
13) Methyl acetate	7.493	7.493	0.722	43	1893666	271.46	ug/L	98
14) Carbon disulfide	7.507	7.511	0.724	76	5238310	258.32	ug/L	100
15) Methylene chloride	7.691	7.691	0.741	84	350760	44.20	ug/L	94
16) tert-Butyl methyl ether	7.981	7.984	0.769	73	684499	44.56	ug/L	99
17) trans-1,2-Dichloroethy...	8.030	8.030	0.774	61	509418	52.93	ug/L	96
18) Vinyl acetate	8.455	8.458	0.815	43	5561891	323.59	ug/L	98
19) 1,1-Dichloroethane	8.508	8.511	0.820	63	632667	51.82	ug/L	99
20) 2-Butanone	9.073	9.077	0.875	43	1880881	235.44	ug/L	97
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	573626	52.51	ug/L	96
22) 2,2-Dichloropropane	9.169	9.173	0.884	77	302764	49.42	ug/L	93
23) Bromochloromethane	9.417	9.417	0.908	128	158239	43.06	ug/L	# 85
24) Chloroform	9.452	9.452	0.911	83	567009	50.68	ug/L	100
25) 1,1,1-Trichloroethane	9.731	9.735	0.938	97	383465	49.11	ug/L	97
26) Cyclohexane	9.830	9.830	0.948	56	592633	52.26	ug/L	99
27) 1,1-Dichloropropene	9.887	9.887	0.953	75	448461	52.41	ug/L	90
28) Carbon tetrachloride	9.929	9.929	0.957	117	341234	49.67	ug/L	99
30) 1,2-Dichloroethane	10.103	10.103	0.974	62	502589	55.18	ug/L	100
31) Benzene	10.124	10.127	0.976	78	1405429	48.65	ug/L	98
32) Cyclohexene	10.248	10.248	0.988	67	676420	50.49	ug/L	96
33) n-Butyl alcohol	10.456	10.460	1.008	56	1520923	5579.92	ug/L	96
34) Trichloroethylene	10.764	10.768	1.037	95	328320	49.03	ug/L	95
35) 1,2-Dichloropropane	11.008	11.004	1.061	63	398575	53.25	ug/L	100
36) Methylcyclohexane	11.019	11.019	1.062	83	560671	47.50	ug/L	96
37) Dibromomethane	11.142	11.146	1.074	93	191470	48.71	ug/L	89

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703L3.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040396|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.252	11.256	1.085	83	425481	52.89	ug/L	100
39) 2-Chloroethylvinyl ether	11.464	11.468	1.105	63	1035074	249.41	ug/L	99
40) cis-1,3-Dichloropropylene	11.701	11.705	1.128	75	537398	51.29	ug/L	91
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	970953	288.14	ug/L	92
44) Toluene	12.090	12.090	0.892	91	1494663	49.01	ug/L	99
45) trans-1,3-Dichloroprop...	12.239	12.239	0.903	75	498348	54.88	ug/L	91
46) 1,1,2-Trichloroethane	12.461	12.465	0.920	83	249077	49.06	ug/L	99
47) 2-Hexanone	12.631	12.631	0.932	43	2639206	264.49	ug/L	97
48) 1,3-Dichloropropane	12.652	12.656	0.934	76	557555	51.89	ug/L	97
49) Tetrachloroethylene	12.691	12.691	0.937	164	247444	43.50	ug/L	94
50) Dibromochloromethane	12.928	12.928	0.954	129	292840	48.10	ug/L	100
51) 1,2-Dibromoethane	13.094	13.094	0.967	107	272912	47.96	ug/L	100
52) Chlorobenzene	13.579	13.579	1.002	112	898041	46.40	ug/L	96
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006	131	305969	48.91	ug/L	98
54) Ethylbenzene	13.635	13.639	1.007	91	1666881	51.85	ug/L	97
55) m,p-Xylenes	13.745	13.749	1.015	106	1286872	99.44	ug/L	93
56) o-Xylene	14.180	14.184	1.047	106	629253	50.71	ug/L	92
57) Styrene	14.184	14.184	1.047	104	1046638	53.73	ug/L	93
59) Bromoform	14.445	14.445	0.905	173	171804	47.76	ug/L	100
60) Isopropylbenzene	14.537	14.537	0.911	105	1521409	52.30	ug/L	98
62) 1,1,2,2-Tetrachloroethane	14.809	14.810	0.928	83	386040	52.04	ug/L	100
63) 1,2,3-Trichloropropane	14.901	14.898	0.934	110	99637	49.87	ug/L	98
64) Bromobenzene	14.951	14.951	0.937	156	345315	45.50	ug/L	87
65) n-Propylbenzene	14.962	14.965	0.938	91	1916968	54.93	ug/L	97
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	1308045	54.92	ug/L	97
67) 2-Chlorotoluene	15.117	15.117	0.947	126	372171	51.03	ug/L #	85
68) 4-Chlorotoluene	15.216	15.216	0.953	91	1117117	51.58	ug/L	95
69) tert-Butylbenzene	15.488	15.489	0.971	134	265994	47.44	ug/L #	87
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973	105	1281349	52.37	ug/L	96
71) sec-Butylbenzene	15.711	15.711	0.984	105	1642820	51.27	ug/L	98
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	1282602	50.92	ug/L	97
73) 1,3-Dichlorobenzene	15.902	15.902	0.996	146	663566	45.06	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	680803	44.47	ug/L	98
75) n-Butylbenzene	16.277	16.277	1.020	91	1322266	54.45	ug/L	97
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	625338	44.64	ug/L	97
77) 1,2-Dibromo-3-chloropr...	17.293	17.293	1.084	157	63788	47.08	ug/L	91
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	436395	45.06	ug/L	99
79) Hexachlorobutadiene	18.548	18.548	1.162	225	234495	43.21	ug/L	98
80) Naphthalene	18.762	18.762	1.176	128	1095763	51.40	ug/L	100
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198	180	396744	47.60	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	6.924	6.924	0.667		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.146	7.175	0.689		0m	N.D.	d	
88) Allyl chloride	7.454	7.546	0.718		0m	N.D.	d	
89) tert-Butyl Alcohol	7.698	7.673	0.742		0m	N.D.	d	
90) Acrylonitrile	7.974	7.928	0.769		0m	N.D.	d	
91) Isopropyl ether	8.451	8.483	0.815		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.617	8.617	0.831		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.073	9.088	0.875		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703L3.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040396|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.073	9.148	0.875		0m	N.D.	d
96) Methacrylonitrile	9.268	9.332	0.893		0m	N.D.	d
97) Tetrahydrofuran	9.455	9.466	0.911		0m	N.D.	d
98) Isobutyl alcohol	9.650	9.770	0.930		0m	N.D.	d
99) Methyl tert-amyl ether	10.124	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.015	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.146	11.089	1.074		0m	N.D.	d
102) 2-Nitropropane	11.666	11.443	1.124		0m	N.D.	d
104) Ethyl methacrylate	12.242	12.235	0.904		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.537	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.700	14.693	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.855	14.856	0.931		0m	N.D.	d
110) Pentachloroethane	15.559	15.559	0.975		0m	N.D.	d
111) Benzyl chloride	16.097	16.100	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.546	16.497	1.037		0m	N.D.	d

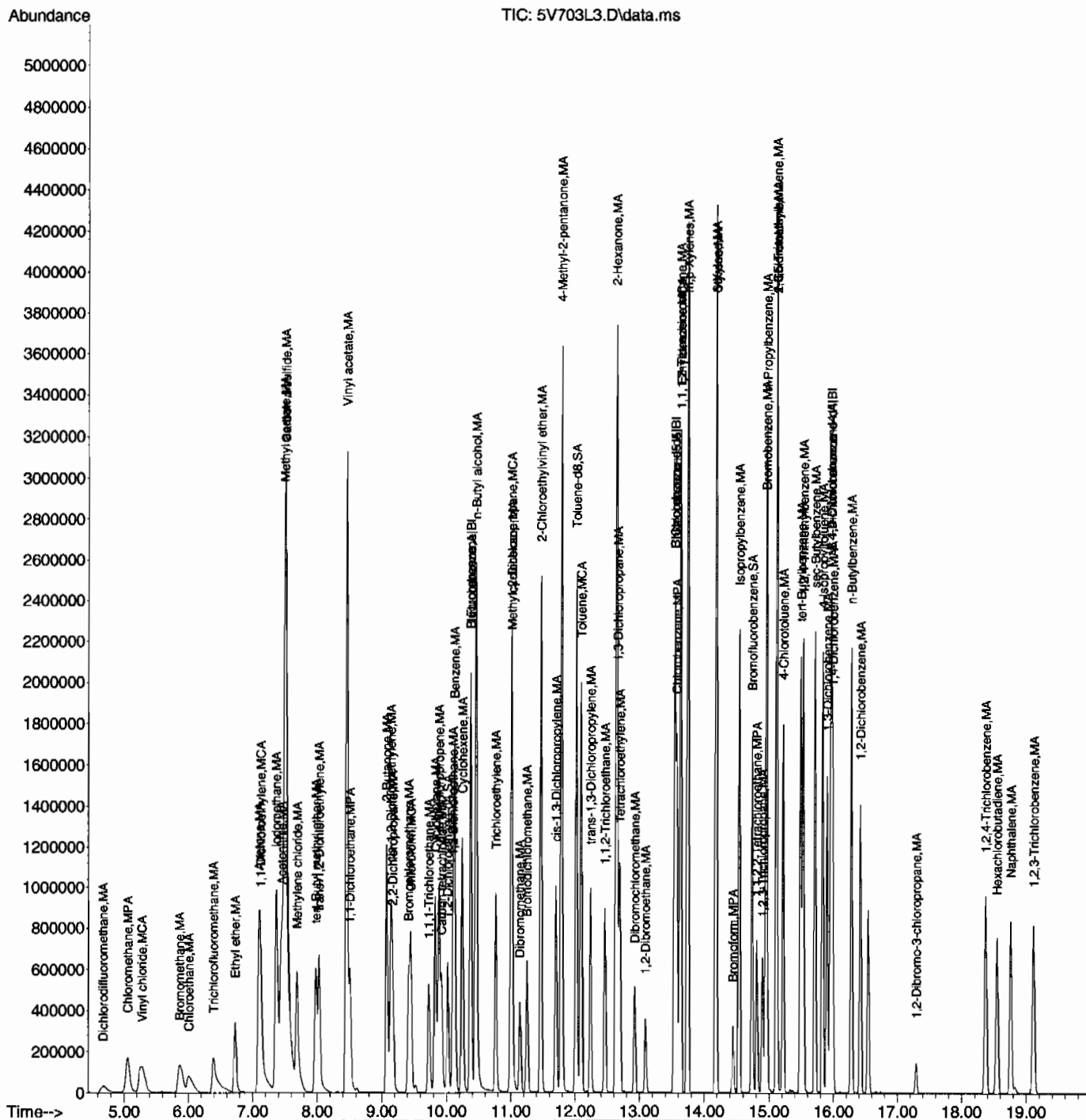
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V703L3.D
Acq On : 31 Jan 2010 12:15 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040396|946584|1|VOA|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384

Matrix: SOIL

Lab Sample ID: 1202040397

Client Sample: QC for batch 946583

Client: LANL010

Project: QC

Client ID: LCS for batch 946583

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 946584

Inst: VOA5.I

Dilution: 1

Run Date: 01/31/2010 12:41

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/31/2010 08:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 013110V5SV704S3.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: 10-1384
Lab Sample ID: 1202040397
Client Sample: QC for batch 946583
Client ID: LCS for batch 946583
Batch ID: 946584
Run Date: 01/31/2010 12:41
Prep Date: 01/31/2010 08:00
Data File: 013110V5SV704S3.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: DXK1
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		325	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\013110V5\
Data File : 5V704S3.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040397|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1846900	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1231006	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	587419	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1846900	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1231006	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.962	15.962	1.000	152	587419	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	471662	54.95	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	= 109.90%			
43) Toluene-d8	12.016	12.016	0.887	98	1675476	49.91	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	= 99.82%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	638128	56.93	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	= 113.86%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.689	0.000		0	N.D.		
3) Chloromethane	5.041	5.051	0.486		0m	N.D.	d	
4) Vinyl chloride	5.303	5.283	0.511		0m	N.D.	d	
5) Bromomethane	0.000	5.877	0.000		0	N.D.		
6) Chloroethane	0.000	6.018	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.391	0.000		0	N.D.		
8) Ethyl ether	6.733	6.733	0.649		0m	N.D.	d	
9) Acetone	7.100	7.100	0.684		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.111	7.125	0.685		0m	N.D.	d	
11) Iodomethane	7.369	7.373	0.710		0m	N.D.	d	
12) Acetonitrile	7.447	7.450	0.718		0m	N.D.	d	
13) Methyl acetate	7.503	7.493	0.723		0m	N.D.	d	
14) Carbon disulfide	7.549	7.511	0.728		0m	N.D.	d	
15) Methylene chloride	7.694	7.691	0.742		0m	N.D.	d	
16) tert-Butyl methyl ether	7.977	7.984	0.769		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.030	8.030	0.774		0m	N.D.	d	
18) Vinyl acetate	8.614	8.458	0.830		0m	N.D.	d	
19) 1,1-Dichloroethane	8.511	8.511	0.820		0m	N.D.	d	
20) 2-Butanone	9.091	9.077	0.876		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.091	9.144	0.876		0m	N.D.	d	
22) 2,2-Dichloropropane	9.176	9.173	0.884		0m	N.D.	d	
23) Bromochloromethane	0.000	9.417	0.000		0	N.D.		
24) Chloroform	9.456	9.452	0.911		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.738	9.735	0.939		0m	N.D.	d	
26) Cyclohexane	9.774	9.830	0.942		0m	N.D.	d	
27) 1,1-Dichloropropene	9.880	9.887	0.952		0m	N.D.	d	
28) Carbon tetrachloride	9.933	9.929	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	10.103	10.103	0.974		0m	N.D.	d	
31) Benzene	10.124	10.127	0.976		0m	N.D.	d	
32) Cyclohexene	10.255	10.248	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.467	10.460	1.009		0m	N.D.	d	
34) Trichloroethylene	10.771	10.768	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	11.008	11.004	1.061		0m	N.D.	d	
36) Methylcyclohexane	11.015	11.019	1.062		0m	N.D.	d	
37) Dibromomethane	0.000	11.146	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704S3.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040397|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.259	11.256	1.085		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.475	11.468	1.106		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.698	11.705	1.127		0m	N.D.	d	
42) 4-Methyl-2-pentanone	11.782	11.786	0.870		0m	N.D.	d	
44) Toluene	12.094	12.090	0.893		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.242	12.239	0.904		0m	N.D.	d	
46) 1,1,2-Trichloroethane	12.461	12.465	0.920		0m	N.D.	d	
47) 2-Hexanone	12.635	12.631	0.933		0m	N.D.	d	
48) 1,3-Dichloropropane	12.649	12.656	0.934		0m	N.D.	d	
49) Tetrachloroethylene	12.691	12.691	0.937		0m	N.D.	d	
50) Dibromochloromethane	12.935	12.928	0.955		0m	N.D.	d	
51) 1,2-Dibromoethane	13.098	13.094	0.967		0m	N.D.	d	
52) Chlorobenzene	13.582	13.579	1.003		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006		0m	N.D.	d	
54) Ethylbenzene	13.639	13.639	1.007		0m	N.D.	d	
55) m,p-Xylenes	13.749	13.749	1.015		0m	N.D.	d	
56) o-Xylene	14.184	14.184	1.047		0m	N.D.	d	
57) Styrene	14.187	14.184	1.047		0m	N.D.	d	
59) Bromoform	0.000	14.445	0.000		0	N.D.		
60) Isopropylbenzene	14.541	14.537	0.911		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.803	14.810	0.927		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	14.898	0.000		0	N.D.		
64) Bromobenzene	14.955	14.951	0.937		0m	N.D.	d	
65) n-Propylbenzene	14.965	14.965	0.938		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.110	15.114	0.947		0m	N.D.	d	
67) 2-Chlorotoluene	15.117	15.117	0.947		0m	N.D.	d	
68) 4-Chlorotoluene	15.216	15.216	0.953		0m	N.D.	d	
69) tert-Butylbenzene	15.481	15.489	0.970		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.527	15.527	0.973		0m	N.D.	d	
71) sec-Butylbenzene	15.708	15.711	0.984		0m	N.D.	d	
72) 4-Isopropyltoluene	15.832	15.832	0.992		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.909	15.902	0.997		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.987	15.991	1.002		0m	N.D.	d	
75) n-Butylbenzene	16.277	16.277	1.020		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.419	16.422	1.029		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	17.293	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151		0m	N.D.	d	
79) Hexachlorobutadiene	18.555	18.548	1.162		0m	N.D.	d	
80) Naphthalene	18.769	18.762	1.176		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	6.924	6.924	0.667	56	225398	228.94	ug/L	87
86) Trichlorotrifluoroethane	7.086	7.079	0.683	85	458713	325.10	ug/L	87
87) Isopropyl Alcohol	7.337	7.175	0.707	45	249	N.D.		
88) Allyl chloride	7.549	7.546	0.728	41	3334391	284.96	ug/L	94
89) tert-Butyl Alcohol	7.666	7.673	0.739	59	116	N.D.		
90) Acrylonitrile	7.931	7.928	0.764	53	764421	274.09	ug/L	99
91) Isopropyl ether	8.487	8.483	0.818	45	298	N.D.		
92) 2-Chloro-1,3-butadiene	8.621	8.617	0.831	53	549517	60.73	ug/L	95
93) Ethyl tert-butyl ether	9.091	8.890	0.876	59	1184	N.D.		
94) Ethyl acetate	9.091	9.088	0.876	43	2376127	279.86	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704S3.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040397|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	9.155	9.148	0.882	54	307039	294.22	ug/L	100
96) Methacrylonitrile	9.332	9.332	0.899	41	1530082	299.82	ug/L	98
97) Tetrahydrofuran	9.466	9.466	0.912	42	787907	294.66	ug/L	98
98) Isobutyl alcohol	9.770	9.770	0.942	41	1018523	3270.83	ug/L	98
99) Methyl tert-amyl ether	0.000	10.138	0.000		0	N.D.		
100) Methyl methacrylate	10.973	10.969	1.058	69	1381395	293.52	ug/L	92
101) 1,4-Dioxane	11.089	11.089	1.069	88	194686	2858.46	ug/L	98
102) 2-Nitropropane	11.446	11.443	1.103	43	723452	293.03	ug/L	99
104) Ethyl methacrylate	12.235	12.235	0.903	69	2711172	327.26	ug/L	94
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.573	14.573	0.913	53	876111	393.65	ug/L	97
108) Cyclohexanone	14.689	14.693	0.920	42	478621	729.58	ug/L	91
109) trans-1,4-Dichloro-2-b...	14.856	14.856	0.931	53	837163	392.54	ug/L	90
110) Pentachloroethane	15.559	15.559	0.975	167	940528	402.33	ug/L	92
111) Benzyl chloride	16.100	16.100	1.009	91	3688889	313.24	ug/L	97
112) bis(2-Chloroisopropyl)...	16.496	16.497	1.033	45	1309938	334.64	ug/L	95

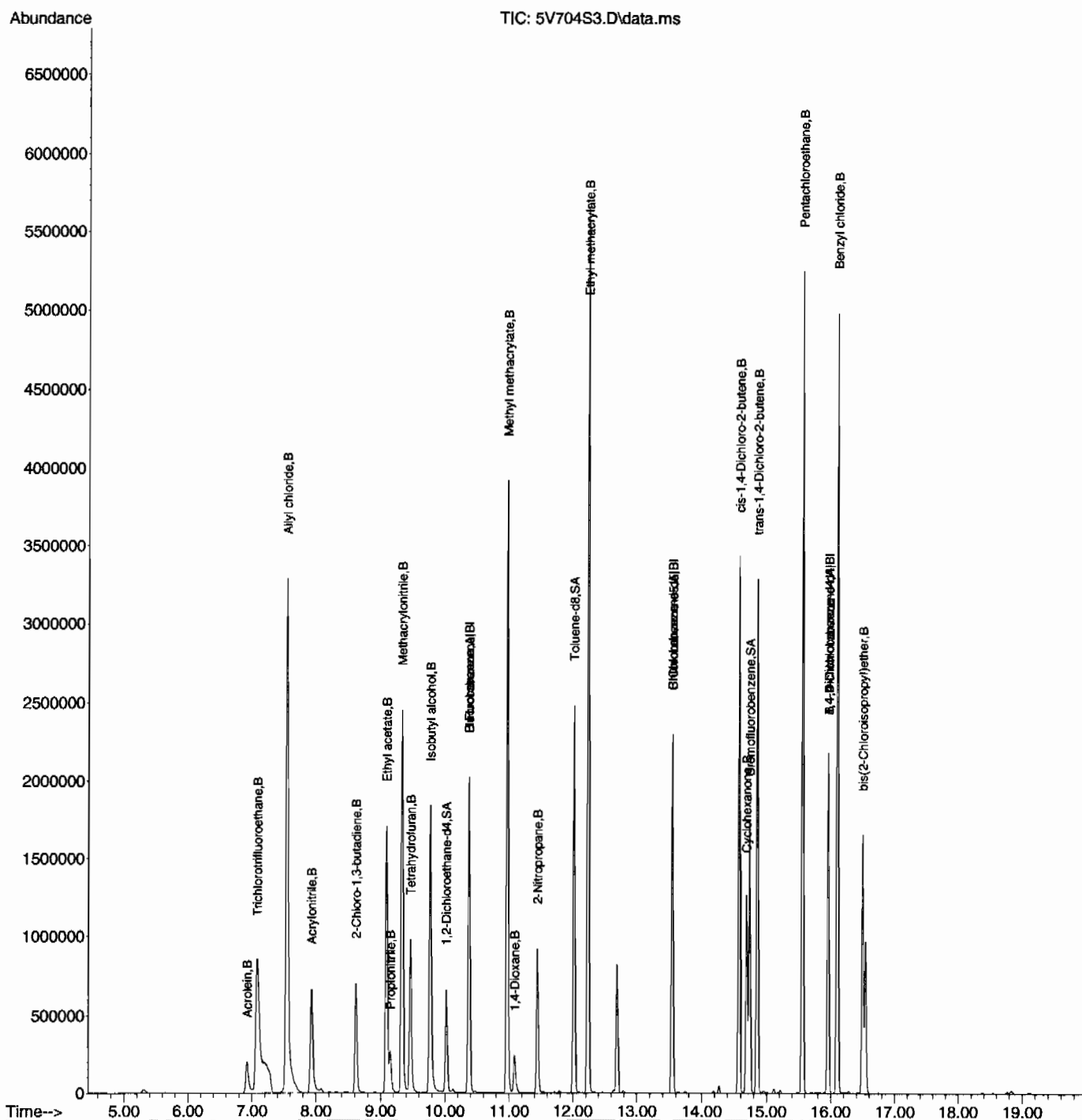
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V704S3.D
Acq On : 31 Jan 2010 12:41 pm
Operator : DXK1
InstName : VOA5
Sample : |1202040397|946584|1|VOA|1|VOA8260Bs|
Misc : LCS 5g N/A SOIL MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
 Lab Sample ID: 1202027524
 Client Sample: QC for batch 946583
 Client ID: RE14-10-7689PS
 Batch ID: 946584
 Run Date: 01/31/2010 18:44
 Prep Date: 01/31/2010 10:42
 Data File: 013110V55V718.D

Date Collected: 01/15/2010 12:00
 Date Received: 01/23/2010 09:20
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: DXK1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 13
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	Hh	36.4	ug/kg	0.391	1.15
74-87-3	Chloromethane	Hh	57.2	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	Hh	56.6	ug/kg	0.345	1.15
74-83-9	Bromomethane	Hh	45.1	ug/kg	0.345	1.15
75-00-3	Chloroethane	Hh	46.4	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	Hh	46.1	ug/kg	0.345	1.15
67-64-1	Acetone	Hh	169	ug/kg	1.91	5.75
75-35-4	1,1-Dichloroethylene	Hh	54.8	ug/kg	0.345	1.15
74-88-4	Iodomethane	Hh	193	ug/kg	1.84	5.75
75-09-2	Methylene chloride	Hh	44.3	ug/kg	2.30	5.75
75-15-0	Carbon disulfide	Hh	239	ug/kg	1.44	5.75
156-60-5	trans-1,2-Dichloroethylene	Hh	51.4	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	Hh	49.3	ug/kg	0.345	1.15
78-93-3	2-Butanone	Hh	183	ug/kg	1.72	5.75
156-59-2	cis-1,2-Dichloroethylene	Hh	51.2	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	Hh	43.1	ug/kg	0.345	1.15
67-66-3	Chloroform	Hh	49.7	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	Hh	43.2	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	Hh	46.1	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	Hh	49.1	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	Hh	45.0	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	Hh	56.5	ug/kg	0.345	1.15
71-43-2	Benzene	Hh	47.7	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	Hh	46.9	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	Hh	53.8	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	Hh	52.4	ug/kg	0.345	1.15
74-95-3	Dibromomethane	Hh	50.7	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	Hh	221	ug/kg	1.44	5.75
10061-01-5	cis-1,3-Dichloropropylene	Hh	45.0	ug/kg	0.345	1.15
108-88-3	Toluene	Hh	47.4	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	Hh	50.2	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	Hh	51.3	ug/kg	0.345	1.15
591-78-6	2-Hexanone	Hh	71.1	ug/kg	1.72	5.75
142-28-9	1,3-Dichloropropane	Hh	52.5	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	Hh	38.4	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	Hh	47.7	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	Hh	48.8	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	Hh	44.6	ug/kg	0.345	1.15

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202027524	Date Received: 01/23/2010 09:20	%Moisture: 13
Client Sample: QC for batch 946583	Client: LANL010	Project: QC
Client ID: RE14-10-7689PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/31/2010 18:44	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/31/2010 10:42	Aliquot: 5 g	Final Volume: 5 mL
Data File: 013110V55V718.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	Hh	48.3	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	Hh	91.1	ug/kg	0.345	2.30
95-47-6	o-Xylene	Hh	48.2	ug/kg	0.345	1.15
100-42-5	Styrene	Hh	49.7	ug/kg	0.345	1.15
75-25-2	Bromoform	Hh	46.1	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	Hh	74.9	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	Hh	55.2	ug/kg	0.345	1.15
108-86-1	Bromobenzene	Hh	45.7	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	Hh	50.9	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	Hh	49.2	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	Hh	48.1	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	Hh	51.5	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	Hh	47.2	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	Hh	44.9	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	Hh	47.7	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	Hh	46.0	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	Hh	37.4	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	Hh	40.5	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	Hh	40.0	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	Hh	44.3	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	Hh	45.3	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	5.75	ug/kg	1.84	5.75
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	Hh	47.2	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	Hh	41.0	ug/kg	0.345	1.15

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V718.D
Acq On : 31 Jan 2010 6:44 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027524|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MS245387001
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 09:54:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.375	10.375	1.000	96	1612985	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1099520	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	546510	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1612985	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1099520	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.963	15.962	1.000	152	546510	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	406404	54.21	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	108.42%			
43) Toluene-d8	12.019	12.016	0.887	98	1430970	47.72	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	95.44%			
61) Bromofluorobenzene	14.739	14.739	0.923	95	702286m	67.34	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	134.68%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.689	4.689	0.452	85	109750	31.63	ug/L	100
3) Chloromethane	5.061	5.051	0.488	50	394779	49.76	ug/L	100
4) Vinyl chloride	5.273	5.283	0.508	62	348542	49.22	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	197321	39.21	ug/L	99
6) Chloroethane	5.998	6.018	0.578	64	192653	40.38	ug/L	99
7) Trichlorofluoromethane	6.391	6.391	0.616	101	279310	40.07	ug/L	98
8) Ethyl ether	6.733	6.733	0.649	59	255939	43.36	ug/L	93
9) Acetone	7.100	7.100	0.684	43	886602	146.62	ug/L	94
10) 1,1-Dichloroethylene	7.125	7.125	0.687	61	358276	47.64	ug/L	95
11) Iodomethane	7.369	7.373	0.710	142	1510066	167.69	ug/L	93
12) Acetonitrile	7.454	7.450	0.718	41	1156281	1157.55	ug/L	98
13) Methyl acetate	7.496	7.493	0.723	43	817807	135.22	ug/L	98
14) Carbon disulfide	7.511	7.511	0.724	76	3661055	208.24	ug/L	100
15) Methylene chloride	7.691	7.691	0.741	84	265035	38.52	ug/L	90
16) tert-Butyl methyl ether	7.984	7.984	0.770	73	538058	40.40	ug/L	99
17) trans-1,2-Dichloroethy...	8.034	8.030	0.774	61	373313	44.74	ug/L	94
18) Vinyl acetate	8.607	8.458	0.830	43	311	N.D.		
19) 1,1-Dichloroethane	8.508	8.511	0.820	63	453832	42.88	ug/L	99
20) 2-Butanone	9.077	9.077	0.875	43	1105363	159.59	ug/L	96
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	421903	44.55	ug/L	96
22) 2,2-Dichloropropane	9.169	9.173	0.884	77	199164	37.50	ug/L	86
23) Bromochloromethane	9.420	9.417	0.908	128	119597	37.54	ug/L	# 82
24) Chloroform	9.452	9.452	0.911	83	419173	43.21	ug/L	99
25) 1,1,1-Trichloroethane	9.728	9.735	0.938	97	271268	40.07	ug/L	97
26) Cyclohexane	9.830	9.830	0.948	56	405915	41.29	ug/L	97
27) 1,1-Dichloropropene	9.883	9.887	0.953	75	316828	42.71	ug/L	88
28) Carbon tetrachloride	9.926	9.929	0.957	117	232894	39.10	ug/L	98
30) 1,2-Dichloroethane	10.103	10.103	0.974	62	387726	49.10	ug/L	99
31) Benzene	10.128	10.127	0.976	78	1039377	41.50	ug/L	96
32) Cyclohexene	10.248	10.248	0.988	67	481156	41.43	ug/L	97
33) n-Butyl alcohol	10.460	10.460	1.008	56	814421	3483.74	ug/L	93
34) Trichloroethylene	10.764	10.768	1.037	95	236914	40.81	ug/L	95
35) 1,2-Dichloropropane	11.008	11.004	1.061	63	303820	46.82	ug/L	99
36) Methylcyclohexane	11.015	11.019	1.062	83	370860	36.24	ug/L	96
37) Dibromomethane	11.142	11.146	1.074	93	150335	44.11	ug/L	88

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V718.D
Acq On : 31 Jan 2010 6:44 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027524|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MS245387001
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 09:54:53 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.252	11.256	1.085	83	317983	45.59	ug/L	99
39) 2-Chloroethylvinyl ether	11.471	11.468	1.106	63	151	N.D.		
40) cis-1,3-Dichloropropylene	11.701	11.705	1.128	75	355358	39.12	ug/L	86
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	559649	192.34	ug/L	88
44) Toluene	12.090	12.090	0.892	91	1086355	41.26	ug/L	99
45) trans-1,3-Dichloroprop...	12.239	12.239	0.903	75	342494	43.68	ug/L	90
46) 1,1,2-Trichloroethane	12.461	12.465	0.920	83	195499	44.60	ug/L	99
47) 2-Hexanone	12.631	12.631	0.932	43	532722	61.83	ug/L	93
48) 1,3-Dichloropropane	12.652	12.656	0.934	76	423287	45.62	ug/L #	60
49) Tetrachloroethylene	12.691	12.691	0.937	164	164076	33.40	ug/L	92
50) Dibromochloromethane	12.928	12.928	0.954	129	218069	41.48	ug/L	99
51) 1,2-Dibromoethane	13.095	13.094	0.967	107	208538	42.44	ug/L	99
52) Chlorobenzene	13.579	13.579	1.002	112	648378	38.80	ug/L	96
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006	131	221630	41.03	ug/L	98
54) Ethylbenzene	13.636	13.639	1.007	91	1165561	41.99	ug/L	98
55) m,p-Xylenes	13.745	13.749	1.015	106	885196	79.22	ug/L	91
56) o-Xylene	14.184	14.184	1.047	106	448713	41.88	ug/L	92
57) Styrene	14.184	14.184	1.047	104	726369	43.19	ug/L	93
59) Bromoform	14.449	14.445	0.905	173	122815	40.08	ug/L	99
60) Isopropylbenzene	14.537	14.537	0.911	105	1036740	41.84	ug/L	97
62) 1,1,2,2-Tetrachloroethane	14.810	14.810	0.928	83	411436	65.10	ug/L	87
63) 1,2,3-Trichloropropane	14.898	14.898	0.933	110	81731	48.02	ug/L	98
64) Bromobenzene	14.951	14.951	0.937	156	257110	39.77	ug/L	89
65) n-Propylbenzene	14.962	14.965	0.937	91	1315311	44.24	ug/L	97
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	908915	44.79	ug/L	97
67) 2-Chlorotoluene	15.117	15.117	0.947	126	265744	42.77	ug/L	88
68) 4-Chlorotoluene	15.216	15.216	0.953	91	756879	41.03	ug/L	96
69) tert-Butylbenzene	15.485	15.489	0.970	134	186401	39.03	ug/L #	88
70) 1,2,4-Trimethylbenzene	15.528	15.527	0.973	105	864204	41.46	ug/L	96
71) sec-Butylbenzene	15.711	15.711	0.984	105	1093082	40.04	ug/L	97
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	697660	32.52	ug/L	96
73) 1,3-Dichlorobenzene	15.902	15.902	0.996	146	442068	35.24	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	453211	34.75	ug/L	98
75) n-Butylbenzene	16.277	16.277	1.020	91	796676	38.51	ug/L	98
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	425992	35.69	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.294	17.293	1.083	157	45493	39.42	ug/L	87
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	228503	27.70	ug/L	100
79) Hexachlorobutadiene	18.548	18.548	1.162	225	121403	26.26	ug/L	99
80) Naphthalene	18.762	18.762	1.175	128	656248	36.13	ug/L	100
81) 1,2,3-Trichlorobenzene	19.116	19.116	1.198	180	210946	29.71	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	0.000	6.924	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.171	7.175	0.691		0m	N.D. d		
88) Allyl chloride	7.454	7.546	0.718		0m	N.D. d		
89) tert-Butyl Alcohol	7.691	7.673	0.741		0m	N.D. d		
90) Acrylonitrile	7.992	7.928	0.770		0m	N.D. d		
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.077	9.088	0.875		0m	N.D. d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V718.D
Acq On : 31 Jan 2010 6:44 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027524|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MS245387001
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 09:54:53 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.077	9.148	0.875		0m	N.D.	d
96) Methacrylonitrile	9.169	9.332	0.884		0m	N.D.	d
97) Tetrahydrofuran	9.459	9.466	0.912		0m	N.D.	d
98) Isobutyl alcohol	9.763	9.770	0.941		0m	N.D.	d
99) Methyl tert-amyl ether	10.124	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.015	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.135	11.089	1.073		0m	N.D.	d
102) 2-Nitropropane	11.457	11.443	1.104		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.537	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.778	14.693	0.926		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.781	14.856	0.926		0m	N.D.	d
110) Pentachloroethane	15.556	15.559	0.975		0m	N.D.	d
111) Benzyl chloride	16.093	16.100	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.546	16.497	1.037		0m	N.D.	d

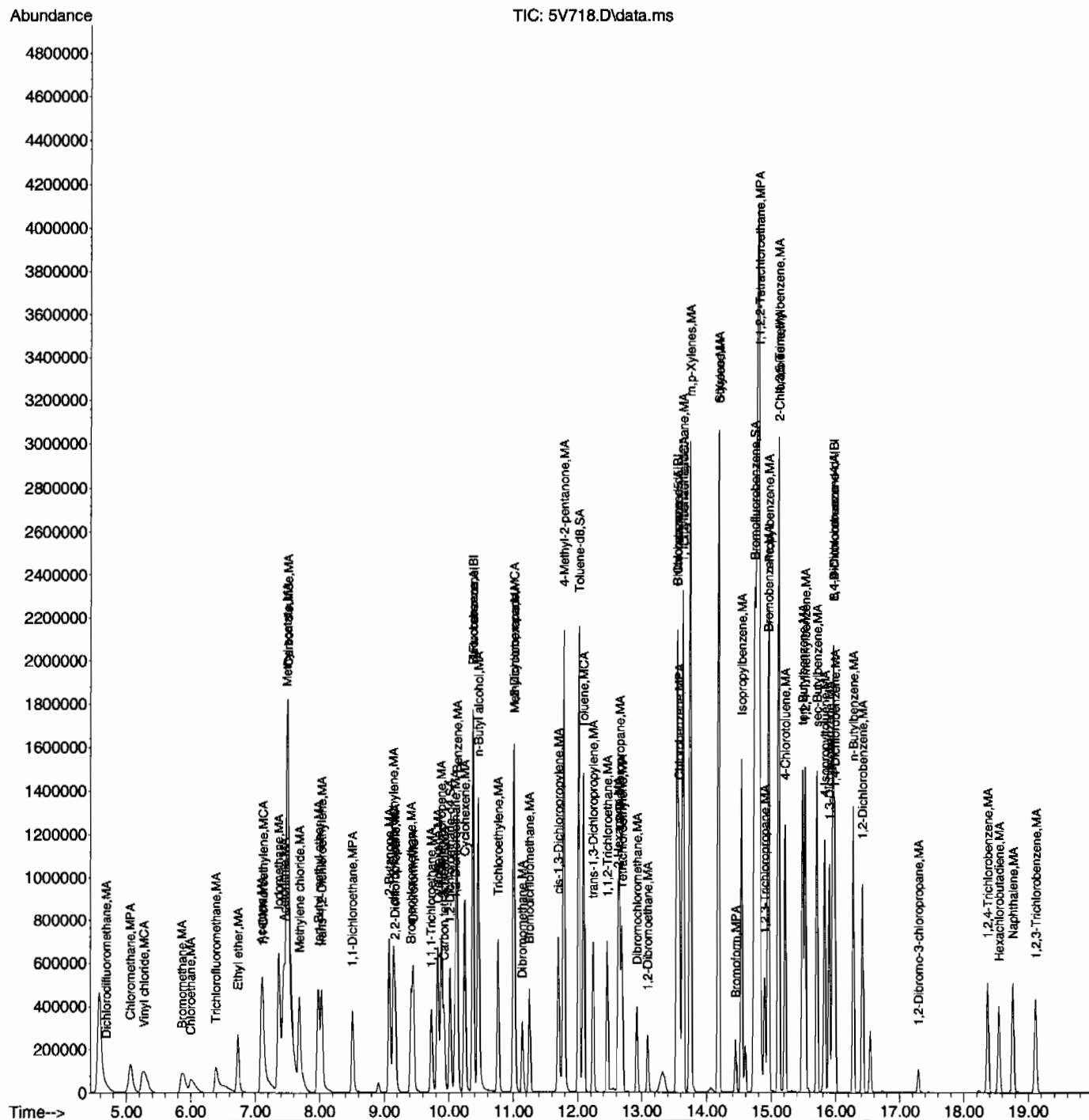
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V718.D
Acq On : 31 Jan 2010 6:44 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027524|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MS245387001
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 09:54:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202027525	Date Received: 01/23/2010 09:20	%Moisture: 13
Client Sample: QC for batch 946583	Client: LANL010	Project: QC
Client ID: RE14-10-7689PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.I	Dilution: 1
Run Date: 01/31/2010 19:10	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/31/2010 10:43	Aliquot: 5 g	Final Volume: 5 mL
Data File: 013110V5SV719.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	Hh	33.0	ug/kg	0.391	1.15
74-87-3	Chloromethane	Hh	51.6	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	Hh	51.7	ug/kg	0.345	1.15
74-83-9	Bromomethane	Hh	40.2	ug/kg	0.345	1.15
75-00-3	Chloroethane	Hh	42.0	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	Hh	43.0	ug/kg	0.345	1.15
67-64-1	Acetone	Hh	149	ug/kg	1.91	5.75
75-35-4	1,1-Dichloroethylene	Hh	49.9	ug/kg	0.345	1.15
74-88-4	Iodomethane	Hh	174	ug/kg	1.84	5.75
75-09-2	Methylene chloride	Hh	39.4	ug/kg	2.30	5.75
75-15-0	Carbon disulfide	Hh	223	ug/kg	1.44	5.75
156-60-5	trans-1,2-Dichloroethylene	Hh	46.9	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	Hh	43.6	ug/kg	0.345	1.15
78-93-3	2-Butanone	Hh	169	ug/kg	1.72	5.75
156-59-2	cis-1,2-Dichloroethylene	Hh	45.7	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	Hh	39.2	ug/kg	0.345	1.15
67-66-3	Chloroform	Hh	44.3	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	Hh	37.6	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	Hh	42.1	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	Hh	45.9	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	Hh	41.5	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	Hh	49.1	ug/kg	0.345	1.15
71-43-2	Benzene	Hh	42.6	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	Hh	43.2	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	Hh	46.2	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	Hh	46.8	ug/kg	0.345	1.15
74-95-3	Dibromomethane	Hh	43.9	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	Hh	208	ug/kg	1.44	5.75
10061-01-5	cis-1,3-Dichloropropylene	Hh	39.5	ug/kg	0.345	1.15
108-88-3	Toluene	Hh	43.2	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	Hh	44.7	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	Hh	45.5	ug/kg	0.345	1.15
591-78-6	2-Hexanone	Hh	55.8	ug/kg	1.72	5.75
142-28-9	1,3-Dichloropropane	Hh	45.6	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	Hh	36.0	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	Hh	41.7	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	Hh	42.6	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	Hh	39.9	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202027525	Date Received: 01/23/2010 09:20	%Moisture: 13
Client Sample: QC for batch 946583	Client: LANL010	Project: QC
Client ID: RE14-10-7689PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 946584	Inst: VOA5.1	Dilution: 1
Run Date: 01/31/2010 19:10	Analyst: DXK1	Purge Vol: 5 mL
Prep Date: 01/31/2010 10:43	Aliquot: 5 g	Final Volume: 5 mL
Data File: 013110V55V719.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	Hh	43.9	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	Hh	82.6	ug/kg	0.345	2.30
95-47-6	o-Xylene	Hh	42.7	ug/kg	0.345	1.15
100-42-5	Styrene	Hh	43.0	ug/kg	0.345	1.15
75-25-2	Bromoform	Hh	40.3	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	Hh	47.5	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	Hh	46.8	ug/kg	0.345	1.15
108-86-1	Bromobenzene	Hh	38.0	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	Hh	44.0	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	Hh	42.0	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	Hh	43.4	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	Hh	44.5	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	Hh	41.3	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	Hh	39.0	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	Hh	41.7	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	Hh	40.2	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	Hh	33.4	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	Hh	35.1	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	Hh	35.0	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	Hh	39.1	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	Hh	39.6	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	5.75	ug/kg	1.84	5.75
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	Hh	41.6	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	Hh	35.3	ug/kg	0.345	1.15

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V719.D
Acq On : 31 Jan 2010 7:10 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027525|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245387001
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 01 09:04:48 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.375	10.375	1.000	96	1683206	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.547	13.547	1.000	117	1128027	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	566703	50.00	ug/L	0.00
82) B Fluorobenzene	10.375	10.375	1.000	96	1683206	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.547	13.547	1.000	117	1128027	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.959	15.962	1.000	152	566703	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.021	10.021	0.966	65	436343	55.78	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	=	111.56%		
43) Toluene-d8	12.016	12.016	0.887	98	1478387	48.06	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	=	96.12%		
61) Bromofluorobenzene	14.739	14.739	0.924	95	572937	52.98	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	=	105.96%		
Target Compounds								QValue
2) Dichlorodifluoromethane	4.689	4.689	0.452	85	103953	28.73	ug/L	98
3) Chloromethane	5.071	5.051	0.489	50	371789	44.90	ug/L	99
4) Vinyl chloride	5.263	5.283	0.507	62	332511	44.99	ug/L	99
5) Bromomethane	5.867	5.877	0.565	94	183805	35.00	ug/L	98
6) Chloroethane	6.008	6.018	0.579	64	181678	36.49	ug/L	99
7) Trichlorofluoromethane	6.391	6.391	0.616	101	271813	37.37	ug/L	98
8) Ethyl ether	6.733	6.733	0.649	59	229977	37.34	ug/L	97
9) Acetone	7.100	7.100	0.684	43	815298	129.21	ug/L	94
10) 1,1-Dichloroethylene	7.122	7.125	0.686	61	340333	43.36	ug/L	96
11) Iodomethane	7.373	7.373	0.711	142	1418019	150.90	ug/L	92
12) Acetonitrile	7.454	7.450	0.718	41	1098564	1053.89	ug/L	98
13) Methyl acetate	7.493	7.493	0.722	43	767638	121.63	ug/L	98
14) Carbon disulfide	7.511	7.511	0.724	76	3555782	193.81	ug/L	100
15) Methylene chloride	7.694	7.691	0.742	84	246065	34.27	ug/L	93
16) tert-Butyl methyl ether	7.984	7.984	0.770	73	472137	33.97	ug/L	100
17) trans-1,2-Dichloroethy...	8.030	8.030	0.774	61	354797	40.75	ug/L	95
18) Vinyl acetate	8.515	8.458	0.821	43	127	N.D.		
19) 1,1-Dichloroethane	8.511	8.511	0.820	63	418894	37.93	ug/L	100
20) 2-Butanone	9.077	9.077	0.875	43	1059391	146.58	ug/L	96
21) cis-1,2-Dichloroethylene	9.144	9.144	0.881	61	392618	39.73	ug/L	96
22) 2,2-Dichloropropane	9.169	9.173	0.884	77	188838	34.07	ug/L	86
23) Bromochloromethane	9.417	9.417	0.908	128	108839	32.74	ug/L	# 82
24) Chloroform	9.452	9.452	0.911	83	390019	38.53	ug/L	98
25) 1,1,1-Trichloroethane	9.731	9.735	0.938	97	258644	36.61	ug/L	97
26) Cyclohexane	9.830	9.830	0.948	56	386776	37.70	ug/L	99
27) 1,1-Dichloropropene	9.887	9.887	0.953	75	309337	39.96	ug/L	90
28) Carbon tetrachloride	9.929	9.929	0.957	117	224401	36.10	ug/L	100
30) 1,2-Dichloroethane	10.103	10.103	0.974	62	352163	42.74	ug/L	100
31) Benzene	10.127	10.127	0.976	78	968069	37.04	ug/L	97
32) Cyclohexene	10.248	10.248	0.988	67	461134	38.05	ug/L	96
33) n-Butyl alcohol	10.460	10.460	1.008	56	839816	3443.66	ug/L	94
34) Trichloroethylene	10.764	10.768	1.037	95	227574	37.57	ug/L	94
35) 1,2-Dichloropropane	11.005	11.004	1.061	63	272163	40.19	ug/L	99
36) Methylcyclohexane	11.015	11.019	1.062	83	352121	32.97	ug/L	97
37) Dibromomethane	11.142	11.146	1.074	93	135862	38.20	ug/L	88

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V719.D
Acq On : 31 Jan 2010 7:10 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027525|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245387001
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 01 09:04:48 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.256	11.256	1.085	83	296043	40.67	ug/L	99
39) 2-Chloroethylvinyl ether	11.461	11.468	1.105	63	109	N.D.		
40) cis-1,3-Dichloropropylene	11.701	11.705	1.128	75	325406	34.32	ug/L	91
42) 4-Methyl-2-pentanone	11.786	11.786	0.870	58	539849	180.85	ug/L	89
44) Toluene	12.090	12.090	0.892	91	1014014	37.54	ug/L	99
45) trans-1,3-Dichloroprop...	12.239	12.239	0.903	75	312463	38.84	ug/L	91
46) 1,1,2-Trichloroethane	12.461	12.465	0.920	83	177951	39.57	ug/L	98
47) 2-Hexanone	12.635	12.631	0.933	43	428643	48.49	ug/L	95
48) 1,3-Dichloropropane	12.652	12.656	0.934	76	377406	39.65	ug/L #	59
49) Tetrachloroethylene	12.691	12.691	0.937	164	157670	31.29	ug/L	93
50) Dibromochloromethane	12.928	12.928	0.954	129	195449	36.24	ug/L	100
51) 1,2-Dibromoethane	13.095	13.094	0.967	107	186720	37.04	ug/L	100
52) Chlorobenzene	13.579	13.579	1.002	112	595233	34.72	ug/L	95
53) 1,1,1,2-Tetrachloroethane	13.632	13.636	1.006	131	200677	36.22	ug/L	99
54) Ethylbenzene	13.639	13.639	1.007	91	1086709	38.16	ug/L	97
55) m,p-Xylenes	13.745	13.749	1.015	106	823453	71.83	ug/L	92
56) o-Xylene	14.184	14.184	1.047	106	408734	37.18	ug/L	92
57) Styrene	14.184	14.184	1.047	104	646055	37.44	ug/L	92
59) Bromoform	14.449	14.445	0.905	173	111297	35.02	ug/L	100
60) Isopropylbenzene	14.537	14.537	0.911	105	970579	37.77	ug/L	98
62) 1,1,2,2-Tetrachloroethane	14.810	14.810	0.928	83	270797	41.32	ug/L	100
63) 1,2,3-Trichloropropane	14.902	14.898	0.934	110	71802	40.69	ug/L	95
64) Bromobenzene	14.951	14.951	0.937	156	221805	33.08	ug/L #	86
65) n-Propylbenzene	14.962	14.965	0.938	91	1179426	38.26	ug/L	97
66) 1,3,5-Trimethylbenzene	15.114	15.114	0.947	105	814205	38.70	ug/L	97
67) 2-Chlorotoluene	15.117	15.117	0.947	126	235308	36.53	ug/L #	85
68) 4-Chlorotoluene	15.216	15.216	0.953	91	686505	35.89	ug/L	95
69) tert-Butylbenzene	15.489	15.489	0.971	134	167778	33.88	ug/L #	87
70) 1,2,4-Trimethylbenzene	15.528	15.527	0.973	105	784710	36.31	ug/L	96
71) sec-Butylbenzene	15.711	15.711	0.984	105	988628	34.93	ug/L	96
72) 4-Isopropyltoluene	15.832	15.832	0.992	119	646043	29.04	ug/L	96
73) 1,3-Dichlorobenzene	15.906	15.902	0.997	146	397319	30.54	ug/L	98
74) 1,4-Dichlorobenzene	15.987	15.991	1.002	146	412245	30.48	ug/L	97
75) n-Butylbenzene	16.277	16.277	1.020	91	729947	34.03	ug/L	98
76) 1,2-Dichlorobenzene	16.419	16.422	1.029	146	379816	30.69	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.294	17.293	1.084	157	41256	34.47	ug/L	86
78) 1,2,4-Trichlorobenzene	18.371	18.371	1.151	180	206036	24.08	ug/L	100
79) Hexachlorobutadiene	18.548	18.548	1.162	225	104557	21.81	ug/L	98
80) Naphthalene	18.762	18.762	1.176	128	613041	32.55	ug/L	100
81) 1,2,3-Trichlorobenzene	19.109	19.116	1.197	180	188784	25.64	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.414	0.000		0	N.D.		
85) Acrolein	0.000	6.924	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.079	0.000		0	N.D.		
87) Isopropyl Alcohol	7.178	7.175	0.692		0m	N.D.	d	
88) Allyl chloride	7.454	7.546	0.718		0m	N.D.	d	
89) tert-Butyl Alcohol	7.709	7.673	0.743		0m	N.D.	d	
90) Acrylonitrile	7.977	7.928	0.769		0m	N.D.	d	
91) Isopropyl ether	0.000	8.483	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	8.617	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	8.890	0.000		0	N.D.		
94) Ethyl acetate	9.077	9.088	0.875		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V719.D
Acq On : 31 Jan 2010 7:10 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027525|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245387001
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 01 09:04:48 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.102	9.148	0.877		0m	N.D.	d
96) Methacrylonitrile	9.173	9.332	0.884		0m	N.D.	d
97) Tetrahydrofuran	9.445	9.466	0.910		0m	N.D.	d
98) Isobutyl alcohol	9.770	9.770	0.942		0m	N.D.	d
99) Methyl tert-amyl ether	10.127	10.138	0.976		0m	N.D.	d
100) Methyl methacrylate	11.019	10.969	1.062		0m	N.D.	d
101) 1,4-Dioxane	11.135	11.089	1.073		0m	N.D.	d
102) 2-Nitropropane	11.659	11.443	1.124		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.235	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.438	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.541	14.573	0.911		0m	N.D.	d
108) Cyclohexanone	14.541	14.693	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	14.806	14.856	0.928		0m	N.D.	d
110) Pentachloroethane	0.000	15.559	0.000		0	N.D.	
111) Benzyl chloride	16.161	16.100	1.013		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.542	16.497	1.037		0m	N.D.	d

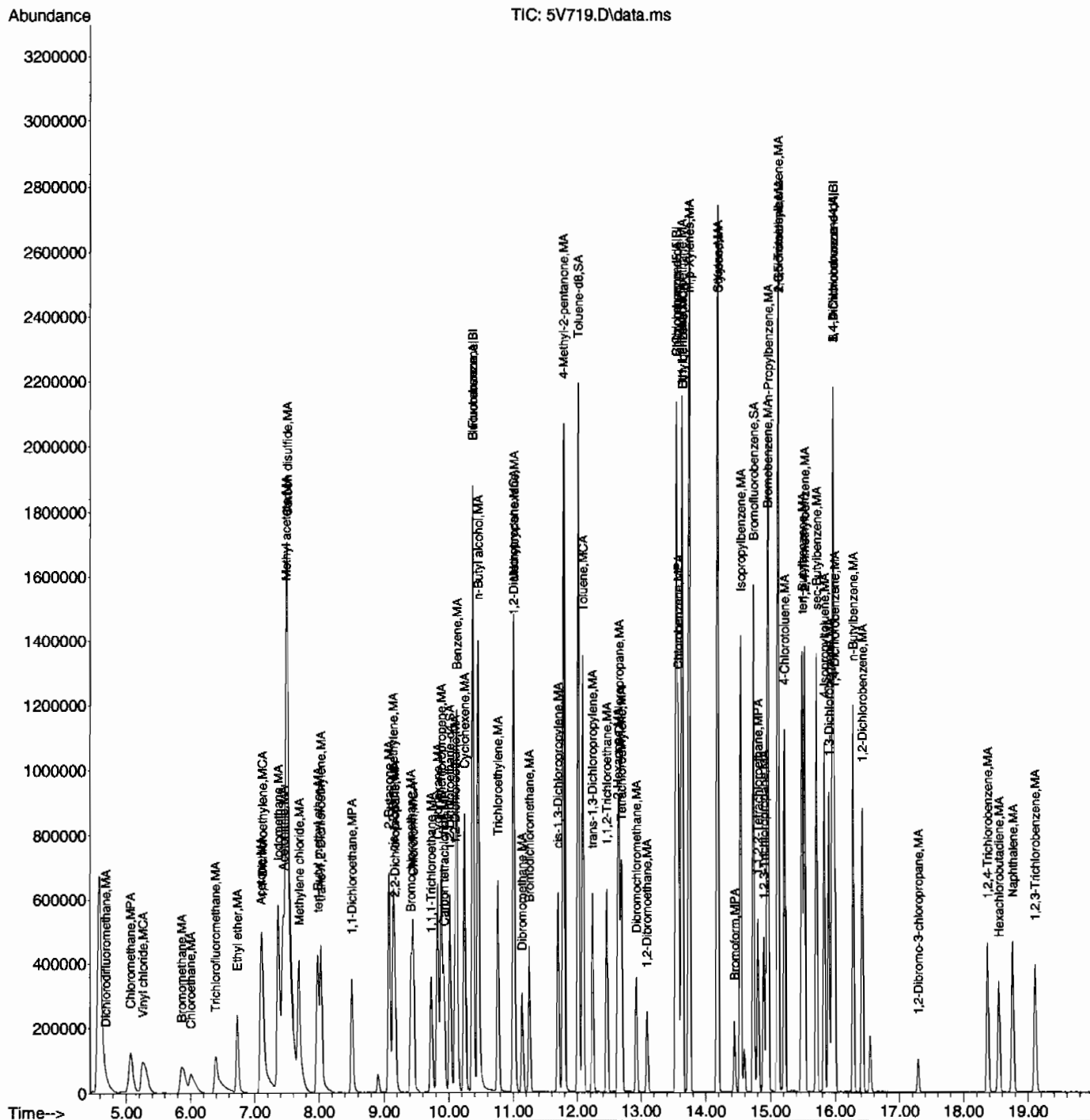
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\
Data File : 5V719.D
Acq On : 31 Jan 2010 7:10 pm
Operator : DXK1
InstName : VOA5
Sample : |1202027525|946584|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245387001
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 01 09:04:48 2010
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Jan 11 08:56:29 2010
Response via : Initial Calibration
Integrator: RTE

SubList :



Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: 946583 Verified by: _____
Analyst: David Kingsbury
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 13
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
1202027522 MB	28-JAN-2010 08:00:00	Soil	5	5	1	N/A						
1202027523 LCS	28-JAN-2010 08:00:00	Soil	5	5	1	N/A						
1202027526 LCS	28-JAN-2010 08:00:00	Soil	5	5	1	N/A						
245387001	28-JAN-2010 15:28:00	Soil	5	5	1	N/A						
245387002	28-JAN-2010 15:29:00	Soil	5	5	1	N/A						
245387003	28-JAN-2010 15:30:00	Soil	5	5	1	N/A						
245387004	28-JAN-2010 15:31:00	Soil	5	5	1	N/A						
245387005	28-JAN-2010 15:32:00	Soil	5	5	1	N/A						
245387006	28-JAN-2010 15:33:00	Soil	5	5	1	N/A						
245387008	28-JAN-2010 15:35:00	Soil	5	5	1	N/A						
245387009	28-JAN-2010 15:36:00	Soil	5	5	1	N/A						
245387010	28-JAN-2010 15:37:00	Soil	5	5	1	N/A						
245387012	28-JAN-2010 15:39:00	Soil	5	5	1	N/A						
1202040395 MB	31-JAN-2010 08:00:00	Soil	5	5	1	N/A						
1202040396 LCS	31-JAN-2010 08:00:00	Soil	5	5	1	N/A						
1202040397 LCS	31-JAN-2010 08:00:00	Soil	5	5	1	N/A						
245387007	31-JAN-2010 10:39:00	Soil	5	5	1	N/A						
245387011	31-JAN-2010 10:40:00	Soil	5	5	1	N/A						
1202027524 PS (245387001)	31-JAN-2010 10:42:00	Soil	5	5	1	N/A						
1202027525 PSD (245387001)	31-JAN-2010 10:43:00	Soil	5	5	1	N/A						

Comments:

Amount

Description

Reagent/Solvent Lot ID

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Date: 1/8/2010 Method 8260/624 Operator: DXK1
 REVIEWED BY: _____
 DATE: _____
 Daily Instrument Readings: _____
 Multiplier Voltage: 1529

PCALIBRATION & CC INFORMATION:

Page 309 of 1391

Date:	1/8/2010
(See pg.	6 for ICAL Std. Sci. Ids)
NaHSO4 lot #	n/a
Cl test lot #	n/a
Sequence Number:	010810v5

Analysis				Wt.(g) or Dil.										AS		Matrix Analyst		Cl test		Accepta	
Date	Time	Data File	Lab Sample ID	Client	Batch #	Vol(ml/ul)	Factor pH	Slot #	w or s	Analyst	(Y/N)	ble(O/X)	Comments								
8 Jan 2010 11:05	5S501.D	UVM091117-02	GEL	BFB	5mL	1	N/A	1	w	DXK1	N/A	X									
8 Jan 2010 11:30	5S502.D	W5VM100108-01	GEL	CCV	5mL	1	N/A	2	w	DXK1	N/A	X	UVM100106-07A+UVM091217-07A								
8 Jan 2010 11:56	5S503.D	W5VM100108-02	GEL	CCV	5mL	1	N/A	3	w	DXK1	N/A	X	UVM091214-01F+UVM100105-01								
8 Jan 2010 12:52	5S504.D	W5VM100108-03	GEL	CCV	5mL	1	N/A	4	w	DXK1	N/A	X	UVM091216-06								
8 Jan 2010 13:05	5S505.D	UVM091117-02	GEL	BFB	5mL	1	N/A	1	w	DXK1	N/A	O									
8 Jan 2010 13:40	5S506.D	W5VM100108-01	VSTD001	ICAL	5mL	1	N/A	2	w	DXK1	N/A	O	UVM100106-02A+UVM091217-02A								
8 Jan 2010 14:05	5S507.D	W5VM100108-02	VSTD002	ICAL	5mL	1	N/A	3	w	DXK1	N/A	O	UVM100106-03A+UVM091217-03A								
8 Jan 2010 14:31	5S508.D	W5VM100108-03	VSTD005	ICAL	5mL	1	N/A	4	w	DXK1	N/A	O	UVM100106-04A+UVM091217-04A								
8 Jan 2010 14:57	5S509.D	W5VM100108-04	VSTD010	ICAL	5mL	1	N/A	5	w	DXK1	N/A	O	UVM100106-05A+UVM091217-05A								
8 Jan 2010 15:23	5S511.D	W5VM100108-05	VSTD020	ICAL	5mL	1	N/A	7	w	DXK1	N/A	O	UVM100106-06A+UVM091217-06A								
8 Jan 2010 15:49	5S512.D	W5VM100108-06	VSTD050	ICAL	5mL	1	N/A	7	w	DXK1	N/A	O	UVM100106-07A+UVM091217-07A								
8 Jan 2010 16:14	5S513.D	W5VM100108-07	VSTD100	ICAL	5mL	1	N/A	8	w	DXK1	N/A	O	UVM100106-08A+UVM091217-08A								
8 Jan 2010 16:40	5S514.D	RINSE	GEL	BLANK	5mL	1	N/A	9	w	DXK1	N/A	X	rinse								
8 Jan 2010 17:06	5S515.D	W5VM100108-08	VSTD0005	ICAL	5mL	1	N/A	10	w	DXK1	N/A	O	UVM100106-01A+UVM091217-01A								
8 Jan 2010 17:32	5S516.D	W5VM100108-09	ICV	ICV	5mL	1	N/A	11	w	DXK1	N/A	O	UVM091214-01F+UVM100105-01								
8 Jan 2010 17:58	5S517.D	W5VM100108-10	ICV	ICV	5mL	1	N/A	12	w	DXK1	N/A	O	UVM091215-01C+UVM100105-01								
8 Jan 2010 18:24	5S518.D	W5VM100108-11	ICAL	ICAL	5mL	1	N/A	13	w	DXK1	N/A	O	UVM091216-01+UVM091209-01C								
8 Jan 2010 18:50	5S519.D	W5VM100108-12	ICAL	ICAL	5mL	1	N/A	14	w	DXK1	N/A	O	UVM091216-02+UVM091209-02C								
8 Jan 2010 19:16	5S520.D	W5VM100108-13	ICAL	ICAL	5mL	1	N/A	15	w	DXK1	N/A	O	UVM091216-03+UVM091209-03C								
8 Jan 2010 19:42	5S521.D	W5VM100108-14	ICAL	ICAL	5mL	1	N/A	16	w	DXK1	N/A	O	UVM091216-04+UVM091209-04C								
8 Jan 2010 20:07	5S522.D	W5VM100108-15	ICAL	ICAL	5mL	1	N/A	17	w	DXK1	N/A	O	UVM091216-05+UVM091209-05C								
8 Jan 2010 20:33	5S523.D	W5VM100108-16	ICAL	ICAL	5mL	1	N/A	18	w	DXK1	N/A	O	UVM091216-06+UVM091209-06C								
8 Jan 2010 20:59	5S524.D	W5VM100108-17	ICAL	ICAL	5mL	1	N/A	19	w	DXK1	N/A	O	UVM091216-07+UVM091209-07C								
8 Jan 2010 21:25	5S525.D	RINSE	GEL	BLANK	5mL	1	N/A	20	w	DXK1	N/A	X	rinse								
8 Jan 2010 21:50	5S526.D	W5VM100108-18	ICV	ICV	5mL	1	N/A	21	w	DXK1	N/A	O	UVM091216-08A								
8 Jan 2010 22:16	5S527.D	RINSE	GEL	BLANK	5mL	1	N/A	22	w	DXK1	N/A	X	rinse								

Date: 1/11/2010 Method 8260/624 Operator: DXK1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1529

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/2010
(See pg. 6 for ICAI Std. Sol. Ids)
NaHSO4 lot # n/a
Cl test lot # 81710
Sequence Number: 011110v5

Daily Standard Volume Added for Purge (ul)
Solution ID# CCV W5VM100111-01 5+5
IS UVM091216-09 1 1
SS UVM091117-02 1 1
LCS W5VM100111-01/02 5+5
BFB UVM091117-02 1
SHORT W5VM100111-03/04 n/a

Purge Amount
5 Water Purge Vol:
5 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 Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Accepta ble(O/X)	Comments
1/11/2010	9:48	5T101.D	RINSE	GEL	BLANK	5mL	1	N/A	1	w	DXK1	N/A	X	rinse
1/11/2010	10:13	5T102.D	UVM091117-02	GEL	BFB	5mL	1	N/A	2	w	DXK1	N/A	O	
1/11/2010	10:39	5T103.D	W5VM100111-01	GEL	ICV/CCV/LCS	5mL	1	N/A	3	w	DXK1	N/A	O	UVM091214-01F+HVM100105-01
1/11/2010	11:05	5T104.D	W5VM100111-02	GEL	LCS	5g	1	N/A	4	s	DXK1	N/A	O	UVM091214-01F+HVM100105-02
1/11/2010	11:31	5T105.D	W5VM100111-03	GEL	CCV	5mL	1	N/A	5	w	DXK1	N/A	O	UVM091216-06
1/11/2010	11:57	5T106.D	W5VM100111-04	GEL	LCS	5g	1	N/A	6	s	DXK1	N/A	O	UVM091216-08A
1/11/2010	12:22	5T107.D	12020---	GEL	BLANK	5mL	1	N/A	7	w	DXK1	N/A	O	
1/11/2010	12:48	5T108.D	12020---	GEL	BLANK	5g	1	N/A	8	s	DXK1	N/A	O	
1/11/2010	14:45	5T109.D	243902001	COAN	940469	5mL	1	pH2	9	w	DXK1	N	O	OR, see 51118
1/11/2010	15:10	5T110.D	244146001	WSRS	940469	5mL	1	pH2	10	w	DXK1	N	O	OR, see 51119
1/11/2010	15:36	5T111.D	244010001	STOL	940468	5mL	1	pH2	11	w	DXK1	N	X	CO (through rest of batch)
1/11/2010	16:02	5T112.D	1202012674	STOL	940468	5mL	1	pH2	12	w	DXK1	N	X	DUP244010001
1/11/2010	16:28	5T113.D	244010002	STOL	940468	5mL	1	pH2	13	w	DXK1	N	X	
1/11/2010	16:54	5T114.D	244010003	STOL	940468	5mL	1	pH2	14	w	DXK1	N	X	
1/11/2010	17:20	5T115.D	244010005	STOL	940468	5mL	1	pH2	15	w	DXK1	N	X	
1/11/2010	17:46	5T116.D	244010006	STOL	940468	5mL	1	pH2	16	w	DXK1	N	X	
1/11/2010	18:11	5T117.D	244017003	BOSH	940468	5mL	1	pH2	17	w	DXK1	N	X	
1/11/2010	18:38	5T118.D	243902001	COAN	940469	2.5mL	2	pH2	18	w	DXK1	N	O	DL for 51109
1/11/2010	19:03	5T119.D	244146001	WSRS	940469	50uL	100	pH2	19	w	DXK1	N	O	DL for 51110
1/11/2010	19:29	5T120.D	1202012677	WSRS	940469	50uL	100	pH2	20	w	DXK1	N	O	MIX[A] MS244146001
1/11/2010	19:55	5T121.D	1202012678	WSRS	940469	50uL	100	pH2	21	w	DXK1	N	O	MIX[A] MS244146001
1/11/2010	20:21	5T122.D	1202012675	STOL	940468	5mL	1	pH2	22	w	DXK1	N	X	MIX[A] MS244010001
1/11/2010	20:47	5T123.D	1202012675	STOL	940468	5mL	1	pH2	23	w	DXK1	N	X	MIX[A] MS244010001
1/11/2010	21:13	5T124.D	RINSE	GEL	BLANK	5mL	1	N/A	24	w	DXK1	N/A	X	rinse
1/11/2010	21:38	5T125.D	RINSE	GEL	BLANK	5mL	1	N/A	25	w	DXK1	N/A	X	rinse
1/11/2010	22:04	5T126.D	RINSE	GEL	BLANK	5mL	1	N/A	26	w	DXK1	N/A	X	rinse
1/11/2010	22:30	5T127.D	154734-A	O2SI	SCREEN	5mL	1	N/A	27	w	DXK1	N/A	X	BISULFATE
1/11/2010	22:56	5T128.D	154734-B	O2SI	SCREEN	5mL	1	N/A	28	w	DXK1	N/A	X	BISULFATE

Date: 1/11/2010 Method 8260/624 Operator: DXK1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1529

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/2010
(See pg. 6 for ICAL Std. Sol. Ids)
NaHSO4 lot # n/a
CI test lot # 81710
Sequence Number: 011110v5

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/MS/	CCV	CCV	LCS	BFB	Purge Amount
IS	W5VM100111-01	1	1	5+5				5 Water Purge Vol:
SS	UVM091216-09	1	1	1				5 Soil Purge Wt.
LCS	UVM091117-02	1	1	1				n/a Mid level ext. MeOH Vol:
BFB	W5VM100111-01/02				5+5			n/a ul
SHORT	UVM091117-02					1		n/a Methanol Lot #
	W5VM100111-03/04			5	5			X Heated Purge
	n/a	n/a						

Analysis		Wt.(g) or Dil.		AS		Matrix Analyst		CI test		Accepta	
Date	Time	Lab Sample ID	Client	Batch #	Factor pH	Slot #	w or s	(Y/N)	ble(O/X)	Comments	
1/11/2010 23:21	5T129.D	SCISPEC	O2SI	SCREEN	5mL	1	N/A	29	w	DXK1	X
1/11/2010 23:47	5T130.D	SCISPEC	O2SI	SCREEN	100uL	50	N/A	30	w	DXK1	X

Date: 1/28/2010 Method 8260/624 Operator: DXK1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1600

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

GC CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/8/2010
(See pg. 6 for ICAL Std. Sol. Ids)
NaHSO4 lot # n/a
Cl test lot # 81710
Sequence Number: 012810v5pm

Daily Standard	Solution ID#	Volume Added for Purge (ul)	AS	Matrix	Analyst	Cl test	Accepta
	CCV	W5VM100128-04	IS	UVM100114-01	1	1	1
	SS	UVM091216-10	1	1	1	1	1
	LCS/MS	W5VM100128-05	1	1	1	1	1
	BFB	UVM091216-10	1	1	1	1	1
	SHORT	W5VM100128-06	1	1	1	1	1

Purge Amount

	5	Water Purge Vol:
	5.0	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	Cl test	Accepta	Comments
1/28/2010	21:33	5V429.D	W5VM100128-04	GEL	BFB/CCV	5mL	1	N/A	29	w	s	DXK1	N/A	O	UVM100106-07A+UVM091217-07D
1/28/2010	21:59	5V430.D	W5VM100128-05	GEL	LCS	5g	1	N/A	30	s	s	DXK1	N/A	O	UVM091214-01+UVM100126-01
1/28/2010	22:25	5V431.D	W5VM100128-06	GEL	CCV/LCS	5g	1	N/A	31	s	s	DXK1	N/A	O	UVM100118-08A
1/28/2010	22:50	5V432.D	12020---	BLANK	BLANK	5g	1	N/A	32	s	s	DXK1	N/A	O	
1/28/2010	23:16	5V433.D	245387001	LANL	946584	5.0g	1	N/A	33	s	s	DXK1	N/A	O	
1/28/2010	23:42	5V434.D	245387002	LANL	946584	5.0g	1	N/A	34	s	s	DXK1	N/A	O	
1/29/2010	0:08	5V435.D	245387003	LANL	946584	5.0g	1	N/A	35	s	s	DXK1	N/A	O	
1/29/2010	0:34	5V436.D	245387004	LANL	946584	5.0g	1	N/A	36	s	s	DXK1	N/A	O	
1/29/2010	1:00	5V437.D	245387005	LANL	946584	5.0g	1	N/A	37	s	s	DXK1	N/A	O	
1/29/2010	1:26	5V438.D	245387006	LANL	946584	5.0g	1	N/A	38	s	s	DXK1	N/A	O	
1/29/2010	1:52	5V439.D	245387007	LANL	946584	5.0g	1	N/A	39	s	s	DXK1	N/A	X	IS low / see 013110v5
1/29/2010	2:18	5V440.D	245387008	LANL	946584	5.0g	1	N/A	40	s	s	DXK1	N/A	O	
1/29/2010	2:43	5V441.D	245387009	LANL	946584	5.0g	1	N/A	41	s	s	DXK1	N/A	O	
1/29/2010	3:09	5V442.D	245387010	LANL	946584	5.0g	1	N/A	42	s	s	DXK1	N/A	O	
1/29/2010	3:35	5V443.D	245387011	LANL	946584	5.0g	1	N/A	43	s	s	DXK1	N/A	X	IS low, SS high / see 013110v5
1/29/2010	4:01	5V444.D	245387012	LANL	946584	5.0g	1	N/A	44	s	s	DXK1	N/A	O	
1/29/2010	4:27	5V445.D	1202027524	LANL	946584	5.0g	1	N/A	45	s	s	DXK1	N/A	X	SOIL MIX[A] MS245387001 / not spiked
1/29/2010	4:53	5V446.D	1202027525	LANL	946584	5.0g	1	N/A	46	s	s	DXK1	N/A	X	SOIL MIX[A] MSD245387001 / see 013110v5
1/29/2010	5:19	5V447.D	RINSE	GEL	RINSE	5mL	1	N/A	47	w	w	DXK1	N/A	X	rinse
1/29/2010	5:45	5V448.D	RINSE	GEL	RINSE	5mL	1	N/A	48	w	w	DXK1	N/A	X	rinse

Date: 1/31/2010

Method 8260/624 Operator: DXK1

REVIEWED BY:

DATE:

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:

Multiplier Voltage: 1600

Page 13 of 1391
CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/8/2010

Daily Standard Volume Added for Purge (ul)

Purge Amount

(See pg. 6 for ICAL Std. Sci. Ids)

NaHSO4 lot # n/a

Cl test lot # 81710

Sequence Number: 013110v5

Solution ID#	Smpl	CCV	LCS	BFB
CCV W5VM100131-02	1	5+5	1	
IS UVM100114-01	1	1	1	
SS UVM091216-10	1	1	1	
LCS/MS W5VM100131-02			5+5	
BFB UVM091216-10				1
SHORT W5VM100131-03		5	5	
	n/a	n/a		n/a

5	Water Purge Vol:
5.0	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 Slot #	Matrix	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1/31/2010	11:23	5V701.D	UVM091216-10	GEL	BFB	5mL	1	N/A	1	1	w	DXK1	N/A	O	
1/31/2010	11:49	5V702.D	W5VM100131-01	GEL	CCV	5g	1	N/A	2	2	s	DXK1	N/A	X	MIX[A]
1/31/2010	12:15	5V703.D	W5VM100131-02	GEL	CCV/LCS	5g	1	N/A	3	3	s	DXK1	N/A	O	UVM091214-01J+IVM100129-01
1/31/2010	12:41	5V704.D	W5VM100131-03	GEL	CCV/LCS	5g	1	N/A	4	4	s	DXK1	N/A	O	UVM100118-08A
1/31/2010	13:07	5V705.D	12020---	BLANK	BLANK	5g	1	N/A	5	5	s	DXK1	N/A	O	
1/31/2010	13:33	5V706.D	245106011	LANL	945552	5.0g	1	N/A	6	6	s	DXK1	N/A	X	IS low SS high / report 5v314
1/31/2010	13:59	5V707.D	245106012	LANL	945552	5.0g	1	N/A	7	7	s	DXK1	N/A	X	IS low SS high / report 5v315
1/31/2010	14:25	5V708.D	245106013	LANL	945552	5.0g	1	N/A	8	8	s	DXK1	N/A	X	IS low / report 5v316
1/31/2010	14:51	5V709.D	245106015	LANL	945552	5.0g	1	N/A	9	9	s	DXK1	N/A	X	IS low / report 5v318
1/31/2010	15:17	5V710.D	245106016	LANL	945552	5.0g	1	N/A	10	10	s	DXK1	N/A	X	IS low SS high / report 5v319
1/31/2010	15:43	5V711.D	245114004	LANL	946008	5.0g	1	N/A	11	11	s	DXK1	N/A	X	IS low SS high / report 5v409
1/31/2010	16:08	5V712.D	245114005	LANL	946008	5.0g	1	N/A	12	12	s	DXK1	N/A	X	IS low SS high / report 5v410
1/31/2010	16:34	5V713.D	245114006	LANL	946008	5.0g	1	N/A	13	13	s	DXK1	N/A	O	
1/31/2010	17:00	5V714.D	245114010	LANL	946008	5.0g	1	N/A	14	14	s	DXK1	N/A	X	IS low SS high / report 5v415
1/31/2010	17:26	5V715.D	245387007	LANL	946584	5.0g	1	N/A	15	15	s	DXK1	N/A	O	
1/31/2010	17:52	5V716.D	245387011	LANL	946584	5.0g	1	N/A	16	16	s	DXK1	N/A	O	IS low / confirmed by 5v443
1/31/2010	18:18	5V717.D	245114003	LANL	946008	5.0g	1	N/A	17	17	s	DXK1	N/A	X	IS low / report 5v408
1/31/2010	18:44	5V718.D	1202027524	LANL	946584	5.0g	1	N/A	18	18	s	DXK1	N/A	O	SOIL MIX[A] MSD245387001
1/31/2010	19:10	5V719.D	1202027525	LANL	946584	5.0g	1	N/A	19	19	s	DXK1	N/A	O	SOIL MIX[A] MSD245387001
1/31/2010	19:36	5V720.D	RINSE	GEL	RINSE	5mL	1	N/A	20	20	w	DXK1	N/A	X	rinse

DATA EXCEPTION REPORT

Mo.Day Yr. 11-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: VOA GC/MS	Test / Method: SW846 8260B	Matrix Type: Solid	Client Code: LANL
Batch ID: 946584	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245387(10-1384) Application Issues: Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Sample Analyzed out of Holding Other Failed Yield for Surrogates Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. QC samples 1202027524(MS/PS) and 1202027525(MSD/PSD) did not meet the spike recovery acceptance criteria for several compounds. 2. The %RPD for MSD/PSD 1202027525 for the following compound was outside of the acceptance limits: 1,1,2,2-Tetrachlorethane 44.7% (0%-25%). 3. The following samples were analyzed out of holding: 245387007,011 1202027524PS, 1202027525PSD 4. QC sample 1202027524 MS/PS failed yield for the following surrogate: Bromofluorobenzene 135% (68%-133%) 5. Sample 245387011 failed Internal Standard Response for the following compound: 1,4-Dichlorobenzene-d4 44.95% (50%-200%)		1. Narrate and report data. As the MS/PS and MSD/PSD displayed similar recoveries, it is believed that the failures are attributed to sample matrix interference. 2. Narrate and report data. In addition to 1,1,2,2-Tetrachlorethane, several non-target compounds failed %RPD. As several compounds behaved in the same manner, it is believed that matrix inference has been demonstrated. 3. The samples were initially analyzed within holding and did not pass surrogate recoveries and/or internal standard responses. The samples were re-analyzed outside of the recommended holding time, but within two times the holding time. The re-analysis results are reported. 4. Narrate and report data. Bromofluorobenzene for the associated Matrix Spike Duplicate did not fail. However, the compound recovered similarly, on the higher end of the spectrum. 5. Narrate and report data. The sample was re-analyzed and confirmed the failure. It is believed that matrix interference has been demonstrated.	

Originator's Name:

David Kingsbury 11-FEB-10

Data Validator/Group Leader:

Sarah Kozlik 17-FEB-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1384**

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: 945501

Prep Batch Number: 945499

Sample Analysis

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

Sample ID	Client ID
245387001	RE14-10-7689
245387002	RE14-10-7679
245387003	RE14-10-7680
245387004	RE14-10-7686
245387005	RE14-10-7688
245387006	RE14-10-7684
245387007	RE14-10-7687
245387008	RE14-10-7681
245387009	RE14-10-7682
245387010	RE14-10-7685
245387011	RE14-10-7683
1202025004	Method Blank (MB)
1202025005	Laboratory Control Sample (LCS)
1202025006	245387002(RE14-10-7679) Matrix Spike (MS)
1202025007	245387002(RE14-10-7679) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the

'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. 2,4-Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, 2,4-Toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials. 2,4-Toluene diisocyanate is reported as an estimated value.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245387002 (RE14-10-7679) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD failed recovery for Hexachlorocyclopentadiene. As the MS and MSD displayed similar recoveries, the failure was attributed to sample matrix interference and the data have been reported. Please see the QC Summary for the specific values.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD failed RPD for 4-Nitrophenol. Since the individual MS and MSD passed recovery for this analyte, the results have been reported un-qualified for the failure. Please see the QC Summary for the specific value.

Internal Standard (ISTD) Acceptance

The internal standard responses were outside of the acceptance criteria for the following sample: 245387011 (RE14-10-7683). The sample was re-analyzed and the failures were confirmed. The first analysis data were reported. The re-analysis raw data have been placed in the Miscellaneous Section.

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

The internal standard responses were outside of the acceptance criteria for the following sample: 245387011 (RE14-10-7683). The sample was re-analyzed and the failures were confirmed. The first analysis data were reported. The re-analysis raw data have been placed in the Miscellaneous Section.

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

The following DER was generated for this SDG: 788093. 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:

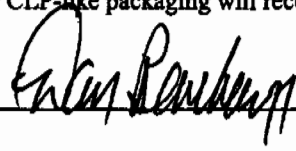
Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

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:  Date: 2-17-10

Roadmap for LANL 10-1384 SVOA

This roadmap was analyzed by nat00999 on 02-08-2010, 08:40.

This roadmap was reviewed by dan01134 on 02-09-2010, 10:06.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0412.d	245387001	04-FEB-2010	15:45	10-1384.sub	RE14-10-7689	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0413.d	245387002	04-FEB-2010	16:13	10-1384.sub	RE14-10-7679	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0416.d	245387003	04-FEB-2010	17:39	10-1384.sub	RE14-10-7680	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0417.d	245387004	04-FEB-2010	18:07	10-1384.sub	RE14-10-7686	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0418.d	245387005	04-FEB-2010	18:36	10-1384.sub	RE14-10-7688	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0419.d	245387006	04-FEB-2010	19:04	10-1384.sub	RE14-10-7684	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0420.d	245387007	04-FEB-2010	19:33	10-1384.sub	RE14-10-7687	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0421.d	245387008	04-FEB-2010	20:01	10-1384.sub	RE14-10-7681	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0422.d	245387009	04-FEB-2010	20:29	10-1384.sub	RE14-10-7682	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0423.d	245387010	04-FEB-2010	20:57	10-1384.sub	RE14-10-7685	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0424.d	245387011	04-FEB-2010	21:25	10-1384.sub	RE14-10-7683	1	945501	USE - failed IS - rr - s6b0527 confirmed
<input checked="" type="checkbox"/>	N	/chem/MSD6.i/s020510.b/s6b0527.d	245387011	05-FEB-2010	22:18	10-1384.sub	RE14-10-7683	1	9455013	fail istd confirms s6b0424

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0407.d	1202025004	mb	04-FEB-2010	13:19	10-1384.sub	SBLK01	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0408.d	1202025005	lcs	04-FEB-2010	13:48	10-1384.sub	SBLK01LCS	1	945501	
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0414.d	1202025006	ms	04-FEB-2010	16:42	10-1384.sub	RE14-10-7679MS	1	945501	C36 bias low
<input type="checkbox"/>	N	/chem/MSD6.i/s020410.b/s6b0415.d	1202025007	msd	04-FEB-2010	17:10	10-1384.sub	RE14-10-7679MSD	1	945501	failed C36

Sample Data Summary

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

SDG Number: 10-1384
Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 21.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.5	422
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	422	ug/kg	84.5	422

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

SDG Number: 10-1384
Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	422	ug/kg	84.5	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	845	ug/kg	160	845
132-64-9	Dibenzofuran	U	422	ug/kg	84.5	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.5	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.5	422
122-66-7	Azobenzene	U	422	ug/kg	84.5	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.5	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.45	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.5	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.5	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.5	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	486	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

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

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

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.26	156	ug/kg		J
	Unknown	2.3	206	ug/kg		J

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

SDG Number:	10-1384	Date Collected:	01/15/2010 12:00	Matrix:	R
Lab Sample ID:	245387003	Date Received:	01/23/2010 09:20	%Moisture:	12
		Client:	LANL010	Project:	LANL01004
Client ID:	RE14-10-7680	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	945501	Inst:	MSD6.I	Dilution:	1
Run Date:	02/04/2010 17:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	01/26/2010 20:21	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s6b0416.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	230	ug/kg		J
	Unknown Aldol Condensate	3.54	389	ug/kg		JA
	Unknown	17.37	374	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387008

Client ID: RE14-10-7681
Batch ID: 945501
Run Date: 02/04/2010 20:01
Prep Date: 01/26/2010 20:21
Data File: s6b0421.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl)ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	429	ug/kg	85.9	429

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387008	Date Received: 01/23/2010 09:20	%Moisture: 22.5
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7681	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 20:01	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6b0421.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	429	ug/kg	85.9	429
606-20-2	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
208-96-8	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
51-28-5	2,4-Dinitrophenol	U	859	ug/kg	163	859
132-64-9	Dibenzofuran	U	429	ug/kg	85.9	429
84-66-2	Diethylphthalate	U	429	ug/kg	85.9	429
86-73-7	Fluorene	U	42.9	ug/kg	12.9	42.9
7005-72-3	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
534-52-1	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429
100-01-6	4-Nitroaniline	U	429	ug/kg	129	429
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	429	ug/kg	85.9	429
122-66-7	Azobenzene	U	429	ug/kg	85.9	429
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
118-74-1	Hexachlorobenzene	U	429	ug/kg	85.9	429
85-01-8	Phenanthrene	U	42.9	ug/kg	12.9	42.9
120-12-7	Anthracene	U	42.9	ug/kg	8.59	42.9
84-74-2	Di-n-butylphthalate	U	429	ug/kg	85.9	429
206-44-0	Fluoranthene	U	42.9	ug/kg	12.9	42.9
85-68-7	Butylbenzylphthalate	U	429	ug/kg	85.9	429
56-55-3	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
91-94-1	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
218-01-9	Chrysene	U	42.9	ug/kg	12.9	42.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
117-84-0	Di-n-octylphthalate	U	429	ug/kg	85.9	429
205-99-2	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
207-08-9	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
50-32-8	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
53-70-3	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9
120-82-1	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.33	200	ug/kg		J
	Unknown Aldol Condensate	3.54	666	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387008

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-80-1	Oleic Acid	11.02	306	ug/kg	83	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	214	ug/kg	99	NJ
630-02-4	Octacosane	14.61	256	ug/kg	87	NJ
	Unknown	17.36	292	ug/kg		J

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387009	Date Received: 01/23/2010 09:20	%Moisture: 12.8
Client ID: RE14-10-7682	Client: LANL010	Project: LANL01004
Batch ID: 945501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 02/04/2010 20:29	Inst: MSD6.1	Dilution: 1
Prep Date: 01/26/2010 20:21	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6b0422.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
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7682
Batch ID: 945501
Run Date: 02/04/2010 20:29
Prep Date: 01/26/2010 20:21
Data File: s6b0422.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.3	159	ug/kg		J
	Unknown	2.34	171	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	537	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	4.3	798	ug/kg	90	NJ
	Unknown	12.02	244	ug/kg		J
	Unknown	12.22	161	ug/kg		J
	Unknown	17.37	518	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387011

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	446	ug/kg	89.3	446
108-95-2	Phenol	U	446	ug/kg	89.3	446
95-57-8	2-Chlorophenol	U	446	ug/kg	89.3	446
106-46-7	1,4-Dichlorobenzene	U	446	ug/kg	89.3	446
621-64-7	N-Nitrosodipropylamine	U	446	ug/kg	89.3	446
59-50-7	4-Chloro-3-methylphenol	U	446	ug/kg	89.3	446
83-32-9	Acenaphthene	U	44.6	ug/kg	14.7	44.6
121-14-2	2,4-Dinitrotoluene	U	446	ug/kg	44.6	446
100-02-7	4-Nitrophenol	U	446	ug/kg	147	446
87-86-5	Pentachlorophenol	U	446	ug/kg	112	446
129-00-0	Pyrene	U	44.6	ug/kg	13.4	44.6
110-86-1	Pyridine	U	446	ug/kg	89.3	446
62-53-3	Aniline	U	446	ug/kg	134	446
111-44-4	bis(2-Chloroethyl) ether	U	446	ug/kg	89.3	446
541-73-1	1,3-Dichlorobenzene	U	446	ug/kg	89.3	446
100-51-6	Benzyl alcohol	U	446	ug/kg	134	446
95-50-1	1,2-Dichlorobenzene	U	446	ug/kg	89.3	446
108-60-1	bis(2-Chloroisopropyl)ether	U	446	ug/kg	89.3	446
95-48-7	o-Cresol	U	446	ug/kg	89.3	446
65794-96-9	m,p-Cresols	U	446	ug/kg	134	446
67-72-1	Hexachloroethane	U	446	ug/kg	89.3	446
98-95-3	Nitrobenzene	U	446	ug/kg	89.3	446
78-59-1	Isophorone	U	446	ug/kg	89.3	446
88-75-5	2-Nitrophenol	U	446	ug/kg	89.3	446
105-67-9	2,4-Dimethylphenol	U	446	ug/kg	156	446
111-91-1	bis(2-Chloroethoxy)methane	U	446	ug/kg	89.3	446
120-83-2	2,4-Dichlorophenol	U	446	ug/kg	89.3	446
65-85-0	Benzoic acid	U	893	ug/kg	223	893
91-20-3	Naphthalene	U	44.6	ug/kg	13.4	44.6
106-47-8	4-Chloroaniline	U	446	ug/kg	89.3	446
87-68-3	Hexachlorobutadiene	U	446	ug/kg	89.3	446
91-57-6	2-Methylnaphthalene	U	44.6	ug/kg	8.93	44.6
77-47-4	Hexachlorocyclopentadiene	U	446	ug/kg	89.3	446
88-06-2	2,4,6-Trichlorophenol	U	446	ug/kg	89.3	446
95-95-4	2,4,5-Trichlorophenol	U	446	ug/kg	89.3	446
91-58-7	2-Chloronaphthalene	U	44.6	ug/kg	14.7	44.6
88-74-4	2-Nitroaniline	U	446	ug/kg	89.3	446
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	446	ug/kg	89.3	446

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

SDG Number: 10-1384
Lab Sample ID: 245387011

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7683
Batch ID: 945501
Run Date: 02/04/2010 21:25
Prep Date: 01/26/2010 20:21
Data File: s6b0424.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	446	ug/kg	89.3	446
606-20-2	2,6-Dinitrotoluene	U	446	ug/kg	44.6	446
208-96-8	Acenaphthylene	U	44.6	ug/kg	13.4	44.6
51-28-5	2,4-Dinitrophenol	U	893	ug/kg	170	893
132-64-9	Dibenzofuran	U	446	ug/kg	89.3	446
84-66-2	Diethylphthalate	U	446	ug/kg	89.3	446
86-73-7	Fluorene	U	44.6	ug/kg	13.4	44.6
7005-72-3	4-Chlorophenylphenylether	U	446	ug/kg	89.3	446
534-52-1	2-Methyl-4,6-dinitrophenol	U	446	ug/kg	89.3	446
100-01-6	4-Nitroaniline	U	446	ug/kg	134	446
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	446	ug/kg	89.3	446
122-66-7	Azobenzene	U	446	ug/kg	89.3	446
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	446	ug/kg	89.3	446
118-74-1	Hexachlorobenzene	U	446	ug/kg	89.3	446
85-01-8	Phenanthrene	U	44.6	ug/kg	13.4	44.6
120-12-7	Anthracene	U	44.6	ug/kg	8.93	44.6
84-74-2	Di-n-butylphthalate	U	446	ug/kg	89.3	446
206-44-0	Fluoranthene	U	44.6	ug/kg	13.4	44.6
85-68-7	Butylbenzylphthalate	U	446	ug/kg	89.3	446
56-55-3	Benzo(a)anthracene	U	44.6	ug/kg	13.4	44.6
91-94-1	3,3'-Dichlorobenzidine	U	446	ug/kg	134	446
218-01-9	Chrysene	U	44.6	ug/kg	13.4	44.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	446	ug/kg	89.3	446
117-84-0	Di-n-octylphthalate	U	446	ug/kg	89.3	446
205-99-2	Benzo(b)fluoranthene	U	44.6	ug/kg	13.4	44.6
207-08-9	Benzo(k)fluoranthene	U	44.6	ug/kg	13.4	44.6
50-32-8	Benzo(a)pyrene	U	44.6	ug/kg	13.4	44.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.6	ug/kg	13.4	44.6
53-70-3	Dibenzo(a,h)anthracene	U	44.6	ug/kg	13.4	44.6
191-24-2	Benzo(ghi)perylene	U	44.6	ug/kg	13.4	44.6
120-82-1	1,2,4-Trichlorobenzene	U	446	ug/kg	89.3	446

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	564	ug/kg		JA
13466-78-9	3-Carene	4.89	613	ug/kg	95	NJ

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

SDG Number: 10-1384
Lab Sample ID: 245387011

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	6.81	570	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	10.25	719	ug/kg	98	NJ
	Unknown	10.47	352	ug/kg		J
	Unknown	10.77	326	ug/kg		J
17351-34-7	14-Pentadecenoic acid	11.03	1110	ug/kg	95	NJ
	Unknown	11.05	539	ug/kg		J
57-11-4	Octadecanoic acid	11.11	484	ug/kg	92	NJ
	Unknown	11.2	283	ug/kg		J
	Unknown	11.3	256	ug/kg		J
1482-93-5	Cyclohexane, hexaethylidene-	11.53	462	ug/kg	95	NJ
74663-83-5	1,5-Heptadiene, 2,5-dimethyl-3-methylene	11.76	346	ug/kg	90	NJ
	Unknown	11.87	606	ug/kg		J
506-30-9	Eicosanoic acid	11.93	482	ug/kg	91	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12	307	ug/kg	98	NJ
	Unknown	12.08	1120	ug/kg		J
	Unknown	12.15	228	ug/kg		J
	Unknown	12.23	310	ug/kg		J
	Unknown	12.37	2120	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.52	4210	ug/kg	95	NJ
	Unknown	12.56	344	ug/kg		J
	Unknown	12.69	231	ug/kg		J
	Unknown	12.92	194	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	13.65	1120	ug/kg	83	NJ
	Unknown	13.69	563	ug/kg		J
630-04-6	Hentriacontane	15.93	930	ug/kg	98	NJ
	Unknown	16.09	862	ug/kg		J
	Unknown	16.3	839	ug/kg		J
	Unknown	17.09	1130	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
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	381	ug/kg	76.1	381
108-95-2	Phenol	U	381	ug/kg	76.1	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.1	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381
95-48-7	o-Cresol	U	381	ug/kg	76.1	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381
78-59-1	Isophorone	U	381	ug/kg	76.1	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381
65-85-0	Benzoic acid	U	761	ug/kg	190	761
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.1	381
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	381	ug/kg	76.1	381

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

SDG Number: 10-1384
Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7684
Batch ID: 945501
Run Date: 02/04/2010 19:04
Prep Date: 01/26/2010 20:21
Data File: s6b0419.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	381	ug/kg	76.1	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	761	ug/kg	145	761
132-64-9	Dibenzofuran	U	381	ug/kg	76.1	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.1	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.1	381
122-66-7	Azobenzene	U	381	ug/kg	76.1	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.1	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.1	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.61	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.1	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.1	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.1	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	163	ug/kg		J
	Unknown Aldol Condensate	3.54	438	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387006	Date Received: 01/23/2010 09:20	%Moisture: 12.8
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7684	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:04	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.14 g	Final Volume: 1 mL
Data File: s6b0419.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	17.37	658	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387010

Client ID: RE14-10-7685
Batch ID: 945501
Run Date: 02/04/2010 20:57
Prep Date: 01/26/2010 20:21
Data File: s6b0423.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.3
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	391	ug/kg	78.2	391
108-95-2	Phenol	U	391	ug/kg	78.2	391
95-57-8	2-Chlorophenol	U	391	ug/kg	78.2	391
106-46-7	1,4-Dichlorobenzene	U	391	ug/kg	78.2	391
621-64-7	N-Nitrosodipropylamine	U	391	ug/kg	78.2	391
59-50-7	4-Chloro-3-methylphenol	U	391	ug/kg	78.2	391
83-32-9	Acenaphthene	U	39.1	ug/kg	12.9	39.1
121-14-2	2,4-Dinitrotoluene	U	391	ug/kg	39.1	391
100-02-7	4-Nitrophenol	U	391	ug/kg	129	391
87-86-5	Pentachlorophenol	U	391	ug/kg	97.7	391
129-00-0	Pyrene	U	39.1	ug/kg	11.7	39.1
110-86-1	Pyridine	U	391	ug/kg	78.2	391
62-53-3	Aniline	U	391	ug/kg	117	391
111-44-4	bis(2-Chloroethyl) ether	U	391	ug/kg	78.2	391
541-73-1	1,3-Dichlorobenzene	U	391	ug/kg	78.2	391
100-51-6	Benzyl alcohol	U	391	ug/kg	117	391
95-50-1	1,2-Dichlorobenzene	U	391	ug/kg	78.2	391
108-60-1	bis(2-Chloroisopropyl)ether	U	391	ug/kg	78.2	391
95-48-7	o-Cresol	U	391	ug/kg	78.2	391
65794-96-9	m,p-Cresols	U	391	ug/kg	117	391
67-72-1	Hexachloroethane	U	391	ug/kg	78.2	391
98-95-3	Nitrobenzene	U	391	ug/kg	78.2	391
78-59-1	Isophorone	U	391	ug/kg	78.2	391
88-75-5	2-Nitrophenol	U	391	ug/kg	78.2	391
105-67-9	2,4-Dimethylphenol	U	391	ug/kg	137	391
111-91-1	bis(2-Chloroethoxy)methane	U	391	ug/kg	78.2	391
120-83-2	2,4-Dichlorophenol	U	391	ug/kg	78.2	391
65-85-0	Benzoic acid	U	782	ug/kg	195	782
91-20-3	Naphthalene	U	39.1	ug/kg	11.7	39.1
106-47-8	4-Chloroaniline	U	391	ug/kg	78.2	391
87-68-3	Hexachlorobutadiene	U	391	ug/kg	78.2	391
91-57-6	2-Methylnaphthalene	U	39.1	ug/kg	7.82	39.1
77-47-4	Hexachlorocyclopentadiene	U	391	ug/kg	78.2	391
88-06-2	2,4,6-Trichlorophenol	U	391	ug/kg	78.2	391
95-95-4	2,4,5-Trichlorophenol	U	391	ug/kg	78.2	391
91-58-7	2-Chloronaphthalene	U	39.1	ug/kg	12.9	39.1
88-74-4	2-Nitroaniline	U	391	ug/kg	78.2	391
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	391	ug/kg	78.2	391

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

SDG Number: 10-1384
Lab Sample ID: 245387010

Client ID: RE14-10-7685
Batch ID: 945501
Run Date: 02/04/2010 20:57
Prep Date: 01/26/2010 20:21
Data File: s6b0423.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.J
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	391	ug/kg	78.2	391
606-20-2	2,6-Dinitrotoluene	U	391	ug/kg	39.1	391
208-96-8	Acenaphthylene	U	39.1	ug/kg	11.7	39.1
51-28-5	2,4-Dinitrophenol	U	782	ug/kg	149	782
132-64-9	Dibenzofuran	U	391	ug/kg	78.2	391
84-66-2	Diethylphthalate	U	391	ug/kg	78.2	391
86-73-7	Fluorene	U	39.1	ug/kg	11.7	39.1
7005-72-3	4-Chlorophenylphenylether	U	391	ug/kg	78.2	391
534-52-1	2-Methyl-4,6-dinitrophenol	U	391	ug/kg	78.2	391
100-01-6	4-Nitroaniline	U	391	ug/kg	117	391
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	391	ug/kg	78.2	391
122-66-7	Azobenzene	U	391	ug/kg	78.2	391
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	391	ug/kg	78.2	391
118-74-1	Hexachlorobenzene	U	391	ug/kg	78.2	391
85-01-8	Phenanthrene	U	39.1	ug/kg	11.7	39.1
120-12-7	Anthracene	U	39.1	ug/kg	7.82	39.1
84-74-2	Di-n-butylphthalate	U	391	ug/kg	78.2	391
206-44-0	Fluoranthene	U	39.1	ug/kg	11.7	39.1
85-68-7	Butylbenzylphthalate	U	391	ug/kg	78.2	391
56-55-3	Benzo(a)anthracene	U	39.1	ug/kg	11.7	39.1
91-94-1	3,3'-Dichlorobenzidine	U	391	ug/kg	117	391
218-01-9	Chrysene	U	39.1	ug/kg	11.7	39.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	391	ug/kg	78.2	391
117-84-0	Di-n-octylphthalate	U	391	ug/kg	78.2	391
205-99-2	Benzo(b)fluoranthene	U	39.1	ug/kg	11.7	39.1
207-08-9	Benzo(k)fluoranthene	U	39.1	ug/kg	11.7	39.1
50-32-8	Benzo(a)pyrene	U	39.1	ug/kg	11.7	39.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.1	ug/kg	11.7	39.1
53-70-3	Dibenzo(a,h)anthracene	U	39.1	ug/kg	11.7	39.1
191-24-2	Benzo(ghi)perylene	U	39.1	ug/kg	11.7	39.1
120-82-1	1,2,4-Trichlorobenzene	U	391	ug/kg	78.2	391

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	167	ug/kg		J
	Unknown	2.48	168	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.3
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 Aldol Condensate	3.54	496	ug/kg		JA
2416-20-8	Hexadecenoic acid, Z-11-	10.22	184	ug/kg	99	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	161	ug/kg	87	NJ

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

SDG Number: 10-1384
Lab Sample ID: 245387004

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
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	431	ug/kg	86.3	431
108-95-2	Phenol	U	431	ug/kg	86.3	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.3	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.3	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.3	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.3	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	U	43.1	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.3	431
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.3	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.3	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.3	431
108-60-1	bis(2-Chloroisopropyl)ether	U	431	ug/kg	86.3	431
95-48-7	o-Cresol	U	431	ug/kg	86.3	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.3	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.3	431
78-59-1	Isophorone	U	431	ug/kg	86.3	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.3	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.3	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.3	431
65-85-0	Benzoic acid	U	863	ug/kg	216	863
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.3	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.3	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.63	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.3	431
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.3	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.3	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.3	431
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	431	ug/kg	86.3	431

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

SDG Number: 10-1384
Lab Sample ID: 245387004

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	431	ug/kg	86.3	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	431	ug/kg	86.3	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.3	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.3	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.3	431
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	431	ug/kg	86.3	431
122-66-7	Azobenzene	U	431	ug/kg	86.3	431
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.3	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.3	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.63	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.3	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.3	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.3	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.3	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.3	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	182	ug/kg		J
	Unknown Aldol Condensate	3.54	512	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387004	Date Received: 01/23/2010 09:20	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7686	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 18:07	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0417.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		17.37	215	ug/kg	J

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

SDG Number: 10-1384
Lab Sample ID: 245387007

Client ID: RE14-10-7687
Batch ID: 945501
Run Date: 02/04/2010 19:33
Prep Date: 01/26/2010 20:21
Data File: s6b0420.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26.7
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	455	ug/kg	90.9	455
108-95-2	Phenol	U	455	ug/kg	90.9	455
95-57-8	2-Chlorophenol	U	455	ug/kg	90.9	455
106-46-7	1,4-Dichlorobenzene	U	455	ug/kg	90.9	455
621-64-7	N-Nitrosodipropylamine	U	455	ug/kg	90.9	455
59-50-7	4-Chloro-3-methylphenol	U	455	ug/kg	90.9	455
83-32-9	Acenaphthene	U	45.5	ug/kg	15.0	45.5
121-14-2	2,4-Dinitrotoluene	U	455	ug/kg	45.5	455
100-02-7	4-Nitrophenol	U	455	ug/kg	150	455
87-86-5	Pentachlorophenol	U	455	ug/kg	114	455
129-00-0	Pyrene	U	45.5	ug/kg	13.6	45.5
110-86-1	Pyridine	U	455	ug/kg	90.9	455
62-53-3	Aniline	U	455	ug/kg	136	455
111-44-4	bis(2-Chloroethyl) ether	U	455	ug/kg	90.9	455
541-73-1	1,3-Dichlorobenzene	U	455	ug/kg	90.9	455
100-51-6	Benzyl alcohol	U	455	ug/kg	136	455
95-50-1	1,2-Dichlorobenzene	U	455	ug/kg	90.9	455
108-60-1	bis(2-Chloroisopropyl)ether	U	455	ug/kg	90.9	455
95-48-7	o-Cresol	U	455	ug/kg	90.9	455
65794-96-9	m,p-Cresols	U	455	ug/kg	136	455
67-72-1	Hexachloroethane	U	455	ug/kg	90.9	455
98-95-3	Nitrobenzene	U	455	ug/kg	90.9	455
78-59-1	Isophorone	U	455	ug/kg	90.9	455
88-75-5	2-Nitrophenol	U	455	ug/kg	90.9	455
105-67-9	2,4-Dimethylphenol	U	455	ug/kg	159	455
111-91-1	bis(2-Chloroethoxy)methane	U	455	ug/kg	90.9	455
120-83-2	2,4-Dichlorophenol	U	455	ug/kg	90.9	455
65-85-0	Benzoic acid	U	909	ug/kg	227	909
91-20-3	Naphthalene	U	45.5	ug/kg	13.6	45.5
106-47-8	4-Chloroaniline	U	455	ug/kg	90.9	455
87-68-3	Hexachlorobutadiene	U	455	ug/kg	90.9	455
91-57-6	2-Methylnaphthalene	U	45.5	ug/kg	9.09	45.5
77-47-4	Hexachlorocyclopentadiene	U	455	ug/kg	90.9	455
88-06-2	2,4,6-Trichlorophenol	U	455	ug/kg	90.9	455
95-95-4	2,4,5-Trichlorophenol	U	455	ug/kg	90.9	455
91-58-7	2-Chloronaphthalene	U	45.5	ug/kg	15.0	45.5
88-74-4	2-Nitroaniline	U	455	ug/kg	90.9	455
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	455	ug/kg	90.9	455

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

SDG Number: 10-1384
Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 26.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	455	ug/kg	90.9	455
606-20-2	2,6-Dinitrotoluene	U	455	ug/kg	45.5	455
208-96-8	Acenaphthylene	U	45.5	ug/kg	13.6	45.5
51-28-5	2,4-Dinitrophenol	U	909	ug/kg	173	909
132-64-9	Dibenzofuran	U	455	ug/kg	90.9	455
84-66-2	Diethylphthalate	U	455	ug/kg	90.9	455
86-73-7	Fluorene	U	45.5	ug/kg	13.6	45.5
7005-72-3	4-Chlorophenylphenylether	U	455	ug/kg	90.9	455
534-52-1	2-Methyl-4,6-dinitrophenol	U	455	ug/kg	90.9	455
100-01-6	4-Nitroaniline	U	455	ug/kg	136	455
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	455	ug/kg	90.9	455
122-66-7	Azobenzene	U	455	ug/kg	90.9	455
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	455	ug/kg	90.9	455
118-74-1	Hexachlorobenzene	U	455	ug/kg	90.9	455
85-01-8	Phenanthrene	U	45.5	ug/kg	13.6	45.5
120-12-7	Anthracene	U	45.5	ug/kg	9.09	45.5
84-74-2	Di-n-butylphthalate	U	455	ug/kg	90.9	455
206-44-0	Fluoranthene	U	45.5	ug/kg	13.6	45.5
85-68-7	Butylbenzylphthalate	U	455	ug/kg	90.9	455
56-55-3	Benzo(a)anthracene	U	45.5	ug/kg	13.6	45.5
91-94-1	3,3'-Dichlorobenzidine	U	455	ug/kg	136	455
218-01-9	Chrysene	U	45.5	ug/kg	13.6	45.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	455	ug/kg	90.9	455
117-84-0	Di-n-octylphthalate	U	455	ug/kg	90.9	455
205-99-2	Benzo(b)fluoranthene	U	45.5	ug/kg	13.6	45.5
207-08-9	Benzo(k)fluoranthene	U	45.5	ug/kg	13.6	45.5
50-32-8	Benzo(a)pyrene	U	45.5	ug/kg	13.6	45.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.5	ug/kg	13.6	45.5
53-70-3	Dibenzo(a,h)anthracene	U	45.5	ug/kg	13.6	45.5
191-24-2	Benzo(ghi)perylene	U	45.5	ug/kg	13.6	45.5
120-82-1	1,2,4-Trichlorobenzene	U	455	ug/kg	90.9	455

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	196	ug/kg		J
	Unknown Aldol Condensate	3.54	551	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387007	Date Received: 01/23/2010 09:20	%Moisture: 26.7
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7687	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:33	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0420.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
127-91-3	.beta.-Pinene	4.68	217	ug/kg	96	NJ
	Unknown	10.54	1020	ug/kg		J
	Unknown	11.04	927	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	420	ug/kg	84.0	420
108-95-2	Phenol	U	420	ug/kg	84.0	420
95-57-8	2-Chlorophenol	U	420	ug/kg	84.0	420
106-46-7	1,4-Dichlorobenzene	U	420	ug/kg	84.0	420
621-64-7	N-Nitrosodipropylamine	U	420	ug/kg	84.0	420
59-50-7	4-Chloro-3-methylphenol	U	420	ug/kg	84.0	420
83-32-9	Acenaphthene	U	42.0	ug/kg	13.9	42.0
121-14-2	2,4-Dinitrotoluene	U	420	ug/kg	42.0	420
100-02-7	4-Nitrophenol	U	420	ug/kg	139	420
87-86-5	Pentachlorophenol	U	420	ug/kg	105	420
129-00-0	Pyrene	U	42.0	ug/kg	12.6	42.0
110-86-1	Pyridine	U	420	ug/kg	84.0	420
62-53-3	Aniline	U	420	ug/kg	126	420
111-44-4	bis(2-Chloroethyl) ether	U	420	ug/kg	84.0	420
541-73-1	1,3-Dichlorobenzene	U	420	ug/kg	84.0	420
100-51-6	Benzyl alcohol	U	420	ug/kg	126	420
95-50-1	1,2-Dichlorobenzene	U	420	ug/kg	84.0	420
108-60-1	bis(2-Chloroisopropyl)ether	U	420	ug/kg	84.0	420
95-48-7	o-Cresol	U	420	ug/kg	84.0	420
65794-96-9	m,p-Cresols	U	420	ug/kg	126	420
67-72-1	Hexachloroethane	U	420	ug/kg	84.0	420
98-95-3	Nitrobenzene	U	420	ug/kg	84.0	420
78-59-1	Isophorone	U	420	ug/kg	84.0	420
88-75-5	2-Nitrophenol	U	420	ug/kg	84.0	420
105-67-9	2,4-Dimethylphenol	U	420	ug/kg	147	420
111-91-1	bis(2-Chloroethoxy)methane	U	420	ug/kg	84.0	420
120-83-2	2,4-Dichlorophenol	U	420	ug/kg	84.0	420
65-85-0	Benzoic acid	U	840	ug/kg	210	840
91-20-3	Naphthalene	U	42.0	ug/kg	12.6	42.0
106-47-8	4-Chloroaniline	U	420	ug/kg	84.0	420
87-68-3	Hexachlorobutadiene	U	420	ug/kg	84.0	420
91-57-6	2-Methylnaphthalene	U	42.0	ug/kg	8.40	42.0
77-47-4	Hexachlorocyclopentadiene	U	420	ug/kg	84.0	420
88-06-2	2,4,6-Trichlorophenol	U	420	ug/kg	84.0	420
95-95-4	2,4,5-Trichlorophenol	U	420	ug/kg	84.0	420
91-58-7	2-Chloronaphthalene	U	42.0	ug/kg	13.9	42.0
88-74-4	2-Nitroaniline	U	420	ug/kg	84.0	420
99-09-2	<i>o</i> -Nitroaniline	U	420	ug/kg	84.0	420
	3-Nitroaniline					

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

SDG Number: 10-1384
Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7688
Batch ID: 945501
Run Date: 02/04/2010 18:36
Prep Date: 01/26/2010 20:21
Data File: s6b0418.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	420	ug/kg	84.0	420
606-20-2	2,6-Dinitrotoluene	U	420	ug/kg	42.0	420
208-96-8	Acenaphthylene	U	42.0	ug/kg	12.6	42.0
51-28-5	2,4-Dinitrophenol	U	840	ug/kg	160	840
132-64-9	Dibenzofuran	U	420	ug/kg	84.0	420
84-66-2	Diethylphthalate	U	420	ug/kg	84.0	420
86-73-7	Fluorene	U	42.0	ug/kg	12.6	42.0
7005-72-3	4-Chlorophenylphenylether	U	420	ug/kg	84.0	420
534-52-1	2-Methyl-4,6-dinitrophenol	U	420	ug/kg	84.0	420
100-01-6	4-Nitroaniline	U	420	ug/kg	126	420
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	420	ug/kg	84.0	420
122-66-7	Azobenzene	U	420	ug/kg	84.0	420
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	420	ug/kg	84.0	420
118-74-1	Hexachlorobenzene	U	420	ug/kg	84.0	420
85-01-8	Phenanthrene	U	42.0	ug/kg	12.6	42.0
120-12-7	Anthracene	U	42.0	ug/kg	8.40	42.0
84-74-2	Di-n-butylphthalate	U	420	ug/kg	84.0	420
206-44-0	Fluoranthene	U	42.0	ug/kg	12.6	42.0
85-68-7	Butylbenzylphthalate	U	420	ug/kg	84.0	420
56-55-3	Benzo(a)anthracene	U	42.0	ug/kg	12.6	42.0
91-94-1	3,3'-Dichlorobenzidine	U	420	ug/kg	126	420
218-01-9	Chrysene	U	42.0	ug/kg	12.6	42.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	420	ug/kg	84.0	420
117-84-0	Di-n-octylphthalate	U	420	ug/kg	84.0	420
205-99-2	Benzo(b)fluoranthene	U	42.0	ug/kg	12.6	42.0
207-08-9	Benzo(k)fluoranthene	U	42.0	ug/kg	12.6	42.0
50-32-8	Benzo(a)pyrene	U	42.0	ug/kg	12.6	42.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.0	ug/kg	12.6	42.0
53-70-3	Dibenzo(a,h)anthracene	U	42.0	ug/kg	12.6	42.0
191-24-2	Benzo(ghi)perylene	U	42.0	ug/kg	12.6	42.0
120-82-1	1,2,4-Trichlorobenzene	U	420	ug/kg	84.0	420

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	186	ug/kg		J
	Unknown Aldol Condensate	3.54	483	ug/kg		JA

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

Page 1 of 3

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
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	381	ug/kg	76.2	381
108-95-2	Phenol	U	381	ug/kg	76.2	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.2	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381
95-48-7	o-Cresol	U	381	ug/kg	76.2	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381
78-59-1	Isophorone	U	381	ug/kg	76.2	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381
65-85-0	Benzoic acid	U	762	ug/kg	191	762
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.2	381
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	381	ug/kg	76.2	381

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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
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	381	ug/kg	76.2	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	762	ug/kg	145	762
132-64-9	Dibenzofuran	U	381	ug/kg	76.2	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.2	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.2	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.2	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.2	381
122-66-7	Azobenzene	U	381	ug/kg	76.2	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.2	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.2	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.62	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.2	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.2	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.2	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.2	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.2	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	162	ug/kg		J
	Unknown Aldol Condensate	3.54	220	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
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		17.36	308	ug/kg	J

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1384

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
1202025004	MB for batch 945499	62	59	65	66	62	84
1202025005	LCS for batch 945499	74	73	71	74	85	91
245387001	RE14-10-7689	45	43	46	49	43	65
245387002	RE14-10-7679	59	60	58	65	72	87
1202025006	RE14-10-7679MS	52	53	50	57	65	74
1202025007	RE14-10-7679MSD	47	48	45	53	64	71
245387003	RE14-10-7680	52	50	53	55	54	77
245387004	RE14-10-7686	58	54	56	57	59	71
245387005	RE14-10-7688	60	57	61	62	64	78
245387006	RE14-10-7684	66	61	66	66	66	83
245387007	RE14-10-7687	59	61	58	65	70	84
245387008	RE14-10-7681	65	65	64	69	80	91
245387009	RE14-10-7682	63	61	63	65	71	84
245387010	RE14-10-7685	65	62	63	67	72	86
245387011	RE14-10-7683	59	57	58	61	68	78

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: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945499

Matrix: SOIL

Lab Sample ID: 1202025005

Instrument: MSD6.I

Analysis Date: 02/04/2010 13:48

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	980	59	22-114
108-95-2	LCS Phenol	1670	0.0	1320	79	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1360	81	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1360	82	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1370	82	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1180	71	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1380	83	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	807	48	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1190	71	27-116
129-00-0	LCS Pyrene	1670	0.0	1390	83	42-113
110-86-1	LCS Pyridine	1670	0.0	1070	64	8-125
62-53-3	LCS Aniline	1670	0.0	708	42	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1110	67	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1350	81	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	1250	75	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1390	84	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1150	69	28-117
95-48-7	LCS o-Cresol	1670	0.0	1270	76	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1460	87	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1350	81	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1220	73	33-116

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 4

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945499

Matrix: SOIL

Lab Sample ID: 1202025005

Instrument: MSD6.I

Analysis Date: 02/04/2010 13:48

Dilution: 1

Analyst: NAG1

Pre Batch II 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	1320	79	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1270	76	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1230	74	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1380	83	34-116
65-85-0	LCS Benzoic acid	3330	0.0	2950	88	22-138
91-20-3	LCS Naphthalene	1670	0.0	1260	76	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	885	53	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1490	89	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1480	89	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1010	61	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1360	81	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1300	78	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1310	79	37-111
88-74-4	LCS 2-Nitroaniline	1670	0.0	1050	63	41-113
99-09-2	<i>o</i> -Nitroaniline	1670	0.0	1050	63	34-125
	<i>m</i> -Nitroaniline	1670	0.0	1050	63	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1420	85	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1330	80	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1380	83	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1030	62	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1650	99	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1450	87	51-126

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 4

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945499

Matrix: SOIL

Lab Sample ID: 1202025005

Instrument: MSD6.I

Analysis Date: 02/04/2010 13:48

Dilution: 1

Analyst: NAG1

Prep Batch II 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	1430	86	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1430	86	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1230	74	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1120	67	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1320	79	46-114
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1210	73	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1350	81	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1380	83	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1410	85	46-107
120-12-7	LCS Anthracene	1670	0.0	1400	84	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1550	93	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1580	95	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1530	92	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1460	88	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1130	68	36-103
218-01-9	LCS Chrysene	1670	0.0	1480	89	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1530	92	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1590	96	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1600	96	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1600	96	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1660	100	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1550	93	53-120

Semi-Volatile

Page 4 of 4

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945499

Matrix: SOIL

Lab Sample ID: 1202025005

Instrument: MSD6.I

Analysis Date: 02/04/2010 13:48

Dilution: 1

Analyst: NAG1

Pred Batch II 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	1540	92	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1620	97	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1370	82	32-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 8

SDG Number: 10-1384

Sample Type: Matrix Spike

Client ID: RE14-10-7679MS

Matrix: R

Lab Sample ID: 1202025006

%Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 16:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	2110	0.00 U	794	38	27-98
108-95-2	MS Phenol	2110	0.00 U	1220	58	33-94
95-57-8	MS 2-Chlorophenol	2110	0.00 U	1220	58	29-96
106-46-7	MS 1,4-Dichlorobenzene	2110	0.00 U	1180	56	27-96
621-64-7	MS N-Nitrosodipropylamine	2110	0.00 U	1230	59	29-102
59-50-7	MS 4-Chloro-3-methylphenol	2110	0.00 U	1140	54	29-110
83-32-9	MS Acenaphthene	2110	0.00 U	1250	59	17-109
121-14-2	MS 2,4-Dinitrotoluene	2110	0.00 U	1280	61	33-107
100-02-7	MS 4-Nitrophenol	2110	0.00 U	660	31	15-110
87-86-5	MS Pentachlorophenol	2110	0.00 U	1170	55	23-110
129-00-0	MS Pyrene	2110	0.00 U	1450	69	24-118
110-86-1	MS Pyridine	2110	0.00 U	763	36	25-102
62-53-3	MS Aniline	2110	0.00 U	963	46	18-109
111-44-4	MS bis(2-Chloroethyl) ether	2110	0.00 U	991	47	29-96
541-73-1	MS 1,3-Dichlorobenzene	2110	0.00 U	1180	56	26-97
100-51-6	MS Benzyl alcohol	2110	0.00 U	982	47	19-112
95-50-1	MS 1,2-Dichlorobenzene	2110	0.00 U	1220	58	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	2110	0.00 U	1040	49	28-103
95-48-7	MS o-Cresol	2110	0.00 U	1130	54	32-107
65794-96-9	MS m,p-Cresols	2110	0.00 U	1230	59	33-115
67-72-1	MS Hexachloroethane	2110	0.00 U	1180	56	25-100
98-95-3	MS Nitrobenzene	2110	0.00 U	1100	52	27-106

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-1384

Sample Type: Matrix Spike

Client ID: RE14-10-7679MS

Matrix: R

Lab Sample ID: 1202025006

%Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 16:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	2110	0.00 U	1250	59	29-104
88-75-5	MS 2-Nitrophenol	2110	0.00 U	1200	57	26-102
105-67-9	MS 2,4-Dimethylphenol	2110	0.00 U	1180	56	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	2110	0.00 U	1160	55	27-101
120-83-2	MS 2,4-Dichlorophenol	2110	0.00 U	1350	64	26-103
65-85-0	MS Benzoic acid	4220	0.00 U	1890	45	13-131
91-20-3	MS Naphthalene	2110	0.00 U	1180	56	23-103
106-47-8	MS 4-Chloroaniline	2110	0.00 U	1050	50	26-103
87-68-3	MS Hexachlorobutadiene	2110	0.00 U	1370	65	28-101
91-57-6	MS 2-Methylnaphthalene	2110	0.00 U	1400	67	27-106
77-47-4	MS Hexachlorocyclopentadiene	2110	0.00 U	566	27	24-117
88-06-2	MS 2,4,6-Trichlorophenol	2110	0.00 U	1420	67	26-105
95-95-4	MS 2,4,5-Trichlorophenol	2110	0.00 U	1340	64	30-110
91-58-7	MS 2-Chloronaphthalene	2110	0.00 U	1290	61	28-102
88-74-4	MS 2-Nitroaniline o-Nitroaniline	2110	0.00 U	1020	48	33-106
99-09-2	MS 3-Nitroaniline m-Nitroaniline	2110	0.00 U	1060	50	33-116
131-11-3	MS Dimethylphthalate	2110	0.00 U	1400	67	38-113
606-20-2	MS 2,6-Dinitrotoluene	2110	0.00 U	1310	62	29-107
208-96-8	MS Acenaphthylene	2110	0.00 U	1370	65	25-108
51-28-5	MS 2,4-Dinitrophenol	2110	0.00 U	926	44	14-102
132-64-9	MS Dibenzofuran	2110	0.00 U	1670	79	35-112
84-66-2	MS Diethylphthalate	2110	0.00 U	1450	69	36-122

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 8

SDG Number: 10-1384

Sample Type: Matrix Spike

Client ID: RE14-10-7679MS

Matrix: R

Lab Sample ID: 1202025006

% Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 16:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	2110	0.00 U	1430	68	33-105
7005-72-3	MS 4-Chlorophenylphenylether	2110	0.00 U	1460	69	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	2110	0.00 U	1020	48	26-97
100-01-6	MS 4-Nitroaniline <i>p-Nitroaniline</i>	2110	0.00 U	1120	53	28-135
122-39-4	MS Diphenylamine	2110	0.00 U	1390	66	33-109
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	2110	0.00 U	1280	61	31-113
101-55-3	MS 4-Bromophenylphenylether	2110	0.00 U	1430	68	31-109
118-74-1	MS Hexachlorobenzene	2110	0.00 U	1410	67	37-99
85-01-8	MS Phenanthrene	2110	0.00 U	1430	68	29-109
120-12-7	MS Anthracene	2110	0.00 U	1410	67	19-118
84-74-2	MS Di-n-butylphthalate	2110	0.00 U	1600	76	39-123
206-44-0	MS Fluoranthene	2110	0.00 U	1500	71	33-114
85-68-7	MS Butylbenzylphthalate	2110	0.00 U	1650	78	35-131
56-55-3	MS Benzo(a)anthracene	2110	0.00 U	1390	66	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	2110	0.00 U	943	45	30-124
218-01-9	MS Chrysene	2110	0.00 U	1420	68	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	2110	0.00 U	1670	79	37-129
117-84-0	MS Di-n-octylphthalate	2110	0.00 U	1960	93	31-143
205-99-2	MS Benzo(b)fluoranthene	2110	0.00 U	1620	77	29-118
207-08-9	MS Benzo(k)fluoranthene	2110	0.00 U	1640	78	32-118
50-32-8	MS Benzo(a)pyrene	2110	0.00 U	1610	76	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	2110	0.00 U	1290	61	29-114

Semi-Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Client ID: RE14-10-7679MS

Lab Sample ID: 1202025006

Instrument: MSD6.I

Analyst: NAG1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

% Moisture: 21.4

Analysis Date: 02/04/2010 16:42

Dilution: 1

Pren Batch II 945499

Batch ID: 945501

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	2110	0.00	U	1310	62	27-119
191-24-2	MS Benzo(ghi)perylene	2110	0.00	U	1220	58	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	2110	0.00	U	1290	61	28-99

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 8

SDG Number: 10-1384

Sample Type: Matrix Spike Duplicate

Client ID: RE14-10-7679MSD

Matrix: R

Lab Sample ID: 1202025007

%Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 17:10

Dilution: 1

Analyst: NAG1

Pre Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	2120	0.00 U	702	33	27-98	12	0-30
108-95-2	MSD Phenol	2120	0.00 U	1120	53	33-94	8	0-30
95-57-8	MSD 2-Chlorophenol	2120	0.00 U	1110	53	29-96	9	0-30
106-46-7	MSD 1,4-Dichlorobenzene	2120	0.00 U	1060	50	27-96	11	0-30
621-64-7	MSD N-Nitrosodipropylamine	2120	0.00 U	1120	53	29-102	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	2120	0.00 U	1450	69	29-110	24	0-30
83-32-9	MSD Acenaphthene	2120	0.00 U	1190	56	17-109	5	0-30
121-14-2	MSD 2,4-Dinitrotoluene	2120	0.00 U	1290	61	33-107	1	0-30
100-02-7	MSD 4-Nitrophenol	2120	0.00 U	956	45	15-110	37 *	0-30
87-86-5	MSD Pentachlorophenol	2120	0.00 U	1200	56	23-110	3	0-30
129-00-0	MSD Pyrene	2120	0.00 U	1360	64	24-118	6	0-30
110-86-1	MSD Pyridine	2120	0.00 U	733	35	25-102	4	0-30
62-53-3	MSD Aniline	2120	0.00 U	864	41	18-109	11	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	2120	0.00 U	874	41	29-96	13	0-30
541-73-1	MSD 1,3-Dichlorobenzene	2120	0.00 U	1040	49	26-97	12	0-30
100-51-6	MSD Benzyl alcohol	2120	0.00 U	930	44	19-112	5	0-30
95-50-1	MSD 1,2-Dichlorobenzene	2120	0.00 U	1090	51	30-97	12	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	2120	0.00 U	915	43	28-103	13	0-30
95-48-7	MSD o-Cresol	2120	0.00 U	1030	49	32-107	10	0-30
65794-96-9	MSD m,p-Cresols	2120	0.00 U	1190	56	33-115	4	0-30
67-72-1	MSD Hexachloroethane	2120	0.00 U	1020	48	25-100	15	0-30
98-95-3	MSD Nitrobenzene	2120	0.00 U	999	47	27-106	9	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1384

Sample Type: Matrix Spike Duplicate

Client ID: RE14-10-7679MSD

Matrix: R

Lab Sample ID: 1202025007

%Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 17:10

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	2120	0.00 U	1120	53	29-104	11	0-30
88-75-5	MSD 2-Nitrophenol	2120	0.00 U	1080	51	26-102	10	0-30
105-67-9	MSD 2,4-Dimethylphenol	2120	0.00 U	1150	54	22-104	3	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2120	0.00 U	1030	49	27-101	12	0-30
120-83-2	MSD 2,4-Dichlorophenol	2120	0.00 U	1270	60	26-103	6	0-30
65-85-0	MSD Benzoic acid	4240	0.00 U	2330	55	13-131	21	0-30
91-20-3	MSD Naphthalene	2120	0.00 U	1050	50	23-103	12	0-30
106-47-8	MSD 4-Chloroaniline	2120	0.00 U	968	46	26-103	8	0-30
87-68-3	MSD Hexachlorobutadiene	2120	0.00 U	1230	58	28-101	10	0-30
91-57-6	MSD 2-Methylnaphthalene	2120	0.00 U	1290	61	27-106	9	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2120	0.00 U	495	23 *	24-117	14	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2120	0.00 U	1360	64	26-105	4	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2120	0.00 U	1320	62	30-110	2	0-30
91-58-7	MSD 2-Chloronaphthalene	2120	0.00 U	1210	57	28-102	6	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	2120	0.00 U	1020	48	33-106	0	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	2120	0.00 U	1060	50	33-116	0	0-30
131-11-3	MSD Dimethylphthalate	2120	0.00 U	1330	63	38-113	6	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2120	0.00 U	1250	59	29-107	5	0-30
208-96-8	MSD Acenaphthylene	2120	0.00 U	1290	61	25-108	6	0-30
51-28-5	MSD 2,4-Dinitrophenol	2120	0.00 U	961	45	14-102	4	0-30
132-64-9	MSD Dibenzofuran	2120	0.00 U	1570	74	35-112	6	0-30
84-66-2	MSD Diethylphthalate	2120	0.00 U	1400	66	36-122	3	0-30

Semi-Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Matrix Spike Duplicate

Client ID: RE14-10-7679MSD

Matrix: R

Lab Sample ID: 1202025007

% Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 17:10

Dilution: 1

Analyst: NAG1

Prep Batch ID: 945499

Inj. Vol: .5 uL

Batch ID: 945501

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	2120	0.00	U	1370	65	33-105	5	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2120	0.00	U	1390	66	30-110	5	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2120	0.00	U	1090	51	26-97	6	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	2120	0.00	U	1120	53	28-135	0	0-30
122-39-4	MSD Diphenylamine	2120	0.00	U	1330	63	33-109	4	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	2120	0.00	U	1230	58	31-113	4	0-30
101-55-3	MSD 4-Bromophenylphenylether	2120	0.00	U	1340	63	31-109	6	0-30
118-74-1	MSD Hexachlorobenzene	2120	0.00	U	1350	64	37-99	4	0-30
85-01-8	MSD Phenanthrene	2120	0.00	U	1370	64	29-109	5	0-30
120-12-7	MSD Anthracene	2120	0.00	U	1360	64	19-118	4	0-30
84-74-2	MSD Di-n-butylphthalate	2120	0.00	U	1500	71	39-123	6	0-30
206-44-0	MSD Fluoranthene	2120	0.00	U	1470	70	33-114	2	0-30
85-68-7	MSD Butylbenzylphthalate	2120	0.00	U	1550	73	35-131	7	0-30
56-55-3	MSD Benzo(a)anthracene	2120	0.00	U	1340	63	30-111	4	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2120	0.00	U	858	40	30-124	9	0-30
218-01-9	MSD Chrysene	2120	0.00	U	1350	64	32-108	5	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2120	0.00	U	1550	73	37-129	7	0-30
117-84-0	MSD Di-n-octylphthalate	2120	0.00	U	2040	96	31-143	4	0-30
205-99-2	MSD Benzo(b)fluoranthene	2120	0.00	U	1590	75	29-118	2	0-30
207-08-9	MSD Benzo(k)fluoranthene	2120	0.00	U	1600	75	32-118	2	0-30
50-32-8	MSD Benzo(a)pyrene	2120	0.00	U	1540	73	33-115	5	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2120	0.00	U	1160	55	29-114	11	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1384

Sample Type: Matrix Spike Duplicate

Client ID: RE14-10-7679MSD

Matrix: R

Lab Sample ID: 1202025007

% Moisture: 21.4

Instrument: MSD6.I

Analysis Date: 02/04/2010 17:10

Dilution: 1

Analyst: NAG1

Pre Batch II 945499

Inj. Vol: .5 uL

Batch ID: 945501

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	2120	0.00	U	1180	56	27-119	10	0-30
191-24-2	MSD Benzo(ghi)perylene	2120	0.00	U	1060	50	28-112	14	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2120	0.00	U	1140	54	28-99	13	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1384	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 945499	Instrument ID:	MSD6.I	Data File:	s6b0407.d
Lab Sample ID:	1202025004	Prep Date:	01/26/2010 20:21	Analyzed:	02/04/10 13:19
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 945499	1202025005	s6b0408.d	02/04/10	1348
02 RE14-10-7689	245387001	s6b0412.d	02/04/10	1545
03 RE14-10-7679	245387002	s6b0413.d	02/04/10	1613
04 RE14-10-7679MS	1202025006	s6b0414.d	02/04/10	1642
05 RE14-10-7679MSD	1202025007	s6b0415.d	02/04/10	1710
06 RE14-10-7680	245387003	s6b0416.d	02/04/10	1739
07 RE14-10-7686	245387004	s6b0417.d	02/04/10	1807
08 RE14-10-7688	245387005	s6b0418.d	02/04/10	1836
09 RE14-10-7684	245387006	s6b0419.d	02/04/10	1904
10 RE14-10-7687	245387007	s6b0420.d	02/04/10	1933
11 RE14-10-7681	245387008	s6b0421.d	02/04/10	2001
12 RE14-10-7682	245387009	s6b0422.d	02/04/10	2029
13 RE14-10-7685	245387010	s6b0423.d	02/04/10	2057
14 RE14-10-7683	245387011	s6b0424.d	02/04/10	2125

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: MSD6.I

Injection Date/Time: 04-FEB-10 11:04

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s020410.b/s6b0402.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.1
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	38.8
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	20.5
365	Greater than 1% of mass 198	2
441	Present, but less than mass 443	75.7
442	Greater than 40% of mass 198	62.4
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.4	/chem/MSD6.i/s020410.b/s6b040	04-FEB-10 11:19
APCVS	WBN100120-03.2	/chem/MSD6.i/s020410.b/s6b040	04-FEB-10 11:53
SBLK01	1202025004	/chem/MSD6.i/s020410.b/s6b040	04-FEB-10 13:19
SBLK01LCS	1202025005	/chem/MSD6.i/s020410.b/s6b040	04-FEB-10 13:48
RE14-10-7689	245387001	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 15:45
RE14-10-7679	245387002	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 16:13
RE14-10-7679MS	1202025006	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 16:42
RE14-10-7679MSD	1202025007	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 17:10
RE14-10-7680	245387003	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 17:39
RE14-10-7686	245387004	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 18:07
RE14-10-7688	245387005	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 18:36
RE14-10-7684	245387006	/chem/MSD6.i/s020410.b/s6b041	04-FEB-10 19:04
RE14-10-7687	245387007	/chem/MSD6.i/s020410.b/s6b042	04-FEB-10 19:33
RE14-10-7681	245387008	/chem/MSD6.i/s020410.b/s6b042	04-FEB-10 20:01
RE14-10-7682	245387009	/chem/MSD6.i/s020410.b/s6b042	04-FEB-10 20:29
RE14-10-7685	245387010	/chem/MSD6.i/s020410.b/s6b042	04-FEB-10 20:57

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: MSD6.I

Injection Date/Time: 04-FEB-10 11:04

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s020410.b/s6b0402.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.1
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	38.8
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	20.5
365	Greater than 1% of mass 198	2
441	Present, but less than mass 443	75.7
442	Greater than 40% of mass 198	62.4
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE14-10-7683	245387011	/chem/MSD6.i/s020410.b/s6b042	04-FEB-10 21:25

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1384

Instrument ID: MSD6.I

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: 10-1384

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
AP12ICAL	WBN091016-01	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 11:59
AP12ICAL	WBN091016-02	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 12:36
AP12ICAL	WBN091016-03	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:13
AP12ICAL	WBN091016-04	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:51
AP12ICAL	WBN091016-05	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 14:30
AP12ICAL	WBN091016-06	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:06
AP12ICAL	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
AP12ICV	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: 10-1384

Instrument: MSD6.I

STD Analysis Time: 04-FEB-10 11:19

GC Column: J&W DB-5MS

Data File: s6b0403.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	199821		4.95	789513		6.23	428255		8.1	747565		9.72	627156		12.8	555140		15.2
Upper Limit	399642		5.45	1579026		6.73	856510		8.6	1495130		10.2	1254312		13.3	1110280		15.7
Lower Limit	99911		4.45	394757		5.73	214128		7.6	373783		9.22	313578		12.3	277570		14.7
Sample ID																		
BLK01	154644		4.95	574061		6.23	327393		8.1	570714		9.71	452232		12.8	339000		15.1
BLK01LCS	152876		4.95	639613		6.23	358137		8.1	647164		9.71	551450		12.8	453718		15.2
RE14-10-7689	145122		4.95	547320		6.23	316778		8.1	527316		9.71	372949		12.8	282961		15.1
RE14-10-7679	160593		4.95	615787		6.23	354069		8.1	597833		9.71	449661		12.8	331860		15.1
RE14-10-7679MS	145646		4.95	598993		6.23	335093		8.1	587961		9.71	453762		12.8	319136		15.1
RE14-10-7679MSD	159698		4.95	655117		6.23	363326		8.1	643219		9.71	507788		12.8	320132		15.2
RE14-10-7680	156737		4.95	594027		6.22	338501		8.1	596295		9.71	443076		12.8	327651		15.2
RE14-10-7686	167795		4.95	660965		6.23	381181		8.1	678655		9.71	554361		12.8	427150		15.2
RE14-10-7688	181018		4.95	693460		6.22	398722		8.1	700921		9.71	550040		12.8	386824		15.2
RE14-10-7684	190212		4.95	733859		6.22	427911		8.1	776777		9.71	632508		12.8	467318		15.2
RE14-10-7687	158019		4.95	611205		6.23	354617		8.1	628374		9.71	488350		12.8	323308		15.2
RE14-10-7681	154076		4.95	601539		6.23	350262		8.1	619238		9.71	483537		12.8	293364		15.2
RE14-10-7682	164420		4.95	629987		6.23	363553		8.1	641877		9.71	511516		12.8	355438		15.2
RE14-10-7685	173259		4.95	678478		6.22	392102		8.1	708003		9.71	515158		12.8	287925		15.2
RE14-10-7683	144534		4.95	568711		6.23	333120		8.1	591516		9.71	445397		12.8	239857	*	15.2

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-1384
Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 21.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7679
Batch ID: 945501
Run Date: 02/04/2010 16:13
Prep Date: 01/26/2010 20:21
Data File: s6b0413.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.5	422
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	422	ug/kg	84.5	422

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

SDG Number: 10-1384
Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7679
Batch ID: 945501
Run Date: 02/04/2010 16:13
Prep Date: 01/26/2010 20:21
Data File: s6b0413.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	422	ug/kg	84.5	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	845	ug/kg	160	845
132-64-9	Dibenzofuran	U	422	ug/kg	84.5	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.5	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.5	422
122-66-7	Azobenzene	U	422	ug/kg	84.5	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.5	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.45	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.5	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.5	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.5	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	486	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0413.d
 Lab Smp Id: 245387002 Client Smp ID: RE14-10-7679
 Inj Date : 04-FEB-2010 16:13
 Operator : nag1 Inst ID: MSD6.i
 Smp Info : |245387002|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	21.41370	% 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	4.948	4.951	(1.000)	160593	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	615787	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	354069	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	597833	40.0000	
* 91 Chrysene-d12	240	12.753	12.763	(1.000)	449661	40.0000	
* 98 Perylene-d12	264	15.143	15.151	(1.000)	331860	40.0000	
\$ 3 2-Fluorophenol	112	3.787	3.776	(0.765)	237093	58.9547	2490
\$ 5 Phenol-d5	99	4.554	4.556	(0.920)	302607	59.6173	2520
\$ 20 Nitrobenzene-d5	82	5.484	5.491	(0.881)	126098	28.9478	1220
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	295012	32.3314	1360
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	74017	71.6226	3020
\$ 81 p-Terphenyl-d14	244	11.416	11.415	(0.895)	316718	43.6760	1840

ION RATIO REPORT

SV REPORT

Data file: s6b0413.d

Report Date: 02/04/2010 17:12

Lab. ID: 245387002

SampleType: SAMPLE

Injection Date: 04-FEB-2010 16:13

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387002|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	8704	2.48	2.81	80-120	100	(T)
42	856	2.48	2.81	54-114	10	(QT)
43	12830	2.49	2.81	7- 67	147	(QT)

4 Aniline				CAS#: 62-53-3		
66	15167	4.55	4.64	80-120	100	(T)
93	574	4.61	4.64	236-296	4	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	18092	5.48	5.33	80-120	100	(T)
42	10046	5.48	5.33	35- 95	56	(T)

22 Isophorone				CAS#: 78-59-1		
82	126098	5.48	5.74	80-120	100	(T)
138	3116	6.23	5.74	0- 50	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	62192	8.10	7.78	80-120	100	(T)
164	354069	8.10	7.78	0- 40	569	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	45851	8.10	8.30	80-120	100	(T)
89	399	8.10	8.29	39- 99	1	(QT)
63	487	8.10	8.29	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene			CAS#: 86-73-7			
166	4381	8.95	8.69	80-120	100	(T)
165	4873	8.95	8.69	62-122	111	(T)
167	1506	8.95	8.69	0- 44	34	(T)

61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	5008	8.95	9.21	80-120	100	(T)
141	35619	8.95	9.21	50-110	711	(QT)
250	10004	8.95	9.21	68-128	200	(QT)

100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	181	17.20	17.20	80-120	100	()
139	0	0.00	17.20	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0413.d
 Lab Smp Id: 245387002 Client Smp ID: RE14-10-7679
 Inj Date : 04-FEB-2010 16:13
 Operator : nag1 Inst ID: MSD6.i
 Smp Info : |245387002|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	21.41370	% moisture

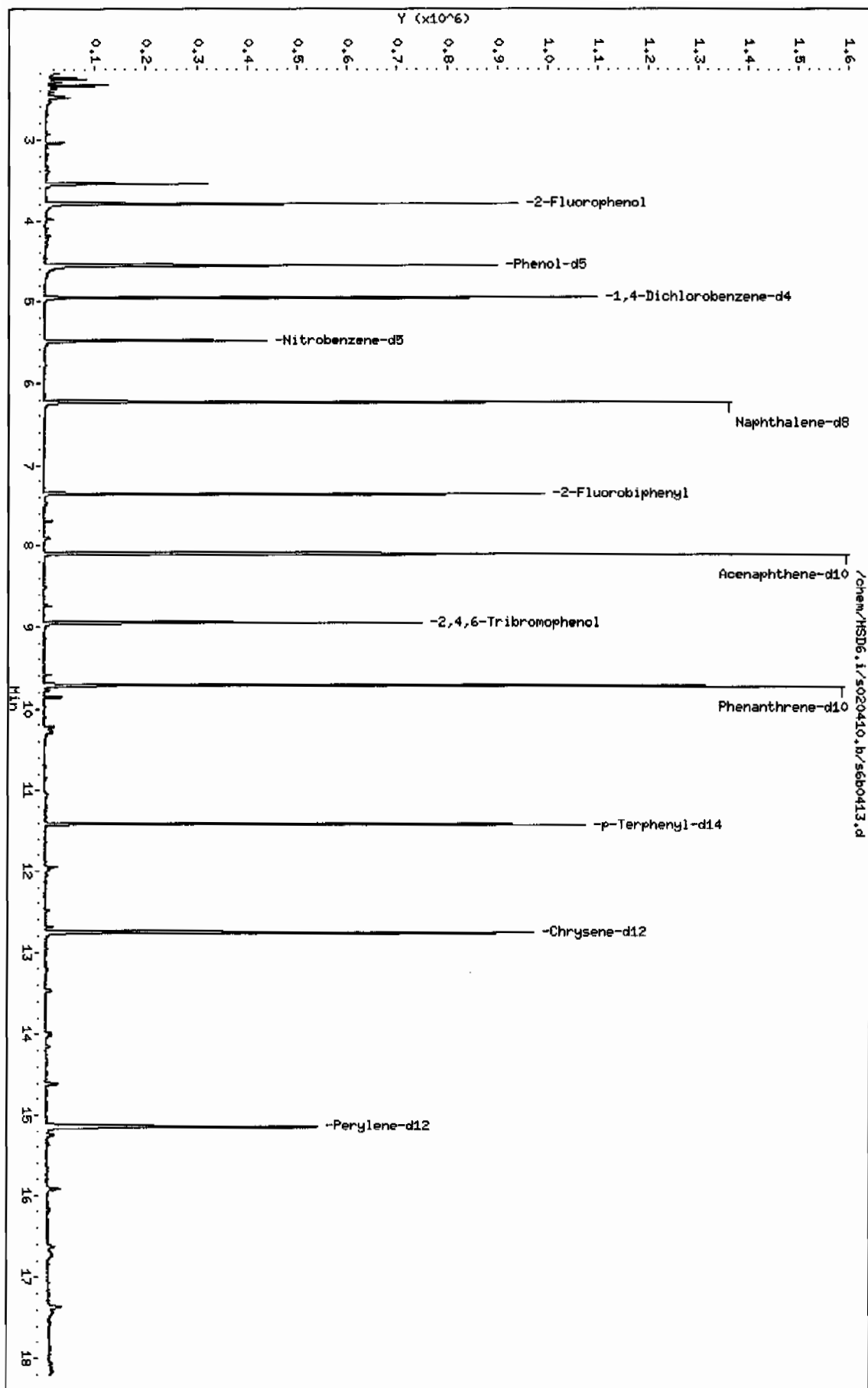
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	940033	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate							
3.544	270557	11.5126676	486	0		0	10

Data File: /chem/HSD6.i/s020410.b/s6b0413.d
Date: 04-FEB-2010 16:13
Client ID: RE14-10-7679
Sample Info: 1245387002194550111SVH11LNL
Volume Injected (uL): 0.5
Column Phase: J&W DB-SHS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 16:13

Client ID: RE14-10-7679

Instrument: MSD6.1

Sample Info: 1245387002194550111SVH11ILANL

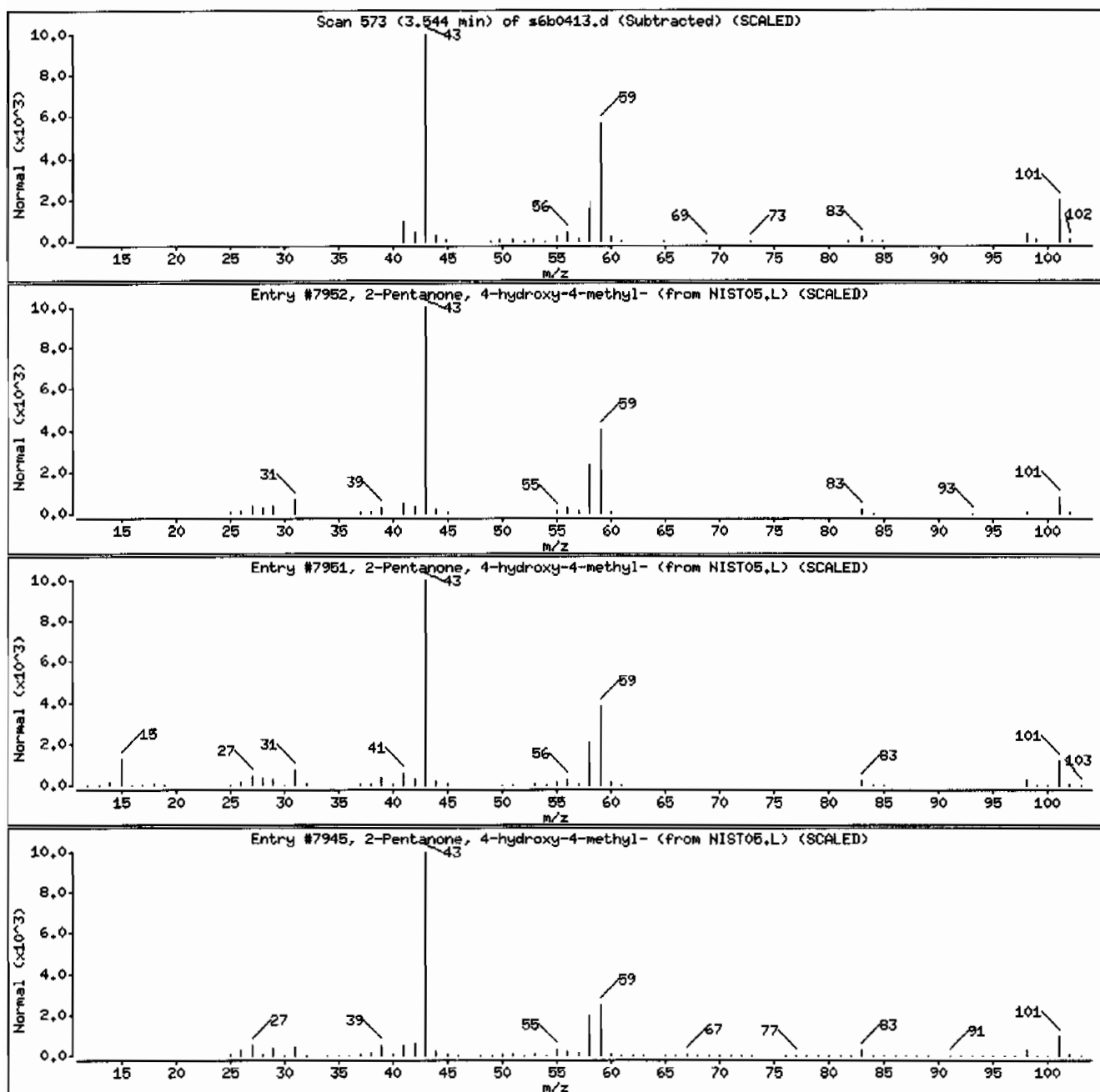
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-6MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	32	C6H12O2	116



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

SDG Number: 10-1384
Lab Sample ID: 245387003

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.J
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

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

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

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6J
Analyst: NAG1
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7680
Batch ID: 945501
Run Date: 02/04/2010 17:39
Prep Date: 01/26/2010 20:21
Data File: s6b0416.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.26	156	ug/kg		J
	Unknown	2.3	206	ug/kg		J

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

Page 3 of 3

SDG Number:	10-1384	Date Collected:	01/15/2010 12:00	Matrix:	R
Lab Sample ID:	245387003	Date Received:	01/23/2010 09:20	%Moisture:	12
		Client:	LANL010	Project:	LANL01004
Client ID:	RE14-10-7680	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	945501	Inst:	MSD6J	Dilution:	1
Run Date:	02/04/2010 17:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	01/26/2010 20:21	Allquot:	30.01 g	Final Volume:	1 mL
Data File:	s6b0416.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	230	ug/kg		J
	Unknown Aldol Condensate	3.54	389	ug/kg		JA
	Unknown	17.37	374	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0416.d
 Lab Smp Id: 245387003 Client Smp ID: RE14-10-7680
 Inj Date : 04-FEB-2010 17:39
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387003|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.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	30.01000	weight of sample
M	12.00540	% 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	4.948	4.951	(1.000)	156737	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	594027	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	338501	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	596295	40.0000	
* 91 Chrysene-d12	240	12.756	12.763	(1.000)	443076	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	327651	40.0000	
\$ 3 2-Fluorophenol	112	3.784	3.776	(0.765)	202290	51.5382	1950
\$ 5 Phenol-d5	99	4.553	4.556	(0.920)	246625	49.7835	1880
\$ 20 Nitrobenzene-d5	82	5.483	5.491	(0.881)	111299	26.4864	1000
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	240359	27.5532	1040
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	53207	53.8536	2040
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	274373	38.3989	1450

ION RATIO REPORT

SV REPORT

Data file: s6b0416.d

Report Date: 02/04/2010 21:17

Lab. ID: 245387003

SampleType: SAMPLE

Injection Date: 04-FEB-2010 17:39

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387003|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	11615	4.55	4.64	80-120	100	(T)
93	137	4.46	4.64	236-296	1	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	15613	5.48	5.33	80-120	100	(T)
42	8937	5.48	5.33	35- 95	57	(T)

22 Isophorone		CAS#: 78-59-1				
82	111299	5.48	5.74	80-120	100	(T)
138	2792	6.22	5.74	0- 50	3	(T)

43 Dimethylphthalate		CAS#: 131-11-3				
163	60124	8.10	7.78	80-120	100	(T)
164	338501	8.10	7.78	0- 40	563	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	43423	8.10	8.30	80-120	100	(T)
89	449	8.10	8.29	39- 99	1	(QT)
63	421	8.10	8.29	15- 75	1	(QT)

53 Fluorene		CAS#: 86-73-7				
166	3337	8.95	8.69	80-120	100	(T)
165	3574	8.95	8.69	62-122	107	(T)
167	775	8.95	8.69	0- 44	23	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	528	17.19	17.17	80-120	100	()
138	225	17.21	17.18	6- 66	43	()

100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	229	17.20	17.20	80-120	100	()
139	0	0.00	17.20	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0416.d
 Lab Smp Id: 245387003 Client Smp ID: RE14-10-7680
 Inj Date : 04-FEB-2010 17:39
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387003|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.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	30.01000	weight of sample
M	12.00540	% moisture

Cpnd Variable

Local Compound Variable

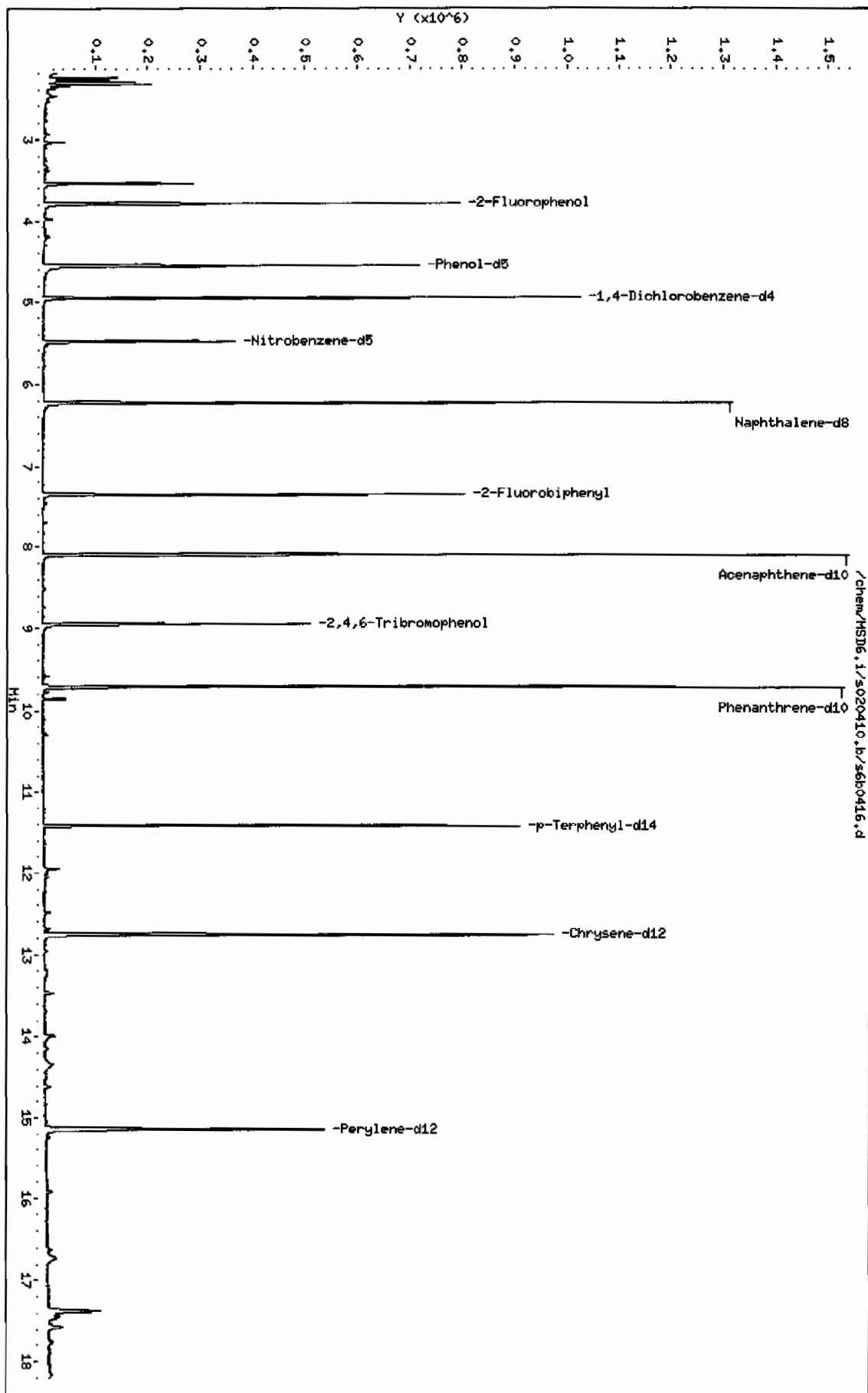
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	906982	40.000
* 98 Perylene-d12	15.146	900570	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.255	93146	4.10793076	156	0		0	10

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.298	123191	5.43298500	206	0		0	10
Unknown				CAS #:			
2.337	137888	6.08118469	230	0		0	10
Unknown Aldol Condensate				CAS #:			
3.542	232677	10.2615764	388	0		0	10
Unknown				CAS #:			
17.370	222084	9.86413443	374	0		0	98

Data File: /chem/MSD6.i/s020410.b/s6b0416.d
 Date: 04-FEB-2010 17:39
 Client ID: RE14-10-7680
 Sample Info: 1245387003194550111SVH111LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SHS

Instrument: MSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 04-FEB-2010 17:39

Client ID: RE14-10-7690

Instrument: MSD6.i

Sample Info: 1245387003194550111SVH11ILANL

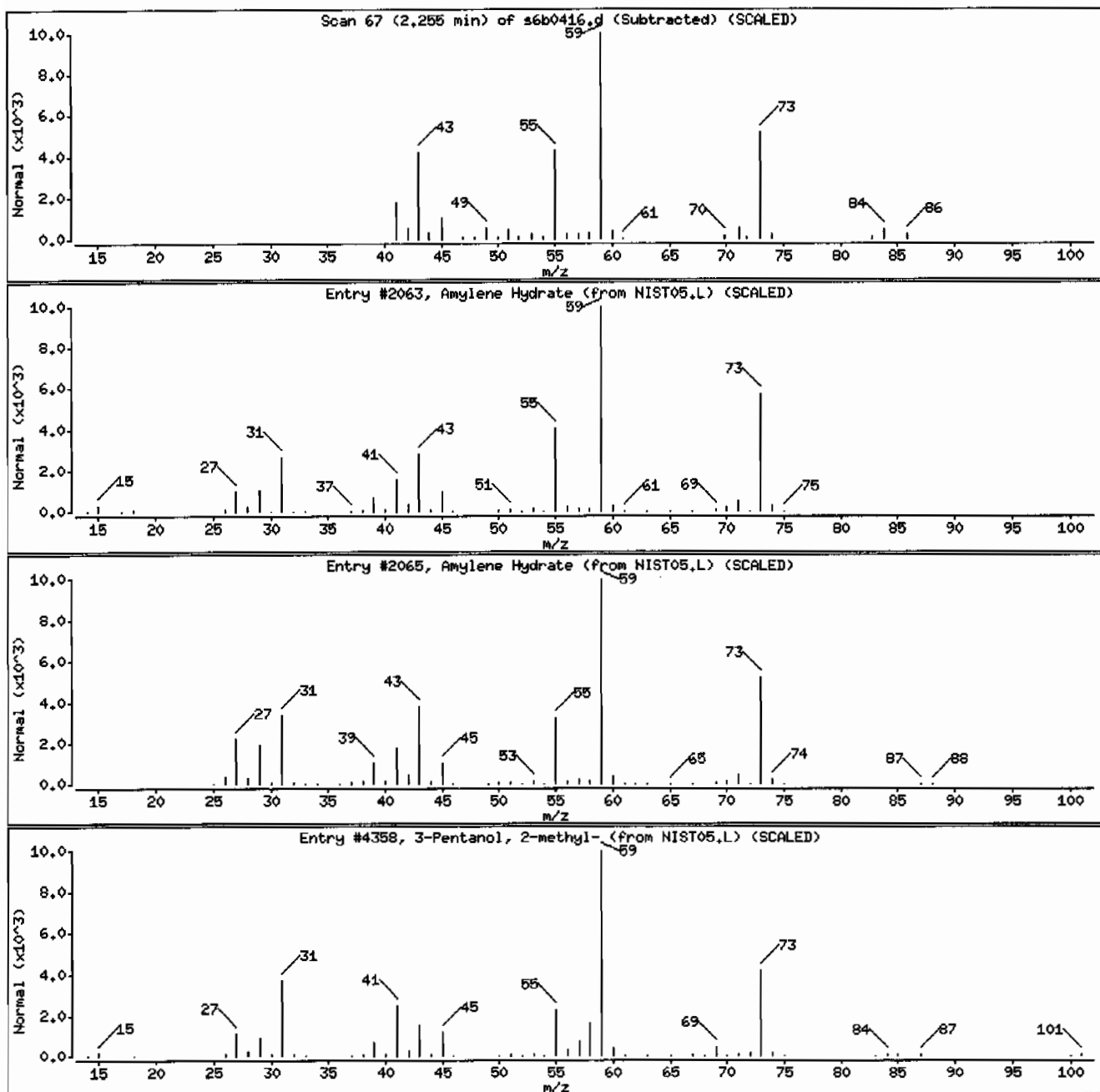
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Amylene Hydrate	75-85-4	NIST05.L	2063	72	C5H12O	88
Amylene Hydrate	75-85-4	NIST05.L	2065	72	C5H12O	88
3-Pentanol, 2-methyl-	565-67-3	NIST05.L	4358	39	C6H14O	102



Date : 04-FEB-2010 17:39

Client ID: RE14-10-7680

Instrument: HSD6.i

Sample Info: 1245387003194550111SVH11ILANL

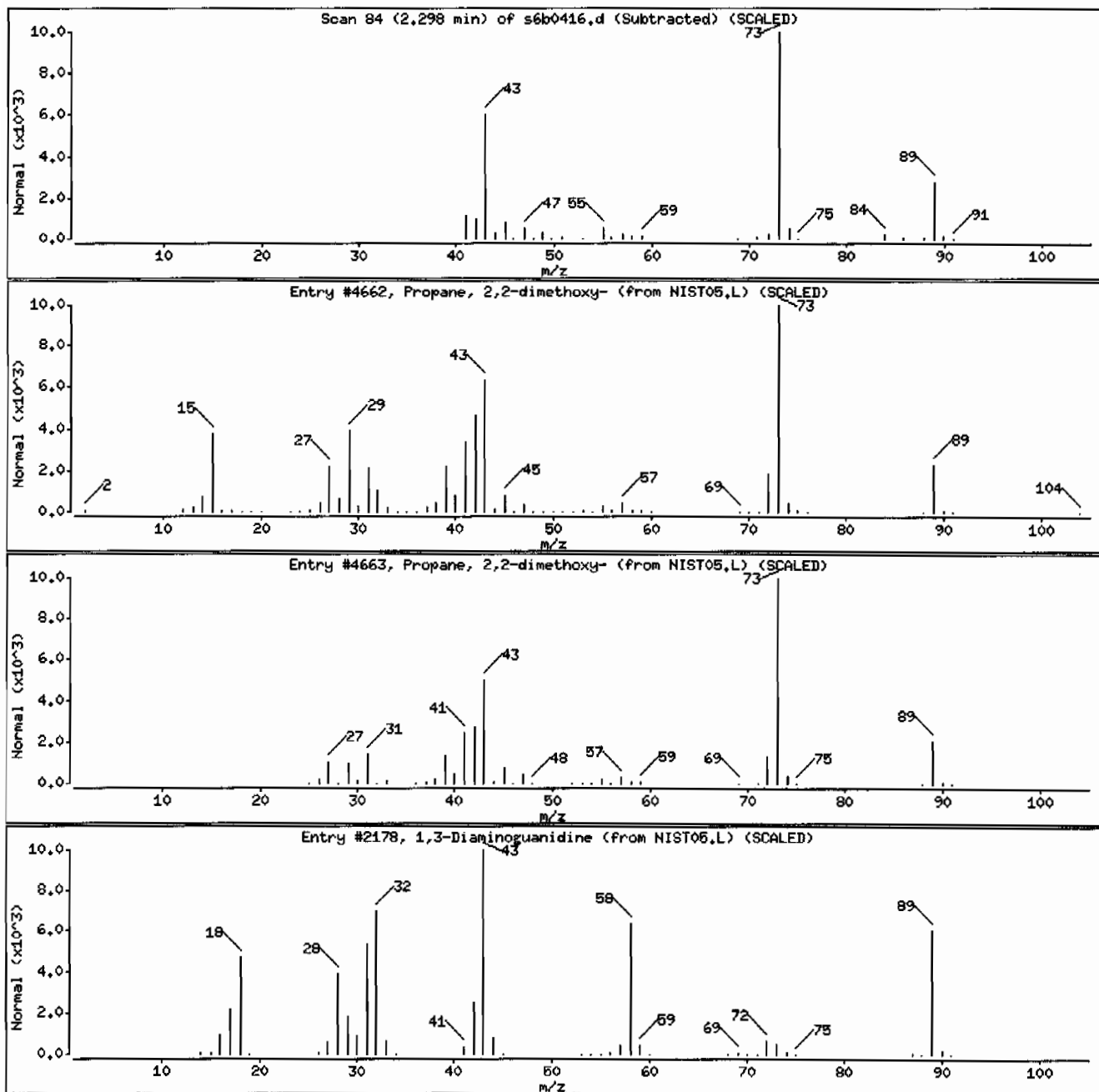
Volume Injected (uL): 0.5

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	40	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	40	C5H12O2	104
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	38	CH7N5	89



Date: 04-FEB-2010 17:39

Client ID: RE14-10-7680

Instrument: MSD6.i

Sample Info: 1245387003194550111SVMI11LANL

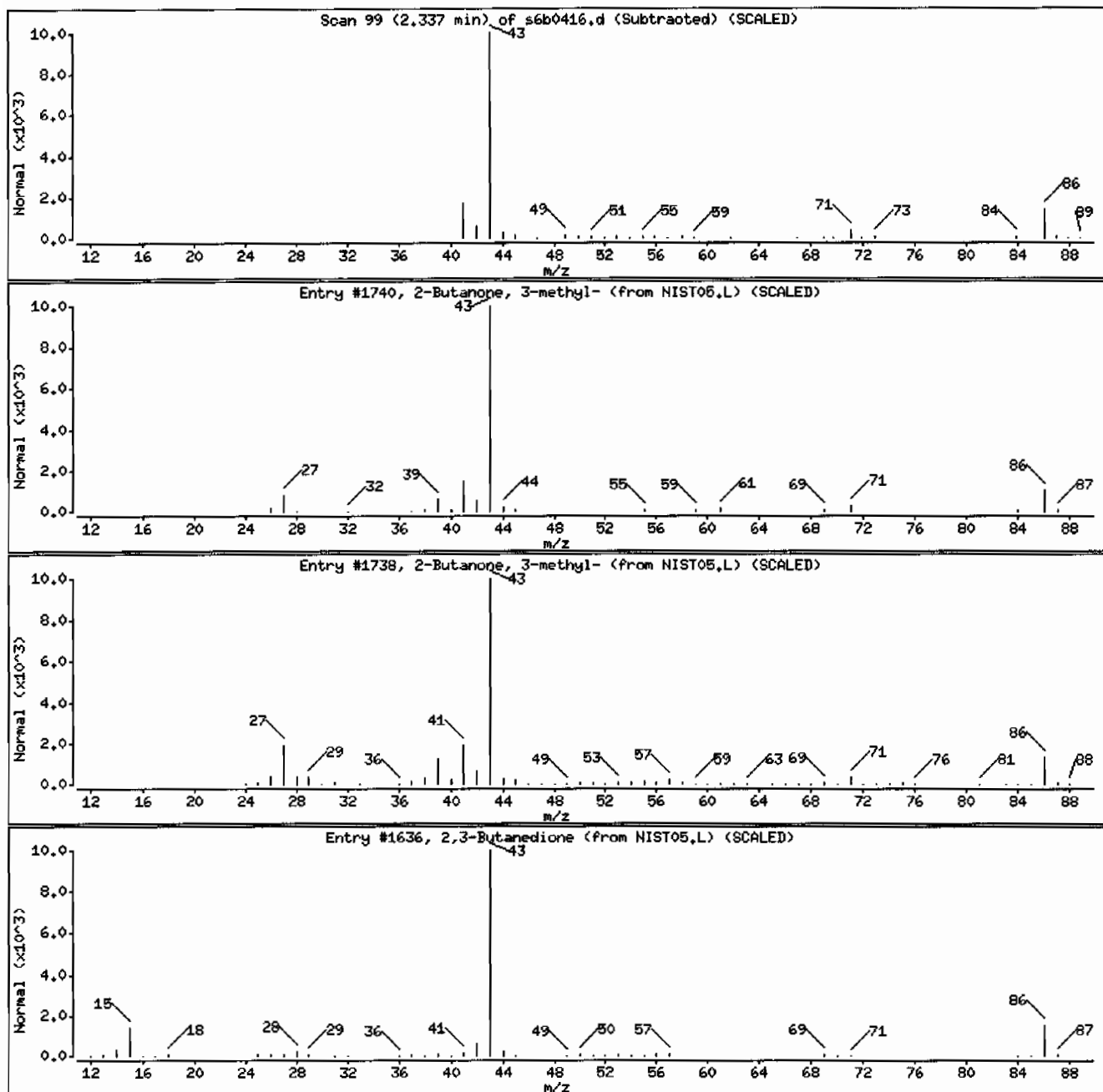
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	59	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	47	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1636	40	C4H6O2	86



Date : 04-FEB-2010 17:39

Client ID: RE14-10-7680

Instrument: MSD6.i

Sample Info: 1245387003194550111SVH11ILANL

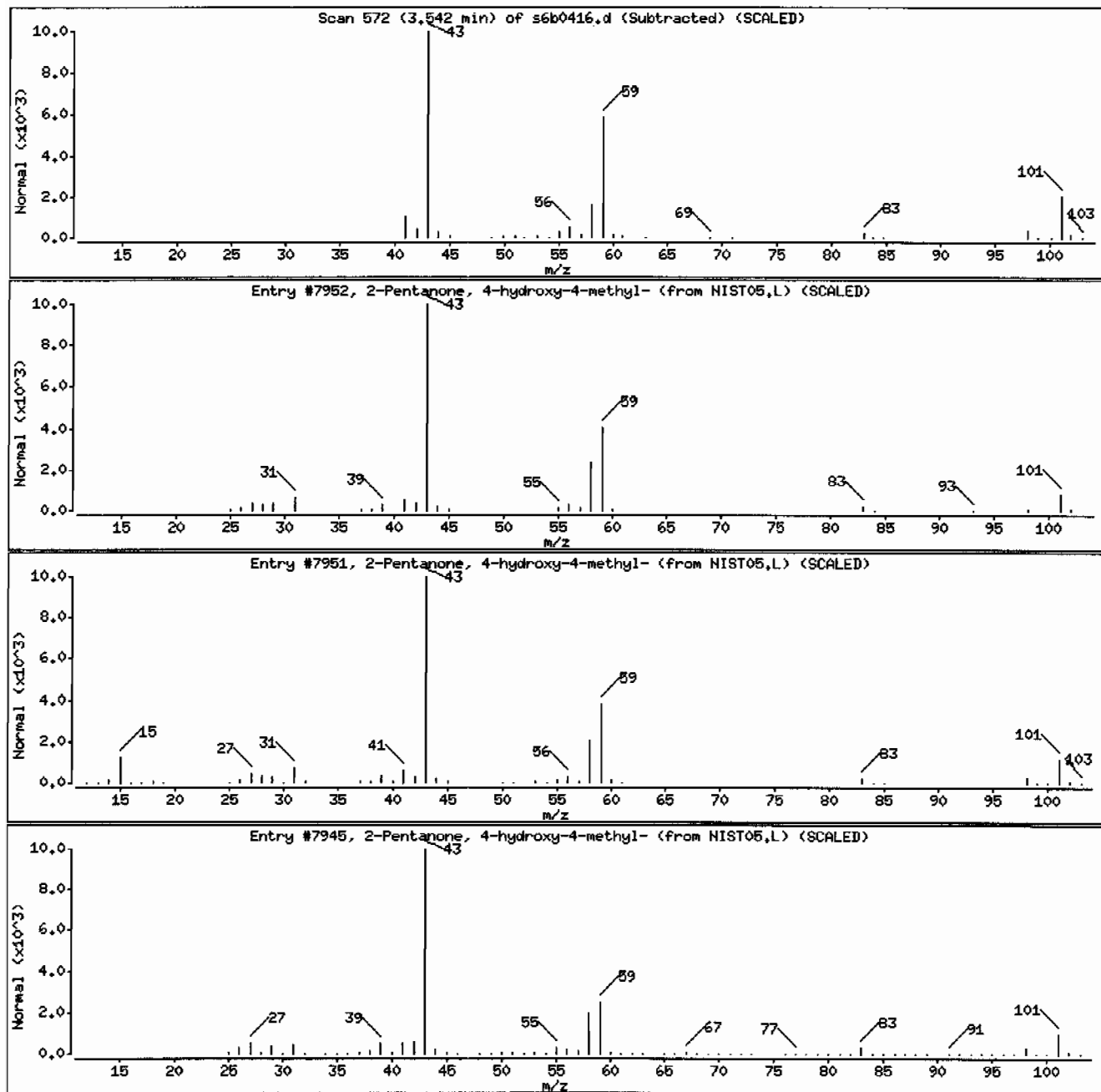
Volume Injected (uL): 0.5

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	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	32	C6H12O2	116



Date : 04-FEB-2010 17:39

Client ID: RE14-10-7680

Instrument: MSD6.1

Sample Info: 1245387003194550111SVMI1ILANL

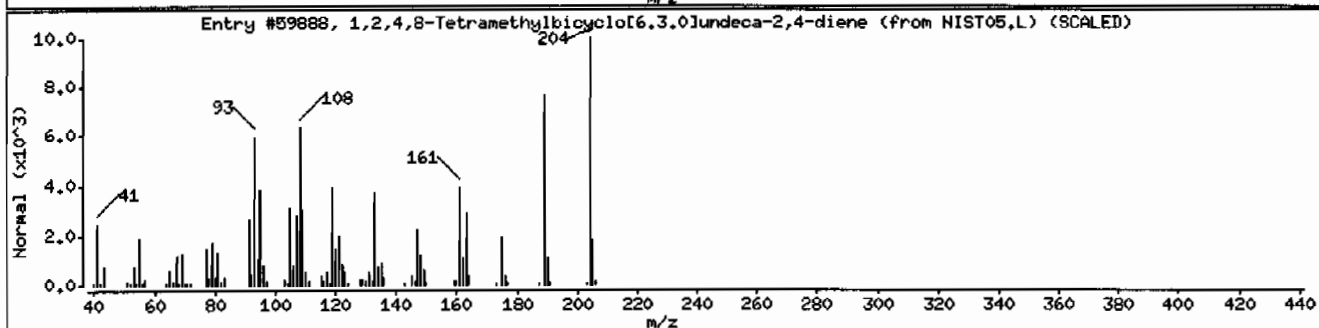
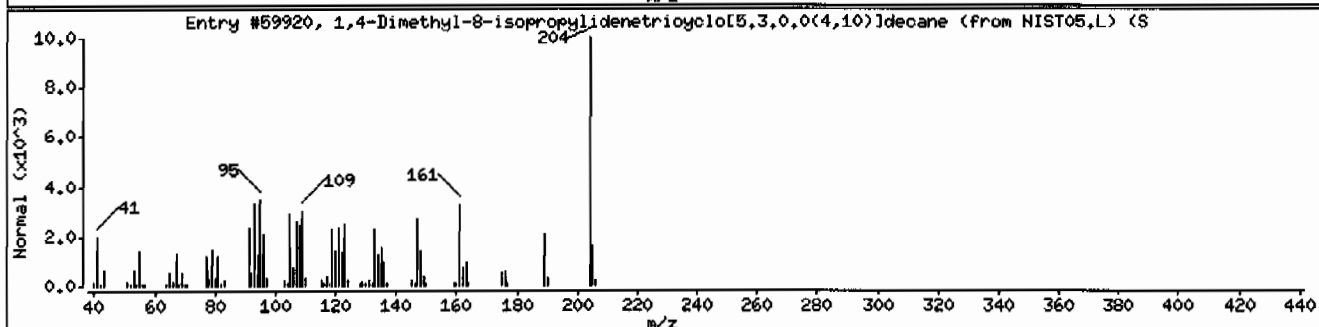
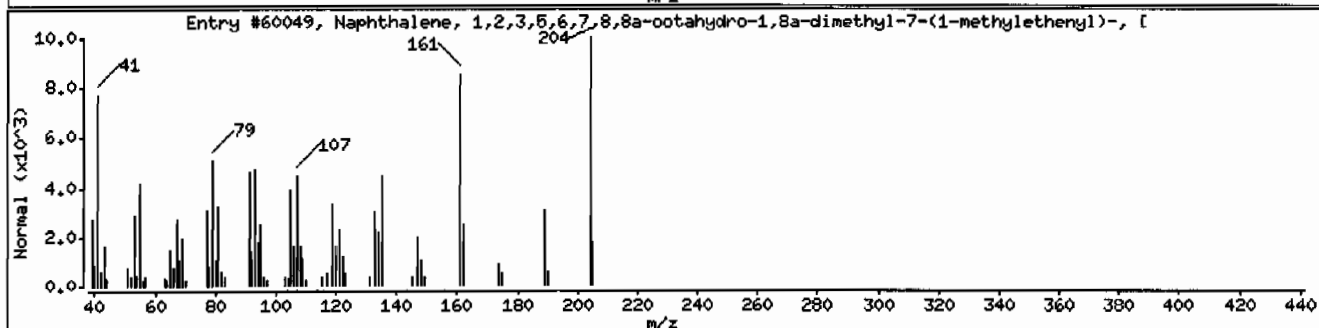
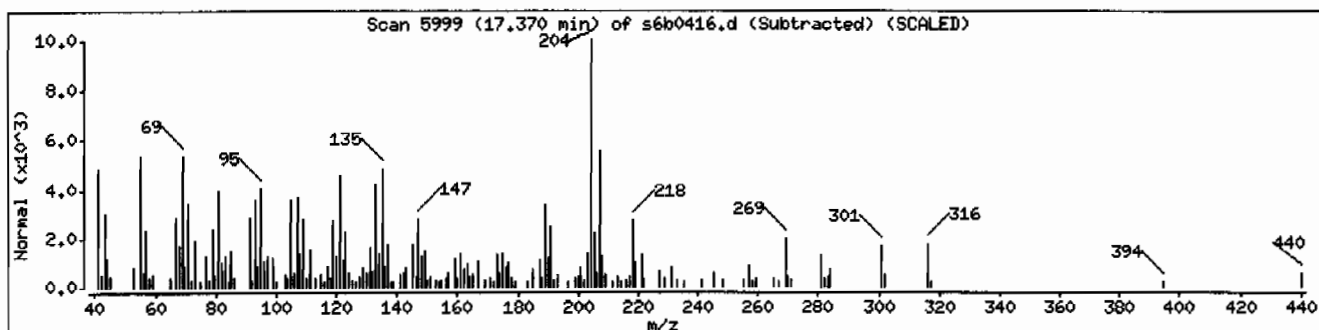
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	64	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.3.0.0(4,10)]decane	1000140-07-7	NIST05.L	59920	50	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	49	C15H24	204



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

SDG Number: 10-1384
Lab Sample ID: 245387008

Client ID: RE14-10-7681
Batch ID: 945501
Run Date: 02/04/2010 20:01
Prep Date: 01/26/2010 20:21
Data File: s6b0421.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl)ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429
99-09-2	<i>o</i> -Nitroaniline	U	429	ug/kg	85.9	429
	3-Nitroaniline					

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

SDG Number: 10-1384
Lab Sample ID: 245387008

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7681
Batch ID: 945501
Run Date: 02/04/2010 20:01
Prep Date: 01/26/2010 20:21
Data File: s6b0421.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	429	ug/kg	85.9	429
606-20-2	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
208-96-8	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
51-28-5	2,4-Dinitrophenol	U	859	ug/kg	163	859
132-64-9	Dibenzofuran	U	429	ug/kg	85.9	429
84-66-2	Diethylphthalate	U	429	ug/kg	85.9	429
86-73-7	Fluorene	U	42.9	ug/kg	12.9	42.9
7005-72-3	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
534-52-1	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429
100-01-6	4-Nitroaniline	U	429	ug/kg	129	429
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	429	ug/kg	85.9	429
122-66-7	Azobenzene	U	429	ug/kg	85.9	429
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
118-74-1	Hexachlorobenzene	U	429	ug/kg	85.9	429
85-01-8	Phenanthrene	U	42.9	ug/kg	12.9	42.9
120-12-7	Anthracene	U	42.9	ug/kg	8.59	42.9
84-74-2	Di-n-butylphthalate	U	429	ug/kg	85.9	429
206-44-0	Fluoranthene	U	42.9	ug/kg	12.9	42.9
85-68-7	Butylbenzylphthalate	U	429	ug/kg	85.9	429
56-55-3	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
91-94-1	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
218-01-9	Chrysene	U	42.9	ug/kg	12.9	42.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
117-84-0	Di-n-octylphthalate	U	429	ug/kg	85.9	429
205-99-2	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
207-08-9	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
50-32-8	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
53-70-3	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9
120-82-1	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.33	200	ug/kg		J
	Unknown Aldol Condensate	3.54	666	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387008

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7681
Batch ID: 945501
Run Date: 02/04/2010 20:01
Prep Date: 01/26/2010 20:21
Data File: s6b0421.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-80-1	Oleic Acid	11.02	306	ug/kg	83	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	214	ug/kg	99	NJ
630-02-4	Octacosane	14.61	256	ug/kg	87	NJ
	Unknown	17.36	292	ug/kg		J

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Data file : /chem/MSD6.i/s020410.b/s6b0421.d
Lab Smp Id: 245387008 Client Smp ID: RE14-10-7681
Inj Date : 04-FEB-2010 20:01
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387008|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	22.45430	% 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	4.948	4.951	(1.000)	154076	40.0000	
* 29 Naphthalene-d8	136	6.227	6.232	(1.000)	601539	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	350262	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	619238	40.0000	
* 91 Chrysene-d12	240	12.758	12.763	(1.000)	483537	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	293364	40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	251815	65.2639	2800
\$ 5 Phenol-d5	99	4.556	4.556	(0.921)	318355	65.3728	2810
\$ 20 Nitrobenzene-d5	82	5.483	5.491	(0.881)	135106	31.7504	1360
\$ 39 2-Fluorobiphenyl	172	7.354	7.354	(0.908)	309436	34.2807	1470
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	81990	80.2000	3440
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	355717	45.6174	1960

ION RATIO REPORT

SV REPORT

Data file: s6b0421.d

Report Date: 02/04/2010 21:18

Lab. ID: 245387008

SampleType: SAMPLE

Injection Date: 04-FEB-2010 20:01

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387008|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	7954	2.50	2.81	80-120	100	(T)
42	282	2.50	2.81	54-114	4	(QT)
43	2228	2.50	2.81	7- 67	28	(T)

4 Aniline				CAS#: 62-53-3		
66	14015	4.55	4.64	80-120	100	(T)
93	1578	4.61	4.64	236-296	11	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	19319	5.48	5.33	80-120	100	(T)
42	11575	5.49	5.33	35- 95	60	(T)

22 Isophorone				CAS#: 78-59-1		
82	135106	5.48	5.74	80-120	100	(T)
138	2783	6.22	5.74	0- 50	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	62385	8.10	7.78	80-120	100	(T)
164	350262	8.10	7.78	0- 40	561	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	45296	8.10	8.30	80-120	100	(T)
89	302	8.10	8.29	39- 99	1	(QT)
63	602	8.10	8.29	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53	Fluorene		CAS#: 86-73-7			
166	5379	8.95	8.69	80-120	100	(T)
165	5211	8.95	8.69	62-122	97	(T)
167	1713	8.95	8.69	0- 44	32	(T)

55	2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1			
198	153	8.94	8.74	80-120	100	(T)
105	689	8.95	8.74	9- 69	449	(QT)
51	521	8.95	8.74	18- 78	339	(QT)

61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	5711	8.95	9.21	80-120	100	(T)
141	39802	8.95	9.21	50-110	697	(QT)
250	11264	8.95	9.21	68-128	197	(QT)

99	Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5			
276	266	17.18	17.17	80-120	100	()
138	122	17.20	17.18	6- 66	46	()

100	Dibenzo(a,h)anthracene		CAS#: 53-70-3			
278	147	17.21	17.20	80-120	100	()
139	181	17.35	17.20	0- 30	123	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020410.b/s6b0421.d
Report Date: 05-Feb-2010 09:19

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0421.d
Lab Smp Id: 245387008 Client Smp ID: RE14-10-7681
Inj Date : 04-FEB-2010 20:01
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387008|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.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	22.45430	% moisture

Cpnd Variable

Local Compound Variable

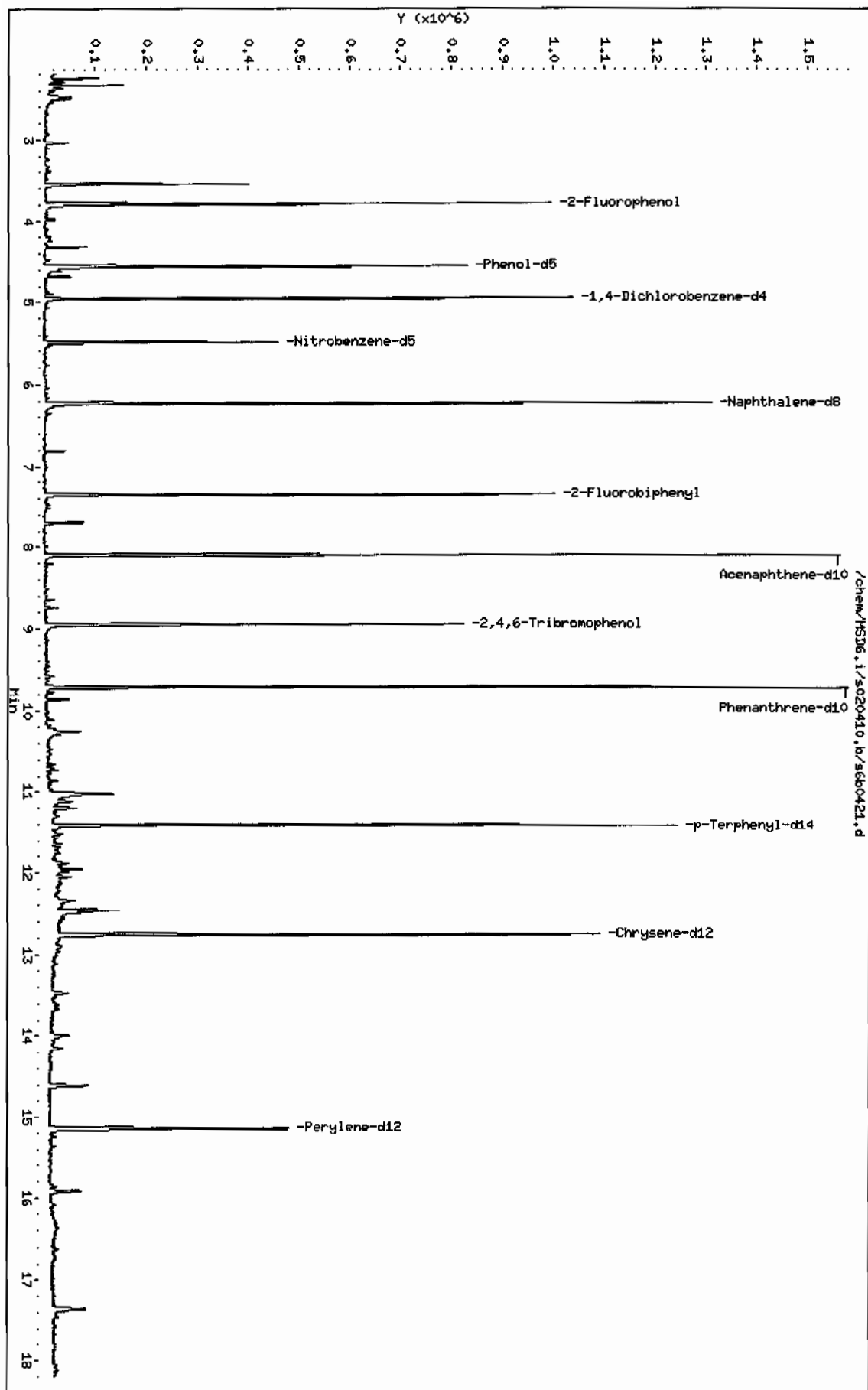
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	894747	40.000
* 67 Phenanthrene-d10	9.711	1515719	40.000
* 91 Chrysene-d12	12.758	1284014	40.000
* 98 Perylene-d12	15.146	818363	40.000

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 #:		
2.334	104024	4.65043104	200	0		0	10
Unknown Aldol Condensate					CAS #:		
3.544	346767	15.5023628	666	0		0	10
Oleic Acid					CAS #: 112-80-1		
11.020	269660	7.11635942	306	83	NIST05.L	113354	67
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
12.457	160012	4.98475241	214	99	NIST05.L	125034	91
Octacosane					CAS #: 630-02-4		
14.611	122156	5.97076346	256	87	NIST05.L	169721	98
Unknown					CAS #:		
17.360	139011	6.79456225	292	0		0	98

Data File: /chem/HSD6.i/s020410.b/s60421.d
 Date: 04-FEB-2010 20:04
 Client ID: RE14-10-7681
 Sample Info: 1245387008194550111SVH11LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5HS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: MSD6.i

Sample Info: 1245387008194550111SVMI11LANL

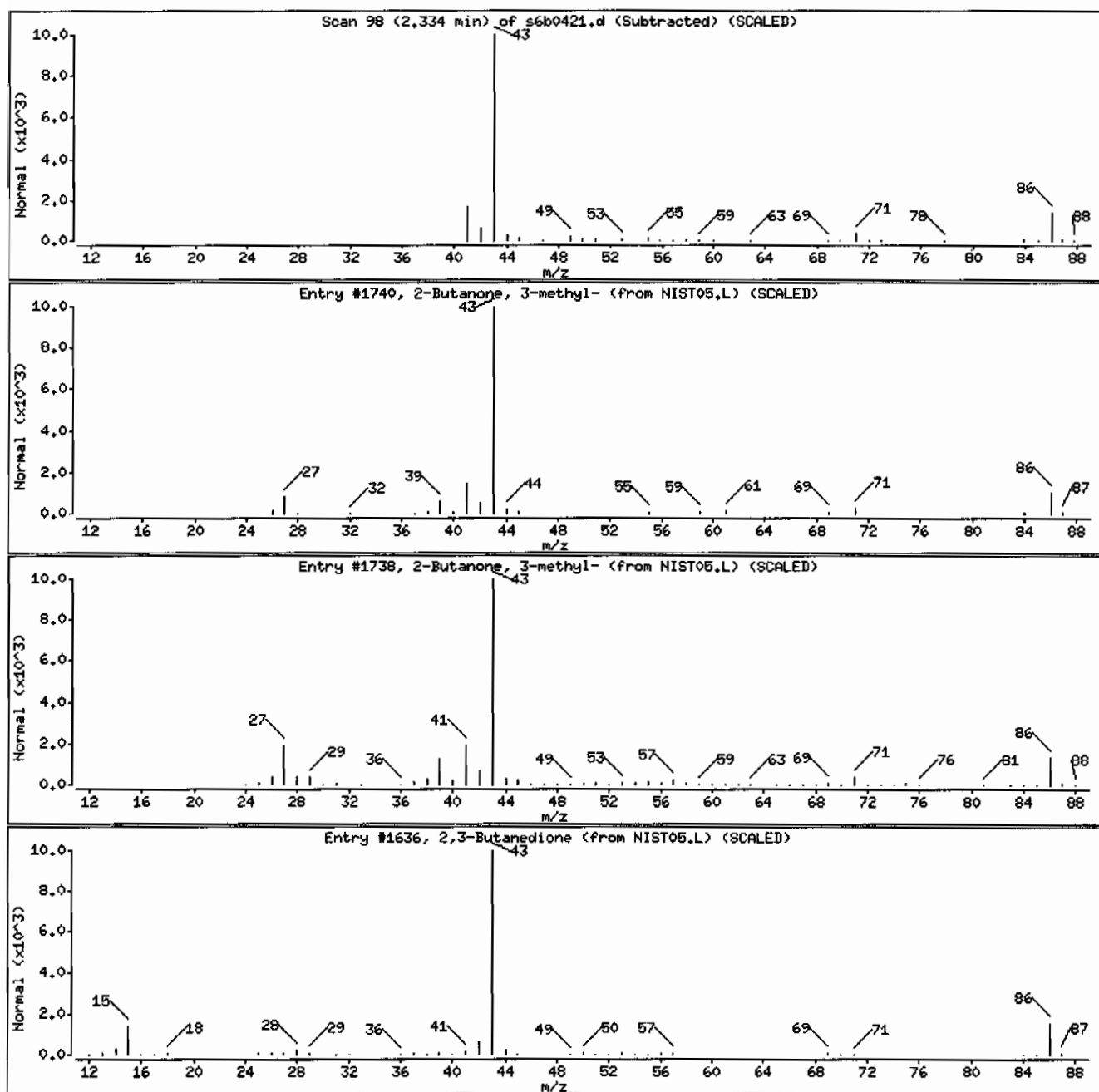
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	59	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	47	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1636	40	C4H6O2	86



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: MSD6.i

Sample Info: 1245387008194550111SVMI11LANL

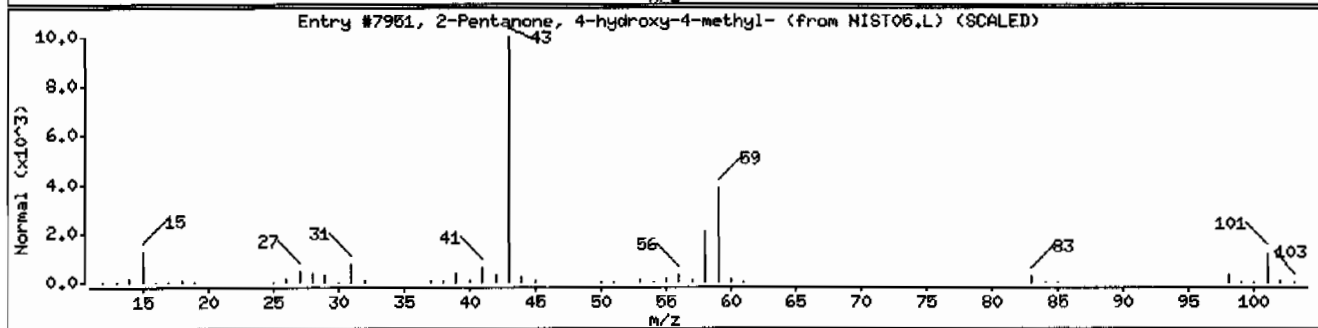
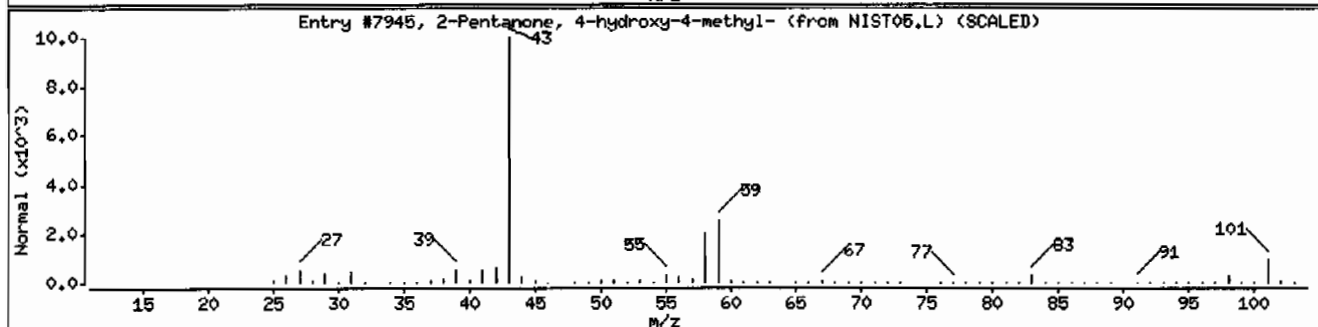
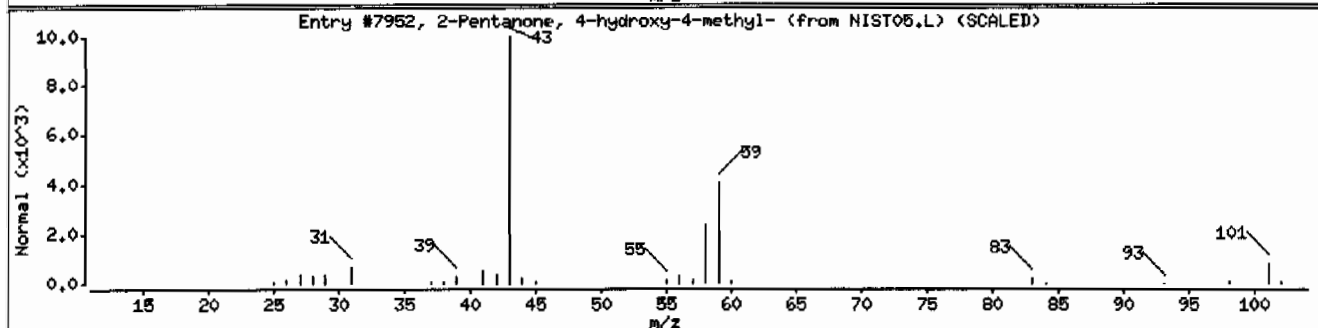
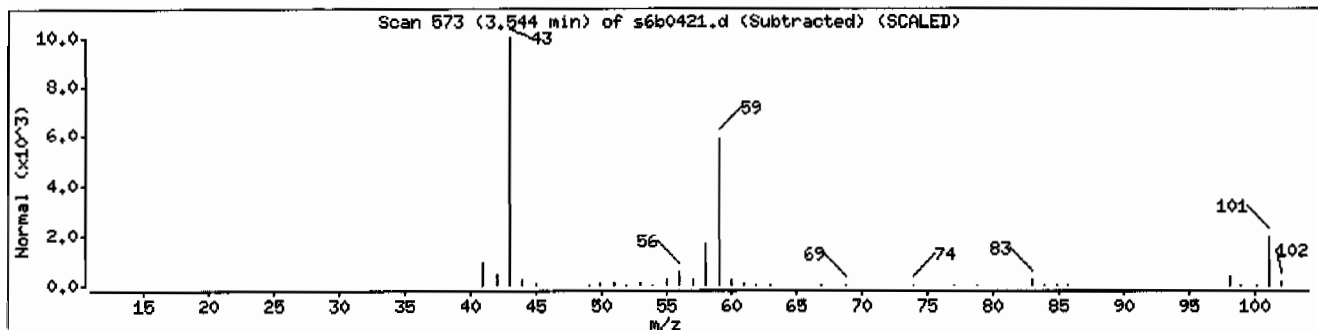
Volume Injected (uL): 0.5

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	56	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	7951	40	C6H12O2	116



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: MSD6.1

Sample Info: 1245387008194550111SVH11ILANL

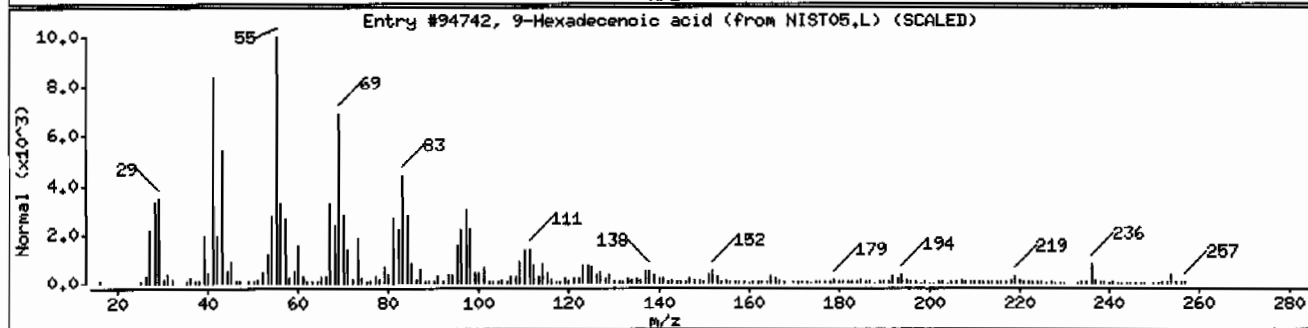
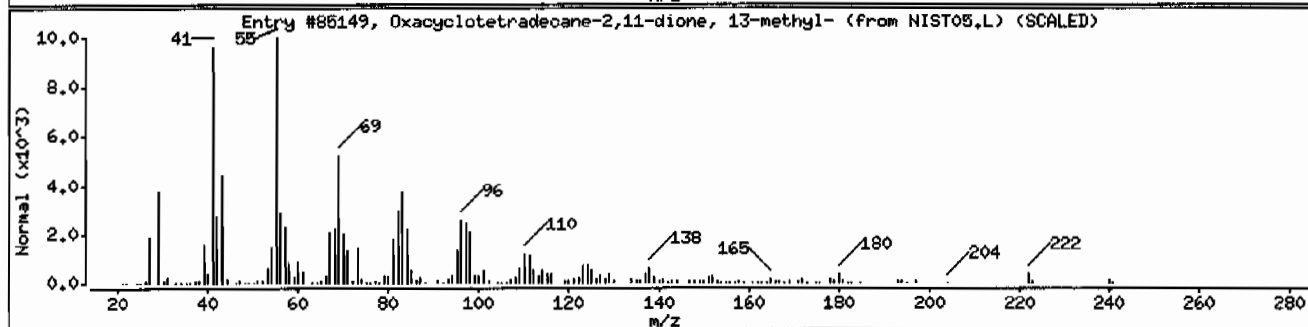
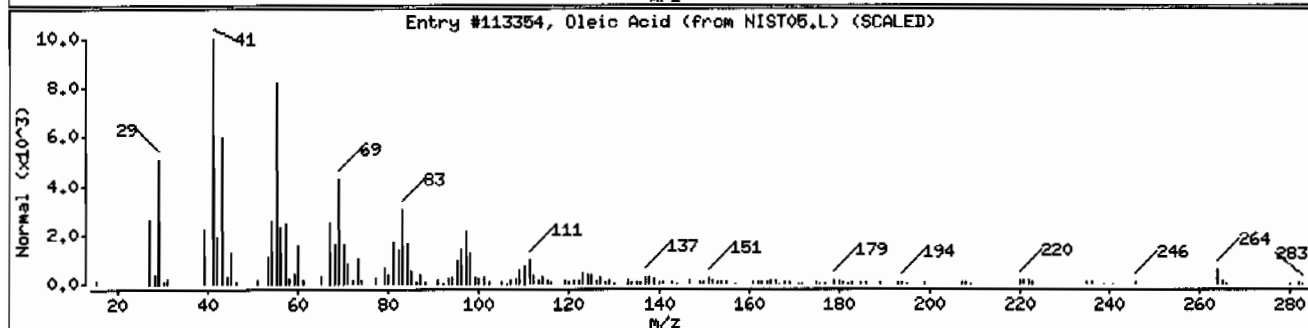
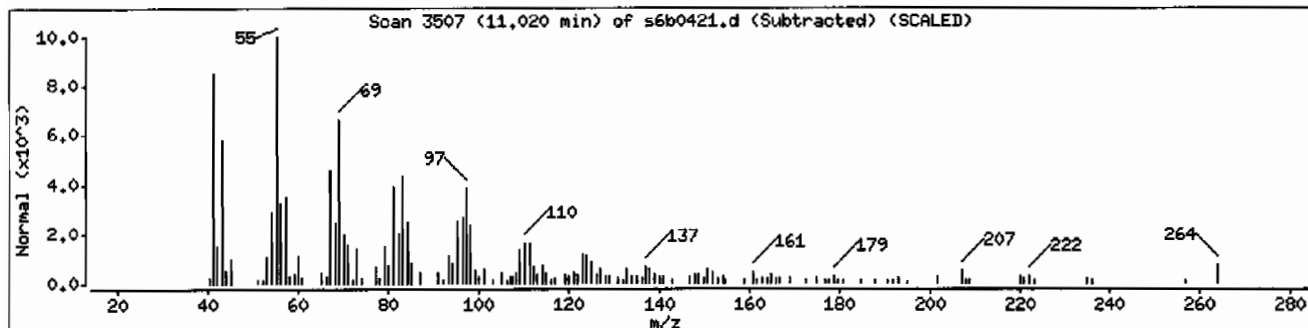
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113354	83	C18H34O2	282
Oxacyclotetradecane-2,11-dione, 13-methy	74685-36-2	NIST05.L	85149	52	C14H24O3	240
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	49	C16H30O2	254



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: HSD6.i

Sample Info: I245387008194550111SVH11ILANL

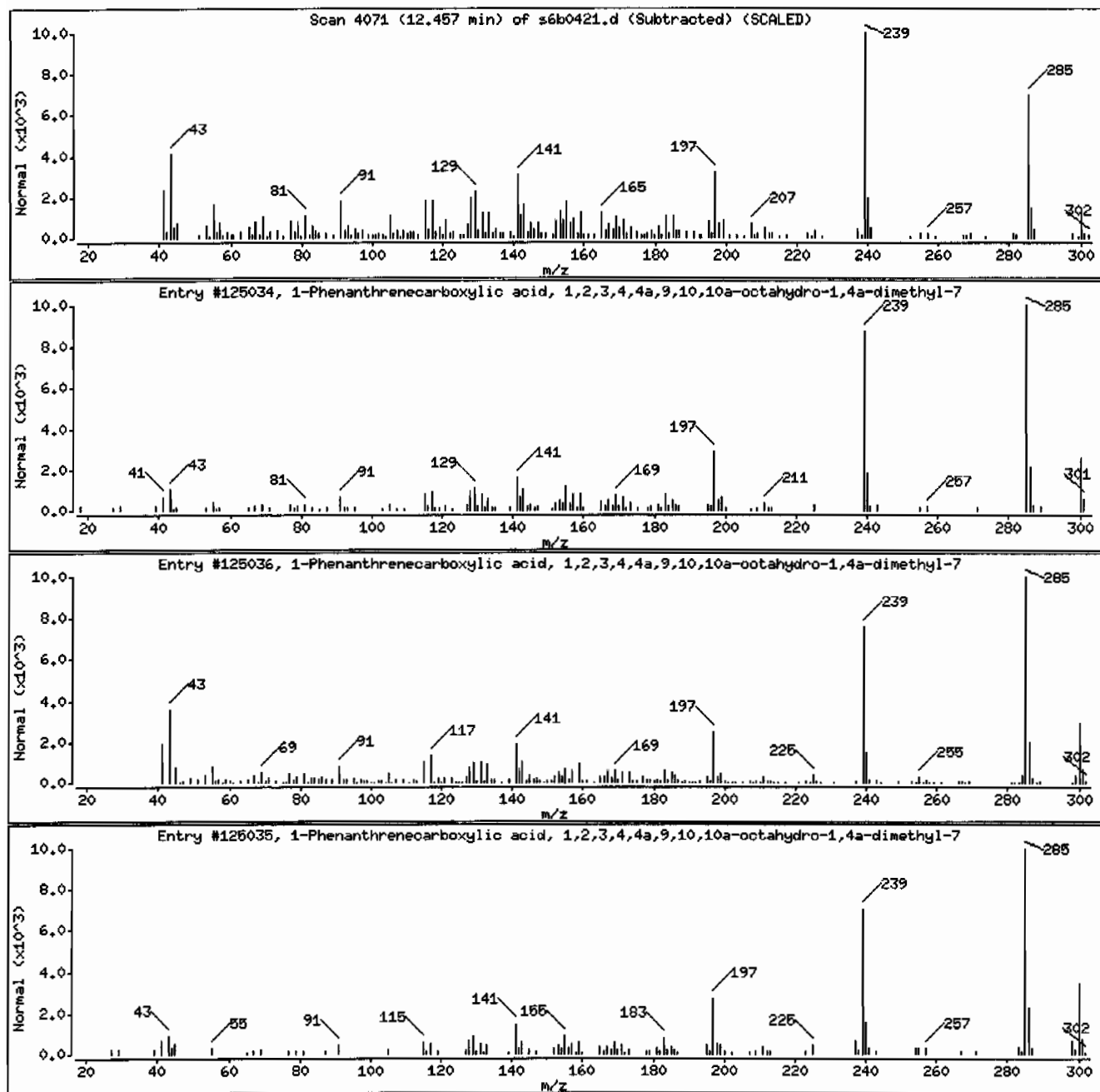
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	99	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	89	C20H28O2	300



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: MSD6.1

Sample Info: 1245387008194550111SVMI1ILANL

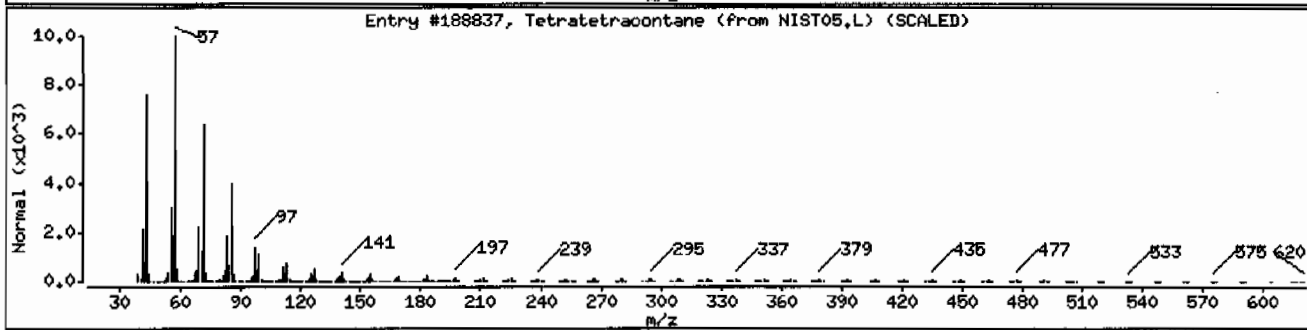
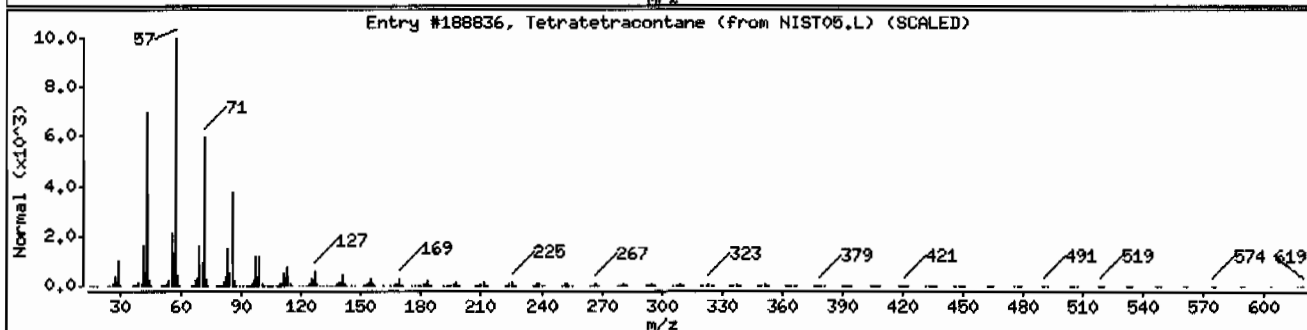
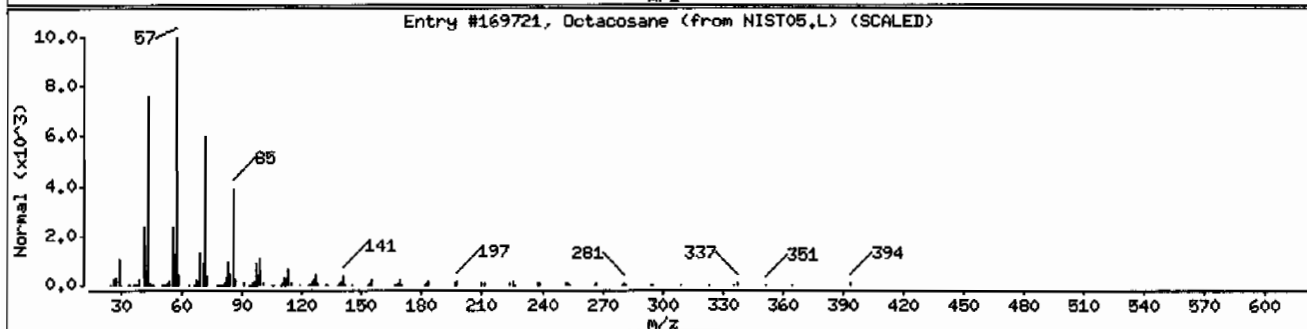
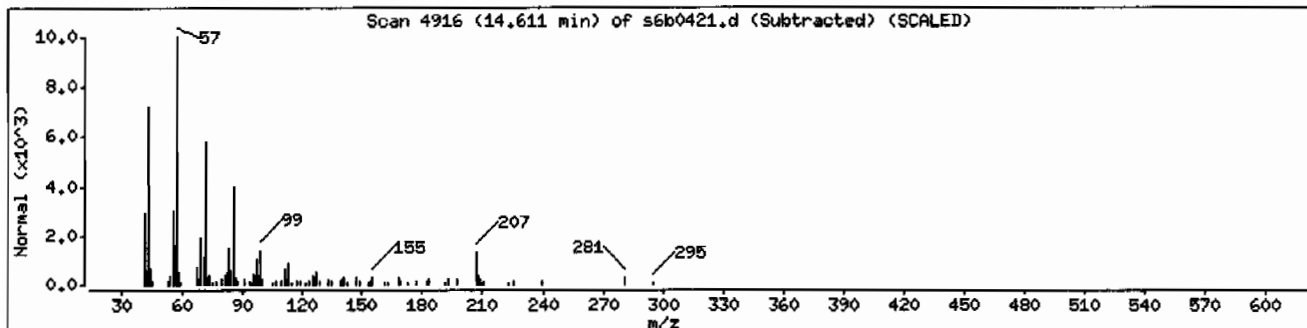
Volume Injected (uL): 0.5

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	C ₂₈ H ₅₈	394
Tetratetracontane	7098-22-8	NIST05.L	188836	87	C ₄₄ H ₉₀	619
Tetratetracontane	7098-22-8	NIST05.L	188837	87	C ₄₄ H ₉₀	619



Date : 04-FEB-2010 20:01

Client ID: RE14-10-7681

Instrument: MSD6.i

Sample Info: 1245387008194550111SVH111LANL

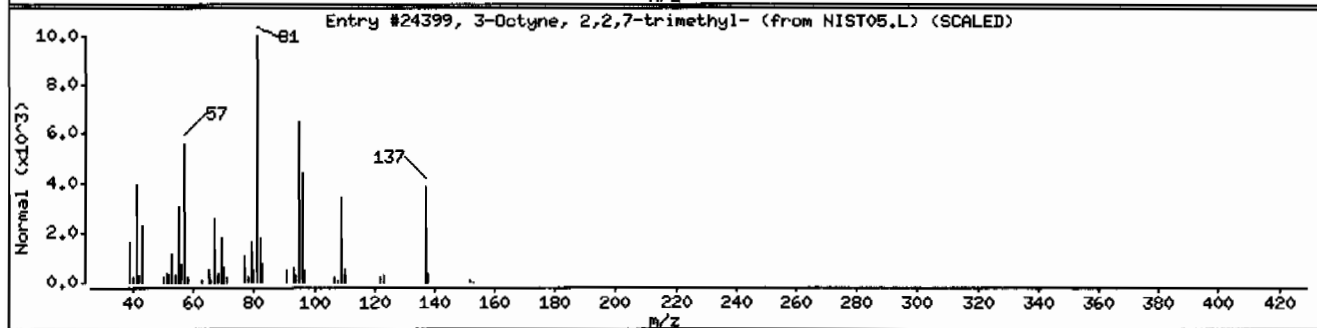
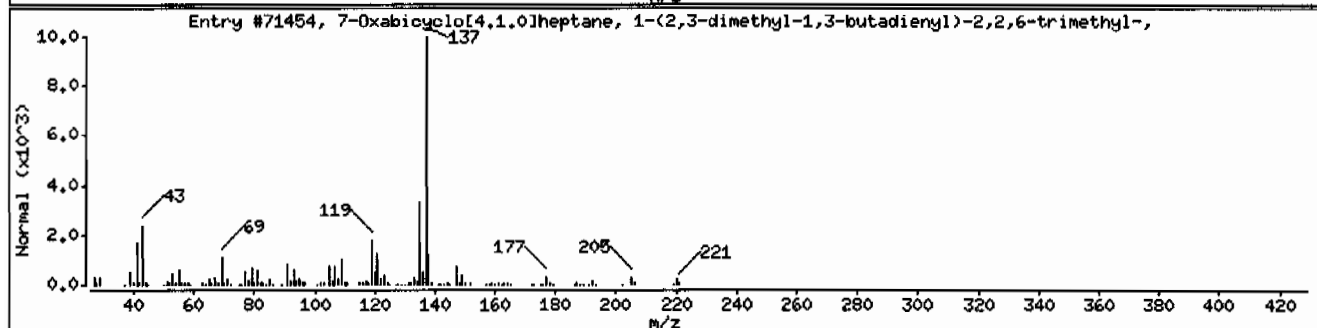
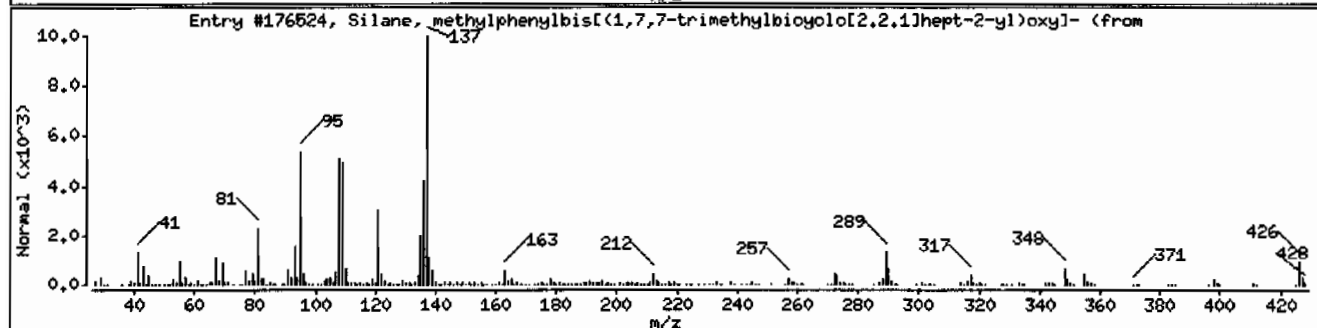
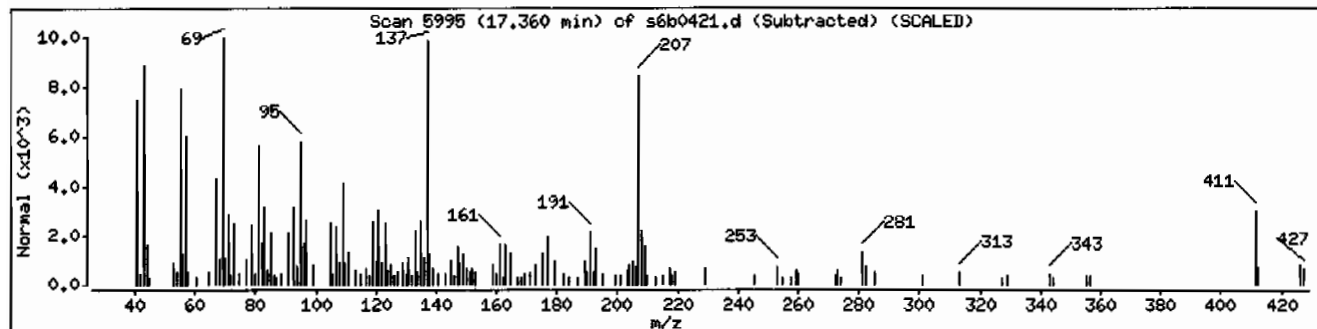
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	41	C ₂₇ H ₄₂ O ₂ Si	426
7-Oxabicyclo[4.1.0]heptane, 1-(2,3-dimet	59744-12-6	NIST05.L	71454	38	C ₁₅ H ₂₄ O	220
3-Octyne, 2,2,7-trimethyl-	55402-13-6	NIST05.L	24399	38	C ₁₁ H ₂₀	152



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

Page 1 of 3

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7682
Batch ID: 945501
Run Date: 02/04/2010 20:29
Prep Date: 01/26/2010 20:21
Data File: s6b0422.d

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

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7682
Batch ID: 945501
Run Date: 02/04/2010 20:29
Prep Date: 01/26/2010 20:21
Data File: s6b0422.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.3	159	ug/kg		J
	Unknown	2.34	171	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387009

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.1
Analyst: NAG1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5131-66-8	Unknown Aldol Condensate	3.54	537	ug/kg	90	JA
	2-Propanol, 1-butoxy-	4.3	798	ug/kg		NJ
	Unknown	12.02	244	ug/kg		J
	Unknown	12.22	161	ug/kg		J
	Unknown	17.37	518	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0422.d
Lab Smp Id: 245387009 Client Smp ID: RE14-10-7682
Inj Date : 04-FEB-2010 20:29
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387009|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.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	12.84060	% 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	4.948	4.951	(1.000)	164420	40.0000	
* 29 Naphthalene-d8	136	6.227	6.232	(1.000)	629987	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	363553	40.0000	
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	641877	40.0000	
* 91 Chrysene-d12	240	12.756	12.763	(1.000)	511516	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	355438	40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	258695	62.8290	2400
\$ 5 Phenol-d5	99	4.553	4.556	(0.920)	315605	60.7309	2320
\$ 20 Nitrobenzene-d5	82	5.483	5.491	(0.881)	140010	31.4170	1200
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	304236	32.4725	1240
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	75121	70.7946	2700
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	347124	42.0805	1610

ION RATIO REPORT

SV REPORT

Data file: s6b0422.d

Report Date: 02/04/2010 21:18

Lab. ID: 245387009

SampleType: SAMPLE

Injection Date: 04-FEB-2010 20:29

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387009|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	8332	2.47	2.81	80-120	100	(T)
42	755	2.48	2.81	54-114	9	(QT)
43	1745	2.47	2.81	7- 67	21	(T)

4 Aniline				CAS#: 62-53-3		
66	14386	4.55	4.64	80-120	100	(T)
93	1433	4.61	4.64	236-296	10	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	20119	5.48	5.33	80-120	100	(T)
42	11548	5.48	5.33	35- 95	57	(T)

22 Isophorone				CAS#: 78-59-1		
82	140010	5.48	5.74	80-120	100	(T)
138	3142	6.23	5.74	0- 50	2	(T)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	2947	7.70	7.50	80-120	100	(T)
164	200	7.70	7.50	2- 62	7	(T)
127	1025	7.35	7.50	7- 67	35	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	63317	8.10	7.78	80-120	100	(T)
164	363553	8.10	7.78	0- 40	574	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	47218	8.10	8.30	80-120	100	(T)
89	432	8.10	8.29	39- 99	1	(QT)
63	229	8.10	8.29	15- 75	0	(QT)

53 Fluorene		CAS#: 86-73-7				
166	4953	8.95	8.69	80-120	100	(T)
165	5209	8.95	8.69	62-122	105	(T)
167	1072	8.95	8.69	0- 44	22	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	136	8.95	8.74	80-120	100	(T)
105	557	8.95	8.74	9- 69	408	(QT)
51	416	8.95	8.74	18- 78	304	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	127	17.20	17.17	80-120	100	()
138	2691	17.37	17.18	6- 66	2105	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020410.b/s6b0422.d
Report Date: 05-Feb-2010 09:19

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0422.d
Lab Smp Id: 245387009 Client Smp ID: RE14-10-7682
Inj Date : 04-FEB-2010 20:29
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387009|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	12.84060	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	949081	40.000
* 91 Chrysene-d12	12.756	1370477	40.000
* 98 Perylene-d12	15.146	983176	40.000

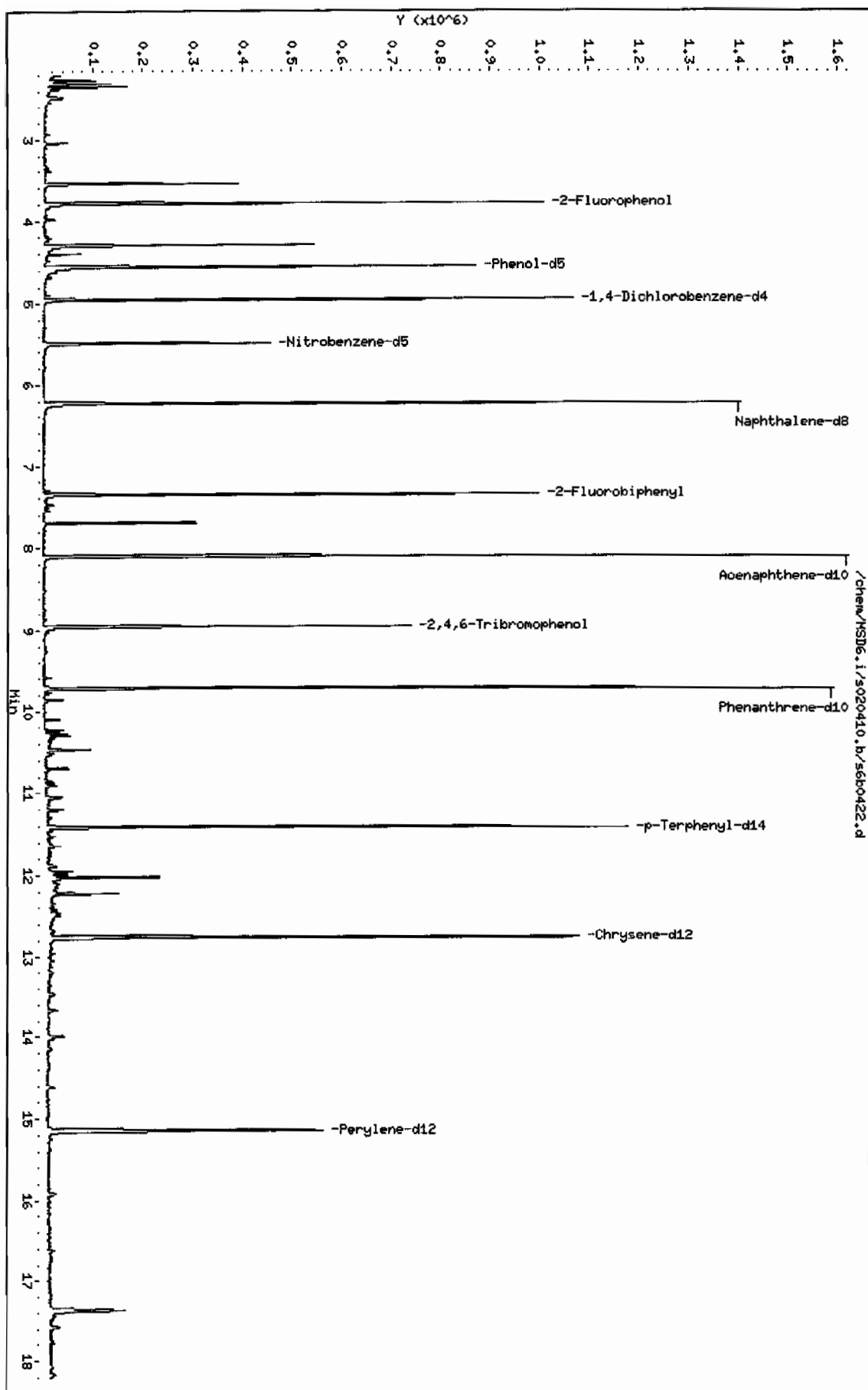
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RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.303	98881	4.16742877	159	0		0	10
Unknown					CAS #:		
2.342	106248	4.47793638	171	0		0	10
Unknown Aldol Condensate					CAS #:		
3.542	333746	14.06606668	537	0		0	10
2-Propanol, 1-butoxy-					CAS #: 5131-66-8		
4.296	495749	20.8938564	798	90	NIST05.L	13973	10
Unknown					CAS #:		
12.024	218731	6.38408296	244	0		0	91
Unknown					CAS #:		
12.221	144812	4.22660592	161	0		0	91
Unknown					CAS #:		
17.368	333358	13.5625091	518	0		0	98

Data File: /chem/HSD6.i/s020410.b/s60422.d
Date : 04-FEB-2010 20:29
Client ID: RE14-10-7682
Sample Info: 124538700919455011(SVH11)LANL
Volume Injected (uL): 0.5
Column phase: JMW DB-SHS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: 1245387009194550111SVH111LANL

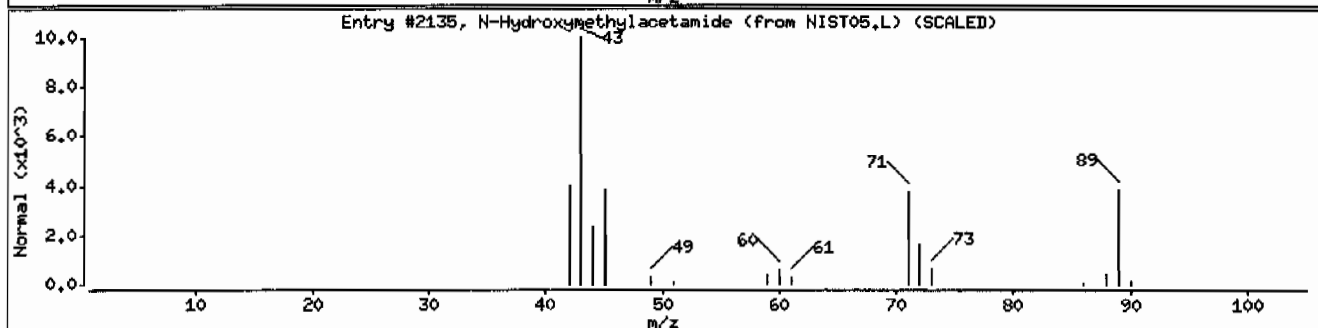
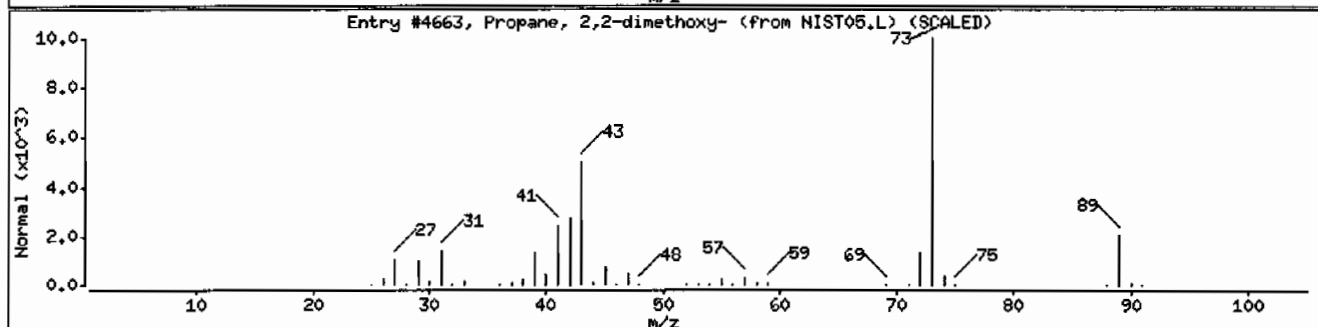
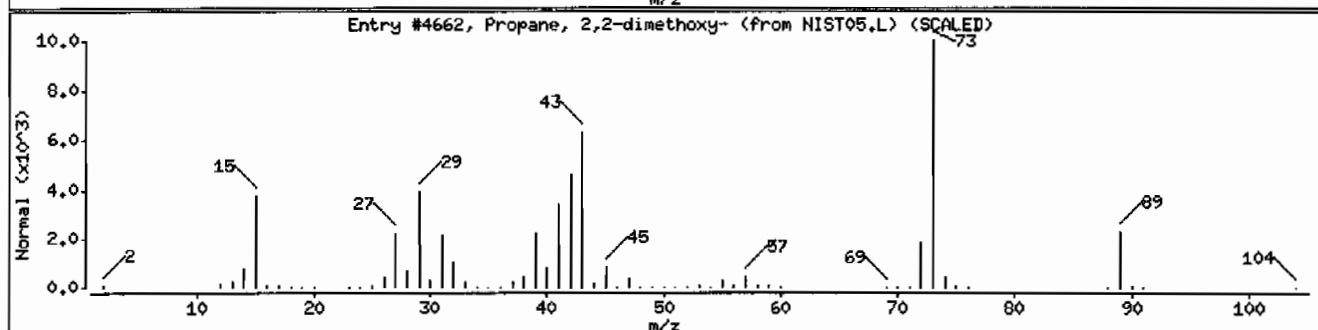
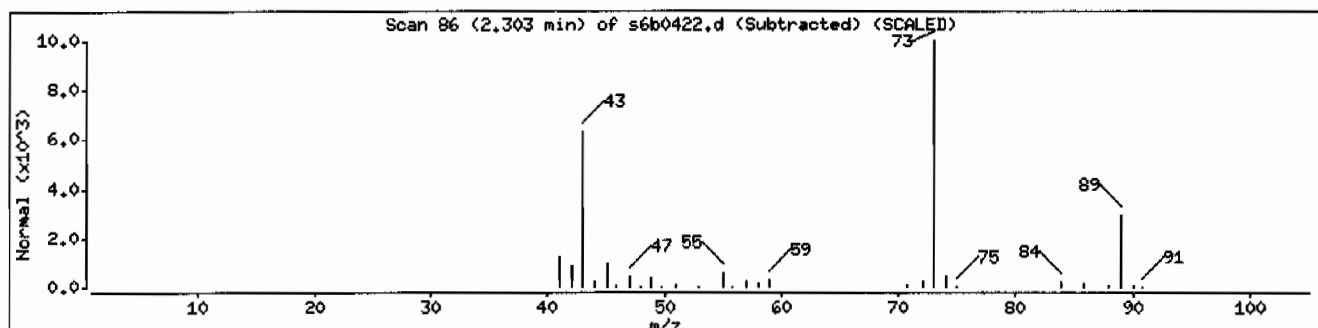
Volume Injected (uL): 0.5

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	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	50	C5H12O2	104
N-Hydroxymethylacetamide	625-51-4	NIST05.L	2135	27	C3H7NO2	89



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: I245387009I945501I1ISVMI1ILANL

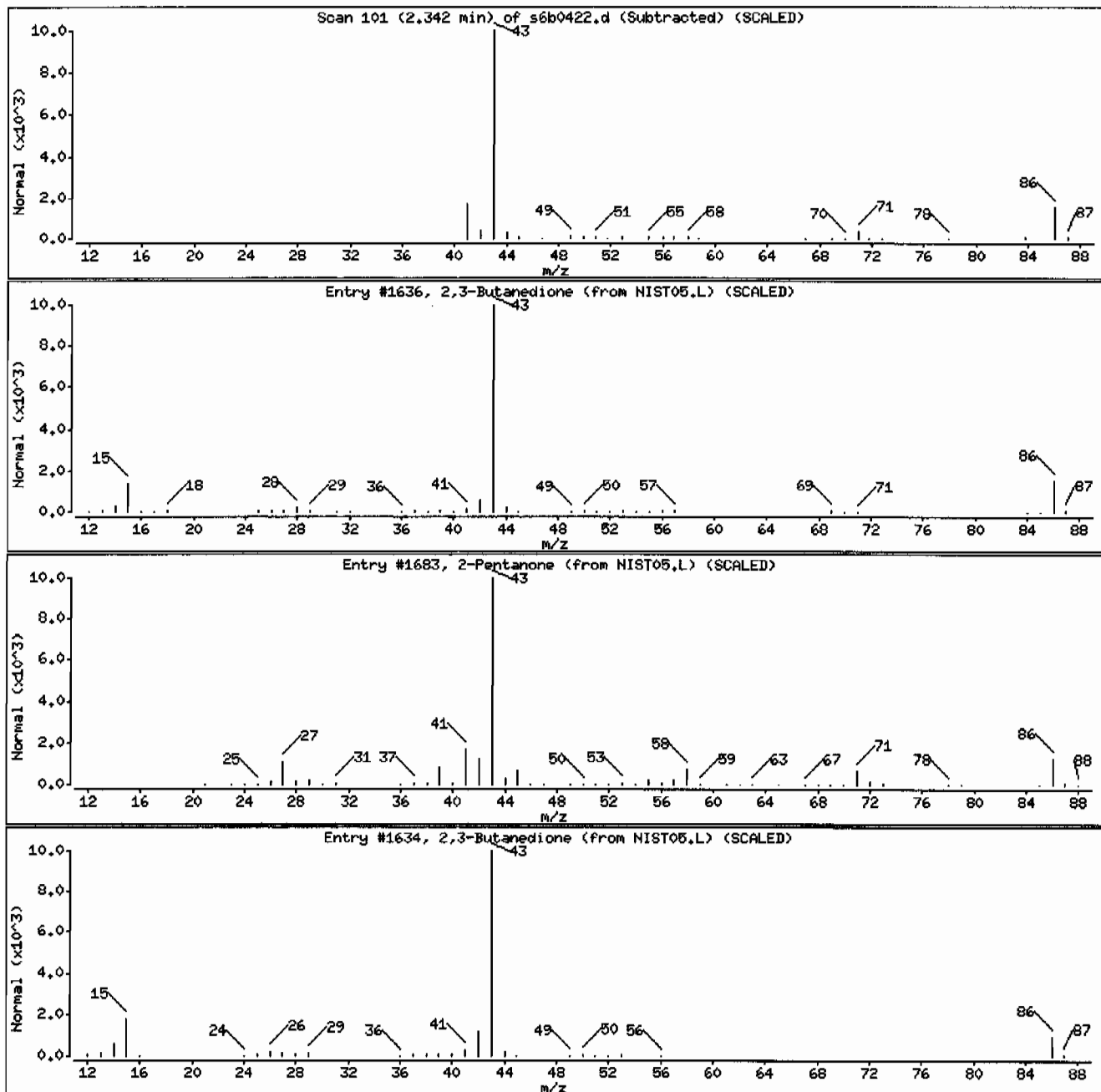
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione	431-03-8	NIST05.L	1636	9	C4H6O2	86
2-Pentanone	107-87-9	NIST05.L	1683	9	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1634	9	C4H6O2	86



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: 1245387009194550111SVMI11LANL

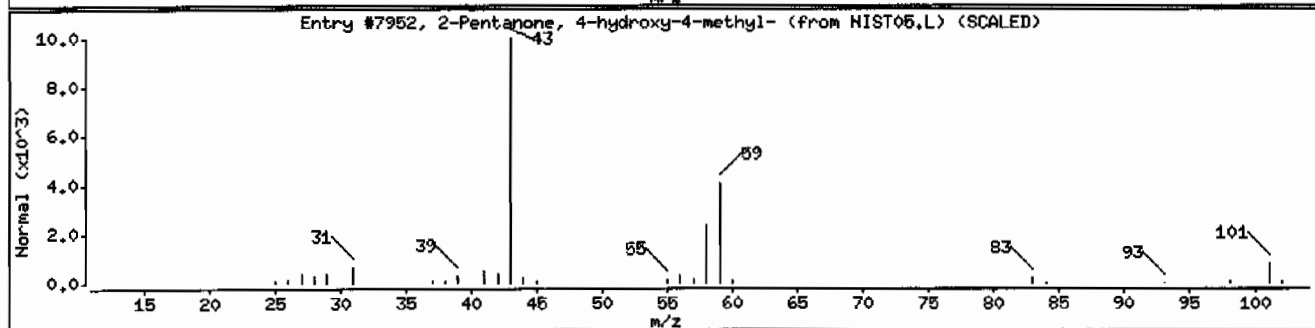
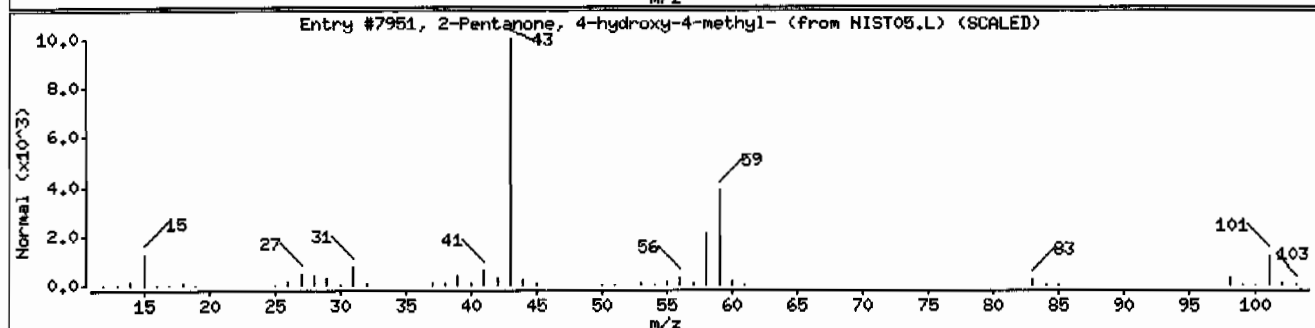
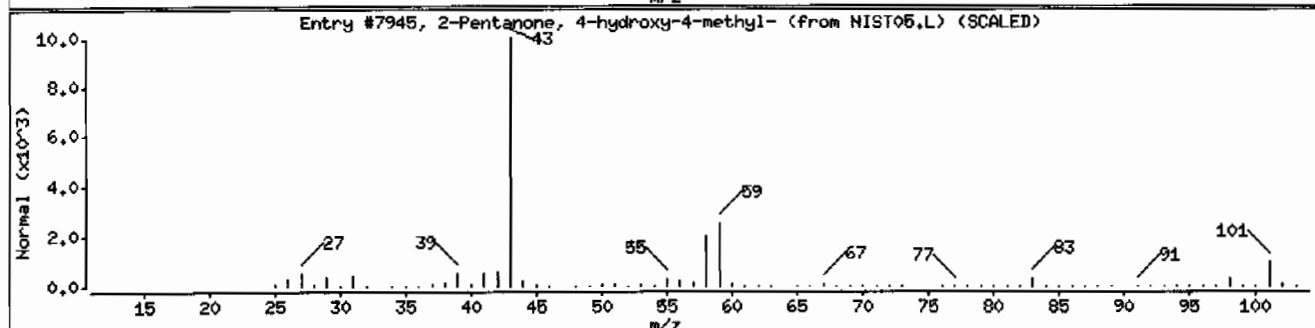
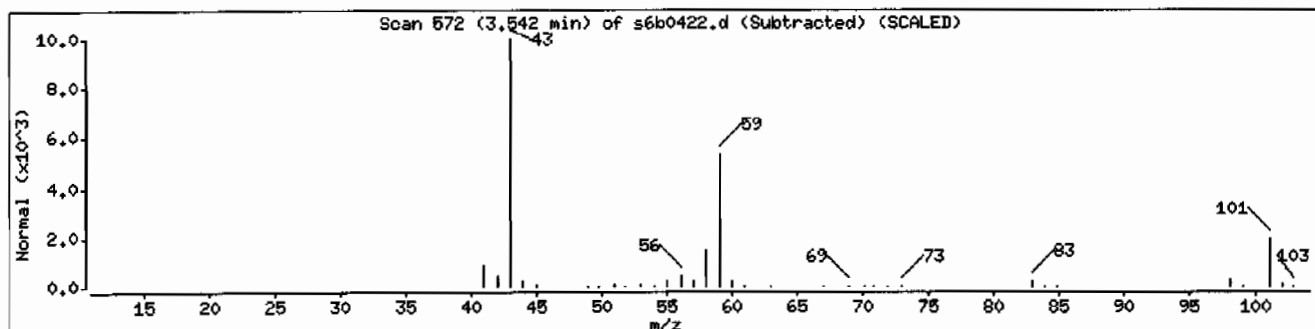
Volume Injected (uL): 0.5

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: 1245387009194550111SVH11ILANL

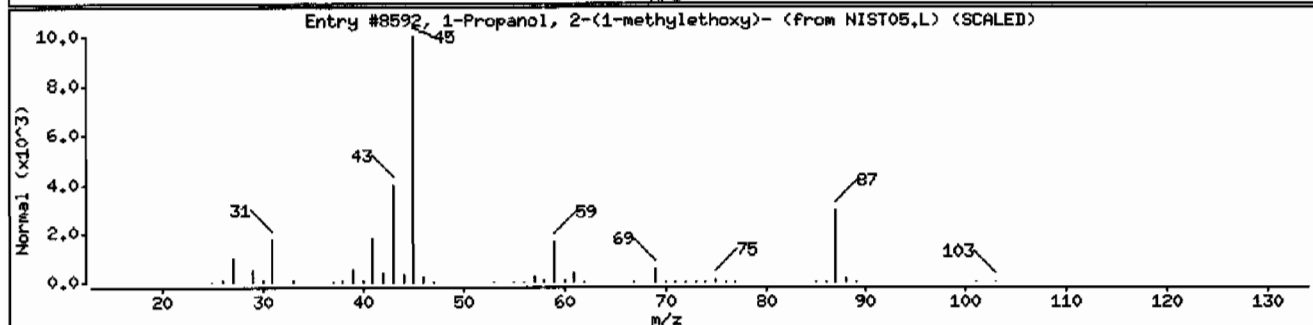
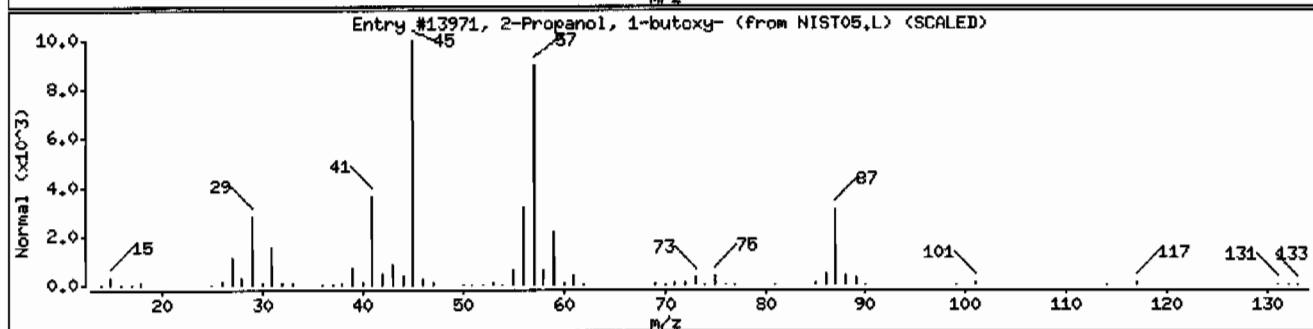
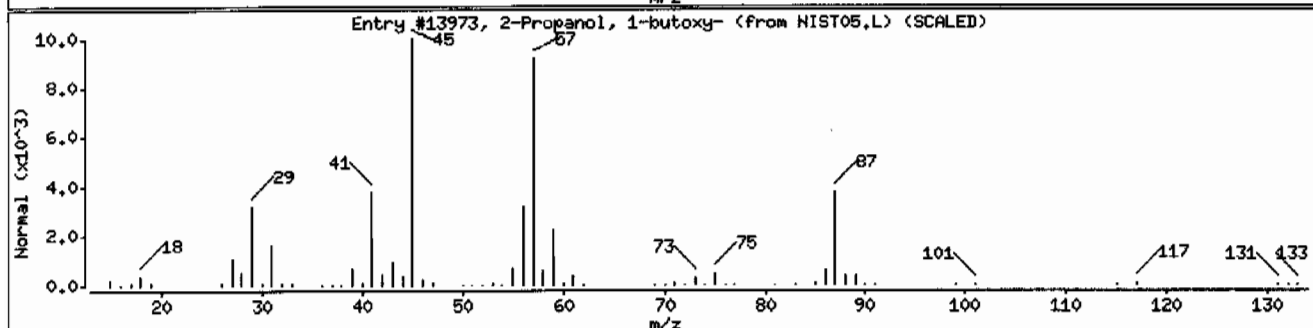
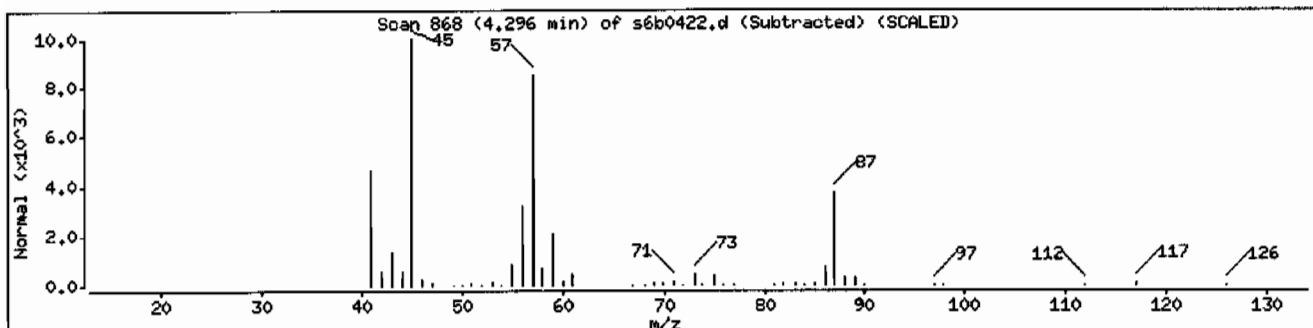
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13973	90	C7H16O2	132
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	90	C7H16O2	132
1-Propanol, 2-(1-methylethoxy)-	3944-37-4	NIST05.L	8592	53	C6H14O2	118



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: 1245387009194550111SVMI11LANL

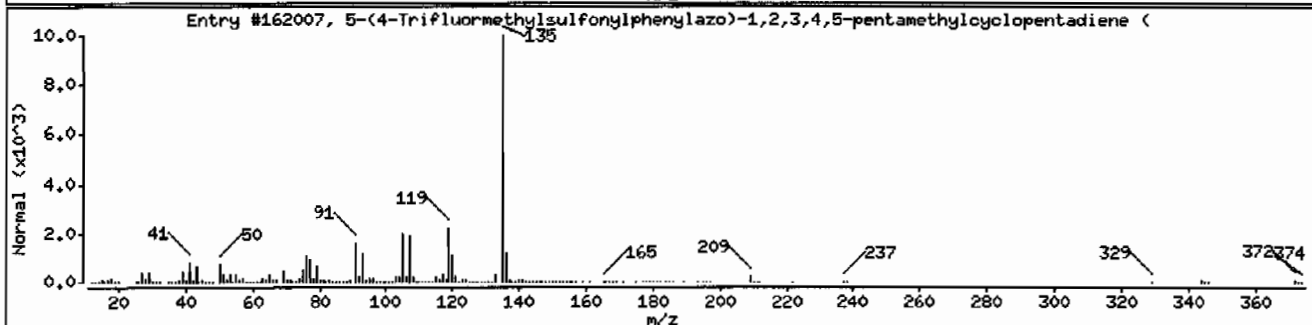
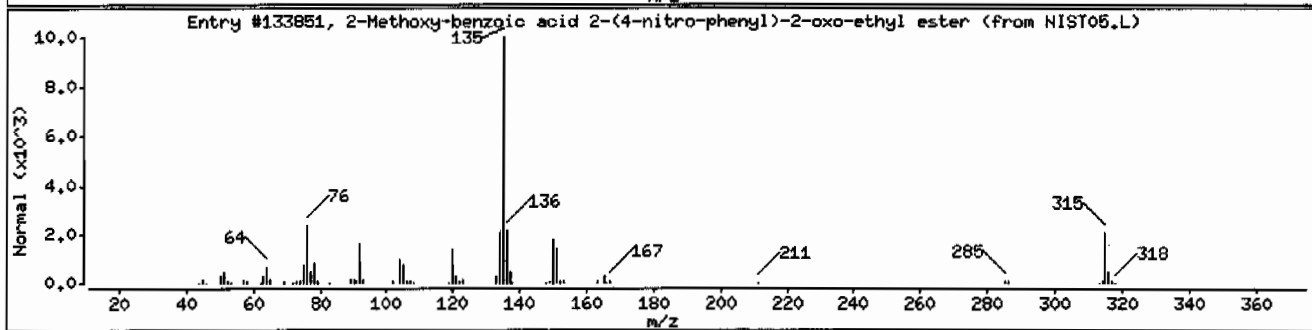
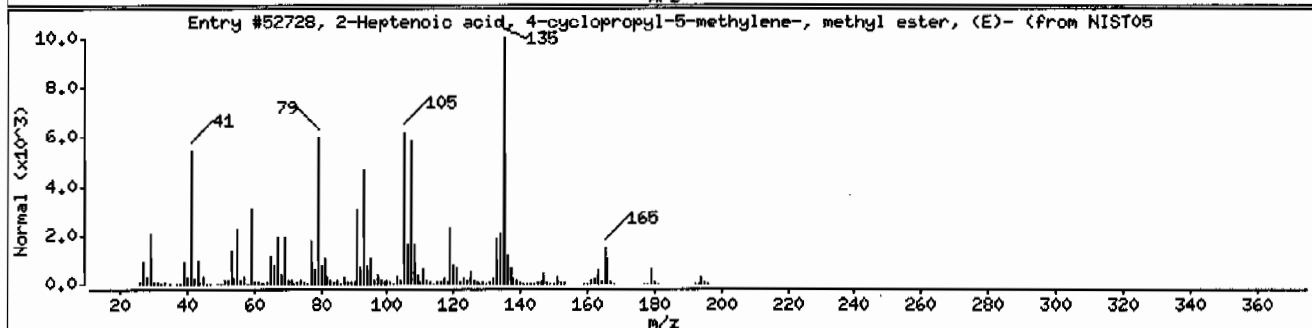
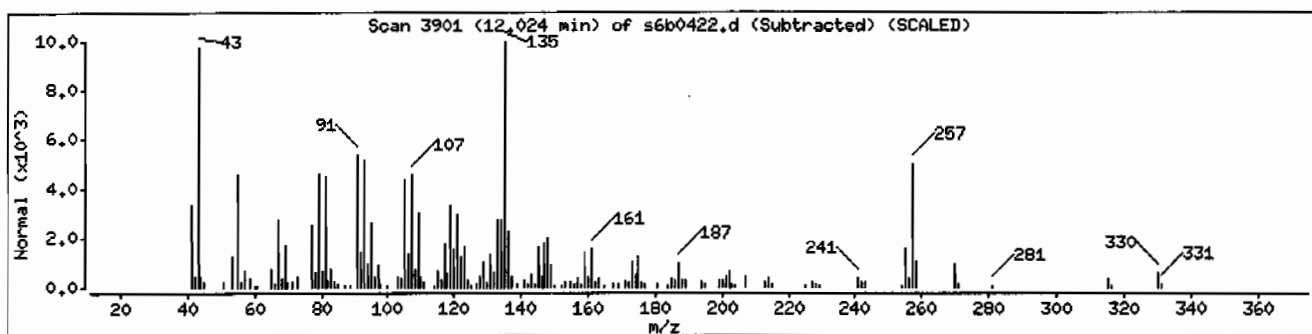
Volume Injected (uL): 0.5

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-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	43	C12H18O2	194
2-Methoxy-benzoic acid 2-(4-nitro-phenyl	1000297-38-7	NIST05.L	133851	38	C16H13NO6	315
5-(4-Trifluoromethylsulfonylphenylazo)-1,	187338-96-1	NIST05.L	162007	38	C17H19F3N2O2S2	372



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: HSD6.i

Sample Info: 1245387009194550111SVH11ILANL

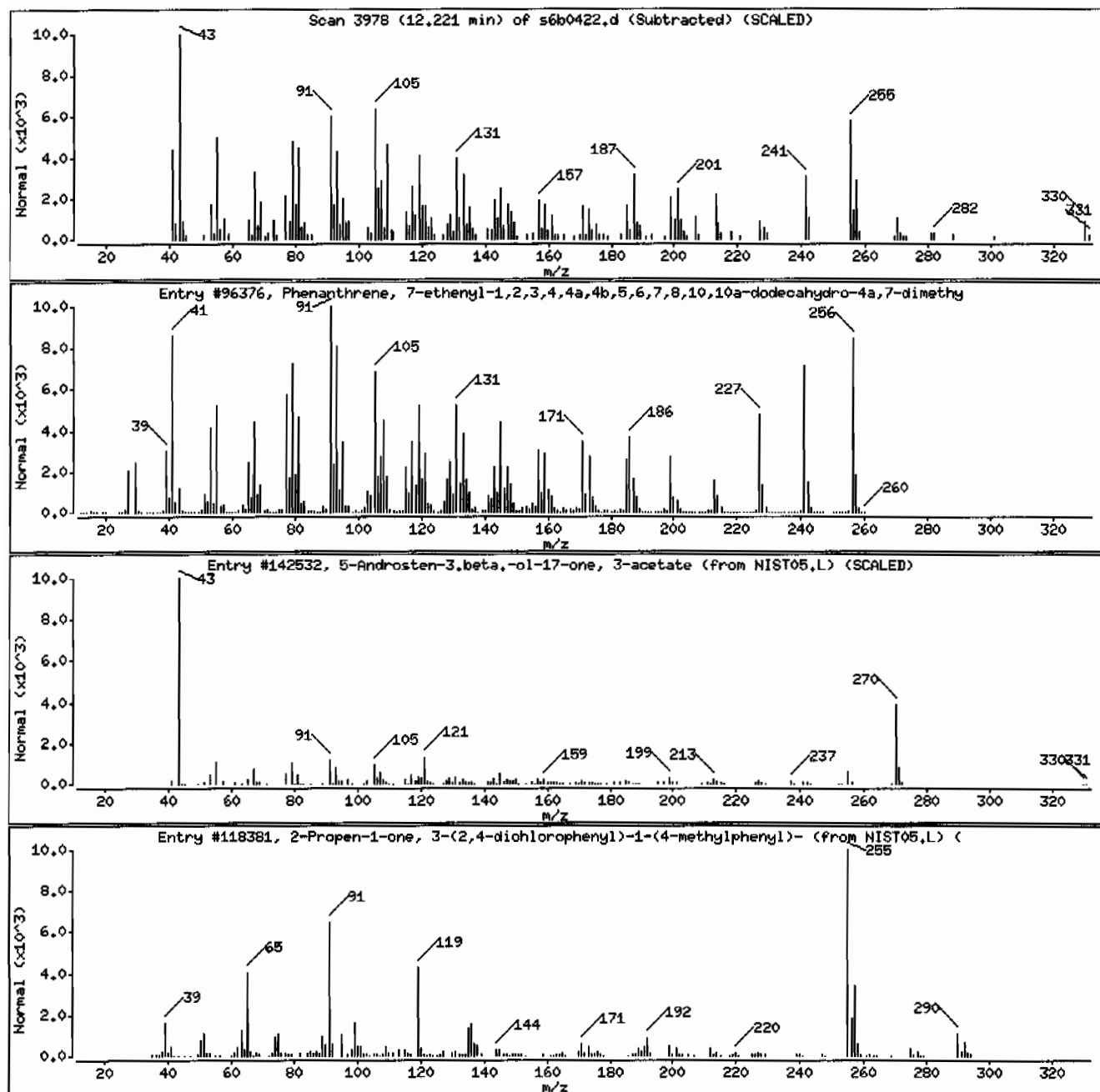
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	25	C19H28	256
5-Androsten-3,β-ol-17-one, 3-acetate	1000127-30-4	NIST05.L	142532	10	C21H30O3	330
2-Propen-1-one, 3-(2,4-dichlorophenyl)-1	76734-08-2	NIST05.L	118381	10	C16H12Cl2O	290



Date : 04-FEB-2010 20:29

Client ID: RE14-10-7682

Instrument: MSD6.i

Sample Info: I245387009I945501I1ISVM11ILANL

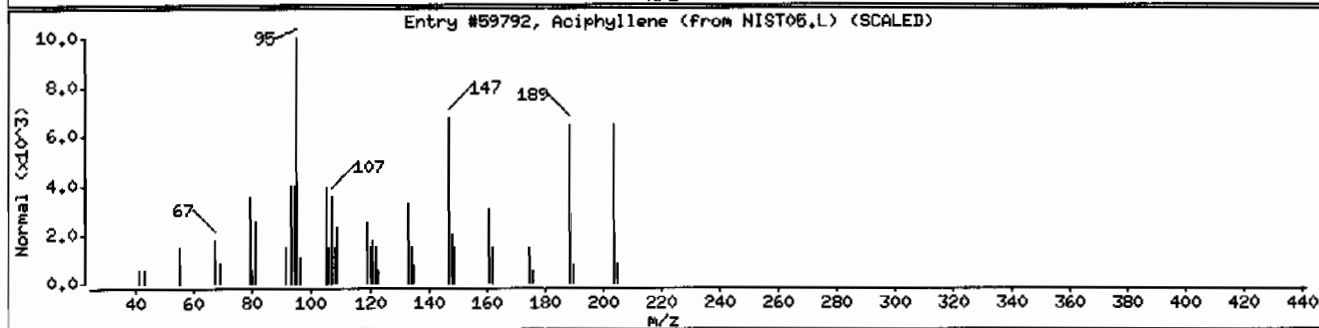
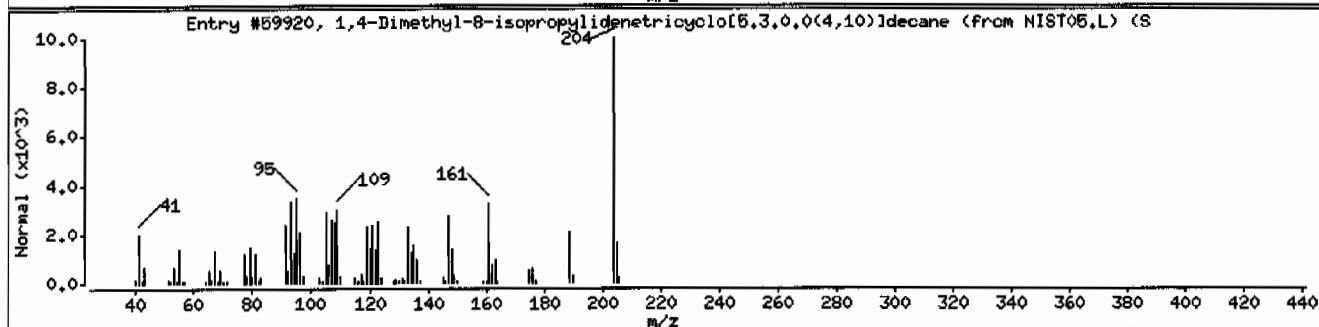
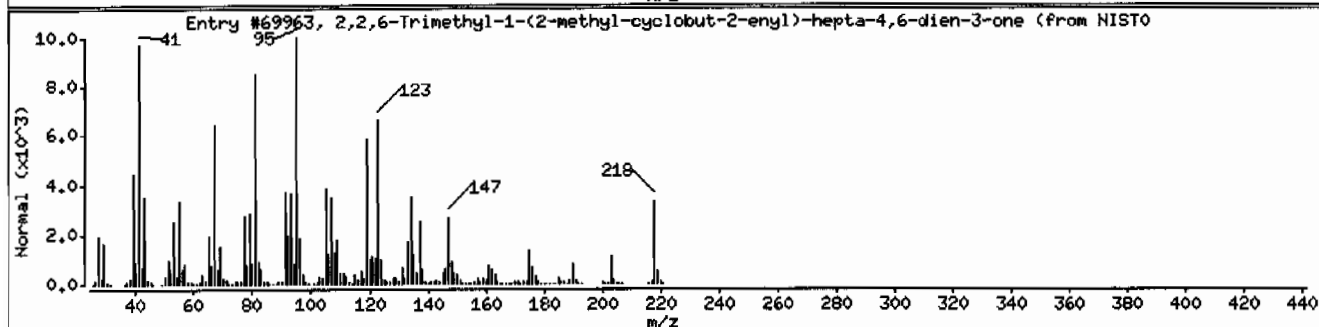
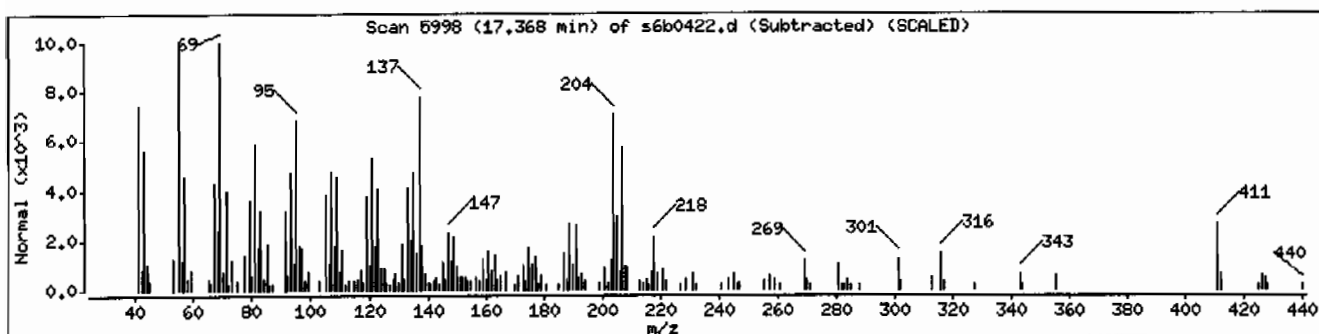
Volume Injected (uL): 0.5

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-enyl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	50	C16H22O	218
1,4-Dimethyl-8-isopropylidenetricyclo[5.3.0.0(4,10)]decane	1000140-07-7	NIST05.L	59920	43	C15H24	204
Aciphyllene	87745-31-1	NIST05.L	59792	35	C15H24	204



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

SDG Number: 10-1384
Lab Sample ID: 245387011

Client ID: RE14-10-7683
Batch ID: 945501
Run Date: 02/04/2010 21:25
Prep Date: 01/26/2010 20:21
Data File: s6b0424.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	446	ug/kg	89.3	446
108-95-2	Phenol	U	446	ug/kg	89.3	446
95-57-8	2-Chlorophenol	U	446	ug/kg	89.3	446
106-46-7	1,4-Dichlorobenzene	U	446	ug/kg	89.3	446
621-64-7	N-Nitrosodipropylamine	U	446	ug/kg	89.3	446
59-50-7	4-Chloro-3-methylphenol	U	446	ug/kg	89.3	446
83-32-9	Acenaphthene	U	44.6	ug/kg	14.7	44.6
121-14-2	2,4-Dinitrotoluene	U	446	ug/kg	44.6	446
100-02-7	4-Nitrophenol	U	446	ug/kg	147	446
87-86-5	Pentachlorophenol	U	446	ug/kg	112	446
129-00-0	Pyrene	U	44.6	ug/kg	13.4	44.6
110-86-1	Pyridine	U	446	ug/kg	89.3	446
62-53-3	Aniline	U	446	ug/kg	134	446
111-44-4	bis(2-Chloroethyl) ether	U	446	ug/kg	89.3	446
541-73-1	1,3-Dichlorobenzene	U	446	ug/kg	89.3	446
100-51-6	Benzyl alcohol	U	446	ug/kg	134	446
95-50-1	1,2-Dichlorobenzene	U	446	ug/kg	89.3	446
108-60-1	bis(2-Chloroisopropyl)ether	U	446	ug/kg	89.3	446
95-48-7	o-Cresol	U	446	ug/kg	89.3	446
65794-96-9	m,p-Cresols	U	446	ug/kg	134	446
67-72-1	Hexachloroethane	U	446	ug/kg	89.3	446
98-95-3	Nitrobenzene	U	446	ug/kg	89.3	446
78-59-1	Isophorone	U	446	ug/kg	89.3	446
88-75-5	2-Nitrophenol	U	446	ug/kg	89.3	446
105-67-9	2,4-Dimethylphenol	U	446	ug/kg	156	446
111-91-1	bis(2-Chloroethoxy)methane	U	446	ug/kg	89.3	446
120-83-2	2,4-Dichlorophenol	U	446	ug/kg	89.3	446
65-85-0	Benzoic acid	U	893	ug/kg	223	893
91-20-3	Naphthalene	U	44.6	ug/kg	13.4	44.6
106-47-8	4-Chloroaniline	U	446	ug/kg	89.3	446
87-68-3	Hexachlorobutadiene	U	446	ug/kg	89.3	446
91-57-6	2-Methylnaphthalene	U	44.6	ug/kg	8.93	44.6
77-47-4	Hexachlorocyclopentadiene	U	446	ug/kg	89.3	446
88-06-2	2,4,6-Trichlorophenol	U	446	ug/kg	89.3	446
95-95-4	2,4,5-Trichlorophenol	U	446	ug/kg	89.3	446
91-58-7	2-Chloronaphthalene	U	44.6	ug/kg	14.7	44.6
88-74-4	2-Nitroaniline	U	446	ug/kg	89.3	446
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	446	ug/kg	89.3	446

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

SDG Number: 10-1384
Lab Sample ID: 245387011

Client ID: RE14-10-7683
Batch ID: 945501
Run Date: 02/04/2010 21:25
Prep Date: 01/26/2010 20:21
Data File: s6b0424.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	446	ug/kg	89.3	446
606-20-2	2,6-Dinitrotoluene	U	446	ug/kg	44.6	446
208-96-8	Acenaphthylene	U	44.6	ug/kg	13.4	44.6
51-28-5	2,4-Dinitrophenol	U	893	ug/kg	170	893
132-64-9	Dibenzofuran	U	446	ug/kg	89.3	446
84-66-2	Diethylphthalate	U	446	ug/kg	89.3	446
86-73-7	Fluorene	U	44.6	ug/kg	13.4	44.6
7005-72-3	4-Chlorophenylphenylether	U	446	ug/kg	89.3	446
534-52-1	2-Methyl-4,6-dinitrophenol	U	446	ug/kg	89.3	446
100-01-6	4-Nitroaniline	U	446	ug/kg	134	446
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	446	ug/kg	89.3	446
122-66-7	Azobenzene	U	446	ug/kg	89.3	446
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	446	ug/kg	89.3	446
118-74-1	Hexachlorobenzene	U	446	ug/kg	89.3	446
85-01-8	Phenanthrene	U	44.6	ug/kg	13.4	44.6
120-12-7	Anthracene	U	44.6	ug/kg	8.93	44.6
84-74-2	Di-n-butylphthalate	U	446	ug/kg	89.3	446
206-44-0	Fluoranthene	U	44.6	ug/kg	13.4	44.6
85-68-7	Butylbenzylphthalate	U	446	ug/kg	89.3	446
56-55-3	Benzo(a)anthracene	U	44.6	ug/kg	13.4	44.6
91-94-1	3,3'-Dichlorobenzidine	U	446	ug/kg	134	446
218-01-9	Chrysene	U	44.6	ug/kg	13.4	44.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	446	ug/kg	89.3	446
117-84-0	Di-n-octylphthalate	U	446	ug/kg	89.3	446
205-99-2	Benzo(b)fluoranthene	U	44.6	ug/kg	13.4	44.6
207-08-9	Benzo(k)fluoranthene	U	44.6	ug/kg	13.4	44.6
50-32-8	Benzo(a)pyrene	U	44.6	ug/kg	13.4	44.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.6	ug/kg	13.4	44.6
53-70-3	Dibenzo(a,h)anthracene	U	44.6	ug/kg	13.4	44.6
191-24-2	Benzo(ghi)perylene	U	44.6	ug/kg	13.4	44.6
120-82-1	1,2,4-Trichlorobenzene	U	446	ug/kg	89.3	446

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.54	564	ug/kg		JA
13466-78-9	3-Carene	4.89	613	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 3 of 3

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387011	Date Received: 01/23/2010 09:20	%Moisture: 25.4
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7683	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 21:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0424.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	6.81	570	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	10.25	719	ug/kg	98	NJ
	Unknown	10.47	352	ug/kg		J
	Unknown	10.77	326	ug/kg		J
17351-34-7	14-Pentadecenoic acid	11.03	1110	ug/kg	95	NJ
	Unknown	11.05	539	ug/kg		J
57-11-4	Octadecanoic acid	11.11	484	ug/kg	92	NJ
	Unknown	11.2	283	ug/kg		J
	Unknown	11.3	256	ug/kg		J
1482-93-5	Cyclohexane, hexaethylidene-	11.53	462	ug/kg	95	NJ
74663-83-5	1,5-Heptadiene, 2,5-dimethyl-3-methylene	11.76	346	ug/kg	90	NJ
	Unknown	11.87	606	ug/kg		J
506-30-9	Eicosanoic acid	11.93	482	ug/kg	91	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12	307	ug/kg	98	NJ
	Unknown	12.08	1120	ug/kg		J
	Unknown	12.15	228	ug/kg		J
	Unknown	12.23	310	ug/kg		J
	Unknown	12.37	2120	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.52	4210	ug/kg	95	NJ
	Unknown	12.56	344	ug/kg		J
	Unknown	12.69	231	ug/kg		J
	Unknown	12.92	194	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	13.65	1120	ug/kg	83	NJ
	Unknown	13.69	563	ug/kg		J
630-04-6	Hentriacontane	15.93	930	ug/kg	98	NJ
	Unknown	16.09	862	ug/kg		J
	Unknown	16.3	839	ug/kg		J
	Unknown	17.09	1130	ug/kg		J

Data File: /chem/MSD6.i/s020410.b/s6b0424.d
Report Date: 05-Feb-2010 09:19

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0424.d
Lab Smp Id: 245387011 Client Smp ID: RE14-10-7683
Inj Date : 04-FEB-2010 21:25
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387011|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	25.37270	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.948	4.951	(1.000)	144534	40.0000
* 29 Naphthalene-d8	136	6.228	6.232	(1.000)	568711	40.0000
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	333120	40.0000
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	591516	40.0000
* 91 Chrysene-d12	240	12.766	12.763	(1.000)	445397	40.0000
* 98 Perylene-d12	264	15.161	15.151	(1.000)	239857	40.0000
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	214171	59.1721 2640
\$ 5 Phenol-d5	99	4.556	4.556	(0.921)	259638	56.8353 2540
\$ 20 Nitrobenzene-d5	82	5.484	5.491	(0.881)	116079	28.8536 1290
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	263776	30.7261 1370
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	66319	68.2093 3040
\$ 81 p-Terphenyl-d14	244	11.418	11.415	(0.894)	279405	38.8993 1740

ION RATIO REPORT

SV REPORT

Data file: s6b0424.d

Report Date: 02/05/2010 07:38

Lab. ID: 245387011

SampleType: SAMPLE

Injection Date: 04-FEB-2010 21:25

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387011|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	15236	2.52	2.81	80-120	100	(T)
42	1236	2.52	2.81	54-114	8	(QT)
43	2292	2.48	2.81	7- 67	15	(T)

4 Aniline				CAS#: 62-53-3		
66	12385	4.56	4.64	80-120	100	(T)
93	14352	4.61	4.64	236-296	116	(Q)

6 Phenol				CAS#: 108-95-2		
94	21108	4.32	4.57	80-120	100	(T)
66	4150	4.32	4.57	11- 71	20	(T)
65	15971	4.32	4.57	0- 30	76	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	15676	5.49	5.33	80-120	100	(T)
42	9931	5.48	5.33	35- 95	63	(T)

22 Isophorone				CAS#: 78-59-1		
82	116079	5.48	5.74	80-120	100	(T)
138	276	6.21	5.74	0- 50	0	(T)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	11564	7.70	7.50	80-120	100	(T)
164	500	7.70	7.50	2- 62	4	(T)
127	886	7.70	7.50	7- 67	8	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
42 o-Nitroaniline				CAS#: 88-74-4		
65	14169	7.70	7.60	80-120	100	(T)
92	16740	7.70	7.60	38- 98	118	(QT)
138	1315	7.70	7.60	86-146	9	(QT)
<hr/>						
43 Dimethylphthalate				CAS#: 131-11-3		
163	58681	8.10	7.78	80-120	100	(T)
164	333120	8.10	7.78	0- 40	568	(QT)
<hr/>						
45 Acenaphthylene				CAS#: 208-96-8		
152	46966	7.51	7.95	80-120	100	(T)
151	49525	7.51	7.95	0- 50	105	(QT)
153	4265	7.51	7.95	0- 43	9	(T)
<hr/>						
48 2,4-Dinitrophenol				CAS#: 51-28-5		
184	229	8.61	8.16	80-120	100	(T)
154	119	8.62	8.14	894-954	52	(QT)
<hr/>						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	43289	8.10	8.30	80-120	100	(T)
89	662	8.10	8.29	39- 99	2	(QT)
63	618	8.10	8.29	15- 75	1	(QT)
<hr/>						
52 4-Nitrophenol				CAS#: 100-02-7		
139	124	8.23	8.20	80-120	100	()
109	434	8.17	8.20	33- 93	350	(Q)
65	709	8.21	8.20	62-122	571	(Q)
<hr/>						
53 Fluorene				CAS#: 86-73-7		
166	4508	8.95	8.69	80-120	100	(T)
165	4421	8.95	8.69	62-122	98	(T)
167	1510	8.95	8.69	0- 44	33	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	231	8.96	8.74	80-120	100	(T)
105	433	8.95	8.74	9- 69	187	(QT)
51	336	8.95	8.74	18- 78	145	(QT)
<hr/>						
56 p-Nitroaniline				CAS#: 100-01-6		
138	128	8.64	8.71	80-120	100	(T)
108	553	8.65	8.71	34- 94	430	(QT)
92	164	8.65	8.71	15- 75	128	(QT)
<hr/>						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	305	17.20	17.17	80-120	100	()
138	1613	17.10	17.18	6- 66	528	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	189	17.21	17.20	80-120	100	()
139	240	17.35	17.20	0- 30	127	(QT)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0424.d
 Lab Smp Id: 245387011 Client Smp ID: RE14-10-7683
 Inj Date : 04-FEB-2010 21:25
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387011|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 23
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	25.37270	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	859792	40.000
* 29 Naphthalene-d8	6.228	1245673	40.000
* 67 Phenanthrene-d10	9.713	1502840	40.000
* 91 Chrysene-d12	12.766	1957882	40.000
* 98 Perylene-d12	15.161	658503	40.000

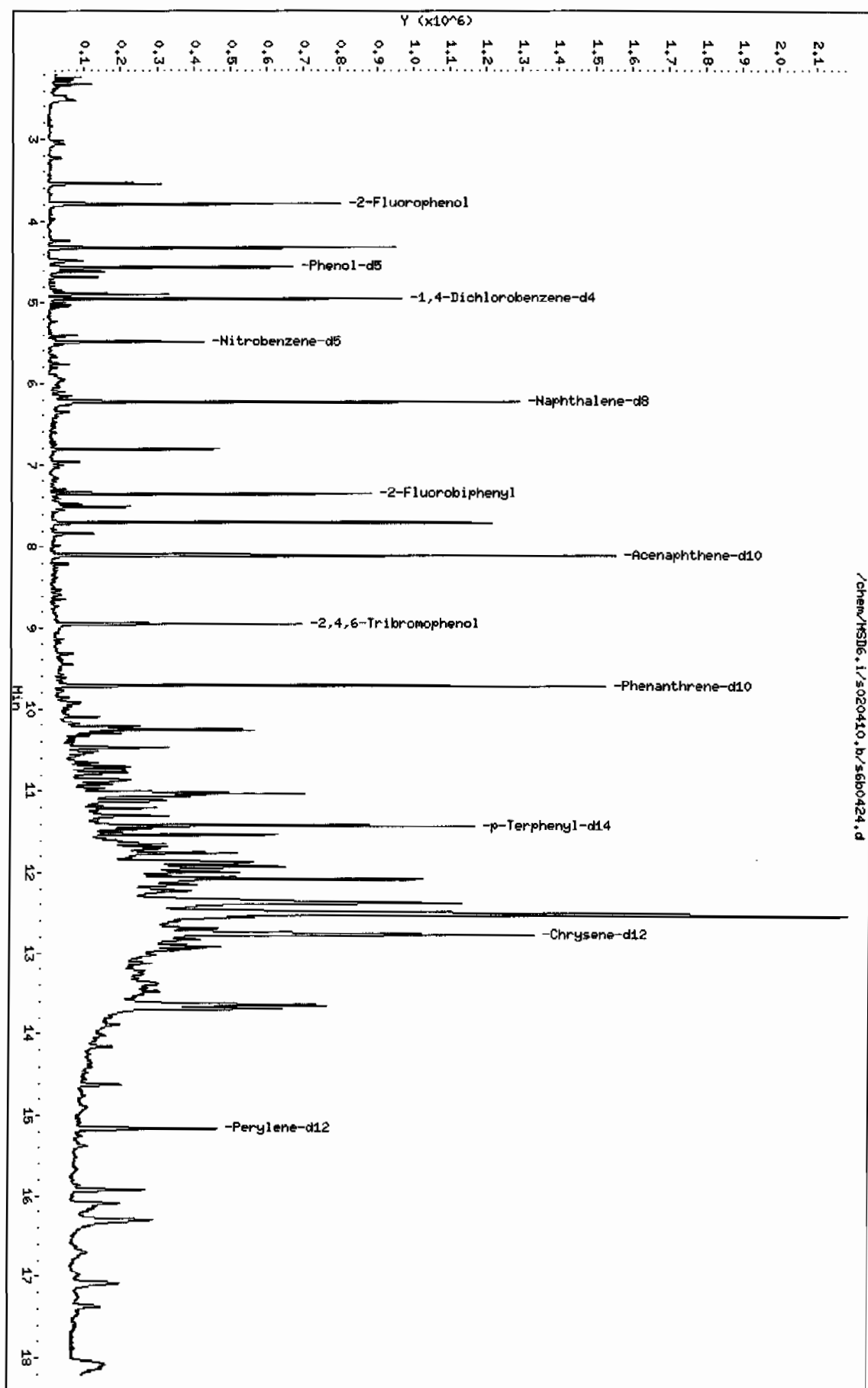
CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.542	271485	12.6302569	564	0		0	10
3-Carene					CAS #: 13466-78-9		
4.890	295337	13.7399095	613	95	NIST05.L	15156	10
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2					CAS #: 92618-89-8		
6.809	397925	12.7778330	570	98	NIST05.L	54321	29
n-Hexadecanoic acid					CAS #: 57-10-3		
10.254	605158	16.1070550	719	98	NIST05.L	96235	67
Unknown					CAS #:		
10.468	296327	7.88712646	352	0		0	67
Unknown					CAS #:		
10.766	274036	7.29381252	326	0		0	67
14-Pentadecenoic acid					CAS #: 17351-34-7		
11.026	935085	24.8884675	1110	95	NIST05.L	85330	67
Unknown					CAS #:		
11.051	453407	12.0679961	539	0		0	67
Octadecanoic acid					CAS #: 57-11-4		
11.107	407049	10.8341357	484	92	NIST05.L	114822	67
Unknown					CAS #:		
11.201	238489	6.34767840	283	0		0	67
Unknown					CAS #:		
11.298	280630	5.73333580	256	0		0	91
Cyclohexane, hexaethylidene-					CAS #: 1482-93-5		
11.530	506281	10.3434425	462	95	NIST05.L	85536	91
1,5-Heptadiene, 2,5-dimethyl-3-methylene					CAS #: 74663-83-5		
11.759	379132	7.74575528	346	90	NIST05.L	15307	91
Unknown					CAS #:		
11.872	664259	13.5709704	606	0		0	91
Eicosanoic acid					CAS #: 506-30-9		
11.925	528573	10.7988800	482	91	NIST05.L	132301	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.996	336642	6.87766889	307	98	NIST05.L	133618	91
Unknown					CAS #:		
12.075	1230166	25.1325798	1120	0		0	91
Unknown					CAS #:		
12.149	249657	5.10055736	228	0		0	91
Unknown					CAS #:		
12.228	339957	6.94540544	310	0		0	91
Unknown					CAS #:		
12.374	2326908	47.5392801	2120	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
12.519	4613062	94.2459707	4210	95	NIST05.L	125037	91
Unknown					CAS #:		
12.557	377389	7.71013892	344	0		0	91
Unknown					CAS #:		
12.690	253531	5.17970155	231	0		0	91
Unknown					CAS #:		
12.924	212301	4.33735970	194	0		0	91
Cedran-diol, 8S,14-					CAS #: 62600-05-9		
13.648	1228197	25.0923618	1120	83	NIST05.L	83830	91
Unknown					CAS #:		
13.686	617128	12.6080711	563	0		0	91
Hentriacontane					CAS #: 630-04-6		
15.926	343179	20.8460211	930	98	NIST05.L	178193	98
Unknown					CAS #:		
16.094	317987	19.3157299	862	0		0	98
Unknown					CAS #:		
16.298	309468	18.7982519	839	0		0	98
Unknown					CAS #:		
17.085	415903	25.2635172	1130	0		0	98

Data File: /chem/HSD6.i/5020410.b/s60424.d
 Date : 04-FEB-2010 21:25
 Client ID: REL4-10-7683
 Sample Info: 12453870119450411SV11.LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SHS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



Date: 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: 1245387011194650111SVMI1ILANL

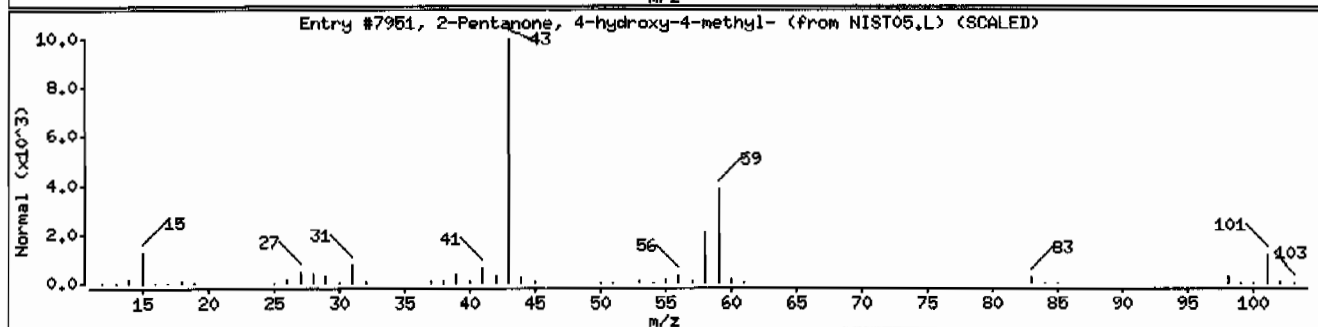
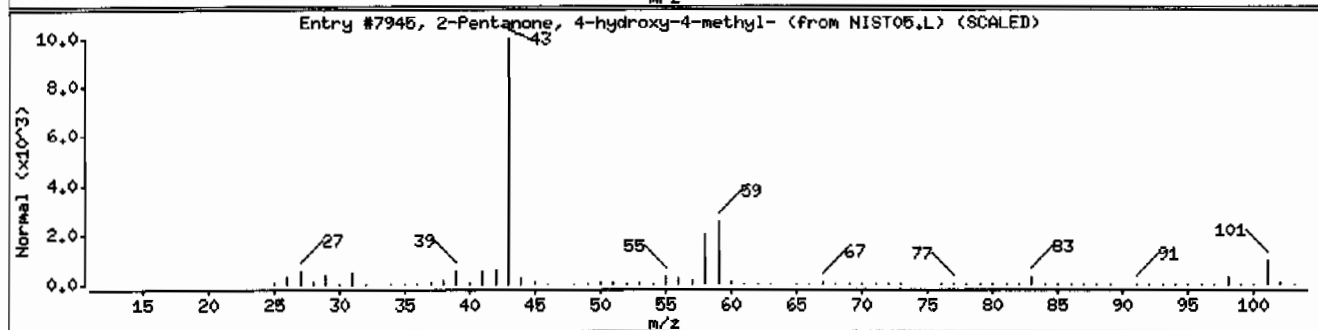
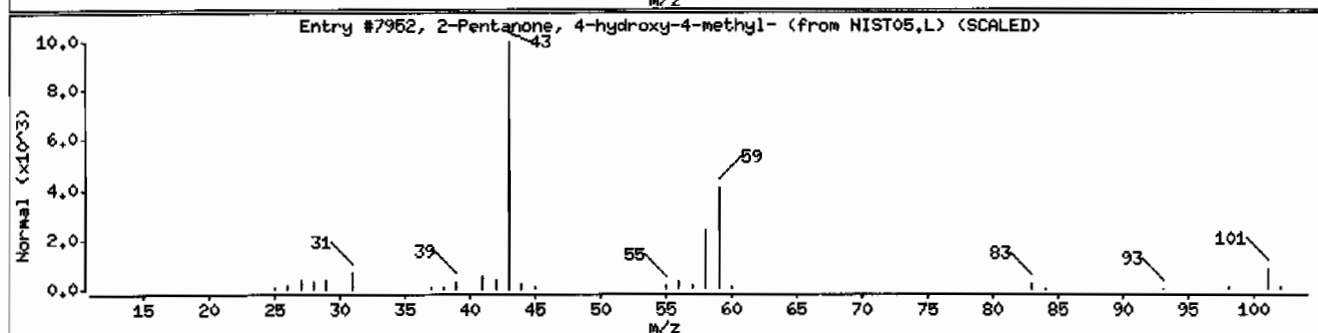
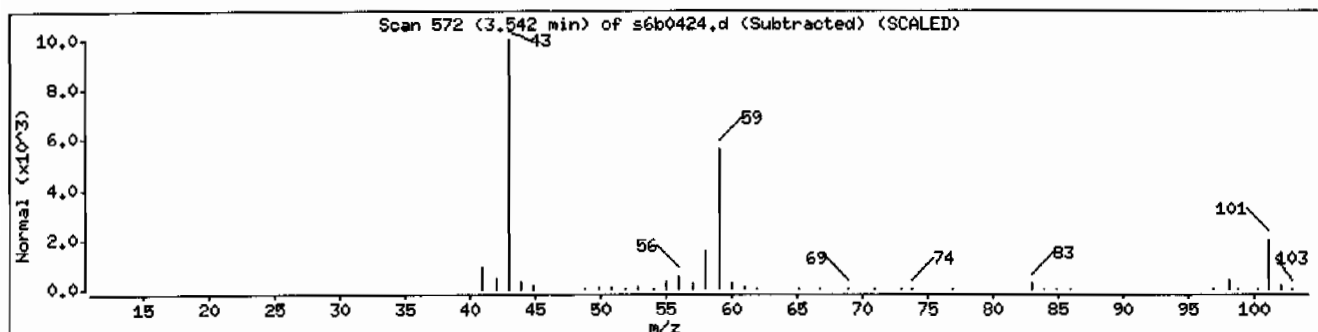
Volume Injected (uL): 0.5

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	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	47	C6H12O2	116



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: 1245387011/94880111/ISVH11/LANL

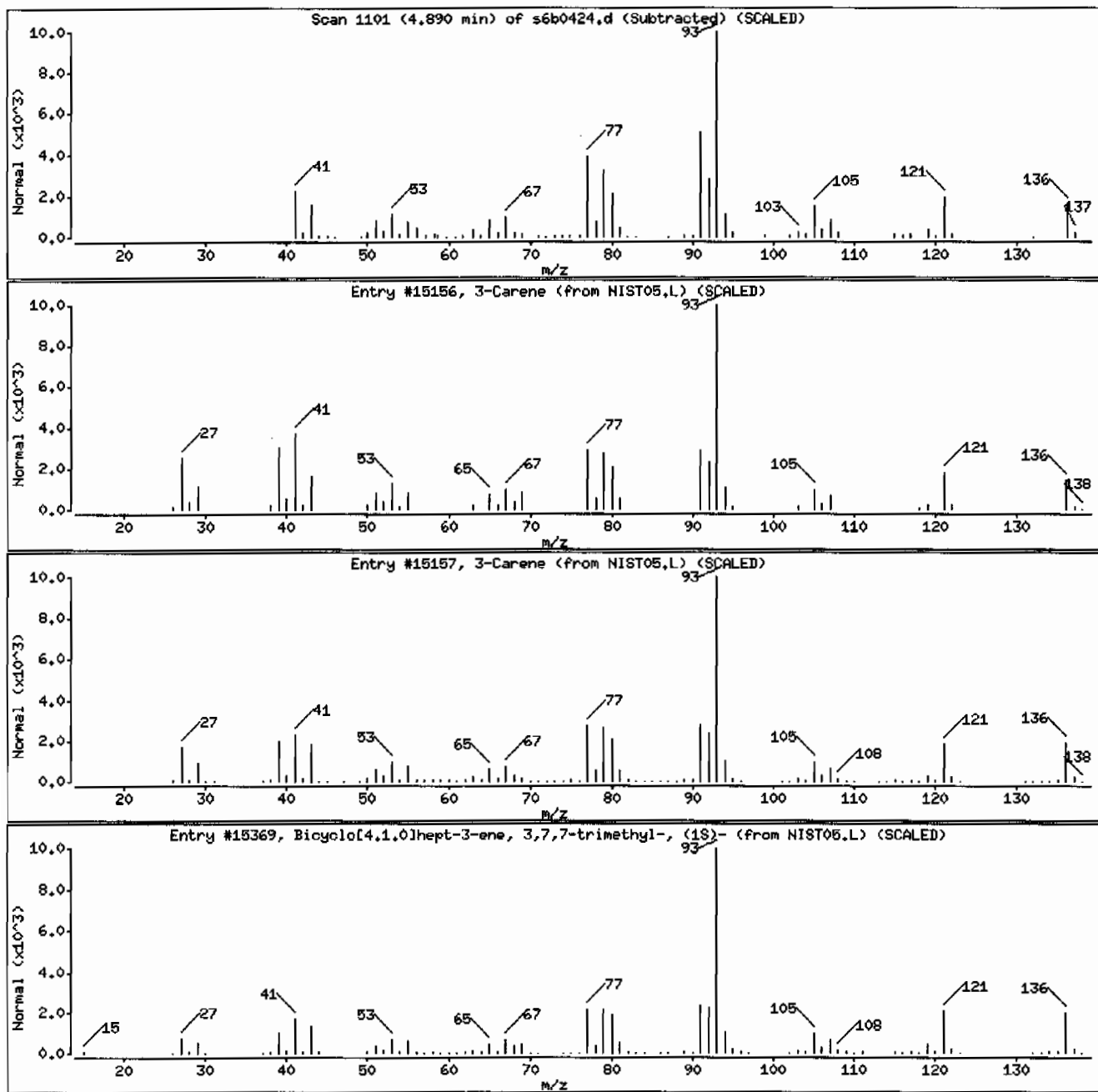
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	95	C10H16	136



Date: 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

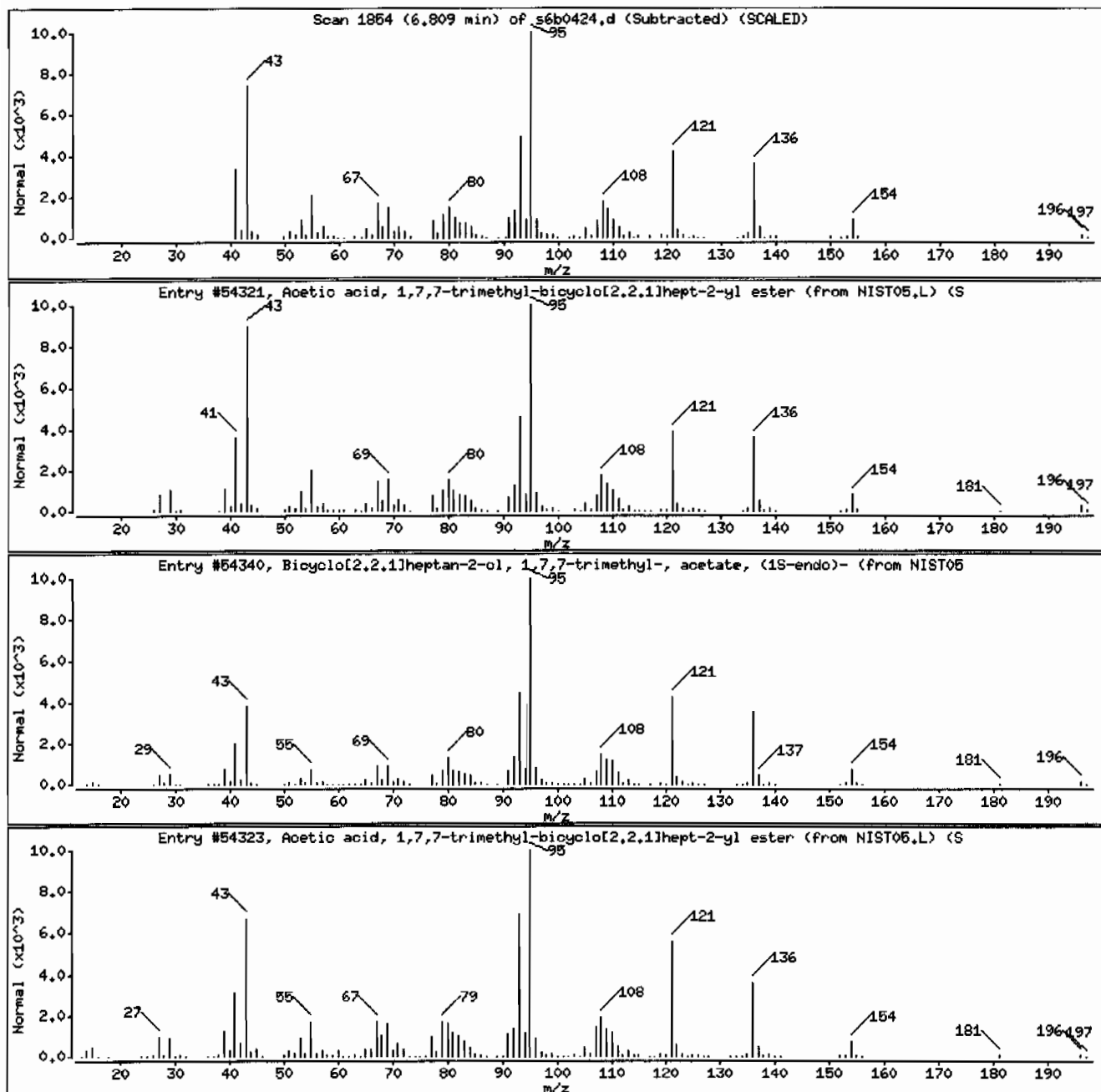
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetic acid, 1,7,7-trimethyl-bicyclo[2,2	92618-89-8	NIST05.L	54321	98	C12H20O2	196
Bicyclo[2,2,1]heptan-2-ol, 1,7,7-trimeth	5655-61-8	NIST05.L	54340	97	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2,2	92618-89-8	NIST05.L	54323	94	C12H20O2	196



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: I245387011194550111SVH111LANL

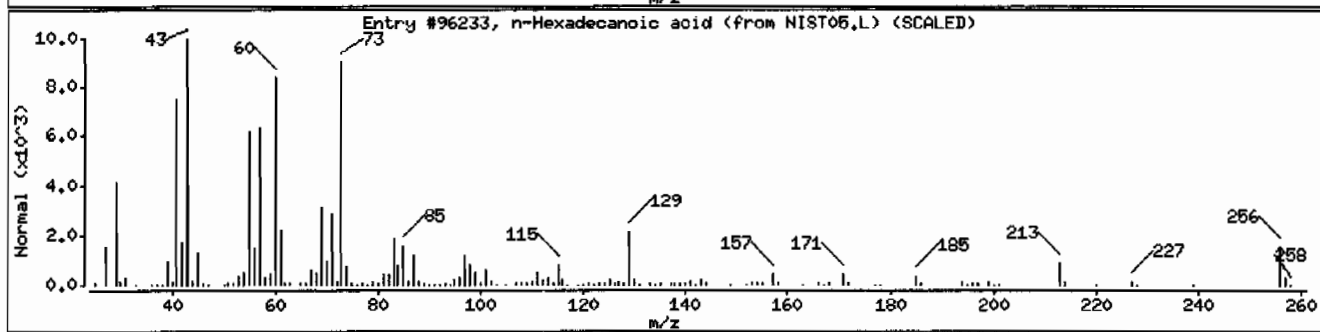
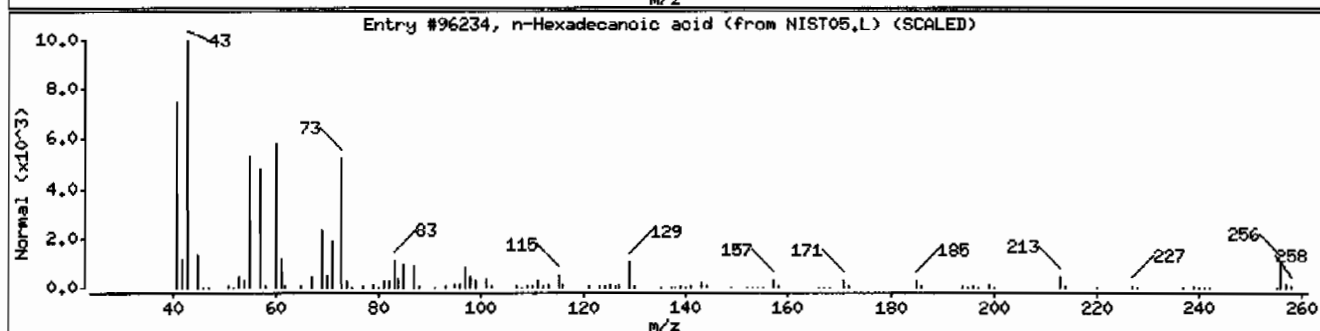
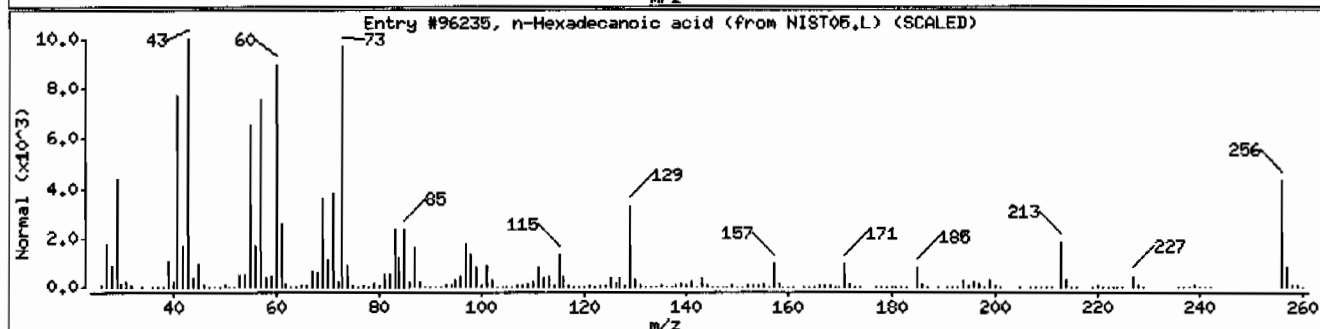
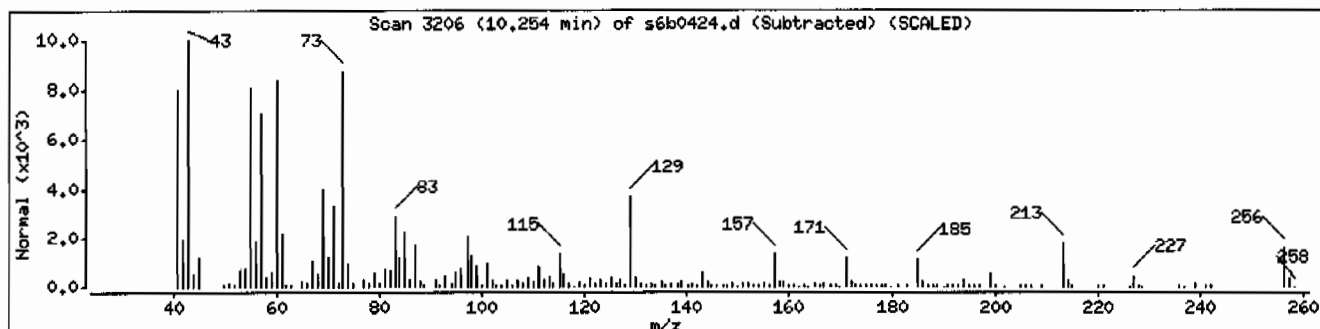
Volume Injected (uL): 0.5

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	96	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	96	C16H32O2	256



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

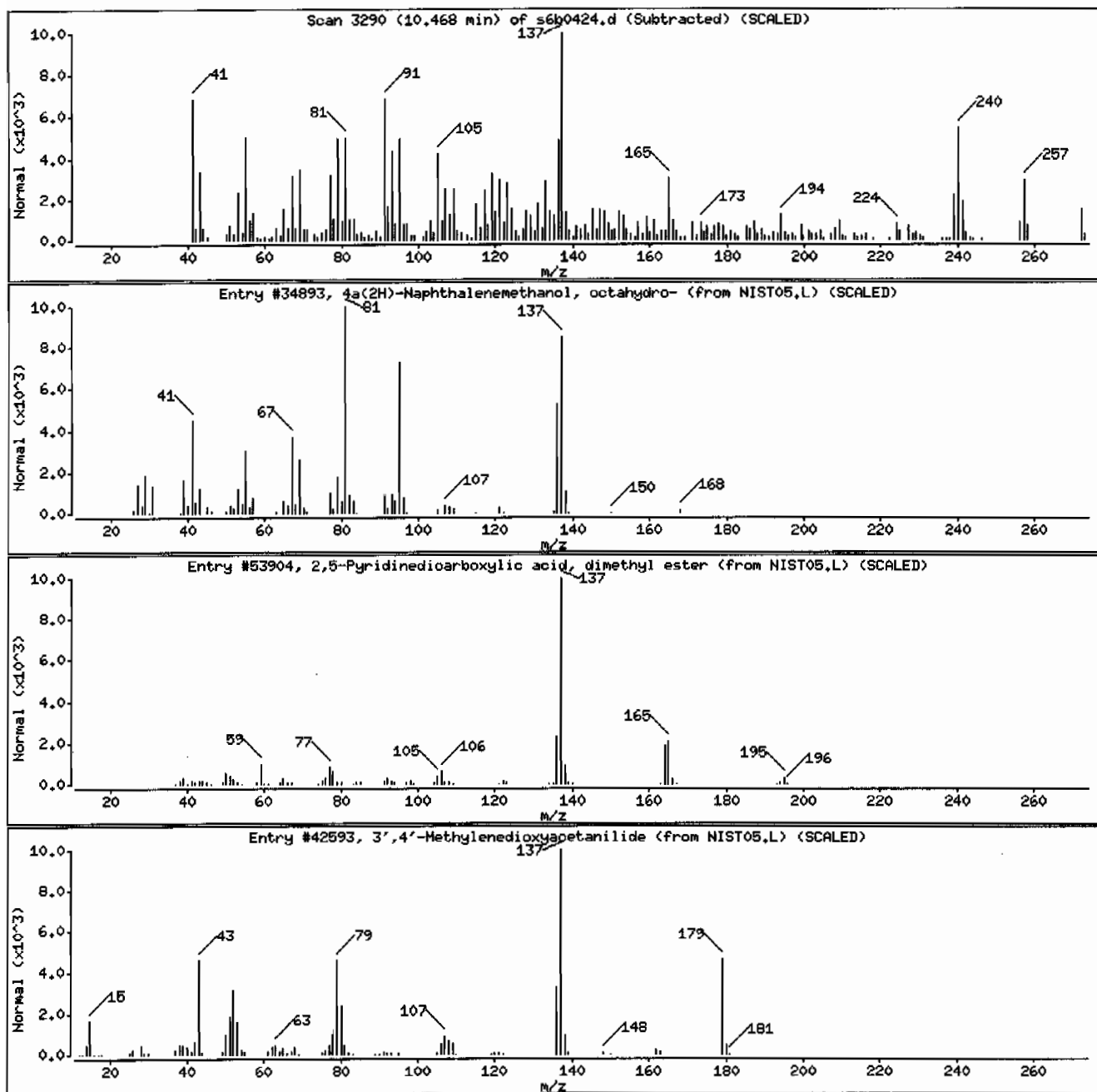
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4a(2H)-Naphthalenemethanol, octahydro-

2,5-Pyridinedicarboxylic acid, dimethyl

3',4'-Methylenedioxyacetanilide

CAS Number	Library	Entry	Quality	Formula	Weight
99992-19-5	NIST05.L	34893	30	C11H20O	168
881-86-7	NIST05.L	53904	30	C9H9NO4	196
13067-19-1	NIST05.L	42593	30	C9H9NO3	179



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI11LANL

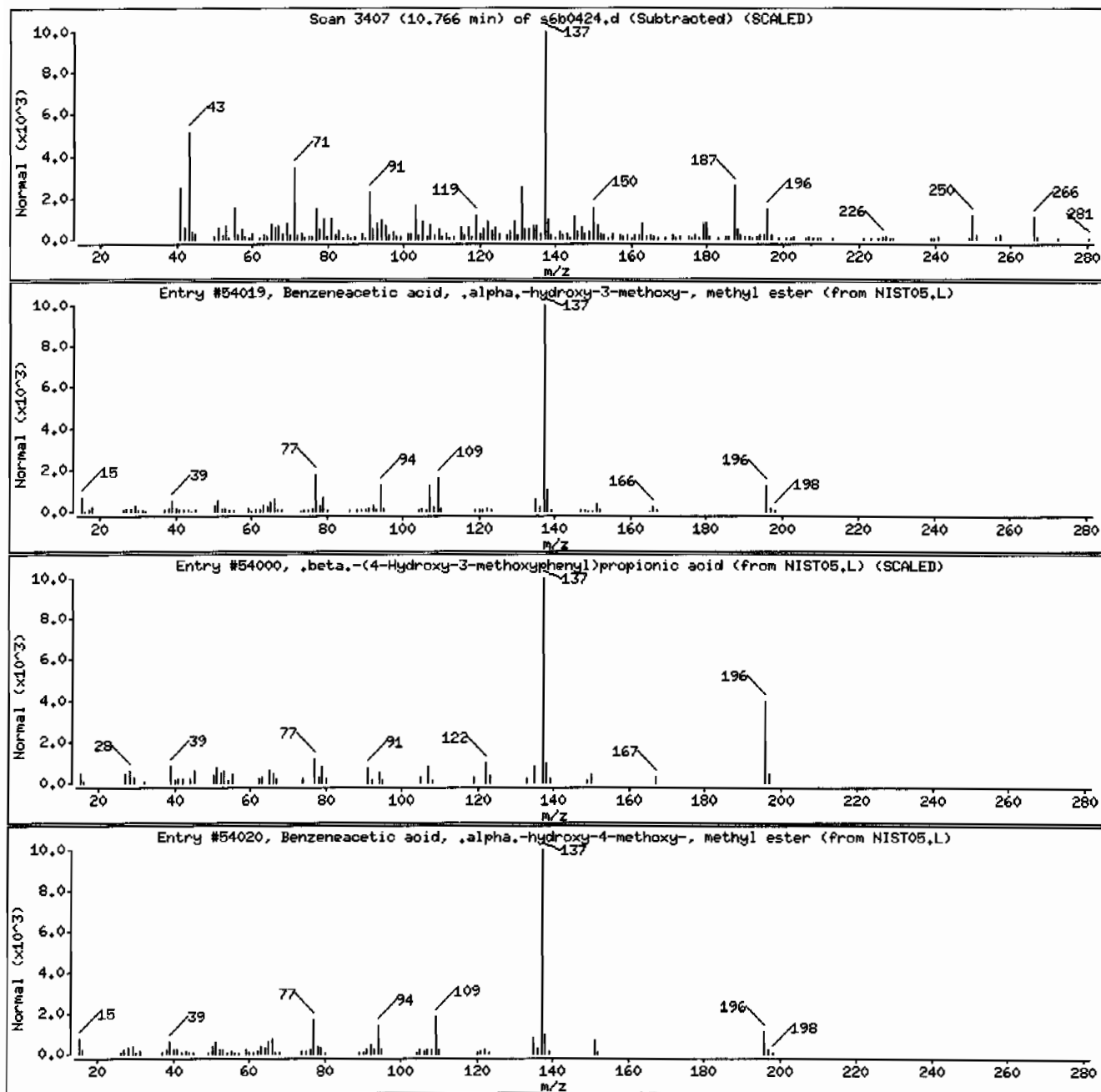
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzeneacetic acid, .alpha.-hydroxy-3-me	54845-40-8	NIST05.L	54019	70	C10H12O4	196
.beta.-(4-Hydroxy-3-methoxyphenyl)propio	1135-23-5	NIST05.L	54000	55	C10H12O4	196
Benzeneacetic acid, .alpha.-hydroxy-4-me	13305-14-1	NIST05.L	54020	55	C10H12O4	196



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: 124538701194550111SVMI1ILANL

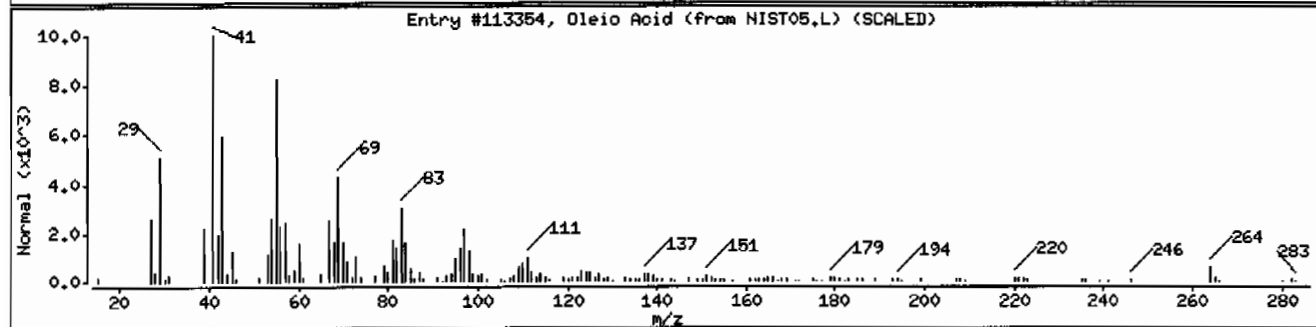
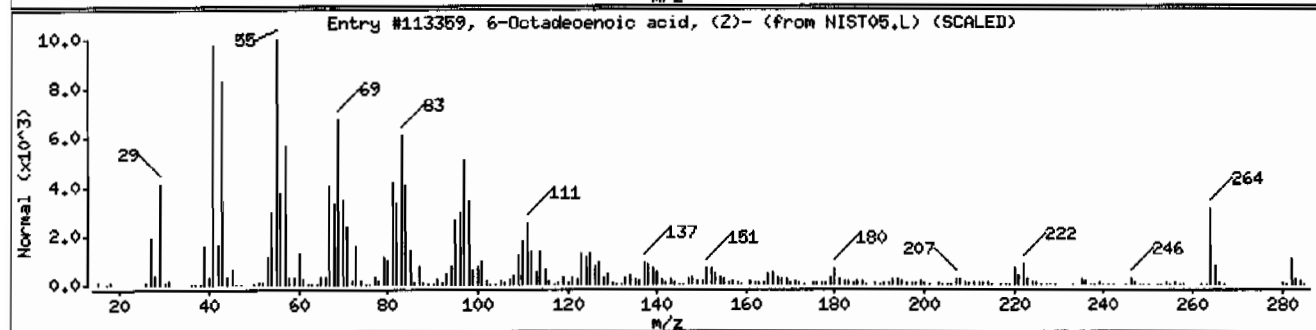
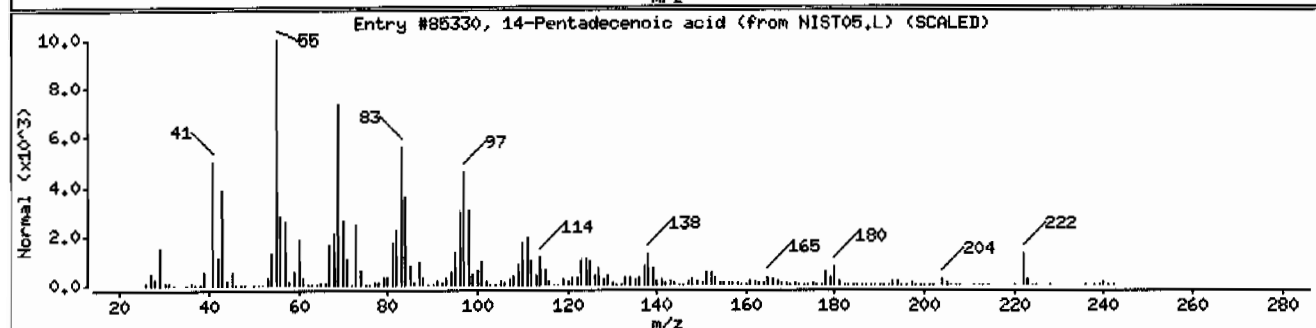
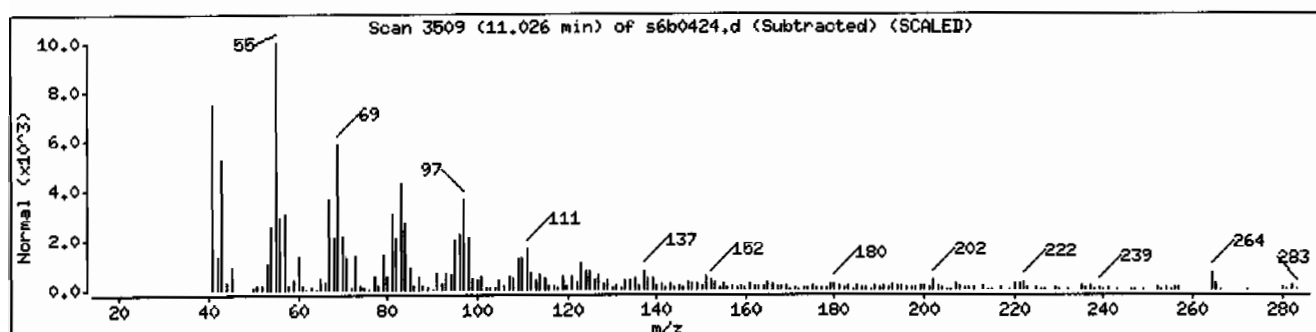
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
14-Pentadecenoic acid	17351-34-7	NIST05.L	85330	95	C15H28O2	240
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	95	C18H34O2	282
Oleic Acid	112-80-1	NIST05.L	113354	93	C18H34O2	282



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH11ILANL

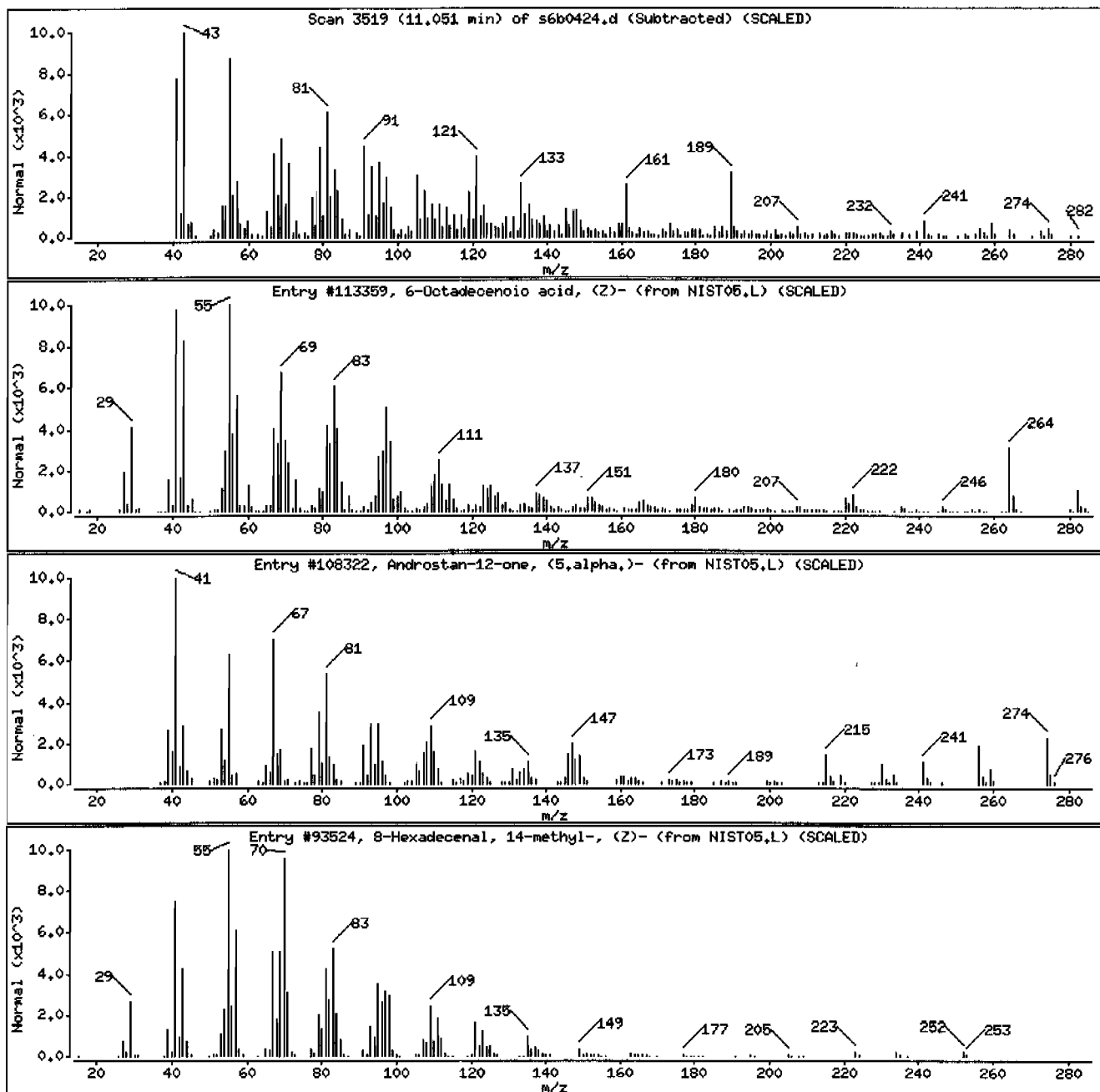
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6-Octadecenoic acid, (Z)-	593-39-6	NIST05.L	113359	68	C18H34O2	282
Androstan-12-one, (5.alpha.)-	3676-09-3	NIST05.L	108322	44	C19H30O	274
8-Hexadecenal, 14-methyl-, (Z)-	60609-53-2	NIST05.L	93524	41	C17H32O	252



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

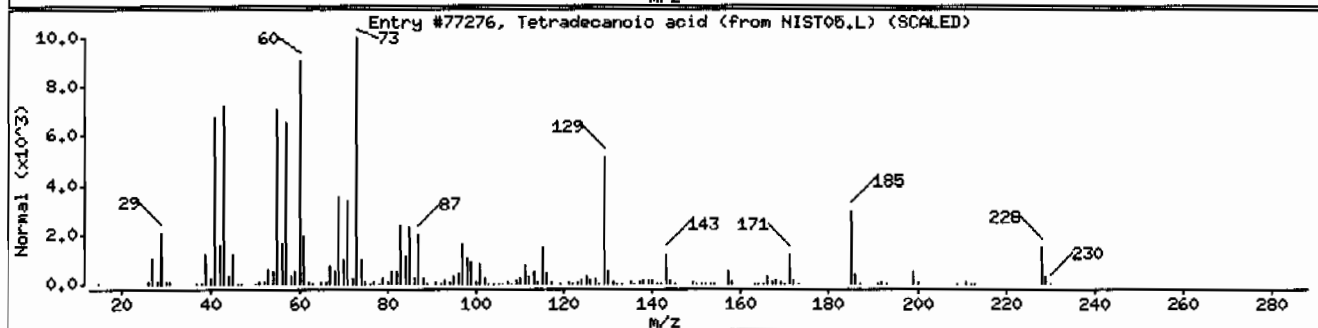
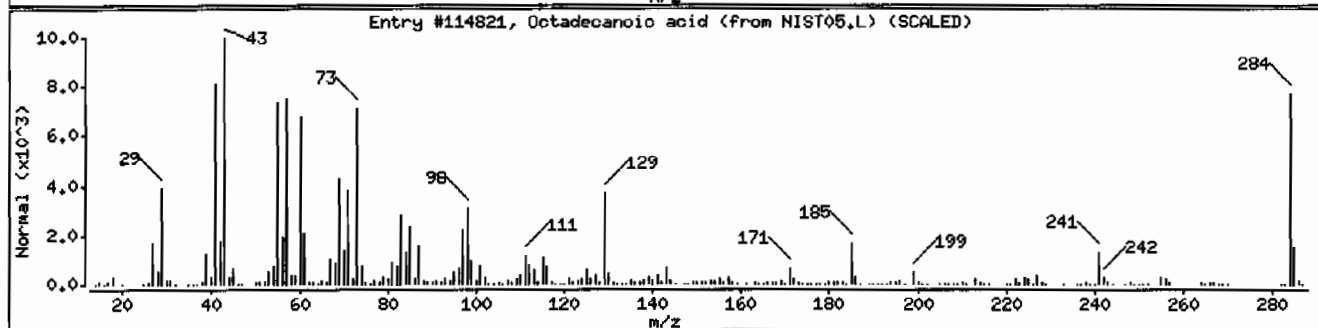
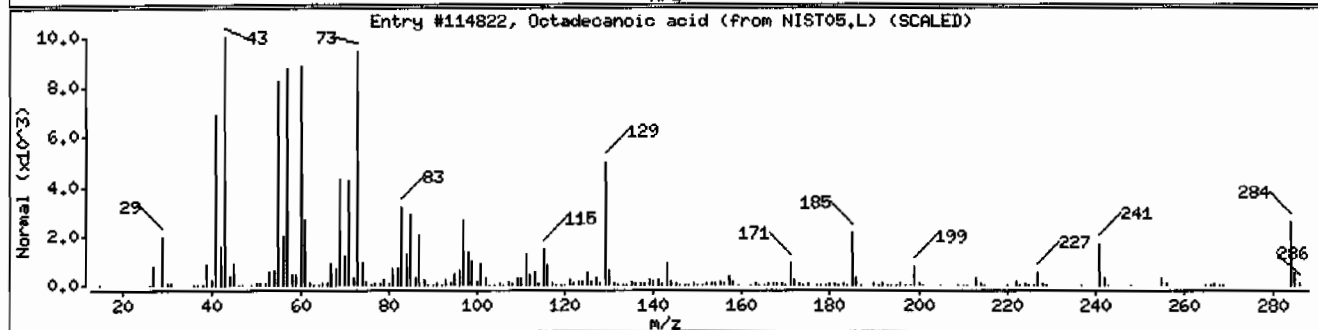
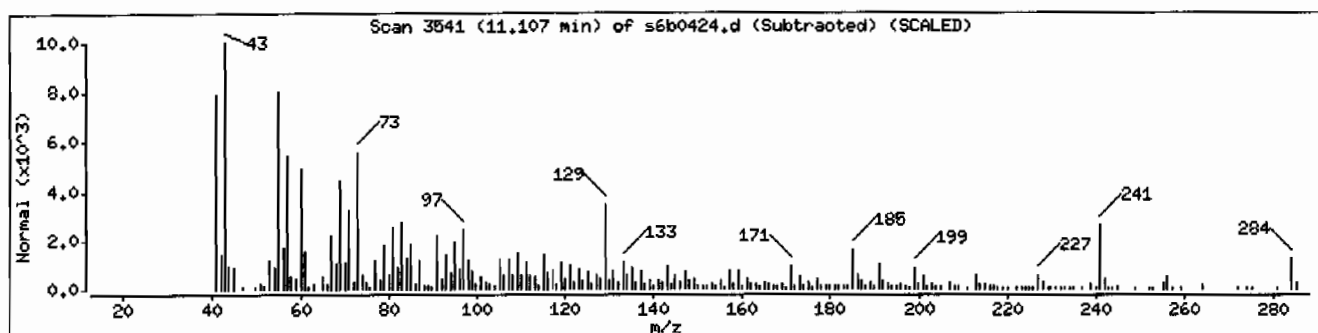
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST05.L	114822	92	C18H36O2	284
Octadecanoic acid	57-11-4	NIST05.L	114821	91	C18H36O2	284
Tetradecanoic acid	544-63-8	NIST05.L	77276	89	C14H28O2	228



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: 124538701194550111SVH11ILANL

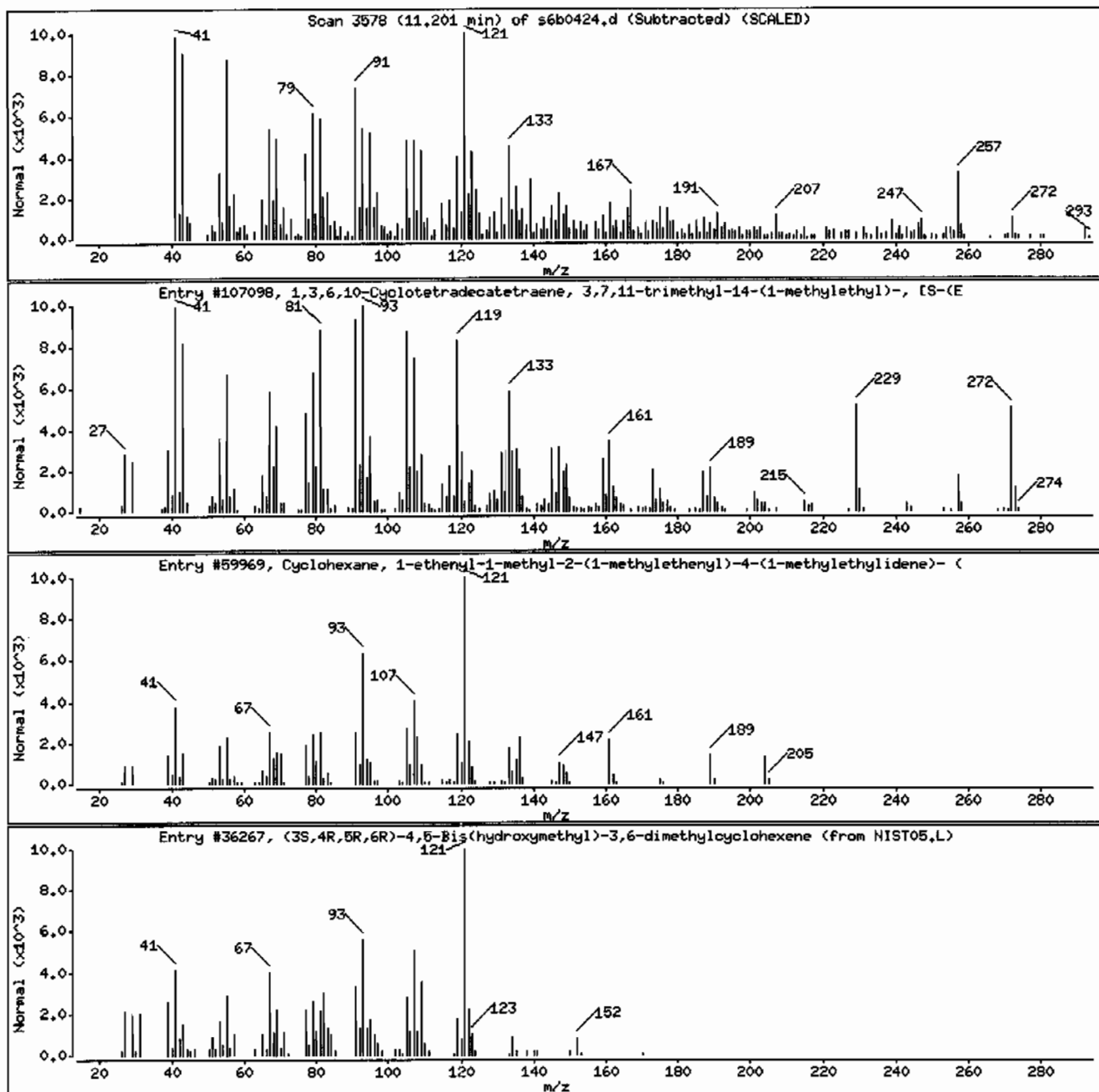
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,6,10-Cyclotetradecatetraene, 3,7,11-	1898-13-1	NIST05.L	107098	64	C20H32	272
Cyclohexane, 1-ethenyl-1-methyl-2-(1-met	3242-08-8	NIST05.L	59969	46	C15H24	204
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	43	C10H18O2	170



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 124538701194550111SVMI11LANL

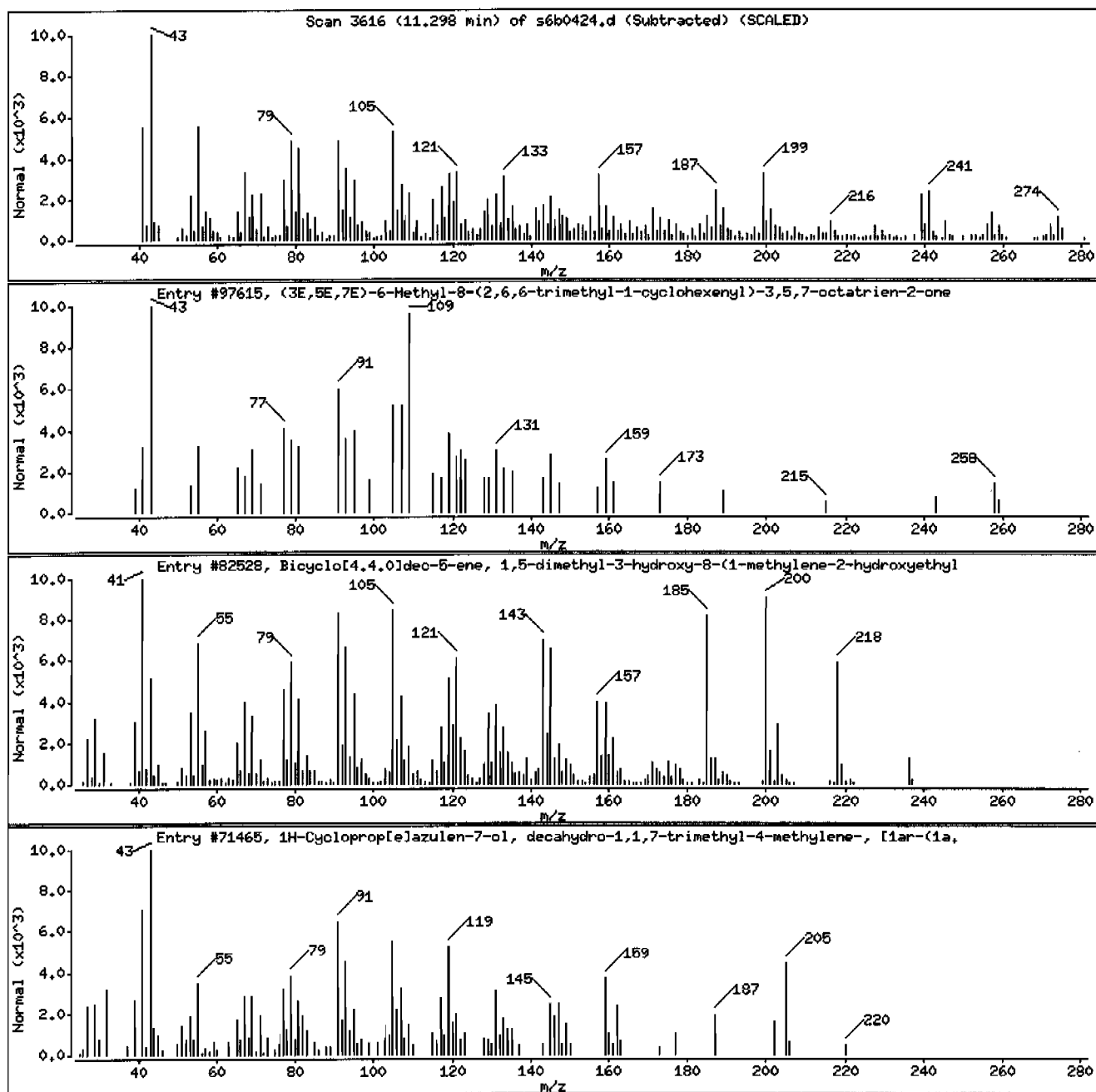
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	14	C18H26O	258
Bicyclo[4.4.0]dec-5-ene, 1,5-dimethyl-3-	1000196-83-7	NIST05.L	82528	10	C15H24O2	236
1H-Cycloprop[elazulen-7-ol, decahydro-1,	6750-60-3	NIST05.L	71465	10	C15H24O	220



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: I245387011194550111SVMI1ILANL

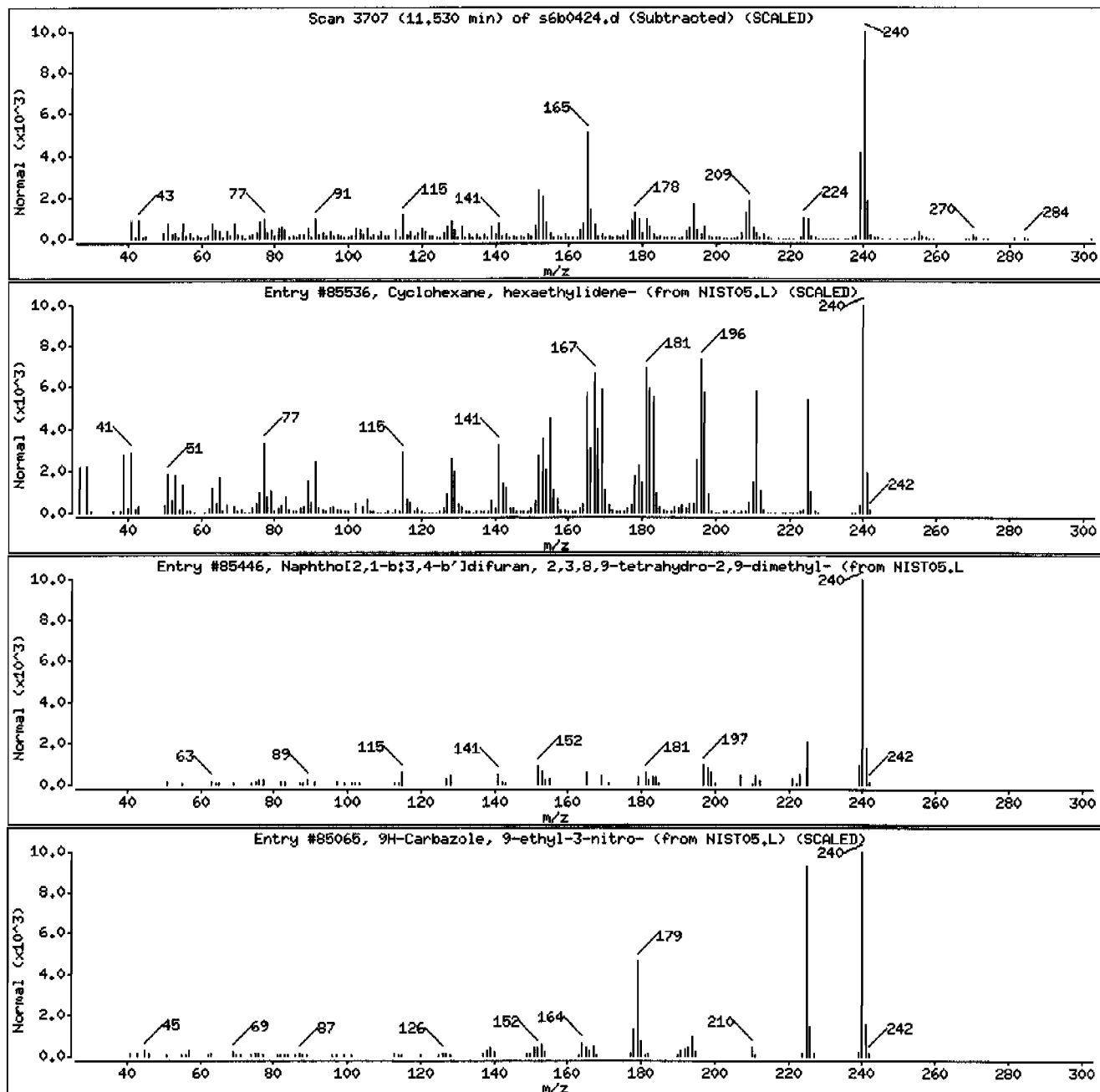
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, hexaethylidene-	1482-93-8	NIST05.L	85536	95	C18H24	240
Naphtho[2,1-b;3,4-b']difuran, 2,3,8,9-te	68873-19-8	NIST05.L	85446	60	C16H16O2	240
9H-Carbazole, 9-ethyl-3-nitro-	86-20-4	NIST05.L	85065	46	C14H12N2O2	240



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: I245387011194550111SVMI1ILANL

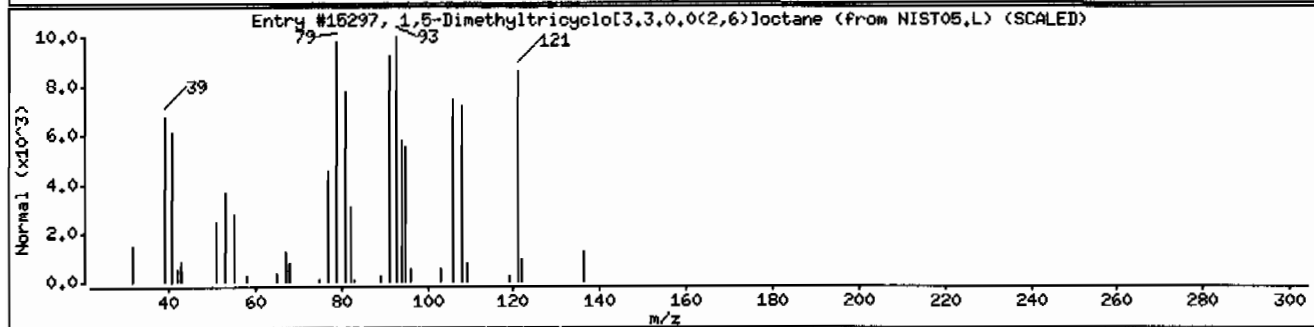
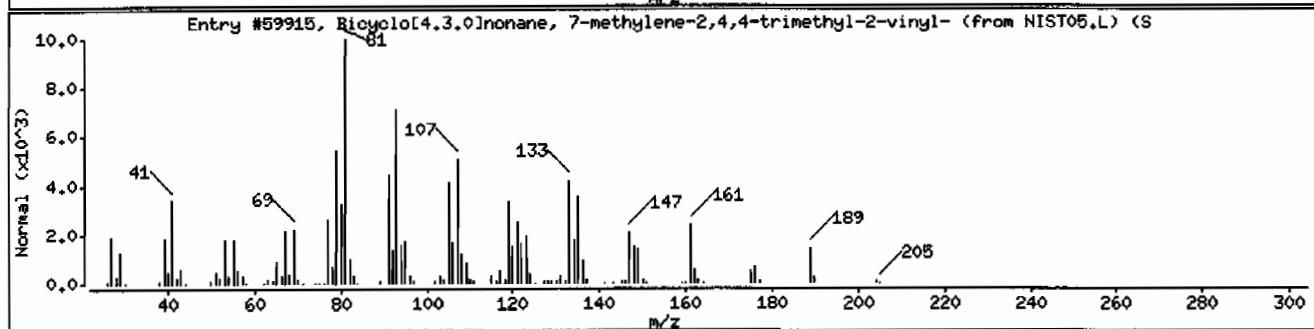
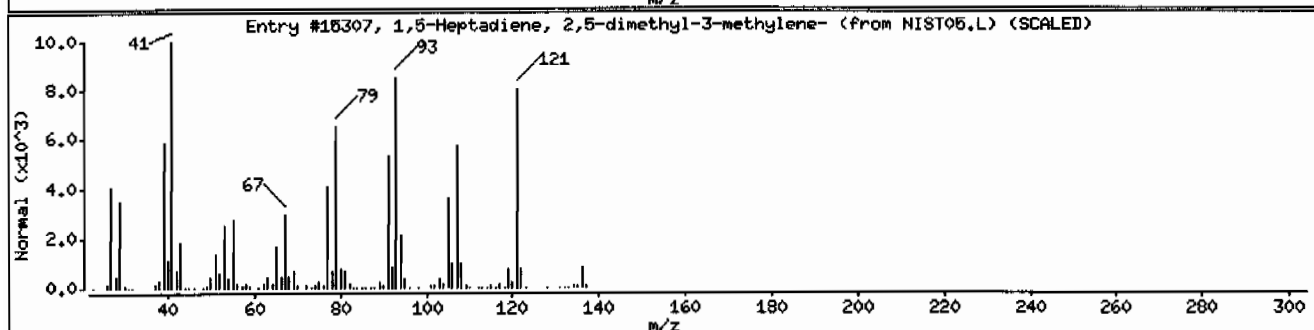
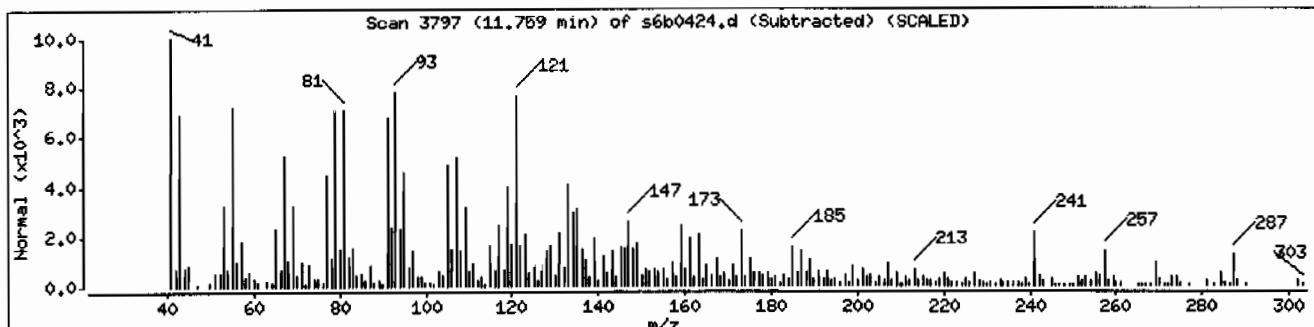
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,5-Heptadiene, 2,5-dimethyl-3-methylene	74663-83-5	NIST05.L	15307	90	C ₁₀ H ₁₆	136
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	64	C ₁₅ H ₂₄	204
1,5-Dimethyltricyclo[3.3.0.0(2,6)]octane	103240-54-6	NIST05.L	16297	64	C ₁₀ H ₁₆	136



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI1ILANL

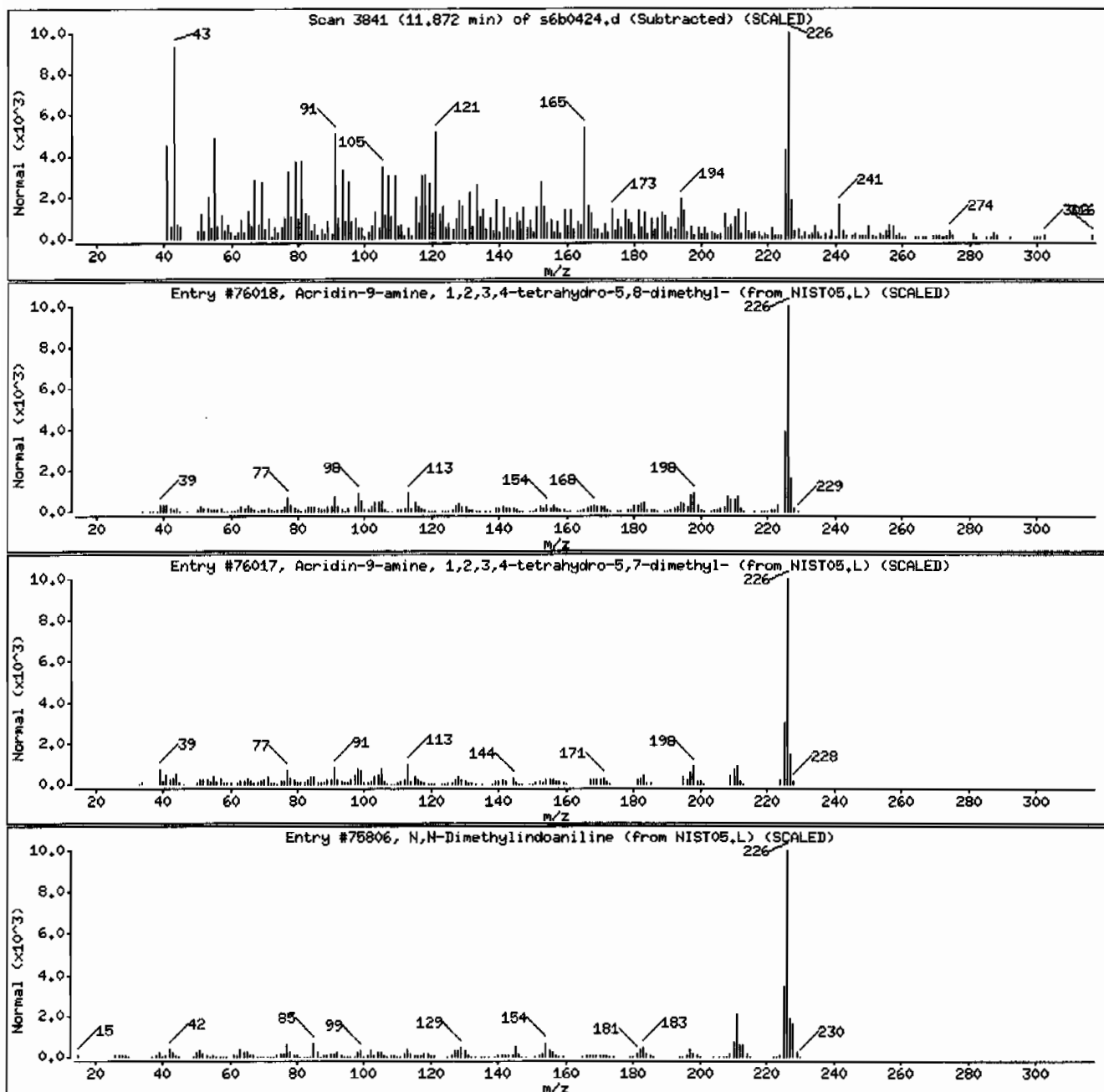
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acridin-9-amine, 1,2,3,4-tetrahydro-5,8-	297758-19-1	NIST05.L	76018	64	C15H18N2	226
Acridin-9-amine, 1,2,3,4-tetrahydro-5,7-	1000300-57-6	NIST05.L	76017	62	C15H18N2	226
N,N-Dimethylindoline	2150-58-5	NIST05.L	75806	60	C14H14N2O	226



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011/94550111/SVM11/LANL

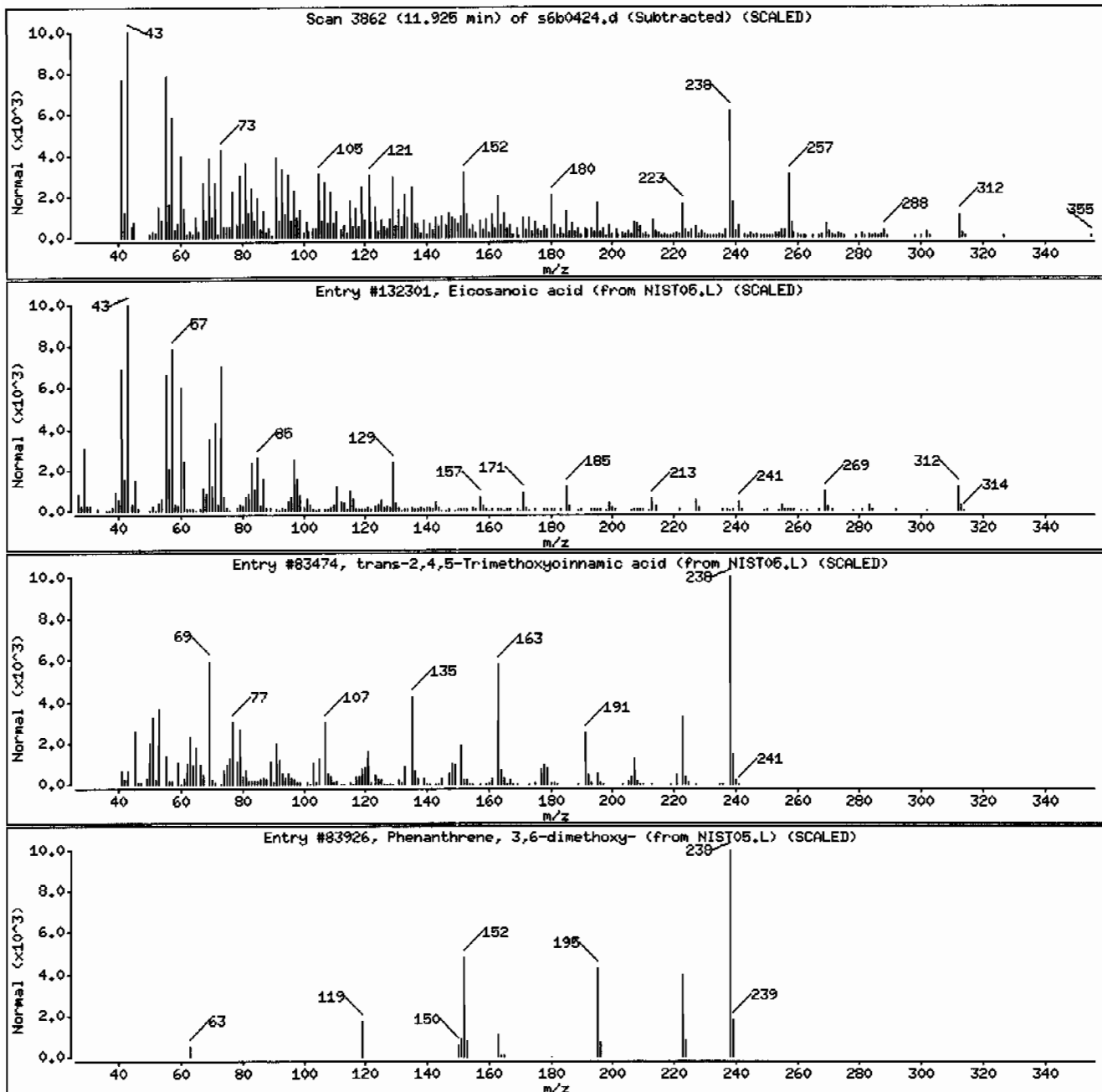
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosanoic acid	606-30-9	NIST05.L	132301	91	C ₂₀ H ₄₀ O ₂	312
trans-2,4,5-Trimethoxycinnamic acid	24160-53-0	NIST05.L	83474	25	C ₁₂ H ₁₄ O ₅	238
Phenanthrene, 3,6-dimethoxy-	15638-08-1	NIST05.L	83926	25	C ₁₆ H ₁₄ O ₂	238



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 124538701194550111SVMI1ILANL

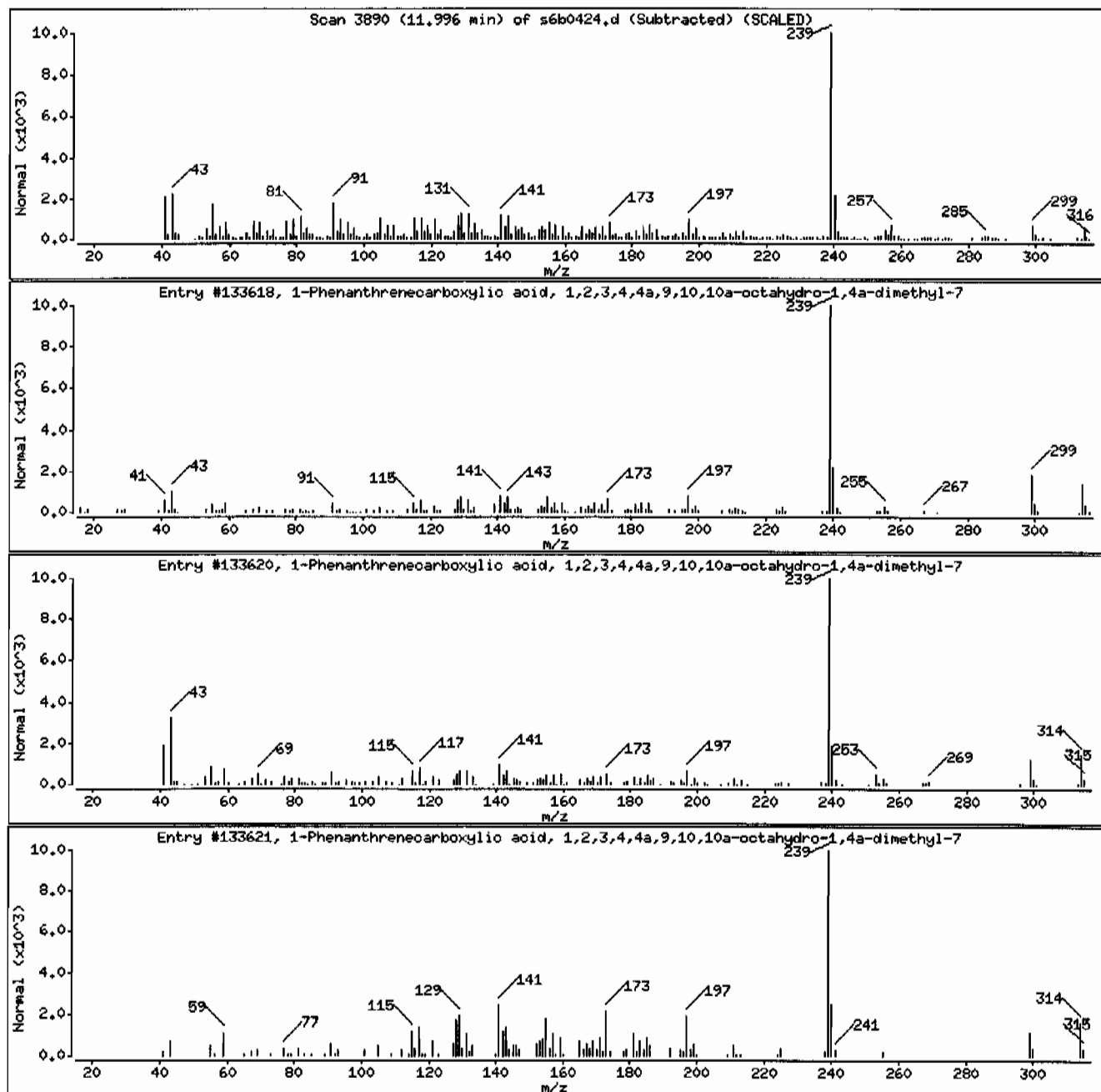
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C ₂₁ H ₃₀ O ₂	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C ₂₁ H ₃₀ O ₂	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	74	C ₂₁ H ₃₀ O ₂	314



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

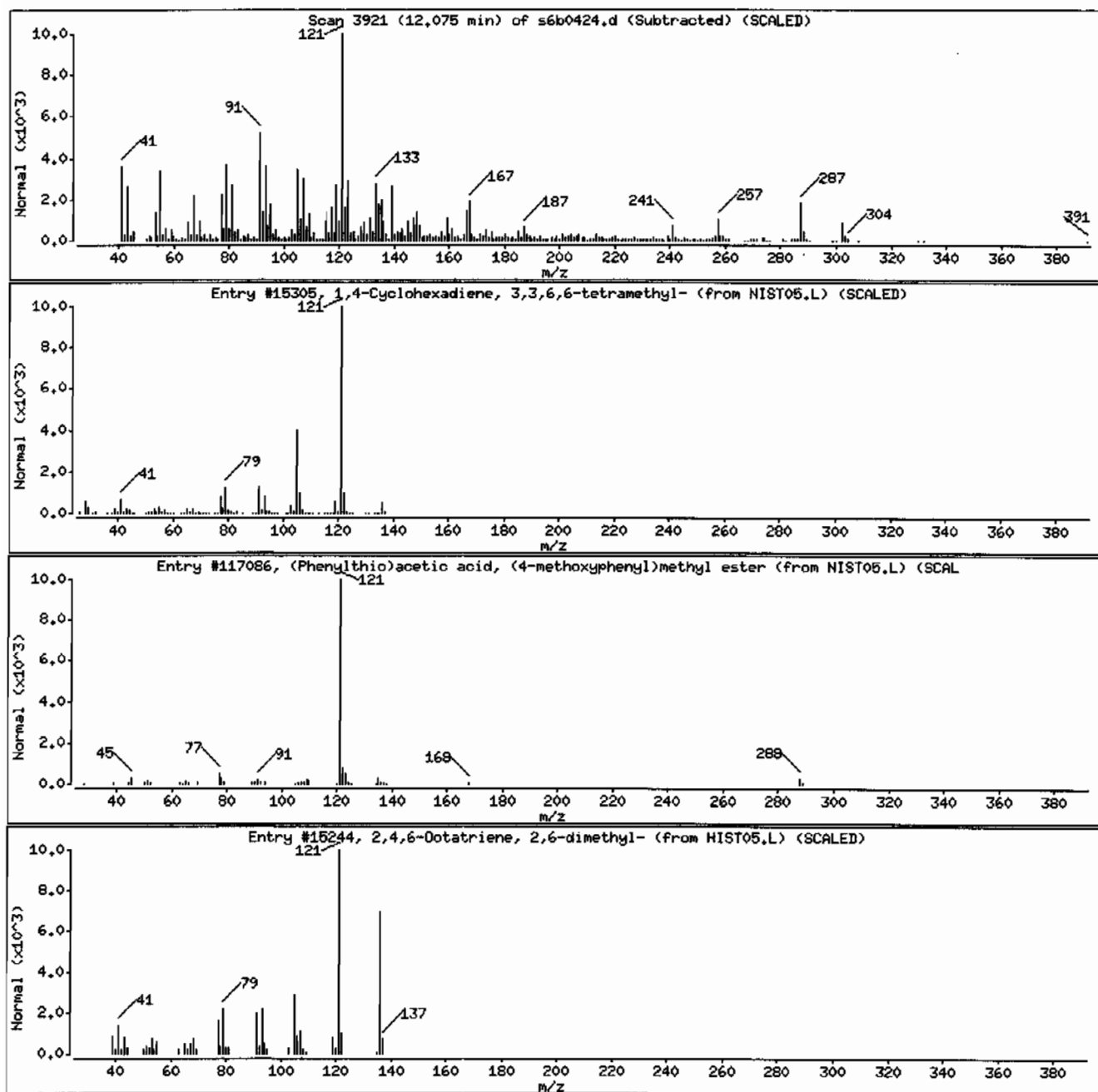
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-64-3	NIST05.L	15305	38	C10H16	136
(Phenylthio)acetic acid, (4-methoxyphenyl-	1000308-33-9	NIST05.L	117086	30	C16H16O3S	288
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	30	C10H16	136



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI1ILANL

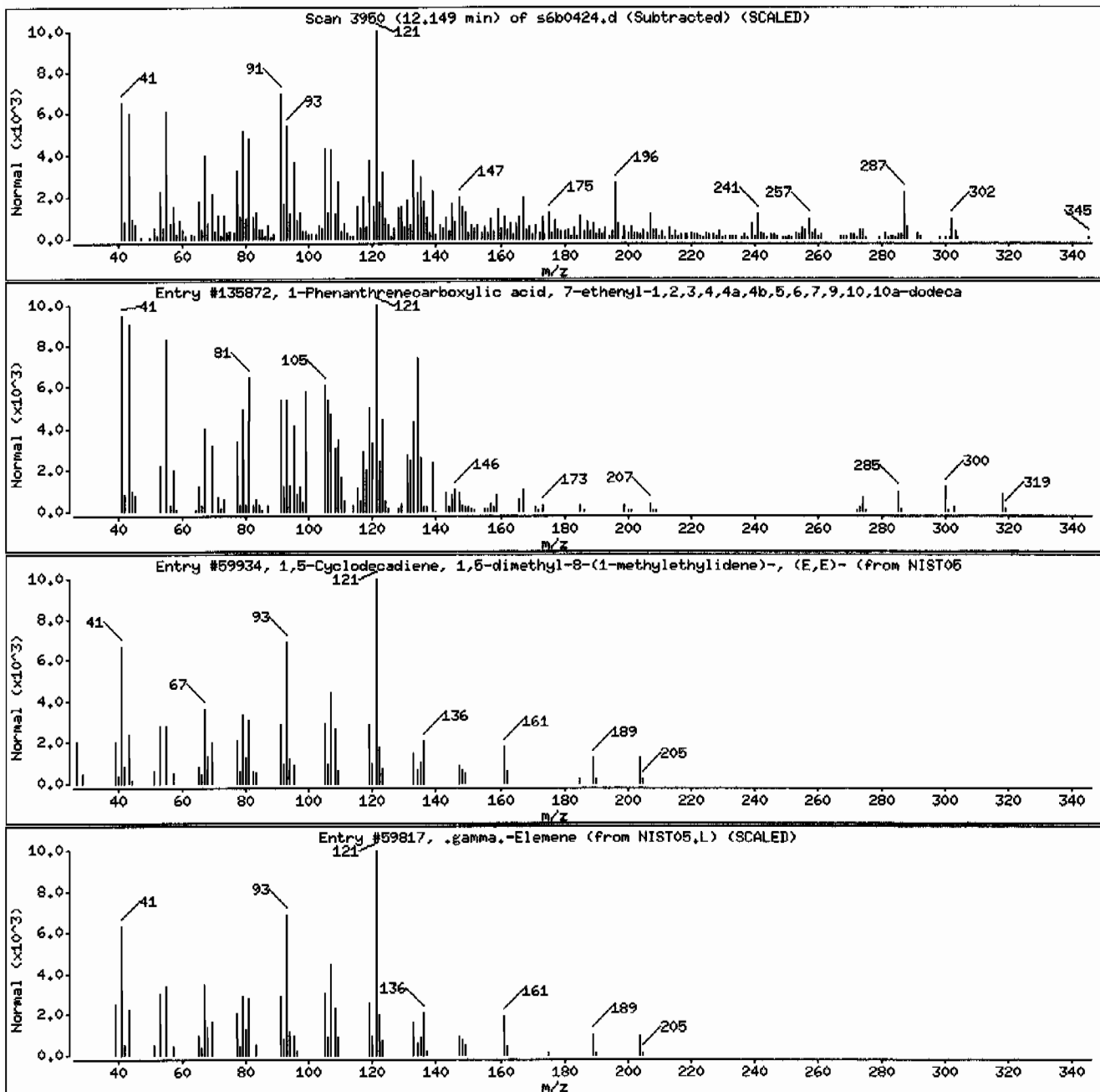
Volume Injected (uL): 0.5

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-Phenanthrenecarboxylic acid, 7-ethenyl	56051-66-2	NIST05.L	135872	46	C20H30O3	318
1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-methyl-2-propenylidene)-, (E,E)-	15423-57-1	NIST05.L	59934	45	C15H24	204
.gamma.-Elemene	30824-67-0	NIST05.L	59817	41	C15H24	204



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI11LANL

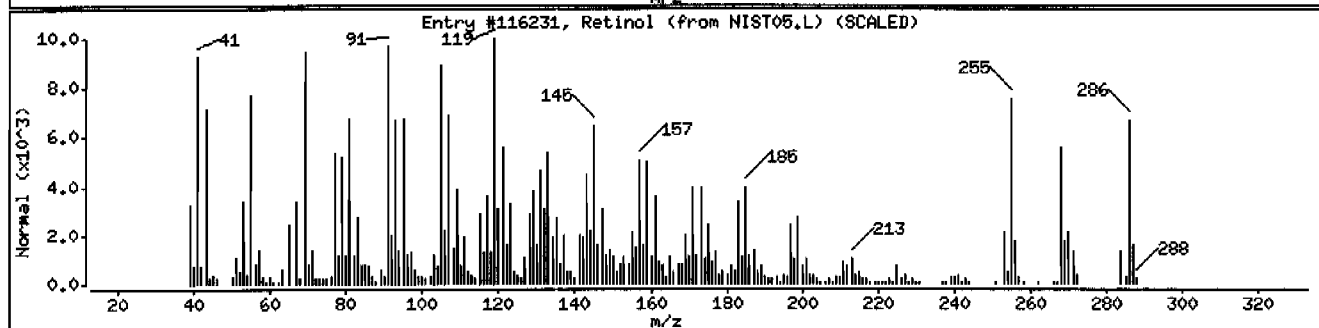
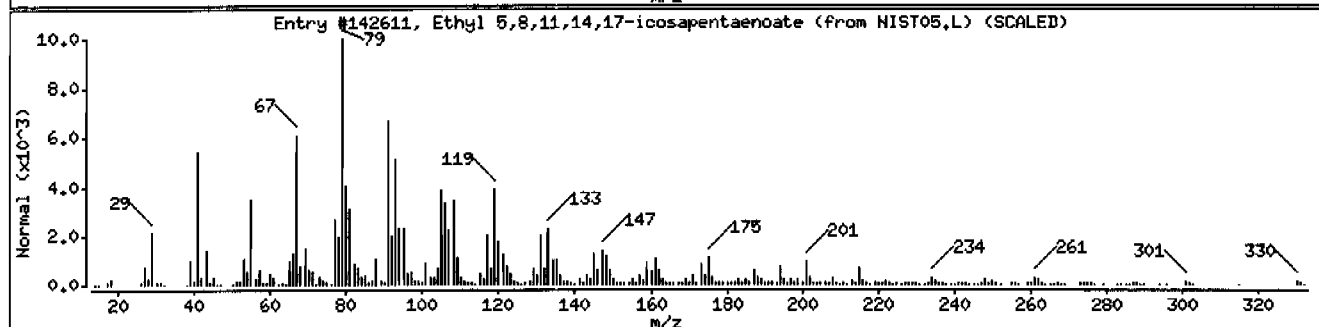
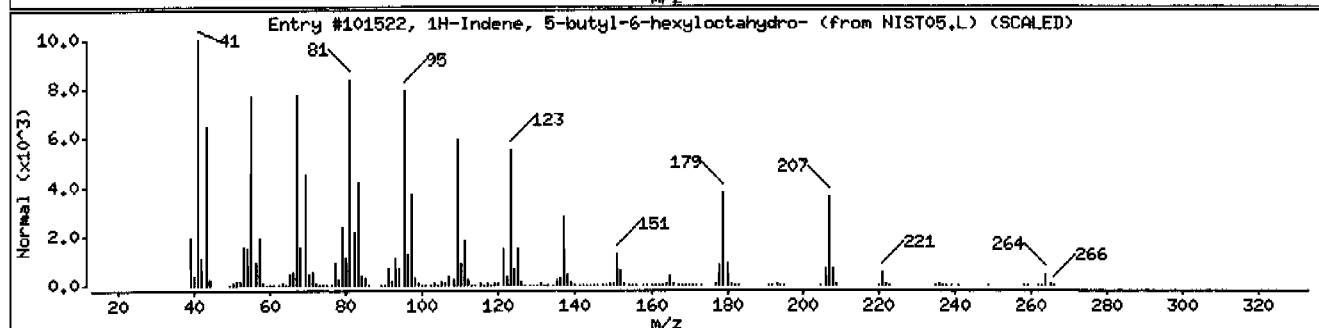
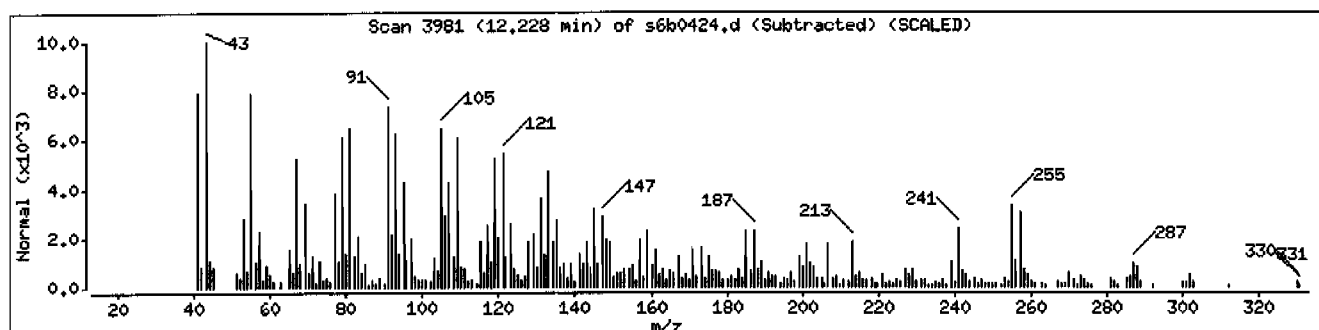
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-6MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	44	C19H36	264
Ethyl 5,8,11,14,17-icosapentaenoate	84494-70-2	NIST05.L	142611	38	C22H34O2	330
Retinol	68-26-8	NIST05.L	116231	35	C20H30O	286



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH11ILANL

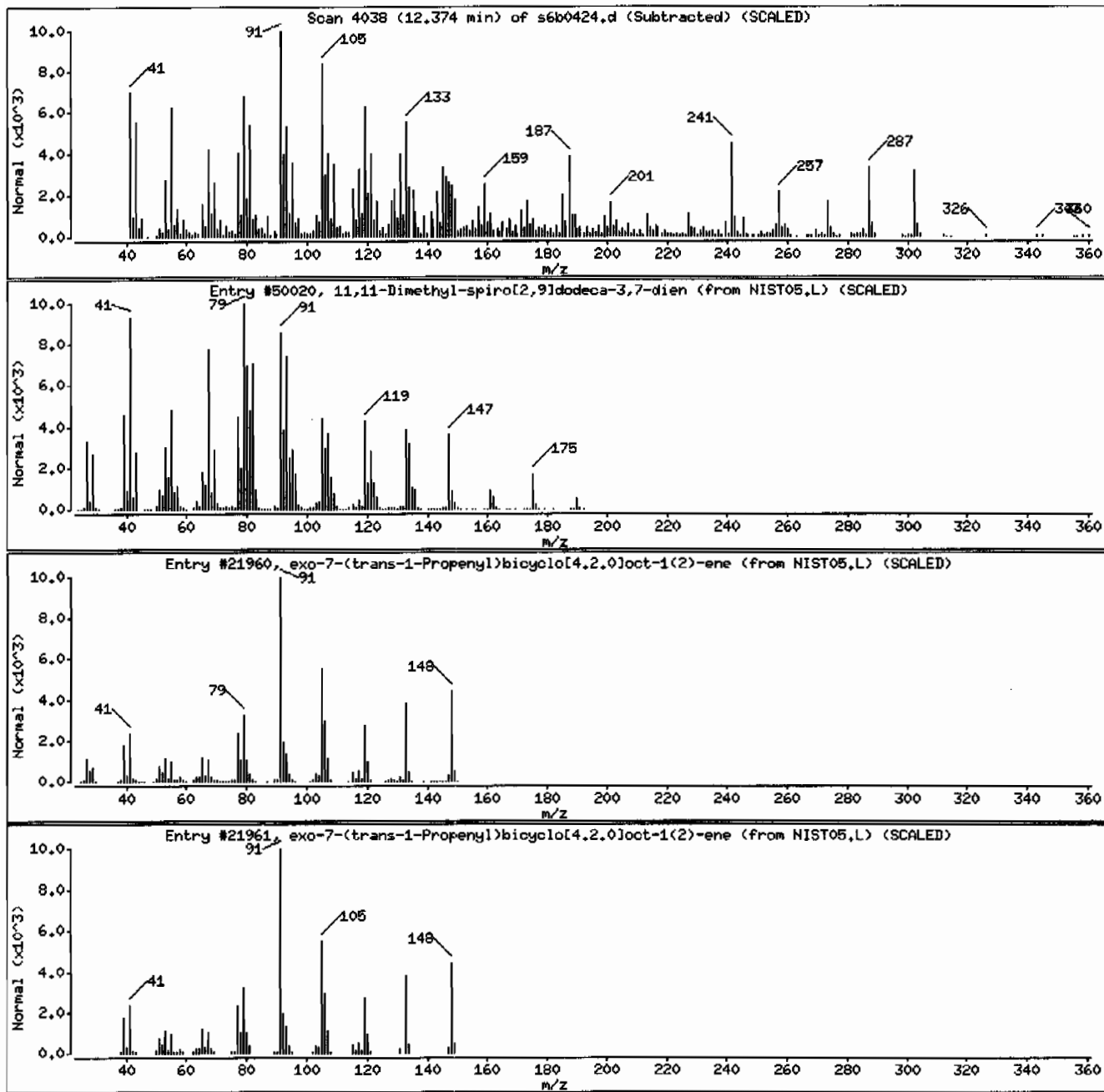
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien	1000062-28-4	NIST05.L	50020	38	C14H22	190
exo-7-(trans-1-Propenyl)bicyclo[4,2,0]oc	107983-42-6	NIST05.L	21960	27	C11H16	148
exo-7-(trans-1-Propenyl)bicyclo[4,2,0]oc	107983-42-6	NIST05.L	21961	27	C11H16	148



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1248387011194550111SVH11ILANL

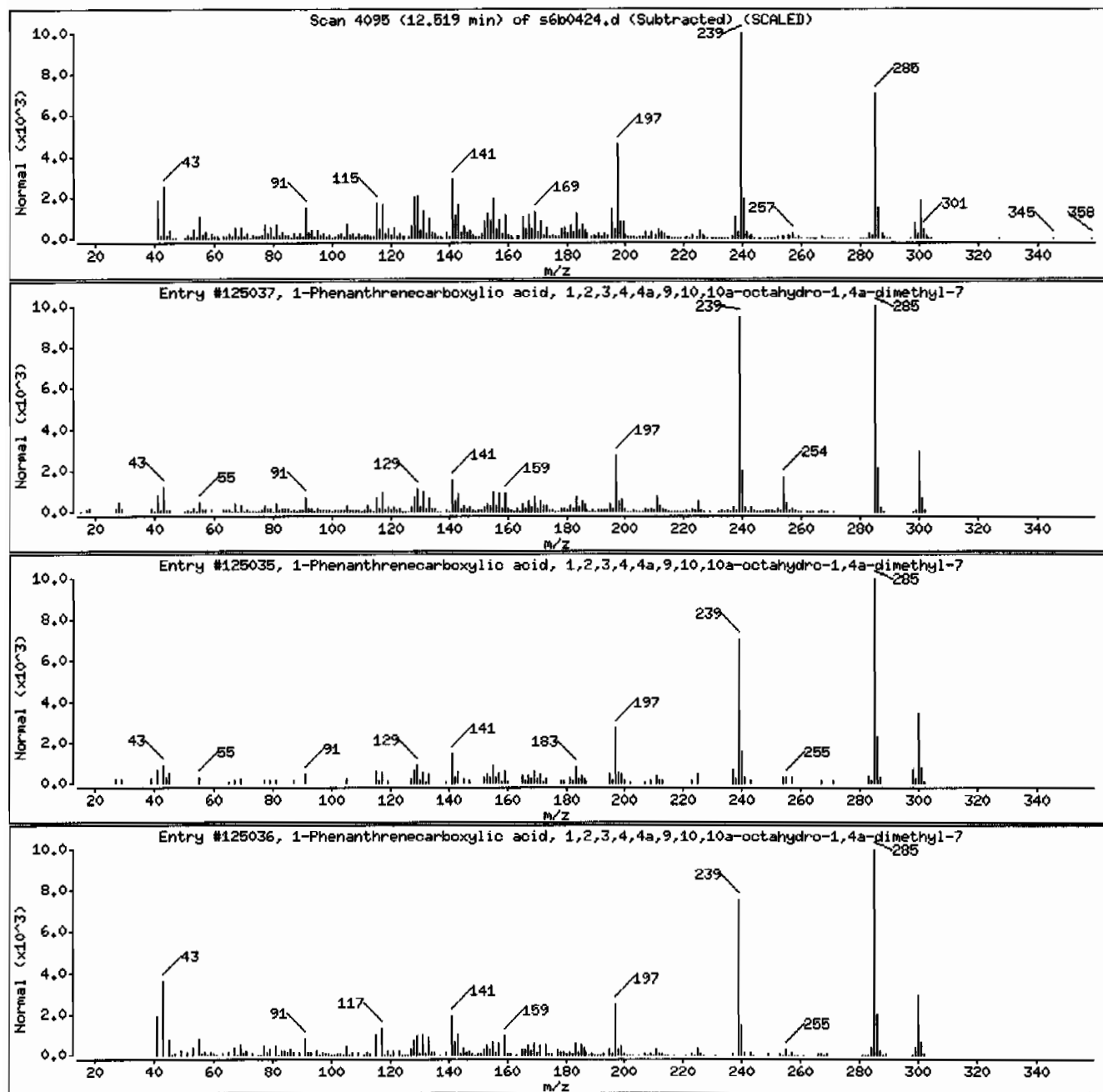
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	93	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	89	C20H28O2	300



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

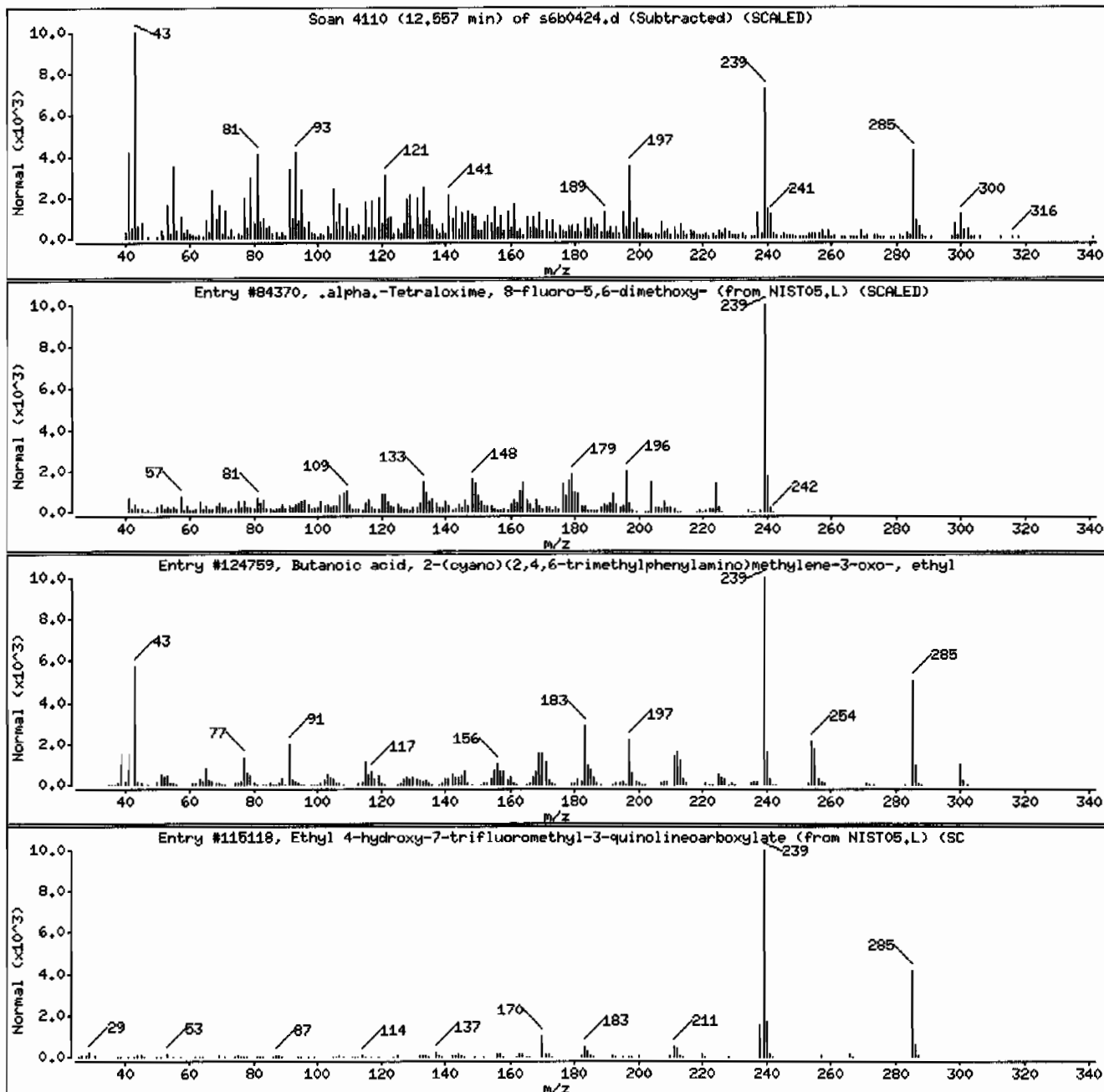
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
,alpha.-Tetraloxime, 8-fluoro-5,6-dimeth	1000125-88-0	NIST05.L	84370	44	C12H14FN03	239
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	43	C17H20N2O3	300
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	27	C13H10F3N03	285



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7693

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH11ILANL

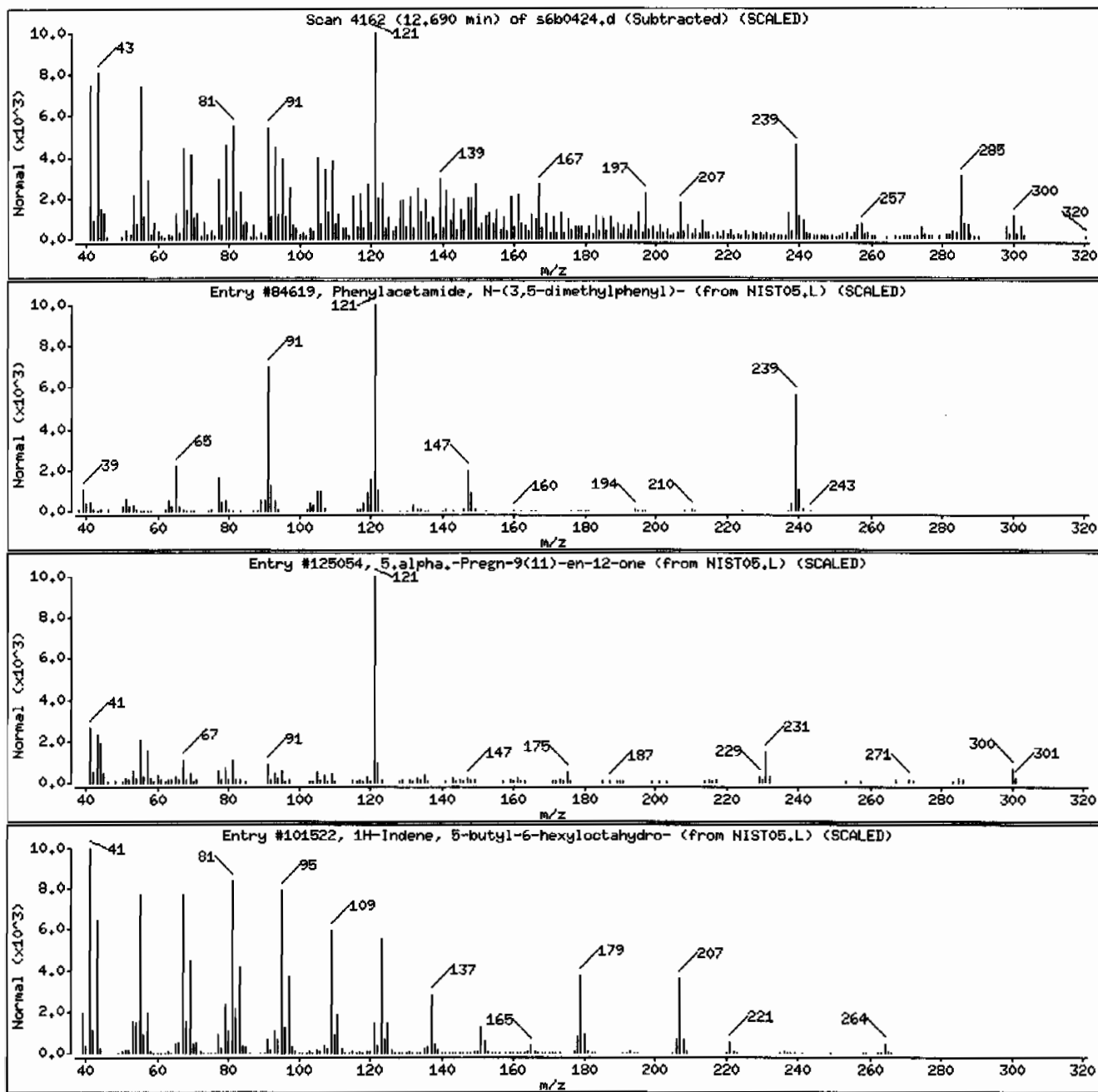
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenylacetamide, N-(3,5-dimethylphenyl)-	329937-72-6	NIST05.L	84619	46	C ₁₆ H ₁₇ NO	239
5.alpha.-Pregn-9(11)-en-12-one	4354-35-2	NIST05.L	125054	25	C ₂₁ H ₃₂ O	300
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	25	C ₁₉ H ₃₆	264



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI1ILANL

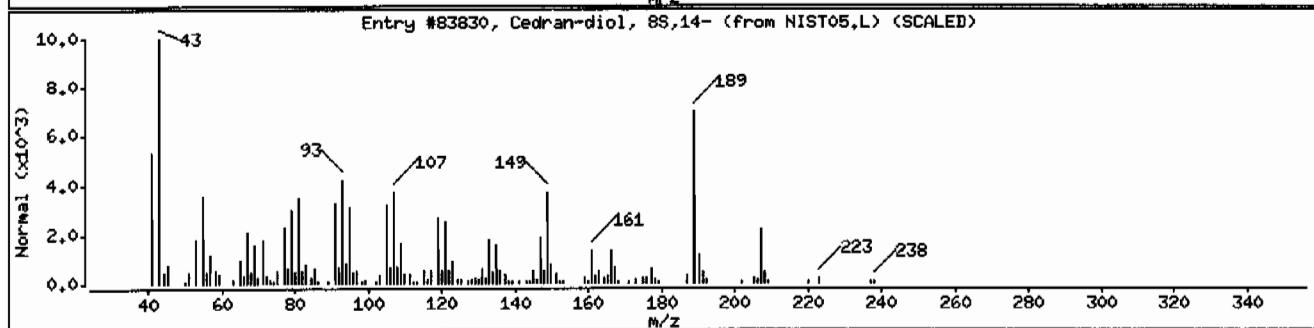
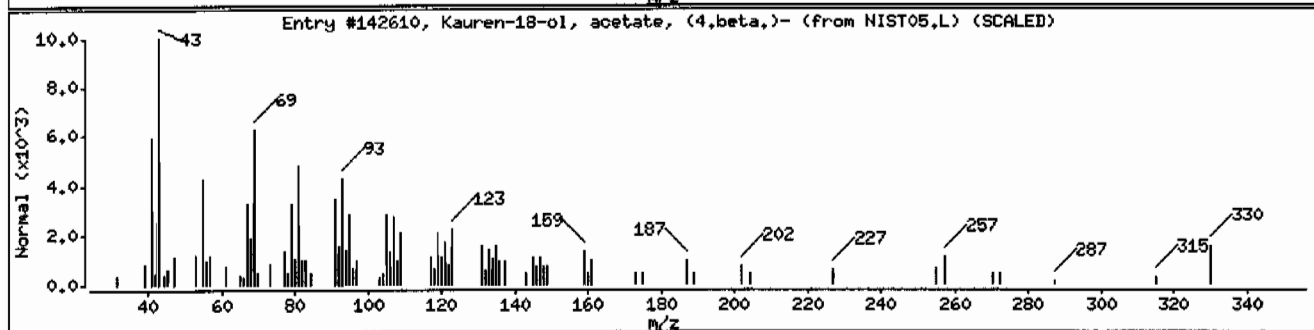
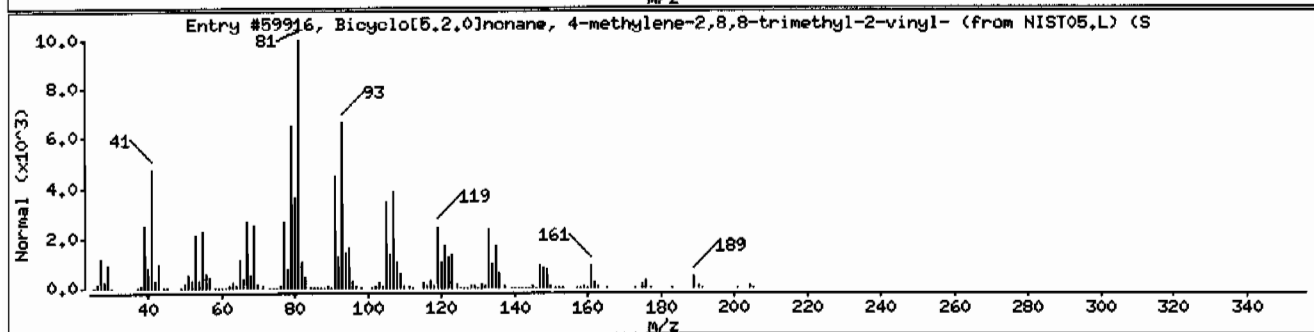
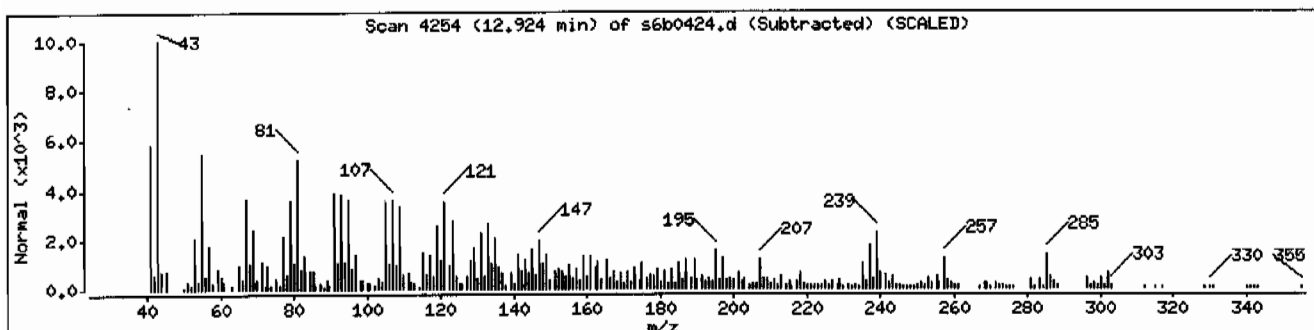
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	50	C16H24	204
Kauren-18-ol, acetate, (4,beta,)-	72150-74-4	NIST05.L	142610	45	C22H34O2	330
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	38	C15H26O2	238



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194850111SVMI11LANL

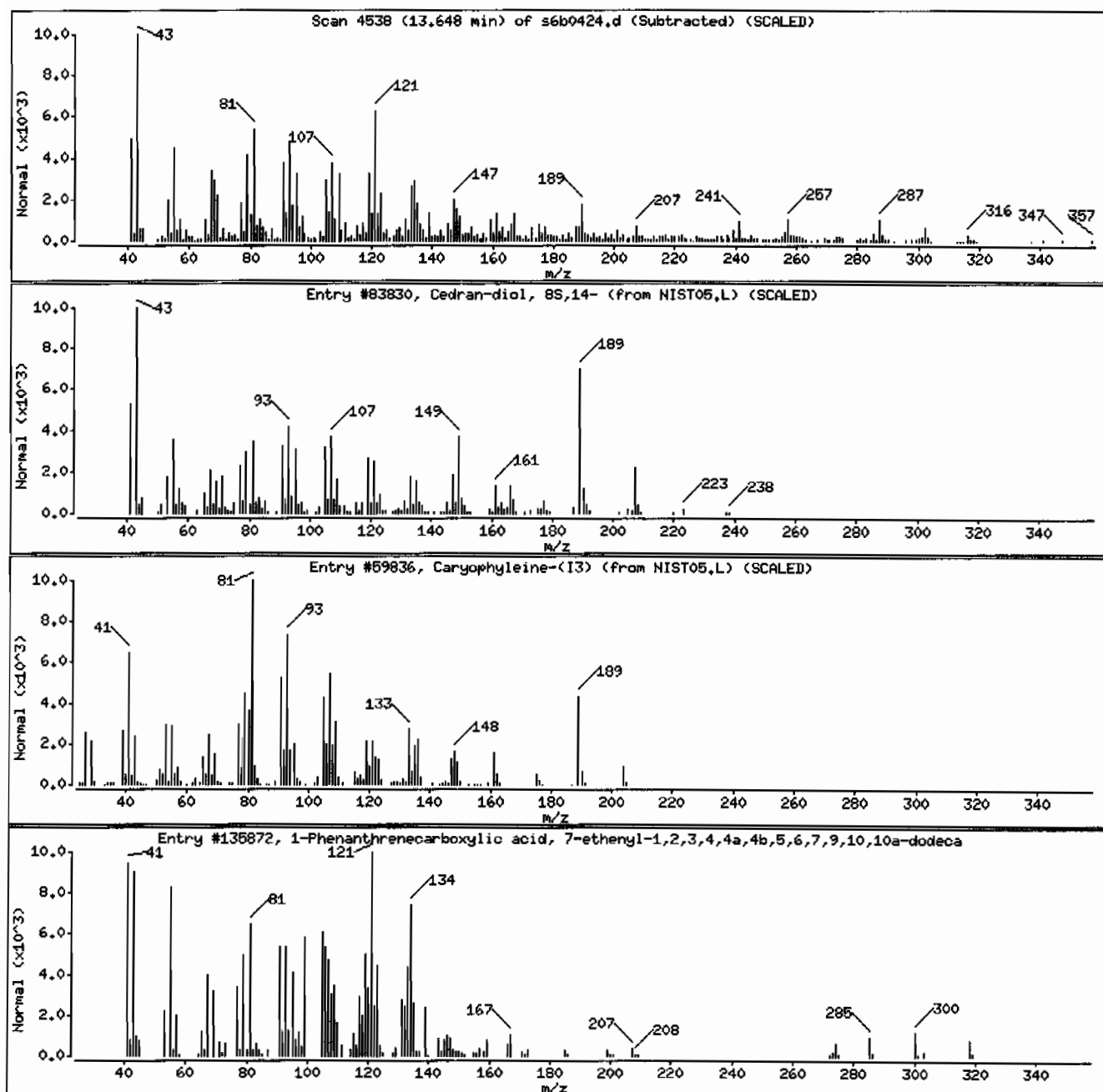
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	83	C15H26O2	238
Caryophyllene-(I3)	136296-37-2	NIST05.L	59836	53	C15H24	204
1-Phenanthrenecarboxylic acid, 7-ethenyl	56051-66-2	NIST05.L	135872	47	C20H30O3	318



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVMI11LANL

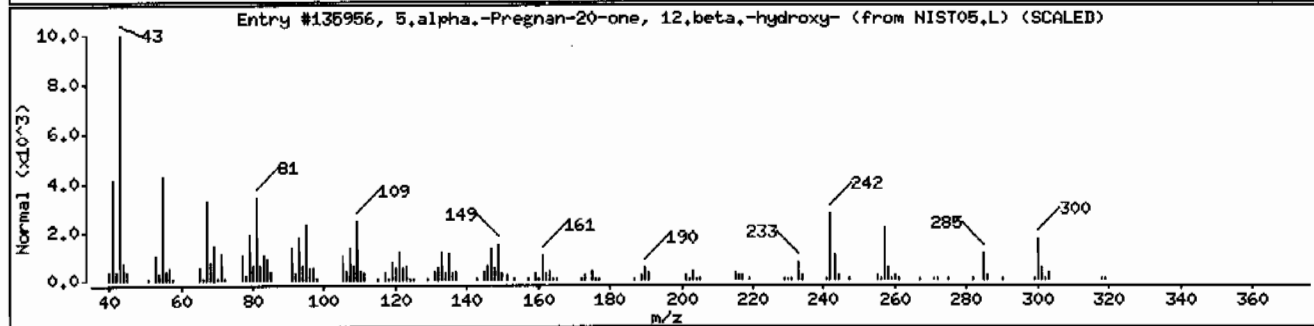
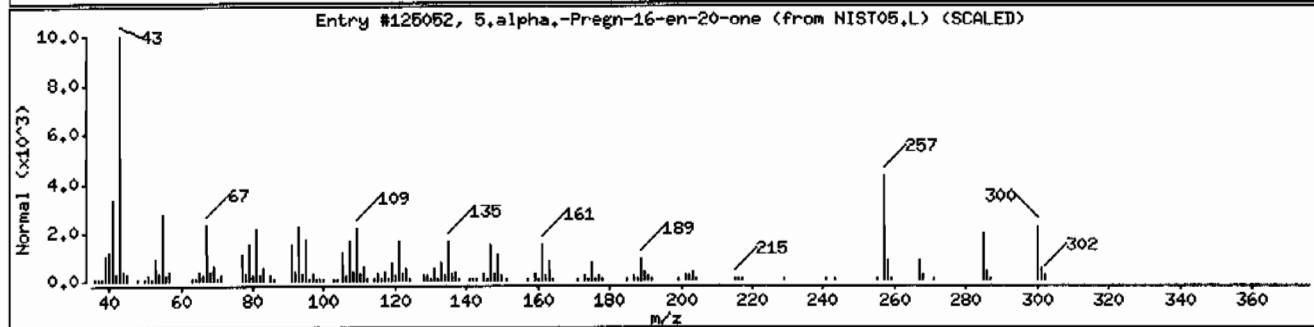
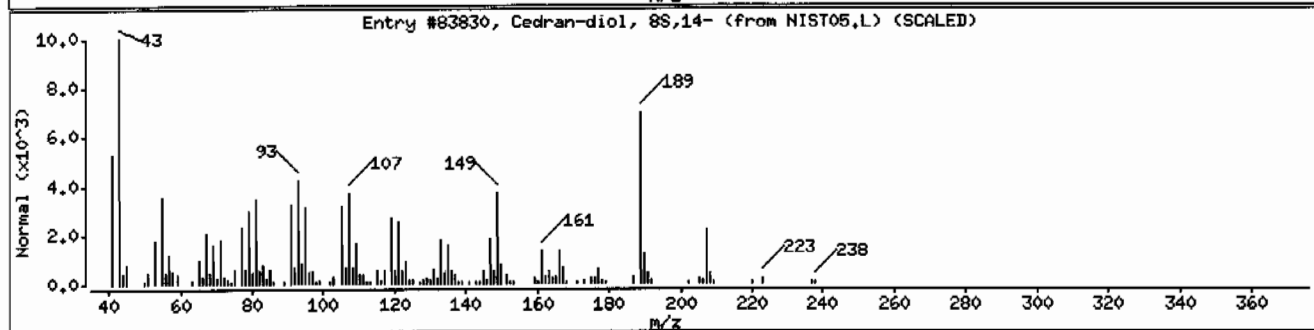
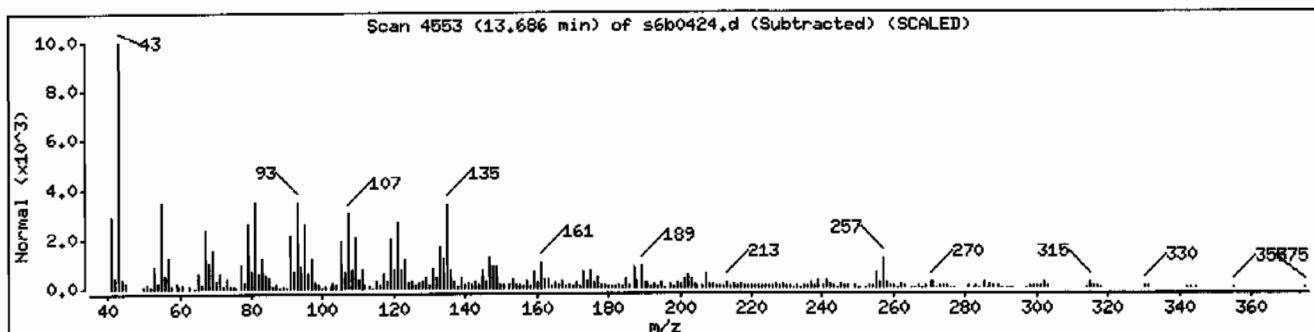
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	60	C15H26O2	238
5.alpha.-Pregn-16-en-20-one	3752-04-3	NIST05.L	125052	38	C21H32O	300
5.alpha.-Pregnan-20-one, 12.beta.-hydrox	5618-22-4	NIST05.L	135956	32	C21H34O2	318



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: I245387011194550111SVH111LANL

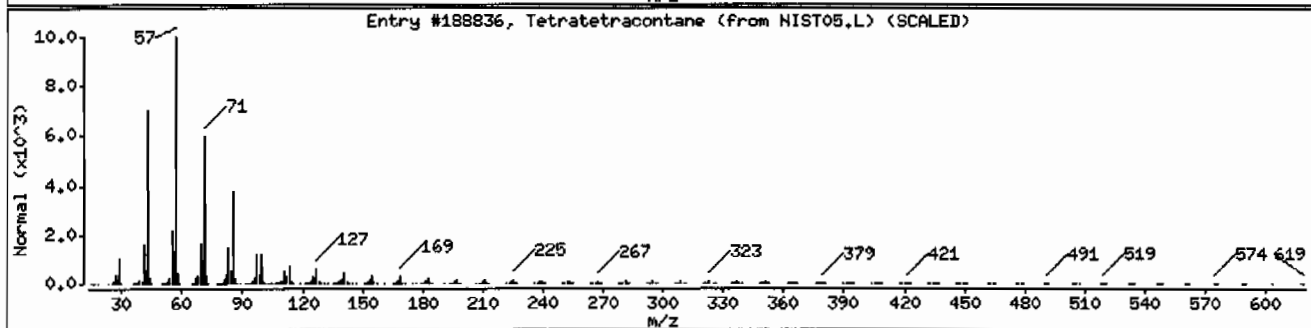
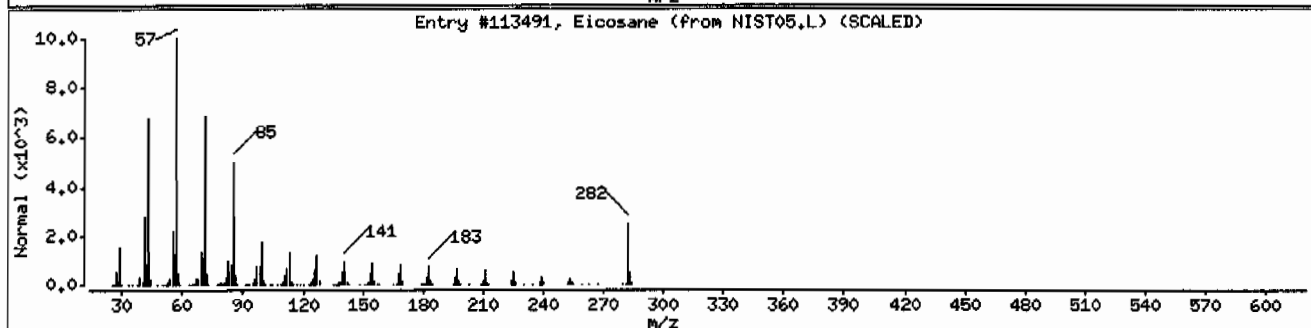
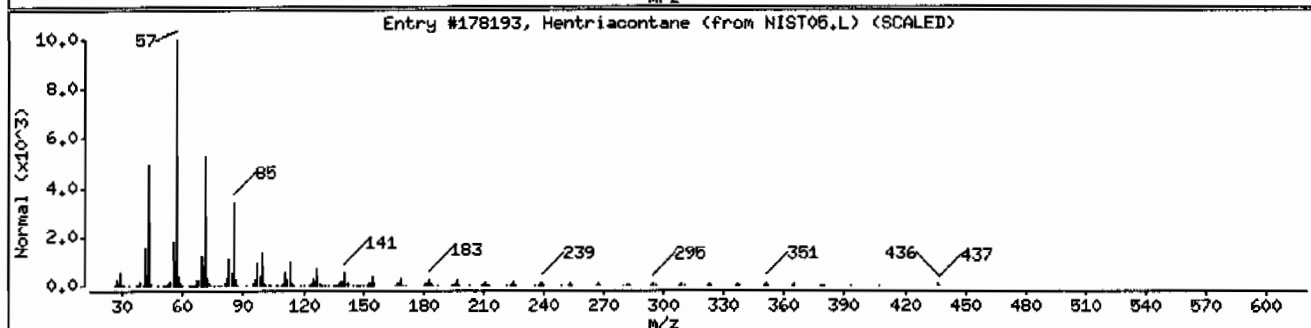
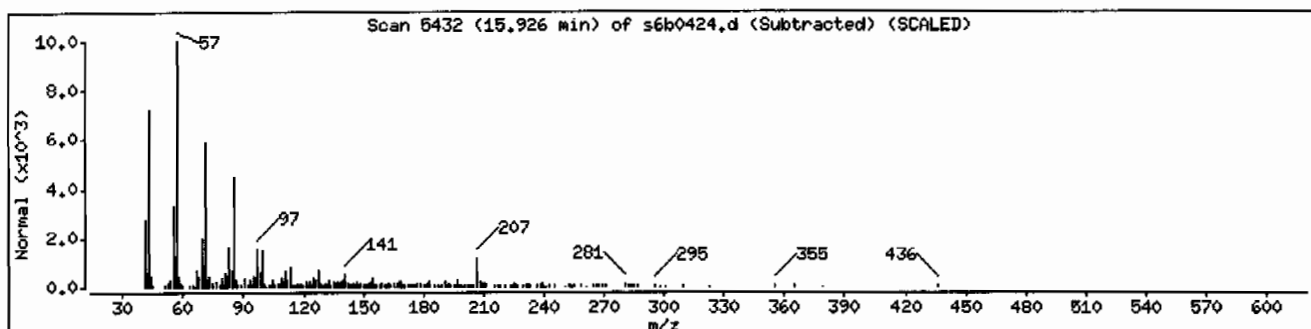
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hentriacontane	630-04-6	NIST05.L	178193	98	C ₃₁ H ₆₄	437
Eicosane	112-95-8	NIST05.L	113491	94	C ₂₀ H ₄₂	282
Tetratetracontane	7098-22-8	NIST05.L	188836	93	C ₄₄ H ₉₀	619



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: I248387011|9455011|SVH11|LANL

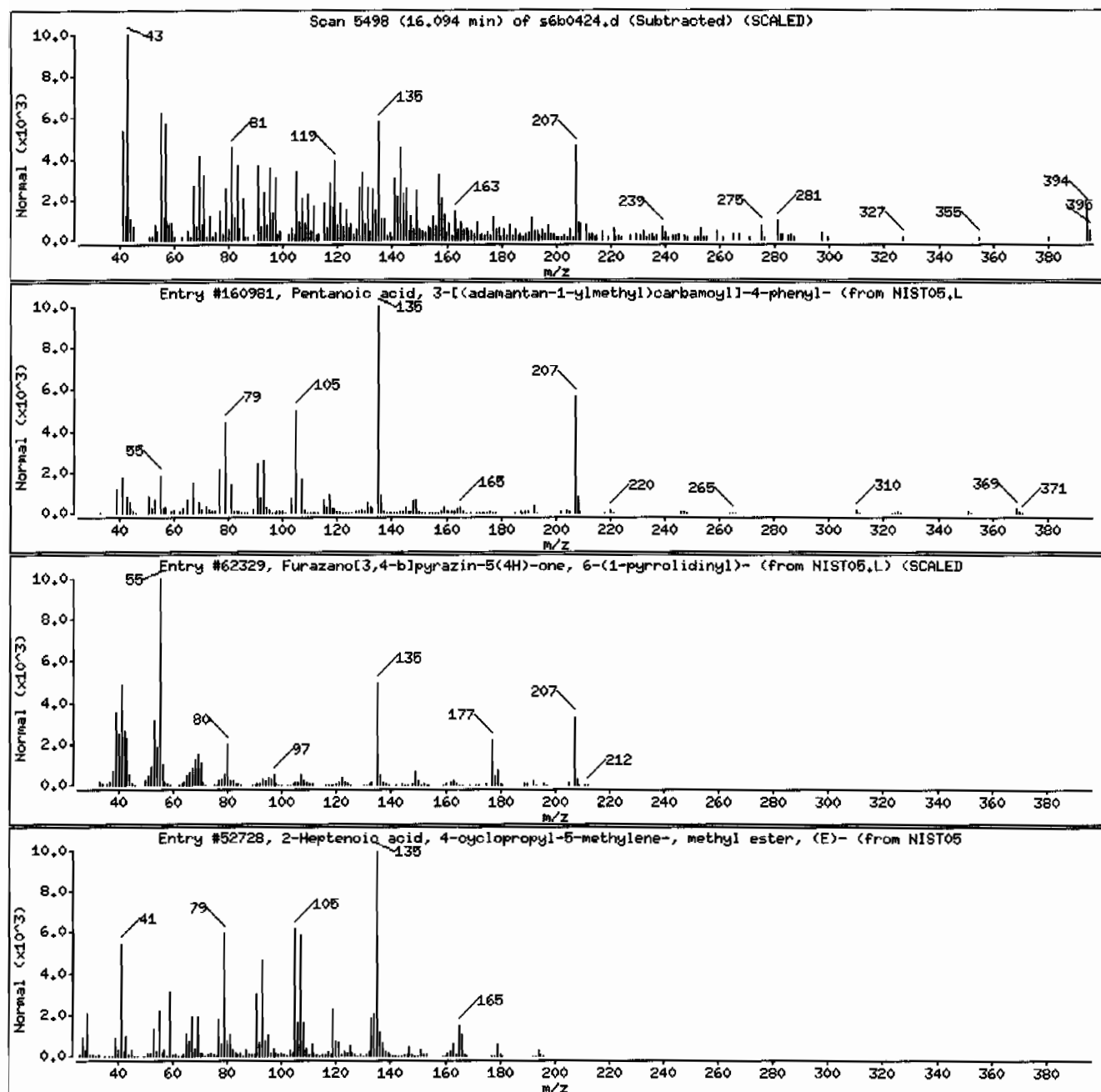
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pentanoic acid, 3-[(adamantan-1-ylmethyl)	1000316-89-1	NIST05.L	160981	18	C23H31NO3	369
Furazano[3,4-b]pyrazin-5(4H)-one, 6-(1-p	332099-72-6	NIST05.L	62329	14	C8H9N5O2	207
2-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	11	C12H18O2	194



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

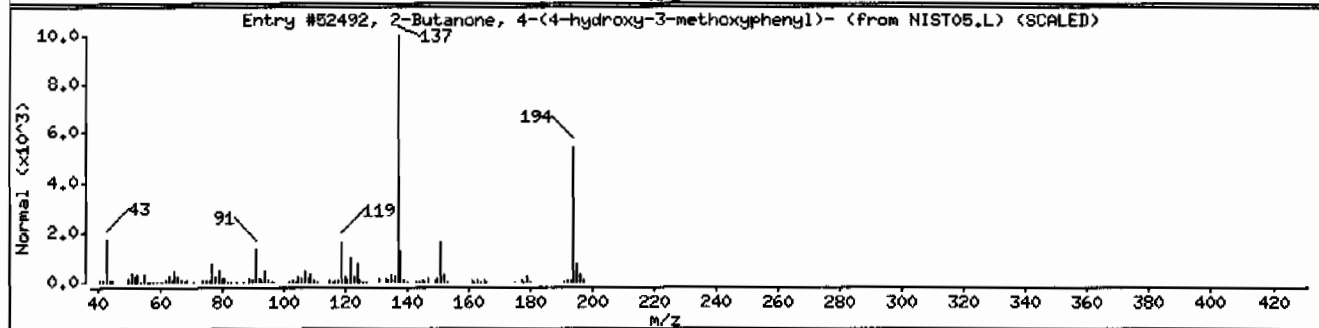
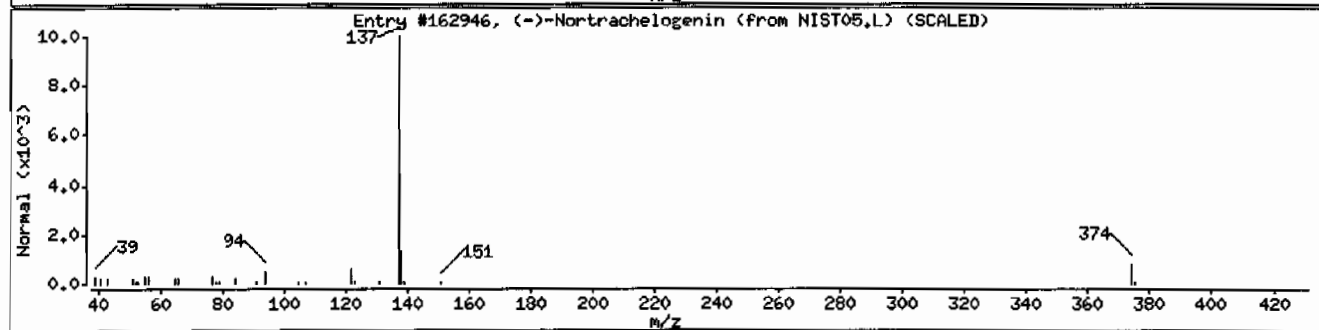
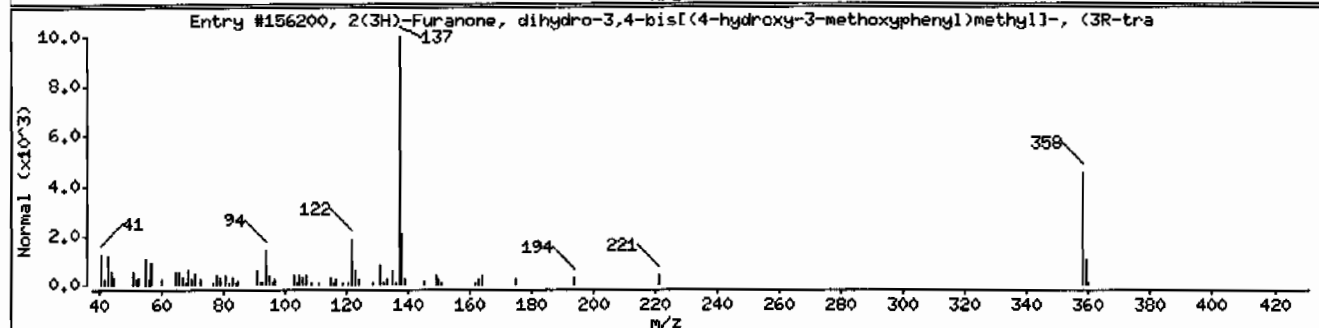
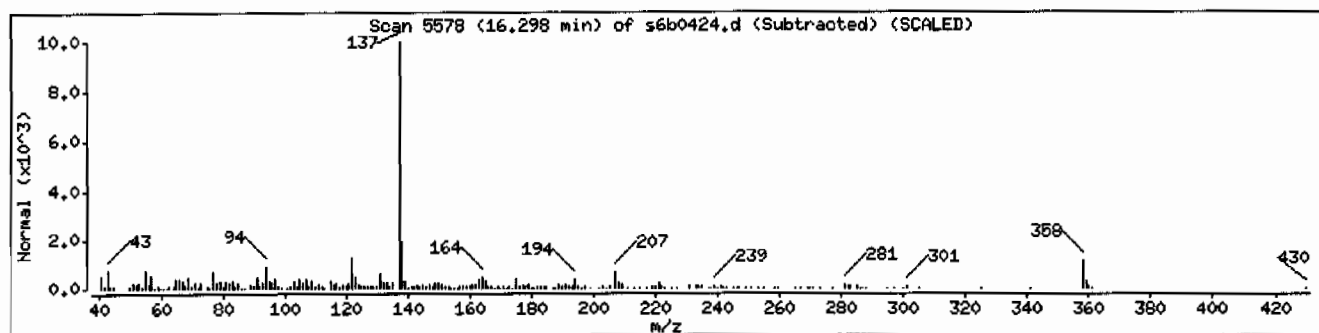
Volume Injected (uL): 0.5

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(3H)-Furanone, dihydro-3,4-bis[4-(hydro	580-72-3	NIST05.L	156200	78	C20H22O6	358
(-)-Nortrachegenin	34444-37-6	NIST05.L	162946	64	C20H22O7	374
2-Butanone, 4-(4-hydroxy-3-methoxyphenyl	122-48-5	NIST05.L	52492	59	C11H14O3	194



Date : 04-FEB-2010 21:25

Client ID: RE14-10-7693

Instrument: MSD6.i

Sample Info: 1245387011194550111SVH111LANL

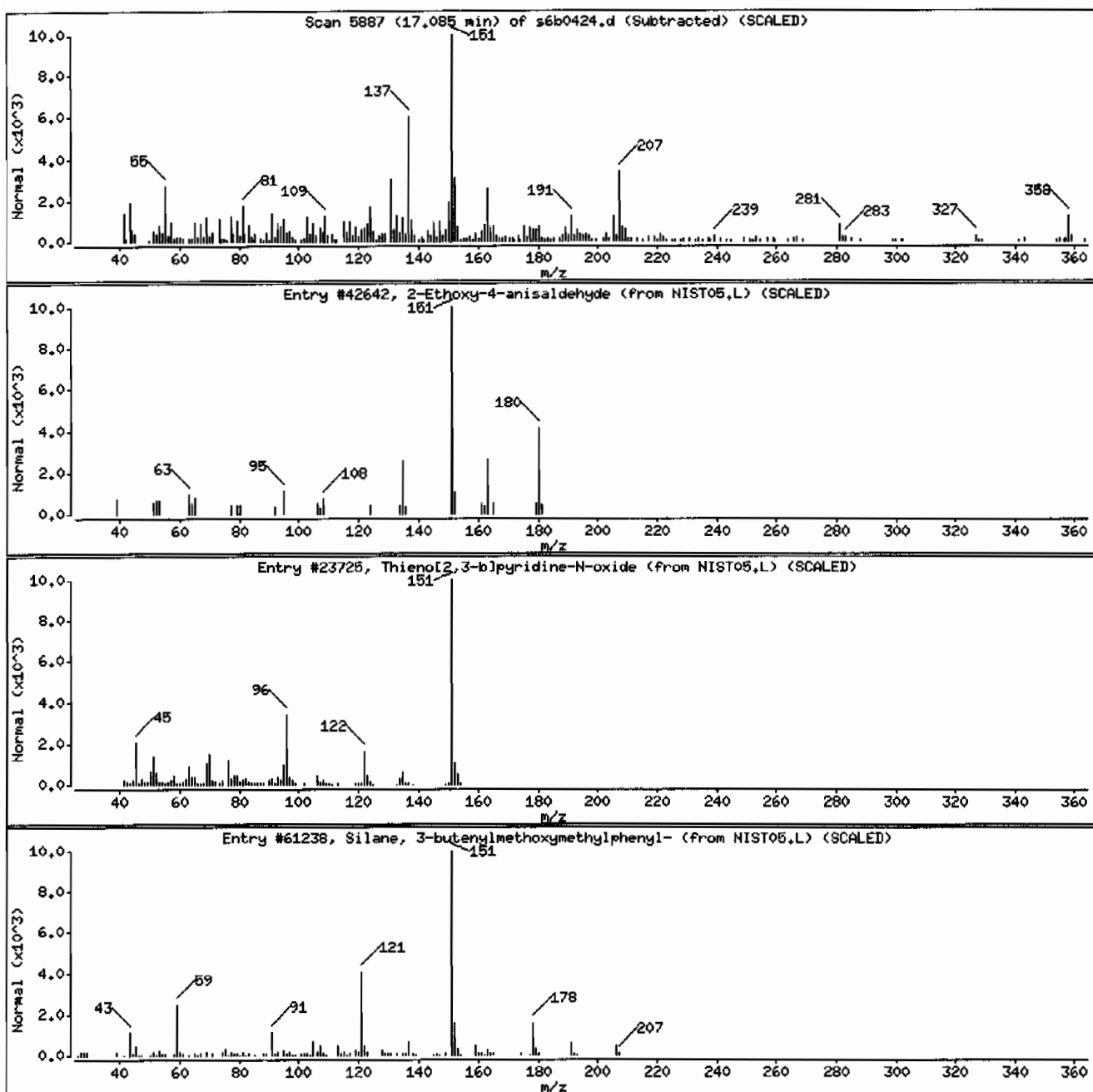
Volume Injected (uL): 0.5

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-Ethoxy-4-anisaldehyde	42924-37-8	NIST05.L	42642	35	C10H12O3	180
Thieno[2,3-b]pyridine-N-oxide	25557-50-0	NIST05.L	23725	30	C7H5NOS	151
Silane, 3-butenylmethoxymethylphenyl-	76557-75-0	NIST05.L	61238	27	C12H18OSi	206



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

SDG Number: 10-1384
Lab Sample ID: 245387006

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7684
Batch ID: 945501
Run Date: 02/04/2010 19:04
Prep Date: 01/26/2010 20:21
Data File: s6b0419.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	381	ug/kg	76.1	381
108-95-2	Phenol	U	381	ug/kg	76.1	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.1	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381
95-48-7	o-Cresol	U	381	ug/kg	76.1	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381
78-59-1	Isophorone	U	381	ug/kg	76.1	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381
65-85-0	Benzoic acid	U	761	ug/kg	190	761
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.1	381
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	381	ug/kg	76.1	381

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

SDG Number: 10-1384
Lab Sample ID: 245387006

Client ID: RE14-10-7684
Batch ID: 945501
Run Date: 02/04/2010 19:04
Prep Date: 01/26/2010 20:21
Data File: s6b0419.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.8
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	381	ug/kg	76.1	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	761	ug/kg	145	761
132-64-9	Dibenzofuran	U	381	ug/kg	76.1	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.1	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.1	381
122-66-7	Azobenzene	U	381	ug/kg	76.1	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.1	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.1	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.61	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.1	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.1	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.1	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	163	ug/kg		J
	Unknown Aldol Condensate	3.54	438	ug/kg		JA

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387006	Date Received: 01/23/2010 09:20	%Moisture: 12.8
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7684	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:04	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.14 g	Final Volume: 1 mL
Data File: s6b0419.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		17.37	658	ug/kg		J

Data File: /chem/MSD6.i/s020410.b/s6b0419.d
Report Date: 05-Feb-2010 09:18

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0419.d
Lab Smp Id: 245387006 Client Smp ID: RE14-10-7684
Inj Date : 04-FEB-2010 19:04
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245387006|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	12.83070	% 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	4.948	4.951 (1.000)	190212	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232 (1.000)	733859	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103 (1.000)	427911	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716 (1.000)	776777	40.0000	
* 91 Chrysene-d12	240	12.758	12.763 (1.000)	632508	40.0000	
* 98 Perylene-d12	264	15.148	15.151 (1.000)	467318	40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776 (0.765)	313123	65.7361	2500
\$ 5 Phenol-d5	99	4.553	4.556 (0.920)	369480	61.4573	2340
\$ 20 Nitrobenzene-d5	82	5.483	5.491 (0.881)	171892	33.1117	1260
\$ 39 2-Fluorobiphenyl	172	7.351	7.354 (0.908)	362958	32.9136	1250
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951 (1.105)	82785	66.2833	2520
\$ 81 p-Terphenyl-d14	244	11.415	11.415 (0.895)	425784	41.7425	1590

ION RATIO REPORT

SV REPORT

Data file: s6b0419.d

Report Date: 02/04/2010 21:18

Lab. ID: 245387006

SampleType: SAMPLE

Injection Date: 04-FEB-2010 19:04

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387006|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	18391	4.55	4.64	80-120	100	(T)
93	160	4.47	4.64	236-296	1	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	24537	5.48	5.33	80-120	100	(T)
42	14180	5.48	5.33	35- 95	58	(T)

22 Isophorone		CAS#: 78-59-1				
82	171892	5.48	5.74	80-120	100	(T)
138	3407	6.22	5.74	0- 50	2	(T)

43 Dimethylphthalate		CAS#: 131-11-3				
163	75897	8.10	7.78	80-120	100	(T)
164	427911	8.10	7.78	0- 40	564	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	56874	8.10	8.30	80-120	100	(T)
89	593	8.10	8.29	39- 99	1	(QT)
63	529	8.09	8.29	15- 75	1	(QT)

53 Fluorene		CAS#: 86-73-7				
166	5467	8.95	8.69	80-120	100	(T)
165	5397	8.95	8.69	62-122	99	(T)
167	1866	8.95	8.69	0- 44	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	104	8.94	8.74	80-120	100	(T)
105	240	8.94	8.74	9- 69	231	(QT)
51	186	8.94	8.74	18- 78	179	(QT)

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	114	17.18	17.17	80-120	100	()
138	4917	17.36	17.18	6- 66	4297	(QT)

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	149	17.21	17.20	80-120	100	()
139	205	17.35	17.20	0- 30	137	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020410.b/s6b0419.d
 Report Date: 05-Feb-2010 09:18

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0419.d
 Lab Smp Id: 245387006 Client Smp ID: RE14-10-7684
 Inj Date : 04-FEB-2010 19:04
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387006|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	12.83070	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.948	1110418	40.000
* 98 Perylene-d12	15.148	1286316	40.000

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	L1B ENTRY	CPND #
Unknown				CAS #:			
2.352	118847	4.28117018	163	0		0	10

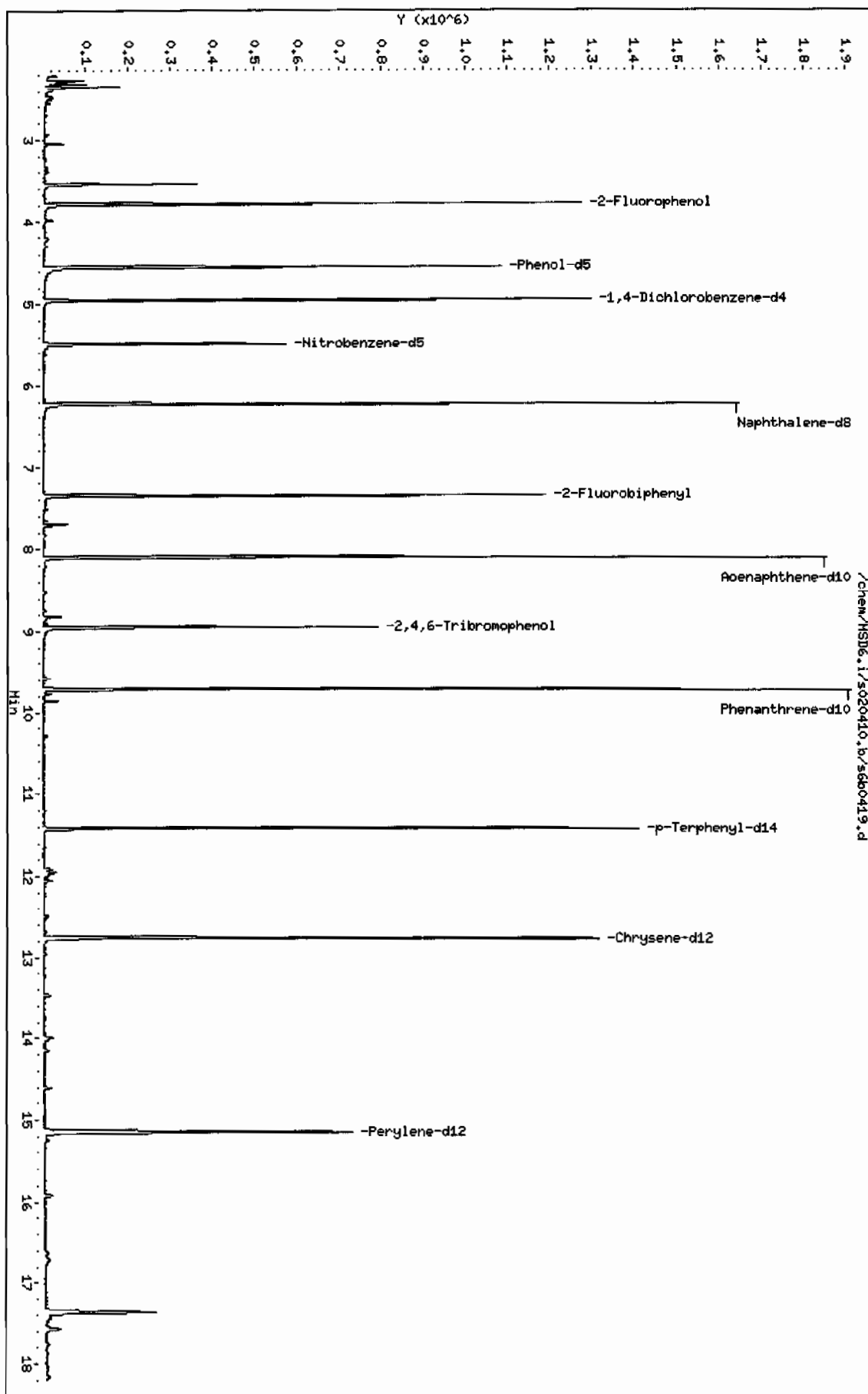
Data File: /chem/MSD6.i/s020410.b/s6b0419.d
Report Date: 05-Feb-2010 09:18

Page 2

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.544	319188	11.4979507	438	0	0	10	
Unknown				CAS #:			
17.365	555700	17.2803508	658	0	0	98	

Data File: /chem/HSD6.i/s020410.b/s600419.d
 Date : 04-FEB-2010 13:04
 Client ID: RE14-10-7684
 Sample Info: 124538700619455011|SH11|LNL
 Volume injected (uL): 0.5
 Column phase: J&H DB-5MS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 04-FEB-2010 19:04

Client ID: RE14-10-7684

Instrument: MSD6.i

Sample Info: 1245387006194550111SVH11ILANL

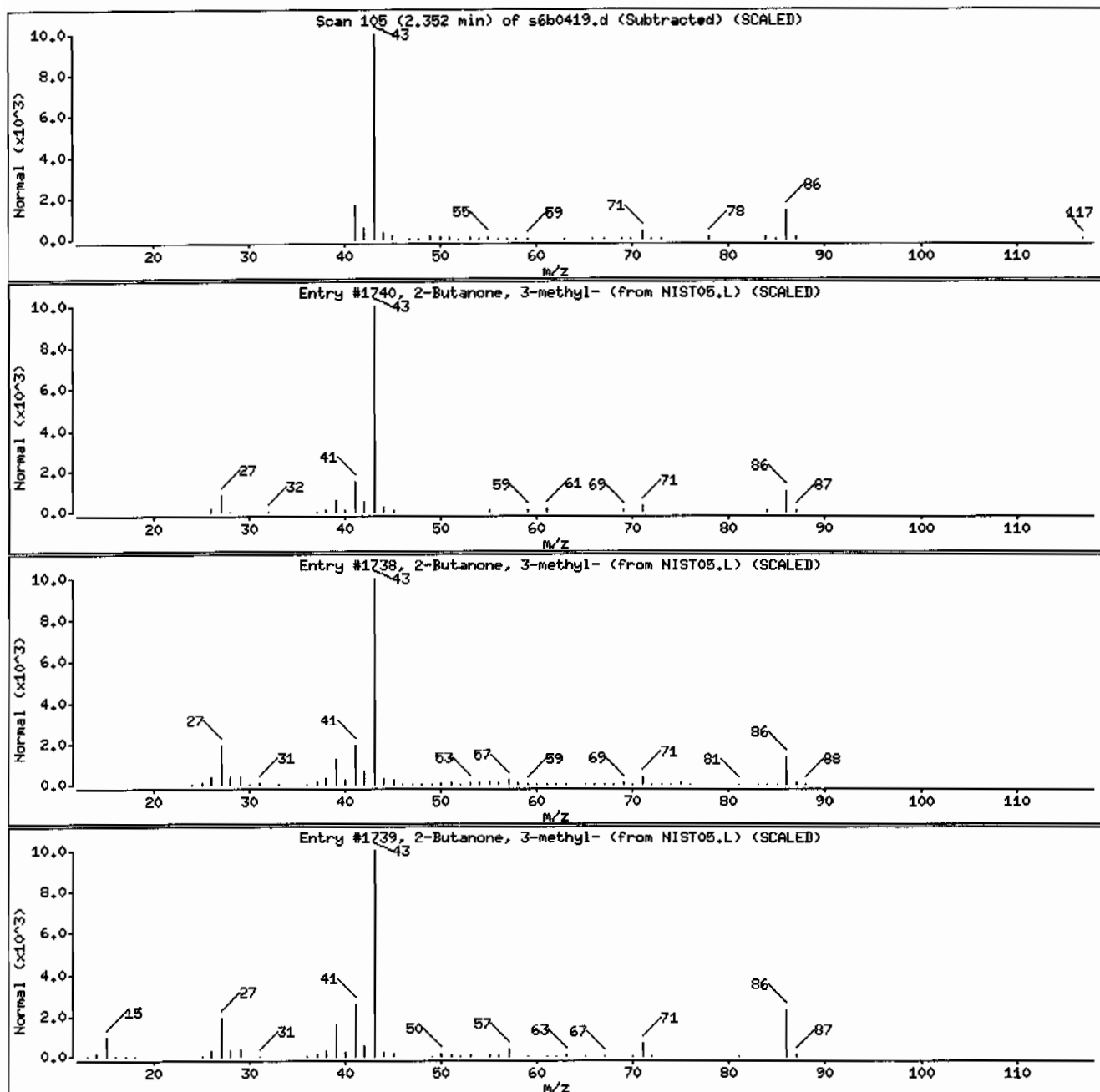
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	64	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	47	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1739	38	C5H10O	86



Date : 04-FEB-2010 19:04

Client ID: RE14-10-7684

Instrument: HSD6.i

Sample Info: 1245387006194550111SVH11ILANL

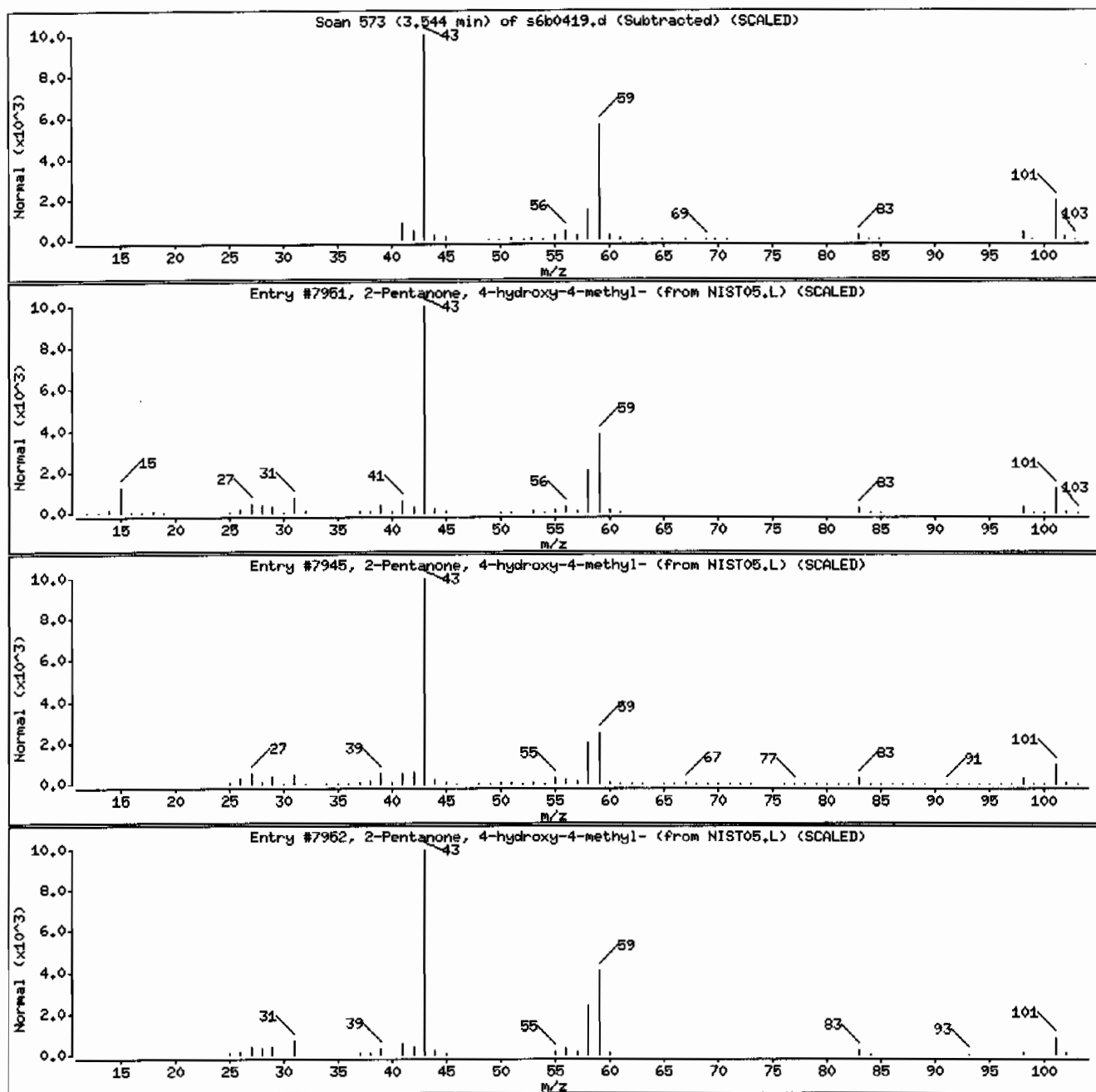
Volume Injected (uL): 0.5

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	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7962	25	C6H12O2	116



Date : 04-FEB-2010 19:04

Client ID: RE14-10-7684

Instrument: MSD6.i

Sample Info: 1245387006194550111SVMI11LANL

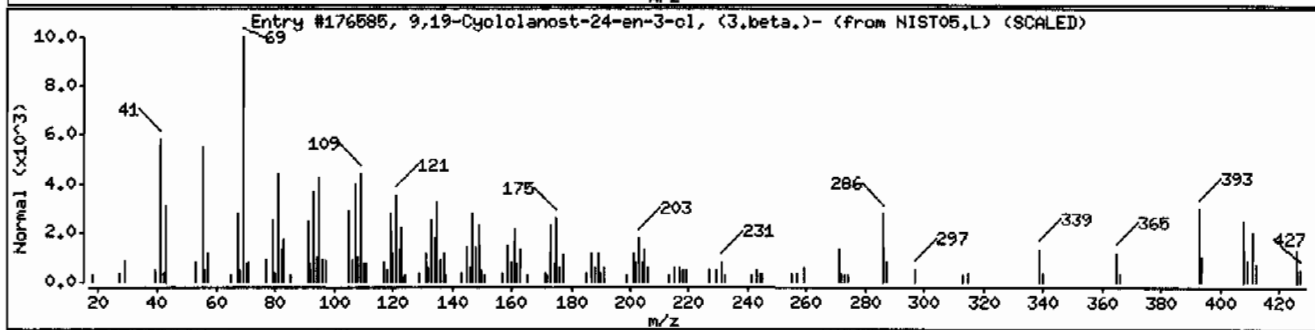
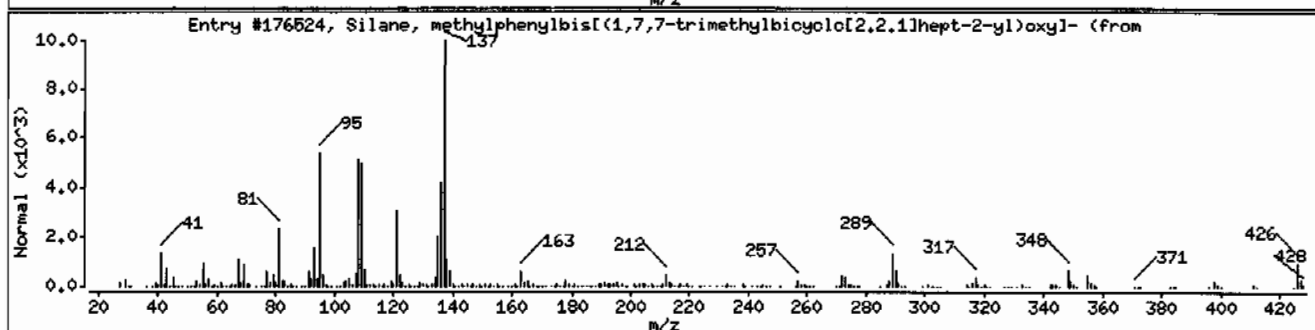
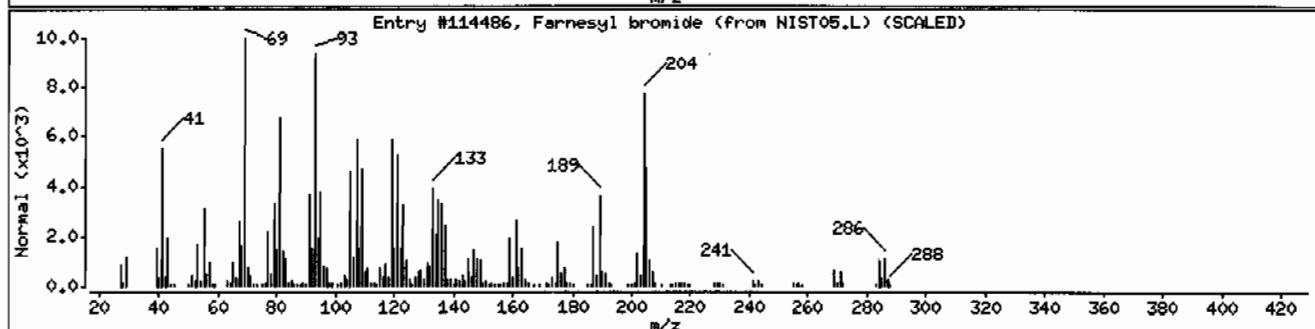
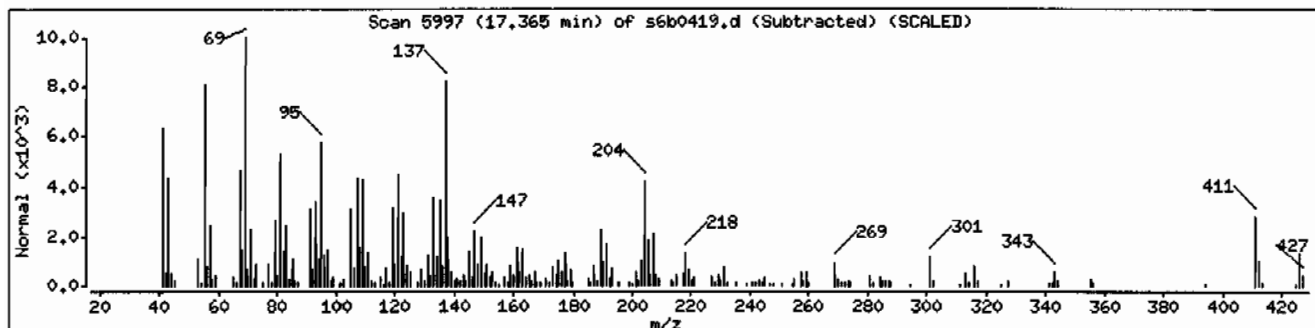
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Farnesyl bromide	6874-67-5	NIST05.L	114486	47	C ₁₅ H ₂₅ Br	284
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	46	C ₂₇ H ₄₂ O ₂ Si	426
9,19-Cyclolanost-24-en-3-ol, (3,β.)-	469-38-5	NIST05.L	176585	45	C ₃₀ H ₅₀ O	426



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

SDG Number: 10-1384
Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7685
Batch ID: 945501
Run Date: 02/04/2010 20:57
Prep Date: 01/26/2010 20:21
Data File: s6b0423.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	391	ug/kg	78.2	391
108-95-2	Phenol	U	391	ug/kg	78.2	391
95-57-8	2-Chlorophenol	U	391	ug/kg	78.2	391
106-46-7	1,4-Dichlorobenzene	U	391	ug/kg	78.2	391
621-64-7	N-Nitrosodipropylamine	U	391	ug/kg	78.2	391
59-50-7	4-Chloro-3-methylphenol	U	391	ug/kg	78.2	391
83-32-9	Acenaphthene	U	39.1	ug/kg	12.9	39.1
121-14-2	2,4-Dinitrotoluene	U	391	ug/kg	39.1	391
100-02-7	4-Nitrophenol	U	391	ug/kg	129	391
87-86-5	Pentachlorophenol	U	391	ug/kg	97.7	391
129-00-0	Pyrene	U	39.1	ug/kg	11.7	39.1
110-86-1	Pyridine	U	391	ug/kg	78.2	391
62-53-3	Aniline	U	391	ug/kg	117	391
111-44-4	bis(2-Chloroethyl) ether	U	391	ug/kg	78.2	391
541-73-1	1,3-Dichlorobenzene	U	391	ug/kg	78.2	391
100-51-6	Benzyl alcohol	U	391	ug/kg	117	391
95-50-1	1,2-Dichlorobenzene	U	391	ug/kg	78.2	391
108-60-1	bis(2-Chloroisopropyl)ether	U	391	ug/kg	78.2	391
95-48-7	o-Cresol	U	391	ug/kg	78.2	391
65794-96-9	m,p-Cresols	U	391	ug/kg	117	391
67-72-1	Hexachloroethane	U	391	ug/kg	78.2	391
98-95-3	Nitrobenzene	U	391	ug/kg	78.2	391
78-59-1	Isophorone	U	391	ug/kg	78.2	391
88-75-5	2-Nitrophenol	U	391	ug/kg	78.2	391
105-67-9	2,4-Dimethylphenol	U	391	ug/kg	137	391
111-91-1	bis(2-Chloroethoxy)methane	U	391	ug/kg	78.2	391
120-83-2	2,4-Dichlorophenol	U	391	ug/kg	78.2	391
65-85-0	Benzoic acid	U	782	ug/kg	195	782
91-20-3	Naphthalene	U	39.1	ug/kg	11.7	39.1
106-47-8	4-Chloroaniline	U	391	ug/kg	78.2	391
87-68-3	Hexachlorobutadiene	U	391	ug/kg	78.2	391
91-57-6	2-Methylnaphthalene	U	39.1	ug/kg	7.82	39.1
77-47-4	Hexachlorocyclopentadiene	U	391	ug/kg	78.2	391
88-06-2	2,4,6-Trichlorophenol	U	391	ug/kg	78.2	391
95-95-4	2,4,5-Trichlorophenol	U	391	ug/kg	78.2	391
91-58-7	2-Chloronaphthalene	U	39.1	ug/kg	12.9	39.1
88-74-4	2-Nitroaniline	U	391	ug/kg	78.2	391
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	391	ug/kg	78.2	391

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

SDG Number: 10-1384
Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 15.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	391	ug/kg	78.2	391
606-20-2	2,6-Dinitrotoluene	U	391	ug/kg	39.1	391
208-96-8	Acenaphthylene	U	39.1	ug/kg	11.7	39.1
51-28-5	2,4-Dinitrophenol	U	782	ug/kg	149	782
132-64-9	Dibenzofuran	U	391	ug/kg	78.2	391
84-66-2	Diethylphthalate	U	391	ug/kg	78.2	391
86-73-7	Fluorene	U	39.1	ug/kg	11.7	39.1
7005-72-3	4-Chlorophenylphenylether	U	391	ug/kg	78.2	391
534-52-1	2-Methyl-4,6-dinitrophenol	U	391	ug/kg	78.2	391
100-01-6	4-Nitroaniline	U	391	ug/kg	117	391
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	391	ug/kg	78.2	391
122-66-7	Azobenzene	U	391	ug/kg	78.2	391
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	391	ug/kg	78.2	391
118-74-1	Hexachlorobenzene	U	391	ug/kg	78.2	391
85-01-8	Phenanthrene	U	39.1	ug/kg	11.7	39.1
120-12-7	Anthracene	U	39.1	ug/kg	7.82	39.1
84-74-2	Di-n-butylphthalate	U	391	ug/kg	78.2	391
206-44-0	Fluoranthene	U	39.1	ug/kg	11.7	39.1
85-68-7	Butylbenzylphthalate	U	391	ug/kg	78.2	391
56-55-3	Benzo(a)anthracene	U	39.1	ug/kg	11.7	39.1
91-94-1	3,3'-Dichlorobenzidine	U	391	ug/kg	117	391
218-01-9	Chrysene	U	39.1	ug/kg	11.7	39.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	391	ug/kg	78.2	391
117-84-0	Di-n-octylphthalate	U	391	ug/kg	78.2	391
205-99-2	Benzo(b)fluoranthene	U	39.1	ug/kg	11.7	39.1
207-08-9	Benzo(k)fluoranthene	U	39.1	ug/kg	11.7	39.1
50-32-8	Benzo(a)pyrene	U	39.1	ug/kg	11.7	39.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.1	ug/kg	11.7	39.1
53-70-3	Dibenzo(a,h)anthracene	U	39.1	ug/kg	11.7	39.1
191-24-2	Benzo(ghi)perylene	U	39.1	ug/kg	11.7	39.1
120-82-1	1,2,4-Trichlorobenzene	U	391	ug/kg	78.2	391

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	167	ug/kg		J
	Unknown	2.48	168	ug/kg		J

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

SDG Number: 10-1384
Lab Sample ID: 245387010

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.3
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 Aldol Condensate	3.54	496	ug/kg		JA
2416-20-8	Hexadecenoic acid, Z-11-	10.22	184	ug/kg	99	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	161	ug/kg	87	NJ

Data File: /chem/MSD6.i/s020410.b/s6b0423.d
Report Date: 05-Feb-2010 09:19

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0423.d
Lab Smp Id: 245387010 Client Smp ID: RE14-10-7685
Inj Date : 04-FEB-2010 20:57
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245387010|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	15.27050	% 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	4.948	4.951	(1.000)	173259		40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	678478		40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	392102		40.0000	
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	708003		40.0000	
* 91 Chrysene-d12	240	12.758	12.763	(1.000)	515158		40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	287925		40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	280920		64.7461	2530
\$ 5 Phenol-d5	99	4.556	4.556	(0.921)	341156		62.2985	2440
\$ 20 Nitrobenzene-d5	82	5.486	5.491	(0.881)	150113		31.2767	1220
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	336572		33.3082	1300
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	82660		72.2275	2820
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	357787		43.0665	1680

ION RATIO REPORT

SV REPORT

Data file: s6b0423.d

Report Date: 02/05/2010 07:37

Lab. ID: 245387010

SampleType: SAMPLE

Injection Date: 04-FEB-2010 20:57

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387010|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	8388	2.50	2.81	80-120	100	(T)
42	1321	2.50	2.81	54-114	16	(QT)
43	2031	2.50	2.81	7- 67	24	(T)

4 Aniline				CAS#: 62-53-3		
66	16174	4.55	4.64	80-120	100	(T)
93	2074	4.61	4.64	236-296	13	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	20783	5.49	5.33	80-120	100	(T)
42	11903	5.48	5.33	35- 95	57	(T)

22 Isophorone				CAS#: 78-59-1		
82	150113	5.49	5.74	80-120	100	(T)
138	3248	6.22	5.74	0- 50	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	70075	8.10	7.78	80-120	100	(T)
164	392102	8.10	7.78	0- 40	560	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	50882	8.10	8.30	80-120	100	(T)
89	587	8.10	8.29	39- 99	1	(QT)
63	578	8.10	8.29	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	5342	8.95	8.69	80-120	100	(T)
165	5725	8.95	8.69	62-122	107	(T)
167	1775	8.95	8.69	0- 44	33	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	139	8.94	8.74	80-120	100	(T)
105	723	8.95	8.74	9- 69	518	(QT)
51	374	8.95	8.74	18- 78	268	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	5873	8.95	9.21	80-120	100	(T)
141	41525	8.95	9.21	50-110	707	(QT)
250	11781	8.95	9.21	68-128	201	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	417	17.19	17.17	80-120	100	()
138	141	17.20	17.18	6- 66	34	()

Q qualifier indicates ion failed ratio requirement						

Data File: /chem/MSD6.i/s020410.b/s6b0423.d
Report Date: 05-Feb-2010 09:19

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0423.d
Lab Smp Id: 245387010 Client Smp ID: RE14-10-7685
Inj Date : 04-FEB-2010 20:57
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387010|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	15.27050	% moisture

Cpnd Variable Local Compound Variable

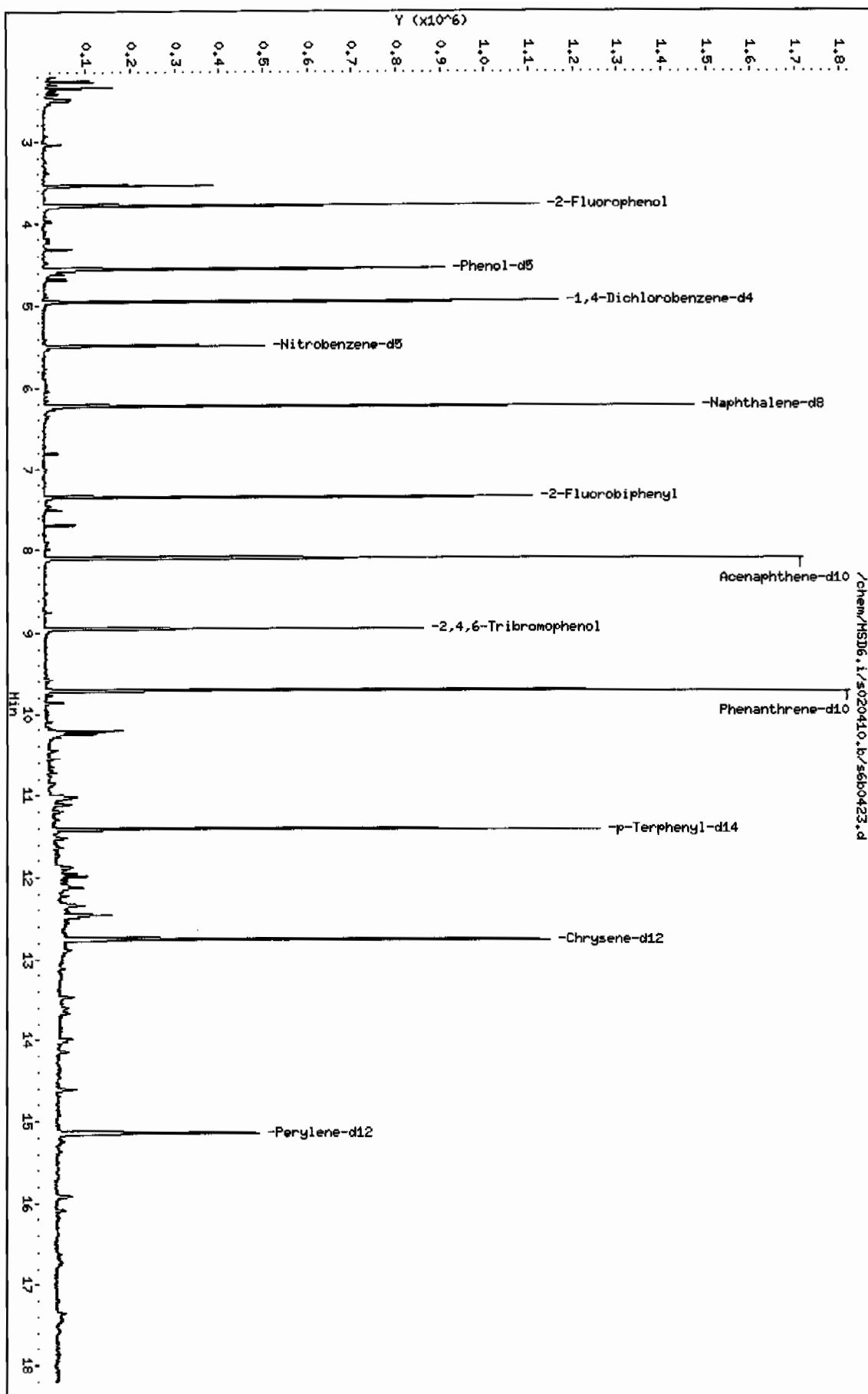
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.948	1015427	40.000
* 67 Phenanthrene-d10	9.713	1733372	40.000
* 91 Chrysene-d12	12.758	1365608	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.339	108243	4.26395547	167	0		0	10
Unknown					CAS #:		
2.479	108812	4.28635595	168	0		0	10
Unknown Aldol Condensate					CAS #:		
3.544	322115	12.6888361	496	0		0	10
Hexadecenoic acid, Z-11-					CAS #: 2416-20-8		
10.215	203991	4.70737849	184	99	NIST05.L	94748	67
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
12.458	141029	4.13086411	161	87	NIST05.L	125034	91

Data File: /chem/HSD6.i/s020410.b/s6b0423.d
Date: 04-FEB-2010 20:57
Client ID: RE14-10-7685
Sample Info: 1245387010194550111SVH11LHNL
Volume Injected (uL): 0.5
Column phase: JMA DB-SMS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 20:57

Client ID: RE14-10-7685

Instrument: HSD6.i

Sample Info: I245387010194550111SVMI1ILANL

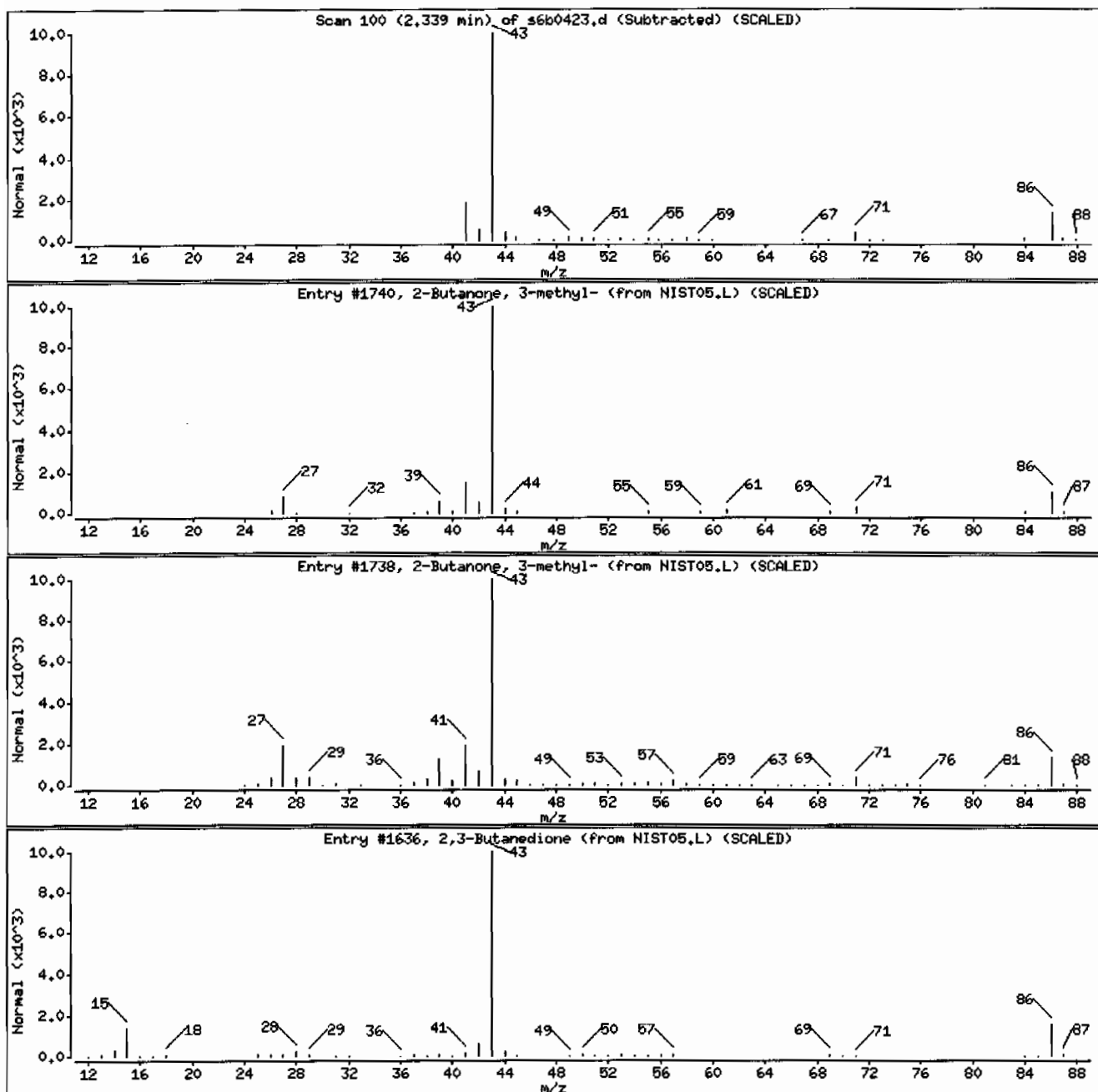
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	72	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	50	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1636	42	C4H6O2	86



Date : 04-FEB-2010 20:57

Client ID: RE14-10-7685

Instrument: MSD6.i

Sample Info: I245387010194550111SVH111LANL

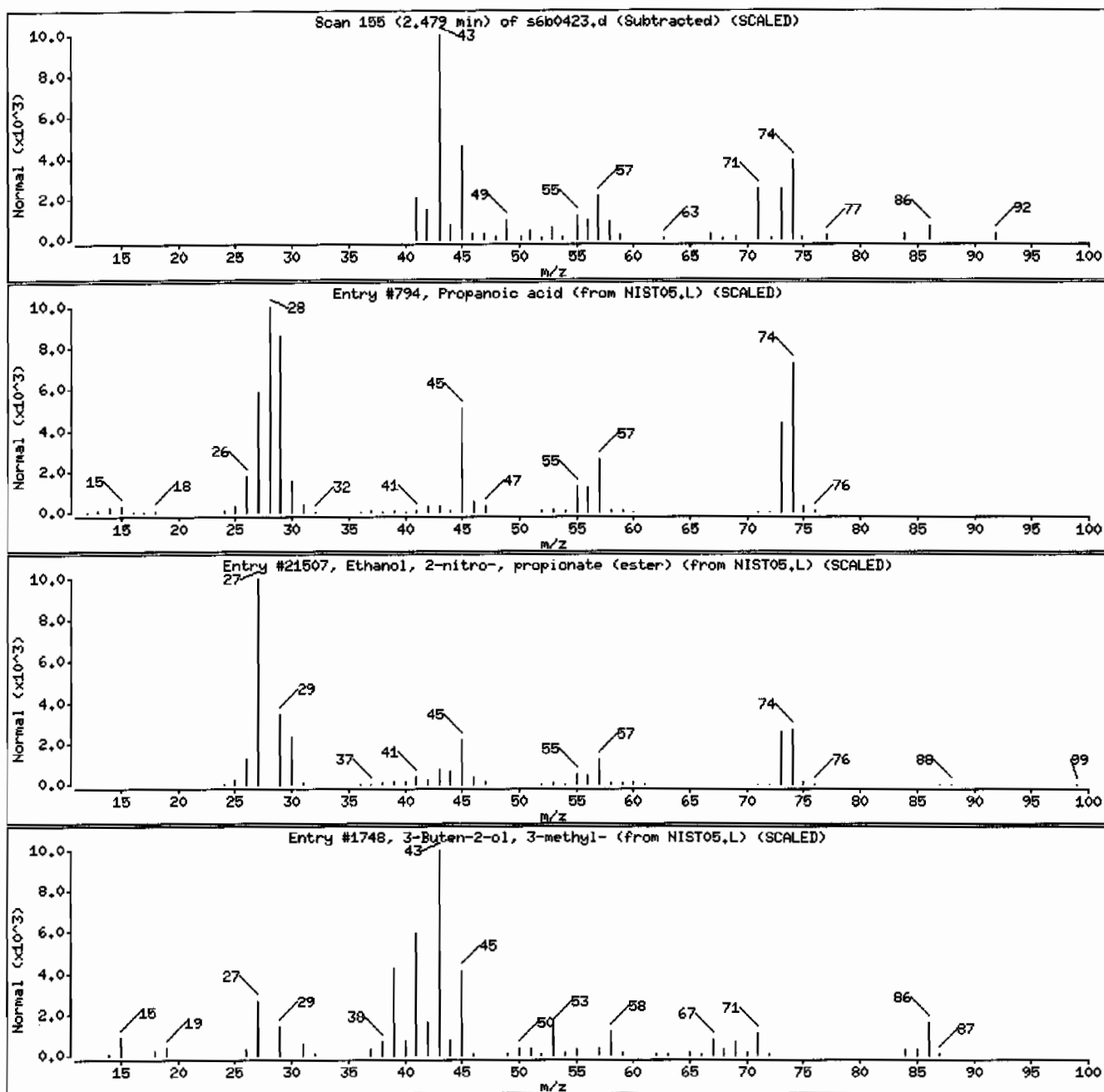
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanoic acid	79-09-4	NIST05.L	794	47	C3H6O2	74
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	25	C5H9NO4	147
3-Buten-2-ol, 3-methyl-	10473-14-0	NIST05.L	1748	12	C5H10O	86



Date : 04-FEB-2010 20:57

Client ID: RE14-10-7685

Instrument: MSD6.1

Sample Info: 1245387010194550111SVMI11LANL

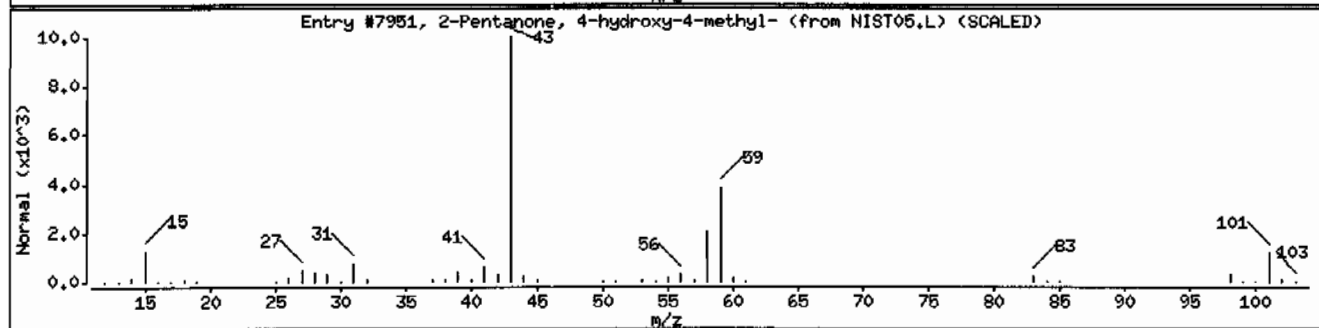
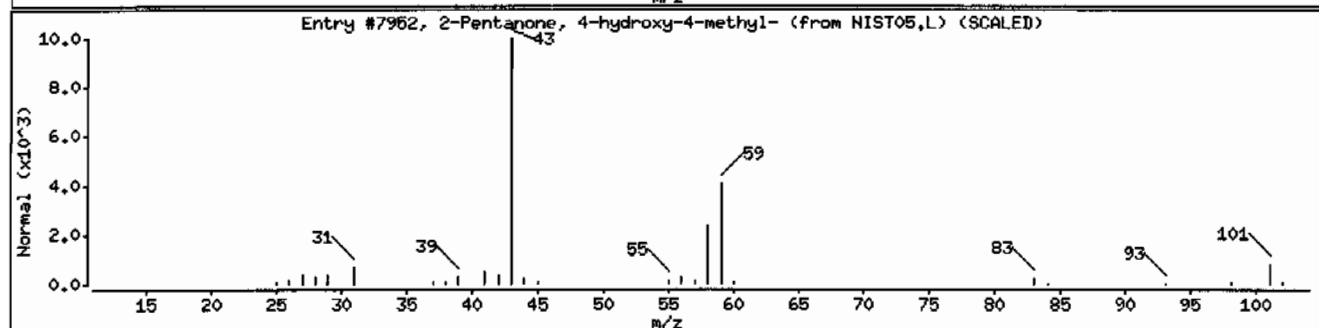
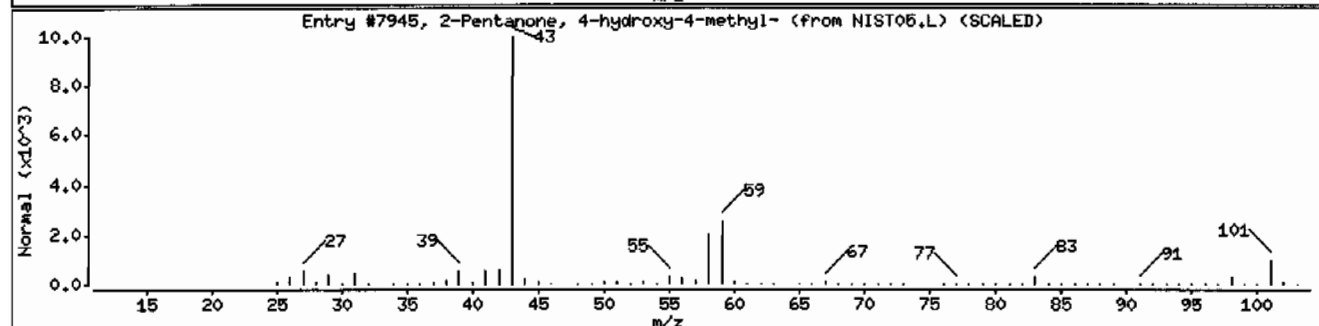
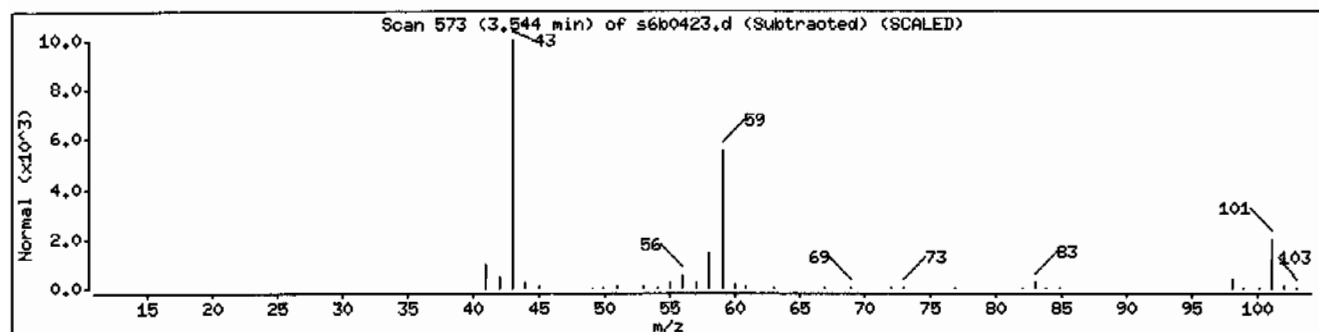
Volume Injected (uL): 0.5

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	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116



Date: 04-FEB-2010 20:57

Client ID: RE14-10-7685

Instrument: HSD6.i

Sample Info: 1245387010194550111SVH111LANL

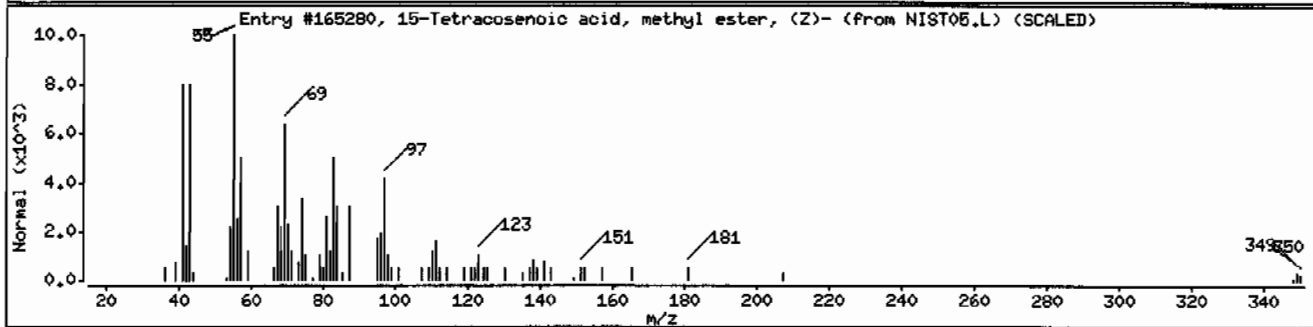
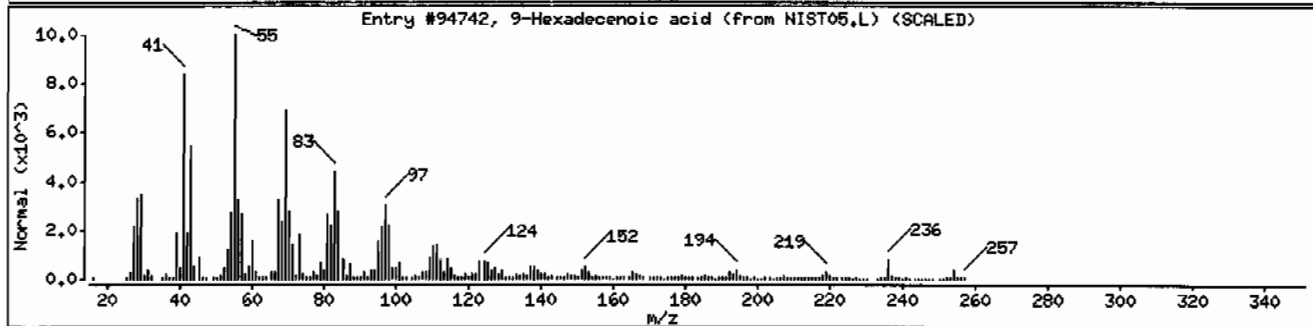
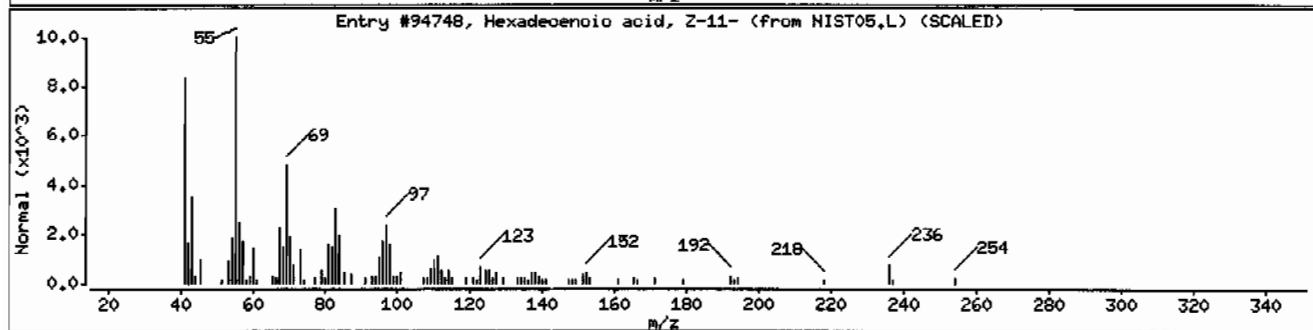
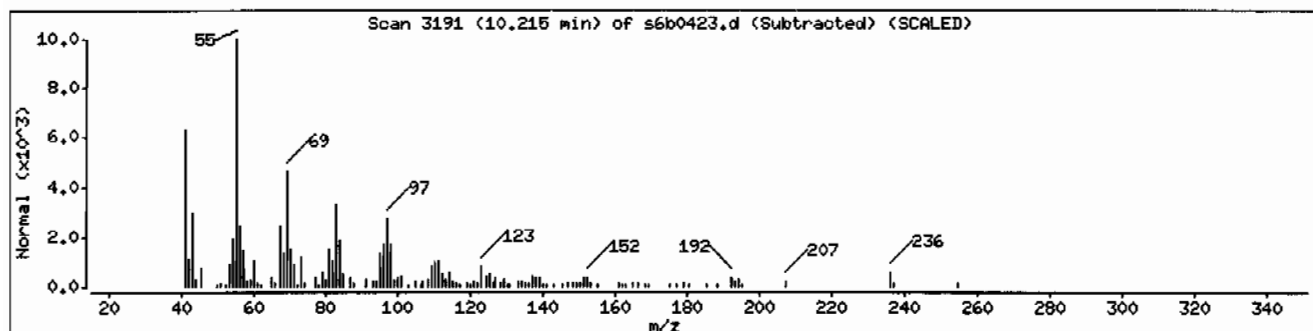
Volume Injected (uL): 0.5

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	99	C16H30O2	254
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	94	C16H30O2	254
15-Tetracosenoic acid, methyl ester, (Z)	2733-88-2	NIST05.L	165280	83	C25H48O2	380



Date : 04-FEB-2010 20:57

Client ID: RE14-10-7685

Instrument: MSD6.i

Sample Info: 1245387010194550111SVMI1ILANL

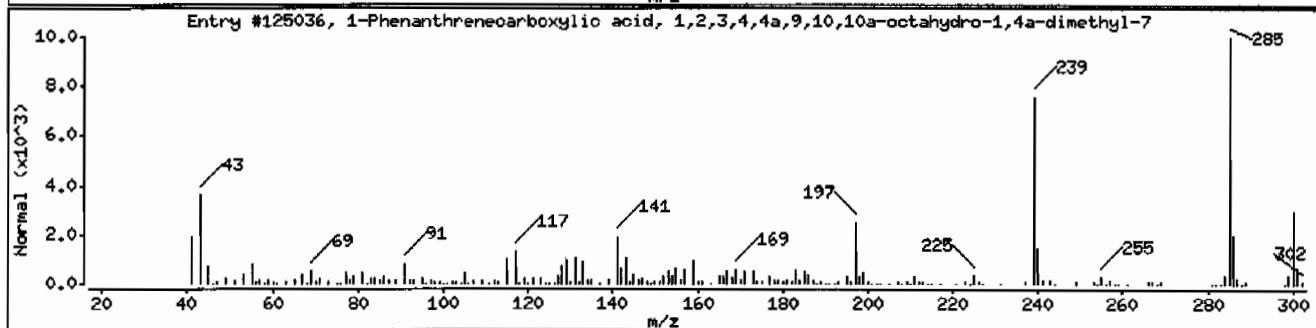
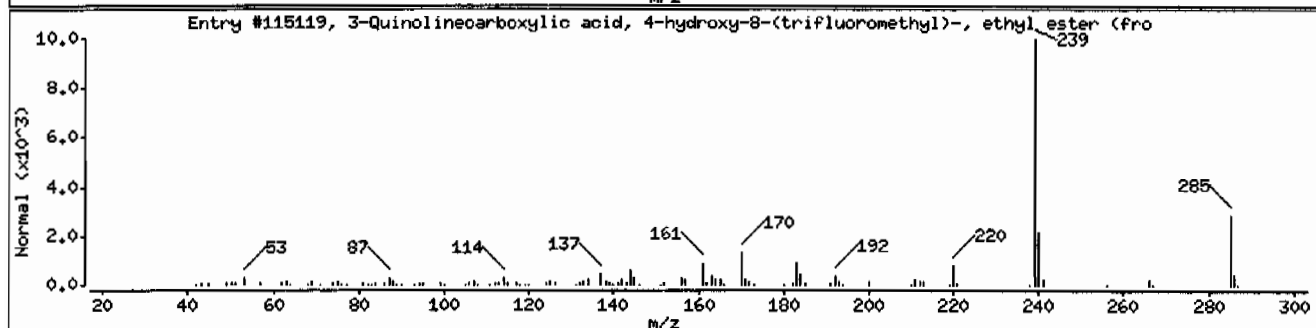
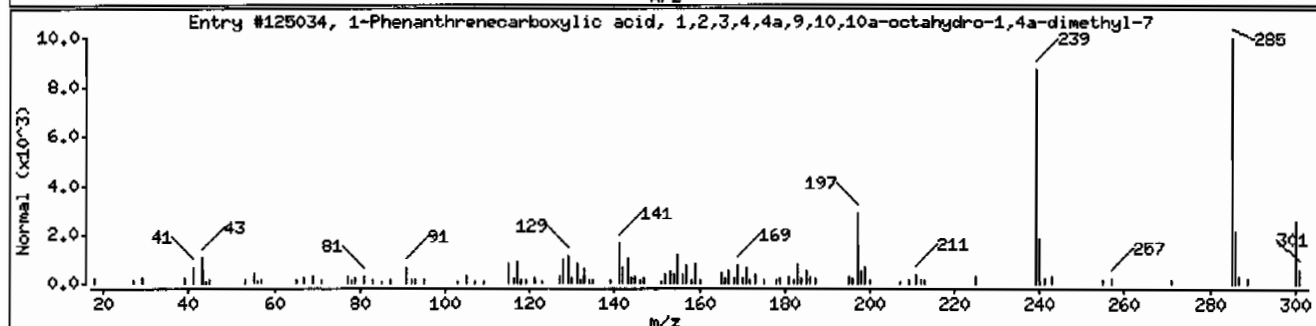
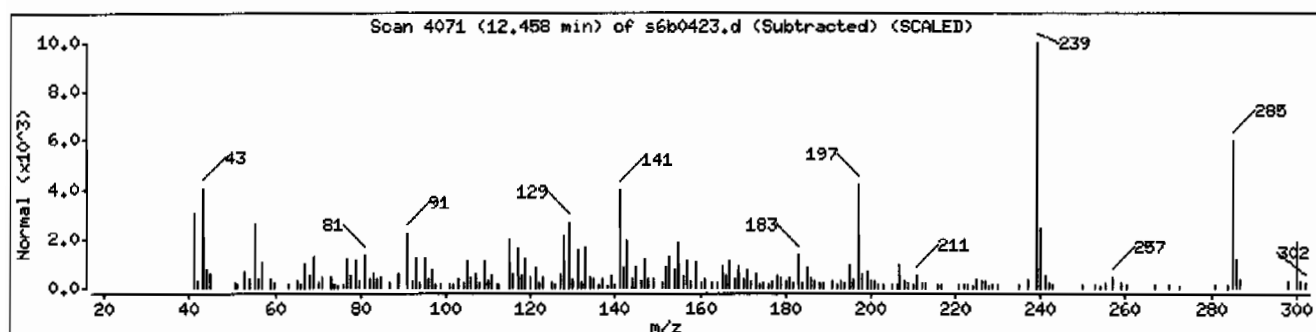
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	87	C20H28O2	300
3-Quinolinescarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	43	C13H10F3NO3	285
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	38	C20H28O2	300



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

SDG Number: 10-1384
Lab Sample ID: 245387004

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
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	431	ug/kg	86.3	431
108-95-2	Phenol	U	431	ug/kg	86.3	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.3	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.3	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.3	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.3	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	U	43.1	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.3	431
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.3	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.3	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.3	431
108-60-1	bis(2-Chloroisopropyl)ether	U	431	ug/kg	86.3	431
95-48-7	o-Cresol	U	431	ug/kg	86.3	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.3	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.3	431
78-59-1	Isophorone	U	431	ug/kg	86.3	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.3	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.3	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.3	431
65-85-0	Benzoic acid	U	863	ug/kg	216	863
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.3	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.3	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.63	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.3	431
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.3	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.3	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.3	431
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	431	ug/kg	86.3	431

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387004	Date Received: 01/23/2010 09:20	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7686	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 18:07	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s6b0417.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	431	ug/kg	86.3	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	431	ug/kg	86.3	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.3	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.3	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.3	431
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	431	ug/kg	86.3	431
122-66-7	Azobenzene	U	431	ug/kg	86.3	431
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.3	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.3	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.63	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.3	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.3	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.3	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.3	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.3	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	182	ug/kg		J
	Unknown Aldol Condensate	3.54	512	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387004

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
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
	Unknown		17.37	215	ug/kg		J

Data File: /chem/MSD6.i/s020410.b/s6b0417.d
Report Date: 09-Feb-2010 09:06

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0417.d
Lab Smp Id: 245387004 Client Smp ID: RE14-10-7686
Inj Date : 04-FEB-2010 18:07
Operator : nag1 Inst ID: MSD6.i
Smp Info : |245387004|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.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	30.05000	weight of sample
M	22.86660	% 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	4.948	4.951	(1.000)	167795	40.0000	
* 29 Naphthalene-d8	136	6.228	6.232	(1.000)	660965	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	381181	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	678655	40.0000	
* 91 Chrysene-d12	240	12.758	12.763	(1.000)	554361	40.0000	
* 98 Perylene-d12	264	15.149	15.151	(1.000)	427150	40.0000	
\$ 3 2-Fluorophenol	112	3.787	3.776	(0.765)	243053	57.8427	2500
\$ 5 Phenol-d5	99	4.553	4.556	(0.920)	287617	54.2320	2340
\$ 20 Nitrobenzene-d5	82	5.484	5.491	(0.881)	130801	27.9750	1210
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	280948	28.6001	1230
\$ 60 2,4,6-Tribromophenol	329	8.946	8.951	(1.105)	65507	58.8793	2540
\$ 81 p-Terphenyl-d14	244	11.416	11.415	(0.895)	317624	35.5284	1530

ION RATIO REPORT

SV REPORT

Data file: s6b0417.d

Report Date: 02/04/2010 21:17

Lab. ID: 245387004

SampleType: SAMPLE

Injection Date: 04-FEB-2010 18:07

Operator: nag1

Instrument: MSD6.i

Sample Info: |245387004|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	6580	2.47	2.81	80-120	100	(T)
42	968	2.48	2.81	54-114	15	(QT)
43	12235	2.48	2.81	7- 67	186	(QT)

4 Aniline				CAS#: 62-53-3		
66	14231	4.55	4.64	80-120	100	(T)
93	769	4.47	4.64	236-296	5	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	18681	5.48	5.33	80-120	100	(T)
42	10819	5.48	5.33	35- 95	58	(T)

22 Isophorone				CAS#: 78-59-1		
82	130801	5.48	5.74	80-120	100	(T)
138	3020	6.23	5.74	0- 50	2	(T)

43 Dimethylphthalate				CAS#: 131-11-3		
163	67974	8.10	7.78	80-120	100	(T)
164	381181	8.10	7.78	0- 40	561	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	49219	8.10	8.30	80-120	100	(T)
89	553	8.10	8.29	39- 99	1	(QT)
63	582	8.10	8.29	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	4206	8.95	8.69	80-120	100	(T)
165	4515	8.95	8.69	62-122	107	(T)
167	1160	8.95	8.69	0- 44	28	(T)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	365	17.19	17.17	80-120	100	()
138	123	17.19	17.18	6- 66	34	()

100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	163	17.19	17.20	80-120	100	()
139	0	0.00	17.20	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement						

Data File: /chem/MSD6.i/s020410.b/s6b0417.d
Report Date: 09-Feb-2010 09:06

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0417.d
Lab Smp Id: 245387004 Client Smp ID: RE14-10-7686
Inj Date : 04-FEB-2010 18:07
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387004|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	22.86660	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.948	978763	40.000
* 98 Perylene-d12	15.149	1181616	40.000

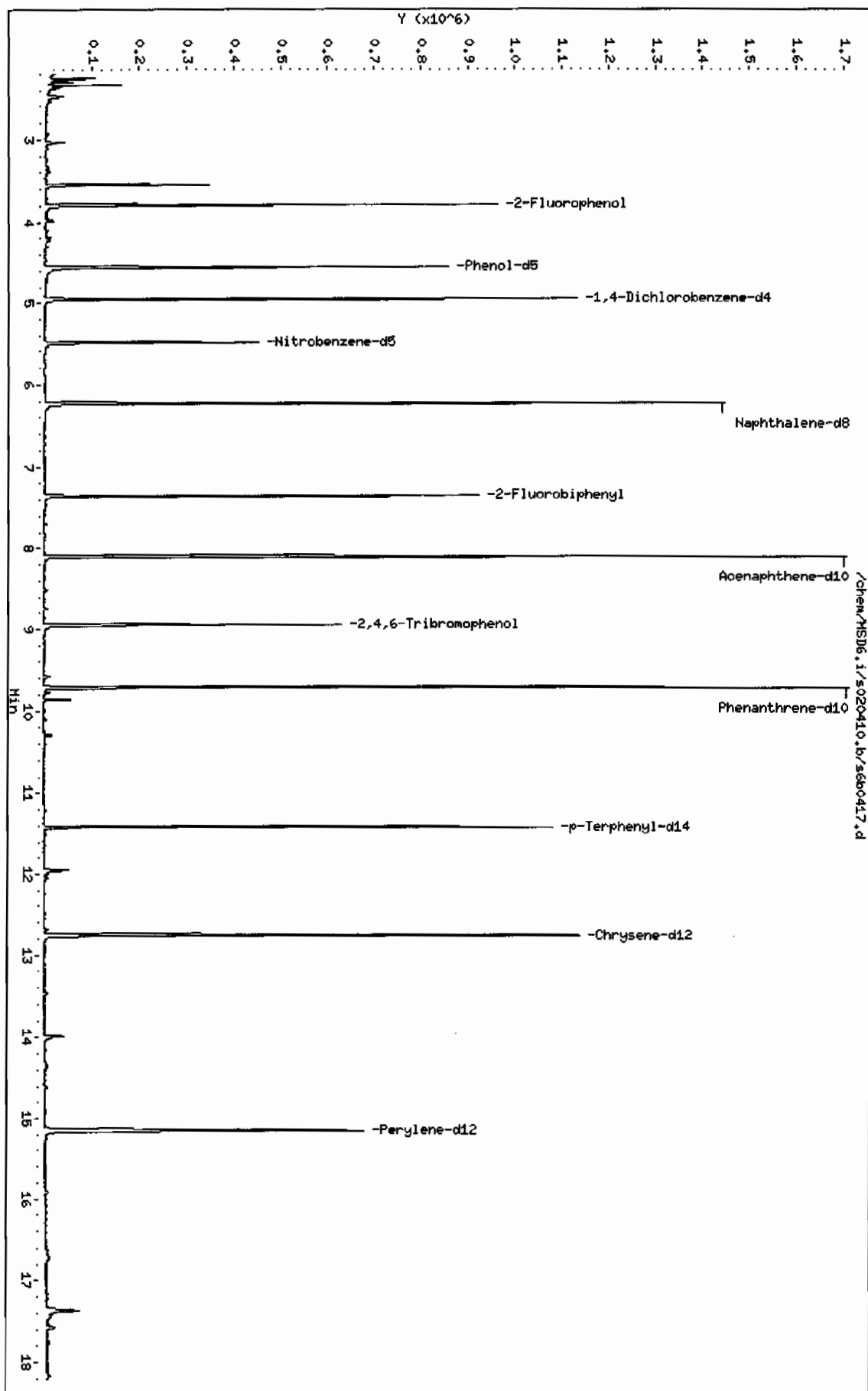
CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY
Unknown					CAS #:	
2.337	103395	4.22553337	182	0		0 10

RT	CONCENTRATIONS			QUANT			
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.542	290494	11.8718780	512	0		0	10
Unknown				CAS #:			
17.370	147145	4.98112940	215	0		0	98

Data File: /chem/HSD6.1/s020410.b/s60417.d
Date : 04-FEB-2010 18:07
Client ID: RE14-10-7686
Sample Info: 1245387004194550111SVH111LAL
Volume Injected (uL): 0.5
Column Phase: J&W DB-SHS

Instrument: HSD6.1
Operator: nag1
Column diameter: 0.20

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Date : 04-FEB-2010 18:07

Client ID: RE14-10-7686

Instrument: MSD6.i

Sample Info: 1245387004194550111SVMI11LANL

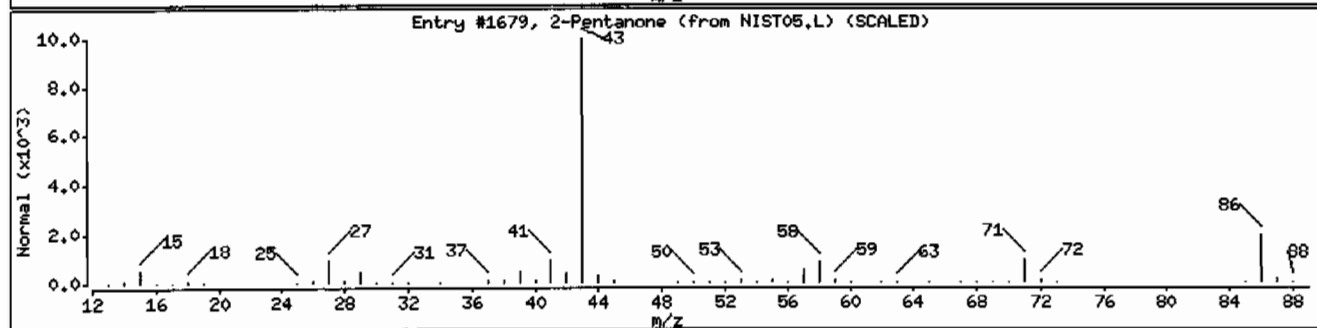
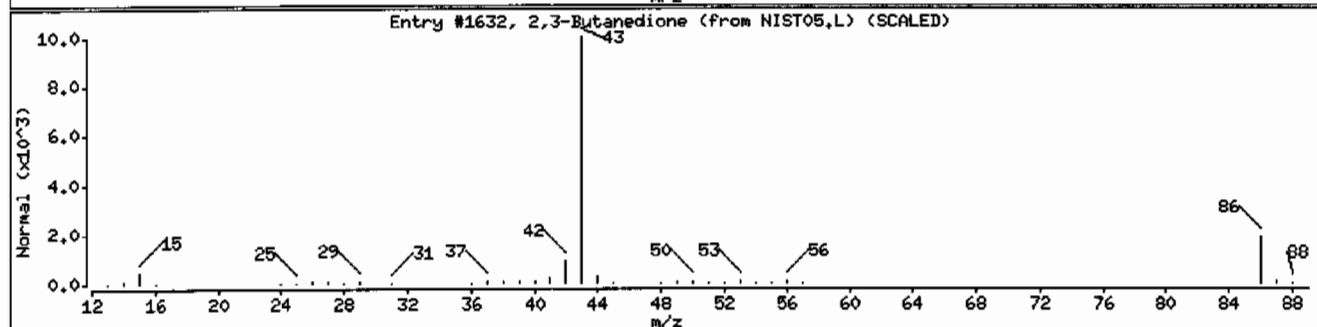
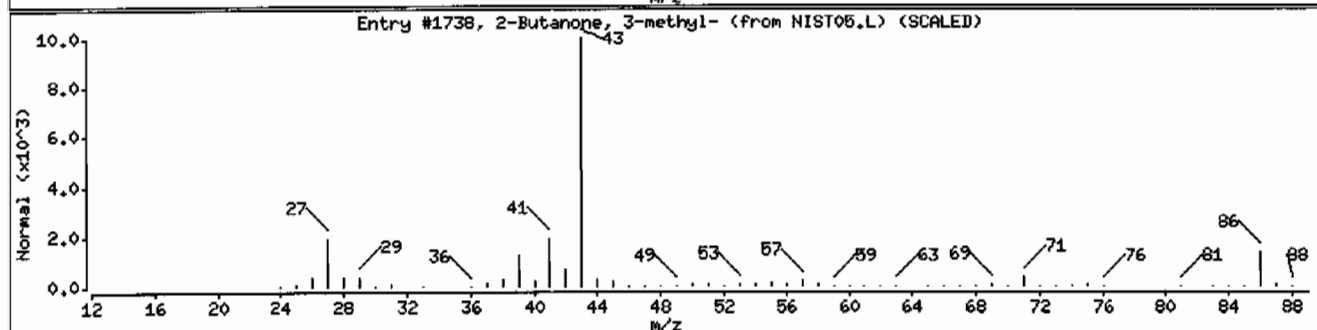
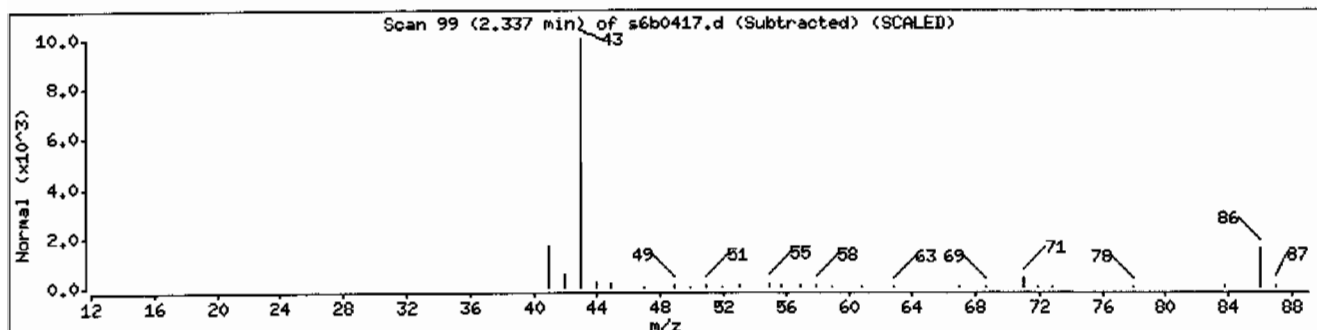
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	50	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1632	32	C4H6O2	86
2-Pentanone	107-87-9	NIST05.L	1679	9	C5H10O	86



Date : 04-FEB-2010 18:07

Client ID: RE14-10-7686

Instrument: MSD6.i

Sample Info: 1245387004194550111SVH11ILANL

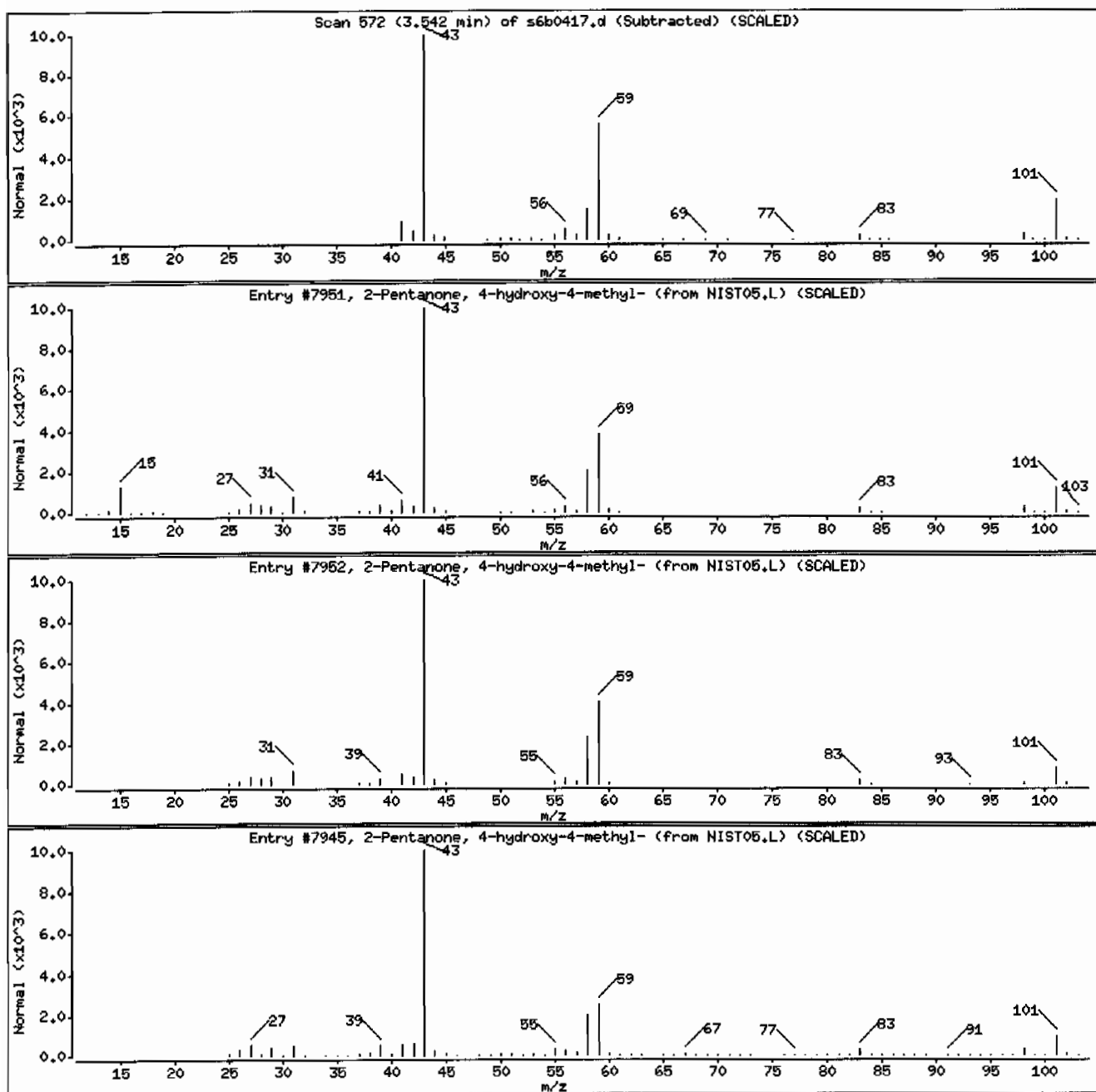
Volume Injected (uL): 0.5

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	39	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	25	C6H12O2	116



Date : 04-FEB-2010 18:07

Client ID: RE14-10-7686

Instrument: MSD6.i

Sample Info: 1245387004194550111SVH11/LANL

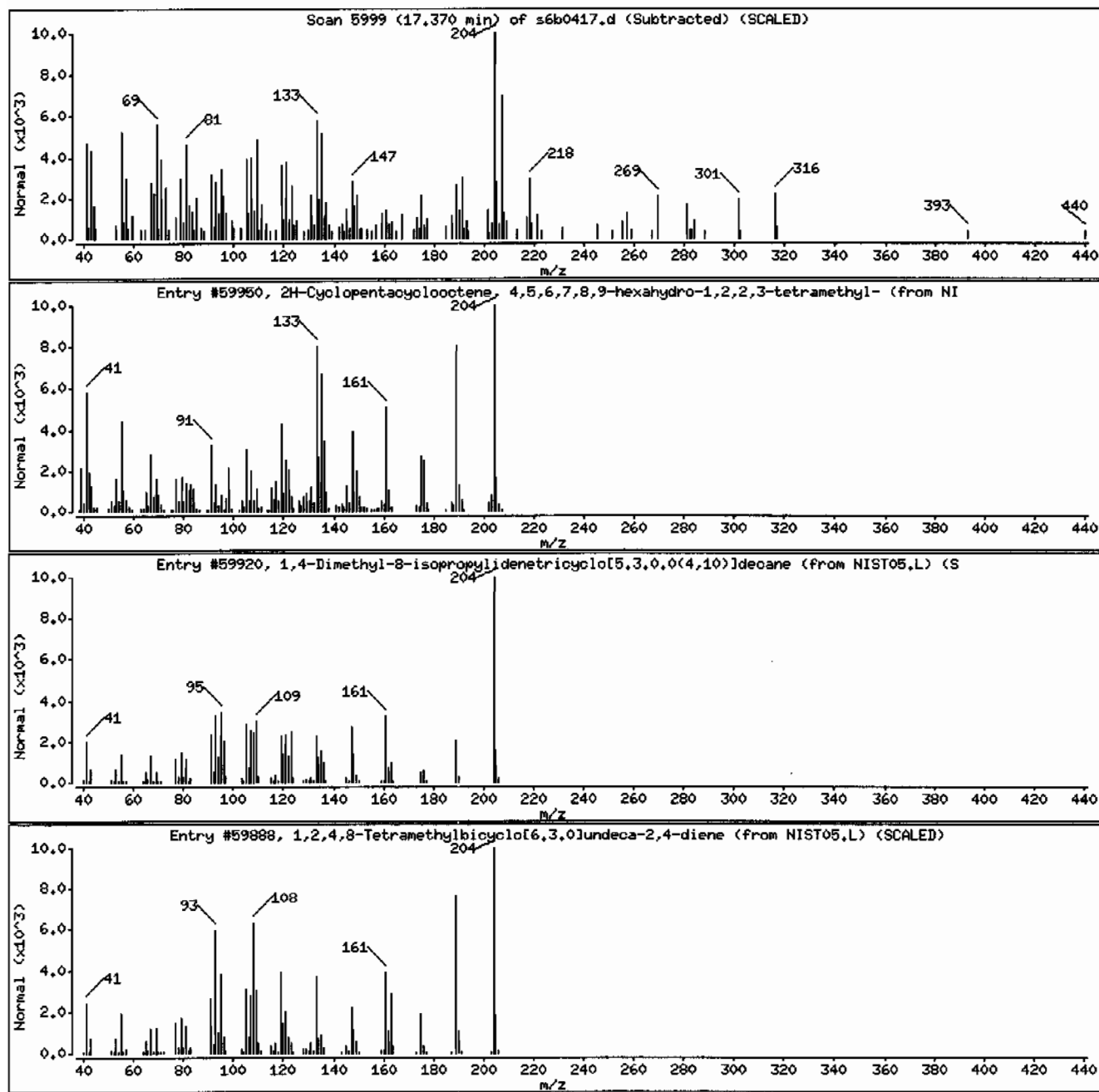
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-hexahydro-1,2,2,3-tetramethyl-	1000221-85-8	NIST05.L	59950	50	C ₁₅ H ₂₄	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.3.0.0(4,10)]decane	1000140-07-7	NIST05.L	59920	41	C ₁₅ H ₂₄	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene	137235-51-9	NIST05.L	59888	30	C ₁₅ H ₂₄	204



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

SDG Number: 10-1384
Lab Sample ID: 245387007

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7687
Batch ID: 945501
Run Date: 02/04/2010 19:33
Prep Date: 01/26/2010 20:21
Data File: s6b0420.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	455	ug/kg	90.9	455
108-95-2	Phenol	U	455	ug/kg	90.9	455
95-57-8	2-Chlorophenol	U	455	ug/kg	90.9	455
106-46-7	1,4-Dichlorobenzene	U	455	ug/kg	90.9	455
621-64-7	N-Nitrosodipropylamine	U	455	ug/kg	90.9	455
59-50-7	4-Chloro-3-methylphenol	U	455	ug/kg	90.9	455
83-32-9	Acenaphthene	U	45.5	ug/kg	15.0	45.5
121-14-2	2,4-Dinitrotoluene	U	455	ug/kg	45.5	455
100-02-7	4-Nitrophenol	U	455	ug/kg	150	455
87-86-5	Pentachlorophenol	U	455	ug/kg	114	455
129-00-0	Pyrene	U	45.5	ug/kg	13.6	45.5
110-86-1	Pyridine	U	455	ug/kg	90.9	455
62-53-3	Aniline	U	455	ug/kg	136	455
111-44-4	bis(2-Chloroethyl) ether	U	455	ug/kg	90.9	455
541-73-1	1,3-Dichlorobenzene	U	455	ug/kg	90.9	455
100-51-6	Benzyl alcohol	U	455	ug/kg	136	455
95-50-1	1,2-Dichlorobenzene	U	455	ug/kg	90.9	455
108-60-1	bis(2-Chloroisopropyl)ether	U	455	ug/kg	90.9	455
95-48-7	o-Cresol	U	455	ug/kg	90.9	455
65794-96-9	m,p-Cresols	U	455	ug/kg	136	455
67-72-1	Hexachloroethane	U	455	ug/kg	90.9	455
98-95-3	Nitrobenzene	U	455	ug/kg	90.9	455
78-59-1	Isophorone	U	455	ug/kg	90.9	455
88-75-5	2-Nitrophenol	U	455	ug/kg	90.9	455
105-67-9	2,4-Dimethylphenol	U	455	ug/kg	159	455
111-91-1	bis(2-Chloroethoxy)methane	U	455	ug/kg	90.9	455
120-83-2	2,4-Dichlorophenol	U	455	ug/kg	90.9	455
65-85-0	Benzoic acid	U	909	ug/kg	227	909
91-20-3	Naphthalene	U	45.5	ug/kg	13.6	45.5
106-47-8	4-Chloroaniline	U	455	ug/kg	90.9	455
87-68-3	Hexachlorobutadiene	U	455	ug/kg	90.9	455
91-57-6	2-Methylnaphthalene	U	45.5	ug/kg	9.09	45.5
77-47-4	Hexachlorocyclopentadiene	U	455	ug/kg	90.9	455
88-06-2	2,4,6-Trichlorophenol	U	455	ug/kg	90.9	455
95-95-4	2,4,5-Trichlorophenol	U	455	ug/kg	90.9	455
91-58-7	2-Chloronaphthalene	U	45.5	ug/kg	15.0	45.5
88-74-4	2-Nitroaniline	U	455	ug/kg	90.9	455
99-09-2	o-Nitroaniline	U	455	ug/kg	90.9	455
	3-Nitroaniline					

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387007	Date Received: 01/23/2010 09:20	%Moisture: 26.7
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7687	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:33	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0420.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	455	ug/kg	90.9	455
606-20-2	2,6-Dinitrotoluene	U	455	ug/kg	45.5	455
208-96-8	Acenaphthylene	U	45.5	ug/kg	13.6	45.5
51-28-5	2,4-Dinitrophenol	U	909	ug/kg	173	909
132-64-9	Dibenzofuran	U	455	ug/kg	90.9	455
84-66-2	Diethylphthalate	U	455	ug/kg	90.9	455
86-73-7	Fluorene	U	45.5	ug/kg	13.6	45.5
7005-72-3	4-Chlorophenylphenylether	U	455	ug/kg	90.9	455
534-52-1	2-Methyl-4,6-dinitrophenol	U	455	ug/kg	90.9	455
100-01-6	4-Nitroaniline	U	455	ug/kg	136	455
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	455	ug/kg	90.9	455
122-66-7	Azobenzene	U	455	ug/kg	90.9	455
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	455	ug/kg	90.9	455
118-74-1	Hexachlorobenzene	U	455	ug/kg	90.9	455
85-01-8	Phenanthrene	U	45.5	ug/kg	13.6	45.5
120-12-7	Anthracene	U	45.5	ug/kg	9.09	45.5
84-74-2	Di-n-butylphthalate	U	455	ug/kg	90.9	455
206-44-0	Fluoranthene	U	45.5	ug/kg	13.6	45.5
85-68-7	Butylbenzylphthalate	U	455	ug/kg	90.9	455
56-55-3	Benzo(a)anthracene	U	45.5	ug/kg	13.6	45.5
91-94-1	3,3'-Dichlorobenzidine	U	455	ug/kg	136	455
218-01-9	Chrysene	U	45.5	ug/kg	13.6	45.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	455	ug/kg	90.9	455
117-84-0	Di-n-octylphthalate	U	455	ug/kg	90.9	455
205-99-2	Benzo(b)fluoranthene	U	45.5	ug/kg	13.6	45.5
207-08-9	Benzo(k)fluoranthene	U	45.5	ug/kg	13.6	45.5
50-32-8	Benzo(a)pyrene	U	45.5	ug/kg	13.6	45.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.5	ug/kg	13.6	45.5
53-70-3	Dibenzo(a,h)anthracene	U	45.5	ug/kg	13.6	45.5
191-24-2	Benzo(ghi)perylene	U	45.5	ug/kg	13.6	45.5
120-82-1	1,2,4-Trichlorobenzene	U	455	ug/kg	90.9	455

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	196	ug/kg		J
	Unknown Aldol Condensate	3.54	551	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 245387007	Date Received: 01/23/2010 09:20	%Moisture: 26.7
	Client: LANL010	Project: LANL01004
Client ID: RE14-10-7687	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 19:33	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0420.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	Flt	Qual
127-91-3	.beta.-Pinene	4.68	217	ug/kg	96	NJ
	Unknown	10.54	1020	ug/kg		J
	Unknown	11.04	927	ug/kg		J

Data File: /chem/MSD6.i/s020410.b/s6b0420.d
Report Date: 05-Feb-2010 09:18

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Data file : /chem/MSD6.i/s020410.b/s6b0420.d
Lab Smp Id: 245387007 Client Smp ID: RE14-10-7687
Inj Date : 04-FEB-2010 19:33
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387007|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	26.71140	% 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	4.948	4.951	(1.000)	158019	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	611205	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	354617	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	628374	40.0000	
* 91 Chrysene-d12	240	12.756	12.763	(1.000)	488350	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	323308	40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	234446	59.2462	2690
\$ 5 Phenol-d5	99	4.553	4.556	(0.920)	304190	60.9054	2770
\$ 20 Nitrobenzene-d5	82	5.484	5.491	(0.881)	125401	29.0036	1320
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	297115	32.5115	1480
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	72565	70.1090	3190
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	332538	42.2246	1920

ION RATIO REPORT

SV REPORT

Data file: s6b0420.d

Report Date: 02/04/2010 21:18

Lab. ID: 245387007

SampleType: SAMPLE

Injection Date: 04-FEB-2010 19:33

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387007|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	10369	2.48	2.81	80-120	100	(T)
42	725	2.47	2.81	54-114	7	(QT)
43	12180	2.48	2.81	7- 67	117	(QT)

4 Aniline				CAS#: 62-53-3		
66	13878	4.55	4.64	80-120	100	(T)
93	1753	4.61	4.64	236-296	13	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	17818	5.48	5.33	80-120	100	(T)
42	10745	5.48	5.33	35- 95	60	(T)

22 Isophorone				CAS#: 78-59-1		
82	125401	5.48	5.74	80-120	100	(T)
138	1394	5.97	5.74	0- 50	1	(T)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	15961	7.54	7.50	80-120	100	()
164	415	7.89	7.50	2- 62	3	(T)
127	155	7.55	7.50	7- 67	1	(Q)

43 Dimethylphthalate				CAS#: 131-11-3		
163	62438	8.10	7.78	80-120	100	(T)
164	354617	8.10	7.78	0- 40	568	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	46370	8.10	8.30	80-120	100	(T)
89	547	8.10	8.29	39- 99	1	(QT)
63	315	8.10	8.29	15- 75	1	(QT)

53 Fluorene		CAS#: 86-73-7				
166	5042	8.95	8.69	80-120	100	(T)
165	4861	8.95	8.69	62-122	96	(T)
167	1034	8.95	8.69	0- 44	21	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	117	8.79	8.71	80-120	100	(T)
108	107	8.76	8.71	34- 94	91	()
92	1062	8.95	8.71	15- 75	904	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	231	17.19	17.17	80-120	100	()
138	127	17.36	17.18	6- 66	55	(T)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020410.b/s6b0420.d
Report Date: 05-Feb-2010 09:18

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0420.d
Lab Smp Id: 245387007 Client Smp ID: RE14-10-7687
Inj Date : 04-FEB-2010 19:33
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387007|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	26.71140	% moisture

Cpnd Variable

Local Compound Variable

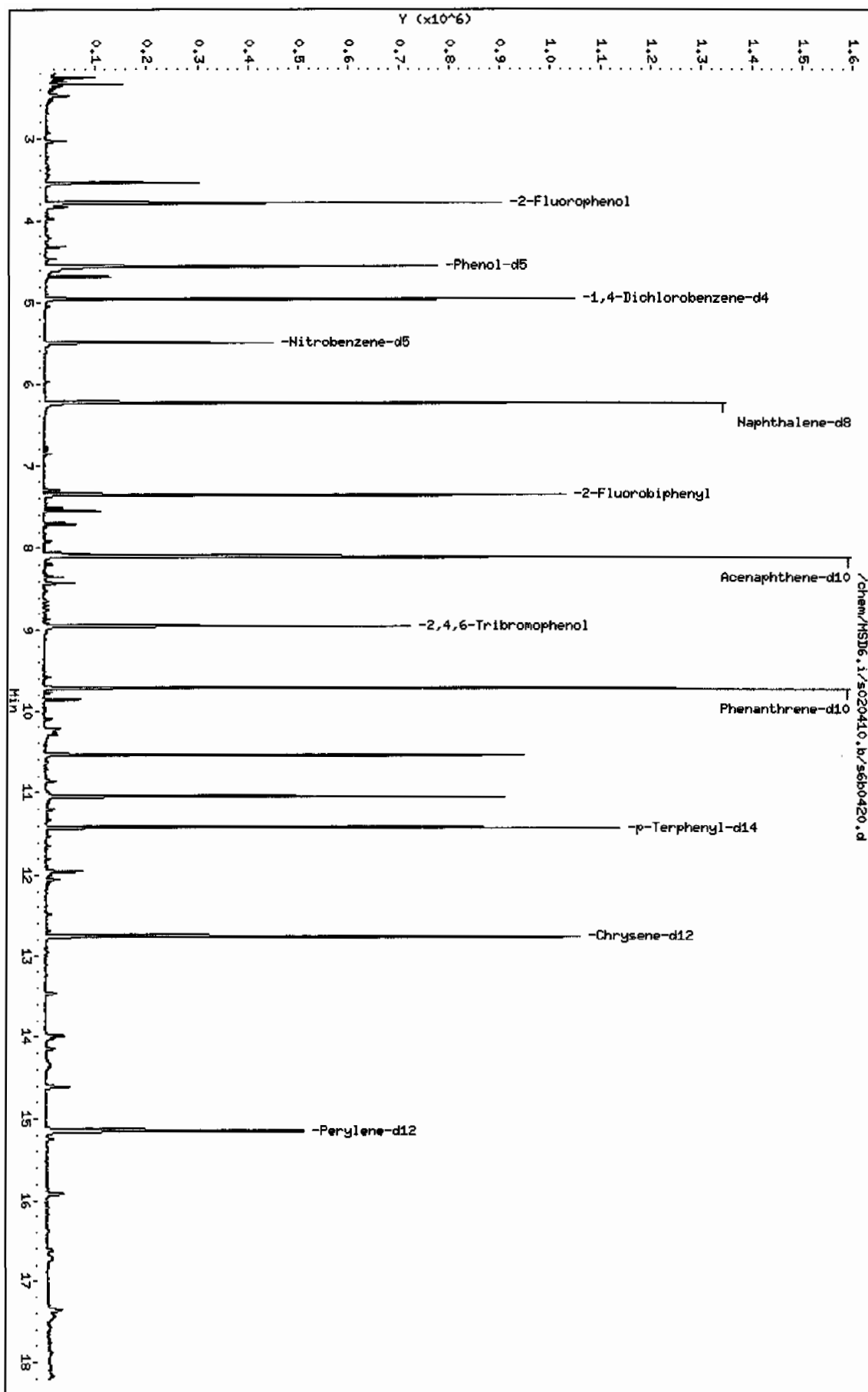
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	914133	40.000
* 67 Phenanthrene-d10	9.711	1536107	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.337	98786	4.32261581	196	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.542	276995	12.1205398	551	0		0	10
.beta.-Pinene					CAS #: 127-91-3		
4.681	108991	4.76916797	217	96	NIST05.L	15171	10
Unknown					CAS #:		
10.541	864650	22.5153507	1020	0		0	67
Unknown					CAS #:		
11.043	783614	20.4051845	927	0		0	67

Data File: /chem/MSD6.1/s020410.b/s6b0420.d
Date : 04-FEB-2010 19:33
Client ID: RE14-10-7687
Sample Info: 12453870071945501.1|SWH11.1|LNL
Volume Injected (uL): 0.5
Column Phase: J&W DB-SHS

Instrument: MSD6.1
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 19:33

Client ID: RE14-10-7687

Instrument: MSD6.i

Sample Info: 1245387007194550111SVH11ILANL

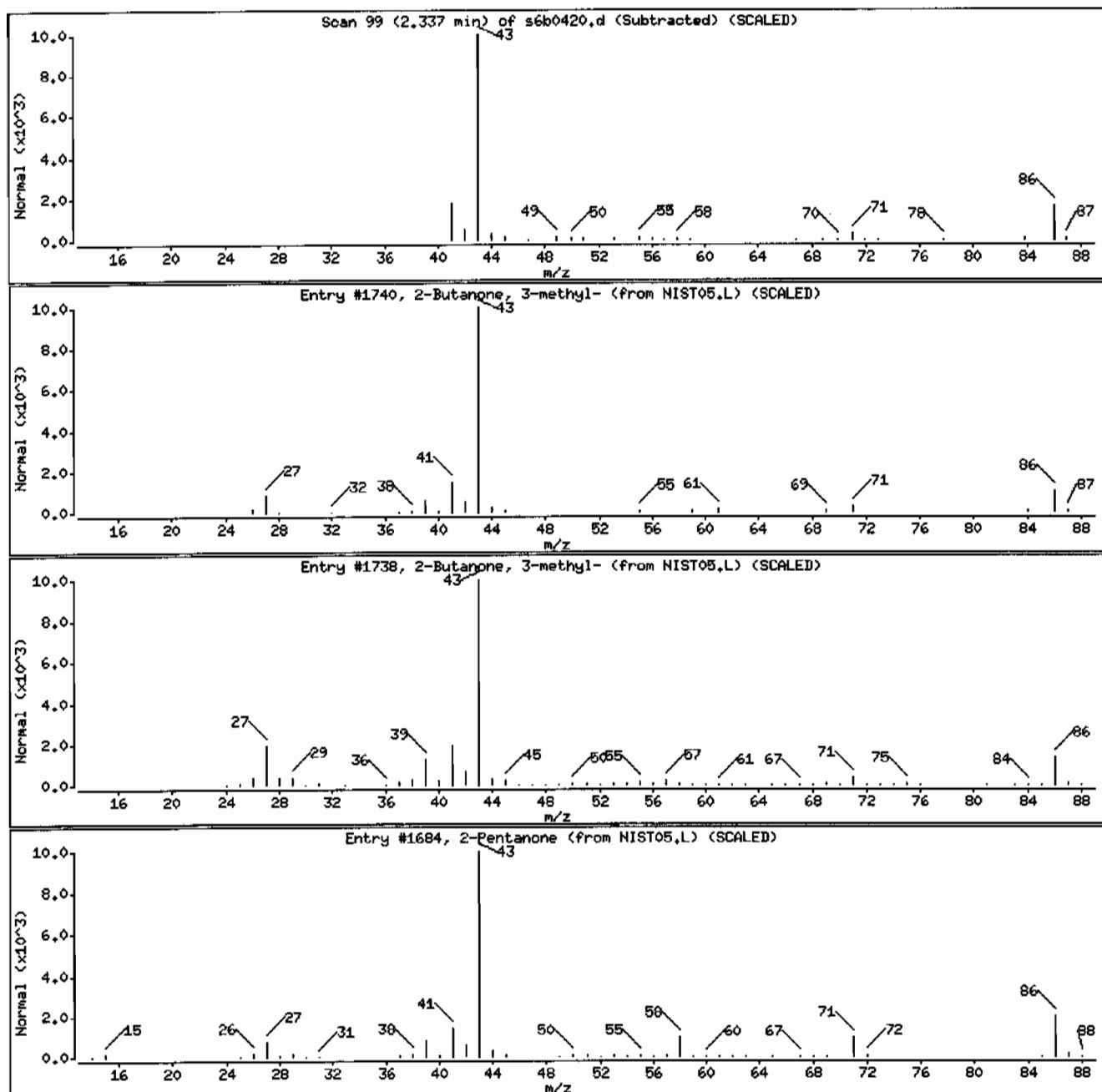
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	64	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	50	C5H10O	86
2-Pentanone	107-87-9	NIST05.L	1684	45	C5H10O	86



Date: 04-FEB-2010 19:33

Client ID: RE14-10-7687

Instrument: MSD6.i

Sample Info: 1245387007194550111SVH111LANL

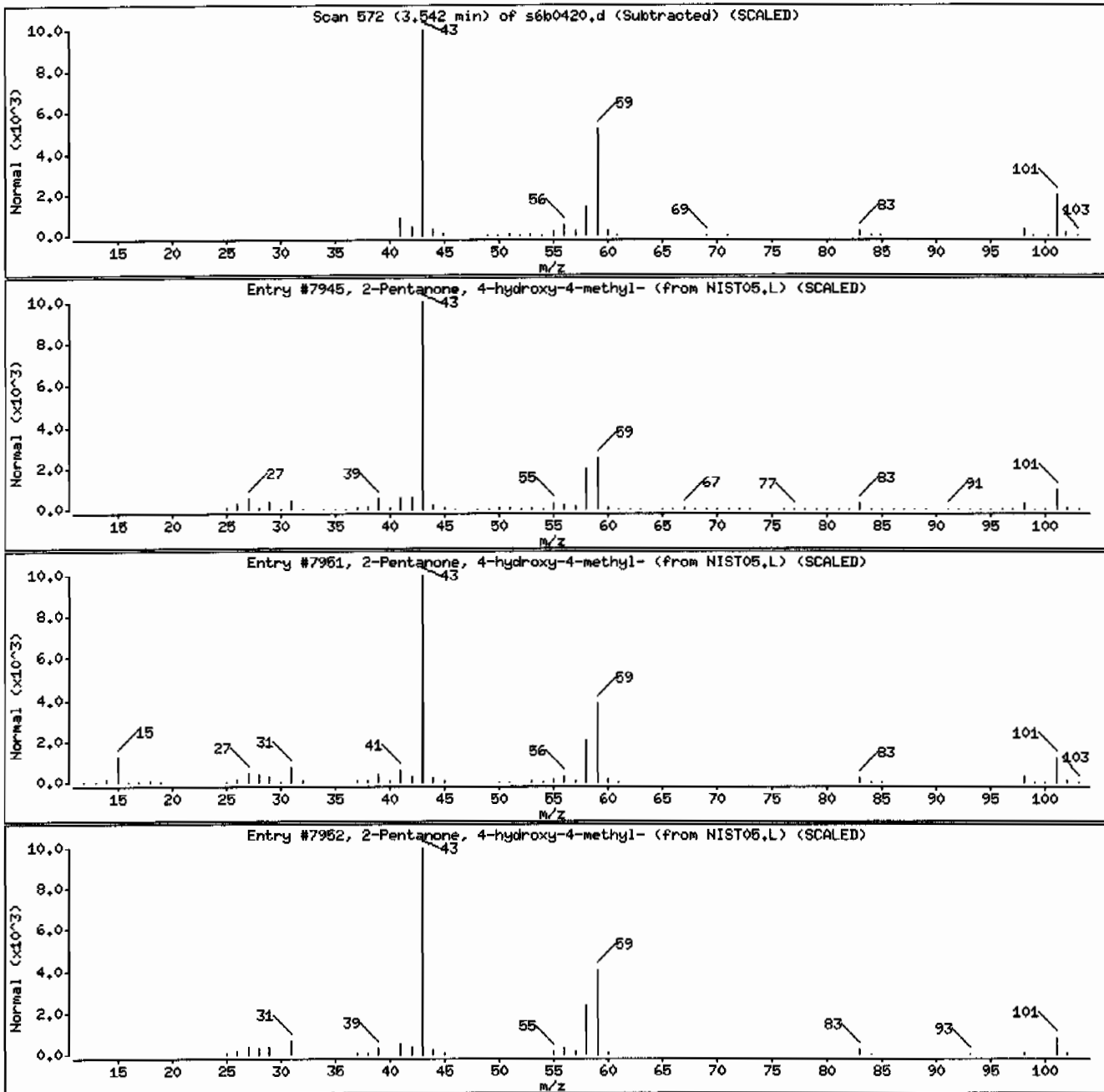
Volume Injected (uL): 0.5

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	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



Date : 04-FEB-2010 19:33

Client ID: RE14-10-7687

Instrument: MSD6.i

Sample Info: 1245387007194550111SVH111LANL

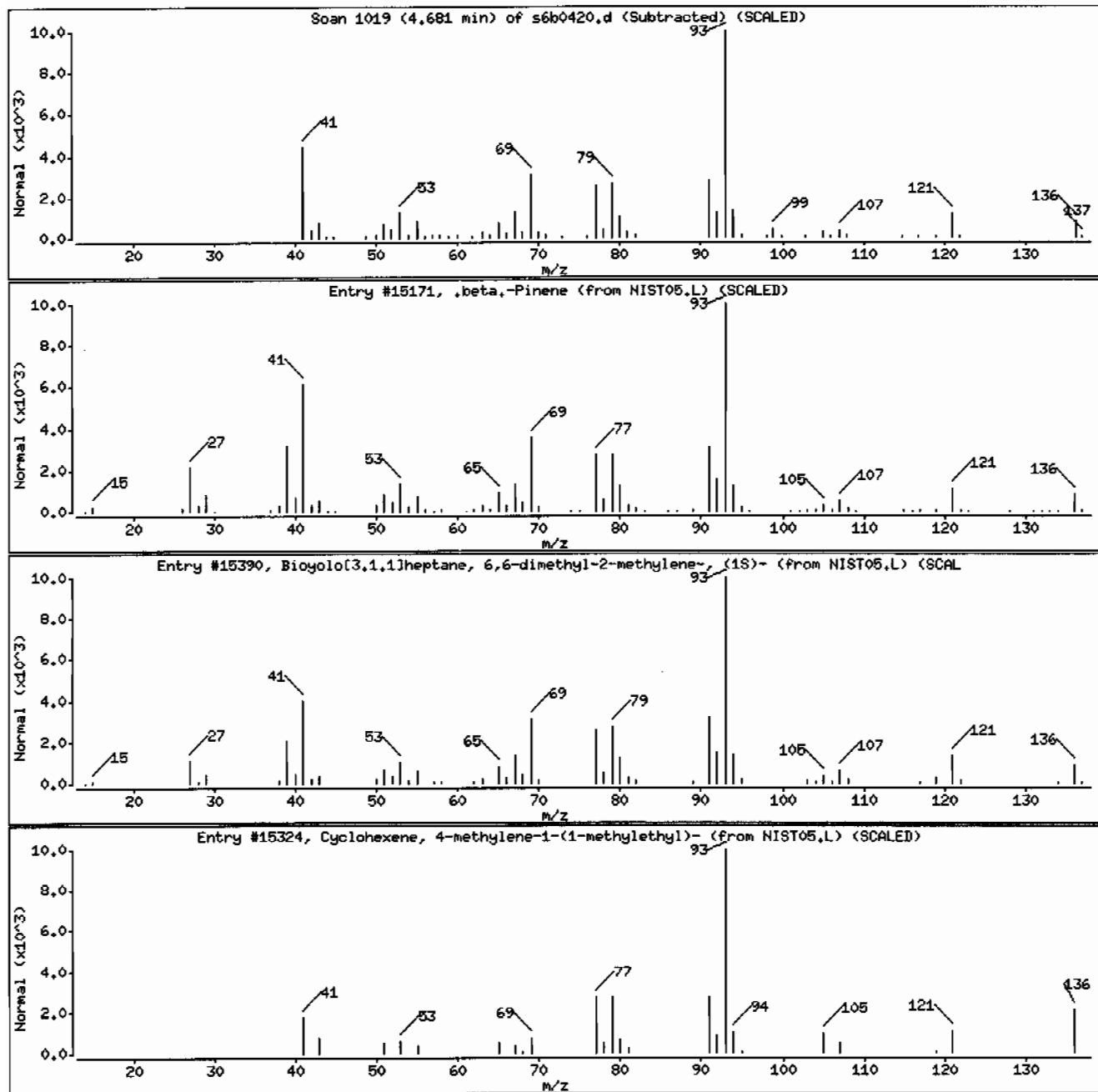
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST05.L	15171	96	C10H16	136
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	94	C10H16	136
Cyclohexene, 4-methylene-1-(1-methylethy	99-84-3	NIST05.L	15324	91	C10H16	136



Date : 04-FEB-2010 19:33

Client ID: RE14-10-7687

Instrument: HSD6.i

Sample Info: 1245387007194550111SVH111LANL

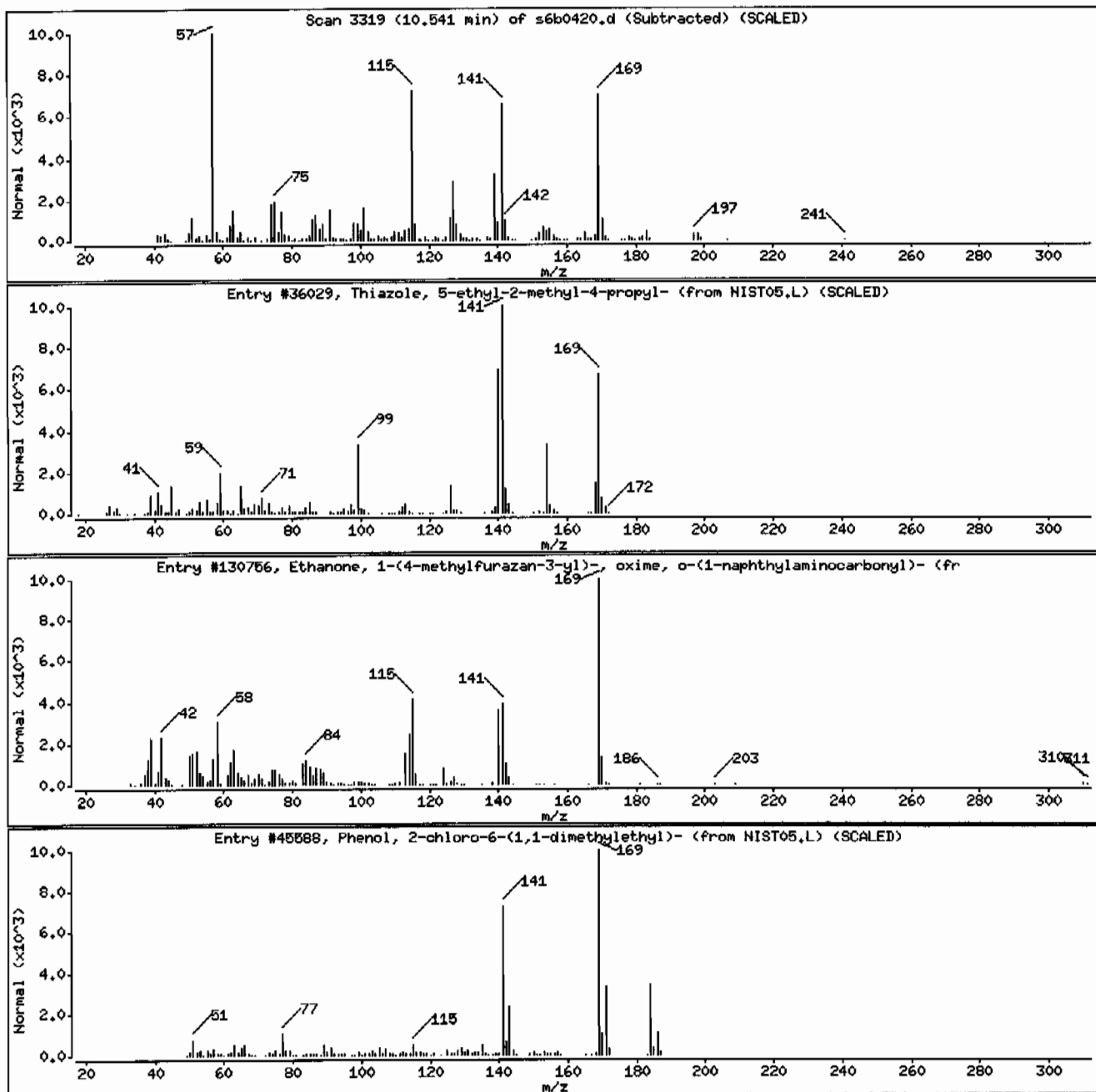
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thiazole, 5-ethyl-2-methyl-4-propyl-	4276-67-9	NIST05.L	36029	38	C9H15NS	169
Ethanone, 1-(4-methylfuran-3-yl)-, oxime	1000264-78-3	NIST05.L	130756	38	C16H14N4O3	310
Phenol, 2-chloro-6-(1,1-dimethylethyl)-	4237-37-0	NIST05.L	45588	35	C10H13ClO	184



Date : 04-FEB-2010 19:33

Client ID: RE14-10-7687

Instrument: HSD6.i

Sample Info: 1245387007194550111SVH111LANL

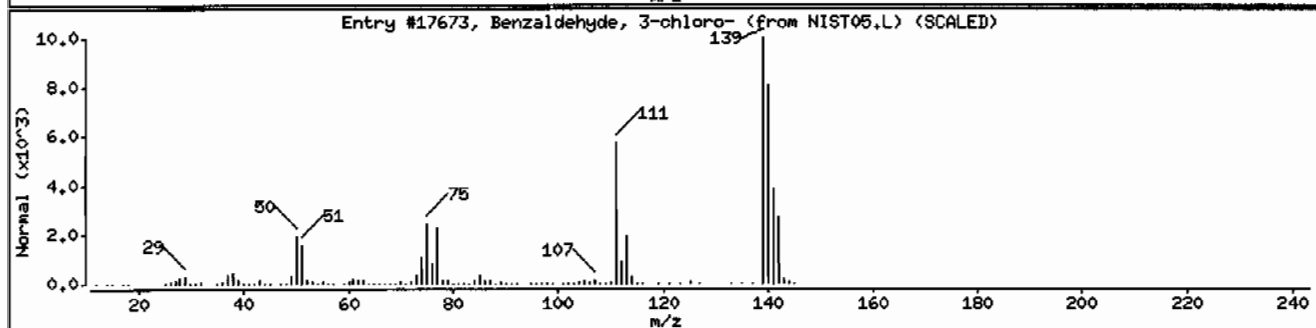
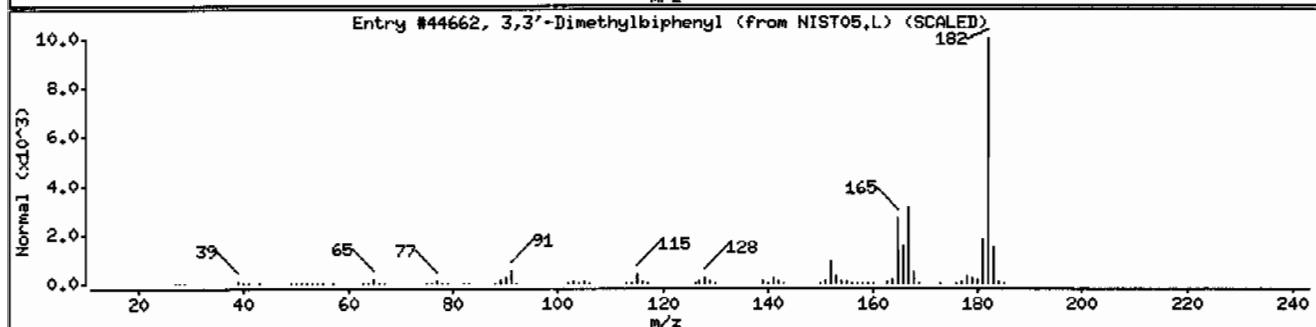
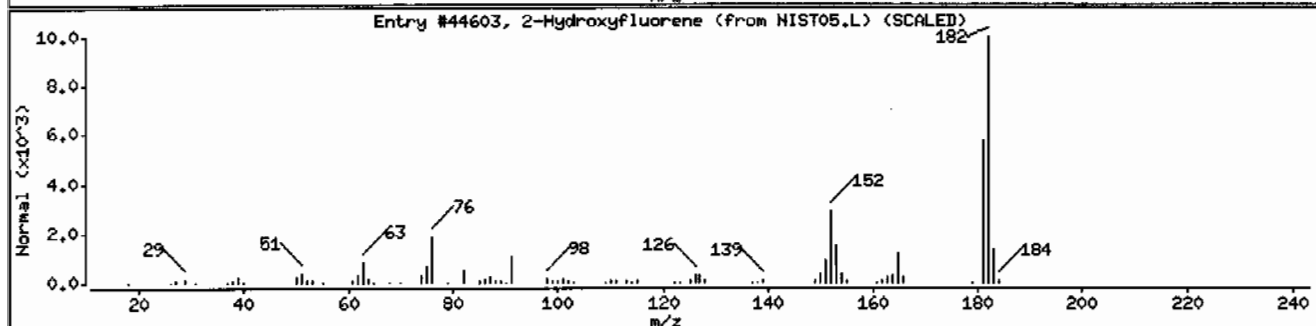
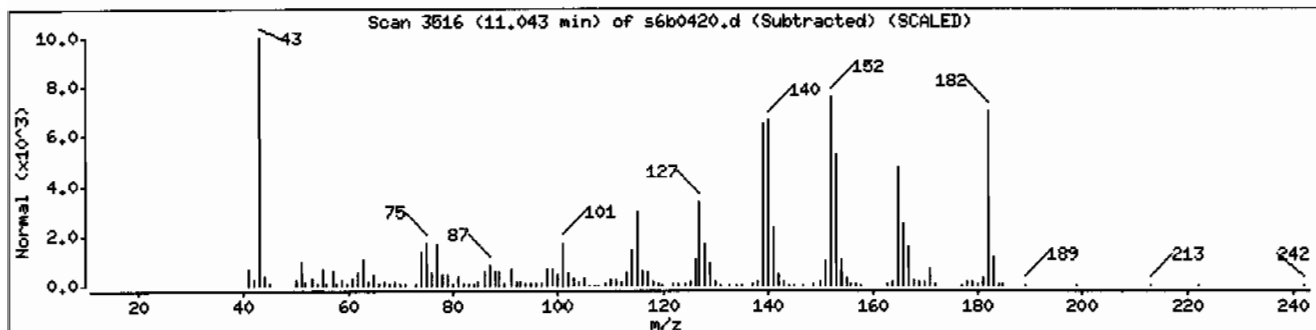
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Hydroxyfluorene	2443-58-5	NIST05.L	44603	46	C13H10O	182
3,3'-Dimethylbiphenyl	612-75-9	NIST05.L	44662	22	C14H14	182
Benzaldehyde, 3-chloro-	587-04-2	NIST05.L	17673	18	C7H5ClO	140



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

SDG Number: 10-1384
Lab Sample ID: 245387005

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7688
Batch ID: 945501
Run Date: 02/04/2010 18:36
Prep Date: 01/26/2010 20:21
Data File: s6b0418.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	420	ug/kg	84.0	420
108-95-2	Phenol	U	420	ug/kg	84.0	420
95-57-8	2-Chlorophenol	U	420	ug/kg	84.0	420
106-46-7	1,4-Dichlorobenzene	U	420	ug/kg	84.0	420
621-64-7	N-Nitrosodipropylamine	U	420	ug/kg	84.0	420
59-50-7	4-Chloro-3-methylphenol	U	420	ug/kg	84.0	420
83-32-9	Acenaphthene	U	42.0	ug/kg	13.9	42.0
121-14-2	2,4-Dinitrotoluene	U	420	ug/kg	42.0	420
100-02-7	4-Nitrophenol	U	420	ug/kg	139	420
87-86-5	Pentachlorophenol	U	420	ug/kg	105	420
129-00-0	Pyrene	U	42.0	ug/kg	12.6	42.0
110-86-1	Pyridine	U	420	ug/kg	84.0	420
62-53-3	Aniline	U	420	ug/kg	126	420
111-44-4	bis(2-Chloroethyl) ether	U	420	ug/kg	84.0	420
541-73-1	1,3-Dichlorobenzene	U	420	ug/kg	84.0	420
100-51-6	Benzyl alcohol	U	420	ug/kg	126	420
95-50-1	1,2-Dichlorobenzene	U	420	ug/kg	84.0	420
108-60-1	bis(2-Chloroisopropyl)ether	U	420	ug/kg	84.0	420
95-48-7	o-Cresol	U	420	ug/kg	84.0	420
65794-96-9	m,p-Cresols	U	420	ug/kg	126	420
67-72-1	Hexachloroethane	U	420	ug/kg	84.0	420
98-95-3	Nitrobenzene	U	420	ug/kg	84.0	420
78-59-1	Isophorone	U	420	ug/kg	84.0	420
88-75-5	2-Nitrophenol	U	420	ug/kg	84.0	420
105-67-9	2,4-Dimethylphenol	U	420	ug/kg	147	420
111-91-1	bis(2-Chloroethoxy)methane	U	420	ug/kg	84.0	420
120-83-2	2,4-Dichlorophenol	U	420	ug/kg	84.0	420
65-85-0	Benzoic acid	U	840	ug/kg	210	840
91-20-3	Naphthalene	U	42.0	ug/kg	12.6	42.0
106-47-8	4-Chloroaniline	U	420	ug/kg	84.0	420
87-68-3	Hexachlorobutadiene	U	420	ug/kg	84.0	420
91-57-6	2-Methylnaphthalene	U	42.0	ug/kg	8.40	42.0
77-47-4	Hexachlorocyclopentadiene	U	420	ug/kg	84.0	420
88-06-2	2,4,6-Trichlorophenol	U	420	ug/kg	84.0	420
95-95-4	2,4,5-Trichlorophenol	U	420	ug/kg	84.0	420
91-58-7	2-Chloronaphthalene	U	42.0	ug/kg	13.9	42.0
88-74-4	2-Nitroaniline	U	420	ug/kg	84.0	420
99-09-2	<i>o</i> -Nitroaniline	U	420	ug/kg	84.0	420
	3-Nitroaniline					

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

SDG Number: 10-1384
Lab Sample ID: 245387005

Client ID: RE14-10-7688
Batch ID: 945501
Run Date: 02/04/2010 18:36
Prep Date: 01/26/2010 20:21
Data File: s6b0418.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.19 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	420	ug/kg	84.0	420
606-20-2	2,6-Dinitrotoluene	U	420	ug/kg	42.0	420
208-96-8	Acenaphthylene	U	42.0	ug/kg	12.6	42.0
51-28-5	2,4-Dinitrophenol	U	840	ug/kg	160	840
132-64-9	Dibenzofuran	U	420	ug/kg	84.0	420
84-66-2	Diethylphthalate	U	420	ug/kg	84.0	420
86-73-7	Fluorene	U	42.0	ug/kg	12.6	42.0
7005-72-3	4-Chlorophenylphenylether	U	420	ug/kg	84.0	420
534-52-1	2-Methyl-4,6-dinitrophenol	U	420	ug/kg	84.0	420
100-01-6	4-Nitroaniline	U	420	ug/kg	126	420
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	420	ug/kg	84.0	420
122-66-7	Azobenzene	U	420	ug/kg	84.0	420
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	420	ug/kg	84.0	420
118-74-1	Hexachlorobenzene	U	420	ug/kg	84.0	420
85-01-8	Phenanthrene	U	42.0	ug/kg	12.6	42.0
120-12-7	Anthracene	U	42.0	ug/kg	8.40	42.0
84-74-2	Di-n-butylphthalate	U	420	ug/kg	84.0	420
206-44-0	Fluoranthene	U	42.0	ug/kg	12.6	42.0
85-68-7	Butylbenzylphthalate	U	420	ug/kg	84.0	420
56-55-3	Benzo(a)anthracene	U	42.0	ug/kg	12.6	42.0
91-94-1	3,3'-Dichlorobenzidine	U	420	ug/kg	126	420
218-01-9	Chrysene	U	42.0	ug/kg	12.6	42.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	420	ug/kg	84.0	420
117-84-0	Di-n-octylphthalate	U	420	ug/kg	84.0	420
205-99-2	Benzo(b)fluoranthene	U	42.0	ug/kg	12.6	42.0
207-08-9	Benzo(k)fluoranthene	U	42.0	ug/kg	12.6	42.0
50-32-8	Benzo(a)pyrene	U	42.0	ug/kg	12.6	42.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.0	ug/kg	12.6	42.0
53-70-3	Dibenzo(a,h)anthracene	U	42.0	ug/kg	12.6	42.0
191-24-2	Benzo(ghi)perylene	U	42.0	ug/kg	12.6	42.0
120-82-1	1,2,4-Trichlorobenzene	U	420	ug/kg	84.0	420

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.35	186	ug/kg		J
	Unknown Aldol Condensate	3.54	483	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0418.d
Lab Smp Id: 245387005 Client Smp ID: RE14-10-7688
Inj Date : 04-FEB-2010 18:36
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387005|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	21.10310	% 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	4.948	4.951	(1.000)	181018	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	693460	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.103	(1.000)	398722	40.0000	
* 67 Phenanthrene-d10	188	9.711	9.716	(1.000)	700921	40.0000	
* 91 Chrysene-d12	240	12.756	12.763	(1.000)	550040	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	386824	40.0000	
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	271225	59.8322	2510
\$ 5 Phenol-d5	99	4.553	4.556	(0.920)	327015	57.1566	2400
\$ 20 Nitrobenzene-d5	82	5.483	5.491	(0.881)	149743	30.5255	1280
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	319608	31.1043	1300
\$ 60 2,4,6-Tribromophenol	329	8.949	8.951	(1.105)	74845	64.3130	2700
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.895)	346008	39.0074	1640

ION RATIO REPORT

SV REPORT

Data file: s6b0418.d

Report Date: 02/04/2010 21:17

Lab. ID: 245387005

SampleType: SAMPLE

Injection Date: 04-FEB-2010 18:36

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387005|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	6832	2.47	2.81	80-120	100	(T)
42	421	2.47	2.81	54-114	6	(QT)
43	11677	2.49	2.81	7- 67	171	(QT)

4	Aniline			CAS#: 62-53-3		
66	16231	4.55	4.64	80-120	100	(T)
93	552	4.47	4.64	236-296	3	(QT)

17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	20737	5.48	5.33	80-120	100	(T)
42	12523	5.48	5.33	35- 95	60	(T)

22	Isophorone			CAS#: 78-59-1		
82	149743	5.48	5.74	80-120	100	(T)
138	3322	6.22	5.74	0- 50	2	(T)

43	Dimethylphthalate			CAS#: 131-11-3		
163	71323	8.10	7.78	80-120	100	(T)
164	398722	8.10	7.78	0- 40	559	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	52059	8.10	8.30	80-120	100	(T)
89	568	8.10	8.29	39- 99	1	(QT)
63	448	8.10	8.29	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53	Fluorene		CAS#:	86-73-7		
166	4769	8.95	8.69	80-120	100	(T)
165	5219	8.95	8.69	62-122	109	(T)
167	1261	8.95	8.69	0- 44	26	(T)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0418.d
 Lab Smp Id: 245387005 Client Smp ID: RE14-10-7688
 Inj Date : 04-FEB-2010 18:36
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387005|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpcpl1

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	21.10310	% moisture

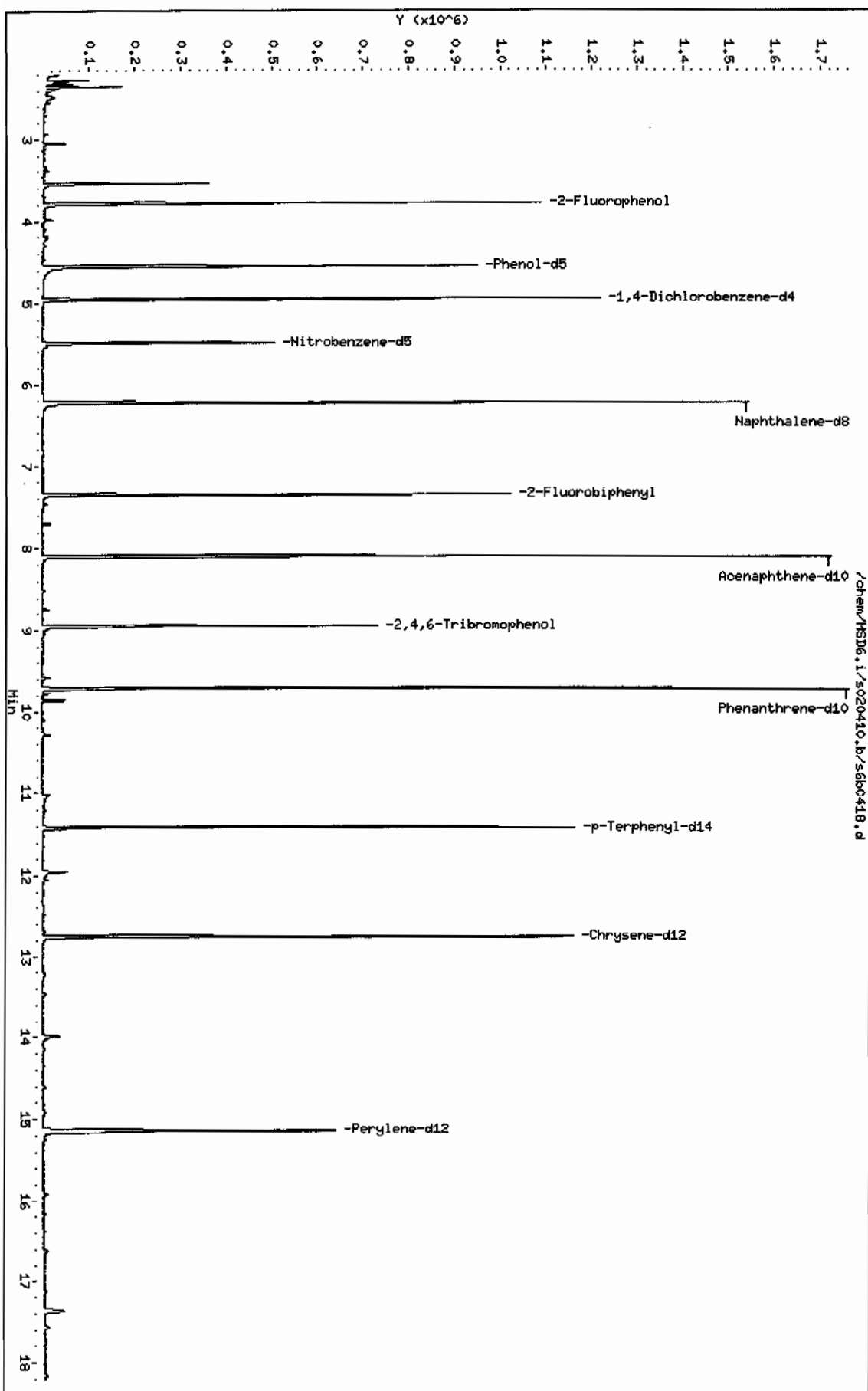
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.948	1048191	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
2.352	116380	4.44116857	186	0		0	10
Unknown Aldol Condensate					CAS #:		
3.544	301258	11.4963114	483	0		0	10

Data File: /chem/HSD6.i/s020410.b/s60418.d
Date: 04-FEB-2010 18:36
Client ID: RE14-10-7688
Sample Info: 1245387005194550111SVH11LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-SHS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 18:36

Client ID: RE14-10-7688

Instrument: MSD6.i

Sample Info: I245387006I94550111SVMI11LANL

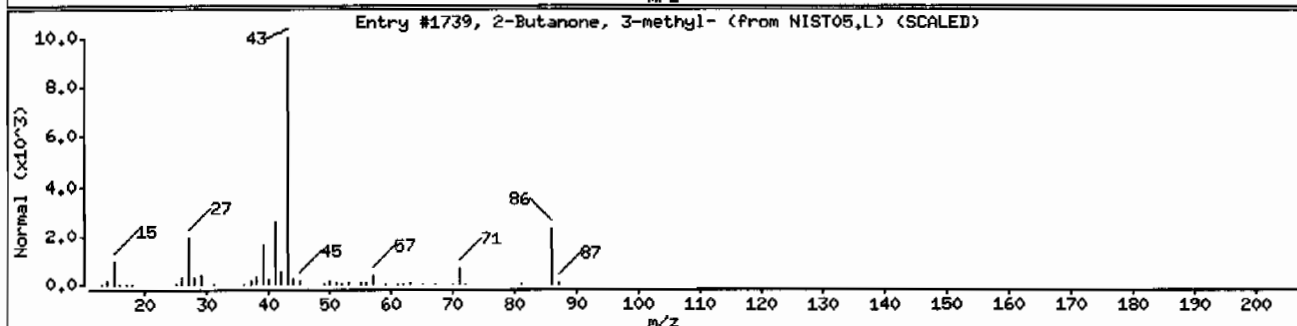
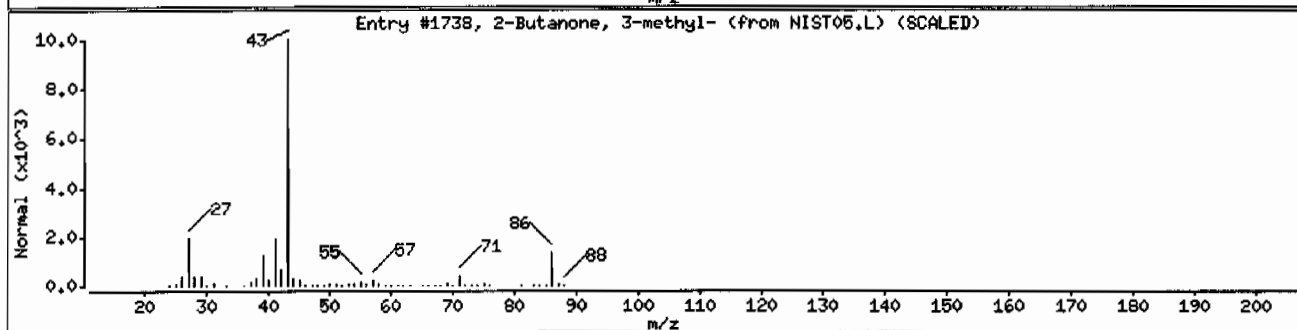
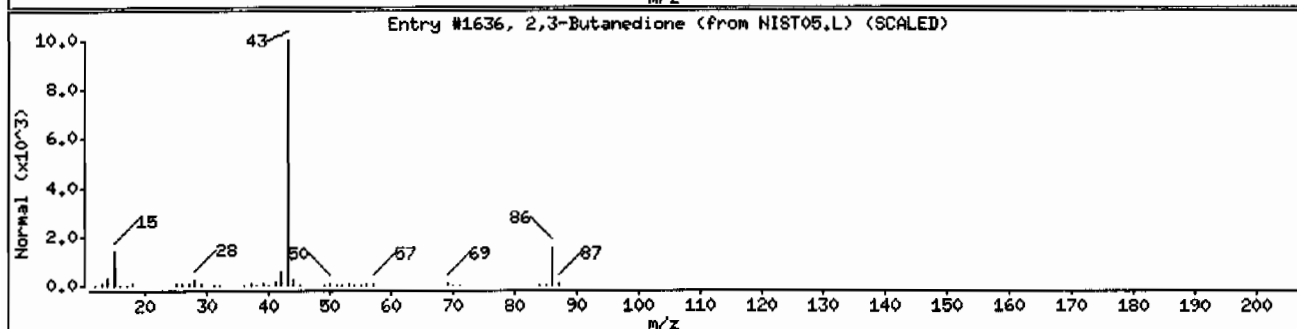
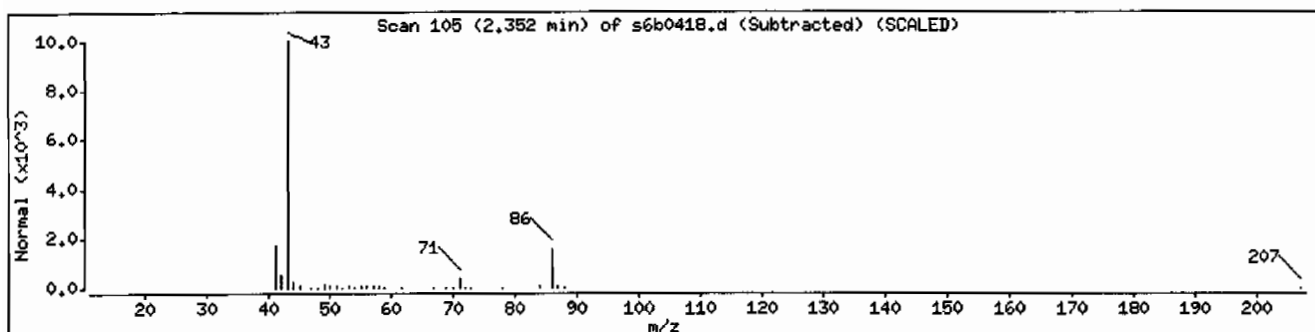
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione	431-03-8	NIST05.L	1636	53	C4H6O2	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	50	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1739	47	C5H10O	86



Date : 04-FEB-2010 18:36

Client ID: RE14-10-7688

Instrument: HSD6.i

Sample Info: 1245387005194550111SVH11ILANL

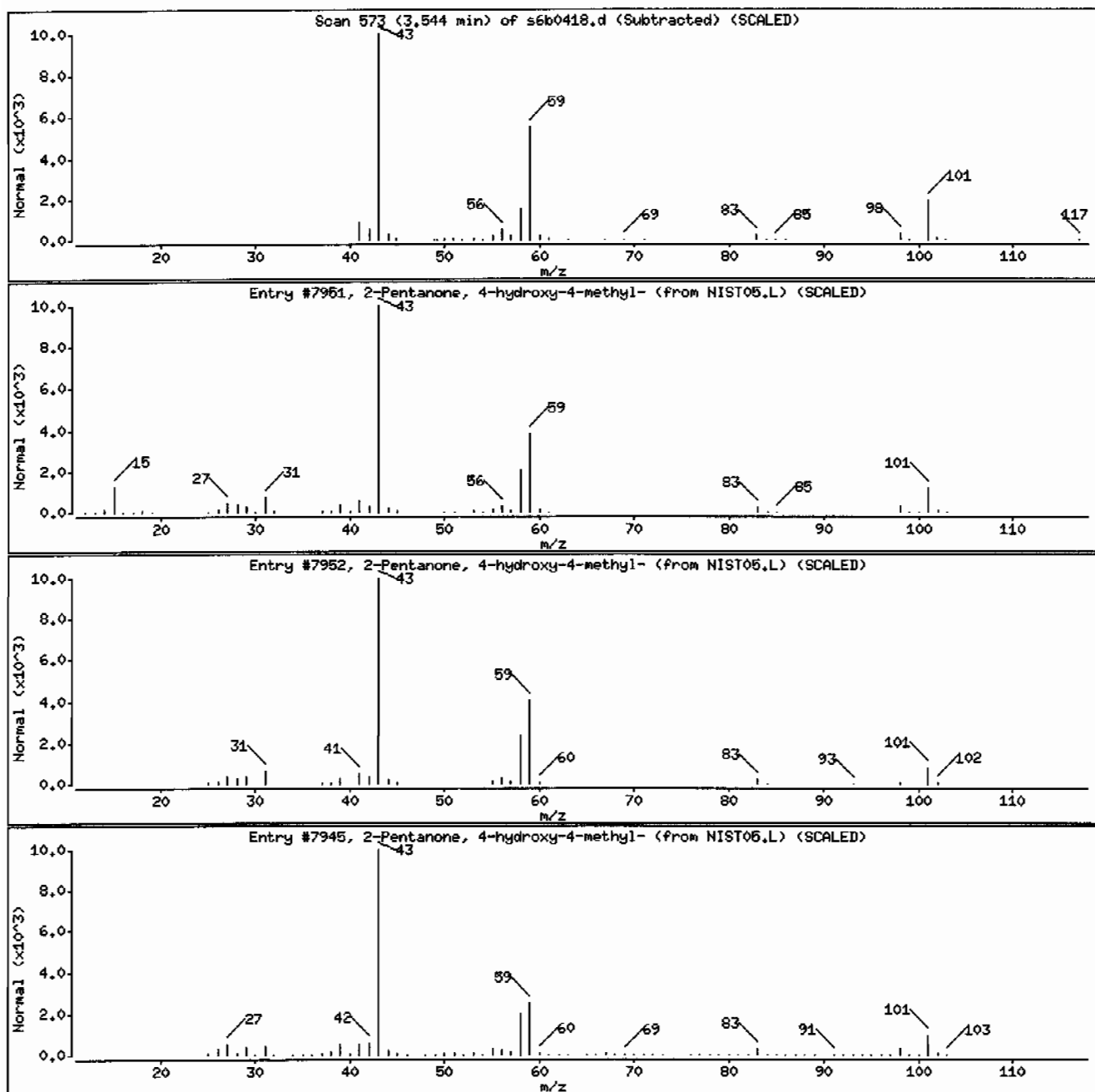
Volume Injected (uL): 0.5

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	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	33	C6H12O2	116



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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
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	381	ug/kg	76.2	381
108-95-2	Phenol	U	381	ug/kg	76.2	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.2	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381
95-48-7	o-Cresol	U	381	ug/kg	76.2	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381
78-59-1	Isophorone	U	381	ug/kg	76.2	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381
65-85-0	Benzoic acid	U	762	ug/kg	191	762
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.2	381
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	381	ug/kg	76.2	381

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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7689
Batch ID: 945501
Run Date: 02/04/2010 15:45
Prep Date: 01/26/2010 20:21
Data File: s6b0412.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	381	ug/kg	76.2	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	762	ug/kg	145	762
132-64-9	Dibenzofuran	U	381	ug/kg	76.2	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.2	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.2	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.2	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.2	381
122-66-7	Azobenzene	U	381	ug/kg	76.2	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.2	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.2	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.62	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.2	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.2	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.2	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.2	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.2	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	162	ug/kg		J
	Unknown Aldol Condensate	3.54	220	ug/kg		JA

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

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13
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		17.36	308	ug/kg	J

Data File: /chem/MSD6.i/s020410.b/s6b0412.d
Report Date: 05-Feb-2010 09:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0412.d
Lab Smp Id: 245387001 Client Smp ID: RE14-10-7689
Inj Date : 04-FEB-2010 15:45
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387001|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.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	30.16000	weight of sample
M	13.02790	% 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	4.948	4.951	(1.000)	145122	40.0000	
* 29 Naphthalene-d8		136	6.227	6.232	(1.000)	547320	40.0000	
* 46 Acenaphthene-d10		164	8.098	8.103	(1.000)	316778	40.0000	
* 67 Phenanthrene-d10		188	9.711	9.716	(1.000)	527316	40.0000	
* 91 Chrysene-d12		240	12.753	12.763	(1.000)	372949	40.0000	
* 98 Perylene-d12		264	15.141	15.151	(1.000)	282961	40.0000	
\$ 3 2-Fluorophenol		112	3.786	3.776	(0.765)	164921	45.3805	1730
\$ 5 Phenol-d5		99	4.553	4.556	(0.920)	198746	43.3297	1650
\$ 20 Nitrobenzene-d5		82	5.483	5.491	(0.881)	89021	22.9926	876
\$ 39 2-Fluorobiphenyl		172	7.351	7.354	(0.908)	200883	24.6071	938
\$ 60 2,4,6-Tribromophenol		329	8.946	8.951	(1.105)	39449	42.6665	1630
\$ 81 p-Terphenyl-d14		244	11.413	11.415	(0.895)	195613	32.5240	1240

ION RATIO REPORT

SV REPORT

Data file: s6b0412.d

Report Date: 02/04/2010 17:12

Lab. ID: 245387001

SampleType: SAMPLE

Injection Date: 04-FEB-2010 15:45

Operator: nagl

Instrument: MSD6.i

Sample Info: |245387001|945501|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	9624	4.55	4.64	80-120	100	(T)
93	407	4.61	4.64	236-296	4	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	12239	5.48	5.33	80-120	100	(T)
42	7171	5.48	5.33	35- 95	59	(T)

22	Isophorone		CAS#: 78-59-1			
82	89021	5.48	5.74	80-120	100	(T)
138	2795	6.23	5.74	0- 50	3	(T)

43	Dimethylphthalate		CAS#: 131-11-3			
163	56248	8.10	7.78	80-120	100	(T)
164	316778	8.10	7.78	0- 40	563	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	41990	8.10	8.30	80-120	100	(T)
89	527	8.10	8.29	39- 99	1	(QT)
63	453	8.10	8.29	15- 75	1	(QT)

99	Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5			
276	696	17.20	17.17	80-120	100	()
138	105	17.19	17.18	6- 66	15	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	266	17.22	17.20	80-120	100	()
139	254	17.36	17.20	0- 30	96	(QT)

 Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s020410.b/s6b0412.d
 Report Date: 05-Feb-2010 09:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0412.d
 Lab Smp Id: 245387001 Client Smp ID: RE14-10-7689
 Inj Date : 04-FEB-2010 15:45
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |245387001|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 05-Feb-2010 09:16 hnm 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: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	13.02790	% moisture

Cpnd Variable Local Compound Variable

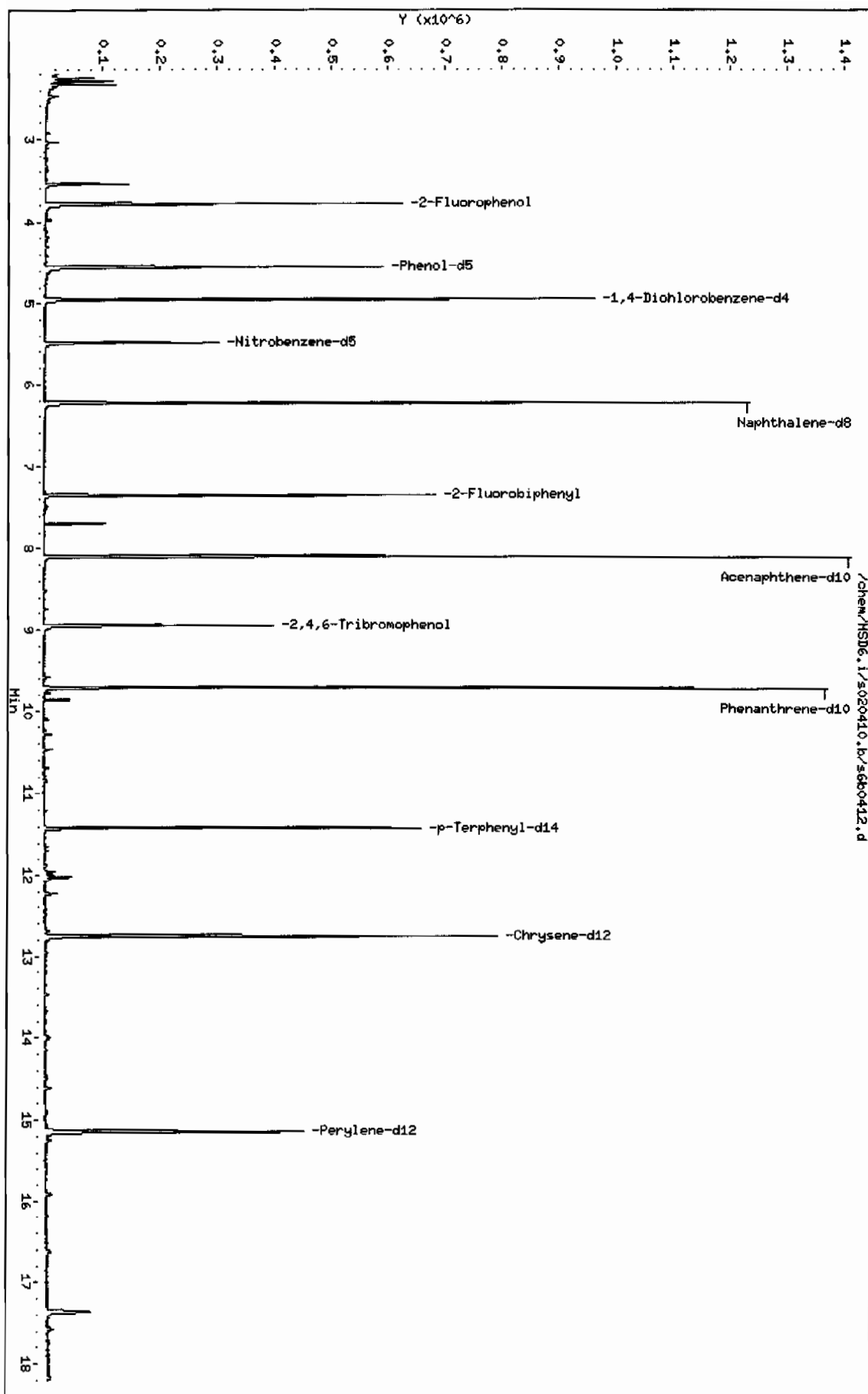
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.948	834980	40.000
* 98 Perylene-d12	15.141	770446	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.293	88454	4.23743306	162	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.542	120670	5.78075097	220	0		0	10
Unknown				CAS #:			
17.360	155462	8.07126359	308	0		0	98

Data File: /chem/MSD6.1/s020410.b/s6b0412.d
Date: 04-FEB-2010 15:45
Client ID: RE14-10-7689
Sample Info: 1245387001|9455011|SM11|LANL
Volume Injected (uL): 0.5
Column phase: 3uM DB-SHS

Instrument: MSD6.1
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 15:45

Client ID: RE14-10-7689

Instrument: MSD6.i

Sample Info: 1245387001194550111SVH11LANL

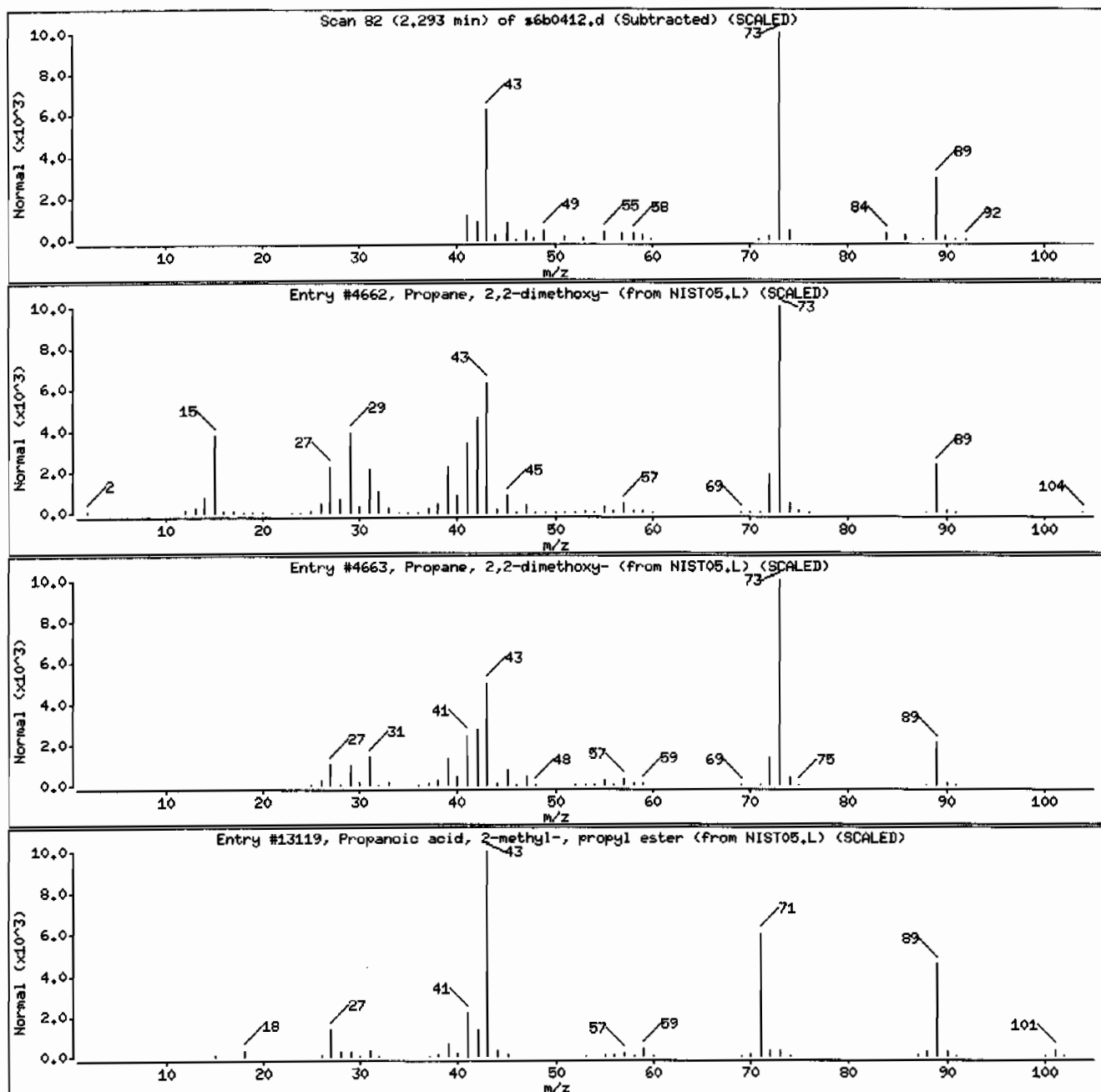
Volume Injected (uL): 0.5

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	4663	28	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	27	C7H14O2	130



Date : 04-FEB-2010 15:45

Client ID: RE14-10-7689

Instrument: MSD6.i

Sample Info: 1245387001194550111SVH11ILANL

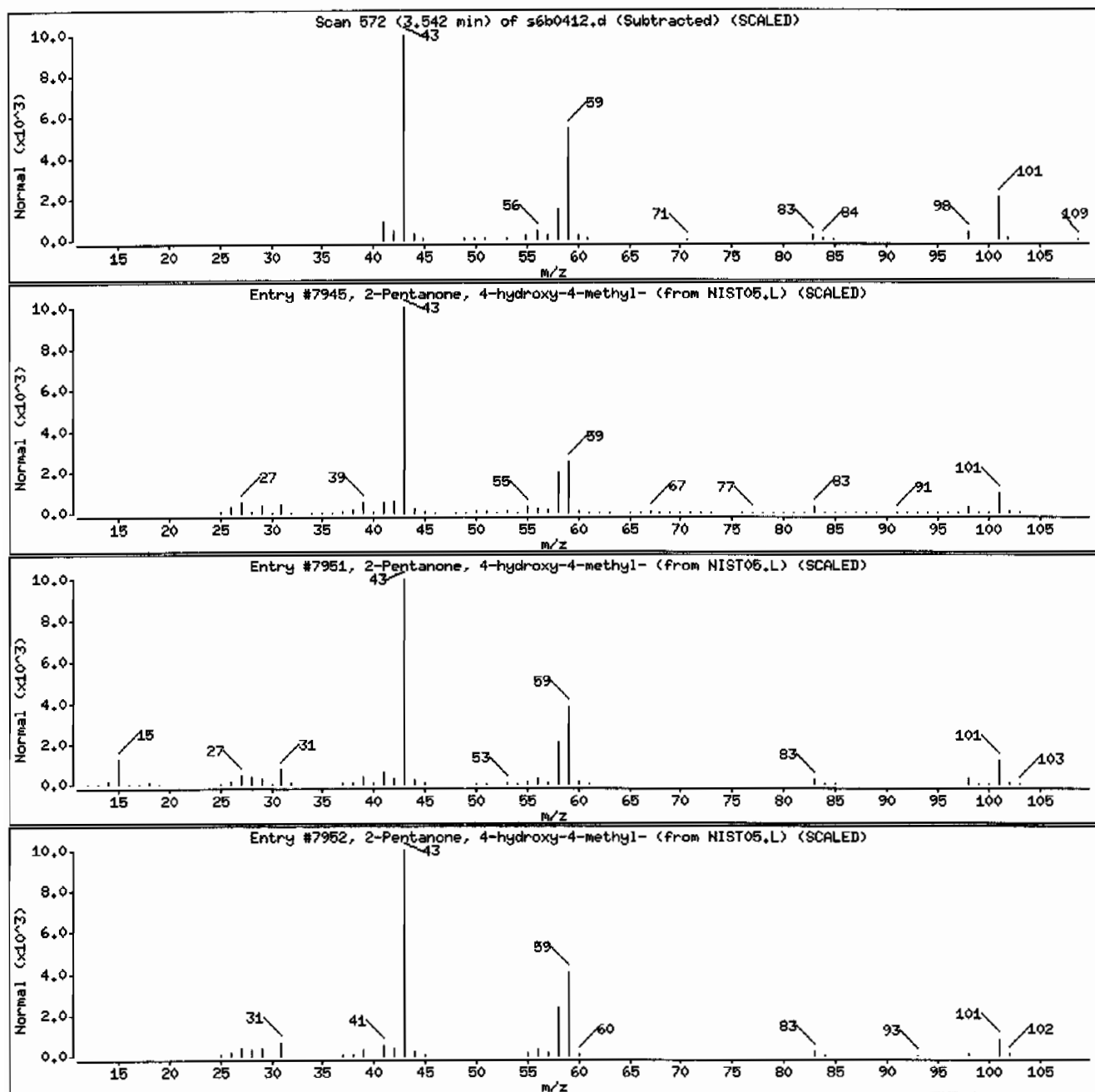
Volume Injected (uL): 0.5

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	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



Date : 04-FEB-2010 15:45

Client ID: RE14-10-7689

Instrument: MSD6.i

Sample Info: 1245387001194550111SVMI1ILANL

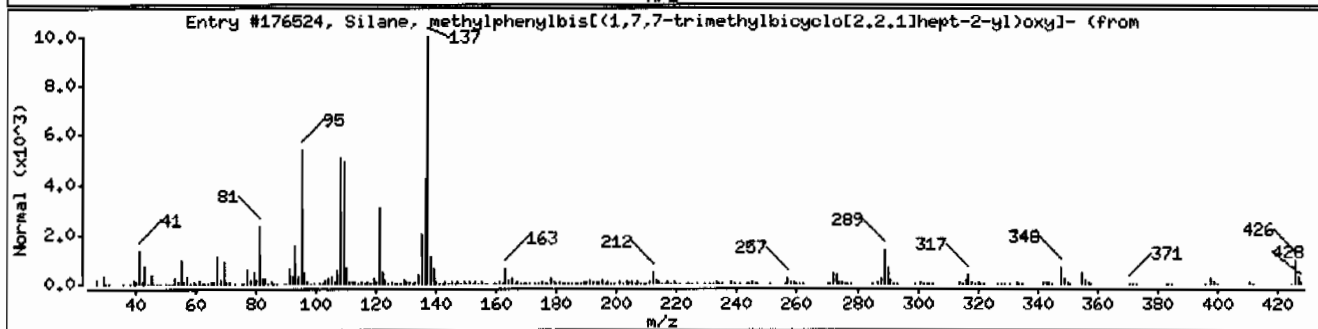
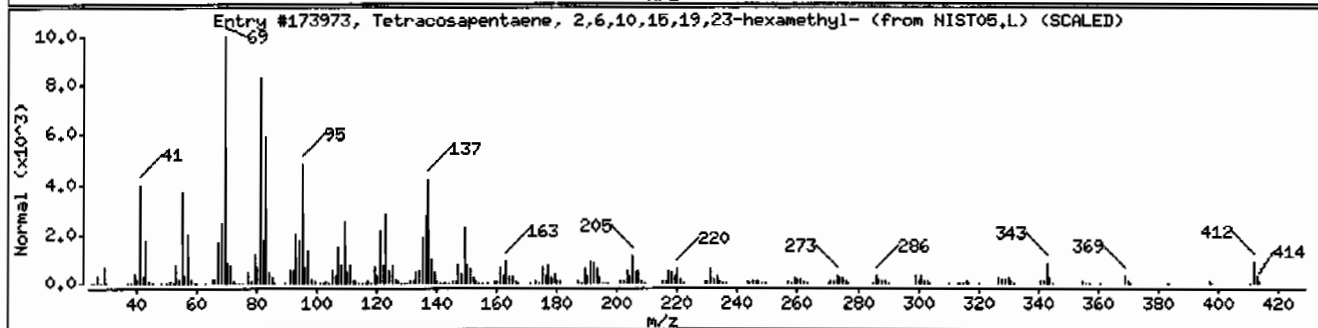
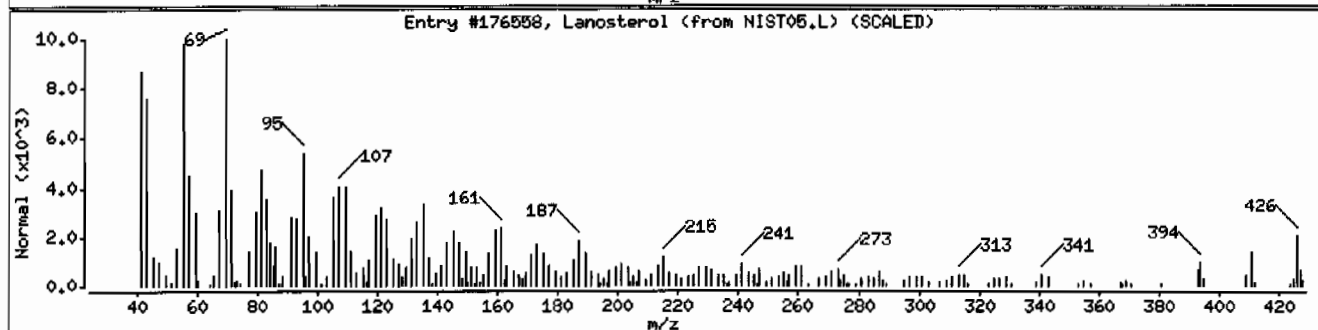
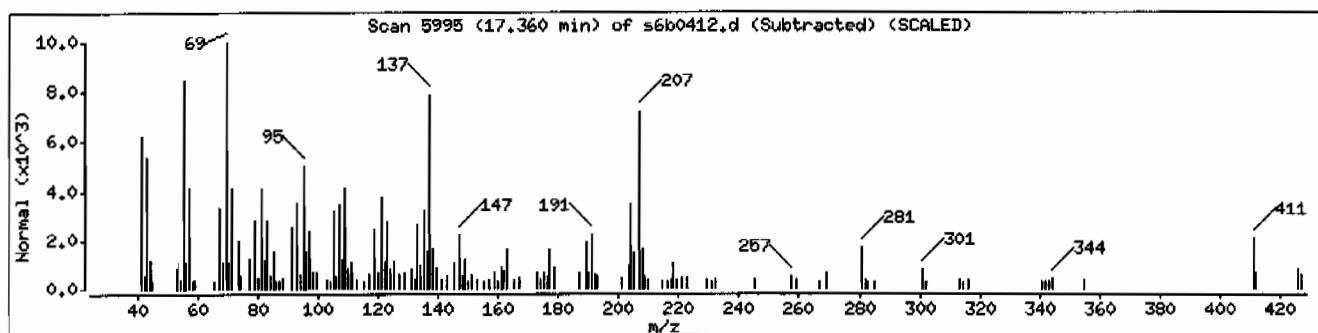
Volume Injected (uL): 0.5

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	176558	49	C ₃₀ H ₅₀ O	426
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	47	C ₃₀ H ₅₂	412
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	43	C ₂₇ H ₄₂ O ₂ Si	426



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	
Benidine	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-Chlorothiobenzole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(i)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.

Indicates the calibration verification concentration level used

* Usual calibration levels using SCAN methodology

** This analyte included in this level at special client request.

(0210/Full list)

Report Date: 04-Feb-2010 16:11

Calibration History

Method : /chem/MSD6.i/s020410.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		
04-FEB-2010 11:19	MEGA	/chem/MSD6.i/s020410.b/s6b0403.d
Ccal Level: 4 , Ccal Amount: 40.0		
04-FEB-2010 12:50	NEV	/chem/MSD6.i/s020410.b/s6b0406.d
Ccal Level: 4 , Ccal Amount: 40.0		
04-FEB-2010 12:22	PEST	/chem/MSD6.i/s020410.b/s6b0405.d
Ccal Level: 4 , Ccal Amount: 40.0		
04-FEB-2010 11:53	AP12	/chem/MSD6.i/s020410.b/s6b0404.d

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 Integrator : HP RTE
 Method file : /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m
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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	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.66245	0.62711 0.66663	0.72014	0.69994	0.71294	0.67761	AVRG		0.68098		4.78734
2 Pyridine	++++ 0.82190	0.78506 0.82246	0.84345	0.94451	0.94132	0.77430	AVRG				8.16958
4 Aniline	++++ 0.51849	0.51792 0.51247	0.56281	0.52949	0.53182	0.51964	AVRG		0.84757		3.21865
209 Benzaldehyde	++++ 0.79828	0.94297 0.74667	0.91161	0.92064	0.86617	0.84259	AVRG		0.52752		8.23824
6 Phenol	++++ 1.20107	1.29580 1.21677	1.38609	1.27955	1.27629	1.24279	AVRG		0.86127		4.82676
							AVRG		1.27120		

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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	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	0.9365| 0.79075|	0.90056| 0.79709|	0.92748|	0.85273|	0.86174|	0.82247|	AVRG		0.86081|		6.48811|
8 2-Chlorophenol	++++ 0.95375|	1.05270| 0.94058|	1.10343|	1.04994|	1.05384|	0.99340|	AVRG		1.02109|		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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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 Level 7	120 Level 8									
16 Acetophenone	++++ 1.13524	1.20921 1.12939	1.17591 1.15285	1.21168 1.16925			AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638 0.70725	0.74117 0.59369	0.78851 0.72893	0.72893 0.73002	0.73002 0.72328		AVRG		0.70865		8.34285
18 m,p-Cresols	++++ 1.02399	1.03591 1.03632	1.12590 1.04958	1.04958 1.05532	1.05532 1.04720		AVRG		1.05346		3.18987
19 Hexachloroethane	++++ 0.43995	0.45806 0.43396	0.49524 0.47390	0.47390 0.46960	0.46960 0.45628		AVRG		0.46100		4.53111
21 Nitrobenzene	++++ 0.24823	0.31691 0.23966	0.32516 0.29885	0.29885 0.29715	0.29715 0.27038		AVRG		0.28519		11.62250
22 Isophorone	++++ 0.45829	0.55891 0.38358	0.57824 0.53268	0.53268 0.53266	0.53266 0.49425		AVRG		0.50552		13.23015
23 2-Nitrophenol	++++ 0.12072	0.13453 0.12047	0.14214 0.13806	0.13601 0.13806	0.13806 0.12888		AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	++++ 0.21868	0.23987 0.21622	0.22536 0.21067	0.21067 0.20421	0.20421 0.21065		AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	++++ 0.26036	0.33208 0.25310	0.34147 0.30906	0.30906 0.30442	0.30442 0.28195		AVRG		0.29749		11.40063

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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
26 2,4-Dichlorophenol	++++ 0.18142	0.19875 0.17985	0.21444 0.19391	0.20921 0.19391	0.20622 0.19391	0.19391	AVRG	0.19769	6.80078		
27 Benzoic acid	++++ 0.15049	++++ 0.14556	0.10585	0.12338	0.14032	0.14157	AVRG	0.13453	12.46641		
28 1,2,4-Trichlorobenzene	++++ 0.21050	0.27809 0.20278	0.27557	0.25214	0.25046	0.22876	AVRG	0.24261	12.25857		
30 Naphthalene	0.93577 ++++	0.85146 ++++	0.85267	0.76017	0.74029	0.64713	AVRG	0.79792	12.82401		
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	0.26991	0.26064	0.24995	AVRG	0.25646	7.00922		
189 Caprolactam	++++ 0.07075	0.06766 0.07172	0.07272	0.08214	0.08102	0.07115	AVRG	0.07388	7.43636		
32 Hexachlorobutadiene	++++ 0.10931	0.14265 0.10542	0.14557	0.13182	0.13097	0.11864	AVRG	0.12634	12.40746		
33 4-Chloro-3-methylphenol	++++ 0.17957	0.20824 0.17303	0.22585	0.20971	0.20633	0.19424	AVRG	0.19957	9.25582		

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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
34 2-Methylnaphthalene	0.56779 0.39981	0.53746 0.38884	0.54769 0.38884	0.49857	0.47476	0.43707	AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872 0.38935	0.52838 0.38051	0.53208 0.38051	0.48366	0.46920	0.42612	AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	++++ 0.18308	0.13520 0.16783	0.17775	0.15114	0.16219	0.15378	AVRG		0.16157		10.19735
208 1,1'-Biphenyl	++++ 1.12776	1.32152 1.10528	1.23439	1.25731	1.19710	1.16580	AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	++++ 0.42997	0.51880 0.43664	0.53286	0.48272	0.49159	0.46096	AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	++++ 0.25242	0.27570 0.25556	0.29634	0.28058	0.28008	0.26989	AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	++++ 0.28523	0.28031 0.28197	0.30282	0.29443	0.29832	0.29160	AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208 0.81926	0.94921 0.82647	0.97975	0.90835	0.91949	0.87198	AVRG		0.89832		6.24992
42 o-Nitroaniline	++++ 0.29539	0.28653 0.30412	0.32807	0.30812	0.31848	0.31056	AVRG		0.30732		4.50651

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100	120									
	Level 7	Level 8									
41 m-Nitroaniline	++++	0.19029	0.23187	0.23025	0.23197	0.23511	AVRG		0.22497		7.03906
	0.22216	0.23314									
43 Dimethylphthalate	++++	1.10253	1.11895	1.05121	1.05401	1.01311	AVRG		1.02610		7.97599
	0.95493	0.88796									
44 2,6-Dinitrotoluene	++++	0.24859	0.25869	0.24751	0.24771	0.24514	AVRG		0.24475		3.87474
	0.22903	0.23656									
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153	AVRG		1.44438		7.03164
	1.30118	1.31187									
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875	AVRG		0.90151		6.58830
	0.82122	0.83304	15920	45695	60199	121040					
48 2,4-Dinitrophenol	++++	++++	15920	45695	60199	121040	LINR	0.36255	0.13077		0.99262
	185455	++++									
49 Dibenzo[<i>f</i>]uran	++++	1.31036	1.35172	1.24091	1.23630	1.17505	AVRG		1.21689		7.96140
	1.09035	1.11352									
50 2,4-Dinitrotoluene	++++	0.28688	0.32526	0.31392	0.31582	0.31468	AVRG		0.30862		4.09740
	0.30077	0.30301									
51 Diethylphthalate	++++	1.08427	1.13193	1.06273	1.05585	1.00787	AVRG		1.03335		6.84784
	0.93441	0.95637									

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
52 4-Nitrophenol	++++ 294363	12277 379687	40572	90802	114423	208122	LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940 0.89677	1.05468 0.90440	1.10259	1.00777	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		7.71070
55 2-Methyl-4,6-dinitrophenol	++++ 279188	9251 346834	34357	85168	107219	199515	LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	++++ 377942	18297 477974	49968	114446	144020	267165	LINR	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	0.16321 0.15022	0.16758	0.15949	0.16092	0.15366	AVRG		0.15784		4.30183

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
	100	120									
	Level 7	Level 8									
63 Hexachlorobenzene	++++ 0.15730	0.17072 0.15822	0.17525 0.16702	0.16690 0.16190			AVRG		0.16533		3.97990
207 Atrazine	++++ 0.03746	0.04466 0.03425	0.04316 0.04336	0.04050 0.04104			AVRG		0.04063		9.04410
65 Pentachlorophenol	++++ 259470	12427 326879	38945	80211	100581	192628	LINR	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

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients		m2	%RSD or R^2
								b	m1		
79 Pyrene	100	120									
	Level 7	Level 8									
85 Butylbenzylphthalate	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734				AVRG			1.10021		11.38295
89 Benzo(a)anthracene	++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845				AVRG			0.50351		6.16544
90 3,3'-Dichlorobenzidine	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891				AVRG			0.86301		4.55256
92 Chrysene	++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173				AVRG			0.28252		7.74710
93 bis(2-Ethylhexyl)phthalate	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409				AVRG			0.82690		4.03552
94 Di-n-octylphthalate	73401	107837	270739	551016	645048	1078889					
	1389660	1700943				WLNK		0.01019	0.70092		0.99014
95 Benzo(b)fluoranthene	++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060				AVRG			1.27127		6.18607
96 Benzo(k)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506				AVRG			0.88507		7.19928
	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909				AVRG			0.88011		7.72381

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913	AVRG		0.76447		12.74919
	0.80179	0.80647									
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LNLR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LNLR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m1	m2	or R ²	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6							
	100	120											
	Level 7	Level 8											
107 Methyl methanesulfonate	++++ 0.50923	0.56429 0.49498	0.53321	0.56316	0.50377	0.53102	AVRG			0.52852		5.24900	
108 N-Nitrosodiethylamine	++++ 0.49304	0.50310 0.49722	0.47987	0.51154	0.48534	0.49862	AVRG			0.49553		2.15019	
109 Ethyl Methanesulfonate	++++ 0.64399	0.65808 0.64860	0.64977	0.67344	0.62747	0.66045	AVRG			0.65169		2.21442	
110 Pentachloroethane	++++ 0.31148	0.32209 0.30303	0.31386	0.33094	0.32010	0.31614	AVRG			0.31681		2.78134	
111 N-Nitrosopyrrolidine	++++ 0.49385	0.44182 0.44600	0.46376	0.50830	0.47779	0.50143	AVRG			0.47614		5.57640	
113 N-Nitrosomorpholine	++++ 0.65974	0.71032 0.65547	0.67134	0.71256	0.65887	0.68726	AVRG			0.67936		3.58698	
114 o-Toluidine	++++ 1.58070	1.74797 1.58178	1.65530	1.71709	1.64005	1.64679	AVRG			1.65281		3.79762	
115 N-Nitrosopiperidine	++++ 0.13997	0.13834 0.14373	0.13623	0.14736	0.13885	0.14290	AVRG			0.14105		2.69891	
116 a,a-Dimethylphenethylamine	++++ 0.86623	0.78770 0.87565	0.81587	0.88476	0.87463	0.88336	AVRG			0.85546		4.44785	

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/s020410.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 04-Feb-2010 15:28 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									
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 Safrrole	++++ 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

GEL Laboratories LLC
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 Cal Date : 04-Feb-2010 15:28 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									
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 Sulfotep	++++ 0.08265	0.08934 0.08005	0.08802	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

GEL Laboratories LLC

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 Cal Date : 04-Feb-2010 15:28 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
136 1,3,5-Trinitrobenzene	++++ 265730	14861 408609	45341	104071	130665	222134	LINR	0.09141	0.12978		0.99734
137 Phenacetin	++++ 0.26738	0.21732 0.28241	0.25812	0.27209	0.26902	0.27044	AVRG		0.26240		8.05167
138 Diallyl	++++ 0.22716	0.26191 0.22410	0.24374	0.25182	0.23998	0.23522	AVRG		0.24056		5.55643
139 Dimethoate	++++ 0.22398	0.18955 0.21950	0.19806	0.21061	0.22946	0.23158	AVRG		0.21468		7.45885
140 4-Aminobiphenyl	++++ 0.53276	0.50489 0.52934	0.50584	0.54599	0.56556	0.56494	AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	++++ 0.06084	0.06195 0.05959	0.06081	0.06546	0.06329	0.06151	AVRG		0.06192		3.12402
142 Pronamide	++++ 0.25173	0.26962 0.25174	0.26582	0.27431	0.26759	0.26151	AVRG		0.26319		3.31411
143 Dinoseb	++++ 375481	11996 479562	47856	123552	154632	280906	AVRG		0.14736		0.99949
144 Disulfoton	++++ 0.29624	0.31933 0.27823	0.32969	0.31920	0.32975	0.31125	LINR	0.15482			6.02930
							AVRG		0.31196		

GEL Laboratories LLC

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 Cal Date : 04-Feb-2010 15:28 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
145 Methyl parathion	++++ 0.18141	0.14493 0.17864	0.15978	0.17270	0.18140	0.18775	AVRG		0.17237		8.70434
146 4-Nitroquinoline-1-oxide	++++ 0.01930	0.02012 0.01750	0.03296	0.02700	0.02533	0.02224	AVRG		0.02349		22.76469
147 Methapyrilene	++++ 0.35132	0.40623 0.33430	0.42209	0.41103	0.39768	0.37937	AVRG		0.38600		8.45747
148 Isodrin	++++ 0.09122	0.10136 0.09037	0.09753	0.10130	0.09757	0.09481	AVRG		0.09631		4.58453
149 Aramite	++++ 0.04564	0.03841 0.04428	0.04251	0.04600	0.04566	0.04690	AVRG		0.04420		6.60357
150 Kepone	++++ 0.06194	0.05674 0.06656	0.06191	0.06311	0.06098	0.06085	AVRG		0.06173		4.75009
151 p-(Dimethylamino)azobenzene	++++ 0.31446	0.31224 0.30396	0.31378	0.33288	0.32474	0.31931	AVRG		0.31734		2.95033
152 Chlorobenzilate	++++ 0.29203	0.30009 0.28006	0.27506	0.30295	0.29512	0.29377	AVRG		0.29130		3.50189
153 3,3'-Dimethylbenzidine	++++ 0.53619	0.49489 0.54473	0.52397	0.53487	0.52482	0.53397	AVRG		0.52763		3.04743

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 Cal Date : 04-Feb-2010 15:28 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
	100 Level 7	120 Level 8									
154 Fampur	++++ 0.35655	0.28850 0.33317	0.33742	0.33640	0.36516	0.37704	AVRG		0.34203		8.41381
155 2-Acetylaminofluorene	++++ 598627	23996 953419	98558	217618	290992	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-Methylcholanthrene	++++ 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	0.63216	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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 Cal Date : 04-Feb-2010 15:28 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
184 p-Benzquinone	++++ 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		0.06000		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	1.09962 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 0.19154	0.19154 0.19074			AVRG		0.18382		7.23195
215 2-Ethoxyethanol	++++ 0.68979	0.69474 0.68463	0.75708 0.72314	0.72734 0.69576			AVRG		0.71035		3.71426

GEL Laboratories LLC

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 Method file : /chem/MSD6.i/s020410.b/MSD6-M8270C-AQA-110909.m
 Cal Date : 04-Feb-2010 15:28 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
216 Methylenebis(2-chloroaniline)	++++	11622	37526	94270	117296	226774	LINR	0.14094	0.14618		0.99920
	306702	394688									
229 2,2'-Dichlorobenzil	++++	0.65548	0.70788	0.67278	++++	0.85557	AVRG		0.73761		11.58274
	0.79635	++++									
230 4-Chlorothiobanisole	++++	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	AVRG		0.43271		8.42306
	0.44832	++++									
233 bis(p-Chlorophenyl)disulfide	++++	0.19644	0.20913	0.18244	++++	0.22594	AVRG		0.20440		7.90920
	0.20806	++++									
234 Diphenyl disulfide	++++	0.20078	0.21401	0.19911	++++	0.24759	AVRG		0.21949		9.81334
	0.23595	++++									
235 Diphenyl sulfide	++++	0.77537	0.76082	0.73538	++++	0.86393	AVRG		0.79117		6.45415
	0.82035	++++									
236 Phenyl sulfone	++++	0.43220	0.43102	0.40994	++++	0.50304	AVRG		0.44947		8.28032
	0.47114	++++									

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
237 Hydroxymethyl phthalimide	++++ 0.17963	0.14671 ++++	0.15531 ++++	0.12673 ++++	0.19818 ++++	0.16131 ++++	AVRG	0.23456	1.46946	0.99364	17.368131<-
238 Phthalic acid	++++ 402020	13646 ++++	40994 ++++	115933 ++++	343308 ++++	0.25337 ++++	LINR	0.15547	0.99358		
239 Thiophenol	++++ 1046955	41092 ++++	104698 ++++	327879 ++++	922601 ++++	0.23456 ++++	LINR	1.46946	0.99364		
240 bis(Chloromethyl)ether	++++ 1.05711	1.01755 ++++	1.00429 ++++	0.94829 ++++	1.10480 ++++	1.02641 ++++	AVRG	1.02641	5.71407		
241 Octachlorostyrene	++++ 0.07072	0.06097 ++++	0.06109 ++++	0.05953 ++++	0.07399 ++++	0.06526 ++++	AVRG	0.06526	10.12747		
M 225 Trichlorophenols	++++ 0.26883	0.27800 ++++	0.29958 ++++	0.28751 ++++	0.28920 ++++	0.28180 ++++	AVRG	0.28180	3.98593		
M 226 Tetrachlorophenols	++++ 0.21460	0.20640 ++++	0.23481 ++++	0.21862 ++++	0.21374 ++++	0.22201 ++++	AVRG	0.22201	4.07356		
M 227 Benzo(b,k)fluoranthene	0.73667 ++++	0.86303 ++++	0.94898 ++++	0.91431 ++++	0.92802 ++++	0.89592 ++++	AVRG	0.89592	7.33906		
M 228 TTO Sum Semivolatiles	++++ ++++	0.88671 ++++	0.88707 ++++	++++	++++	0.000e+00 ++++	AVRG	0.88259	0.000e+00	0.000e+00	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
\$ 3 2-Fluorophenol	++++ 0.95348	0.98202 0.95648	1.07204 0.95648	1.02934 0.95648	1.03017 0.98830	0.98830	AVRG	1	1.00169		4.36295
\$ 5 Phenol-d5	++++ 1.22407	1.23734 1.22277	1.34586 1.22277	1.27212 1.28456	1.28456 1.26316	1.26316	AVRG		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	++++ 0.25359	0.30745 0.24671	0.31426 0.24671	0.29453 0.24671	0.29315 0.24671	0.27101	AVRG		0.28296		9.27927
\$ 39 2-Fluorobiphenyl	++++ 0.92488	1.11512 0.93239	1.14628 0.93239	1.04977 0.93239	1.05601 0.93239	0.99136	AVRG		1.03083		8.29816
\$ 60 2,4,6-Tribromophenol	++++ 0.12190	0.10485 0.12607	0.11685 0.12607	0.11180 0.12607	0.11267 0.12607	0.12310	AVRG		0.11675		6.41378
\$ 81 p-Terphenyl-d14	++++ 0.59401	0.71309 0.58404	0.69797 0.58404	0.64349 0.58404	0.66522 0.58404	0.62764	AVRG		0.64507		7.73004

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Curve	Formula	Units
Averaged	$\text{Amt} = \text{Rsp/ml}$	Response
Linear	$\text{Amt} = b + \text{Rsp/ml}$	Response
Wt Linear	$\text{Amt} = b + \text{Rsp/ml}$	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

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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
35 1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged
45 Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged
47 Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear|spcc
49 Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged
51 Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged
52 4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear|spcc
53 Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear
56 p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear
133 Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged
65 Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear|ccc
206 n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged
68 Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged
69 Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged
76 Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged|ccc
79 Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged
92 Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear

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	
94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	Averaged|ccc
95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	Averaged|
96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	Averaged|
97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	Linear|
100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	Linear|
101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	Averaged|
126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	Averaged|
143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	Linear|
173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	Averaged|
184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	Averaged|
192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	Averaged|
211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	Averaged|
210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	Averaged|
26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	Linear|<-
179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	Linear|
214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	Averaged|
215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	Averaged|
216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	Linear|
M 225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	Averaged|
M 226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	Averaged|
M 227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	Averaged

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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				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (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			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP 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.

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
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-Napthoquinone	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	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.58994	0.58994	0.000	10.14239	Averaged
141 Pentachloronitrobenzene	0.06192	0.06213	0.06213	0.000	0.34079	Averaged
142 Pronamide	0.26319	0.26234	0.26234	0.000	-0.32101	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02580	0.02580	0.000	9.82299	Averaged
147 Methapyrilene	0.38600	0.39422	0.39422	0.000	2.12820	Averaged
148 Isodrin	0.09631	0.08838	0.08838	0.000	-8.22821	Averaged
149 Aramite	0.04420	0.04155	0.04155	0.000	-5.99495	Averaged
150 Kepone	0.06173	0.05889	0.05889	0.000	-4.59530	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33079	0.33079	0.000	4.23929	Averaged
152 Chlorobenzilate	0.29130	0.29321	0.29321	0.000	0.65640	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.57778	0.57778	0.000	9.50435	Averaged
155 2-Acetylaminofluorene	41.44131	40.00000	0.34022	0.000	3.60328	Linear
157 7,12Dimethylbenz(a)anthracene	0.47906	0.41447	0.41447	0.000	-13.48259	Averaged
158 3-Methylcholanthrene	0.36955	0.35869	0.35869	0.000	-2.93887	Averaged
212 Cis Diallate	0.25295	0.25705	0.25705	0.000	1.62146	Averaged
213 Trans Diallate	0.28301	0.27233	0.27233	0.000	-3.77545	Averaged

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					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (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					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	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 Diallylate	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 Diallylate	86	9.092	9.092	(0.947)	35280	6.00000	6.1
213 Trans Diallylate	86	8.990	8.990	(0.937)	211803	34.0000	32.7

QC Flag Legend

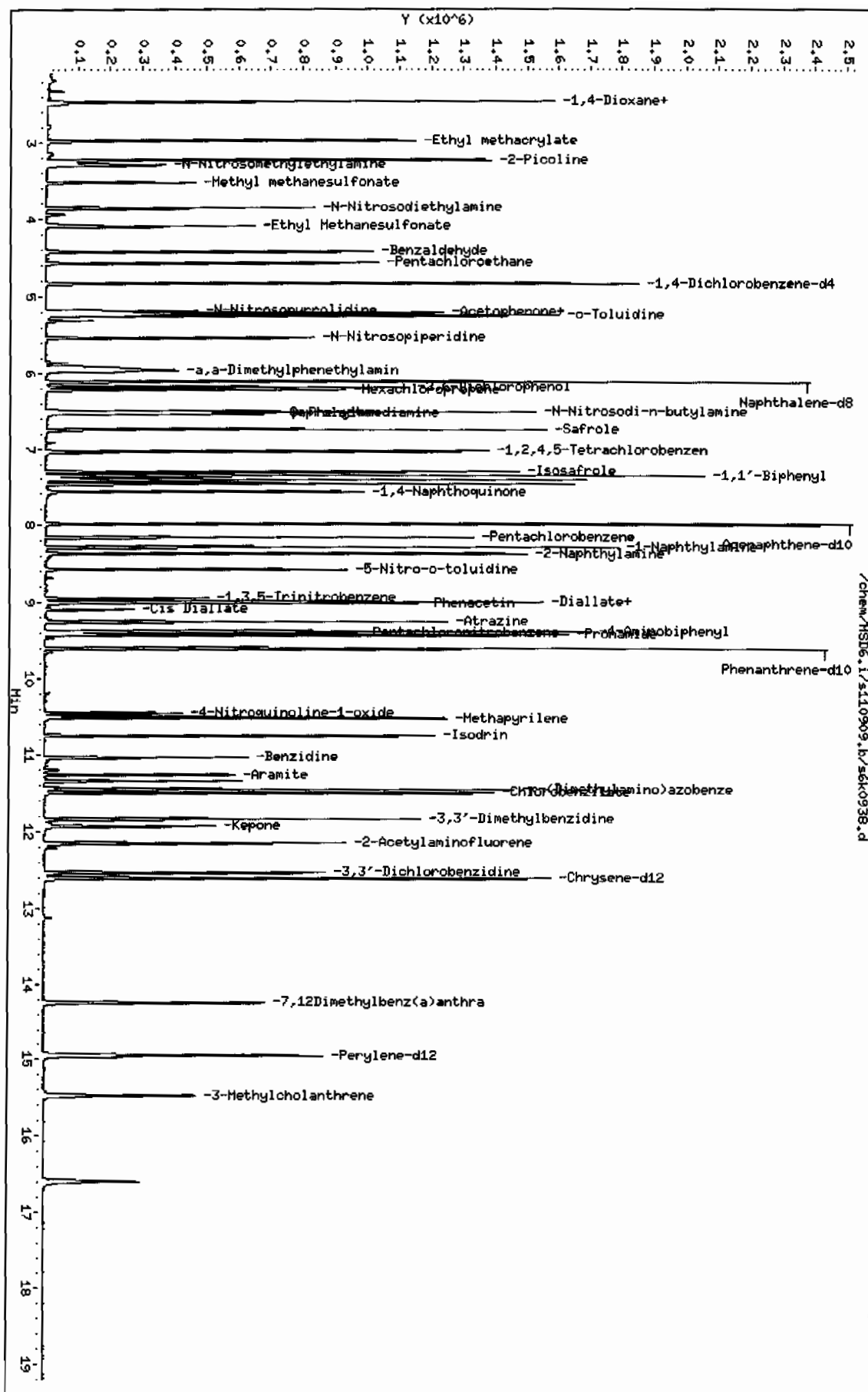
T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Page 1

Client ID: AP12ICV

Instrument: MSID6.1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-FEB-2010 11:19
Lab File ID: s6b0403.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/s020410.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
3 2-Fluorophenol	1.00169	0.90834	0.90834|0.000	-9.31945	60.00000	Averaged
5 Phenol-d5	1.26427	1.15626	1.15626|0.000	-8.54326	60.00000	Averaged
20 Nitrobenzene-d5	0.28296	0.27392	0.27392|0.000	-3.19345	60.00000	Averaged
39 2-Fluorobiphenyl	1.03083	1.05070	1.05070|0.000	1.92730	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11675	0.11558	0.11558|0.000	-1.00485	60.00000	Averaged
81 p-Terphenyl-d14	0.64507	0.67298	0.67298|0.000	4.32732	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.54011	0.54011|0.000	-20.68540	60.00000	Averaged
2 Pyridine	0.84757	0.61980	0.61980|0.000	-26.87353	60.00000	Averaged
4 Aniline	0.52752	0.43518	0.43518|0.000	-17.50467	60.00000	Averaged
6 Phenol	1.27120	1.19199	1.19199|0.001	-6.23107	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.86081	0.70621	0.70621|0.000	-17.95996	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.00200	1.00200|0.000	-1.86952	60.00000	Averaged
203 n-Decane	1.42254	1.08150	1.08150|0.000	-23.97394	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.23390	1.23390|0.000	4.96823	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.22425	1.22425|0.001	2.73831	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.11231	1.14968	1.14968|0.000	3.35983	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.60874	1.60874|0.000	-16.29064	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.57991	0.57991|0.000	-8.58400	60.00000	Averaged
15 o-Cresol	0.83139	0.80634	0.80634|0.000	-3.01240	60.00000	Averaged
18 m,p-Cresols	1.05346	1.03972	1.03972|0.000	-1.30457	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.71249	0.71249|0.050	0.54185	60.00000	Averaged|spcc
19 Hexachloroethane	0.46100	0.47066	0.47066|0.000	2.09522	60.00000	Averaged
21 Nitrobenzene	0.28519	0.27091	0.27091|0.000	-5.00608	60.00000	Averaged
22 Isophorone	0.50552	0.49148	0.49148|0.000	-2.77699	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13864	0.13864|0.001	5.39366	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.21795	0.24302	0.24302|0.000	11.50081	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.27651	0.27651|0.000	-7.05446	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.21378	0.21378|0.001	8.14015	20.00000	Averaged|ccc
27 Benzoic acid	0.13453	0.13374	0.13374|0.000	-0.58881	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.25304	0.25304|0.000	4.29794	60.00000	Averaged
30 Naphthalene	0.79792	0.75663	0.75663|0.000	-5.17412	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.18538	0.18538|0.000	-15.22602	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.25126	0.25126|0.000	-2.02776	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13470	0.13470|0.001	6.61861	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.19957	0.20038	0.20038|0.001	0.40657	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.48150	0.51830	0.51830|0.000	7.64350	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-FEB-2010 11:19
Lab File ID: s6b0403.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/s020410.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.47100	0.49481	0.49481	0.000	5.05418	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.12107	0.12107	0.050	-25.06383	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.47908	0.47375	0.47375	0.000	-1.11305	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.28154	0.28154	0.001	3.15318	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.29067	0.28728	0.28728	0.000	-1.16567	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.90593	0.90593	0.000	0.84624	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.24308	0.24308	0.000	-20.90449	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.19664	0.19664	0.000	-12.59419	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.02352	1.02352	0.000	-0.25189	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24277	0.24277	0.000	-0.80753	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.30556	0.30556	0.000	-0.99203	60.00000	Averaged
45 Acenaphthylene	1.44438	1.46666	1.46666	0.000	1.54253	60.00000	Averaged
47 Acenaphthene	0.90151	0.84916	0.84916	0.001	-5.80749	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	42.62558	40.00000	0.09194	0.050	6.56394	60.00000	Linear|spcc
49 Dibenzofuran	1.21689	1.23665	1.23665	0.000	1.62403	60.00000	Averaged
51 Diethylphthalate	1.03335	1.03696	1.03696	0.000	0.34959	60.00000	Averaged
52 4-Nitrophenol	36.38688	40.00000	0.14658	0.050	-9.03281	60.00000	Linear|spcc
53 Fluorene	0.99879	0.99190	0.99190	0.000	-0.69024	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.47798	0.47798	0.000	1.28405	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	53.38390	40.00000	0.12476	0.000	33.45975	60.00000	Linear
56 p-Nitroaniline	33.32892	40.00000	0.16752	0.000	-16.67769	60.00000	Linear
133 Diphenylamine	0.48213	0.45786	0.45786	0.001	-5.03390	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.61327	0.55996	0.55996	0.000	-8.69175	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15277	0.15277	0.000	-3.21133	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.15889	0.15889	0.000	-3.89258	60.00000	Averaged
65 Pentachlorophenol	36.87906	40.00000	0.07849	0.001	-7.80235	20.00000	Linear|ccc
206 n-Octadecane	0.44173	0.39300	0.39300	0.000	-11.03233	60.00000	Averaged
68 Phenanthrene	0.82721	0.82367	0.82367	0.000	-0.42791	60.00000	Averaged
69 Anthracene	0.82682	0.83140	0.83140	0.000	0.55401	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	0.99442	0.99442	0.000	4.72658	60.00000	Averaged
76 Fluoranthene	0.79242	0.83281	0.83281	0.001	5.09774	20.00000	Averaged|ccc
79 Pyrene	1.10021	1.02197	1.02197	0.000	-7.11071	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.50540	0.50540	0.000	0.37676	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.84526	0.84526	0.000	-2.05687	60.00000	Averaged
92 Chrysene	0.82690	0.82424	0.82424	0.000	-0.32095	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	41.94136	40.00000	0.72780	0.000	4.85341	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-FEB-2010 11:19
Lab File ID: s6b0403.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/s020410.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	1.30381	1.30381	0.001	2.55927	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	0.88507	0.90458	0.90458	0.000	2.20353	60.00000	Averaged|
96 Benzo(k)fluoranthene	0.88011	0.94464	0.94464	0.000	7.33260	60.00000	Averaged|
97 Benzo(a)pyrene	0.76447	0.86366	0.86366	0.001	12.97519	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	45.87488	40.00000	0.84357	0.000	14.68720	60.00000	Linear|
100 Dibenzo(a,h)anthracene	46.21613	40.00000	0.69251	0.000	15.54031	60.00000	Linear|
101 Benzo(ghi)perylene	0.58403	0.71323	0.71323	0.000	22.12213	60.00000	Averaged|
126 m-Dinitrobenzene	0.16929	0.16711	0.16711	0.000	-1.29121	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.21896	0.23139	0.23139	0.000	5.67544	60.00000	Averaged|
143 Dinoseb	42.89846	40.00000	0.13522	0.000	7.24616	60.00000	Linear|
173 Carbazole	0.65449	0.63888	0.63888	0.000	-2.38567	60.00000	Averaged|
184 p-Benzoquinone	0.12730	0.03155	0.03155	0.000	-75.21443	60.00000	Averaged|<-
192 Methoxychlor	0.55243	0.56335	0.56335	0.000	1.97563	60.00000	Averaged|
211 p-Toluidine	0.89987	0.87047	0.87047	0.000	-3.26708	60.00000	Averaged|
210 m-Toluidine	1.12396	1.10844	1.10844	0.000	-1.38117	60.00000	Averaged|
215 2-Ethoxyethanol	0.71035	0.48751	0.48751	0.000	-31.37074	60.00000	Averaged|
179 Dibenzo(a,e)pyrene	32.12398	40.00000	0.23429	0.000	-19.69006	60.00000	Linear|
26 Phthalic anhydride	30.83820	40.00000	0.05597	0.000	-22.90450	60.00000	Linear|
214 1,4-Dinitrobenzene	0.18382	0.16238	0.16238	0.000	-11.65895	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	30.71867	40.00000	0.09166	0.000	-23.20332	60.00000	Linear|
M 225 Trichlorophenols	0.28180	0.28441	0.28441	0.000	0.92582	60.00000	Averaged|
M 226 Tetrachlorophenols	0.21896	0.23139	0.23139	0.000	5.67544	60.00000	Averaged|
M 227 Benzo(b,k)fluoranthene	0.88259	0.92461	0.92461	0.000	4.76085	60.00000	Averaged|

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0403.d
Lab Smp Id: WBN100121-17.4 Client Smp ID: MEGACVS
Inj Date : 04-FEB-2010 11:19
Operator : nagl 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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm 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: hpclpl1

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)
ON-COL (ng/ul)						
* 10 1,4-Dichlorobenzene-d4	152	4.951	4.951	(1.000)	199821	40.0000
* 29 Naphthalene-d8	136	6.232	6.232	(1.000)	789513	40.0000
* 46 Acenaphthene-d10	164	8.103	8.103	(1.000)	428255	40.0000
* 67 Phenanthrene-d10	188	9.716	9.716	(1.000)	747565	40.0000
* 91 Chrysene-d12	240	12.763	12.763	(1.000)	627156	40.0000
* 98 Perylene-d12	264	15.151	15.151	(1.000)	555140	40.0000
\$ 3 2-Fluorophenol	112	3.776	3.776	(0.763)	181505	40.0000 36.3
\$ 5 Phenol-d5	99	4.556	4.556	(0.920)	231045	40.0000 36.6
\$ 20 Nitrobenzene-d5	82	5.491	5.491	(0.881)	216265	40.0000 38.7
\$ 39 2-Fluorobiphenyl	172	7.354	7.354	(0.908)	449967	40.0000 40.8
\$ 60 2,4,6-Tribromophenol	329	8.951	8.951	(1.105)	49496	40.0000 39.6
\$ 81 p-Terphenyl-d14	244	11.415	11.415	(0.894)	422064	40.0000 41.7
1 N-Methyl-N-nitrosomethylamine	74	2.813	2.813	(0.568)	107926	40.0000 31.7
2 Pyridine	79	2.851	2.851	(0.576)	123849	40.0000 29.2
4 Aniline	66	4.640	4.640	(0.937)	86958	40.0000 33.0
6 Phenol	94	4.569	4.569	(0.923)	238184	40.0000 37.5
7 bis(2-Chloroethyl) ether	63	4.676	4.676	(0.944)	141115	40.0000 32.8
8 2-Chlorophenol	128	4.752	4.752	(0.960)	200221	40.0000 39.2
203 n-Decane	43	4.750	4.750	(0.959)	216106	40.0000 30.4
9 1,3-Dichlorobenzene	146	4.900	4.900	(0.990)	246559	40.0000 42.0
11 1,4-Dichlorobenzene	146	4.966	4.966	(1.003)	244631	40.0000 41.1
13 1,2-Dichlorobenzene	146	5.116	5.116	(1.033)	229730	40.0000 41.3
14 bis(2-Chloroisopropyl) ether	45	5.183	5.183	(1.047)	321461	40.0000 33.5
12 Benzyl alcohol	108	5.060	5.060	(1.022)	115878	40.0000 36.6
15 o-Cresol	107	5.144	5.144	(1.039)	161124	40.0000 38.8
18 m,p-Cresols	107	5.300	5.300	(1.070)	207757	40.0000 39.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.325	5.325	(1.076)	142371	40.0000	40.2
19 Hexachloroethane	117	5.448	5.448	(1.100)	94047	40.0000	40.8
21 Nitrobenzene	77	5.511	5.511	(0.884)	213890	40.0000	38.0
22 Isophorone	82	5.743	5.743	(0.922)	388028	40.0000	38.9
23 2-Nitrophenol	139	5.827	5.827	(0.935)	109458	40.0000	42.2
24 2,4-Dimethylphenol	122	5.838	5.838	(0.937)	191866	40.0000	44.6
25 bis(2-Chloroethoxy)methane	93	5.939	5.939	(0.953)	218305	40.0000	37.2
26 2,4-Dichlorophenol	162	6.069	6.069	(0.974)	168780	40.0000	43.2
27 Benzoic acid	105	5.945	5.945	(0.954)	105587	40.0000	39.8
28 1,2,4-Trichlorobenzene	180	6.161	6.161	(0.989)	199780	40.0000	41.7
30 Naphthalene	128	6.255	6.255	(1.004)	597370	40.0000	37.9
204 alpha-Terpineol	59	6.238	6.238	(1.001)	146362	40.0000	33.9
31 4-Chloroaniline	127	6.294	6.294	(1.010)	198371	40.0000	39.2
32 Hexachlorobutadiene	225	6.360	6.360	(1.020)	106349	40.0000	42.6
33 4-Chloro-3-methylphenol	107	6.775	6.775	(1.087)	158200	40.0000	40.2
34 2-Methylnaphthalene	142	6.977	6.977	(1.119)	409206	40.0000	43.0
35 1-Methylnaphthalene	142	7.084	7.084	(1.137)	390658	40.0000	42.0
36 Hexachlorocyclopentadiene	237	7.132	7.132	(0.880)	51850	40.0000	30.0
205 2,3-Dichloroaniline	161	7.275	7.275	(0.898)	202884	40.0000	39.6
37 2,4,6-Trichlorophenol	196	7.267	7.267	(0.897)	120573	40.0000	41.3
38 2,4,5-Trichlorophenol	196	7.305	7.305	(0.902)	123029	40.0000	39.5
40 2-Chloronaphthalene	162	7.501	7.501	(0.926)	387967	40.0000	40.3
42 o-Nitroaniline	65	7.603	7.603	(0.938)	104100	40.0000	31.6
41 m-Nitroaniline	138	8.047	8.047	(0.993)	84211	40.0000	35.0
43 Dimethylphthalate	163	7.784	7.784	(0.961)	438326	40.0000	39.9
44 2,6-Dinitrotoluene	165	7.858	7.858	(0.970)	103968	40.0000	39.7
50 2,4-Dinitrotoluene	165	8.296	8.296	(1.024)	130857	40.0000	39.6
45 Acenaphthylene	152	7.952	7.952	(0.981)	628105	40.0000	40.6
47 Acenaphthene	154	8.138	8.138	(1.004)	363655	40.0000	37.7
48 2,4-Dinitrophenol	184	8.159	8.159	(1.007)	39374	40.0000	42.6
49 Dibenzofuran	168	8.322	8.322	(1.027)	529602	40.0000	40.6
51 Diethylphthalate	149	8.536	8.536	(1.053)	444083	40.0000	40.1
52 4-Nitrophenol	139	8.205	8.205	(1.013)	62773	40.0000	36.4
53 Fluorene	166	8.694	8.694	(1.073)	424786	40.0000	39.7
54 4-Chlorophenylphenylether	204	8.676	8.676	(1.071)	204698	40.0000	40.5
55 2-Methyl-4,6-dinitrophenol	198	8.737	8.737	(0.899)	93268	40.0000	53.4
56 p-Nitroaniline	138	8.712	8.712	(1.075)	71743	40.0000	33.3
133 Diphenylamine	169	8.804	8.804	(0.906)	342283	40.0000	38.0
58 1,2-Diphenylhydrazine	77	8.849	8.849	(0.911)	418610	40.0000	36.5
61 4-Bromophenylphenylether	248	9.209	9.209	(0.948)	114205	40.0000	38.7
63 Hexachlorobenzene	284	9.285	9.285	(0.956)	118784	40.0000	38.4
65 Pentachlorophenol	266	9.494	9.494	(0.977)	58675	40.0000	36.9
206 n-Octadecane	57	9.527	9.527	(0.981)	293792	40.0000	35.6
68 Phenanthrene	178	9.741	9.741	(1.003)	615750	40.0000	39.8
69 Anthracene	178	9.797	9.797	(1.008)	621529	40.0000	40.2
72 Di-n-butylphthalate	149	10.294	10.294	(1.060)	743391	40.0000	41.9
76 Fluoranthene	202	11.031	11.031	(1.135)	622583	40.0000	42.0

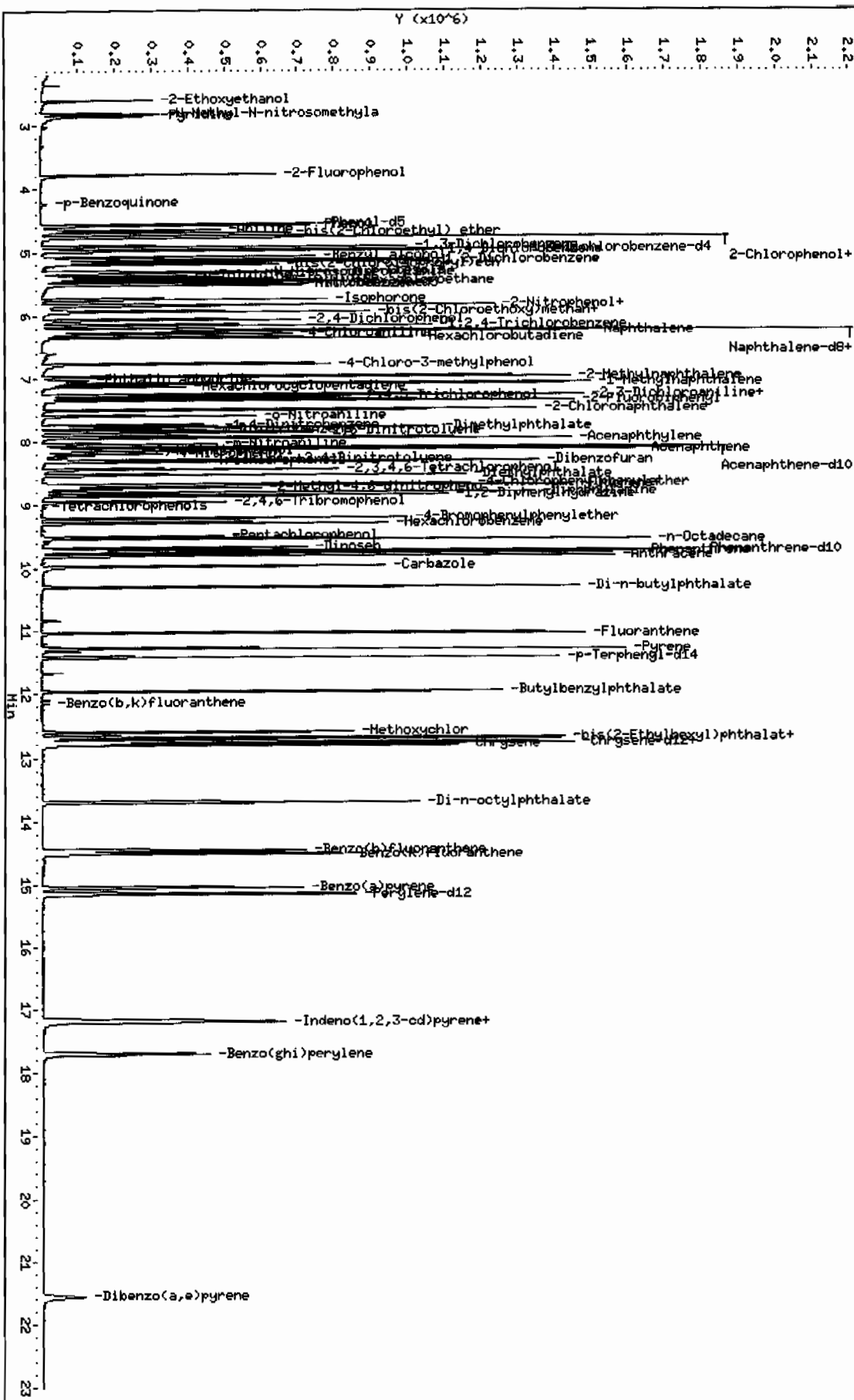
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	11.280	11.280	(0.884)	640937	40.0000	37.2
85 Butylbenzylphthalate	149	11.956	11.956	(0.937)	316966	40.0000	40.2
89 Benzo(a)anthracene	228	12.743	12.743	(0.998)	530107	40.0000	39.2
92 Chrysene	228	12.799	12.799	(1.003)	516930	40.0000	39.9
93 bis(2-Ethylhexyl)phthalate	149	12.692	12.692	(0.994)	456444	40.0000	41.9
94 Di-n-octylphthalate	149	13.698	13.698	(0.904)	723796	40.0000	41.0
95 Benzo(b)fluoranthene	252	14.458	14.458	(0.954)	502167	40.0000	40.9
96 Benzo(k)fluoranthene	252	14.509	14.509	(0.958)	524408	40.0000	42.9
97 Benzo(a)pyrene	252	15.049	15.049	(0.993)	479451	40.0000	45.2
99 Indeno(1,2,3-cd)pyrene	276	17.172	17.172	(1.133)	468300	40.0000	45.9
100 Dibenzo(a,h)anthracene	278	17.197	17.197	(1.135)	384440	40.0000	46.2
101 Benzo(ghi)perylene	276	17.702	17.702	(1.168)	395941	40.0000	48.8(Q)
126 m-Dinitrobenzene	168	7.833	7.833	(0.967)	71565	40.0000	39.5
130 2,3,4,6-Tetrachlorophenol	232	8.444	8.444	(1.042)	99092	40.0000	42.3
143 Dinoseb	211	9.672	9.672	(0.996)	101086	40.0000	42.9
173 Carbazole	167	9.960	9.960	(1.025)	477605	40.0000	39.0
184 p-Benzoquinone	54	4.222	4.222	(0.853)	6305	40.0000	9.9
192 Methoxychlor	227	12.598	12.598	(0.987)	353306	40.0000	40.8
211 p-Toluidine	106	5.371	5.371	(1.085)	173939	40.0000	38.7
210 m-Toluidine	106	5.404	5.404	(1.092)	221489	40.0000	39.4
215 2-Ethoxyethanol	59	2.601	2.601	(0.525)	97415	40.0000	27.4
179 Dibenzo(a,e)pyrene	302	21.567	21.567	(1.423)	130066	40.0000	32.1
26 Phthalic anhydride	104	7.040	7.040	(1.130)	44187	40.0000	30.8
214 1,4-Dinitrobenzene	75	7.751	7.751	(0.957)	69542	40.0000	35.3
216 Methylenebis(2-chloroaniline)	231	12.679	12.679	(0.993)	57484	40.0000	30.7(Q)
M 225 Trichlorophenols	196				243602	80.0000	80.7
M 226 Tetrachlorophenols	232				99092	40.0000	42.3
M 227 Benzo(b,k)fluoranthene	252				1026575	80.0000	83.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s020410.b/s60403.d
 Date: 04-FEB-2010 11:19
 Client ID: MECACVS
 Sample Info: IBERN00121-17.410CV11.SW11.MECACVS
 Column phase: J&W DB-SMS

Instrument: MSD6.1
 Operator: nag1
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-FEB-2010 11:53
Lab File ID: s6b0404.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/s020410.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	0.75652	0.75652	0.000	-12.16290	60.00000	Averaged
16 Acetophenone	1.16908	1.07816	1.07816	0.000	-7.77641	60.00000	Averaged
189 Caprolactam	0.07388	0.07447	0.07447	0.000	0.79843	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.08750	1.08750	0.000	-9.47399	60.00000	Averaged
207 Atrazine	0.04063	0.03951	0.03951	0.000	-2.76334	60.00000	Averaged
77 Benzidine	0.39304	0.16532	0.16532	0.000	-57.93866	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.24794	0.24794	0.000	-12.23885	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.31257	0.31257	0.000	-14.61211	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.16023	0.16023	0.000	-17.35239	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.61323	0.61323	0.000	-23.87906	60.00000	Averaged
105 2-Picoline	1.30872	1.13957	1.13957	0.000	-12.92461	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.41773	0.41773	0.000	-18.25902	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.45106	0.45106	0.000	-14.65631	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.43546	0.43546	0.000	-12.12232	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.55728	0.55728	0.000	-14.48650	60.00000	Averaged
110 Pentachloroethane	0.31681	0.29660	0.29660	0.000	-6.37705	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.46092	0.46092	0.000	-3.19599	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.56572	0.56572	0.000	-16.72846	60.00000	Averaged
114 o-Toluidine	1.65281	1.52281	1.52281	0.000	-7.86536	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.12865	0.12865	0.000	-8.79477	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.42728	0.42728	0.000	-50.05265	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20362	0.20362	0.000	-1.57404	60.00000	Averaged
119 Hexachloropropene	0.10269	0.09960	0.09960	0.000	-3.00881	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.18205	0.18205	0.000	-20.69053	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.17995	0.17995	0.000	-14.32680	60.00000	Averaged
122 Safrrole	0.18653	0.17913	0.17913	0.000	-3.96693	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.39407	0.39407	0.000	-6.88141	60.00000	Averaged
124 Isosafrole	0.33959	0.30245	0.30245	0.000	-10.93766	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.27333	0.27333	0.000	-10.89022	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.34885	0.34885	0.000	-4.30586	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.81259	0.81259	0.000	-10.45063	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.85983	0.85983	0.000	-12.27262	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.24278	0.24278	0.000	-12.98470	60.00000	Averaged
136 1,3,5-Trinitrobenzene	36.76276	40.00000	0.10741	0.000	-8.09311	60.00000	Linear
137 Phenacetin	0.26240	0.22577	0.22577	0.000	-13.95640	60.00000	Averaged
138 Diallyl	0.24056	0.21592	0.21592	0.000	-10.24365	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-FEB-2010 11:53
 Lab File ID: s6b0404.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/s020410.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	0.21491	0.21491	0.000	-15.03847	60.00000	Averaged
213 Trans Diallate	0.28301	0.25402	0.25402	0.000	-10.24365	60.00000	Averaged
140 4-Aminobiphenyl	0.53562	0.49386	0.49386	0.000	-7.79541	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06121	0.06121	0.000	-1.15130	60.00000	Averaged
142 Pronamide	0.26319	0.25209	0.25209	0.000	-4.21646	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.01464	0.01464	0.000	-37.69492	60.00000	Averaged
147 Methapyrilene	0.38600	0.30849	0.30849	0.000	-20.08213	60.00000	Averaged
148 Isodrin	0.09631	0.09988	0.09988	0.000	3.71201	60.00000	Averaged
149 Aramite	0.04420	0.04447	0.04447	0.000	0.60684	60.00000	Averaged
150 Kepone	0.06173	0.05891	0.05891	0.000	-4.56088	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.29294	0.29294	0.000	-7.68756	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.29945	0.29945	0.000	2.80042	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.38227	0.38227	0.000	-27.55007	60.00000	Averaged
155 2-Acetylaminofluorene	36.12684	40.00000	0.29065	0.000	-9.68289	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.47899	0.47899	0.000	-0.01509	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.34180	0.34180	0.000	-7.50907	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0404.d
Lab Smp Id: WBN100120-03.2 Client Smp ID: APCVS
Inj Date : 04-FEB-2010 11:53
Operator : nagl 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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Feb-2010 16:12 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: hpclpl

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	4.948	4.948 (1.000)	208369	40.0000	
* 29 Naphthalene-d8	136	6.228	6.228 (1.000)	769139	40.0000	
* 46 Acenaphthene-d10	164	8.098	8.098 (1.000)	439432	40.0000	
* 67 Phenanthrene-d10	188	9.716	9.716 (1.000)	755112	40.0000	
* 91 Chrysene-d12	240	12.756	12.756 (1.000)	585302	40.0000	
* 98 Perylene-d12	264	15.146	15.146 (1.000)	443156	40.0000	
209 Benzaldehyde	77	4.551	4.551 (0.920)	157635	40.0000	35.1
16 Acetophenone	105	5.328	5.328 (1.077)	224656	40.0000	36.9
189 Caprolactam	113	6.658	6.658 (1.069)	57278	40.0000	40.3
208 1,1'-Biphenyl	154	7.466	7.466 (0.922)	477881	40.0000	36.2
207 Atrazine	173	9.364	9.364 (0.964)	29836	40.0000	38.9
77 Benzidine	184	11.156	11.156 (0.875)	96760	40.0000	16.8
90 3,3'-Dichlorobenzidine	252	12.679	12.679 (0.994)	145119	40.0000	35.1
102 1,4-Dioxane	88	2.607	2.607 (0.527)	65130	40.0000	34.2
103 Methyl methacrylate	100	2.602	2.602 (0.526)	33388	40.0000	33.0
104 Ethyl methacrylate	69	3.101	3.101 (0.627)	127779	40.0000	30.4
105 2-Picoline	93	3.361	3.361 (0.679)	237452	40.0000	34.8
106 N-Nitrosomethylethylamine	88	3.432	3.432 (0.694)	87041	40.0000	32.7
107 Methyl methanesulfonate	80	3.657	3.657 (0.739)	93987	40.0000	34.1
108 N-Nitrosodiethylamine	102	3.985	3.985 (0.805)	90737	40.0000	35.2
109 Ethyl Methanesulfonate	79	4.220	4.220 (0.853)	116120	40.0000	34.2
110 Pentachloroethane	167	4.689	4.689 (0.947)	61803	40.0000	37.4
111 N-Nitrosopyrrolidine	100	5.315	5.315 (1.074)	96041	40.0000	38.7(Q)
113 N-Nitrosomorpholine	56	5.346	5.346 (1.080)	117878	40.0000	33.3
114 o-Toluidine	106	5.366	5.366 (1.084)	317307	40.0000	36.8
115 N-Nitrosopiperidine	114	5.659	5.659 (0.909)	98948	40.0000	36.5

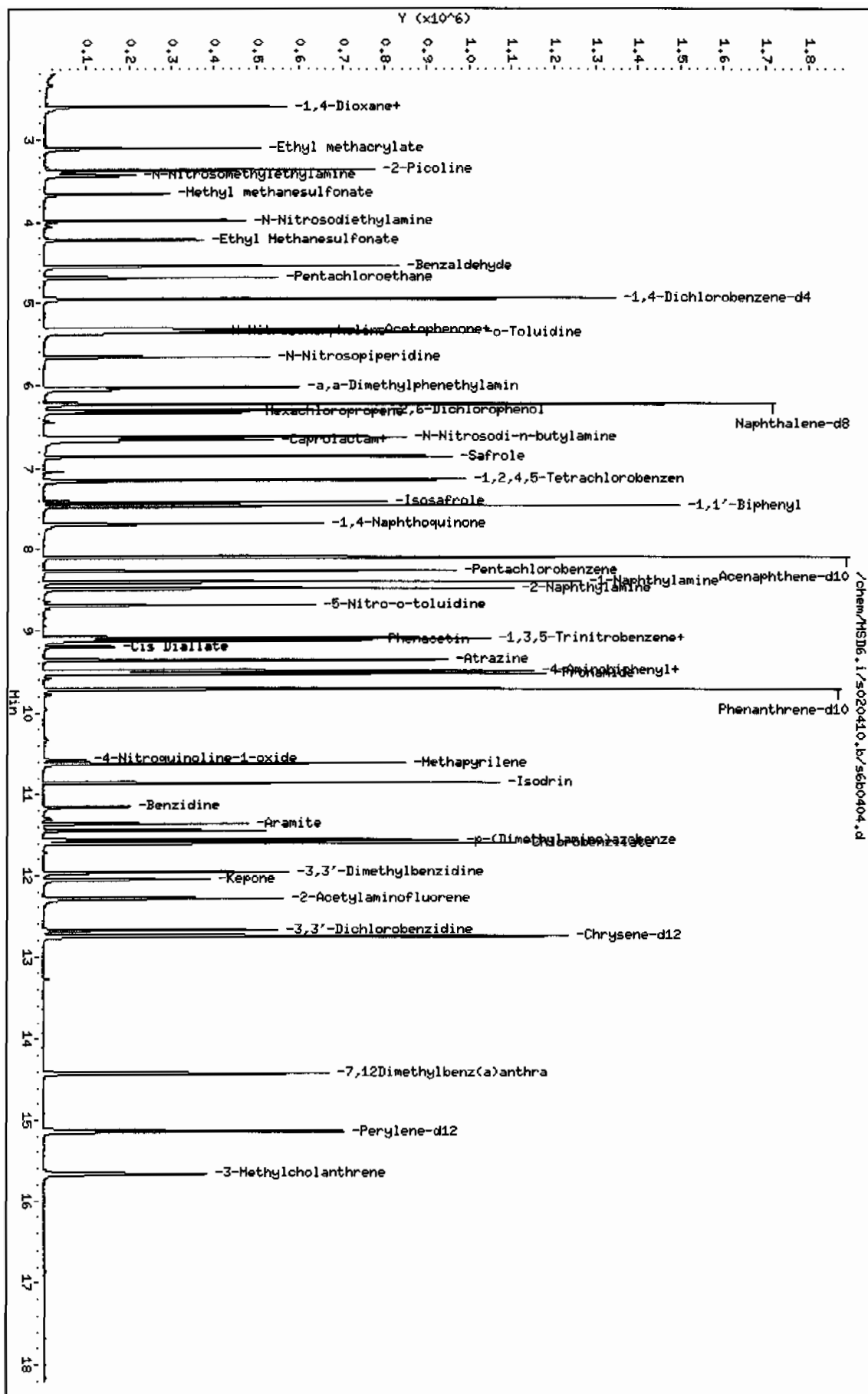
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	6.024	6.024 (0.967)		328636	40.0000	20.0
118 2,6-Dichlorophenol	162	6.302	6.302 (1.012)		156609	40.0000	39.4
119 Hexachloropropene	213	6.332	6.332 (1.017)		76603	40.0000	38.8
120 p-Phenylenediamine	108	6.666	6.666 (1.070)		140023	40.0000	31.7
121 N-Nitrosodi-n-butylamine	84	6.625	6.625 (1.064)		138407	40.0000	34.3 (Q)
122 Safrole	162	6.862	6.862 (1.102)		137773	40.0000	38.4
123 1,2,4,5-Tetrachlorobenzene	216	7.150	7.150 (0.883)		173168	40.0000	37.2
124 Isosafrole	162	7.418	7.418 (0.916)		132905	40.0000	35.6
125 1,4-Naphthoquinone	158	7.688	7.688 (0.949)		120111	40.0000	35.6
127 Pentachlorobenzene	250	8.271	8.271 (1.021)		153294	40.0000	38.3
128 1-Naphthylamine	143	8.404	8.404 (1.038)		357076	40.0000	35.8
129 2-Naphthylamine	143	8.488	8.488 (1.048)		377839	40.0000	35.1
131 5-Nitro-o-toluidine	152	8.694	8.694 (1.074)		106685	40.0000	34.8
136 1,3,5-Trinitrobenzene	75	9.082	9.082 (0.935)		81110	40.0000	36.8
137 Phenacetin	108	9.127	9.127 (0.939)		170485	40.0000	34.4 (Q)
138 Diallyl	86	9.097	9.097 (0.936)		163043	40.0000	35.9
212 Cis Diallyl	86	9.199	9.199 (0.947)		24342	6.00000	5.1
213 Trans Diallyl	86	9.097	9.097 (0.936)		163043	34.0000	30.5
140 4-Aminobiphenyl	169	9.492	9.492 (0.977)		372921	40.0000	36.9
141 Pentachloronitrobenzene	237	9.504	9.504 (0.978)		46220	40.0000	39.5 (Q)
142 Pronamide	173	9.533	9.533 (0.981)		190357	40.0000	38.3
146 4-Nitroquinoline-1-oxide	101	10.572	10.572 (1.088)		11053	40.0000	24.9
147 Methapyrilene	58	10.623	10.623 (1.093)		232941	40.0000	32.0
148 Isodrin	193	10.860	10.860 (1.118)		75422	40.0000	41.5
149 Aramite	185	11.367	11.367 (1.170)		33579	40.0000	40.2
150 Kepone	272	12.050	12.050 (1.240)		44486	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.568	11.568 (0.907)		171460	40.0000	36.9
152 Chlorobenzilate	251	11.607	11.607 (0.910)		175271	40.0000	41.1
153 3,3'-Dimethylbenzidine	212	11.961	11.961 (0.938)		223744	40.0000	29.0
155 2-Acetylaminofluorene	181	12.287	12.287 (0.963)		170116	40.0000	36.1
157 7,12Dimethylbenz(a)anthracene	256	14.425	14.425 (0.952)		212266	40.0000	40.0
158 3-Methylcholanthrene	268	15.671	15.671 (1.035)		151471	40.0000	37.0 (Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD6.1/5020410.b/560404.d
 Date: 04-FEB-2010 11:53
 Client ID: APCVS
 Sample Info: IABN100120-03.2\CCV\1\SM\1\APCVS
 Column phase: J&W DB-SHS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Page 1

Date : 09-NOV-2009 18:00

Client ID: DFTPP

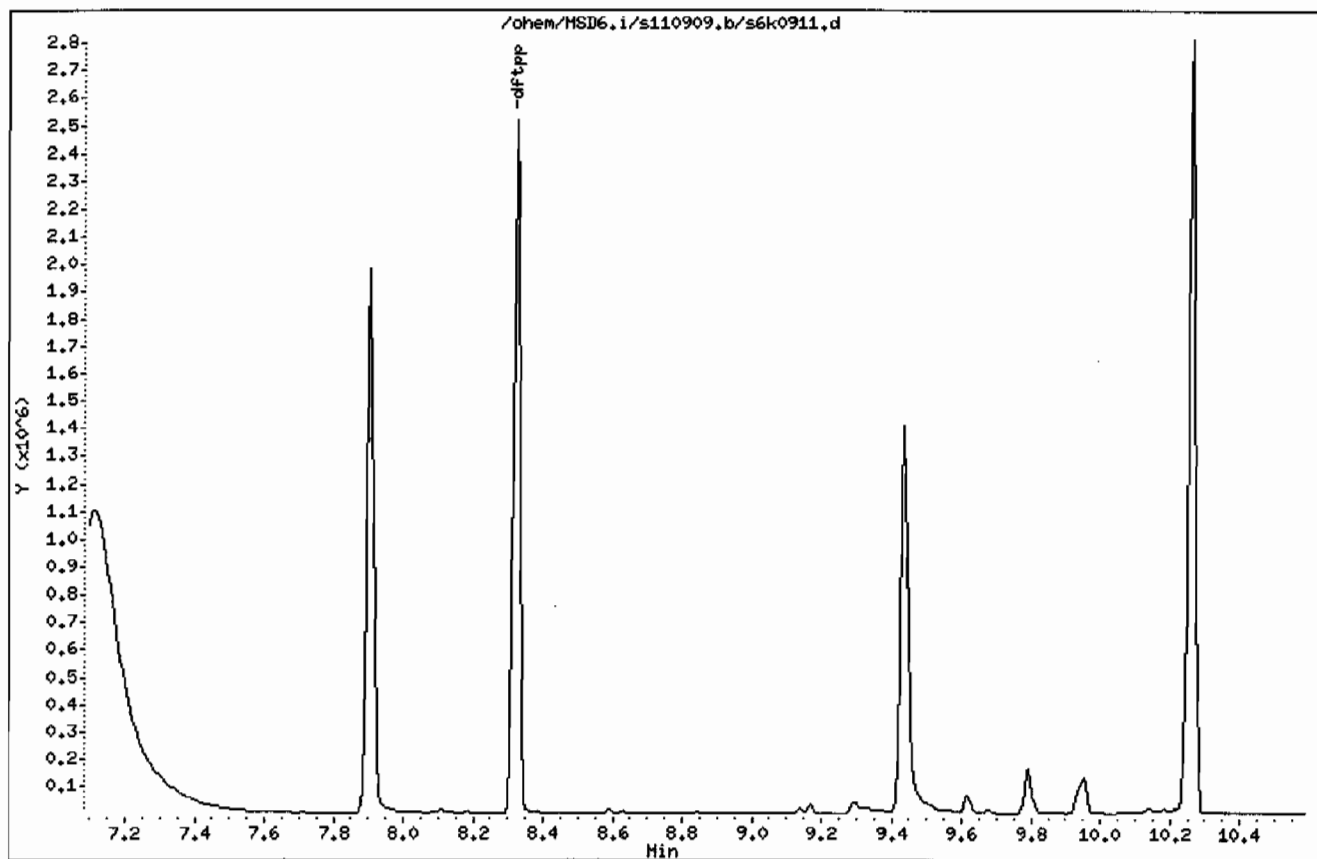
Instrument: MSD6.i

Sample Info: IWBNO91101-01/50 PPH11|SVHF11|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

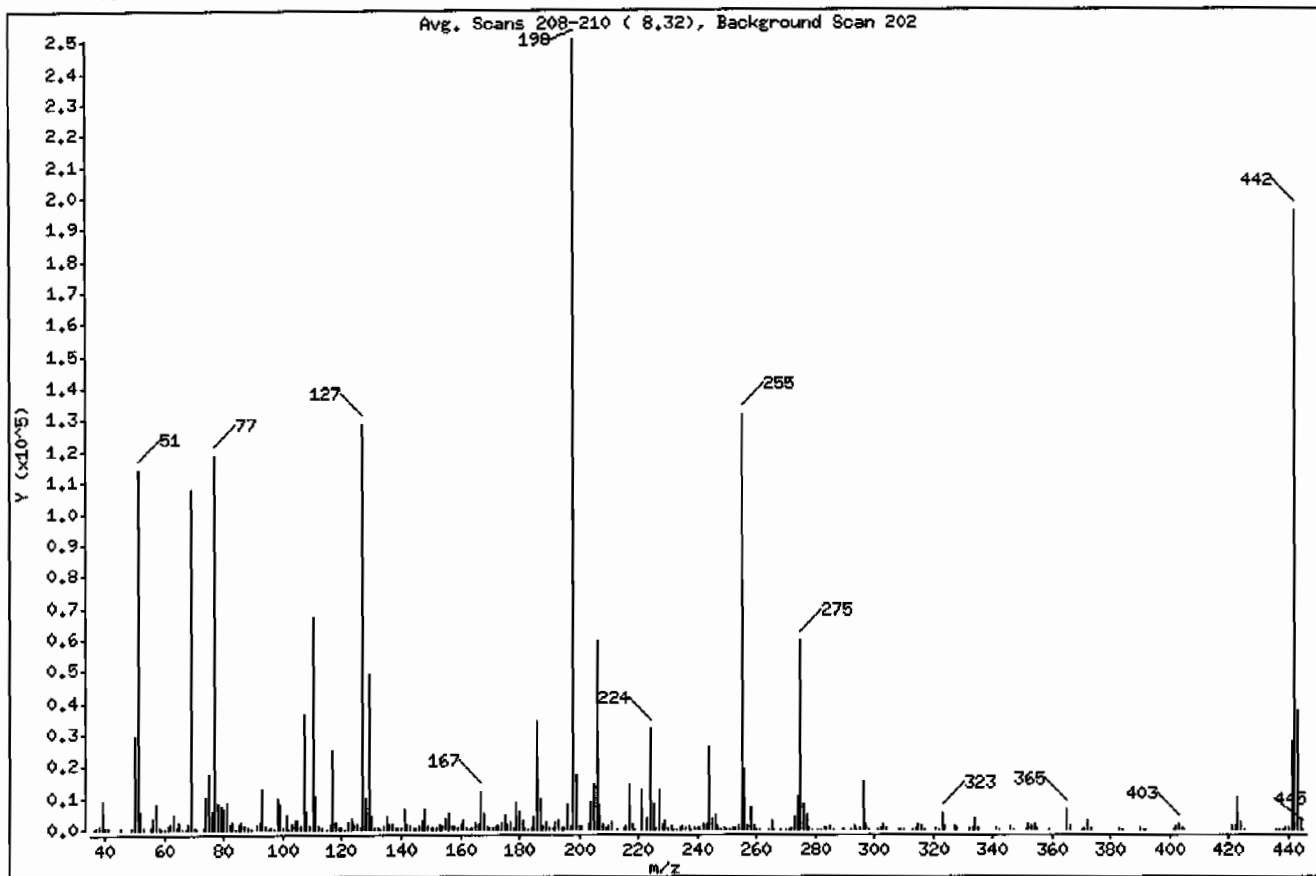
Sample Info: IWBNO91101-01150 PPM11SVMF111DFTPP

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: HSD6.i

Sample Info: IWBNO91101-01150 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
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	145.00	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: HSD6.i

Sample Info: IWB091101-01150 PPH11SVMF111DFTPP

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	4368	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: DFTTP

Instrument: MSD6.i

Sample Info: IWBNO91101-01150 PPM11SVHF11IDFTTP

Operator: JHB3

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
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/HSD6.i/s110909,b/s6k0921.d

Page 1

Date : 10-NOV-2009 11:07

Client ID: DFTPP

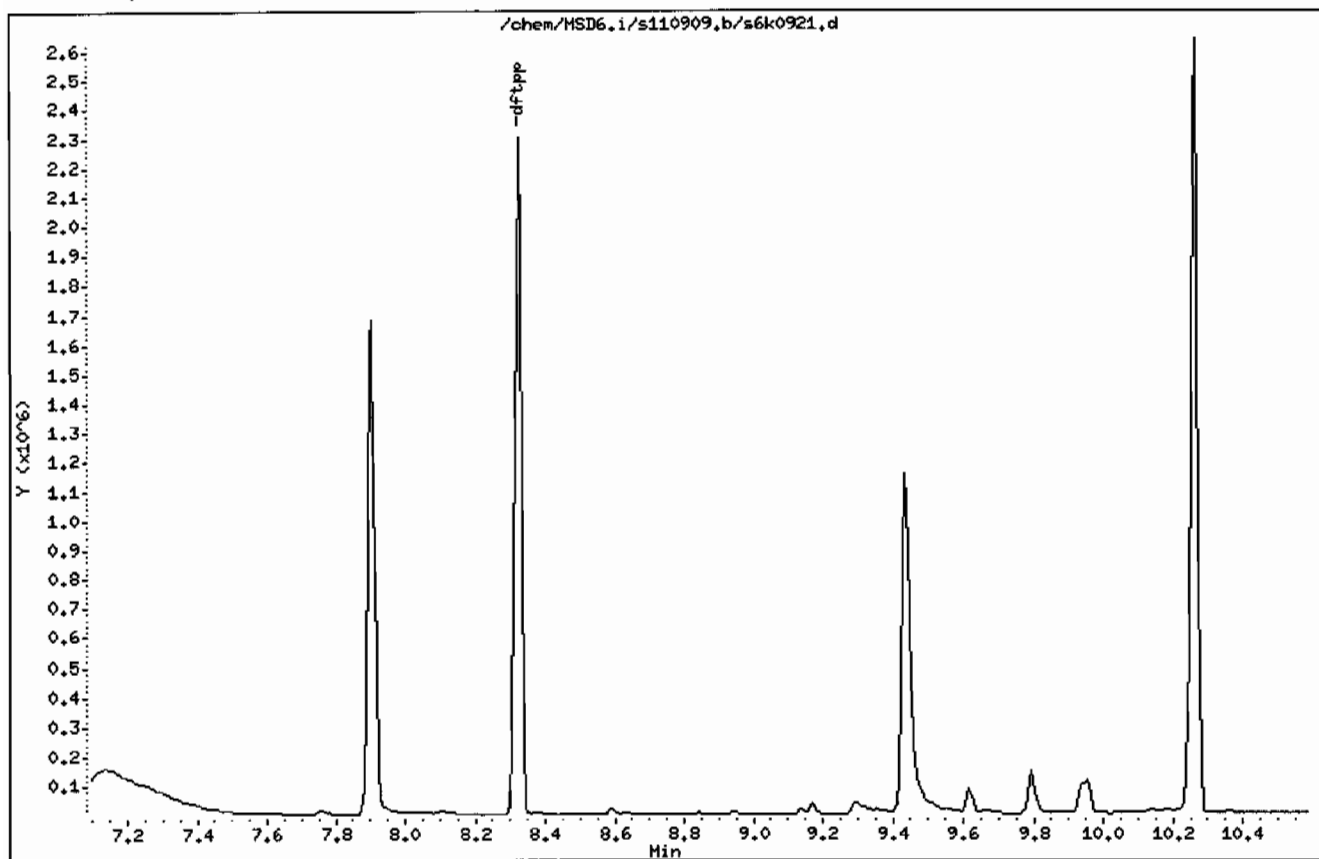
Instrument: HSD6.i

Sample Info: IWBNO91101-01150 PPH11|SVHF11|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20



Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

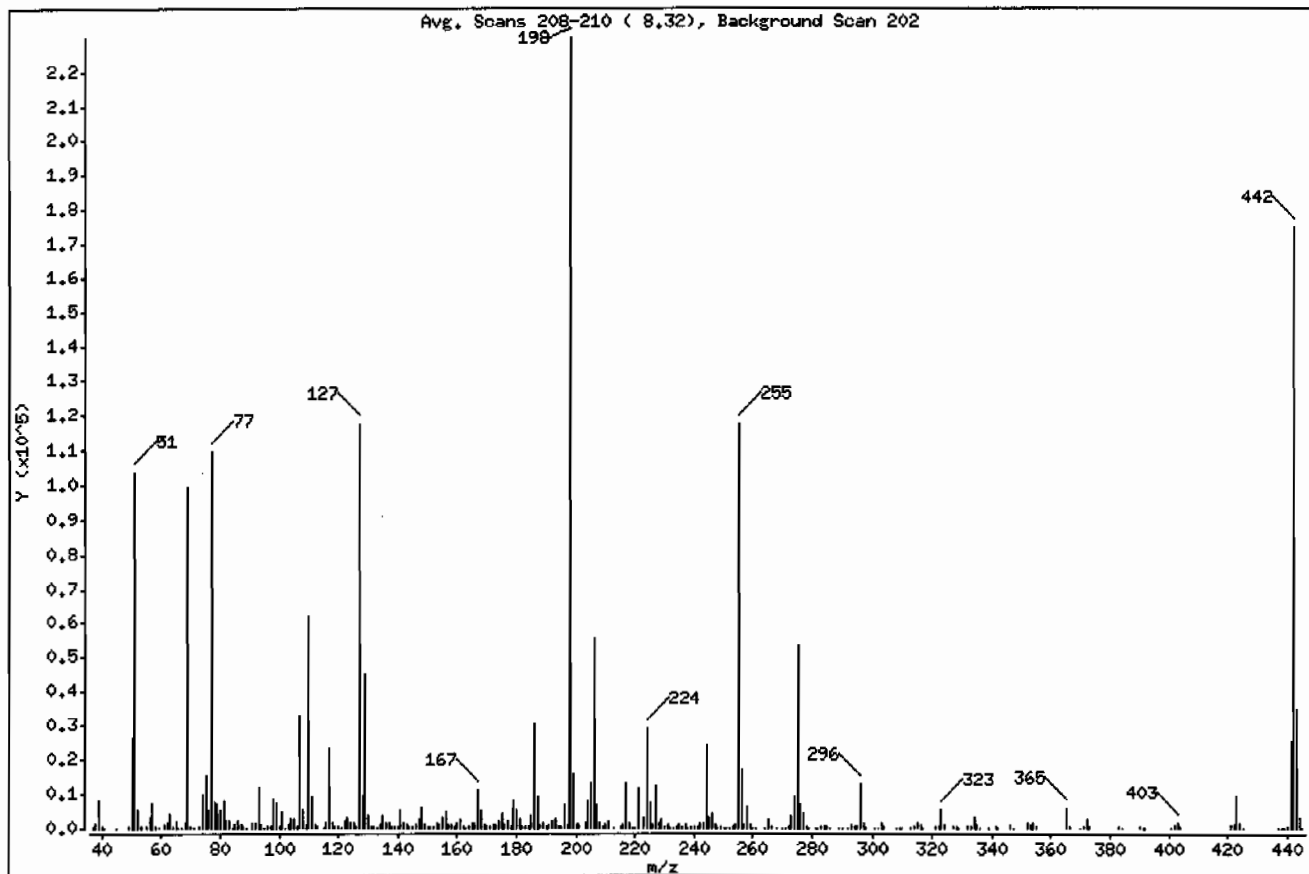
Sample Info: IWBNO91101-01150 PPM11|SVMF11|DFTPP

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	45.09
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: DFTPP

Instrument: MSD6.1

Sample Info: IWB091101-01150 PPM11SVMF11DFTPP

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: HSD6.i

Sample Info: IWBNO91101-01150 PPM11|SVMF11|DFTTP

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	960
| 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 PPH11SVHF11IDFTPP

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/HSD6.i/s020410.b/s6b0402.d

Page 1

Date : 04-FEB-2010 11:04

Client ID: DFTPP

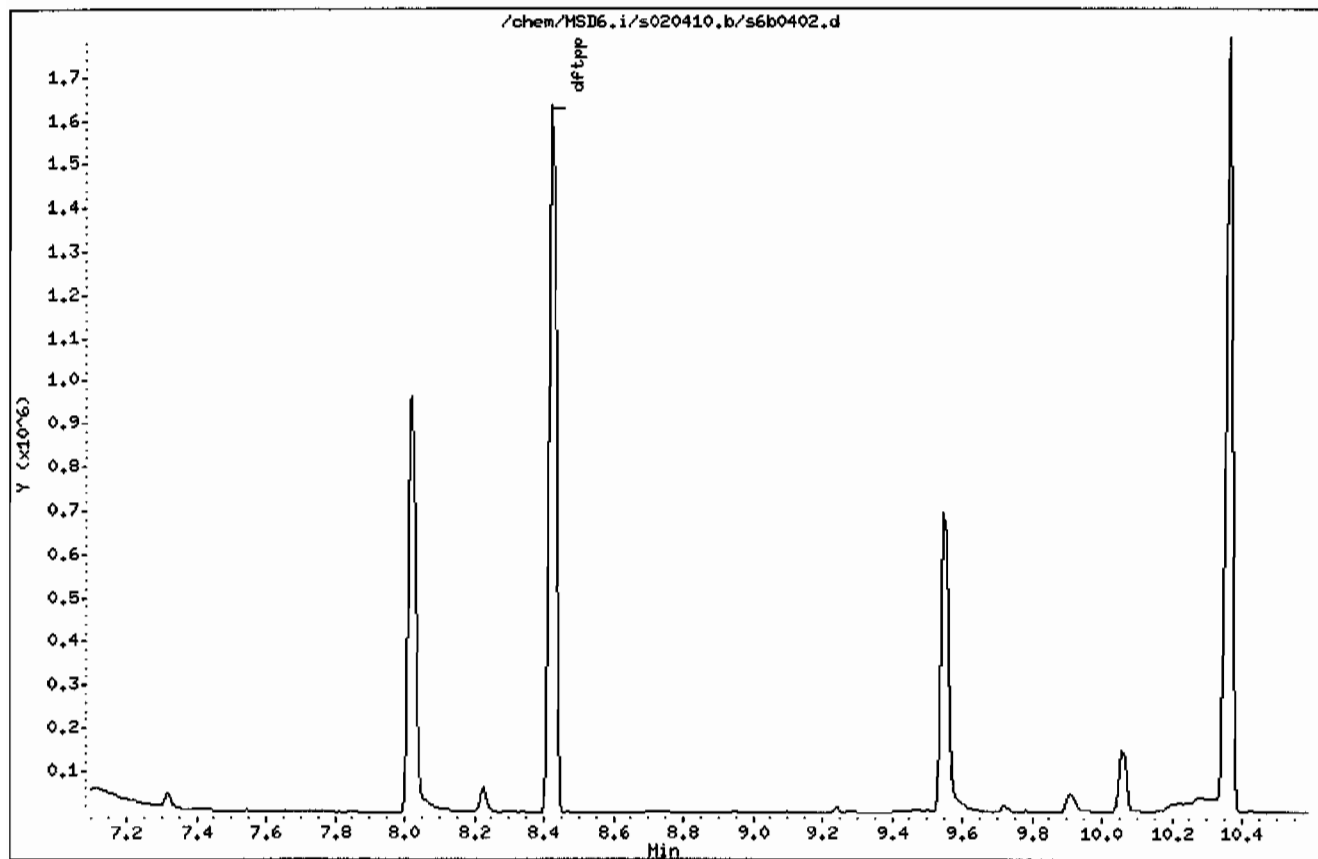
Instrument: HSD6.i

Sample Info: IWBNI00107-01|DFTPP11|SVMF11|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-SMS

Column diameter: 0.20



Date : 04-FEB-2010 11:04

Client ID: DFTPP

Instrument: MSD6.i

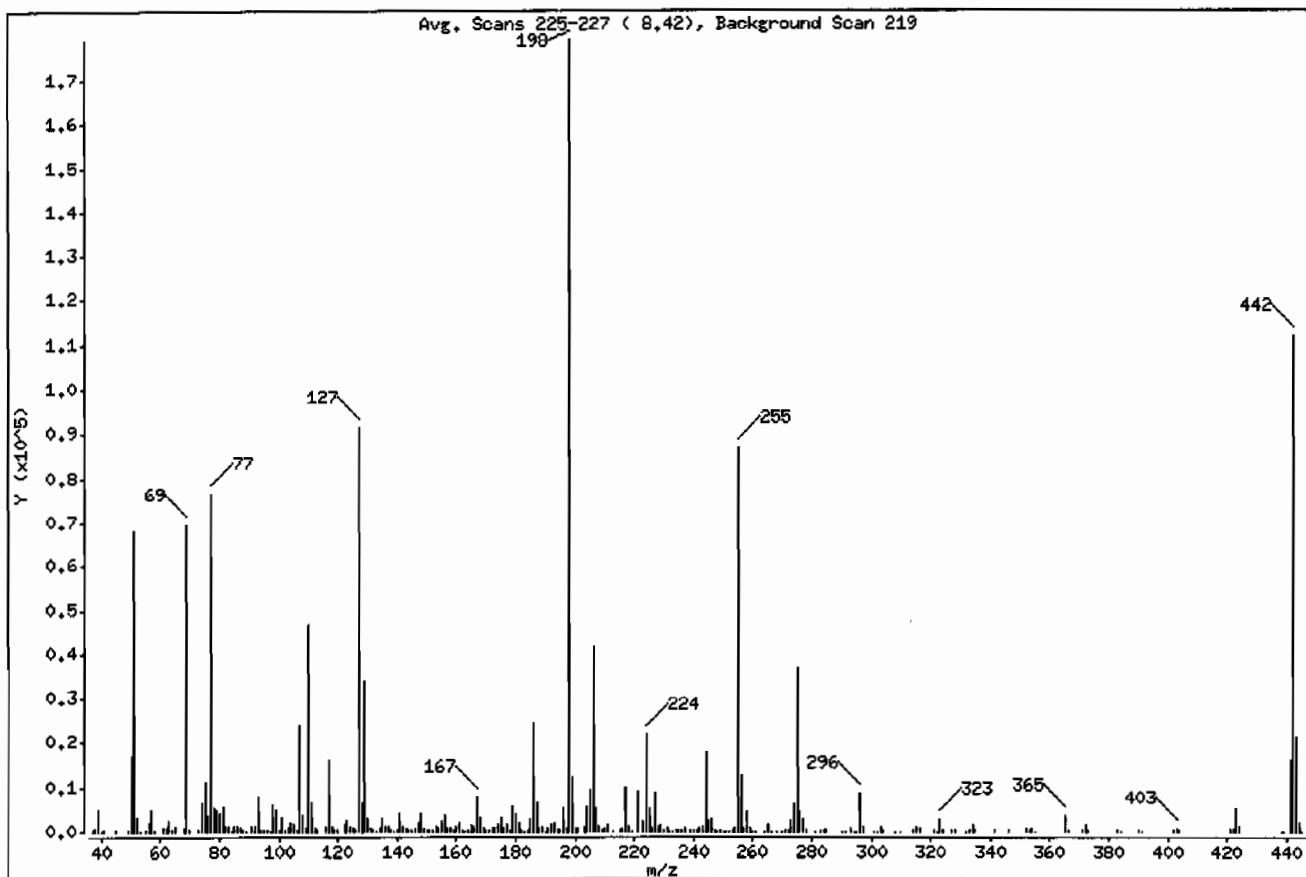
Sample Info: IWBH100107-01|DFTPP11|SVHF11|DFTPP

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	38.07
68	Less than 2.00% of mass 69	0.55 (1.41)
69	Mass 69 relative abundance	38.84
70	Less than 2.00% of mass 69	0.23 (0.58)
127	40.00 - 60.00% of mass 198	50.93
197	Less than 1.00% of mass 198	0.62
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	20.49
365	Greater than 1.00% of mass 198	1.96
441	Present, but less than mass 443	9.01
442	Greater than 40.00% of mass 198	62.45
443	17.00 - 23.00% of mass 442	11.90 (19.06)

Date : 04-FEB-2010 11:04

Client ID: DFTPP

Instrument: MSD6.1

Sample Info: IWBNI00107-01IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-SHS

Column diameter: 0.20

Data File: s6b0402.d

Spectrum: Avg. Scans 225-227 (8.42), Background Scan 219

Location of Maximum: 198.00

Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	253	123.00	2421	192.00	1848	271.00	235
38.00	790	124.00	1038	193.00	2070	272.00	242
39.00	4998	125.00	1011	194.00	413	273.00	2506
40.00	192	126.00	425	195.00	344	274.00	6262
41.00	208	127.00	91224	196.00	5170	275.00	36696
45.00	221	128.00	6617	197.00	939	276.00	4729
49.00	456	129.00	33712	198.00	179072	277.00	2976
50.00	17016	130.00	3030	199.00	12175	278.00	496
51.00	68184	131.00	619	200.00	888	281.00	91
52.00	3448	132.00	319	201.00	984	283.00	373
53.00	174	133.00	109	203.00	1063	284.00	254
55.00	370	134.00	981	204.00	5791	285.00	486
56.00	2018	135.00	2697	205.00	9580	290.00	88
57.00	5077	136.00	1141	206.00	41640	291.00	42
58.00	206	137.00	1348	207.00	5158	293.00	643
61.00	872	138.00	322	208.00	1390	294.00	172
62.00	956	139.00	165	209.00	556	295.00	178
63.00	2608	140.00	348	210.00	662	296.00	8773
64.00	339	141.00	4045	211.00	1582	297.00	1313
65.00	1317	142.00	1346	213.00	46	301.00	88
68.00	983	143.00	1004	215.00	375	302.00	110
69.00	69560	144.00	272	216.00	826	303.00	1132
70.00	404	145.00	230	217.00	9966	304.00	331
73.00	544	146.00	749	218.00	1284	308.00	93
74.00	6668	147.00	2010	219.00	157	310.00	84
75.00	10921	148.00	4252	221.00	8965	314.00	521
76.00	3711	149.00	914	223.00	2362	315.00	1118
77.00	76760	150.00	236	224.00	21624	316.00	651
78.00	5252	151.00	536	225.00	5505	321.00	315
79.00	4817	152.00	334	226.00	632	322.00	106
80.00	4011	153.00	1082	227.00	8548	323.00	3060
81.00	5633	154.00	1029	228.00	1291	324.00	480
82.00	1390	155.00	2401	229.00	1705	327.00	478
83.00	1356	156.00	3611	230.00	274	328.00	304
84.00	142	157.00	779	231.00	732	332.00	199

Date : 04-FEB-2010 11:04

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00107-01IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20

Data File: s6b0402.d

Spectrum: Avg. Scans 225-227 (8.42), Background Scan 219

Location of Maximum: 198.00

Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	1091	158.00	789	232.00	177	333.00	269
86.00	1440	159.00	472	233.00	187	334.00	1831
87.00	726	160.00	1289	234.00	565	335.00	533
88.00	302	161.00	1932	235.00	565	341.00	303
89.00	48	162.00	615	236.00	425	346.00	592
91.00	1237	163.00	93	237.00	790	352.00	764
92.00	1239	164.00	283	239.00	365	353.00	558
93.00	7950	165.00	1539	240.00	264	354.00	936
94.00	594	166.00	1218	241.00	472	355.00	130
95.00	247	167.00	7863	242.00	1014	365.00	3508
96.00	550	168.00	3296	243.00	1189	366.00	471
97.00	160	169.00	672	244.00	17512	371.00	218
98.00	6229	170.00	224	245.00	2514	372.00	1548
99.00	5141	171.00	339	246.00	2959	373.00	327
100.00	491	172.00	799	247.00	616	383.00	372
101.00	3117	173.00	904	248.00	153	384.00	98
102.00	221	174.00	1768	249.00	529	390.00	211
103.00	919	175.00	3090	250.00	105	391.00	99
104.00	1988	176.00	923	251.00	162	402.00	538
105.00	1782	177.00	1453	252.00	154	403.00	730
106.00	589	178.00	508	253.00	435	404.00	299
107.00	24056	179.00	5774	254.00	714	421.00	752
108.00	3687	180.00	4270	255.00	86760	422.00	635
109.00	792	181.00	1982	256.00	12666	423.00	5371
110.00	46352	182.00	319	257.00	926	424.00	1046
111.00	6767	183.00	170	258.00	4574	438.00	111
112.00	931	184.00	480	259.00	667	439.00	176
113.00	232	185.00	2907	260.00	43	441.00	16145
116.00	1234	186.00	24096	261.00	88	442.00	111848
117.00	15850	187.00	6476	264.00	74	443.00	21320
118.00	1131	188.00	654	265.00	1810	444.00	1917
119.00	250	189.00	1177	266.00	164	445.00	119
120.00	303	190.00	198	268.00	9		
122.00	1512	191.00	627	270.00	165		

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

SDG Number: 10-1384
Lab Sample ID: 1202025004
Client Sample: QC for batch 945499
Client ID: MB for batch 945499
Batch ID: 945501
Run Date: 02/04/2010 13:19
Prep Date: 01/26/2010 20:21
Data File: s6b0407.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
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

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

SDG Number: 10-1384
Lab Sample ID: 1202025004

Matrix: SOIL

Client Sample: QC for batch 945499

Client: LANL010

Project: QC

Client ID: MB for batch 945499

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 945501

Inst: MSD6.I

Dilution: 1

Run Date: 02/04/2010 13:19

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 01/26/2010 20:21

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6b0407.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.31	6520	ug/kg		J
	Unknown	2.35	155	ug/kg		J

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

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SDG Number:	10-1384	Matrix:	SOIL
Lab Sample ID:	1202025004		
Client Sample:	QC for batch 945499	Client:	LANL010
Client ID:	MB for batch 945499	Method:	SW846 8270C
Batch ID:	945501	Inst:	MSD6.I
Run Date:	02/04/2010 13:19	Analyst:	NAG1
Prep Date:	01/26/2010 20:21	Aliquot:	30 g
Data File:	s6b0407.d	Column:	J&W DB-5MS
		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	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate		3.54	331	ug/kg		JA

Data File: /chem/MSD6.i/s020410.b/s6b0407.d
Report Date: 04-Feb-2010 15:30

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0407.d
Lab Smp Id: 1202025004 Client Smp ID: SBLK01
Inj Date : 04-FEB-2010 13:19
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202025004|945501|1|SVM|1|SBLK01
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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Feb-2010 15:28 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.946	4.951	(1.000)	154644	40.0000	
* 29 Naphthalene-d8	136	6.225	6.232	(1.000)	574061	40.0000	
* 46 Acenaphthene-d10	164	8.095	8.103	(1.000)	327393	40.0000	
* 67 Phenanthrene-d10	188	9.708	9.716	(1.000)	570714	40.0000	
* 91 Chrysene-d12	240	12.753	12.763	(1.000)	452232	40.0000	
* 98 Perylene-d12	264	15.141	15.151	(1.000)	339000	40.0000	
\$ 3 2-Fluorophenol	112	3.784	3.776	(0.765)	240099	61.9989	2070
\$ 5 Phenol-d5	99	4.551	4.556	(0.920)	288951	59.1169	1970
\$ 20 Nitrobenzene-d5	82	5.484	5.491	(0.881)	131275	32.3267	1080
\$ 39 2-Fluorobiphenyl	172	7.351	7.354	(0.908)	279806	33.1635	1100
\$ 60 2,4,6-Tribromophenol	329	8.946	8.951	(1.105)	59016	61.7599	2060
\$ 81 p-Terphenyl-d14	244	11.413	11.415	(0.895)	307458	42.1580	1400

Data File: /chem/MSD6.i/s020410.b/s6b0407.d
 Report Date: 04-Feb-2010 15:30

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0407.d
 Lab Smp Id: 1202025004 Client Smp ID: SBLK01
 Inj Date : 04-FEB-2010 13:19
 Operator : nagl Inst ID: MSD6.i
 Smp Info : |1202025004|945501|1|SVM|1|SBLK01
 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/s020410.b/MSD6-M8270C-AQA-110909.m
 Meth Date : 04-Feb-2010 15:28 nat00999 Quant Type: ISTD
 Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
 Als bottle: 6 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1384.sub
 Target Version: 3.50
 Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.946	890441	40.000

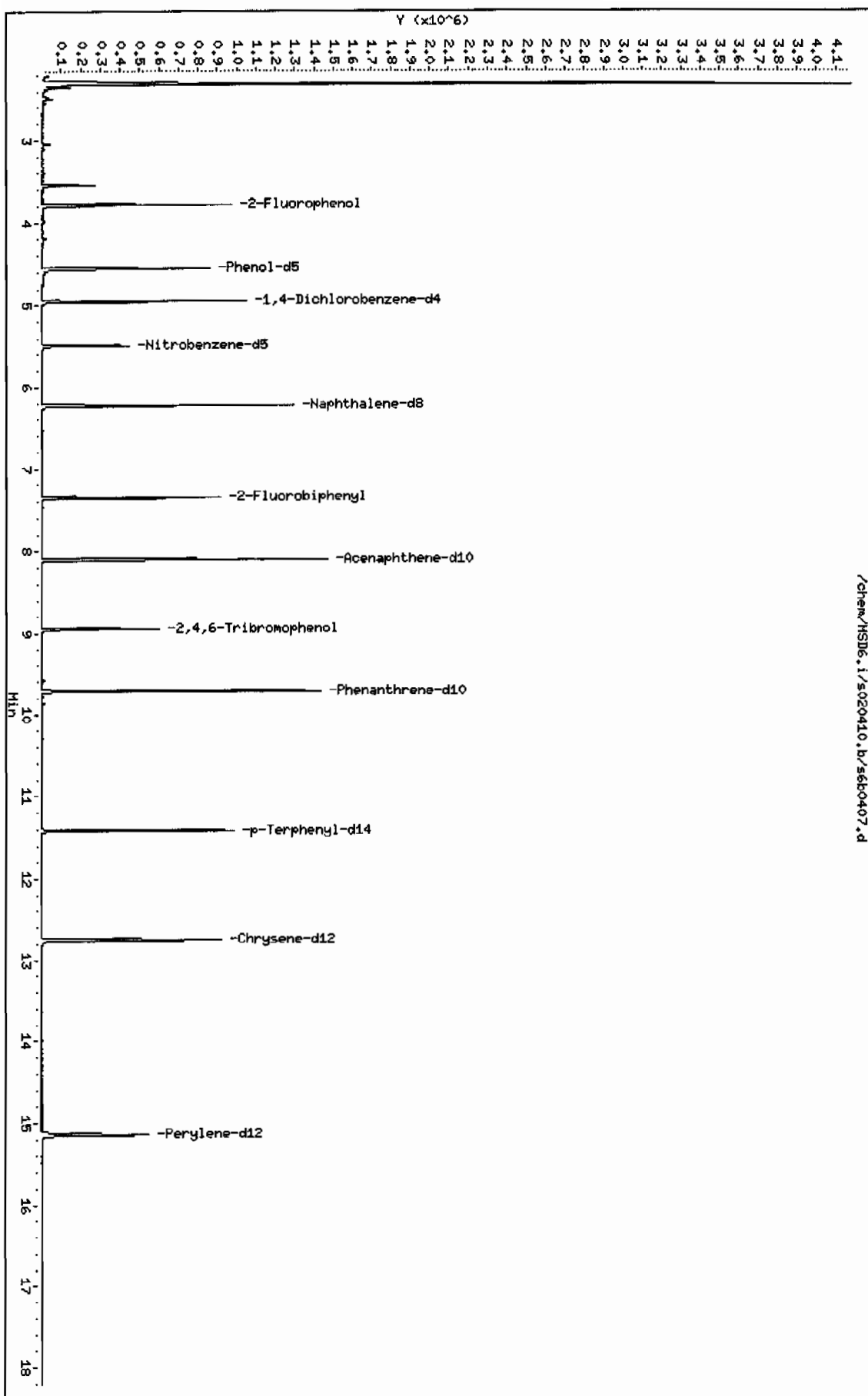
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.314	4351455	195.474107	6520	0		0	10
Unknown					CAS #:		
2.349	103561	4.65213837	155	0		0	10

Page 2

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
3.542	220723	9.91521475	330	0		0	10

Data File: /chem/HSD6.i/s020410.b/s6b0407.d
Date : 04-FEB-2010 13:19
Client ID: SRLK01
Sample Info: 11202025004194550111SUM111SRLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: HSD6.i
Operator: nag1
Column diameter: 0.20



Date : 04-FEB-2010 13:19

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202025004194550111SVN111SBLK01

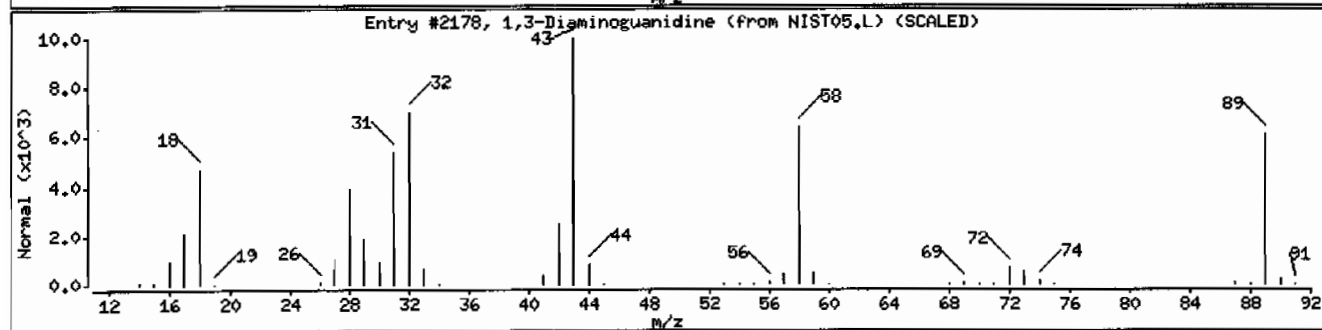
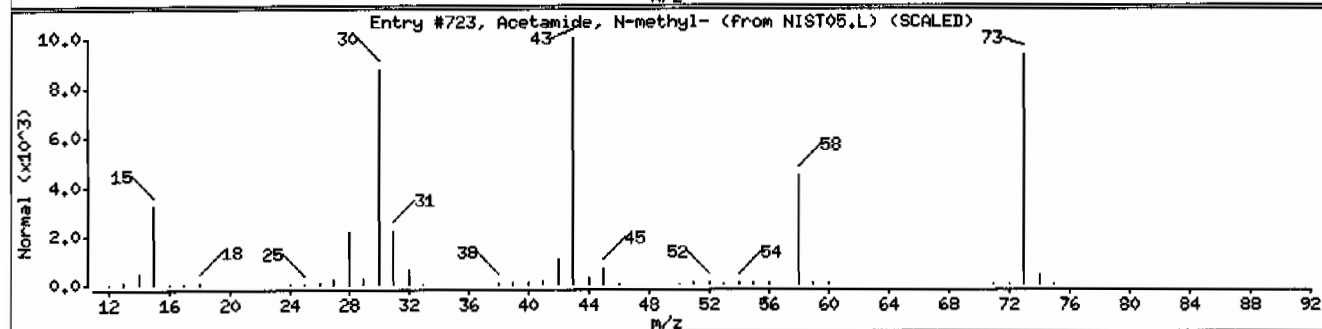
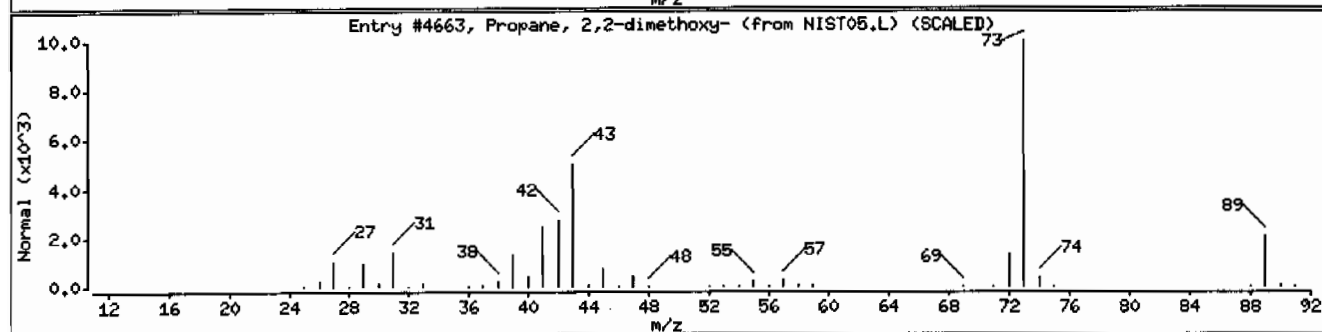
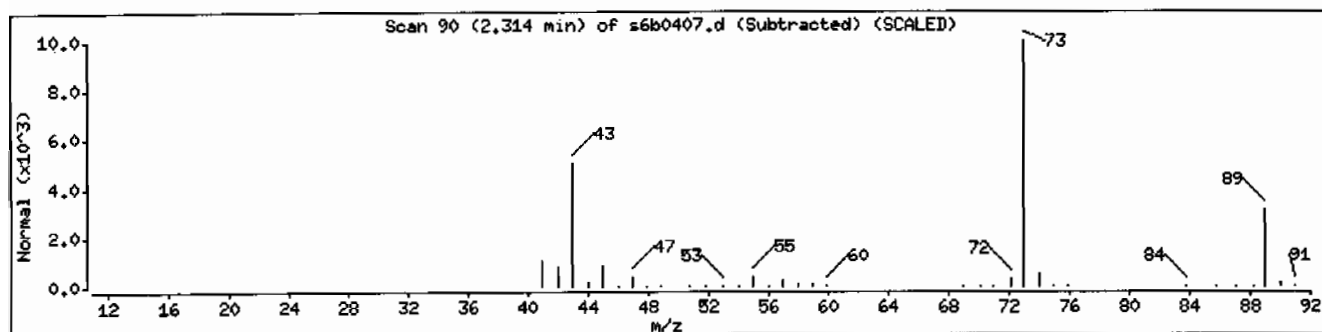
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-SMS

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	39	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	9	C3H7NO	73
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	9	CH7N5	89



Date: 04-FEB-2010 13:19

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202025004194550111SVH11SBLK01

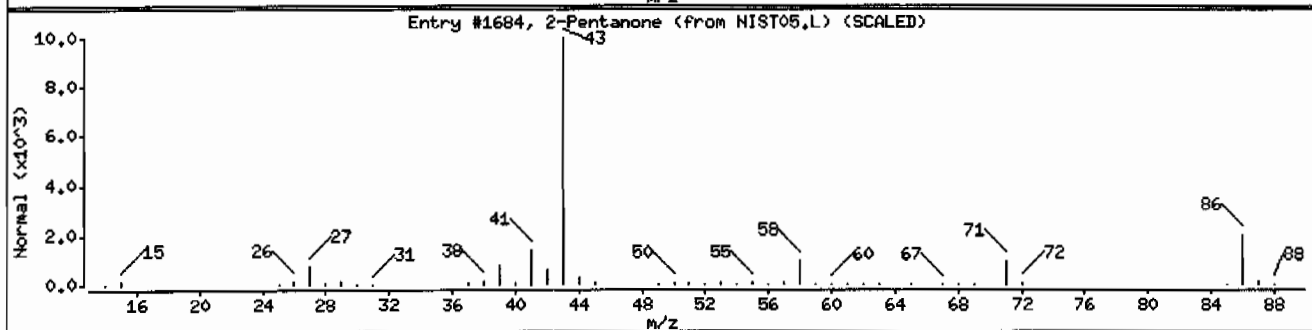
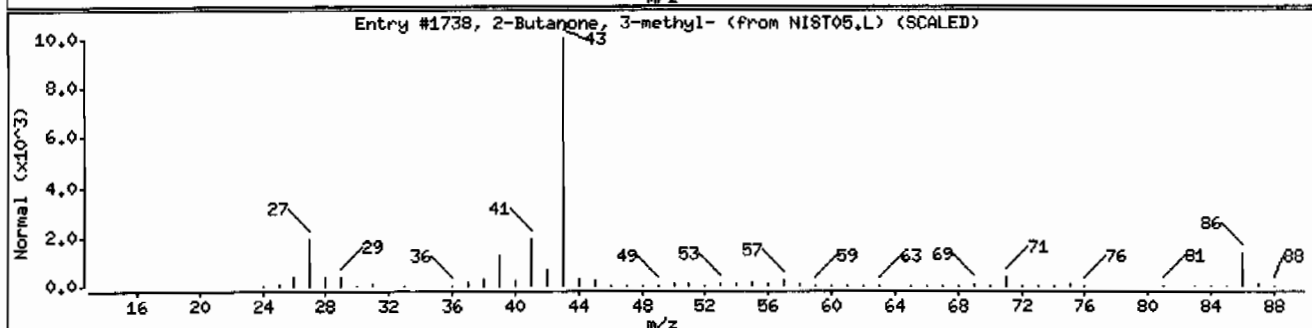
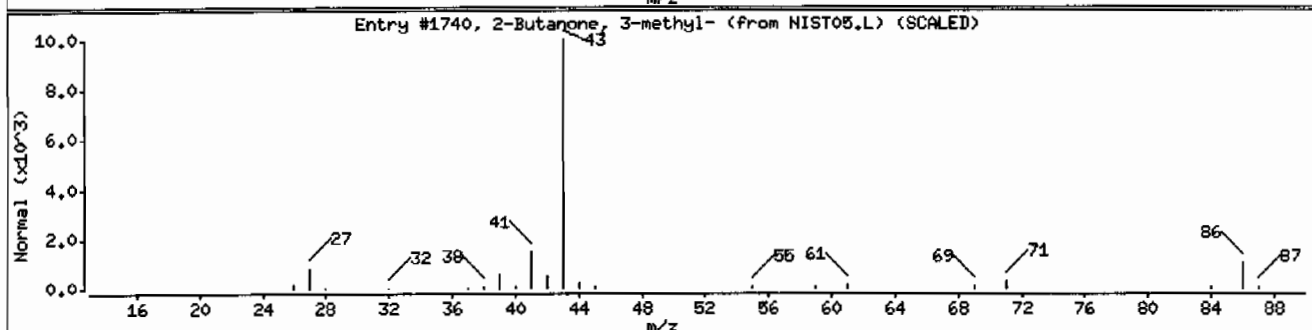
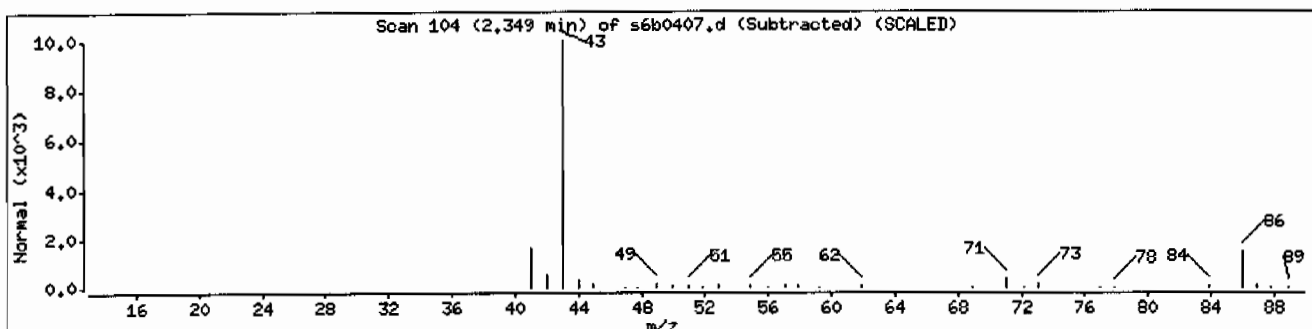
Volume Injected (uL): 0.5

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-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	64	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	47	C5H10O	86
2-Pentanone	107-87-9	NIST05.L	1684	40	C5H10O	86



Date : 04-FEB-2010 13:19

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202025004194550111SVH111SBLK01

Volume Injected (uL): 0.5

Operator: nag1

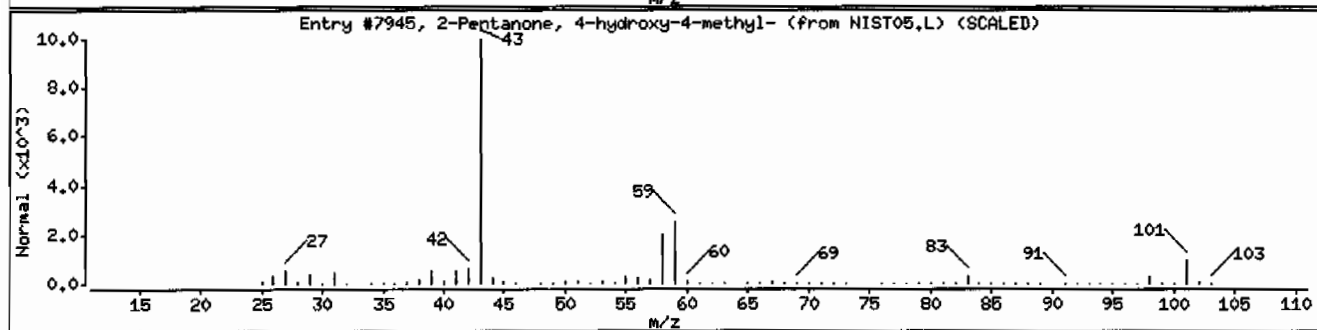
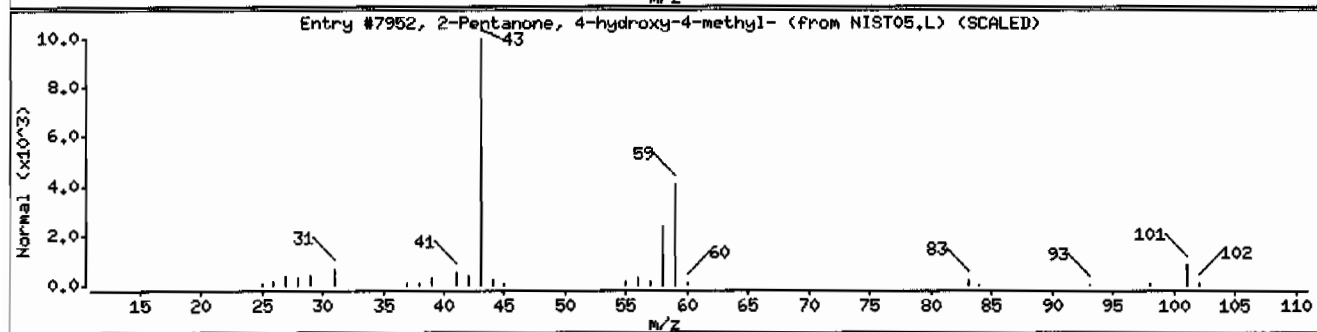
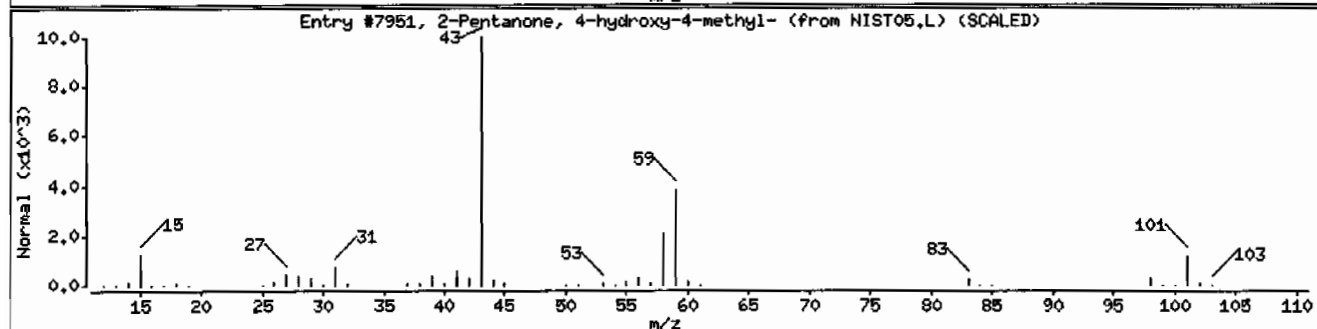
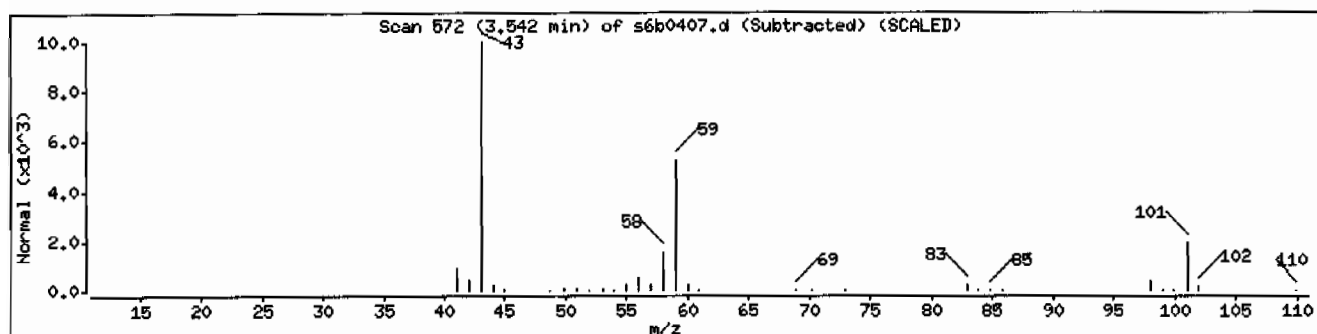
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown Aldol Condensate

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	32	C6H12O2	116



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

SDG Number: 10-1384
Lab Sample ID: 1202025005

Matrix: SOIL

Client Sample: QC for batch 945499
Client ID: LCS for batch 945499
Batch ID: 945501
Run Date: 02/04/2010 13:48
Prep Date: 01/26/2010 20:21
Data File: s6b0408.d

Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30 g
Column: J&W DB-5MS

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		980	ug/kg	66.7	333
108-95-2	Phenol		1320	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1360	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1360	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1370	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1180	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1380	ug/kg	33.3	333
100-02-7	4-Nitrophenol		807	ug/kg	110	333
87-86-5	Pentachlorophenol		1190	ug/kg	83.3	333
129-00-0	Pyrene		1390	ug/kg	10.0	33.3
110-86-1	Pyridine		1070	ug/kg	66.7	333
62-53-3	Aniline		708	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1110	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1350	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1250	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1390	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1150	ug/kg	66.7	333
95-48-7	o-Cresol		1270	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1460	ug/kg	100	333
67-72-1	Hexachloroethane		1350	ug/kg	66.7	333
98-95-3	Nitrobenzene		1220	ug/kg	66.7	333
78-59-1	Isophorone		1300	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1320	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1270	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1230	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1380	ug/kg	66.7	333
65-85-0	Benzoic acid		2950	ug/kg	167	667
91-20-3	Naphthalene		1260	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		885	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1490	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1480	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1010	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1360	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1300	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1310	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1050	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1050	ug/kg	66.7	333

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

SDG Number: 10-1384
Lab Sample ID: 1202025005
Client Sample: QC for batch 945499
Client ID: LCS for batch 945499
Batch ID: 945501
Run Date: 02/04/2010 13:48
Prep Date: 01/26/2010 20:21
Data File: s6b0408.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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1420	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1330	ug/kg	33.3	333
208-96-8	Acenaphthylene		1380	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1030	ug/kg	127	667
132-64-9	Dibenzofuran		1650	ug/kg	66.7	333
84-66-2	Diethylphthalate		1450	ug/kg	66.7	333
86-73-7	Fluorene		1430	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1430	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1230	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1120	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1320	ug/kg	66.7	333
122-66-7	Azobenzene		1210	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1350	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1380	ug/kg	66.7	333
85-01-8	Phenanthrene		1410	ug/kg	10.0	33.3
120-12-7	Anthracene		1400	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1550	ug/kg	66.7	333
206-44-0	Fluoranthene		1580	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1530	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1460	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1130	ug/kg	100	333
218-01-9	Chrysene		1480	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1530	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1590	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1600	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1600	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1660	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1550	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1540	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1620	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1370	ug/kg	66.7	333

Data File: /chem/MSD6.i/s020410.b/s6b0408.d
Report Date: 04-Feb-2010 15:30

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0408.d
Lab Smp Id: 1202025005 Client Smp ID: SBLK01LCS
Inj Date : 04-FEB-2010 13:48
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202025005|945501|1|SVM|1|SBLK01LCS
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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Feb-2010 15:28 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.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	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.951	4.951	(1.000)	152876	40.0000
* 29 Naphthalene-d8	136	6.230	6.232	(1.000)	639613	40.0000
* 46 Acenaphthene-d10	164	8.101	8.103	(1.000)	358137	40.0000
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	647164	40.0000
* 91 Chrysene-d12	240	12.761	12.763	(1.000)	551450	40.0000
* 98 Perylene-d12	264	15.151	15.151	(1.000)	453718	40.0000
\$ 3 2-Fluorophenol	112	3.787	3.776	(0.765)	283283	73.9959 2470
\$ 5 Phenol-d5	99	4.559	4.556	(0.921)	353542	73.1681 2440
\$ 20 Nitrobenzene-d5	82	5.489	5.491	(0.881)	160231	35.4134 1180
\$ 39 2-Fluorobiphenyl	172	7.354	7.354	(0.908)	342971	37.1604 1240
\$ 60 2,4,6-Tribromophenol	329	8.954	8.951	(1.105)	88829	84.9790 2830
\$ 81 p-Terphenyl-d14	244	11.416	11.415	(0.895)	405176	45.5610 1520

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.571	4.569	(0.923)	191904	39.4996	1320 (Q)
8 2-Chlorophenol	128	4.752	4.752	(0.960)	158783	40.6874	1360
11 1,4-Dichlorobenzene	146	4.966	4.966	(1.003)	185795	40.7959	1360
17 N-Nitrosodipropylamine	70	5.318	5.325	(1.074)	111509	41.1715	1370 (Q)
28 1,2,4-Trichlorobenzene	180	6.159	6.161	(0.989)	159368	41.0797	1370
33 4-Chloro-3-methylphenol	107	6.786	6.775	(1.089)	113302	35.5055	1180
47 Acenaphthene	154	8.136	8.138	(1.004)	309549	38.3504	1280
50 2,4-Dinitrotoluene	165	8.292	8.296	(1.024)	114041	41.2712	1380
52 4-Nitrophenol	139	8.213	8.205	(1.014)	30543	24.2166	807
65 Pentachlorophenol	266	9.497	9.494	(0.978)	48875	35.6883	1190
79 Pyrene	202	11.281	11.280	(0.884)	632135	41.6763	1390
2 Pyridine	79	2.874	2.851	(0.581)	103884	32.0695	1070
4 Aniline	66	4.635	4.640	(0.936)	42836	21.2467	708 (Q)
7 bis(2-Chloroethyl) ether	63	4.673	4.676	(0.944)	109731	33.3537	1110
9 1,3-Dichlorobenzene	146	4.900	4.900	(0.990)	181966	40.5032	1350
12 Benzyl alcohol	108	5.063	5.060	(1.023)	90637	37.3842	1250
13 1,2-Dichlorobenzene	146	5.114	5.116	(1.033)	177805	41.8254	1390
14 bis(2-Chloroisopropyl) ether	45	5.178	5.183	(1.046)	253996	34.5808	1150
15 o-Cresol	107	5.150	5.144	(1.040)	120597	37.9537	1260
18 m,p-Cresols	107	5.298	5.300	(1.070)	175867	43.6805	1460
19 Hexachloroethane	117	5.448	5.448	(1.100)	71483	40.5719	1350
21 Nitrobenzene	77	5.509	5.511	(0.884)	166478	36.5060	1220
22 Isophorone	82	5.738	5.743	(0.921)	314629	38.9230	1300
23 2-Nitrophenol	139	5.825	5.827	(0.935)	83459	39.6773	1320
24 2,4-Dimethylphenol	122	5.835	5.838	(0.937)	133047	38.1757	1270
25 bis(2-Chloroethoxy) methane	93	5.937	5.939	(0.953)	175484	36.8896	1230
26 2,4-Dichlorophenol	162	6.075	6.069	(0.975)	130572	41.3065	1380
27 Benzoic acid	105	5.960	5.945	(0.957)	190356	88.4898	2950
30 Naphthalene	128	6.251	6.255	(1.003)	482186	37.7920	1260
31 4-Chloroaniline	127	6.294	6.294	(1.010)	108900	26.5555	885
32 Hexachlorobutadiene	225	6.358	6.360	(1.020)	90093	44.5957	1490
34 2-Methylnaphthalene	142	6.974	6.977	(1.119)	341444	44.3473	1480
36 Hexachlorocyclopentadiene	237	7.132	7.132	(0.880)	43982	30.4040	1010
37 2,4,6-Trichlorophenol	196	7.267	7.267	(0.897)	99536	40.7311	1360
38 2,4,5-Trichlorophenol	196	7.311	7.305	(0.902)	101407	38.9656	1300
40 2-Chloronaphthalene	162	7.502	7.501	(0.926)	315770	39.2599	1310
42 o-Nitroaniline	65	7.601	7.603	(0.938)	86790	31.5416	1050
41 m-Nitroaniline	138	8.044	8.047	(0.993)	63520	31.5352	1050
43 Dimethylphthalate	163	7.777	7.784	(0.960)	392222	42.6926	1420
44 2,6-Dinitrotoluene	165	7.856	7.858	(0.970)	87228	39.8060	1330
45 Acenaphthylene	152	7.950	7.952	(0.981)	536496	41.4854	1380
48 2,4-Dinitrophenol	184	8.159	8.159	(1.007)	19112	30.8258	1030 (Q)
49 Dibenzofuran	168	8.320	8.322	(1.027)	540549	49.6130	1650
51 Diethylphthalate	149	8.534	8.536	(1.053)	403471	43.6091	1450
53 Fluorene	166	8.692	8.694	(1.073)	382714	42.7966	1430
54 4-Chlorophenylphenylether	204	8.674	8.676	(1.071)	181002	42.8375	1430
55 2-Methyl-4,6-dinitrophenol	198	8.735	8.737	(0.899)	51766	36.7699	1220

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.710	8.712	(1.075)	60530	33.5624	1120
133 Diphenylamine	169	8.804	8.804	(0.906)	309479	39.6743	1320
58 1,2-Diphenylhydrazine	77	8.850	8.849	(0.911)	360884	36.3716	1210
61 4-Bromophenylphenylether	248	9.206	9.209	(0.948)	103602	40.5697	1350
63 Hexachlorobenzene	284	9.285	9.285	(0.956)	110737	41.3987	1380
68 Phenanthrene	178	9.741	9.741	(1.003)	566555	42.3321	1410
69 Anthracene	178	9.798	9.797	(1.009)	560195	41.8766	1400
72 Di-n-butylphthalate	149	10.292	10.294	(1.060)	714842	46.5312	1550
76 Fluoranthene	202	11.028	11.031	(1.135)	606782	47.3286	1580
85 Butylbenzylphthalate	149	11.956	11.956	(0.937)	318489	45.8822	1530
89 Benzo(a)anthracene	228	12.743	12.743	(0.999)	521527	43.8346	1460
90 3,3'-Dichlorobenzidine	252	12.679	12.679	(0.994)	131859	33.8549	1130
92 Chrysene	228	12.799	12.799	(1.003)	505669	44.3576	1480
93 bis(2-Ethylhexyl)phthalate	149	12.690	12.692	(0.994)	440646	46.0085	1530
94 Di-n-octylphthalate	149	13.699	13.698	(0.904)	688646	47.7564	1590
95 Benzo(b)fluoranthene	252	14.458	14.458	(0.954)	480956	47.9071	1600
96 Benzo(k)fluoranthene	252	14.506	14.509	(0.957)	478446	47.9261	1600
97 Benzo(a)pyrene	252	15.049	15.049	(0.993)	431597	49.7730	1660
99 Indeno(1,2,3-cd)pyrene	276	17.172	17.172	(1.133)	389295	46.6082	1550
100 Dibenzo(a,h)anthracene	278	17.197	17.197	(1.135)	313329	46.0949	1540
101 Benzo(ghi)perylene	276	17.702	17.702	(1.168)	322774	48.7236	1620
1 N-Methyl-N-nitrosomethylamine	74	2.826	2.813	(0.571)	76517	29.4000	980

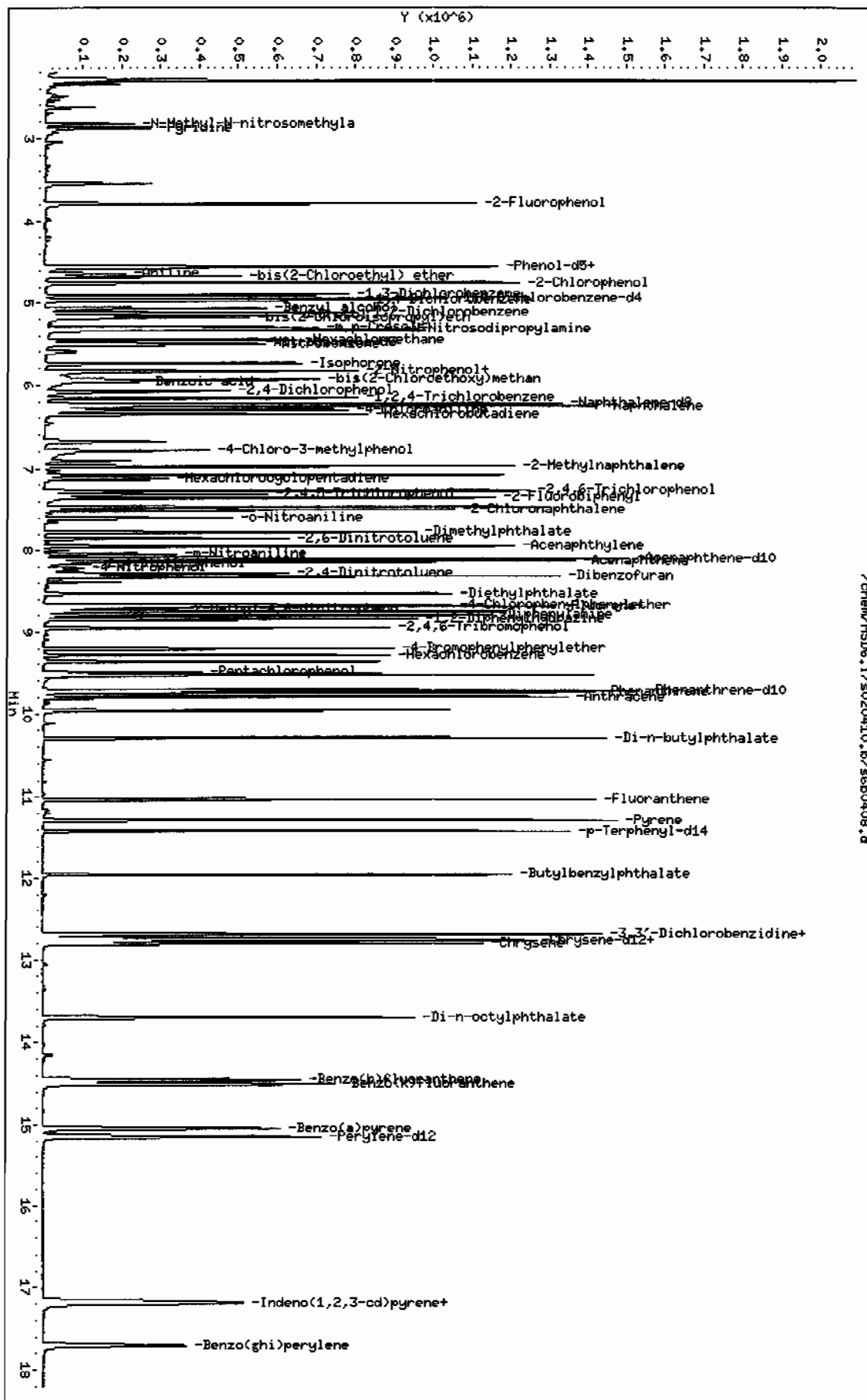
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s020410.b/s6b0408.d
 Date: 04-FEB-2010 13:48
 Client ID: SBLK01LCS
 Sample Info: 1120205005194550111SM111SBLK01LCS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD6.i
 Operator: nag1
 Column diameter: 0.20

/chem/MSD6.i/s020410.b/s6b0408.d



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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202025006	Date Received: 01/23/2010 09:20	%Moisture: 21.4
Client Sample: QC for batch 945499	Client: LANL010	Project: QC
Client ID: RE14-10-7679MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 16:42	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s6b0414.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		794	ug/kg	84.4	422
108-95-2	Phenol		1220	ug/kg	84.4	422
95-57-8	2-Chlorophenol		1220	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene		1180	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine		1230	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol		1140	ug/kg	84.4	422
83-32-9	Acenaphthene		1250	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene		1280	ug/kg	42.2	422
100-02-7	4-Nitrophenol		660	ug/kg	139	422
87-86-5	Pentachlorophenol		1170	ug/kg	105	422
129-00-0	Pyrene		1450	ug/kg	12.7	42.2
110-86-1	Pyridine		763	ug/kg	84.4	422
62-53-3	Aniline		963	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether		991	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene		1180	ug/kg	84.4	422
100-51-6	Benzyl alcohol		982	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene		1220	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether		1040	ug/kg	84.4	422
95-48-7	o-Cresol		1130	ug/kg	84.4	422
65794-96-9	m,p-Cresols		1230	ug/kg	127	422
67-72-1	Hexachloroethane		1180	ug/kg	84.4	422
98-95-3	Nitrobenzene		1100	ug/kg	84.4	422
78-59-1	Isophorone		1250	ug/kg	84.4	422
88-75-5	2-Nitrophenol		1200	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol		1180	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane		1160	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol		1350	ug/kg	84.4	422
65-85-0	Benzoic acid		1890	ug/kg	211	844
91-20-3	Naphthalene		1180	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline		1050	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene		1370	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene		1400	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene		566	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol		1420	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol		1340	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene		1290	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline		1020	ug/kg	84.4	422
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1060	ug/kg	84.4	422

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

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202025006	Date Received: 01/23/2010 09:20	%Moisture: 21.4
Client Sample: QC for batch 945499	Client: LANL010	Project: QC
Client ID: RE14-10-7679MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 16:42	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s6b0414.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		1400	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene		1310	ug/kg	42.2	422
208-96-8	Acenaphthylene		1370	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol		926	ug/kg	160	844
132-64-9	Dibenzofuran		1670	ug/kg	84.4	422
84-66-2	Diethylphthalate		1450	ug/kg	84.4	422
86-73-7	Fluorene		1430	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether		1460	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol		1020	ug/kg	84.4	422
100-01-6	4-Nitroaniline		1120	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1390	ug/kg	84.4	422
122-66-7	Azobenzene		1280	ug/kg	84.4	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1430	ug/kg	84.4	422
118-74-1	Hexachlorobenzene		1410	ug/kg	84.4	422
85-01-8	Phenanthrene		1430	ug/kg	12.7	42.2
120-12-7	Anthracene		1410	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate		1600	ug/kg	84.4	422
206-44-0	Fluoranthene		1500	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate		1650	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene		1390	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine		943	ug/kg	127	422
218-01-9	Chrysene		1420	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate		1670	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate		1960	ug/kg	84.4	422
205-99-2	Benzo(b)fluoranthene		1620	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene		1640	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene		1610	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene		1290	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene		1310	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene		1220	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene		1290	ug/kg	84.4	422

Data File: /chem/MSD6.i/s020410.b/s6b0414.d
Report Date: 05-Feb-2010 09:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0414.d
Lab Smp Id: 1202025006 Client Smp ID: RE14-10-7679MS
Inj Date : 04-FEB-2010 16:42
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202025006|945501|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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	21.41370	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.948	4.951	(1.000)	145646	40.0000
* 29 Naphthalene-d8	136	6.230	6.232	(1.000)	598993	40.0000
* 46 Acenaphthene-d10	164	8.100	8.103	(1.000)	335093	40.0000
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	587961	40.0000
* 91 Chrysene-d12	240	12.761	12.763	(1.000)	453762	40.0000
* 98 Perylene-d12	264	15.143	15.151	(1.000)	319136	40.0000
\$ 3 2-Fluorophenol	112	3.786	3.776	(0.765)	190828	52.3203 2210
\$ 5 Phenol-d5	99	4.558	4.556	(0.921)	242044	52.5794 2220
\$ 20 Nitrobenzene-d5	82	5.488	5.491	(0.881)	106189	25.0608 1060
\$ 39 2-Fluorobiphenyl	172	7.354	7.354	(0.908)	244749	28.3418 1200
\$ 60 2,4,6-Tribromophenol	329	8.951	8.951	(1.105)	63810	65.2424 2750
\$ 81 p-Terphenyl-d14	244	11.413	11.415	(0.894)	272219	37.2002 1570

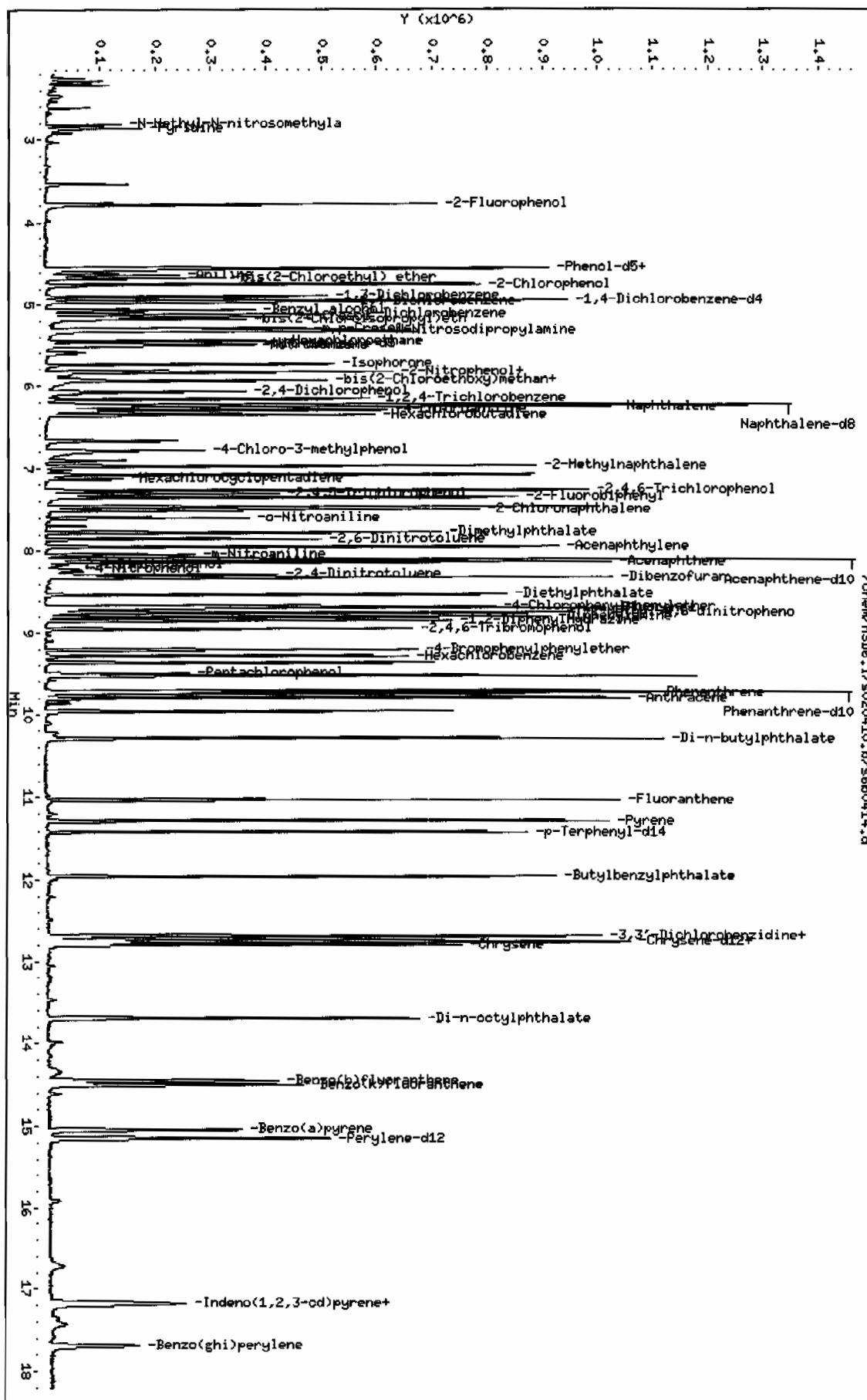
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	4.571	4.569	(0.924)	133656	28.8760	1220 (Q)
8 2-Chlorophenol		128	4.752	4.752	(0.960)	107611	28.9437	1220
11 1,4-Dichlorobenzene		146	4.966	4.966	(1.004)	121540	28.0119	1180
17 N-Nitrosodipropylamine		70	5.313	5.325	(1.074)	75482	29.2531	1230 (Q)
28 1,2,4-Trichlorobenzene		180	6.159	6.161	(0.989)	111106	30.5815	1290
33 4-Chloro-3-methylphenol		107	6.785	6.775	(1.089)	80778	27.0300	1140
47 Acenaphthene		154	8.136	8.138	(1.004)	224614	29.7414	1250
50 2,4-Dinitrotoluene		165	8.289	8.296	(1.023)	78692	30.4369	1280
52 4-Nitrophenol		139	8.217	8.205	(1.014)	14104	15.6406	660
65 Pentachlorophenol		266	9.497	9.494	(0.978)	32592	27.6236	1160
79 Pyrene		202	11.278	11.280	(0.884)	427609	34.2614	1440
2 Pyridine		79	2.859	2.851	(0.578)	55857	18.0993	763
4 Aniline		66	4.635	4.640	(0.937)	43863	22.8360	963
7 bis(2-Chloroethyl) ether		63	4.671	4.676	(0.944)	73650	23.4978	991
9 1,3-Dichlorobenzene		146	4.897	4.900	(0.990)	119515	27.9230	1180
12 Benzyl alcohol		108	5.060	5.060	(1.023)	53773	23.2803	982
13 1,2-Dichlorobenzene		146	5.114	5.116	(1.033)	117412	28.9901	1220
14 bis(2-Chloroisopropyl) ether		45	5.178	5.183	(1.046)	172388	24.6352	1040
15 o-Cresol		107	5.150	5.144	(1.041)	81230	26.8334	1130
18 m,p-Cresols		107	5.295	5.300	(1.070)	112251	29.2640	1230
19 Hexachloroethane		117	5.448	5.448	(1.101)	46984	27.9907	1180
21 Nitrobenzene		77	5.506	5.511	(0.884)	110945	25.9783	1100
22 Isophorone		82	5.736	5.743	(0.921)	223841	29.5694	1250
23 2-Nitrophenol		139	5.825	5.827	(0.935)	55922	28.3888	1200
24 2,4-Dimethylphenol		122	5.835	5.838	(0.937)	91252	27.9589	1180
25 bis(2-Chloroethoxy) methane		93	5.937	5.939	(0.953)	122160	27.4215	1160
26 2,4-Dichlorophenol		162	6.072	6.069	(0.975)	94498	31.9217	1350
27 Benzoic acid		105	5.932	5.945	(0.952)	90046	44.6979	1880
30 Naphthalene		128	6.250	6.255	(1.003)	334605	28.0036	1180
31 4-Chloroaniline		127	6.291	6.294	(1.010)	95905	24.9726	1050
32 Hexachlorobutadiene		225	6.357	6.360	(1.020)	61428	32.4686	1370
34 2-Methylnaphthalene		142	6.974	6.977	(1.119)	239946	33.2780	1400
36 Hexachlorocyclopentadiene		237	7.132	7.132	(0.880)	18179	13.4310	566
37 2,4,6-Trichlorophenol		196	7.267	7.267	(0.897)	76816	33.5955	1420
38 2,4,5-Trichlorophenol		196	7.310	7.305	(0.902)	77556	31.8502	1340
40 2-Chloronaphthalene		162	7.501	7.501	(0.926)	231013	30.6972	1290
42 o-Nitroaniline		65	7.601	7.603	(0.938)	62409	24.2407	1020
41 m-Nitroaniline		138	8.044	8.047	(0.993)	47539	25.2243	1060
43 Dimethylphthalate		163	7.777	7.784	(0.960)	285955	33.2661	1400
44 2,6-Dinitrotoluene		165	7.856	7.858	(0.970)	63595	31.0169	1310
45 Acenaphthylene		152	7.950	7.952	(0.981)	393086	32.4863	1370
48 2,4-Dinitrophenol		184	8.167	8.159	(1.008)	8154	21.9455	926 (Q)
49 Dibenzofuran		168	8.319	8.322	(1.027)	403433	39.5745	1670
51 Diethylphthalate		149	8.531	8.536	(1.053)	297840	34.4058	1450
53 Fluorene		166	8.691	8.694	(1.073)	284496	34.0013	1430
54 4-Chlorophenylphenylether		204	8.674	8.676	(1.071)	136887	34.6248	1460
55 2-Methyl-4,6-dinitrophenol		198	8.735	8.737	(0.899)	27059	24.1658	1020

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.704	8.712	(1.075)	41738	26.5927	1120
133 Diphenylamine	169	8.801	8.804	(0.906)	233931	33.0089	1390
58 1,2-Diphenylhydrazine	77	8.849	8.849	(0.911)	274099	30.4066	1280
61 4-Bromophenylphenylether	248	9.206	9.209	(0.948)	78406	33.7947	1420
63 Hexachlorobenzene	284	9.285	9.285	(0.956)	81396	33.4936	1410
68 Phenanthrene	178	9.739	9.741	(1.003)	413209	33.9831	1430
69 Anthracene	178	9.795	9.797	(1.008)	407393	33.5206	1410
72 Di-n-butylphthalate	149	10.292	10.294	(1.060)	529133	37.9110	1600
76 Fluoranthene	202	11.028	11.031	(1.135)	415557	35.6769	1500
85 Butylbenzylphthalate	149	11.953	11.956	(0.937)	223990	39.2154	1650
89 Benzo(a)anthracene	228	12.743	12.743	(0.999)	321949	32.8855	1390
90 3,3'-Dichlorobenzidine	252	12.677	12.679	(0.993)	71621	22.3476	942
92 Chrysene	228	12.796	12.799	(1.003)	316800	33.7726	1420
93 bis(2-Ethylhexyl)phthalate	149	12.689	12.692	(0.994)	311009	39.5218	1670
94 Di-n-octylphthalate	149	13.696	13.698	(0.904)	470753	46.4129	1960
95 Benzo(b)fluoranthene	252	14.453	14.458	(0.954)	270532	38.3110	1620
96 Benzo(k)fluoranthene	252	14.501	14.509	(0.958)	272270	38.7747	1640
97 Benzo(a)pyrene	252	15.041	15.049	(0.993)	232597	38.1355	1610
99 Indeno(1,2,3-cd)pyrene	276	17.164	17.172	(1.133)	173221	30.6002	1290
100 Dibenzo(a,h)anthracene	278	17.192	17.197	(1.135)	143796	31.0161	1310
101 Benzo(ghi)perylene	276	17.691	17.702	(1.168)	134570	28.8801	1220
1 N-Methyl-N-nitrosomethylamine	74	2.818	2.813	(0.570)	46689	18.8297	794

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20



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

SDG Number: 10-1384
Lab Sample ID: 1202025007
Client Sample: QC for batch 945499
Client ID: RE14-10-7679MSD
Batch ID: 945501
Run Date: 02/04/2010 17:10
Prep Date: 01/26/2010 20:21
Data File: s6b0415.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8270C
Inst: MSD6.I
Analyst: NAG1
Aliquot: 30.02 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 21.4
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		702	ug/kg	84.8	424
108-95-2	Phenol		1120	ug/kg	84.8	424
95-57-8	2-Chlorophenol		1110	ug/kg	84.8	424
106-46-7	1,4-Dichlorobenzene		1060	ug/kg	84.8	424
621-64-7	N-Nitrosodipropylamine		1120	ug/kg	84.8	424
59-50-7	4-Chloro-3-methylphenol		1450	ug/kg	84.8	424
83-32-9	Acenaphthene		1190	ug/kg	14.0	42.4
121-14-2	2,4-Dinitrotoluene		1290	ug/kg	42.4	424
100-02-7	4-Nitrophenol		956	ug/kg	140	424
87-86-5	Pentachlorophenol		1200	ug/kg	106	424
129-00-0	Pyrene		1360	ug/kg	12.7	42.4
110-86-1	Pyridine		733	ug/kg	84.8	424
62-53-3	Aniline		864	ug/kg	127	424
111-44-4	bis(2-Chloroethyl) ether		874	ug/kg	84.8	424
541-73-1	1,3-Dichlorobenzene		1040	ug/kg	84.8	424
100-51-6	Benzyl alcohol		930	ug/kg	127	424
95-50-1	1,2-Dichlorobenzene		1090	ug/kg	84.8	424
108-60-1	bis(2-Chloroisopropyl)ether		915	ug/kg	84.8	424
95-48-7	o-Cresol		1030	ug/kg	84.8	424
65794-96-9	m,p-Cresols		1190	ug/kg	127	424
67-72-1	Hexachloroethane		1020	ug/kg	84.8	424
98-95-3	Nitrobenzene		999	ug/kg	84.8	424
78-59-1	Isophorone		1120	ug/kg	84.8	424
88-75-5	2-Nitrophenol		1080	ug/kg	84.8	424
105-67-9	2,4-Dimethylphenol		1150	ug/kg	148	424
111-91-1	bis(2-Chloroethoxy)methane		1030	ug/kg	84.8	424
120-83-2	2,4-Dichlorophenol		1270	ug/kg	84.8	424
65-85-0	Benzoic acid		2330	ug/kg	212	848
91-20-3	Naphthalene		1050	ug/kg	12.7	42.4
106-47-8	4-Chloroaniline		968	ug/kg	84.8	424
87-68-3	Hexachlorobutadiene		1230	ug/kg	84.8	424
91-57-6	2-Methylnaphthalene		1290	ug/kg	8.48	42.4
77-47-4	Hexachlorocyclopentadiene		495	ug/kg	84.8	424
88-06-2	2,4,6-Trichlorophenol		1360	ug/kg	84.8	424
95-95-4	2,4,5-Trichlorophenol		1320	ug/kg	84.8	424
91-58-7	2-Chloronaphthalene		1210	ug/kg	14.0	42.4
88-74-4	2-Nitroaniline		1020	ug/kg	84.8	424
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1060	ug/kg	84.8	424

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

Page 2 of 2

SDG Number: 10-1384	Date Collected: 01/15/2010 12:00	Matrix: R
Lab Sample ID: 1202025007	Date Received: 01/23/2010 09:20	%Moisture: 21.4
Client Sample: QC for batch 945499	Client: LANL010	Project: QC
Client ID: RE14-10-7679MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 945501	Inst: MSD6.I	Dilution: 1
Run Date: 02/04/2010 17:10	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 01/26/2010 20:21	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6b0415.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		1330	ug/kg	84.8	424
606-20-2	2,6-Dinitrotoluene		1250	ug/kg	42.4	424
208-96-8	Acenaphthylene		1290	ug/kg	12.7	42.4
51-28-5	2,4-Dinitrophenol		961	ug/kg	161	848
132-64-9	Dibenzofuran		1570	ug/kg	84.8	424
84-66-2	Diethylphthalate		1400	ug/kg	84.8	424
86-73-7	Fluorene		1370	ug/kg	12.7	42.4
7005-72-3	4-Chlorophenylphenylether		1390	ug/kg	84.8	424
534-52-1	2-Methyl-4,6-dinitrophenol		1090	ug/kg	84.8	424
100-01-6	4-Nitroaniline		1120	ug/kg	127	424
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1330	ug/kg	84.8	424
122-66-7	Azobenzene		1230	ug/kg	84.8	424
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1340	ug/kg	84.8	424
118-74-1	Hexachlorobenzene		1350	ug/kg	84.8	424
85-01-8	Phenanthrene		1370	ug/kg	12.7	42.4
120-12-7	Anthracene		1360	ug/kg	8.48	42.4
84-74-2	Di-n-butylphthalate		1500	ug/kg	84.8	424
206-44-0	Fluoranthene		1470	ug/kg	12.7	42.4
85-68-7	Butylbenzylphthalate		1550	ug/kg	84.8	424
56-55-3	Benzo(a)anthracene		1340	ug/kg	12.7	42.4
91-94-1	3,3'-Dichlorobenzidine		858	ug/kg	127	424
218-01-9	Chrysene		1350	ug/kg	12.7	42.4
117-81-7	bis(2-Ethylhexyl)phthalate		1550	ug/kg	84.8	424
117-84-0	Di-n-octylphthalate		2040	ug/kg	84.8	424
205-99-2	Benzo(b)fluoranthene		1590	ug/kg	12.7	42.4
207-08-9	Benzo(k)fluoranthene		1600	ug/kg	12.7	42.4
50-32-8	Benzo(a)pyrene		1540	ug/kg	12.7	42.4
193-39-5	Indeno(1,2,3-cd)pyrene		1160	ug/kg	12.7	42.4
53-70-3	Dibenzo(a,h)anthracene		1180	ug/kg	12.7	42.4
191-24-2	Benzo(ghi)perylene		1060	ug/kg	12.7	42.4
120-82-1	1,2,4-Trichlorobenzene		1140	ug/kg	84.8	424

Data File: /chem/MSD6.i/s020410.b/s6b0415.d
Report Date: 05-Feb-2010 09:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020410.b/s6b0415.d
Lab Smp Id: 1202025007 Client Smp ID: RE14-10-7679MSD
Inj Date : 04-FEB-2010 17:10
Operator : nagl Inst ID: MSD6.i
Smp Info : |1202025007|945501|1|SVM|1|MSD
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/s020410.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Feb-2010 09:16 hnm Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	21.41370	% 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	4.948	4.951	(1.000)	159698	40.0000	
* 29 Naphthalene-d8	136	6.228	6.232	(1.000)	655117	40.0000	
* 46 Acenaphthene-d10	164	8.100	8.103	(1.000)	363326	40.0000	
* 67 Phenanthrene-d10	188	9.713	9.716	(1.000)	643219	40.0000	
* 91 Chrysene-d12	240	12.761	12.763	(1.000)	507788	40.0000	
* 98 Perylene-d12	264	15.146	15.151	(1.000)	320132	40.0000	
\$ 3 2-Fluorophenol	112	3.787	3.776	(0.765)	187354	46.8479	1980
\$ 5 Phenol-d5	99	4.559	4.556	(0.921)	241046	47.7552	2020
\$ 20 Nitrobenzene-d5	82	5.486	5.491	(0.881)	104443	22.5371	955
\$ 39 2-Fluorobiphenyl	172	7.354	7.354	(0.908)	247488	26.4320	1120
\$ 60 2,4,6-Tribromophenol	329	8.951	8.951	(1.105)	68244	64.3538	2730
\$ 81 p-Terphenyl-d14	244	11.416	11.415	(0.895)	292340	35.6994	1510

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.569	4.569	(0.923)	134033	26.4095	1120 (Q)
8 2-Chlorophenol	128	4.752	4.752	(0.960)	107187	26.2929	1110
11 1,4-Dichlorobenzene	146	4.966	4.966	(1.004)	118500	24.9081	1060
17 N-Nitrosodipropylamine	70	5.313	5.325	(1.074)	74882	26.4670	1120 (Q)
28 1,2,4-Trichlorobenzene	180	6.159	6.161	(0.989)	106658	26.8422	1140
33 4-Chloro-3-methylphenol	107	6.783	6.775	(1.089)	111978	34.2601	1450
47 Acenaphthene	154	8.134	8.138	(1.004)	229828	28.0670	1190
50 2,4-Dinitrotoluene	165	8.292	8.296	(1.024)	85436	30.4776	1290
52 4-Nitrophenol	139	8.218	8.205	(1.014)	27957	22.5616	956
65 Pentachlorophenol	266	9.497	9.494	(0.978)	36629	28.2314	1200
79 Pyrene	202	11.280	11.280	(0.884)	447268	32.0237	1360
2 Pyridine	79	2.864	2.851	(0.579)	58520	17.2937	733
4 Aniline	66	4.635	4.640	(0.937)	42918	20.3780	864
7 bis(2-Chloroethyl) ether	63	4.671	4.676	(0.944)	70842	20.6132	874
9 1,3-Dichlorobenzene	146	4.897	4.900	(0.990)	115650	24.6425	1040
12 Benzyl alcohol	108	5.061	5.060	(1.023)	55548	21.9327	930
13 1,2-Dichlorobenzene	146	5.114	5.116	(1.033)	114153	25.7053	1090
14 bis(2-Chloroisopropyl) ether	45	5.175	5.183	(1.046)	165658	21.5904	915
15 o-Cresol	107	5.150	5.144	(1.041)	80514	24.2565	1030
18 m,p-Cresols	107	5.295	5.300	(1.070)	117616	27.9647	1180
19 Hexachloroethane	117	5.445	5.448	(1.100)	44316	24.0781	1020
21 Nitrobenzene	77	5.506	5.511	(0.884)	110087	23.5690	999
22 Isophorone	82	5.736	5.743	(0.921)	218224	26.3578	1120
23 2-Nitrophenol	139	5.825	5.827	(0.935)	54867	25.4670	1080
24 2,4-Dimethylphenol	122	5.833	5.838	(0.937)	96606	27.0635	1150
25 bis(2-Chloroethoxy) methane	93	5.935	5.939	(0.953)	118342	24.2887	1030
26 2,4-Dichlorophenol	162	6.070	6.069	(0.975)	96870	29.9196	1270
27 Benzoic acid	105	5.942	5.945	(0.954)	121144	54.9828	2330 (Q)
30 Naphthalene	128	6.251	6.255	(1.004)	323695	24.7696	1050
31 4-Chloroaniline	127	6.291	6.294	(1.010)	95893	22.8303	968
32 Hexachlorobutadiene	225	6.358	6.360	(1.021)	60241	29.1133	1230
34 2-Methylnaphthalene	142	6.974	6.977	(1.120)	239229	30.3361	1280
36 Hexachlorocyclopentadiene	237	7.130	7.132	(0.880)	17137	11.6773	495 (R)
37 2,4,6-Trichlorophenol	196	7.267	7.267	(0.897)	79586	32.1022	1360
38 2,4,5-Trichlorophenol	196	7.311	7.305	(0.902)	82086	31.0910	1320
40 2-Chloronaphthalene	162	7.499	7.501	(0.926)	233874	28.6624	1210
42 o-Nitroaniline	65	7.601	7.603	(0.938)	67478	24.1729	1020
41 m-Nitroaniline	138	8.044	8.047	(0.993)	51116	25.0146	1060
43 Dimethylphthalate	163	7.777	7.784	(0.960)	291673	31.2946	1330
44 2,6-Dinitrotoluene	165	7.853	7.858	(0.969)	65481	29.4551	1250
45 Acenaphthylene	152	7.950	7.952	(0.981)	400074	30.4945	1290
48 2,4-Dinitrophenol	184	8.162	8.159	(1.008)	9692	22.6619	960 (Q)
49 Dibenzofuran	168	8.320	8.322	(1.027)	409124	37.0141	1570
51 Diethylphthalate	149	8.531	8.536	(1.053)	310336	33.0636	1400
53 Fluorene	166	8.692	8.694	(1.073)	292639	32.2567	1370
54 4-Chlorophenylphenylether	204	8.674	8.676	(1.071)	140543	32.7871	1390
55 2-Methyl-4,6-dinitrophenol	198	8.735	8.737	(0.899)	32116	25.6161	1080

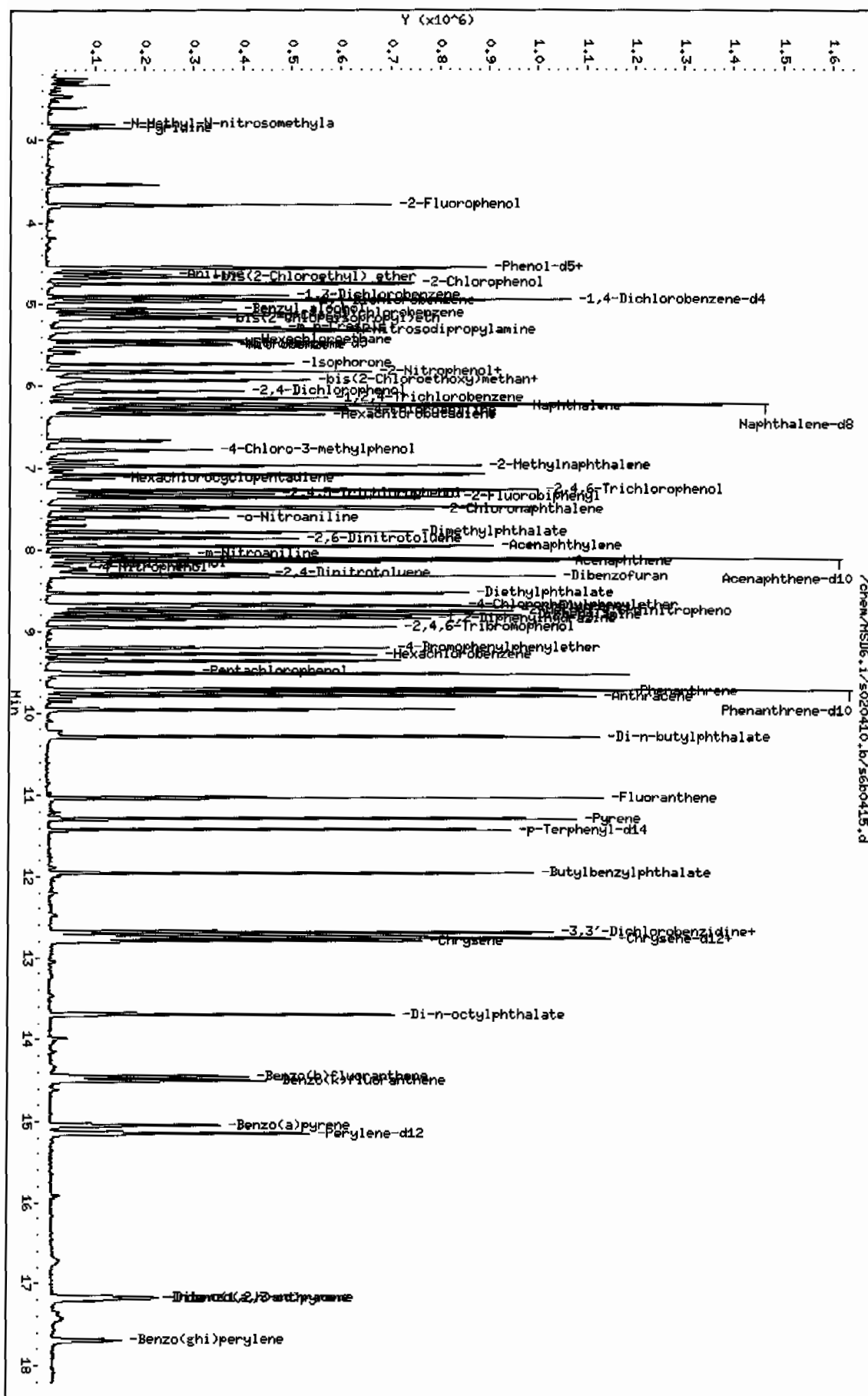
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	8.707	8.712	(1.075)	44958	26.4647	1120
133 Diphenylamine		169	8.801	8.804	(0.906)	244054	31.4789	1330
58 1,2-Diphenylhydrazine		77	8.847	8.849	(0.911)	285955	28.9967	1230
61 4-Bromophenylphenylether		248	9.206	9.209	(0.948)	80525	31.7264	1340
63 Hexachlorobenzene		284	9.285	9.285	(0.956)	84729	31.8699	1350
68 Phenanthrene		178	9.739	9.741	(1.003)	428886	32.2422	1370
69 Anthracene		176	9.795	9.797	(1.008)	427877	32.1816	1360
72 Di-n-butylphthalate		149	10.292	10.294	(1.060)	540324	35.3870	1500
76 Fluoranthene		202	11.028	11.031	(1.135)	443081	34.7720	1470
85 Butylbenzylphthalate		149	11.953	11.956	(0.937)	233211	36.4857	1550
89 Benzo (a) anthracene		228	12.741	12.743	(0.998)	345993	31.5814	1340
90 3,3'-Dichlorobenzidine		252	12.679	12.679	(0.994)	72604	20.2440	858
92 Chrysene		228	12.797	12.799	(1.003)	334297	31.8462	1350
93 bis(2-Ethylhexyl)phthalate		149	12.690	12.692	(0.994)	321499	36.5392	1550
94 Di-n-octylphthalate		149	13.696	13.698	(0.904)	489328	48.0941	2040
95 Benzo (b) fluoranthene		252	14.453	14.458	(0.954)	265480	37.4786	1590
96 Benzo (k) fluoranthene		252	14.501	14.509	(0.957)	265889	37.7482	1600
97 Benzo (a) pyrene		252	15.044	15.049	(0.993)	221932	36.2737	1540
99 Indeno(1,2,3-cd)pyrene		276	17.167	17.172	(1.133)	152949	27.2987	1160
100 Dibenzo (a,h) anthracene		278	17.190	17.197	(1.135)	128173	27.8619	1180
101 Benzo (ghi) perylene		276	17.694	17.702	(1.168)	117113	25.0555	1060
1 N-Methyl-N-nitrosomethylamine		74	2.818	2.813	(0.570)	45027	16.5616	702

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/s020410.b/s6b0415.d
 Date: 04-FEB-2010 17:10
 Client ID: RE14-10-7679MSD
 Sample Info: 1120202007194550111SUM11MSD
 Volume Injected (uL): 0.5
 Column phase: 3uM DB-SMS

Instrument: MSD6.i
 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: 945499 Verified by: _____
 Analyst: Alberto Velasco Lab SOP: GL-OA-E-010 REV# 18
 Method: SW846 3550B Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202025004 MB	26-JAN-2010 20:21:00	30	1	0.03333
1202025005 LCS	26-JAN-2010 20:21:00	30	1	0.03333
245387001	26-JAN-2010 20:21:00	30.16	1	0.03316
245387002	26-JAN-2010 20:21:00	30.13	1	0.03319
1202025006 MS (245387002)	26-JAN-2010 20:21:00	30.17	1	0.03315
1202025007 MSD (245387002)	26-JAN-2010 20:21:00	30.02	1	0.03331
245387003	26-JAN-2010 20:21:00	30.01	1	0.03332
245387004	26-JAN-2010 20:21:00	30.05	1	0.03328
245387005	26-JAN-2010 20:21:00	30.19	1	0.03312
245387006	26-JAN-2010 20:21:00	30.14	1	0.03318
245387007	26-JAN-2010 20:21:00	30.02	1	0.03331
245387008	26-JAN-2010 20:21:00	30.03	1	0.0333
245387009	26-JAN-2010 20:21:00	30.03	1	0.0333
245387010	26-JAN-2010 20:21:00	30.19	1	0.03312
245387011	26-JAN-2010 20:21:00	30.02	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202025005	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	Verified By: AJS
LCS	1202025005	BENZIDINE LCS	UE091229-21	1	mL	Final Solvent: CH2Cl2
MS	1202025006	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	
MS	1202025006	BENZIDINE LCS	UE091229-21	1	mL	
MSD	1202025007	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	
MSD	1202025007	BENZIDINE LCS	UE091229-21	1	mL	
SURR	Ali	BNA for all Surrogate	UE091229-10	1	mL	
REGNT	Ali	Acetone	1259670	150	mL	
REGNT	Ali	Methylene Chloride	1259674-D	150	mL	
SOURC	Ali	SODIUM SULFATE	1256907	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
1s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	150 PPM	s110909	1.0	DFTPP	DOSE
1s6k0902.d	Inst blk	JMB3	09-NOV-2009 11:35	1-----s110909	1.0	INST BLK	DOSE	
1s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	11 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	110 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	120 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	140 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	150 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	180 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	1100 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	1120 PPM	s110909	1.0	MEGAICAL	DOSE
1s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	150 PPM	s110909	1.0	DFTPP	
1s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	150 PPM	s110909	1.0	DFTPP	
1s6k0912.d	Inst blk	JMB3	09-NOV-2009 18:15	1-----s110909	1.0	INST BLK		
1s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	11 PPM	s110909	1.0	MEGAICAL	
1s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	110 PPM	s110909	1.0	MEGAICAL	
1s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	120 PPM	s110909	1.0	MEGAICAL	
1s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	140 PPM	s110909	1.0	MEGAICAL	
1s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	150 PPM	s110909	1.0	MEGAICAL	
1s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	180 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBNO91106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0|MEGAICAL	|
s6k0920.d	WBNO91106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0|MEGAICAL	|
s6k0921-D.d	WBNO91101-01	JMB3	10-NOV-2009 11:07	150 PPM	s110909	1.0|DFTTP	|
s6k0921.d	WBNO91101-01	JMB3	10-NOV-2009 11:07	150 PPM	s110909	1.0|DFTTP	|
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	-----	s110909	1.0|INST BLK	|
s6k0923.d	WBNO91016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0|AP12ICAL	|
s6k0924.d	WBNO91016-02	JMB3	10-NOV-2009 12:36	120 PPM	s110909	1.0|AP12ICAL	|
s6k0925.d	WBNO91016-03	JMB3	10-NOV-2009 13:13	140 PPM	s110909	1.0|AP12ICAL	|
s6k0926.d	WBNO91016-04	JMB3	10-NOV-2009 13:51	150 PPM	s110909	1.0|AP12ICAL	|
s6k0927.d	WBNO91016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0|AP12ICAL	|
s6k0928.d	WBNO91016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0|AP12ICAL	|
s6k0929.d	WBNO91016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0|AP12ICAL	|
s6k0930.d	WBNO91029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0|PESTICAL	|
s6k0931.d	WBNO91029-24	JMB3	10-NOV-2009 16:56	120 PPM	s110909	1.0|PESTICAL	|
s6k0932.d	WBNO91029-23.1	JMB3	10-NOV-2009 17:33	140 PPM	s110909	1.0|PESTICAL	|
s6k0933.d	WBNO91029-22	JMB3	10-NOV-2009 18:09	150 PPM	s110909	1.0|PESTICAL	|
s6k0934.d	WBNO91029-21	JMB3	10-NOV-2009 18:45	180 PPM	s110909	1.0|PESTICAL	|
s6k0935.d	WBNO91029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0|PESTICAL	|
s6k0936.d	WBNO91029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0|PESTICAL	|
s6k0937-D.d	WBNO91106-09.1	JMB3	10-NOV-2009 20:29	140 PPM	s110909	1.0|MEGAICV	| FAILED SC 8270D
s6k0937.d	WBNO91106-09.1	JMB3	10-NOV-2009 20:29	140 PPM	s110909	1.0|MEGAICV	|
s6k0938-D.d	WBNO91016-08.1	JMB3	10-NOV-2009 21:07	140 PPM	s110909	1.0|AP12ICV	|
s6k0938.d	WBNO91016-08.1	JMB3	10-NOV-2009 21:07	140 PPM	s110909	1.0|AP12ICV	|
s6k0939-D.d	WBNO91029-26.1	JMB3	10-NOV-2009 21:35	140 PPM	s110909	1.0|PESTICV	|
s6k0939.d	WBNO91029-26.1	JMB3	10-NOV-2009 21:35	140 PPM	s110909	1.0|PESTICV	|
s6k0940-D.d	WBNO91101-01	JMB3	10-NOV-2009 22:12	150 PPM	s110909	1.0|DFTTP	|
s6k0940.d	WBNO91101-01	JMB3	10-NOV-2009 22:12	150 PPM	s110909	1.0|DFTTP	|

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	-----s110909	1.0|INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM s110909	1.0|HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM s110909	1.0|HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM s110909	1.0|HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM s110909	1.0|HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM s110909	1.0|HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM s110909	1.0|HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM s110909	1.0|NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM s110909	1.0|NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM s110909	1.0|NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM s110909	1.0|NEVICAL	DUSE - disabled
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM s110909	1.0|NEVICAL	
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM s110909	1.0|NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM s110909	1.0|NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM s110909	1.0|HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM s110909	1.0|HEXICV	

Instrument Batch: /chem/MSD6.i/s110909.b

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 02/04/2010 METHOD: See raw data OPERATOR: nag1 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: 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.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD6.i/s020410.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1s6b0401.d	WBN100107-01	nag1	04-FEB-2010 08:43	DFTPP	s020410	1.0	DFTPP	DUSE
1s6b0402.d	WBN100107-01	nag1	04-FEB-2010 11:04	DFTPP	s020410	1.0	DFTPP	
1s6b0403.d	WBN100121-17.4	nag1	04-FEB-2010 11:19	CCV	s020410	1.0	MEGACVS	199821
1s6b0404.d	WBN100120-03.2	nag1	04-FEB-2010 11:53	CCV	s020410	1.0	IAPCVS	
1s6b0405.d	WBN100103.23.5	nag1	04-FEB-2010 12:22	CCV	s020410	1.0	PESTCVS	
1s6b0406.d	UBN091117-08.3	nag1	04-FEB-2010 12:50	CCV	s020410	1.0	NEVCVS	
1s6b0407.d	1202025004	nag1	04-FEB-2010 13:19	945501	10-1384	1.0	SBLK01	
1s6b0408.d	1202025005	nag1	04-FEB-2010 13:48	945501	10-1384	1.0	SBLK01LCS	
1s6b0409.d	1202027211	nag1	04-FEB-2010 14:17	946459	1245319	1.0	SBLK01LCS	DUSE - C77 less than 10% recovery - rr s6b0318
1s6b0410.d	1202027207	nag1	04-FEB-2010 14:46	946459	1245319	1.0	MS	DUSE - C77 not present - rr s6b0322
1s6b0411.d	1202027209	nag1	04-FEB-2010 15:15	946459	1245319	1.0	MSD	DUSE - C77 not present - rr s6b0323
1s6b0412.d	1245387001	nag1	04-FEB-2010 15:45	945501	10-1384	1.0	LANL	
1s6b0413.d	1245387002	nag1	04-FEB-2010 16:13	945501	10-1384	1.0	LANL	
1s6b0414.d	1202025006	nag1	04-FEB-2010 16:42	945501	10-1384	1.0	MS	C36 bias low
1s6b0415.d	1202025007	nag1	04-FEB-2010 17:10	945501	10-1384	1.0	MSD	failed C36
1s6b0416.d	1245387003	nag1	04-FEB-2010 17:39	945501	10-1384	1.0	LANL	
1s6b0417.d	1245387004	nag1	04-FEB-2010 18:07	945501	10-1384	1.0	LANL	
1s6b0418.d	1245387005	nag1	04-FEB-2010 18:36	945501	10-1384	1.0	LANL	
1s6b0419.d	1245387006	nag1	04-FEB-2010 19:04	945501	10-1384	1.0	LANL	

Is6b0420.d	1245387007	1	04-FEB-2010 19:33	945501	10-1384	1	1.0	LANL	1
Is6b0421.d	1245387008	1	04-FEB-2010 20:01	945501	10-1384	1	1.0	LANL	1
Is6b0422.d	1245387009	1	04-FEB-2010 20:29	945501	10-1384	1	1.0	LANL	1
Is6b0423.d	1245387010	1	04-FEB-2010 20:57	945501	10-1384	1	1.0	LANL	1
Is6b0424.d	1245387011	1	04-FEB-2010 21:25	945501	10-1384	1	1.0	LANL	USE - failed IS - rr - s6b0527 confirmed

(s10HInstrument Batch: /chem/MSD6.i/s020410.b

Page: 1

DATA EXCEPTION REPORT

Mo.Day Yr. 08-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEM/VOA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 945501	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245387(10-1384) Application Issues: Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. The MSD failed recovery for Hexachlorocyclopentadiene. 2. The MS/MSD failed RPD for 4-Nitrophenol.		1. As the MS and MSD displayed similar recoveries, the failure was attributed to sample matrix interference and the data have been reported. Please see the QC Summary for the specific values. 2. Since the individual MS and MSD passed recovery for this analyte, the results have been reported un-qualified for the failure. Please see the QC Summary for the specific value.	

Originator's Name:

Nathan Greene 08-FEB-10

Data Validator/Group Leader:

Daniel Beacham 09-FEB-10

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020510.b/s6b0527.d
Lab Smp Id: 245387011 Client Smp ID: RE14-10-7683
Inj Date : 05-FEB-2010 22:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387011|9455013|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/s020510.b/MSD6-M8270C-AQA-110909.m
Meth Date : 06-Feb-2010 14:21 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	25.37270	% 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	4.897	4.897	(1.000)	175861	40.0000	
* 29 Naphthalene-d8	136	6.174	6.177	(1.000)	701255	40.0000	
* 46 Acenaphthene-d10	164	8.047	8.047	(1.000)	399089	40.0000	
* 67 Phenanthrene-d10	188	9.662	9.657	(1.000)	677874	40.0000	
* 91 Chrysene-d12	240	12.702	12.689	(1.000)	405619	40.0000	
* 98 Perylene-d12	264	15.067	15.052	(1.000)	176824	40.0000	
\$ 3 2-Fluorophenol	112	3.741	3.728	(0.764)	179263	40.7050	1820
\$ 5 Phenol-d5	99	4.513	4.508	(0.921)	282571	50.8368	2270
\$ 20 Nitrobenzene-d5	82	5.435	5.438	(0.880)	132811	26.7729	1200
\$ 39 2-Fluorobiphenyl	172	7.300	7.300	(0.907)	317053	30.8272	1380
\$ 60 2,4,6-Tribromophenol	329	8.898	8.895	(1.106)	67924	58.3122	2600
\$ 81 p-Terphenyl-d14	244	11.367	11.359	(0.895)	287617	43.9695	1960

ION RATIO REPORT

SV REPORT

Data file: s6b0527.d

Report Date: 02/06/2010 14:14

Lab. ID: 245387011

SampleType: SAMPLE

Injection Date: 05-FEB-2010 22:18

Operator: nag1

Instrument: MSD6.i

Sample Info: |245387011|9455013|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100122-01

Comment:

Method used: /chem/MSD6.i/s020510.b/MSD6-M8270C-AQA-110909.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1384

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	6252	2.51	2.77	80-120	100	(T)
42	653	2.50	2.77	59-119	10	(QT)
43	4365	2.44	2.77	5- 65	70	(QT)

4 Aniline				CAS#: 62-53-3		
66	11015	4.51	4.59	80-120	100	(T)
93	13817	4.56	4.59	228-288	125	(Q)

6 Phenol				CAS#: 108-95-2		
94	19928	4.27	4.52	80-120	100	(T)
66	3788	4.27	4.52	13- 73	19	(T)
65	14518	4.27	4.52	0- 30	73	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	18307	5.44	5.27	80-120	100	(T)
42	10978	5.44	5.27	37- 97	60	(T)

22 Isophorone				CAS#: 78-59-1		
82	132811	5.44	5.69	80-120	100	(T)
138	143	6.15	5.69	0- 50	0	(T)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	12416	7.64	7.45	80-120	100	(T)
164	711	7.64	7.45	3- 63	6	(T)
127	990	7.64	7.45	8- 68	8	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
42	o-Nitroaniline		CAS#: 88-74-4			
65	14187	7.64	7.55	80-120	100	(T)
92	18258	7.64	7.55	37- 97	129	(QT)
138	1452	7.64	7.55	84-144	10	(QT)
<hr/>						
43	Dimethylphthalate		CAS#: 131-11-3			
163	69609	8.05	7.73	80-120	100	(T)
164	399089	8.05	7.73	0- 40	573	(QT)
<hr/>						
45	Acenaphthylene		CAS#: 208-96-8			
152	49962	7.46	7.90	80-120	100	(T)
151	54528	7.46	7.90	0- 49	109	(QT)
153	4381	7.46	7.90	0- 43	9	(T)
<hr/>						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	51767	8.05	8.24	80-120	100	(T)
89	404	8.05	8.24	40-100	1	(QT)
63	327	8.04	8.24	14- 74	1	(QT)
<hr/>						
53	Fluorene		CAS#: 86-73-7			
166	4863	8.90	8.64	80-120	100	(T)
165	4955	8.90	8.64	62-122	102	(T)
167	1136	8.90	8.64	0- 44	23	(T)
<hr/>						
55	2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1			
198	116	8.89	8.68	80-120	100	(T)
105	387	9.07	8.68	9- 69	333	(QT)
51	447	8.90	8.68	19- 79	384	(QT)
<hr/>						
56	p-Nitroaniline		CAS#: 100-01-6			
138	225	8.18	8.66	80-120	100	(T)
108	583	8.48	8.66	48-108	258	(QT)
92	147	8.41	8.65	19- 79	65	(T)
<hr/>						
79	Pyrene		CAS#: 129-00-0			
202	3570	10.97	11.22	80-120	100	(T)
200	593	10.97	11.22	0- 51	17	(T)
101	2522	10.97	11.22	0- 44	71	(QT)
<hr/>						
99	Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5			
276	329	17.10	17.06	80-120	100	()
138	263	17.02	17.06	4- 64	80	(Q)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

Data file : /chem/MSD6.i/s020510.b/s6b0527.d
Lab Smp Id: 245387011 Client Smp ID: RE14-10-7683
Inj Date : 05-FEB-2010 22:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |245387011|9455013|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/s020510.b/MSD6-M8270C-AQA-110909.m
Meth Date : 06-Feb-2010 14:21 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1384.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	25.37270	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.897	1000830	40.000
* 29 Naphthalene-d8	6.174	1442513	40.000
* 67 Phenanthrene-d10	9.662	1635268	40.000
* 91 Chrysene-d12	12.702	1556130	40.000
* 98 Perylene-d12	15.067	522410	40.000

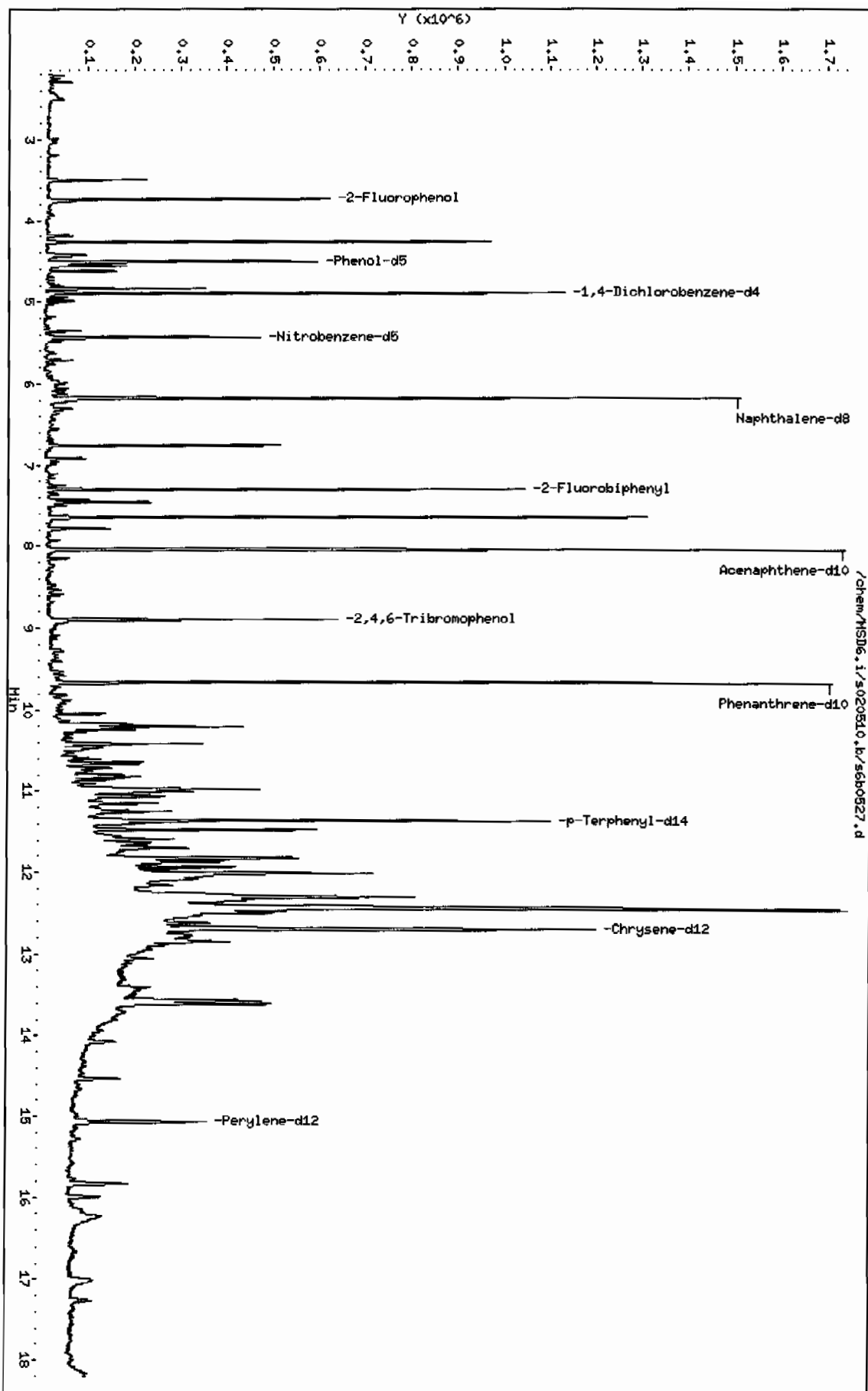
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.499	192404	7.68976832	343	0		0	10
3-Carene					CAS #: 13466-78-9		
4.839	302189	12.0775274	539	98	NIST05.L	15151	10
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth					CAS #: 5655-61-8		
6.758	454732	12.6094300	563	99	NIST05.L	54340	29
Unknown Aldol Condensate					CAS #:		
10.182	201046	4.91774026	220	0		0	67
n-Hexadecanoic acid					CAS #: 57-10-3		
10.205	428391	10.4787853	468	99	NIST05.L	96235	67
Unknown					CAS #:		
10.238	199450	4.87870428	218	0		0	67
Unknown					CAS #:		
10.417	330532	8.08507496	361	0		0	67
Unknown					CAS #:		
10.827	181847	4.44811654	198	0		0	67
Unknown					CAS #:		
11.008	348279	8.51919595	380	0		0	67
Unknown					CAS #:		
11.069	257657	6.30249332	281	0		0	67
Unknown					CAS #:		
11.151	172362	4.21610776	188	0		0	67
Unknown					CAS #:		
11.252	216010	5.55248413	248	0		0	91
Cyclohexane, hexaethylidene-					CAS #: 1482-93-5		
11.479	478943	12.3111177	550	95	NIST05.L	85536	91
Unknown					CAS #:		
11.591	192719	4.95380161	221	0		0	91
Unknown					CAS #:		
11.703	237188	6.09687215	272	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
11.828	769218	19.7725910	882	0		0	91
Unknown				CAS #:			
11.872	445490	11.4512287	511	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1235-74-1			
11.938	315278	8.10416338	362	95	NIST05.L	133621	91
Unknown				CAS #:			
12.017	1225527	31.5019046	1410	0		0	91
.gamma.-Elemene				CAS #: 30824-67-0			
12.091	186933	4.80507728	214	84	NIST05.L	59818	91
Unknown				CAS #:			
12.274	238302	6.12549756	273	0		0	91
Unknown				CAS #:			
12.310	1215606	31.2468812	1390	0		0	91
Unknown				CAS #:			
12.346	460799	11.8447450	529	0		0	91
Unknown				CAS #:			
12.453	3560809	91.5298140	4080	0		0	91
Unknown				CAS #:			
12.501	438430	11.2697530	503	0		0	91
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-				CAS #: 1000159-38-2			
12.853	310193	7.97343356	356	83	NIST05.L	59916	91
7.alpha.-Ethyl-8.beta.-hydroxy-2,6-dimet				CAS #: 1000077-92-4			
13.566	577247	14.8380103	662	83	NIST05.L	62984	91
Unknown				CAS #:			
13.609	477604	12.2767186	548	0		0	91
Eicosane				CAS #: 112-95-8			
15.829	228462	17.4929004	781	95	NIST05.L	113490	98

Data File: /chem/HSD6.i/s020510.b/s60527.d
 Date: 05-FEB-2010 22:18
 Client ID: REL4-10-7683
 Sample Info: 1245387011945501311SVH11LHNL
 Volume Injected (μL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD6.i
 Operator: nag1
 Column diameter: 0.20



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 124538701119455013111SVH111LANL

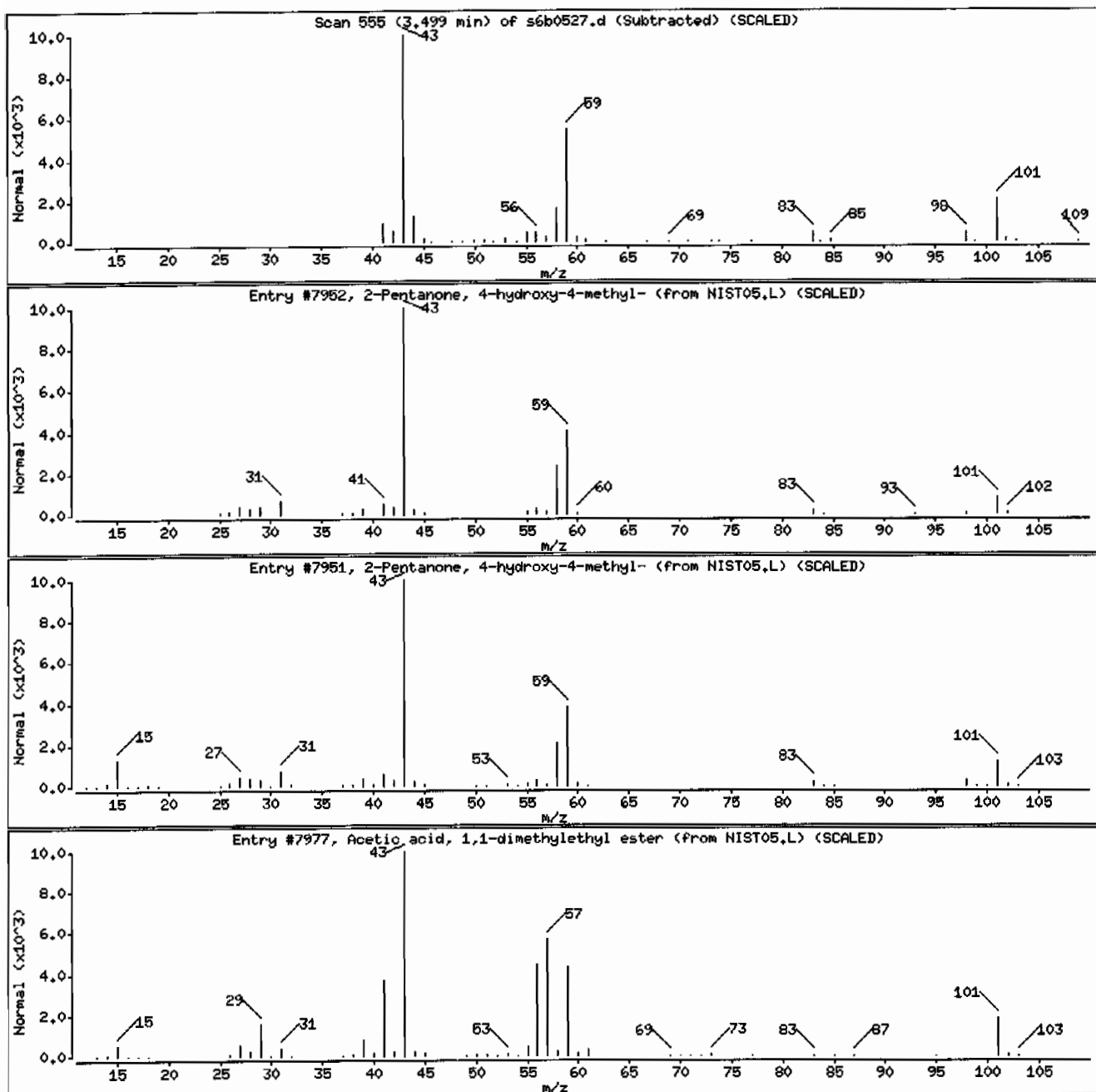
Volume Injected (uL): 0.5

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	40	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	36	C6H12O2	116



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH111LANL

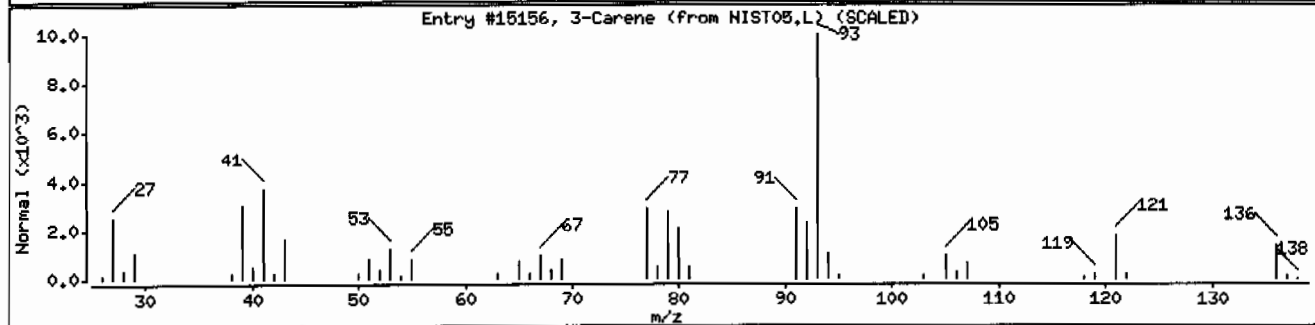
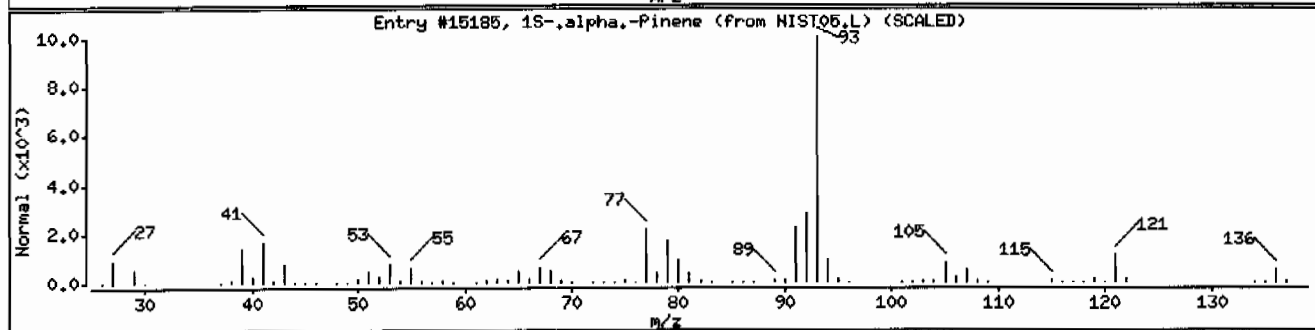
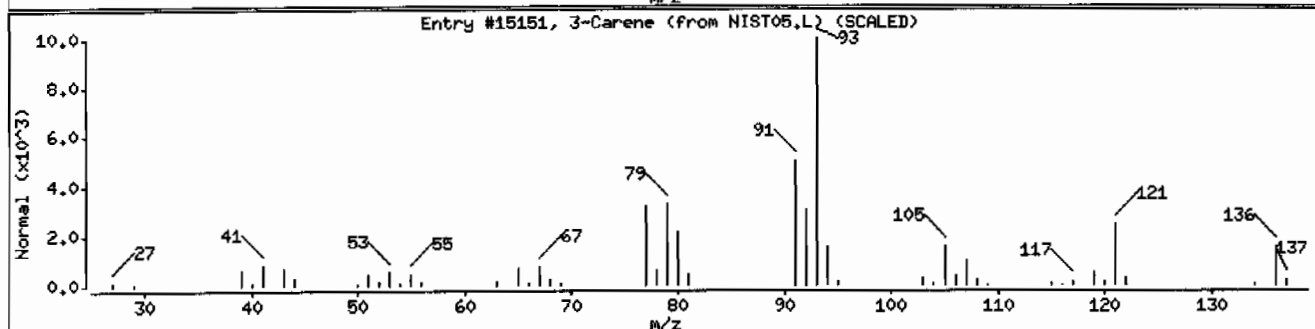
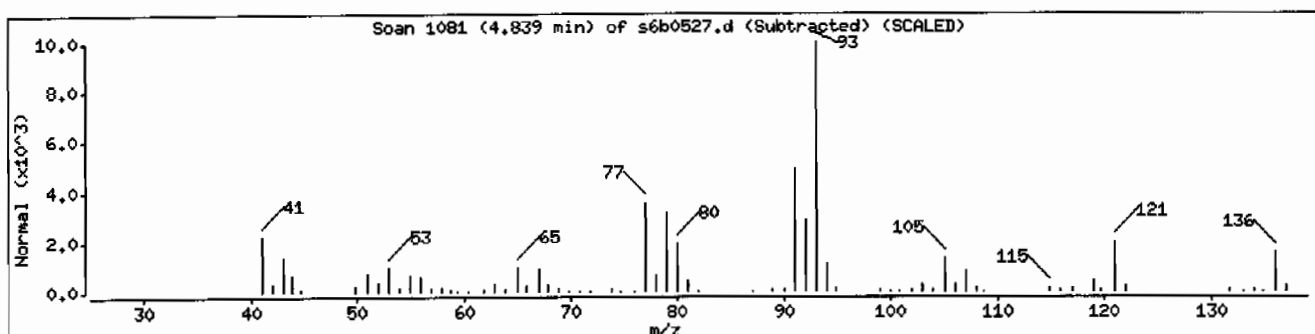
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15151	98	C10H16	136
1S-,alpha,-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011|9455013|1|SVH11|LANL

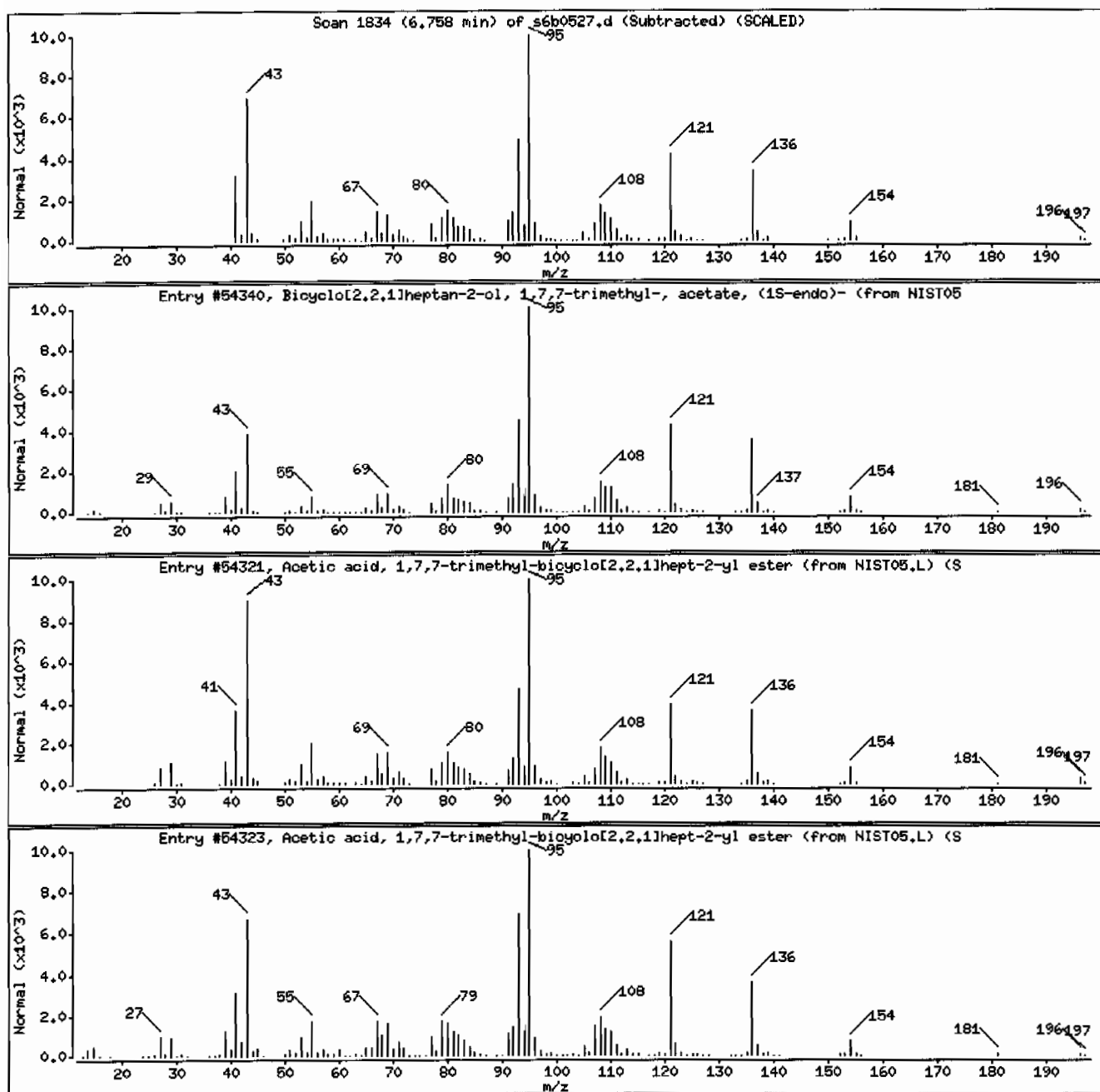
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	5655-61-8	NIST05.L	54340	99	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	92618-89-8	NIST05.L	54321	98	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	92618-89-8	NIST05.L	54323	95	C12H20O2	196



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011|945501311|SVH11|LANL

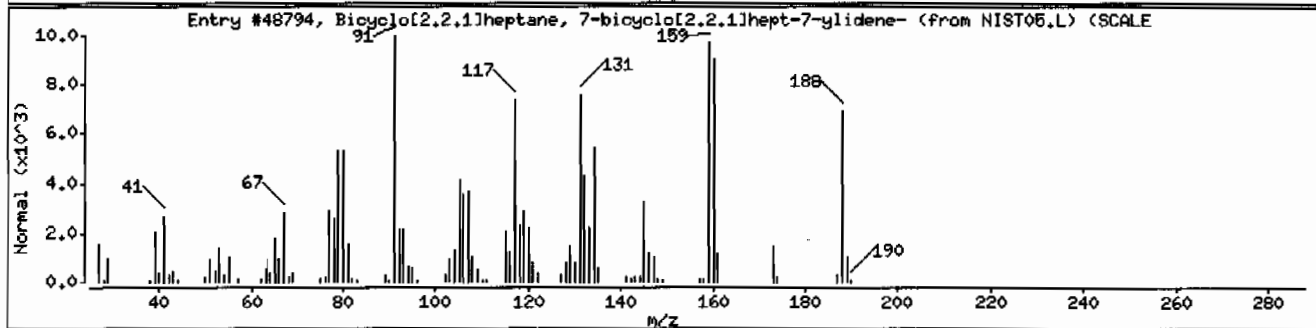
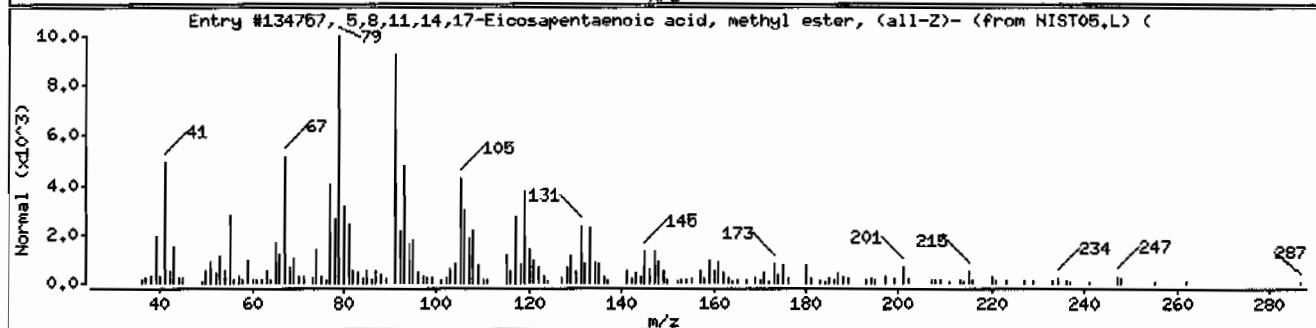
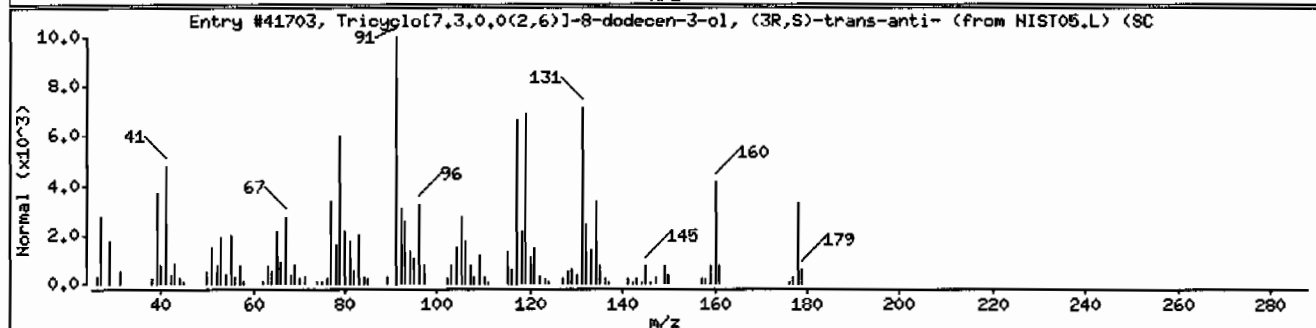
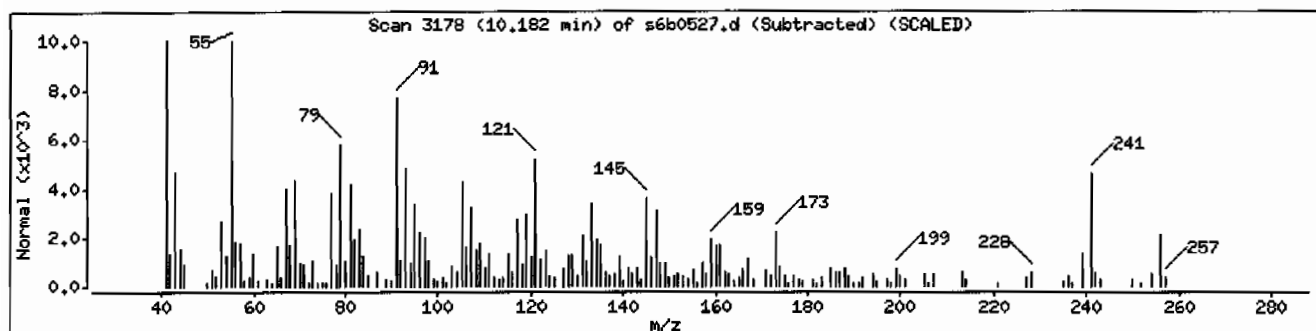
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
Tricyclo[7.3.0.0(2,6)]-8-dodecen-3-ol, (	1000099-25-3	NIST05.L	41703	22	C12H18O	178
5,8,11,14,17-Eicosapentaenoic acid, meth	2734-47-6	NIST05.L	134757	22	C21H32O2	316
Bicyclo[2.2.1]heptane, 7-bicyclo[2.2.1]h	61689-29-3	NIST05.L	48794	22	C14H20	188



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 12453870111945501311SVH111LANL

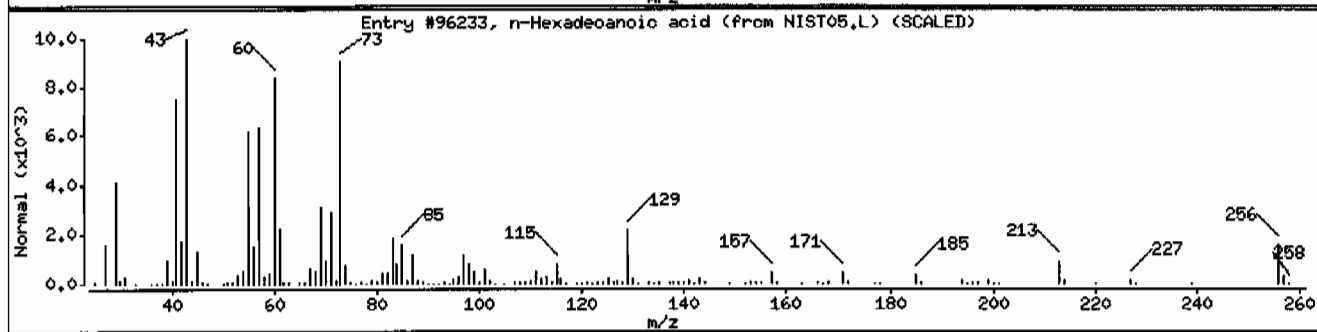
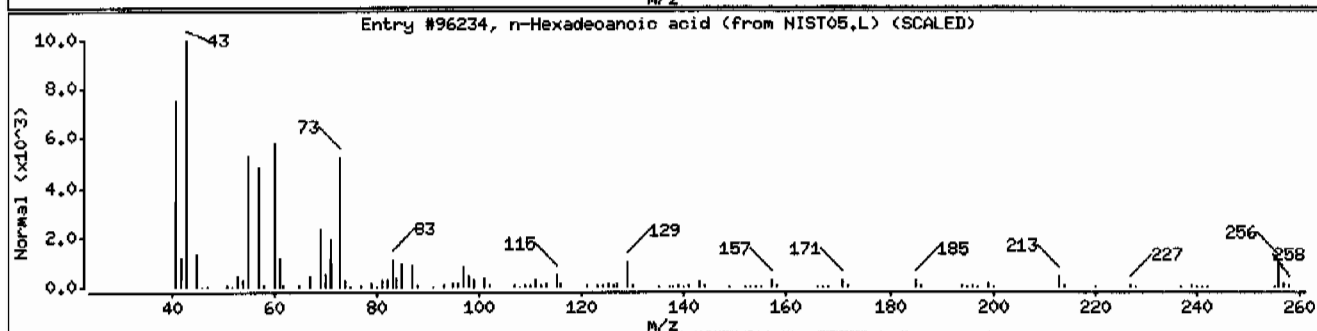
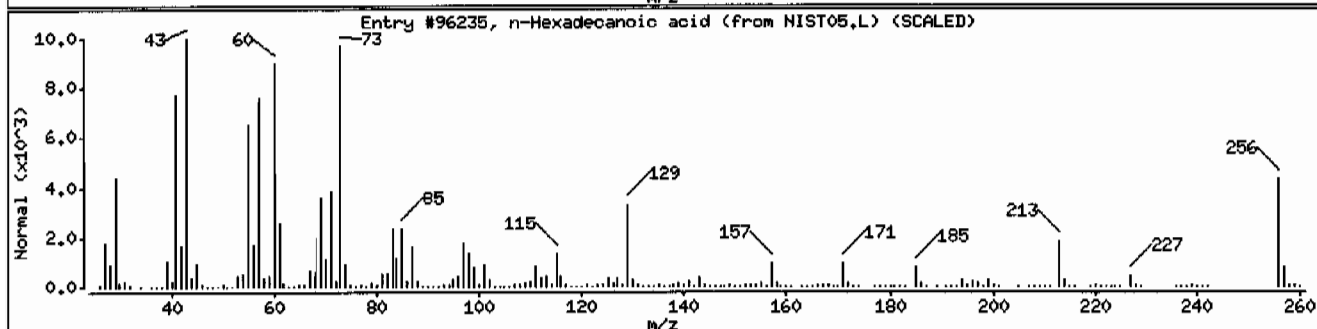
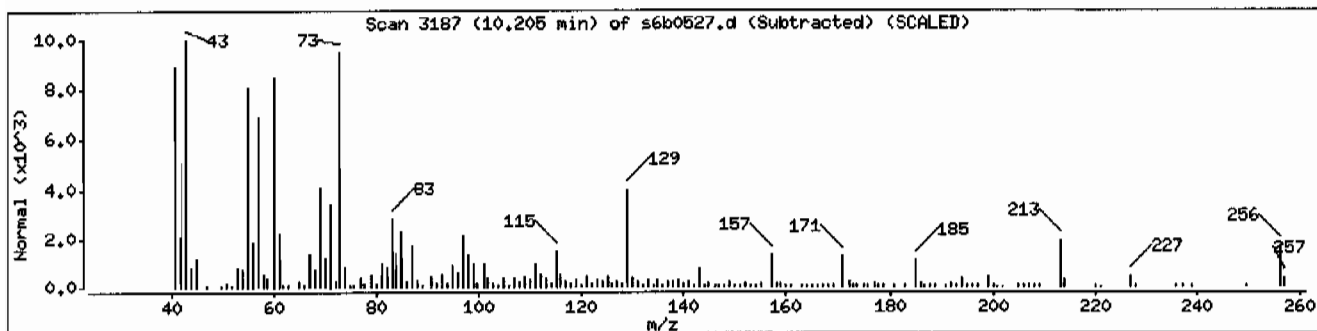
Volume Injected (uL): 0.5

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	99	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	96	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	96	C16H32O2	256



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: 12453870111945501311SVMI11LANL

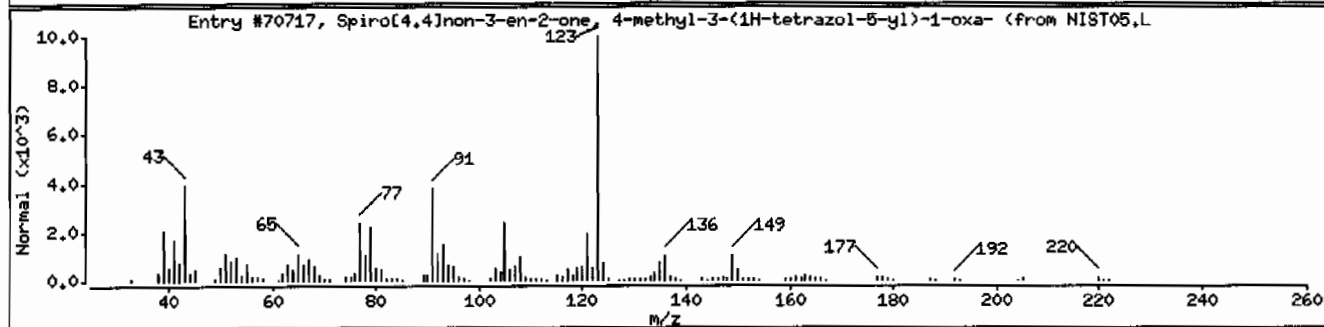
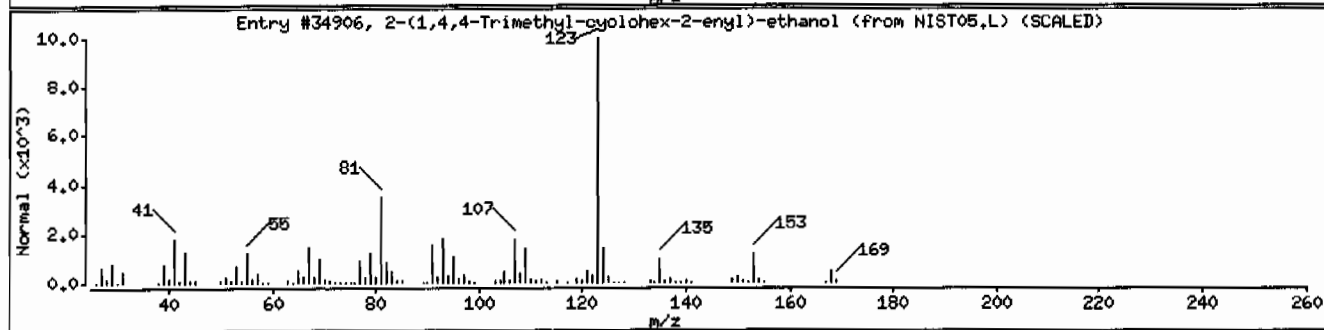
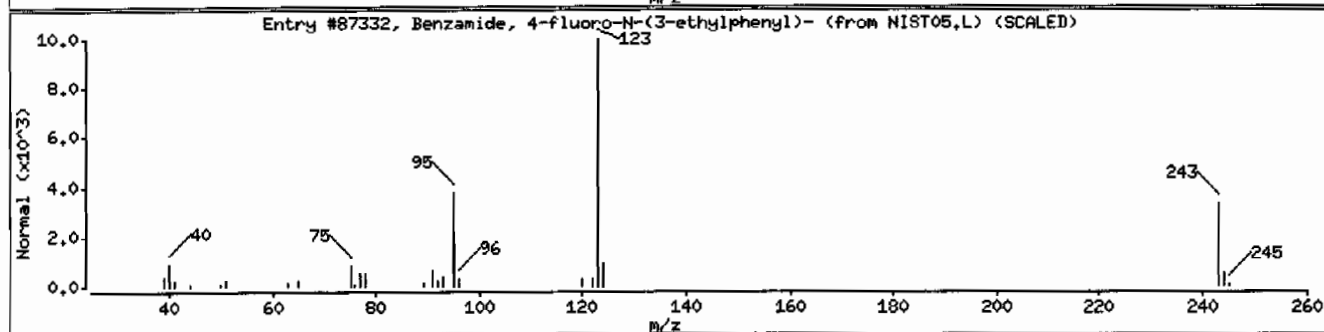
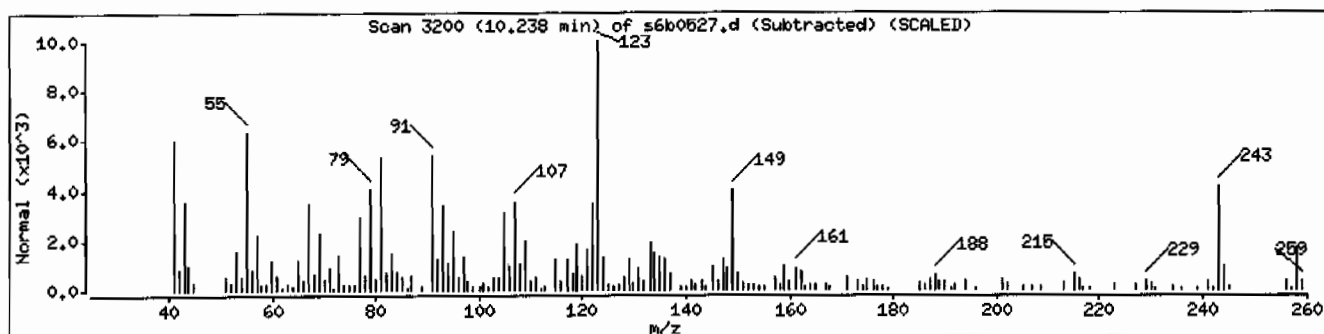
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzamide, 4-fluoro-N-(3-ethylphenyl)-	101398-05-4	NIST05.L	87332	38	C15H14FN0	243
2-(1,4,4-Trimethyl-cyclohex-2-enyl)-etha	1000190-92-3	NIST05.L	34906	38	C11H200	168
Spiro[4.4]non-3-en-2-one, 4-methyl-3-(1H	1000316-40-4	NIST05.L	70717	30	C10H12N4O2	220



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011/945501311/SVH11/LANL

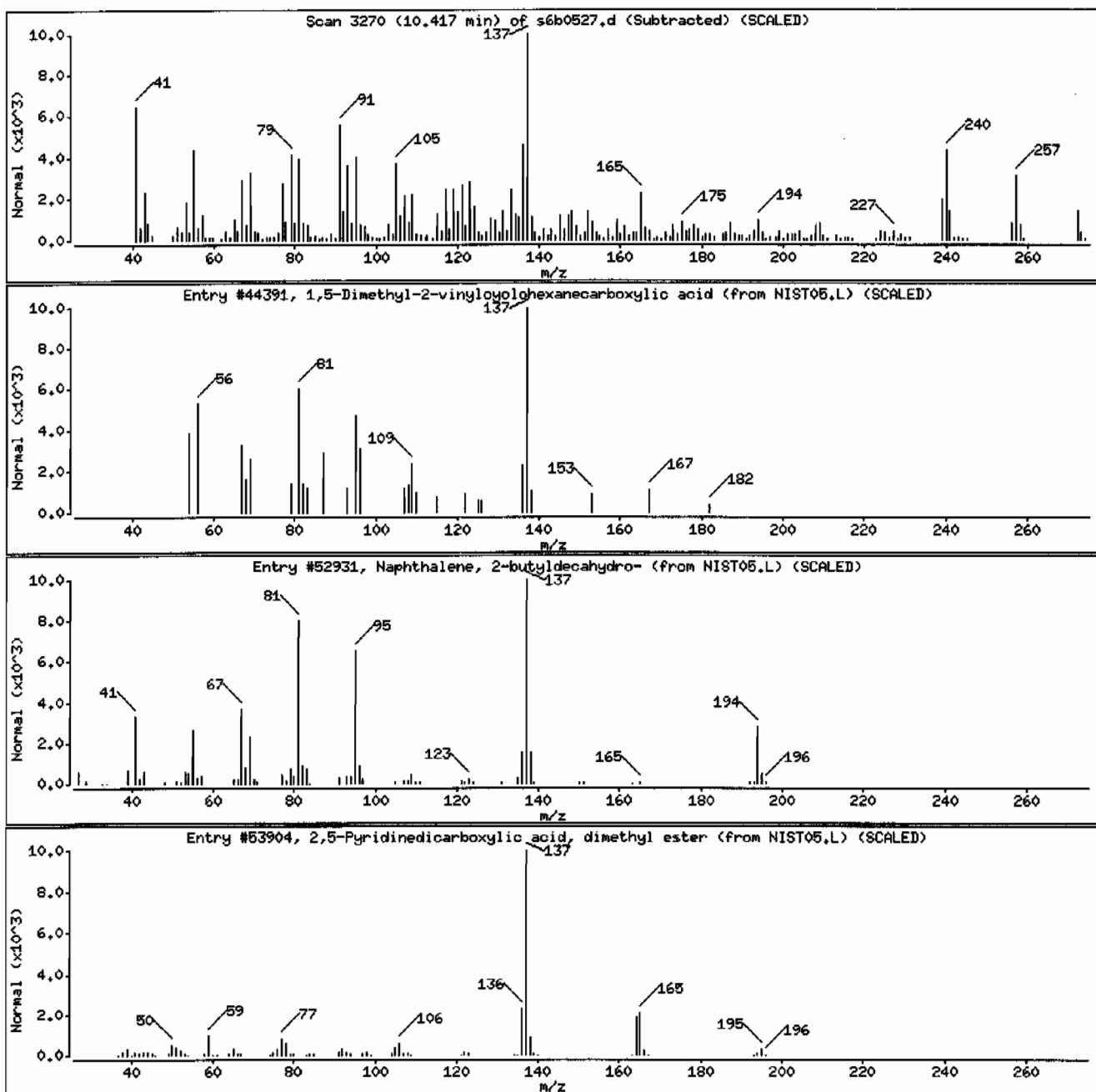
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5-Dimethyl-2-vinyloxylohexanecarboxyli	106542-17-0	NIST05.L	44391	38	C11H18O2	182
Naphthalene, 2-butyldecahydro-	6305-52-8	NIST05.L	52931	35	C14H26	194
2,5-Pyridinedicarboxylic acid, dimethyl	881-86-7	NIST05.L	53904	30	C9H9NO4	196



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH111LANL

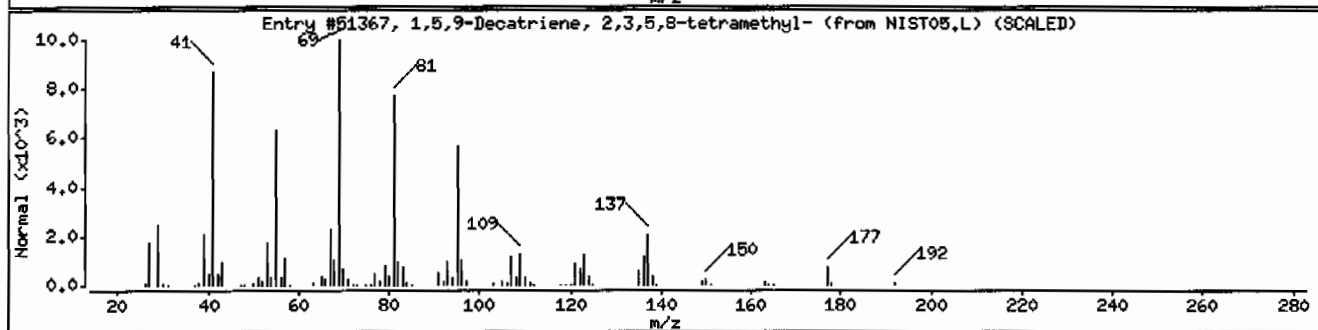
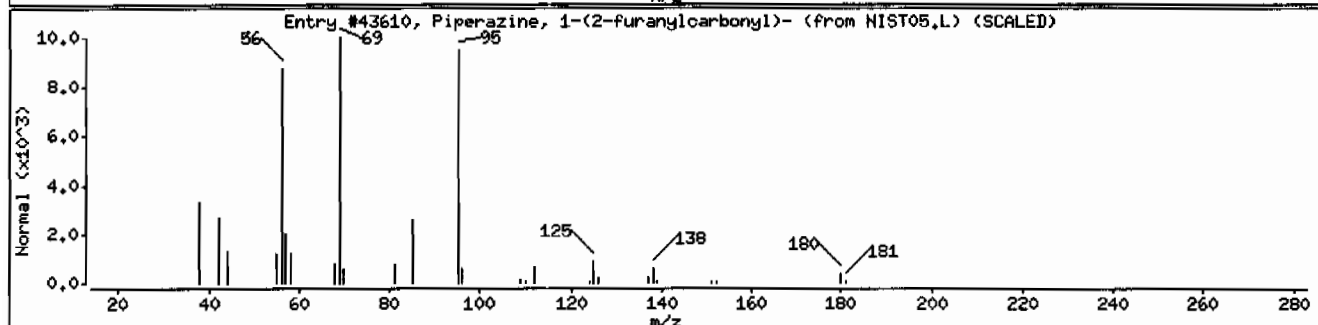
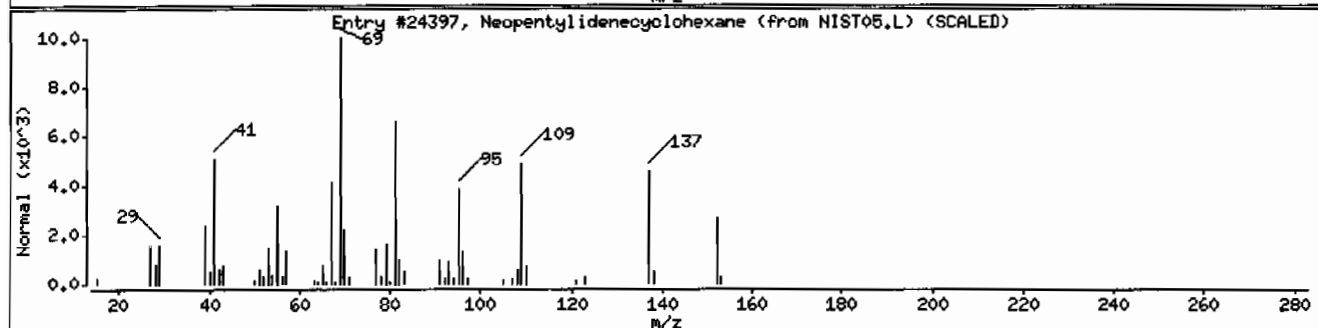
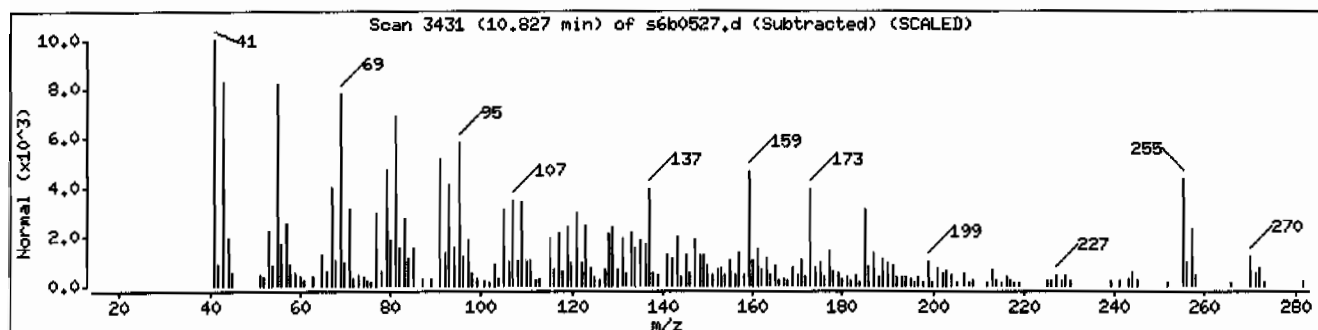
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Neopentylidenecyclohexane	39546-80-0	NIST05.L	24397	38	C11H20	152
Piperazine, 1-(2-furanylcarbonyl)-	40172-95-0	NIST05.L	43610	22	C9H12N2O2	180
1,5,9-Decatriene, 2,3,5,8-tetramethyl-	230646-72-7	NIST05.L	51367	22	C14H24	192



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH111LANL

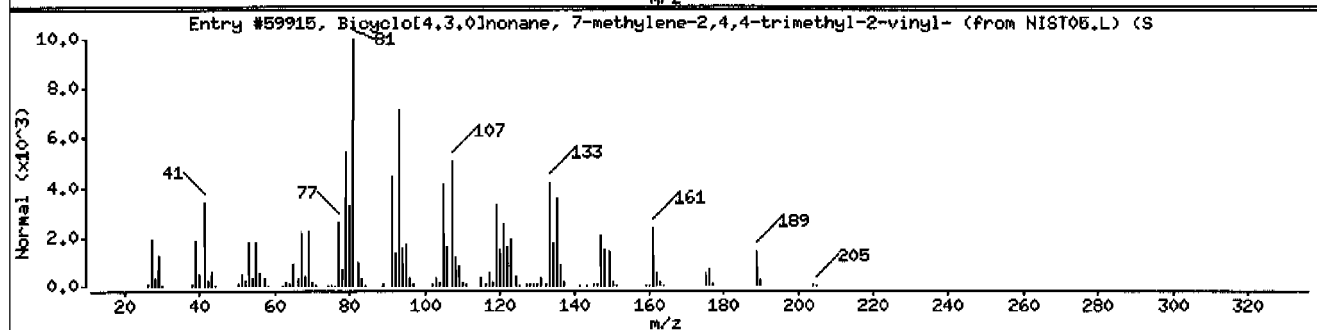
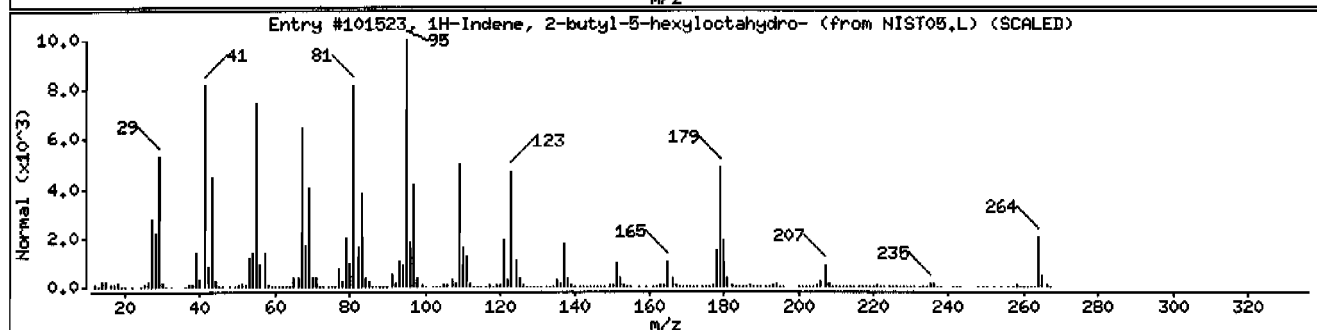
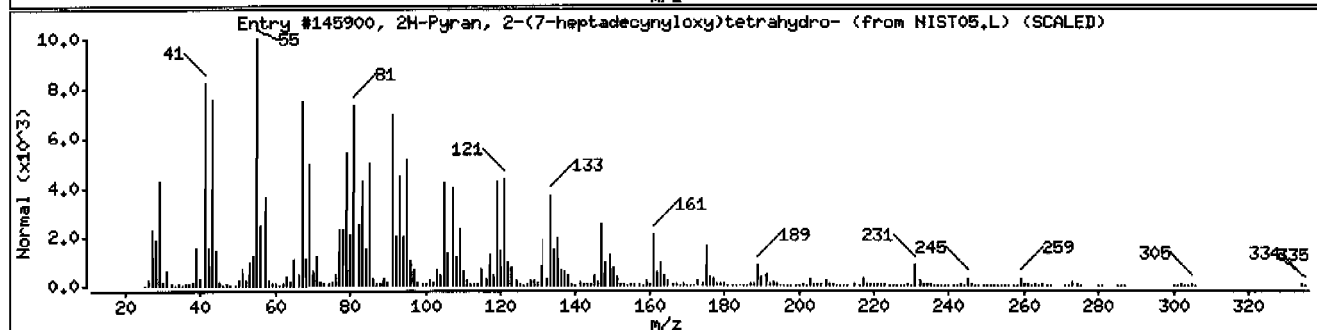
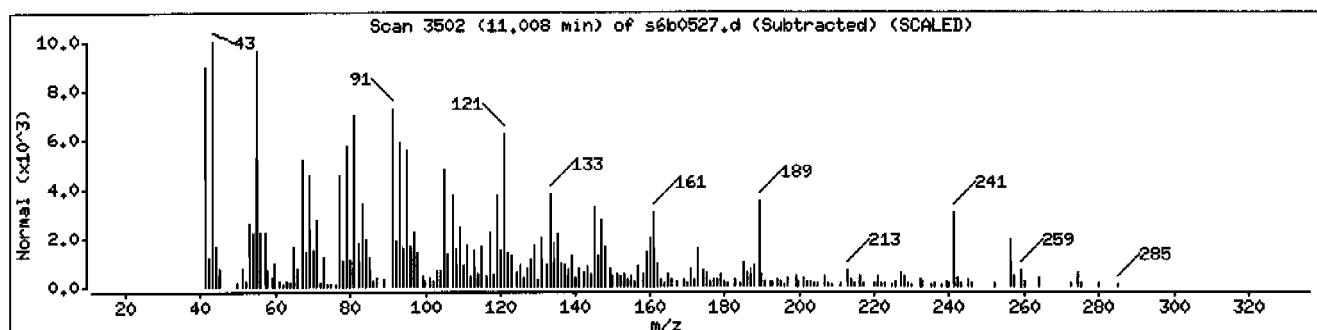
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-Pyran, 2-(7-heptadecyloxy)tetrahydro	56599-50-9	NIST05.L	145900	27	C22H40O2	336
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NIST05.L	101523	25	C19H36	264
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	25	C15H24	204



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245397011/945501311/SVH11/LANL

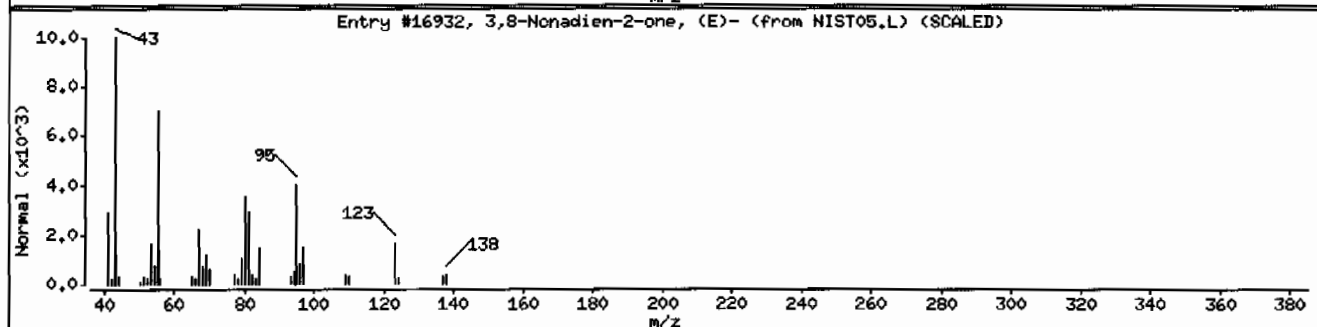
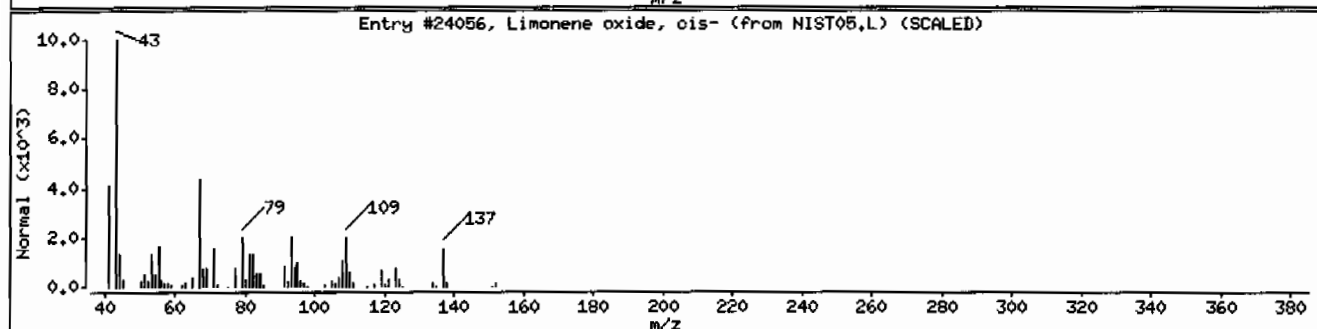
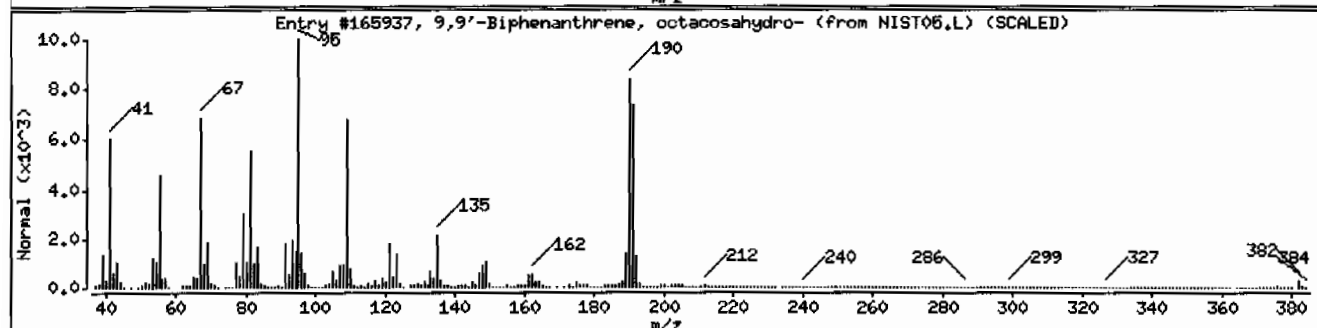
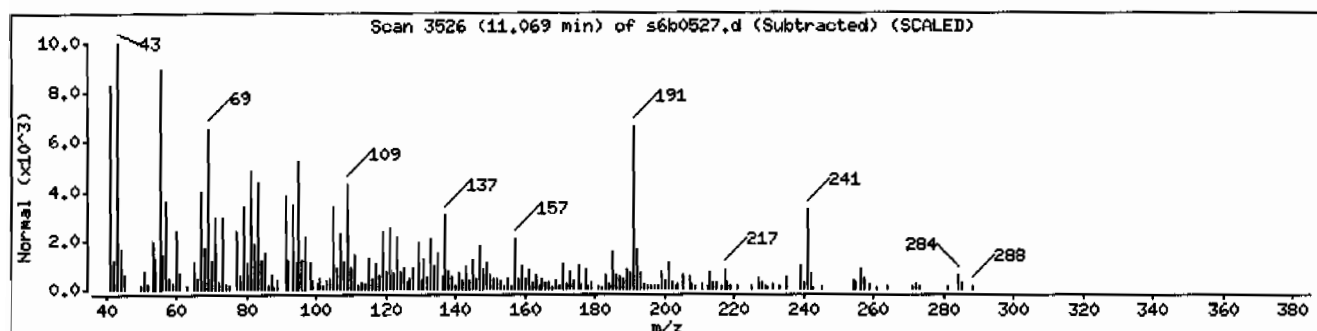
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,9'-Biphenanthrene, octacosahydro-	55334-18-4	NIST05.L	165937	43	C28H46	382
Limonene oxide, cis-	4680-24-4	NIST05.L	24056	25	C10H16O	152
3,8-Nonadien-2-one, (E)-	55282-90-1	NIST05.L	16932	25	C9H14O	138



Date: 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 12453870111945501311|SVH11|LANL

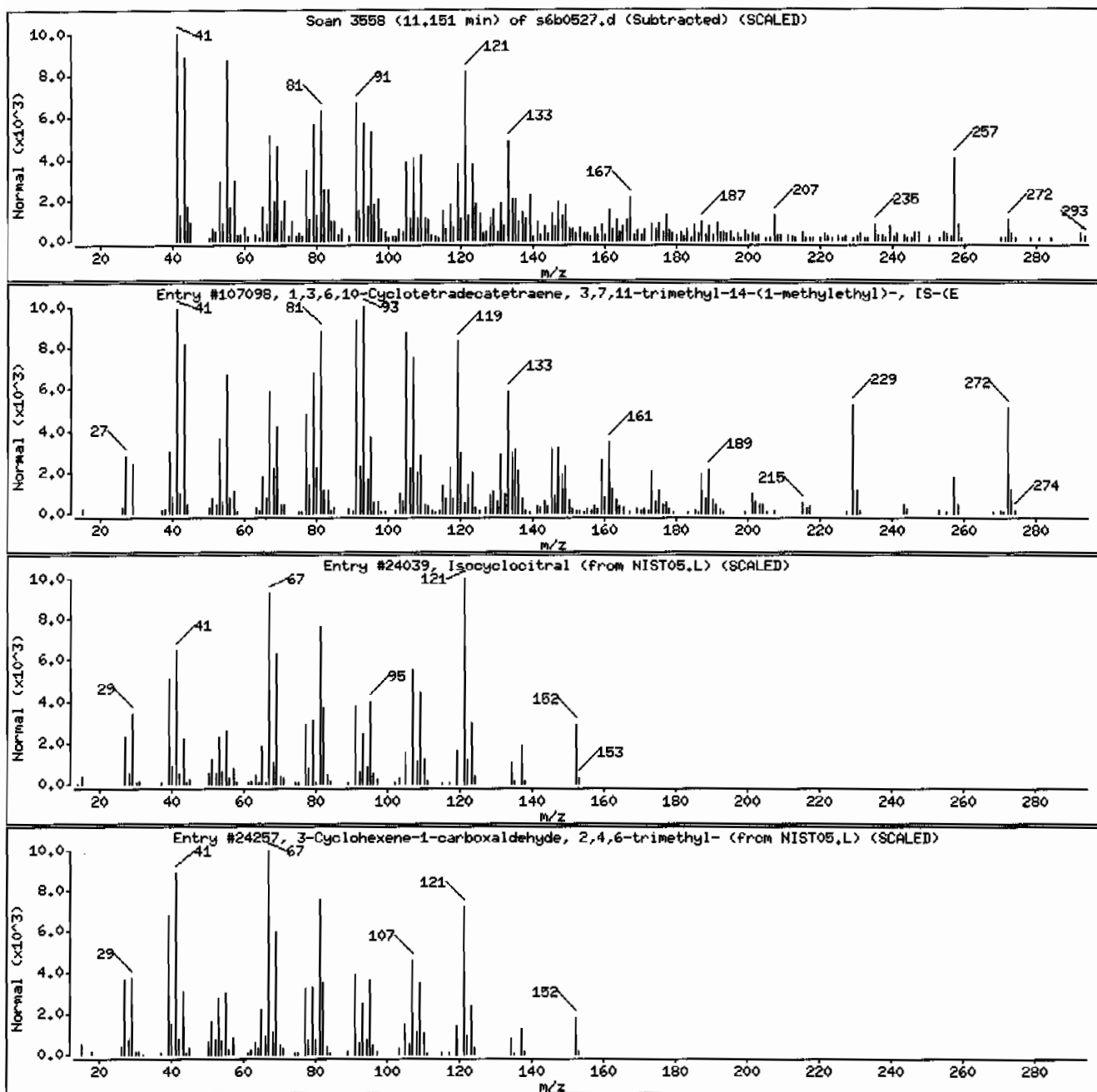
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,6,10-Cyclotetradecatetraene, 3,7,11-	1898-13-1	NIST05.L	107098	56	C20H32	272
Isocyclocitral	1335-66-6	NIST05.L	24039	50	C10H16O	152
3-Cyclohexene-1-carboxaldehyde, 2,4,6-tr	1423-46-7	NIST05.L	24257	50	C10H16O	152



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.1

Sample Info: 1245387011/945501311/SVH11/LANL

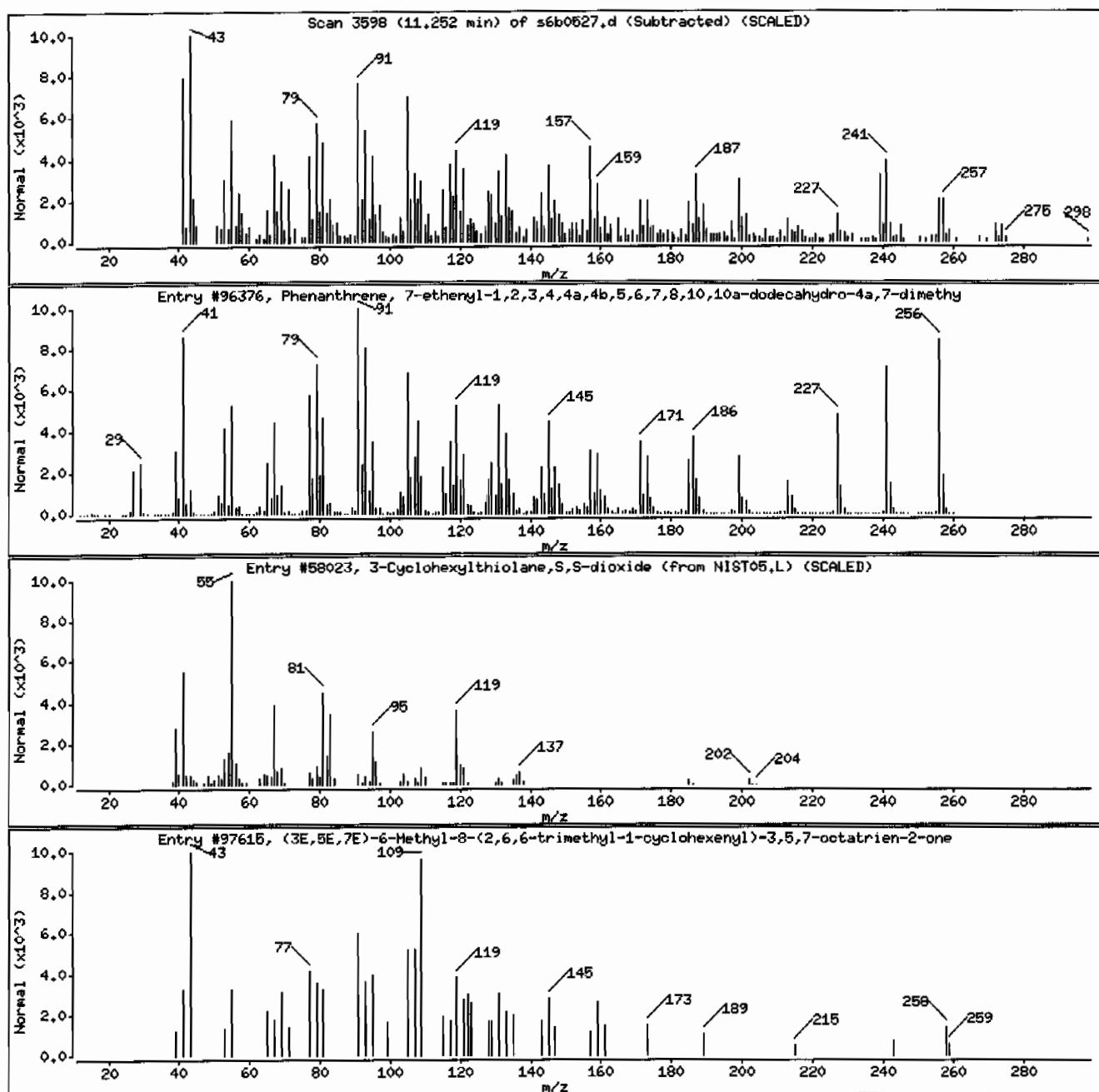
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	35	C19H28	256
3-Cyclohexylthiolane,S,S-dioxide	71053-08-2	NIST05.L	58023	25	C10H18O2S	202
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	12	C18H26O	258



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: I245387011|945501311|SVH11|LANL

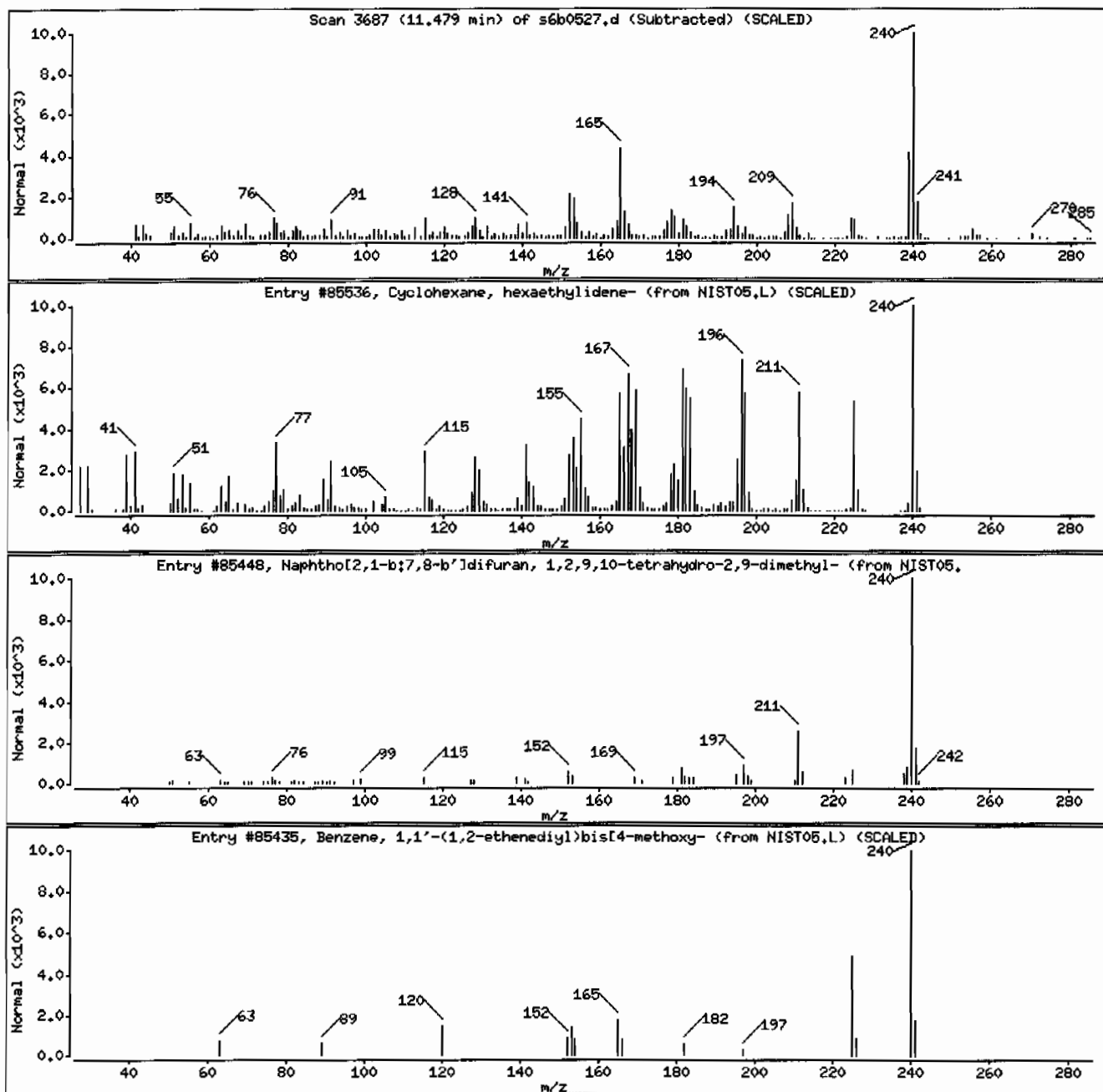
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, hexaethylidene-	1482-93-5	NIST05.L	85536	95	C18H24	240
Naphtho[2,1-b:7,8-b']difuran, 1,2,9,10-t	68873-21-2	NIST05.L	85448	46	C16H16O2	240
Benzene, 1,1'-(1,2-ethenediyl)bis[4-meth	4705-34-4	NIST05.L	85435	43	C16H16O2	240



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1248387011945501311SVMI11LANL

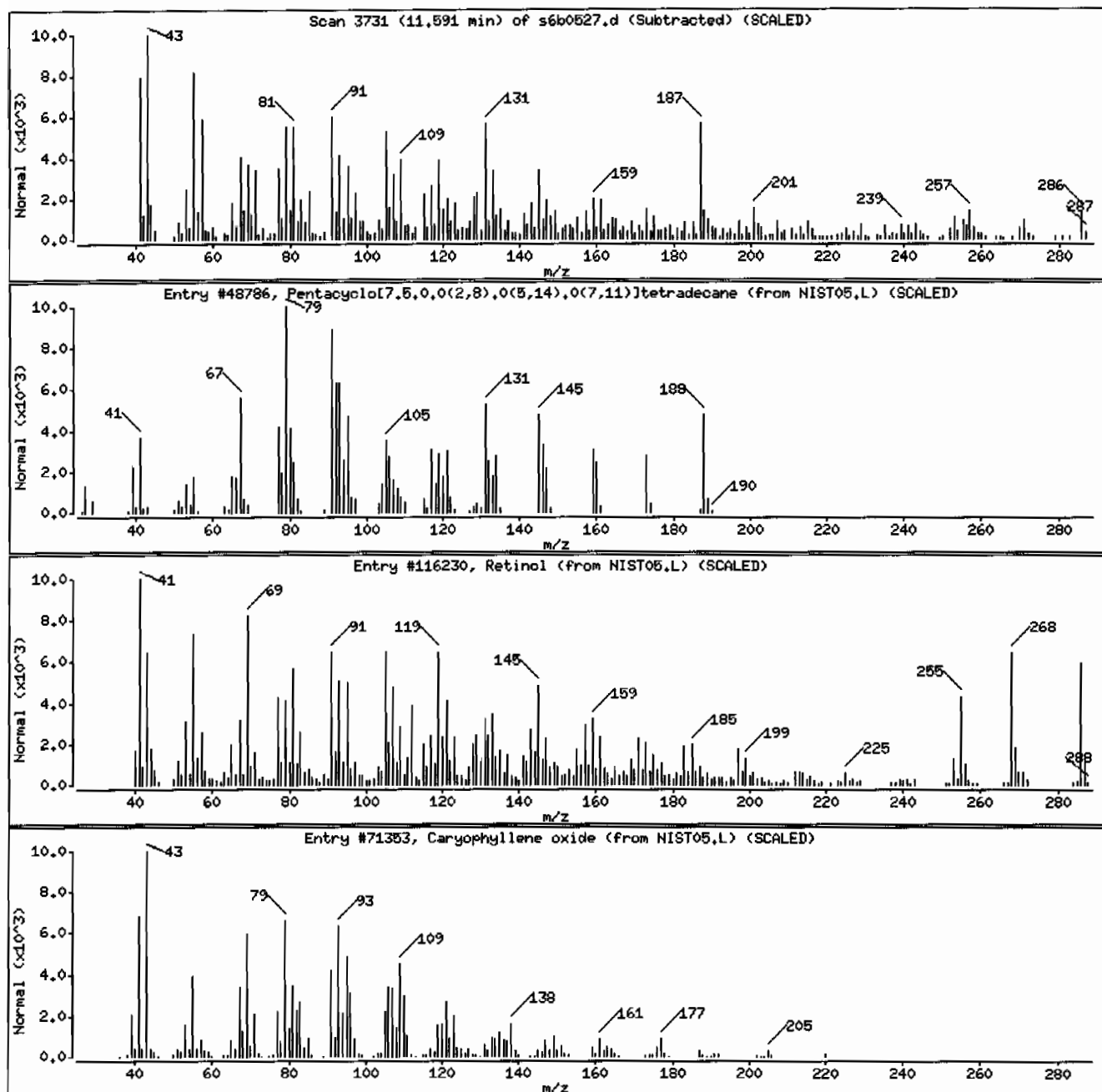
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pentacyclo[7.5.0.0(2,8).0(6,14).0(7,11)]	79772-15-9	NIST05.L	48786	43	C14H20	188
Retinol	68-26-8	NIST05.L	116230	38	C20H30O	286
Caryophyllene oxide	1139-30-6	NIST05.L	71353	25	C15H24O	220



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011|948501311|SVMI11LANL

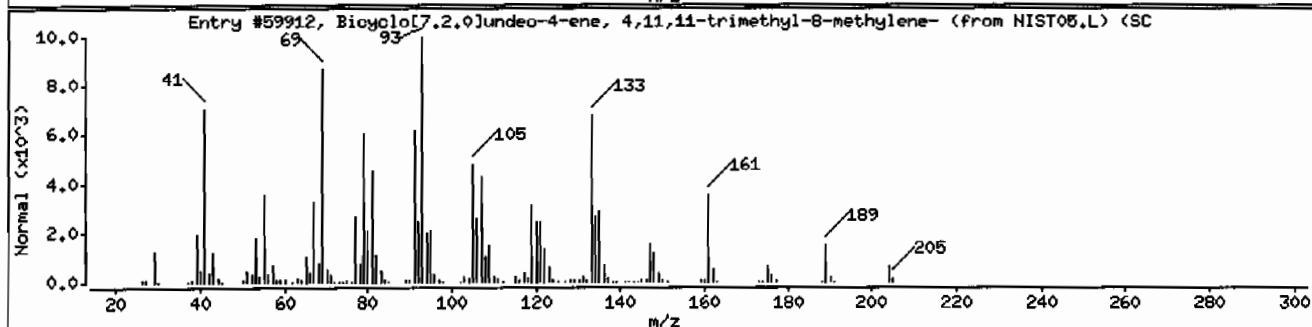
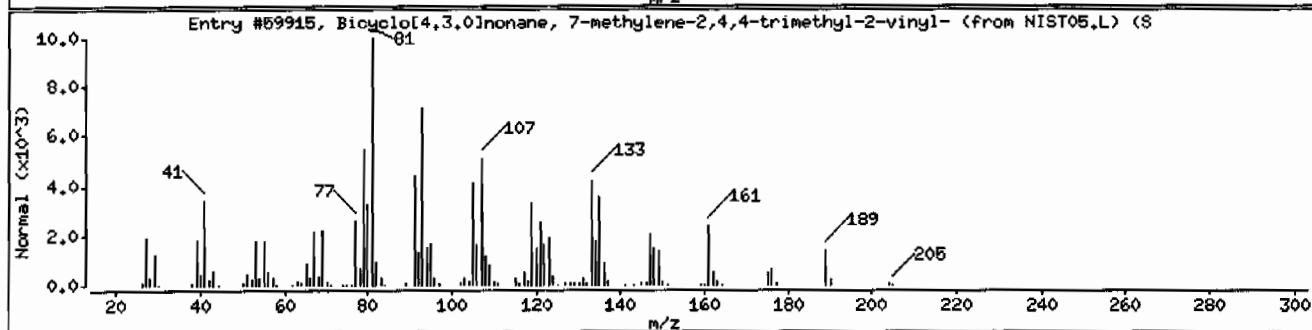
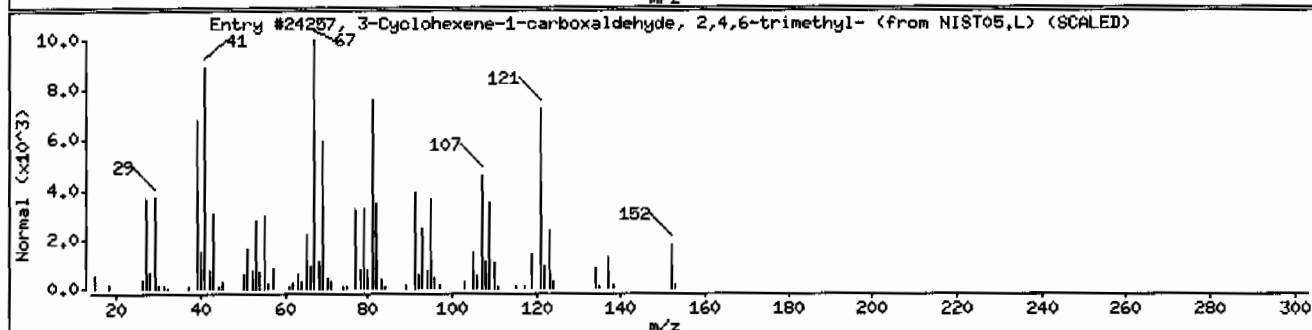
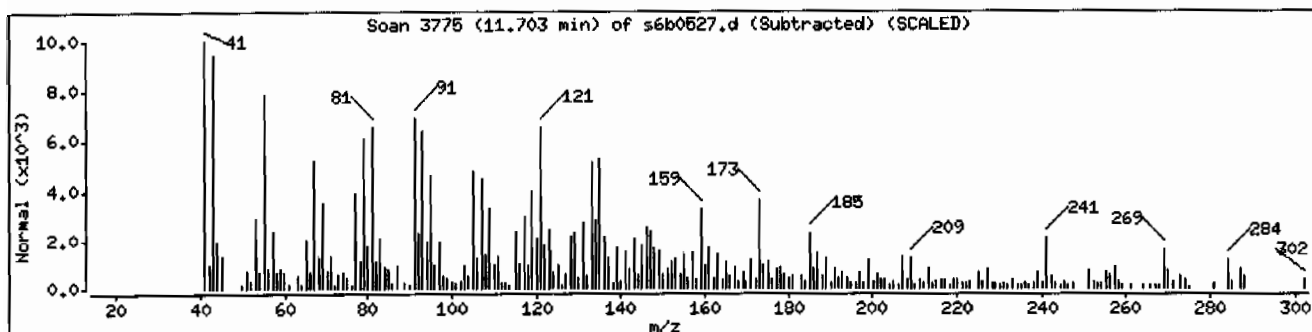
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Cyclohexene-1-carboxaldehyde, 2,4,6-tr	1423-46-7	NIST05.L	24257	50	C10H16O	152
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	49	C15H24	204
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	13877-93-5	NIST05.L	59912	38	C15H24	204



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011|945501311|SVMI11|LANL

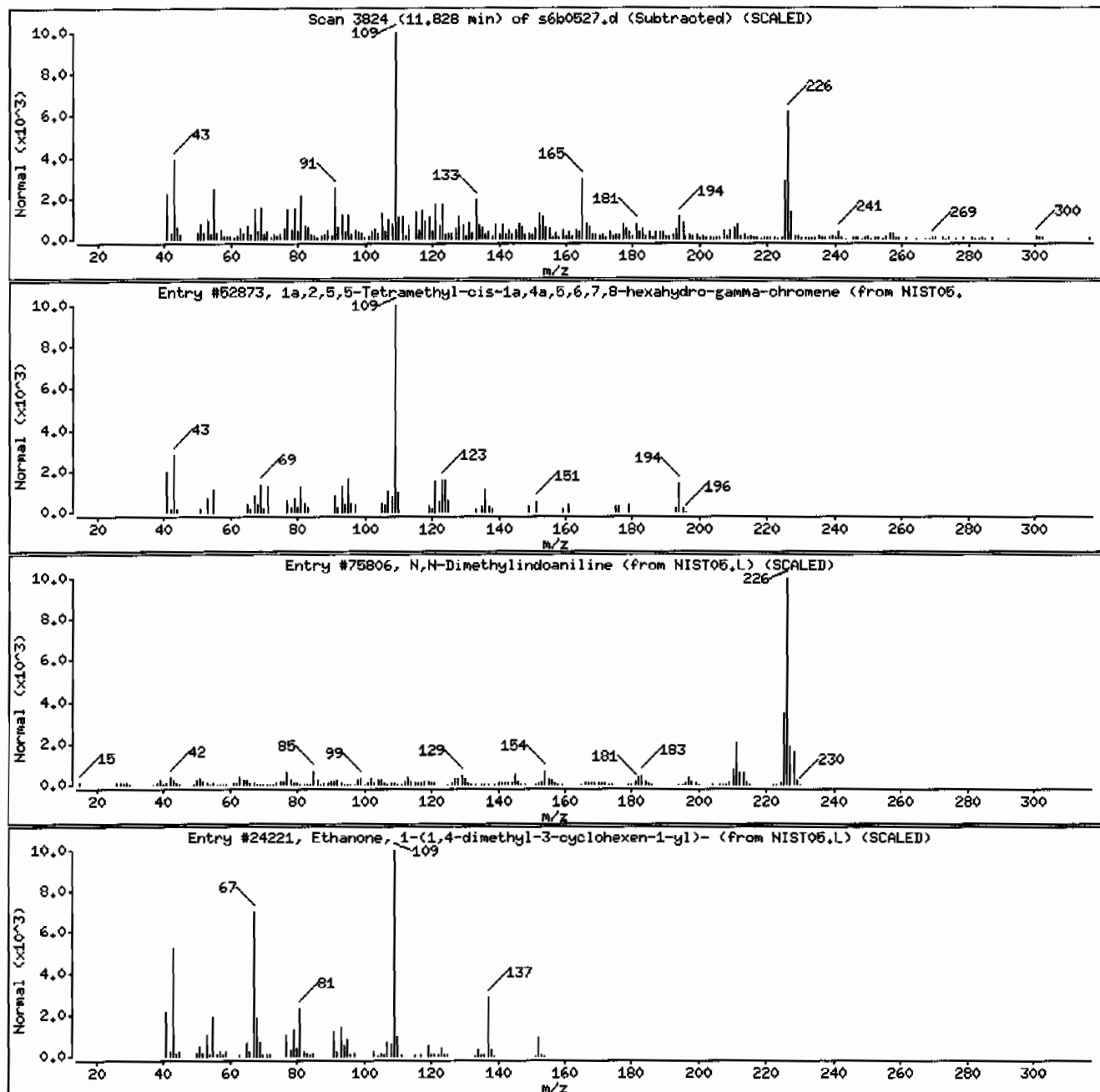
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	56	C13H22O	194
N,N-Dimethylindoline	2150-58-5	NIST05.L	75806	51	C14H14N2O	226
Ethanone, 1-(1,4-dimethyl-3-cyclohexen-1	43219-68-7	NIST05.L	24221	38	C10H16O	152



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: 1245397011/945501311/SVH11/LANL

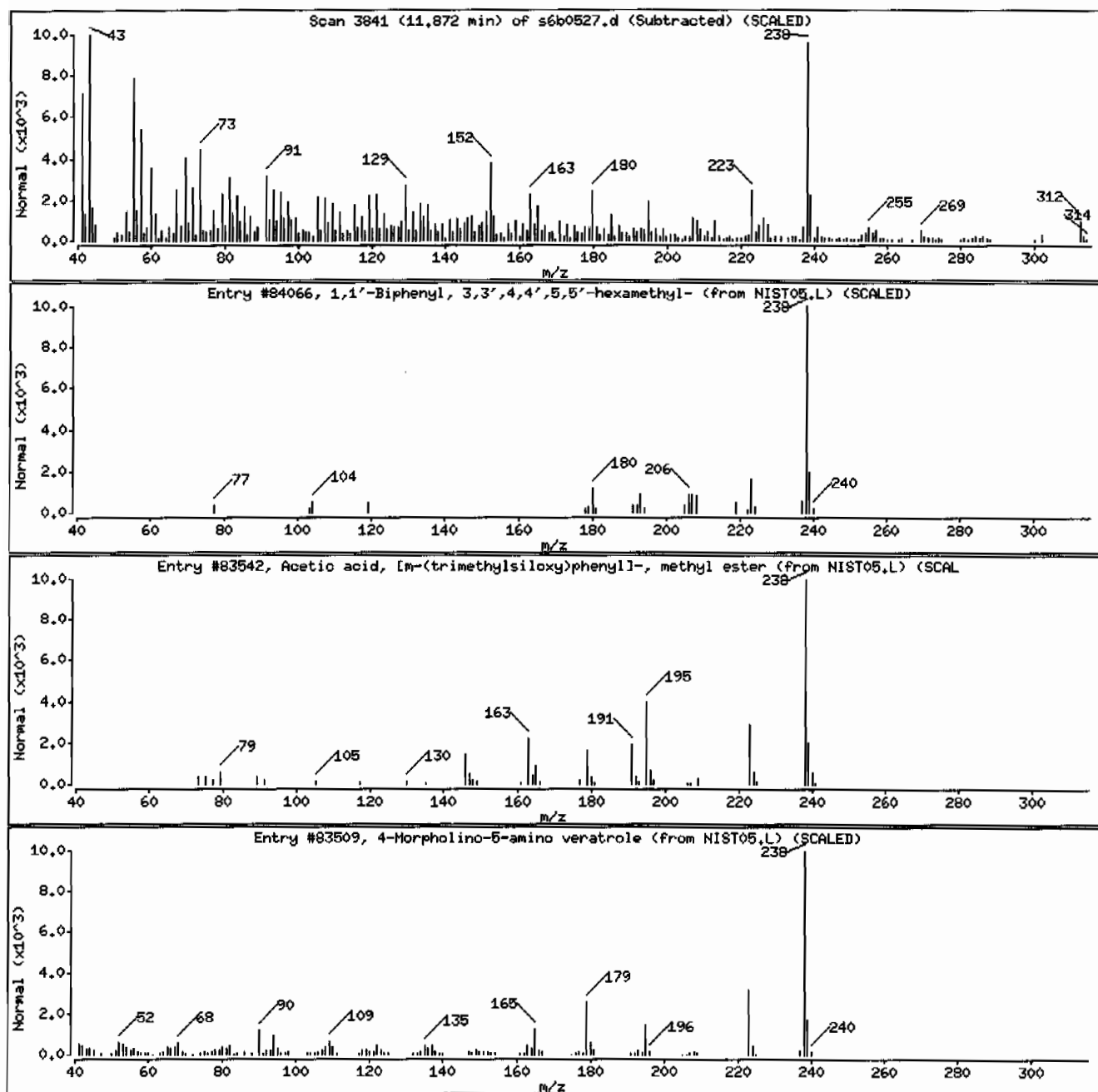
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1'-Biphenyl, 3,3',4,4',5,5'-hexamethyl	56667-01-7	NIST05.L	84066	55	C18H22	238
Acetic acid, [m-(trimethylsiloxy)phenyl]	27798-61-4	NIST05.L	83542	50	C12H18O3Si	238
4-Morpholino-5-amino veratrole	30058-28-7	NIST05.L	83509	49	C12H18N2O3	238



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011/945501311/SVH11/LANL

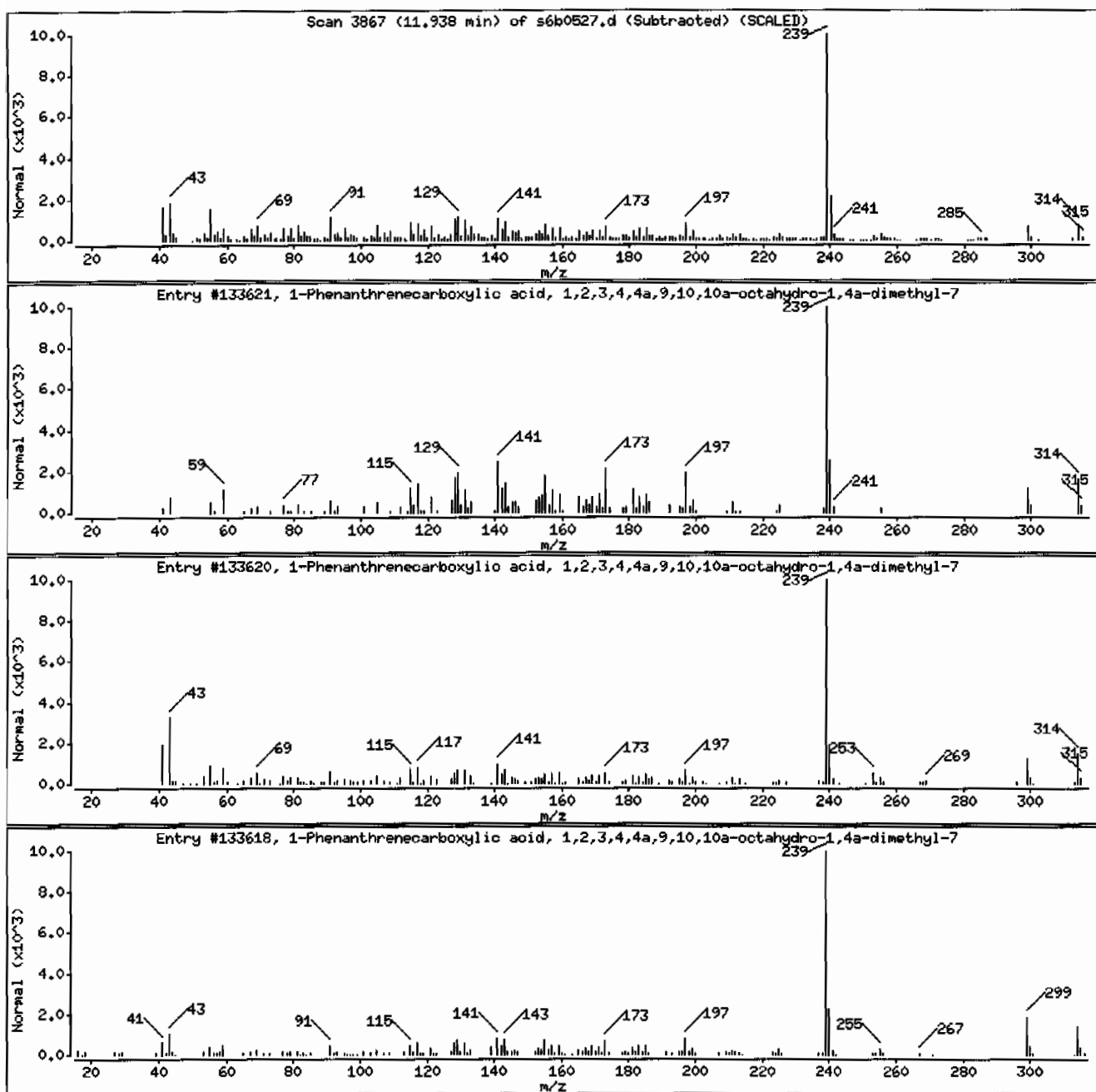
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	94	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	93	C21H30O2	314



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH11ILANL

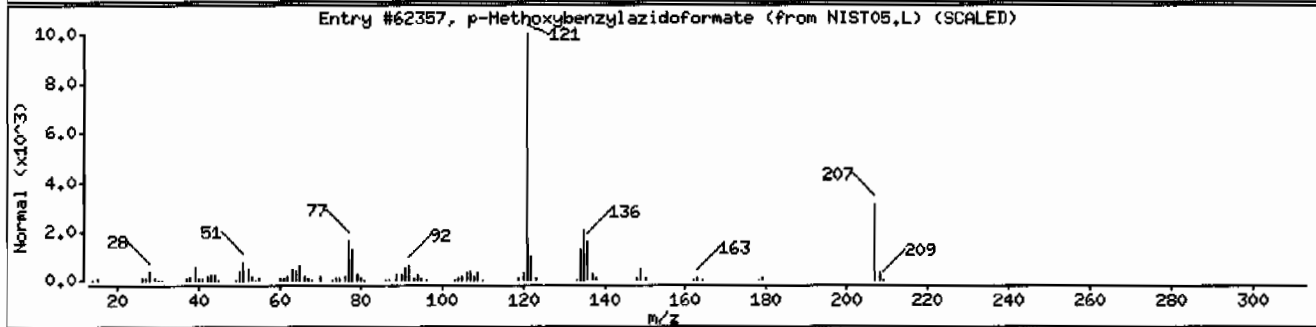
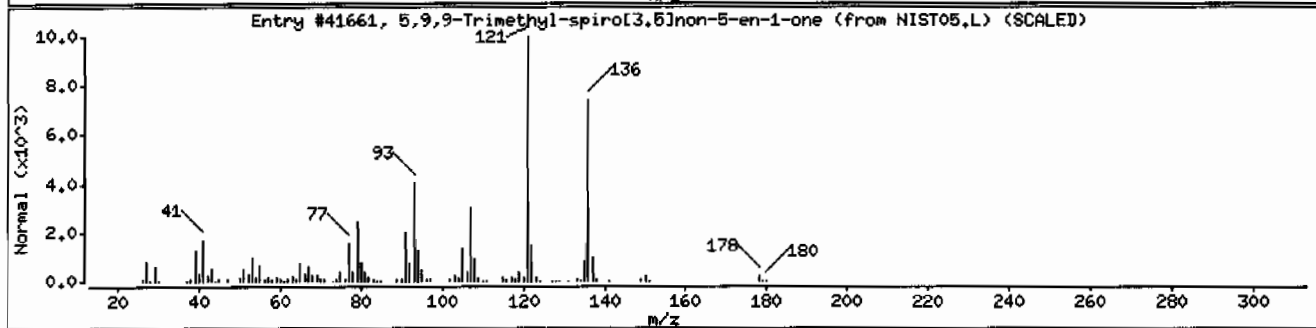
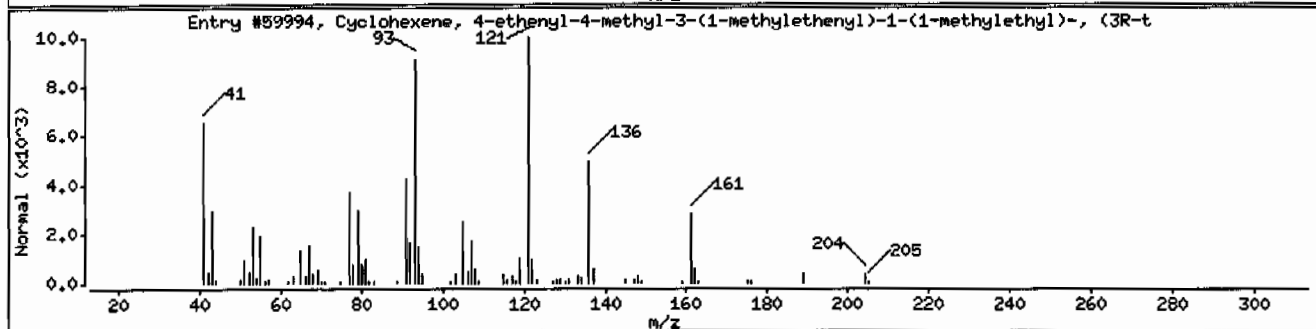
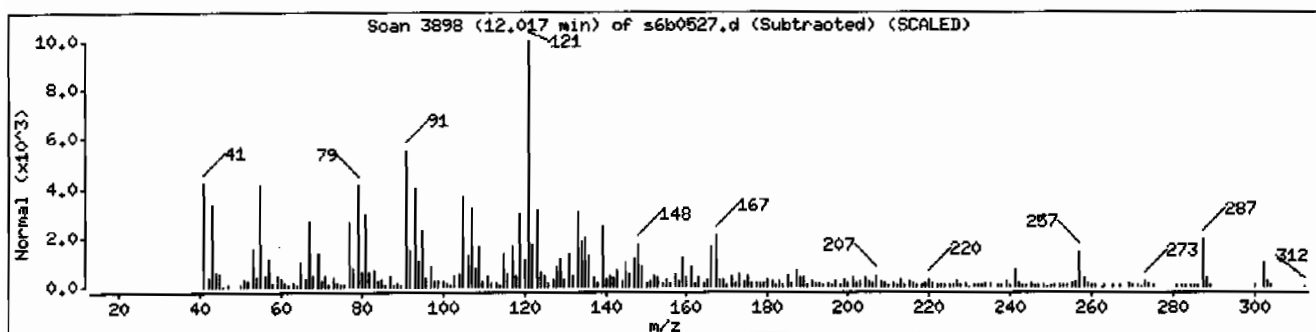
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexene, 4-ethenyl-4-methyl-3-(1-met	20307-84-0	NIST05.L	59994	38	C15H24	204
5,9,9-Trimethyl-spiro[3.5]non-5-en-1-one	1000185-13-4	NIST05.L	41661	38	C12H18O	176
p-Methoxybenzylazidoformate	25474-85-5	NIST05.L	62357	27	C9H9N3O3	207



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: 124538701119455013111SVHI11LANL

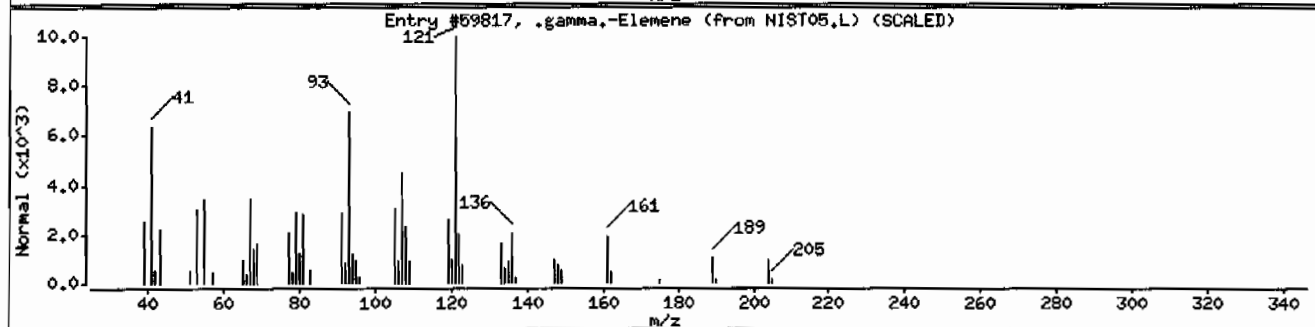
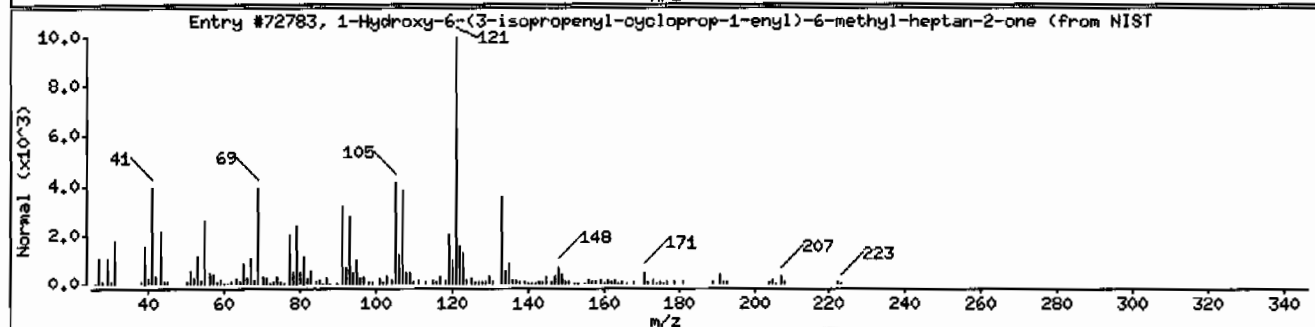
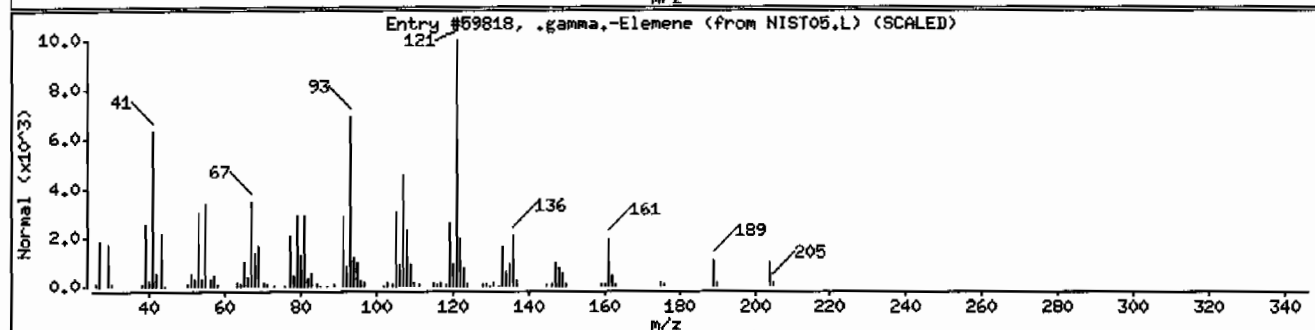
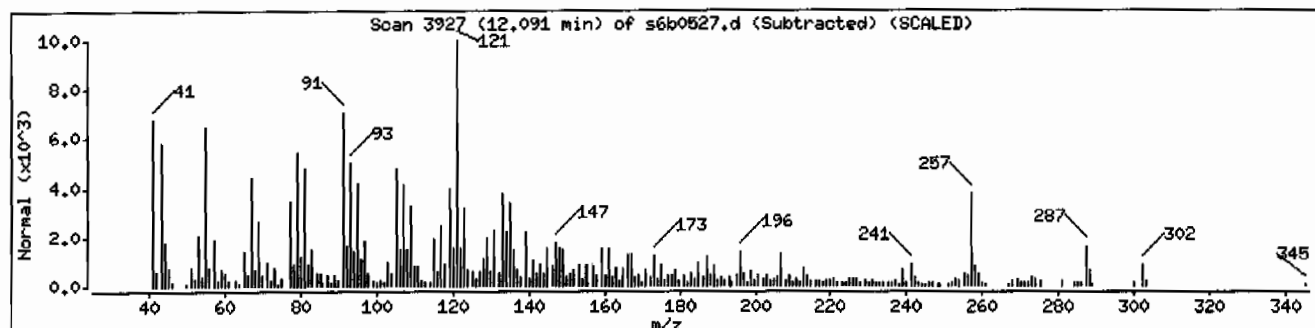
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Elemene	30824-67-0	NIST05.L	59818	84	C15H24	204
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	50	C14H22O2	222
.gamma.-Elemene	30824-67-0	NIST05.L	59817	46	C15H24	204



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Benzene, (1-methyl-1-butenyl)-

CAS Number

Library

Entry

Quality

Formula

Weight

2-Propenal, 3-(4-methylphenyl)-

1504-75-2

NIST05.L

20745

38

C10H10O

146

Benzene, 1-(1-buten-3-yl)-4-pentyl-

1000161-70-6

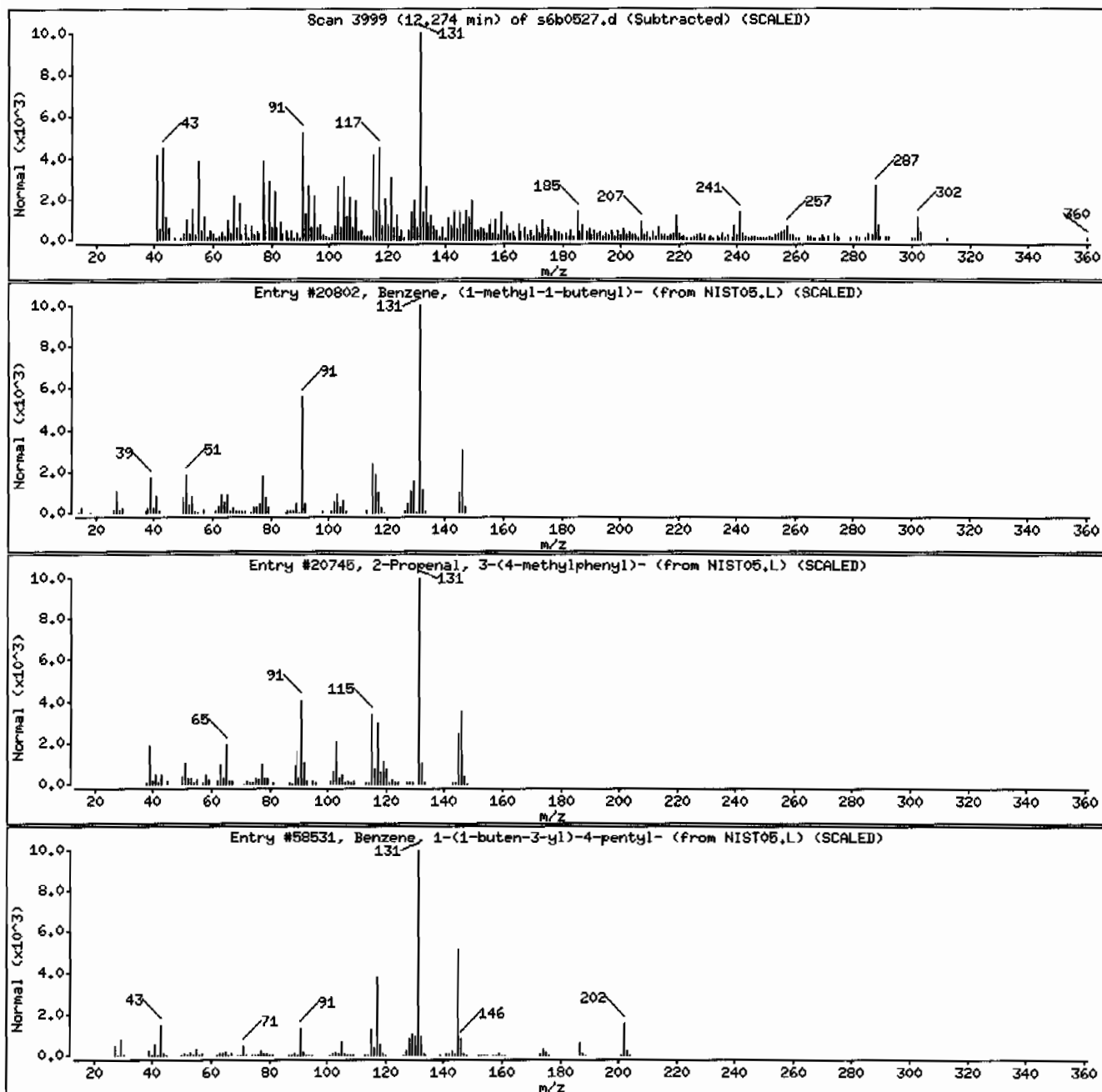
NIST05.L

58531

35

C15H22

202



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011945501311SVH111LANL

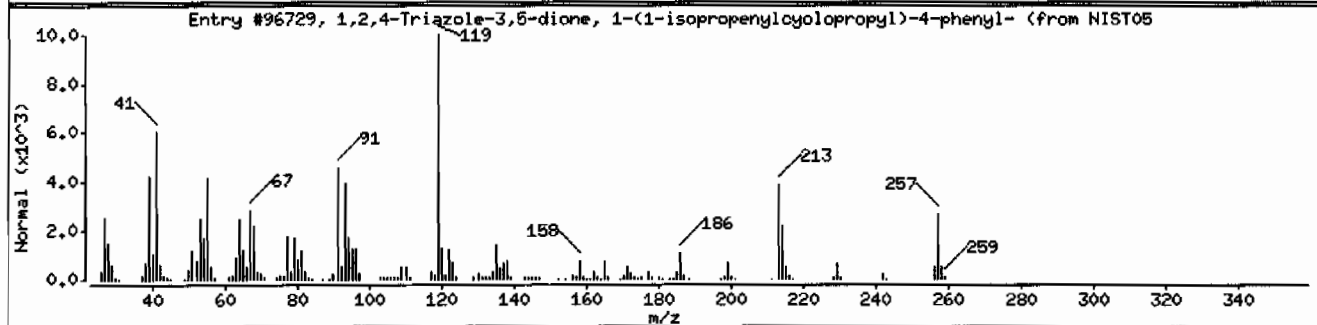
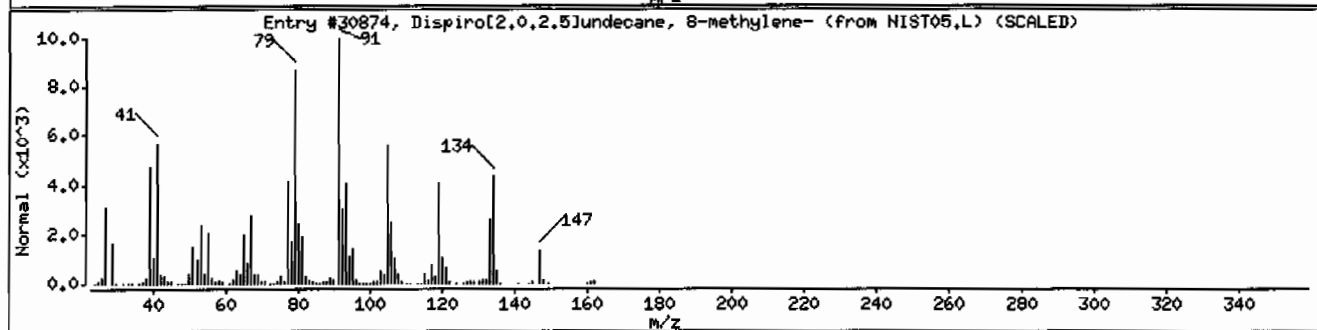
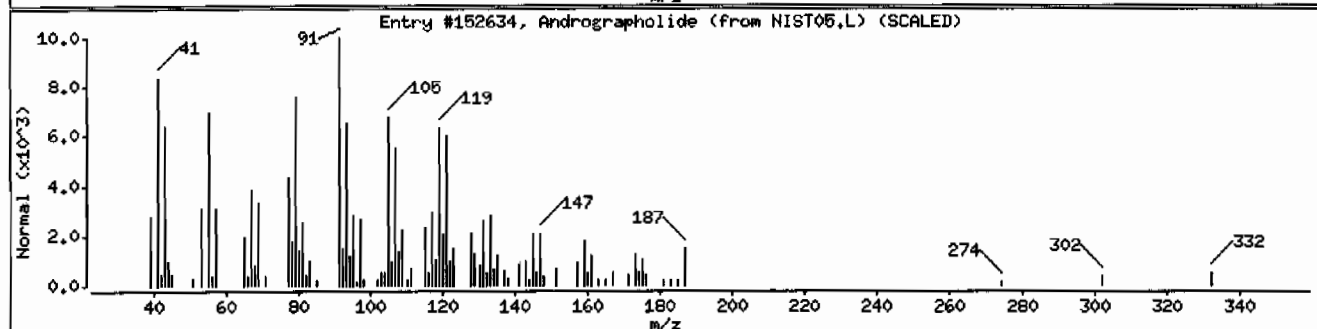
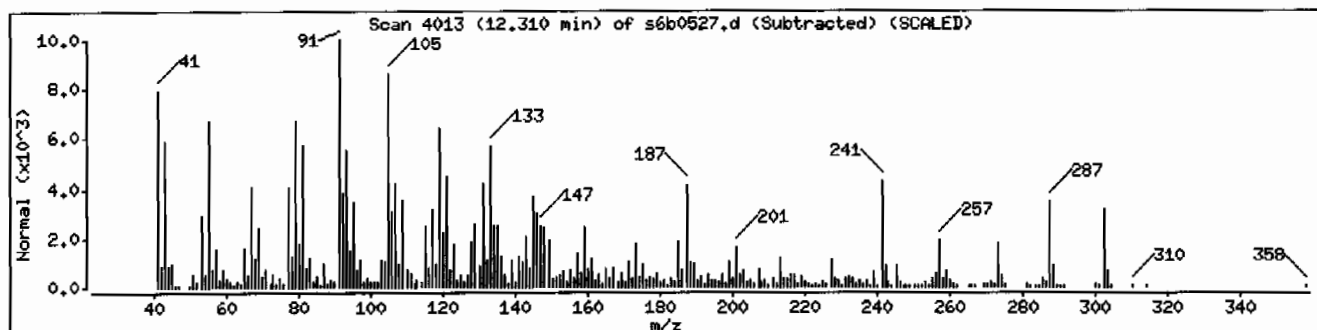
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Andrographolide	5508-58-7	NIST05.L	152634	38	C ₂₀ H ₃₀ O ₅	350
Dispiro[2.0,2.5]undecane, 8-methylene-	51567-09-0	NIST05.L	30874	20	C ₁₂ H ₁₈	162
1,2,4-Triazole-3,5-dione, 1-(1-isopropenyl-4-phenyl)-	1000154-45-7	NIST05.L	96729	15	C ₁₄ H ₁₅ N ₃ O ₂	257



Date: 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 124538701119455013111SVMI11LANL

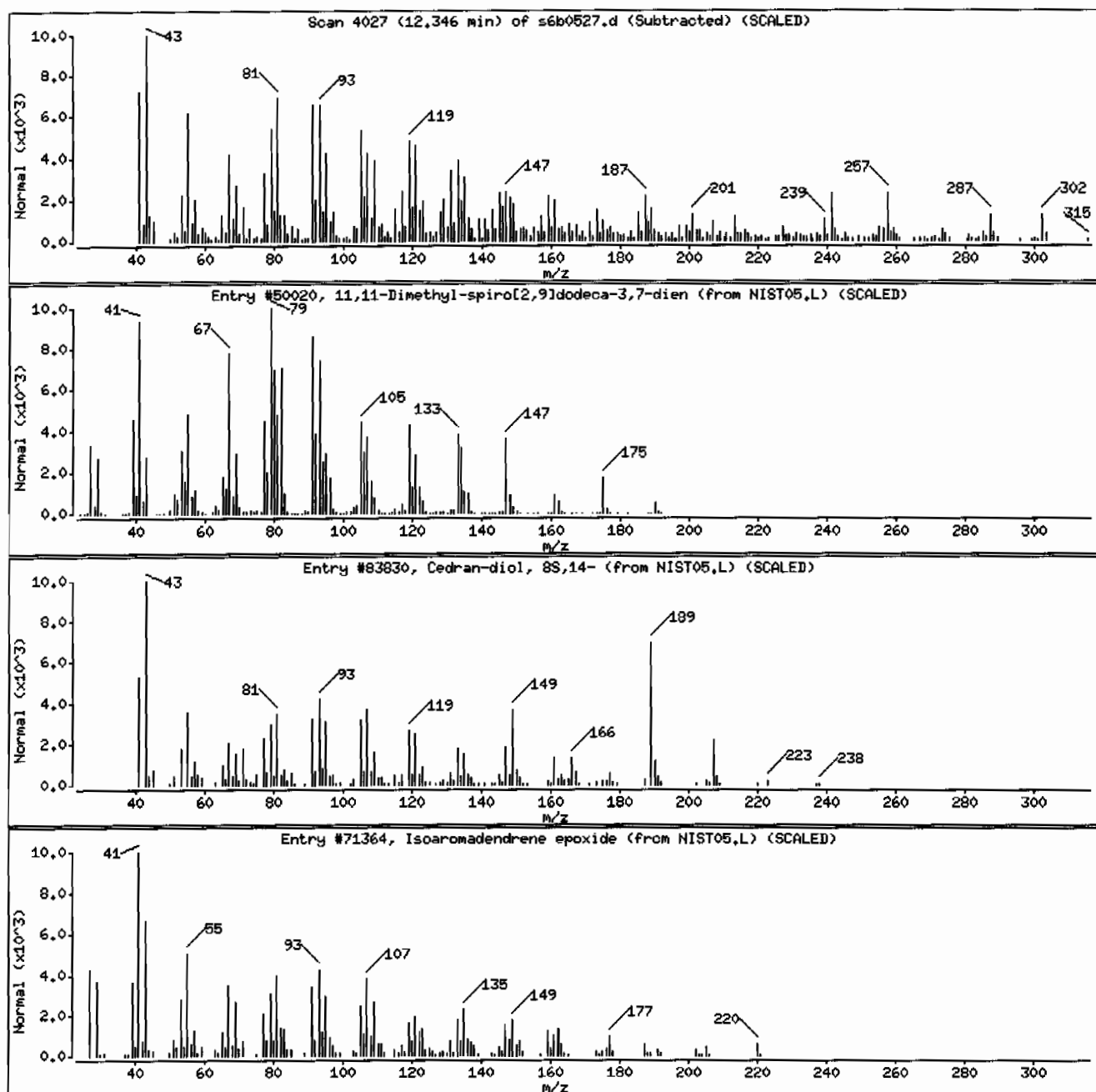
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien	1000062-28-4	NIST05.L	50020	42	C14H22	190
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	41	C15H26O2	238
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	38	C15H24O	220



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 1245387011/945501311/SVH11/LANL

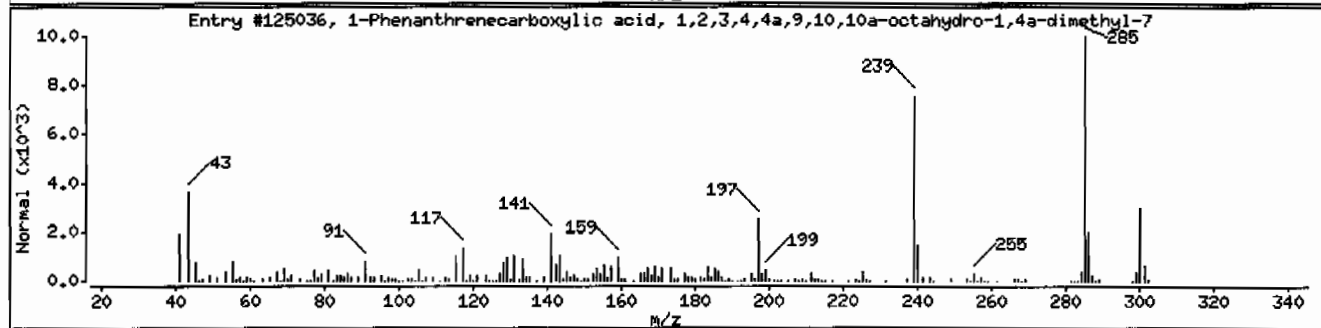
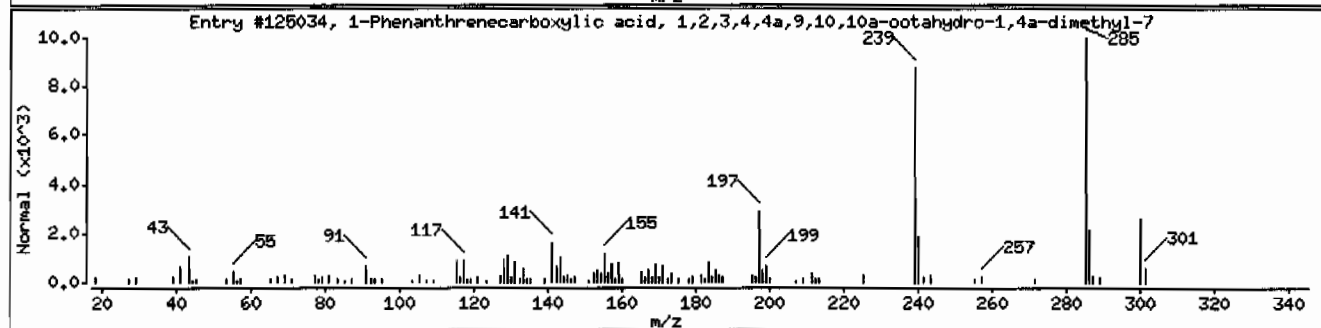
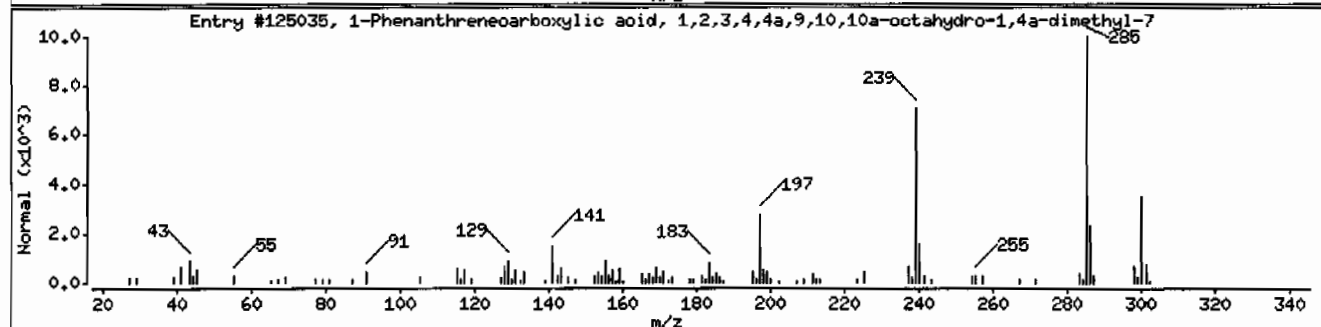
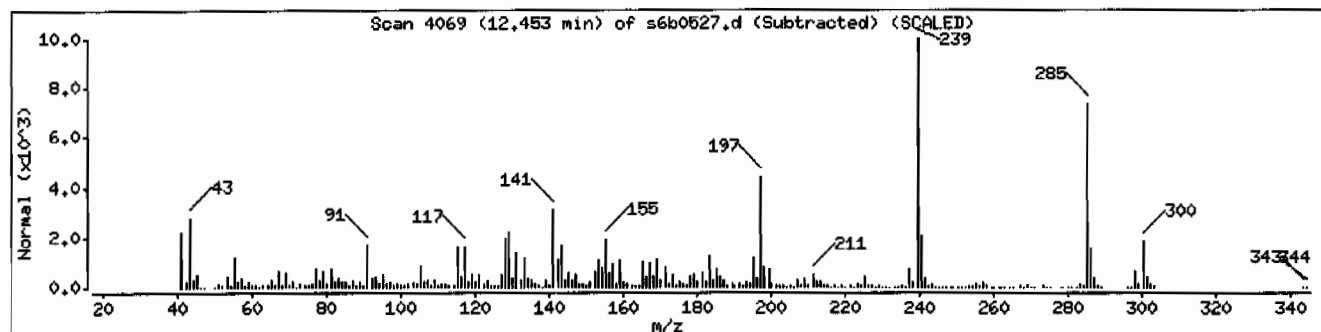
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	94	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	94	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	93	C ₂₀ H ₂₈ O ₂	300



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 12453870111945501311SVH11ILANL

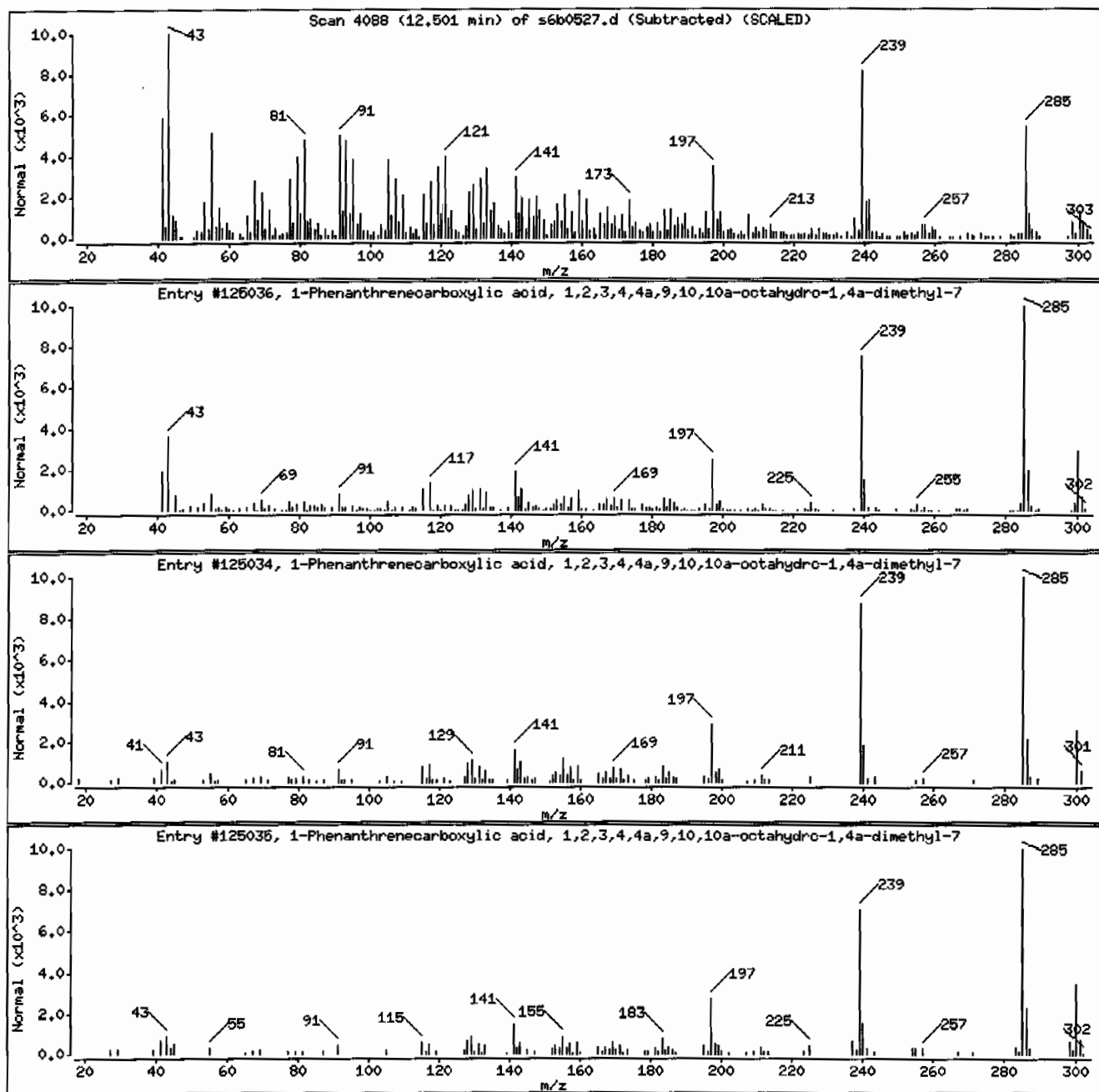
Volume Injected (uL): 0.5

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-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	97	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	96	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	86	C20H28O2	300



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: HSD6,i

Sample Info: 1245387011|945501311|SVH11|LANL

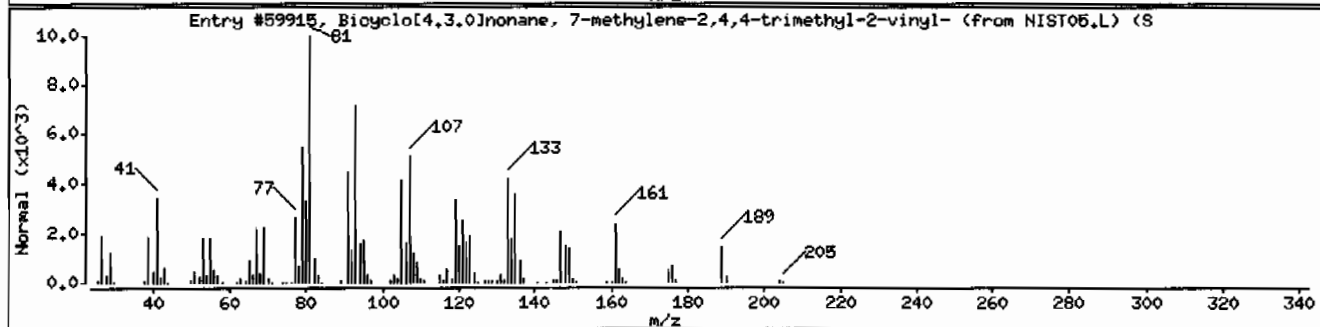
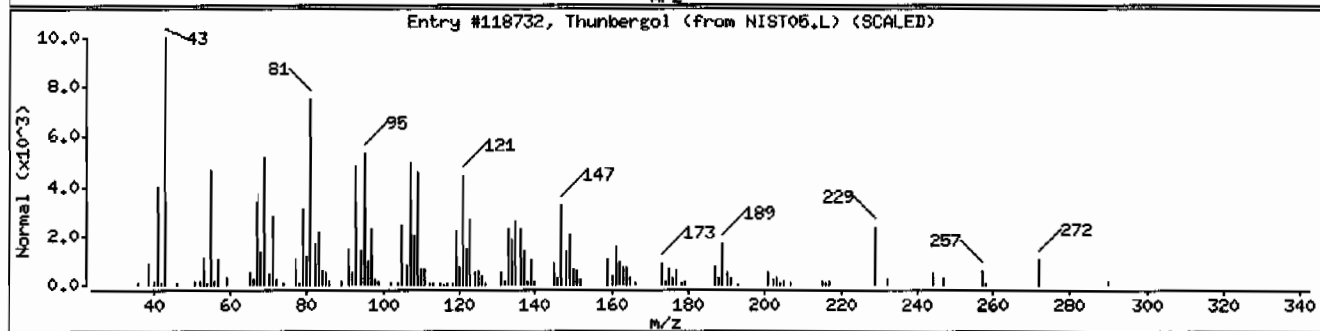
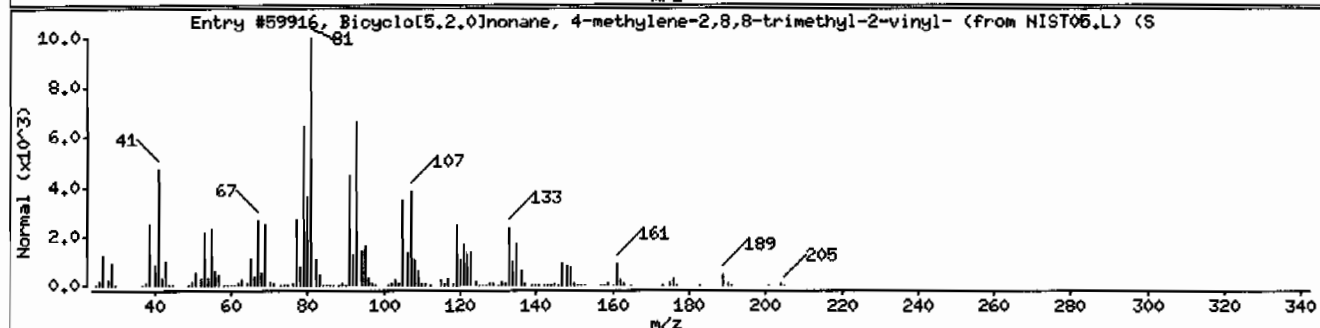
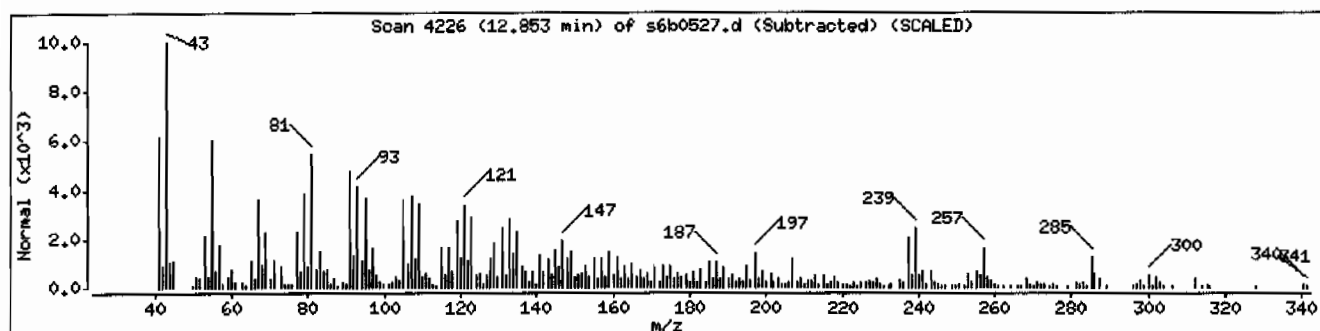
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	83	C15H24	204
Thunbergol	25269-17-4	NIST05.L	118732	43	C20H34O	290
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	41	C15H24	204



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 12453870111945501311SVMI11LANL

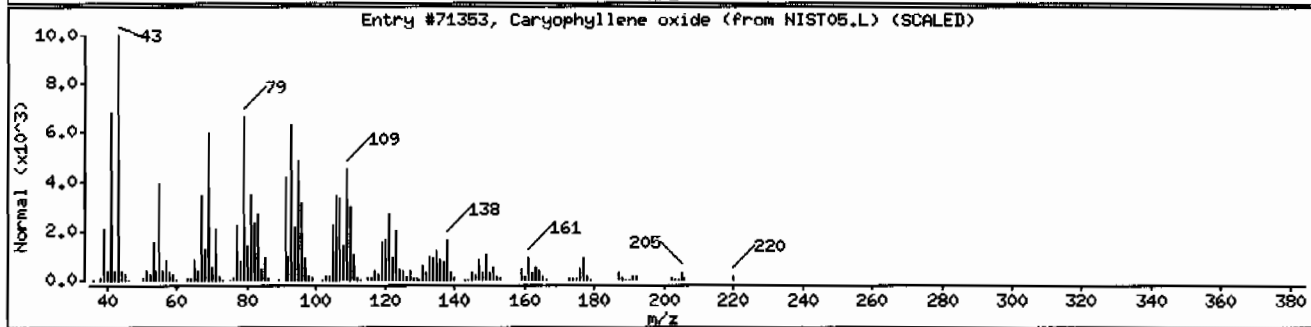
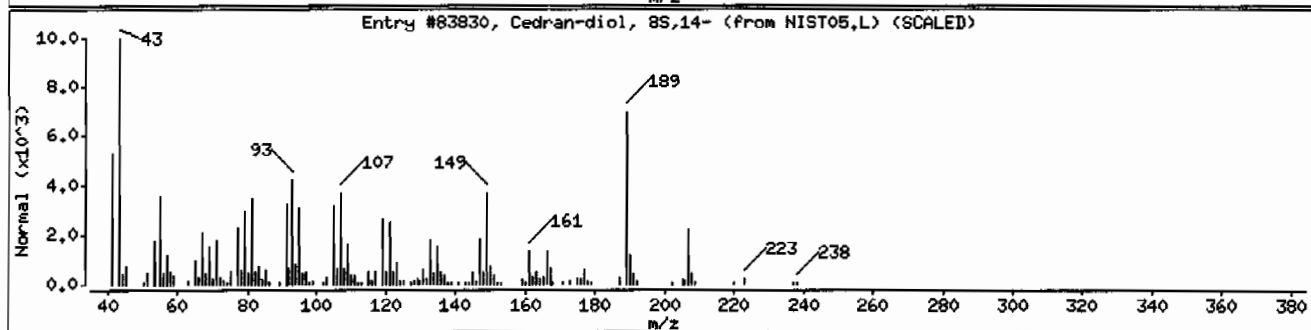
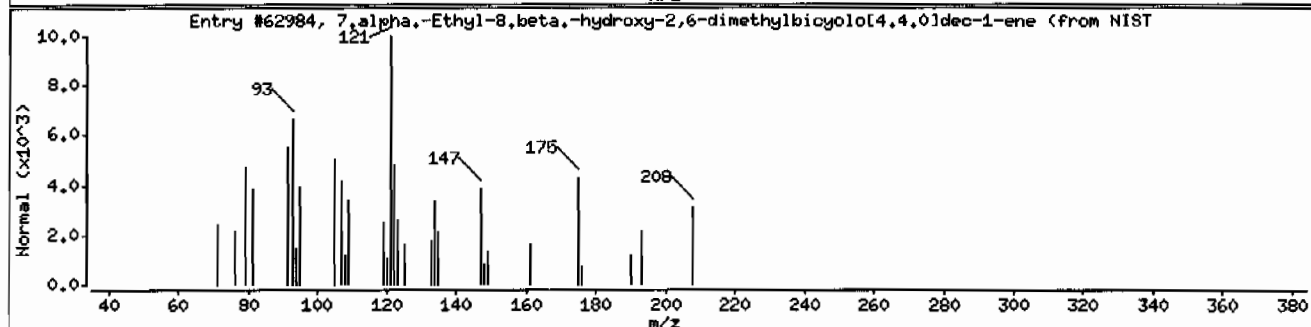
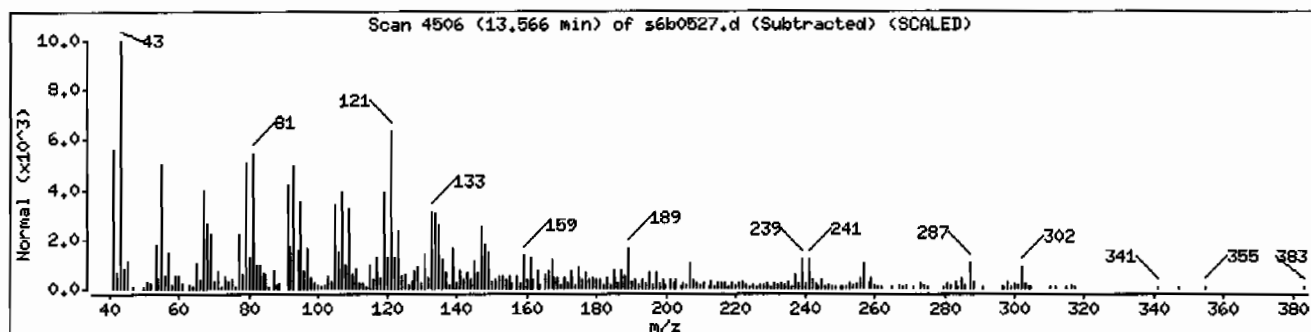
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7.alpha.-Ethyl-8.beta.-hydroxy-2,6-dimet	1000077-92-4	NIST05.L	62984	83	C14H24O	208
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	58	C15H26O2	238
Caryophyllene oxide	1139-30-6	NIST05.L	71353	55	C15H24O	220



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: MSD6.i

Sample Info: 124538701119455013111SVMI11LANL

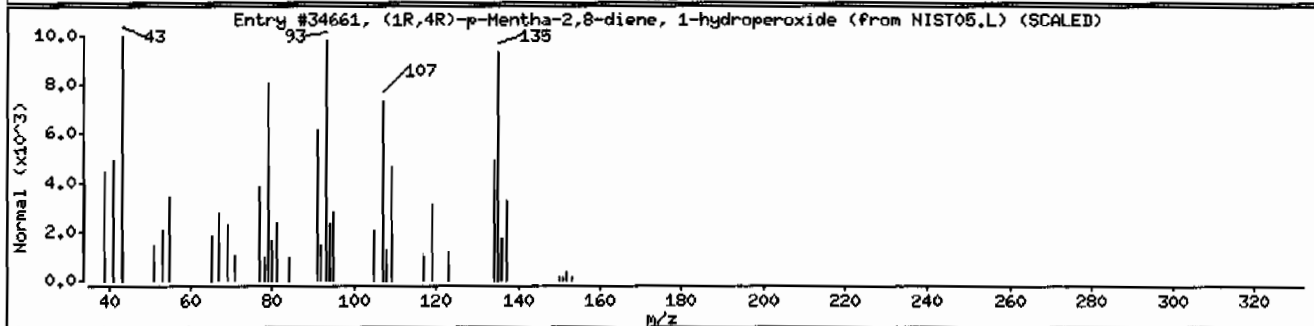
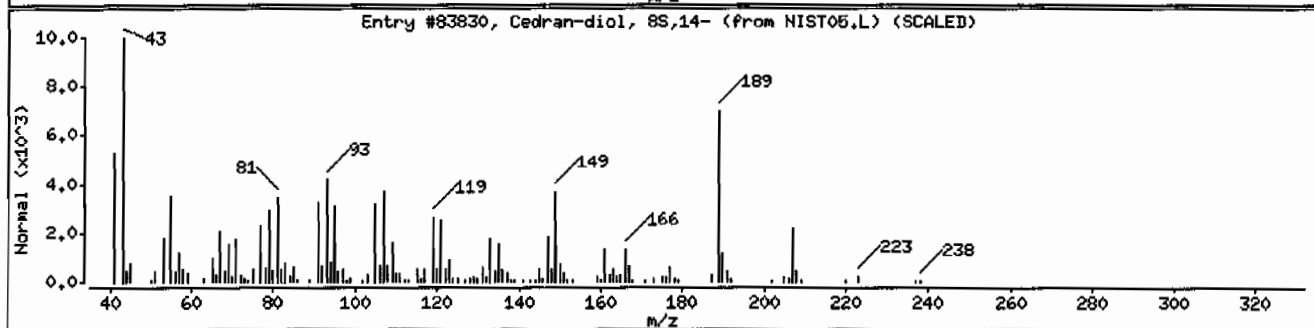
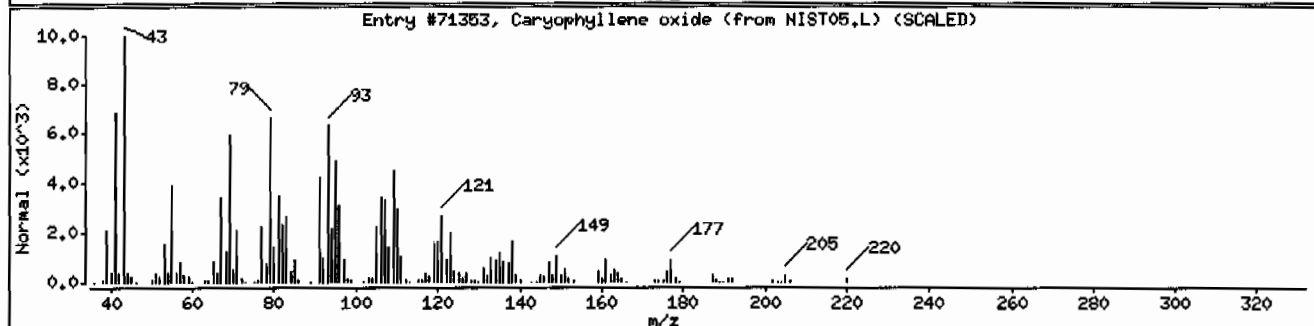
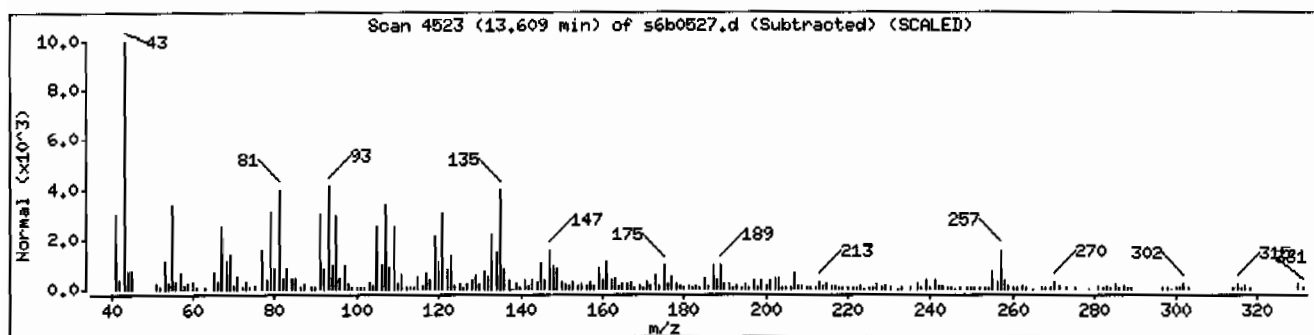
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Caryophyllene oxide	1139-30-6	NIST05.L	71353	50	C15H24O	220
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	40	C15H26O2	238
(1R,4R)-p-Mentha-2,8-diene, 1-hydroperox	1000292-74-0	NIST05.L	34661	38	C10H16O2	168



Date : 05-FEB-2010 22:18

Client ID: RE14-10-7683

Instrument: HSD6.i

Sample Info: 124538701119455013111SVMI11LANL

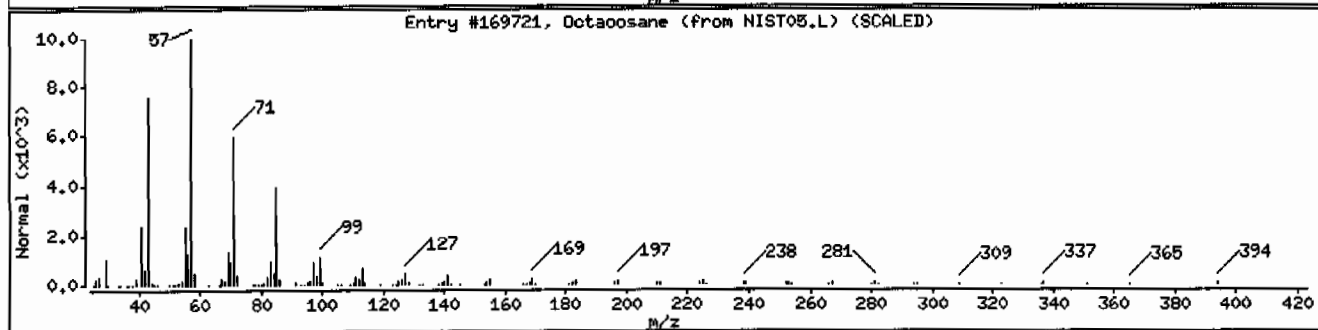
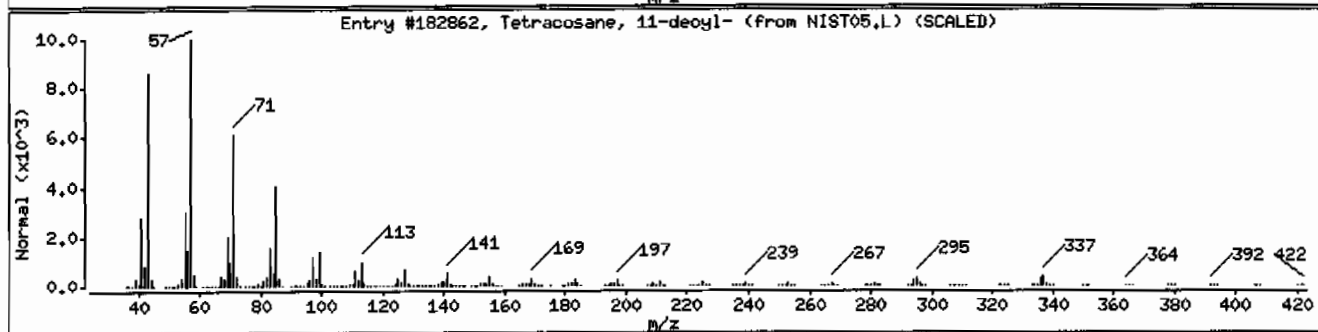
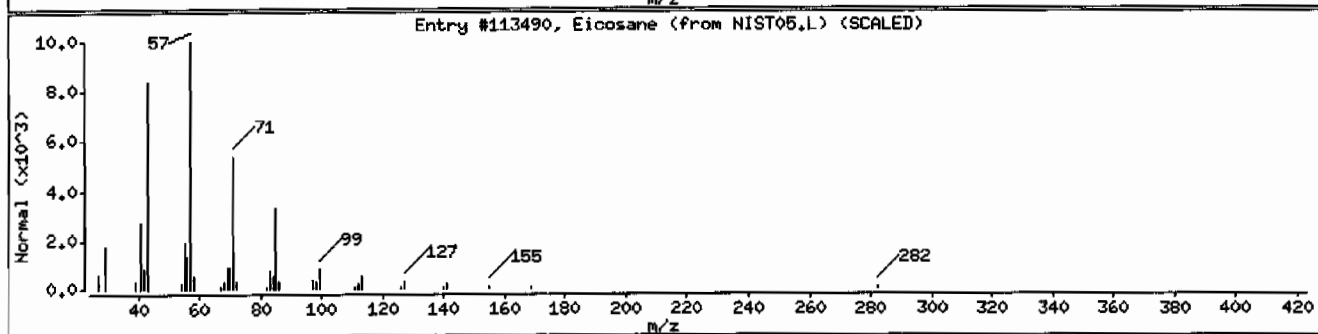
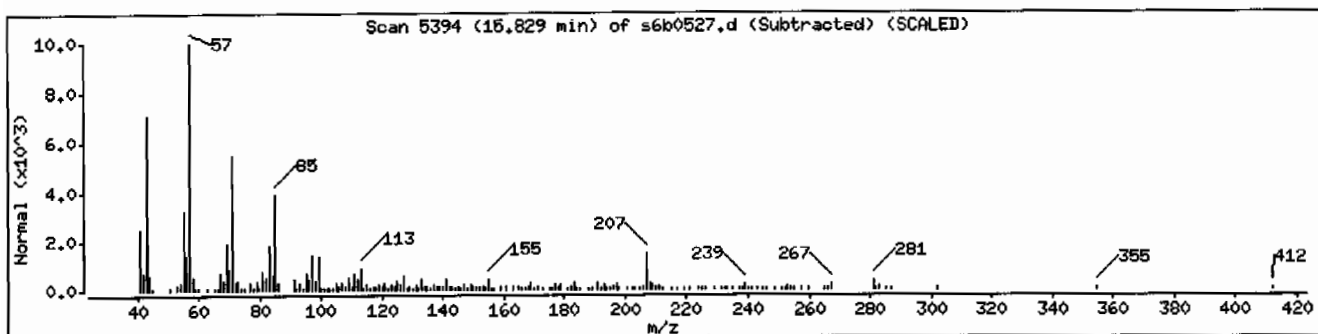
Volume Injected (uL): 0.5

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	113490	95	C20H42	282
Tetracosane, 11-decyl-	55429-84-0	NIST05.L	182862	87	C34H70	479
Octacosane	630-02-4	NIST05.L	169721	87	C28H58	394



LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1384**

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: 944907

Prep Batch Number: 944905

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
245387001	RE14-10-7689
245387002	RE14-10-7679
245387003	RE14-10-7680
245387004	RE14-10-7686
245387005	RE14-10-7688
245387006	RE14-10-7684
245387007	RE14-10-7687
245387008	RE14-10-7681
245387009	RE14-10-7682
245387010	RE14-10-7685
245387011	RE14-10-7683
1202023571	Method Blank (MB)
1202023572	Laboratory Control Sample (LCS)
1202023573	245387001(RE14-10-7689) Matrix Spike (MS)
1202023574	245387001(RE14-10-7689) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

10-1384-EXPLCMS

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS recovered Tetryl at 42.4% with recovery limits of 51-112% and recovered PETN at 152% with recovery limits of 64-137%. While PETN exhibited a high bias, it was not detected in the associated samples. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported. Please see data exception report 791668.

QC Sample Designation

Sample 245387001 (RE14-10-7689) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recovered Tetryl at 22.9%. The recovery limits are 36-124%. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported. Please see data exception report 791668.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Tetryl at 35.8%. The recovery limits are 36-124%. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported. Please see data exception report 791668.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for Tetryl was 35.8%. 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 791668.

Internal Standard (ISTD) Acceptance

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

Secondary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 245387001 (RE14-10-7689) 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

Samples 245387008 (RE14-10-7681), 245387009 (RE14-10-7682) and 245387010 (RE14-10-7685) failed acceptance criteria. They were re-analyzed and passed acceptance criteria. The re-analysis data are reported.

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

Data exception report 791688 was generated for this SDG.

The LCS recovered Tetryl at 42.4% with recovery limits of 51-112% and recovered PETN at 152% with recovery limits of 64-137%. While PETN exhibited a high bias, it was not detected in the associated samples. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported.

The MS recovered Tetryl at 22.9%. The recovery limits are 36-124%. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported.

The MSD recovered Tetryl at 35.8%. The recovery limits are 36-124%. The Tetryl recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported.

The MS/MSD RPD for Tetryl was 35.8%. 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. Moore Date: 02/18/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208230a

Date Analyzed: 13-FEB-10 07:23

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: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130066.wiff

Date Analyzed: 14-FEB-10 03:13

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208233a

Date Analyzed: 13-FEB-10 08:52

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: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130069.wiff

Date Analyzed: 14-FEB-10 04:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1200	
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: RE14-10-7680

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208234a

Date Analyzed: 13-FEB-10 09:21

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: RE14-10-7680

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130070.wiff

Date Analyzed: 14-FEB-10 04:16

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208235a

Date Analyzed: 13-FEB-10 09:51

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: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130071.wiff

Date Analyzed: 14-FEB-10 04:31

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208236a

Date Analyzed: 13-FEB-10 10:20

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: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130072.wiff

Date Analyzed: 14-FEB-10 04:47

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208237a

Date Analyzed: 13-FEB-10 10:50

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: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130073.wiff

Date Analyzed: 14-FEB-10 05:03

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Moisture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208241a

Date Analyzed: 13-FEB-10 12:49

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Moisture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130077.wiff

Date Analyzed: 14-FEB-10 06:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1610	
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: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208242a

Date Analyzed: 13-FEB-10 13:18

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: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140014.wiff

Date Analyzed: 14-FEB-10 17:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	404	J
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: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208243a

Date Analyzed: 13-FEB-10 13:48

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: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140015.wiff

Date Analyzed: 14-FEB-10 17:57

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208244a

Date Analyzed: 13-FEB-10 14:17

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: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140016.wiff

Date Analyzed: 14-FEB-10 18:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6840	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208245a

Date Analyzed: 13-FEB-10 14:47

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: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130081.wiff

Date Analyzed: 14-FEB-10 07:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	11300	
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): 10-1384

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245387001	RE14-10-7689	112	70 - 144	
245387001	RE14-10-7689	130	70 - 144	
245387002	RE14-10-7679	106	70 - 144	
245387002	RE14-10-7679	132	70 - 144	
245387003	RE14-10-7680	113	70 - 144	
245387003	RE14-10-7680	136	70 - 144	
245387004	RE14-10-7686	114	70 - 144	
245387004	RE14-10-7686	138	70 - 144	
245387005	RE14-10-7688	117	70 - 144	
245387005	RE14-10-7688	130	70 - 144	
245387006	RE14-10-7684	120	70 - 144	
245387006	RE14-10-7684	136	70 - 144	
245387007	RE14-10-7687	115	70 - 144	
245387007	RE14-10-7687	134	70 - 144	
245387008	RE14-10-7681	110	70 - 144	
245387008	RE14-10-7681	115	70 - 144	
245387009	RE14-10-7682	109	70 - 144	
245387009	RE14-10-7682	119	70 - 144	
245387010	RE14-10-7685	116	70 - 144	
245387010	RE14-10-7685	118	70 - 144	
245387011	RE14-10-7683	114	70 - 144	
245387011	RE14-10-7683	139	70 - 144	
1202023571	MB for batch 944905	102	70 - 144	
1202023571	MB for batch 944905	138	70 - 144	
1202023572	LCS for batch 944905	112	70 - 144	
1202023572	LCS for batch 944905	139	70 - 144	
1202023573	RE14-10-7689(245387001MS)	114	70 - 144	
1202023573	RE14-10-7689(245387001MS)	127	70 - 144	
1202023574	RE14-10-7689(245387001MSD)	113	70 - 144	
1202023574	RE14-10-7689(245387001MSD)	135	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) 10-1384

Extract Batch Code: 944905

Date Extracted: 27-JAN-10

GEL LCS ID: 1202023572

GEL LCSDUP ID:

Analysis Date/Time: 13-FEB-10 06:54

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	4280	85.6					69 – 126
2,4,6-Trinitrotoluene	5000	5020	100					73 – 149
2,4-Dinitrotoluene	5000	5100	102					87 – 137
2,6-Dinitrotoluene	5000	4920	98.4					89 – 120
2-Amino-4,6-dinitrotoluene	5000	5360	107					90 – 130
4-Amino-2,6-dinitrotoluene	5000	5040	101					84 – 130
HMX	5000	5160	103					58 – 138
Nitrobenzene	5000	5040	101					71 – 122
PETN	5000	7590	152 *					64 – 137
RDX	5000	5580	112					81 – 137
Tetryl	5000	2120	42.4 *					51 – 112
m-Dinitrobenzene	5000	5260	105					83 – 122
m-Nitrotoluene	5000	4710	94.1					73 – 118
o-Nitrotoluene	5000	5200	104					72 – 119
p-Nitrotoluene	5000	5300	106					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) 10-1384

Extract Batch Code: 944905

Date Extracted: 27-JAN-10

GEL LCS ID: 1202023572

GEL LCSDUP ID:

Analysis Date/Time: 14-FEB-10 02:57

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	5000	5480	110					52 - 114
2,6-Diamino-4-nitrotoluene	5000	6080	122					64 - 122
3,5-Dinitroaniline	5000	6130	123					70 - 127
TATB	5000	6500	130					28 - 162
tris(o-cresyl) phosphate	5000	5400	108					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: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Extract Batch Code: 944905

Date Extracted: 27-JAN-10

GEL Spike ID: 1202023573

GEL SpikeDup ID: 1202023574

Analysis Date/Time: 13-FEB-10 07:53

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	5000	0	3860	77.1	4120	82.3	6.54	30	50 – 140
2,4,6-Trinitrotoluene	5000	0	4090	81.8	4810	96.1	16.2	30	76 – 144
2,4-Dinitrotoluene	5000	0	4910	98.1	5160	103	5.08	30	86 – 135
2,6-Dinitrotoluene	5000	0	5260	105	5000	100	5.12	30	90 – 118
2-Amino-4,6-dinitrotoluene	5000	0	5160	103	5530	111	7.01	30	85 – 137
4-Amino-2,6-dinitrotoluene	5000	0	4700	94	5190	104	9.79	30	72 – 143
HMX	5000	0	5030	101	5220	104	3.77	30	51 – 144
Nitrobenzene	5000	0	4780	95.6	4890	97.7	2.2	30	70 – 122
PETN	5000	0	5930	119	6600	132	10.7	30	60 – 140
RDX	5000	0	4820	96.4	5340	107	10.3	30	59 – 152
Tetryl	5000	0	1140	22.9 *	1790	35.8 *	44.2 *	30	36 – 124
m-Dinitrobenzene	5000	0	4930	98.6	5030	101	2.1	30	85 – 118
m-Nitrotoluene	5000	0	5010	100	4800	96	4.18	30	70 – 120
o-Nitrotoluene	5000	0	5600	112	5160	103	8.17	30	69 – 123
p-Nitrotoluene	5000	0	5510	110	5320	106	3.64	30	65 – 133

#Column to be used to flag recovery and RPD values with an asterisk

3

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Extract Batch Code: 944905

Date Extracted: 27-JAN-10

GEL Spike ID: 1202023573

GEL SpikeDup ID: 1202023574

Analysis Date/Time: 14-FEB-10 03:29

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	5200	104	5000	100	3.92	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5430	109	6140	123	12.3	30	55 - 130
3,5-Dinitroaniline	5000	0	5890	118	5560	111	5.76	30	73 - 129
TATB	5000	141	6750	132	6040	118	11.1	30	29 - 155
tris(o-cresyl) phosphate	5000	18.4	5230	104	5210	104	.383	30	72 - 127

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 14:44

GEL Data File: EXP0208001a

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	481.075
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	515.914
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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Method: C:\MASSLYNX\New_Exp\PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010
Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208001a

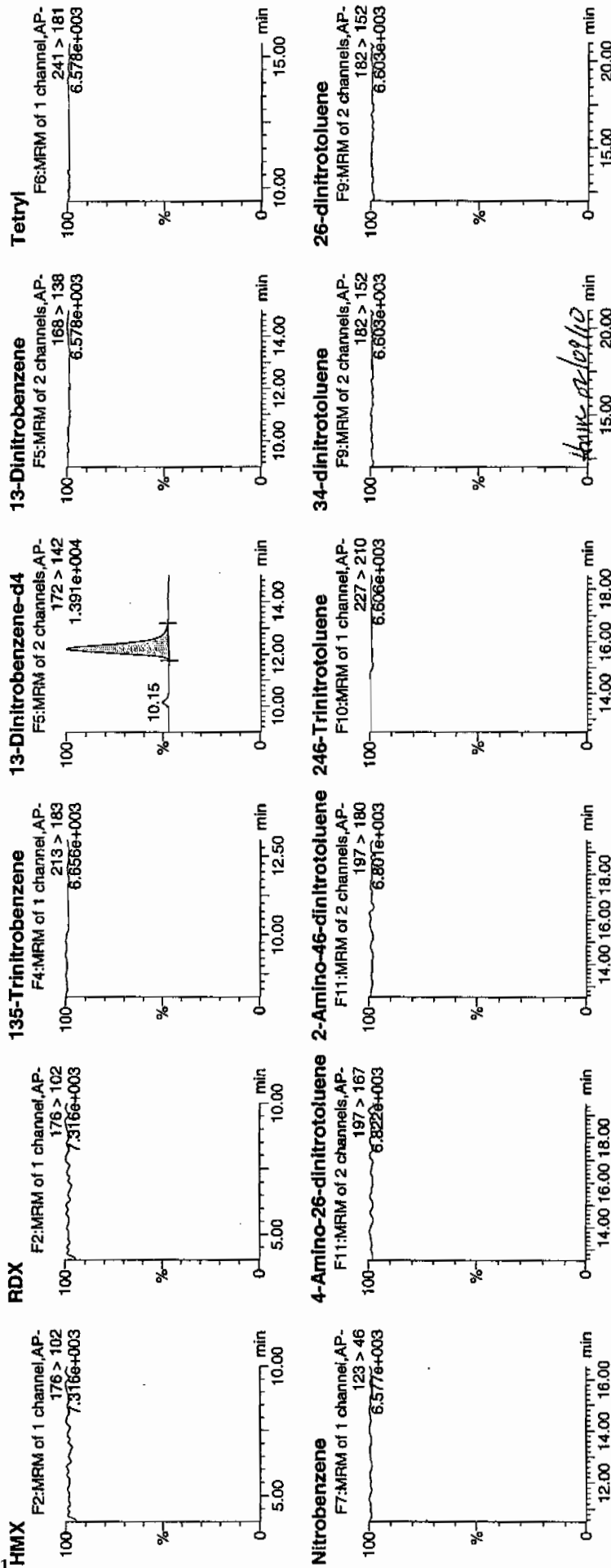
Date: 08-Feb-2010

Time: 14:44:17

ID: XIBLK01

Vial: 1:1,A

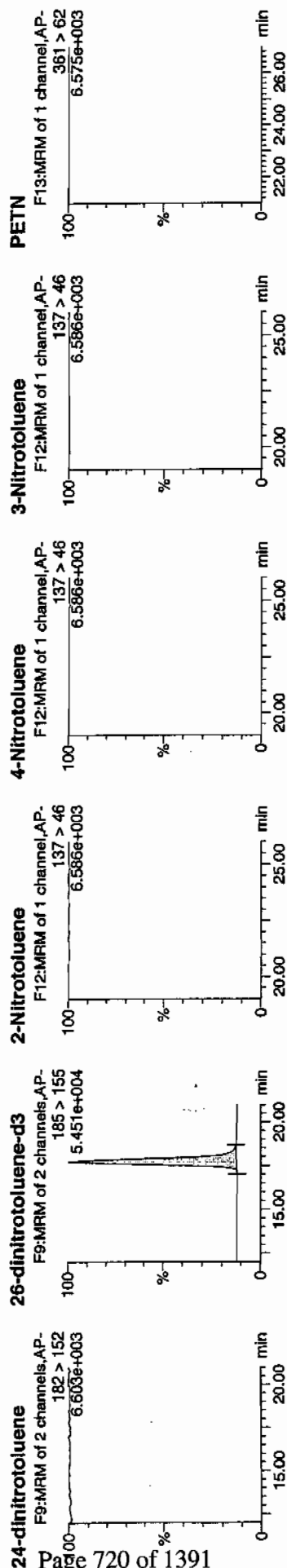
WRT
2/9/10



Quantify Sample Report

Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/ml)	% Rec	% Dev	SN
XIBLK01	H-MX	176 > 102			3092.901									
XIBLK01	ROX	176 > 102			3092.901									
XIBLK01	135-Trinitrobenzene	213 > 183			3092.901									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.20	3092.901		3092.901	3092.901	bb			481.0748	96.2	-3.8	573.7
XIBLK01	13-Dinitrobenzene	168 > 138			3092.901									
XIBLK01	Tetryl	241 > 181			3092.901									
XIBLK01	Nitrobenzene	123 > 46			3092.901									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			19047.234									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			19047.234									
XIBLK01	246-Trinitrotoluene	227 > 210			19047.234									
XIBLK01	34-dinitrotoluene	182 > 152			19047.234									
XIBLK01	26-dinitrotoluene	182 > 152			19047.234									
XIBLK01	24-dinitrotoluene	182 > 152			19047.234									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.71	19047.234		19047.234	19047.234	bb			515.9145	103.2	3.2	1409.8
XIBLK01	2-Nitrotoluene	137 > 46			19047.234									
XIBLK01	4-Nitrotoluene	137 > 46			19047.234									
XIBLK01	3-Nitrotoluene	137 > 46			19047.234									
XIBLK01	PETN	361 > 62			19047.234									

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 15:13

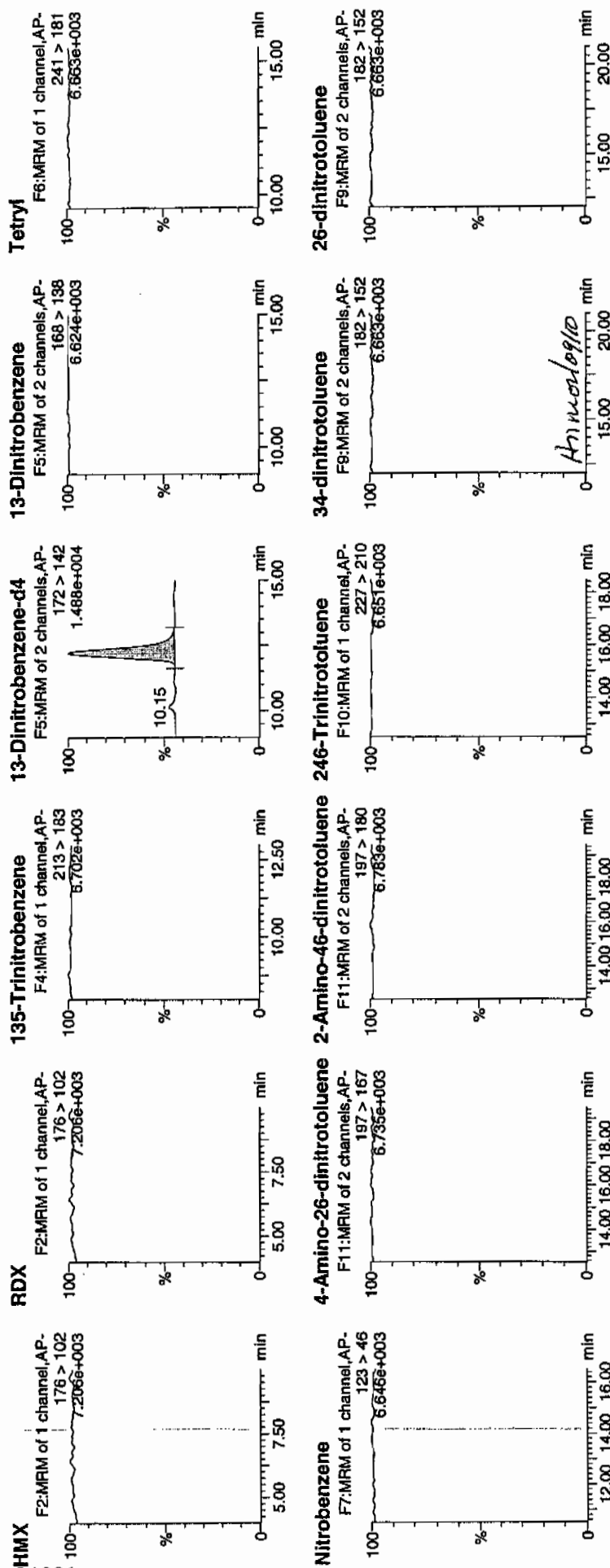
GEL Data File: EXP0208002a

Instrument ID: LCMSMS

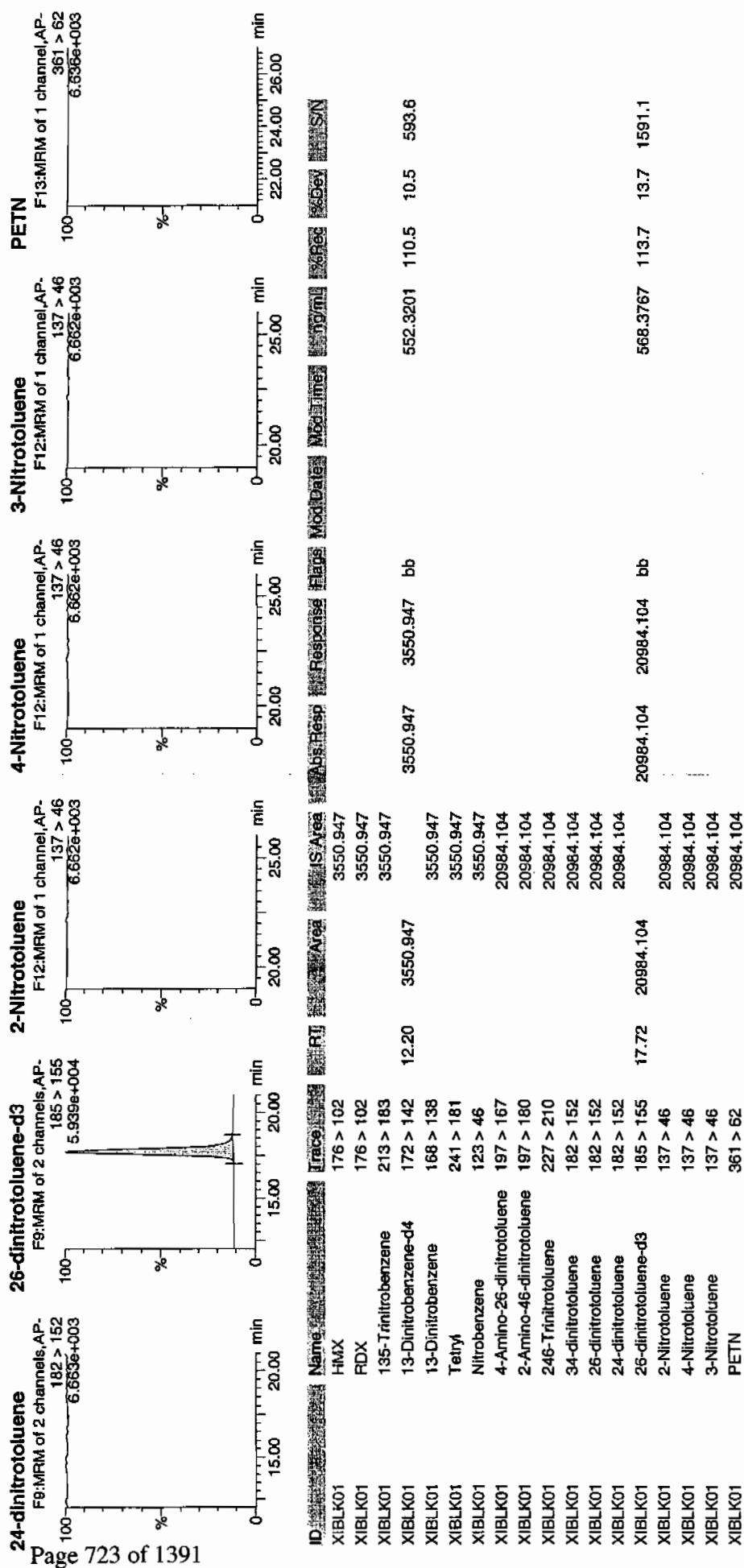
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	552.32
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	568.377
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

2/9/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 13-FEB-10 10:12

GEL Data File: EXS02130001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

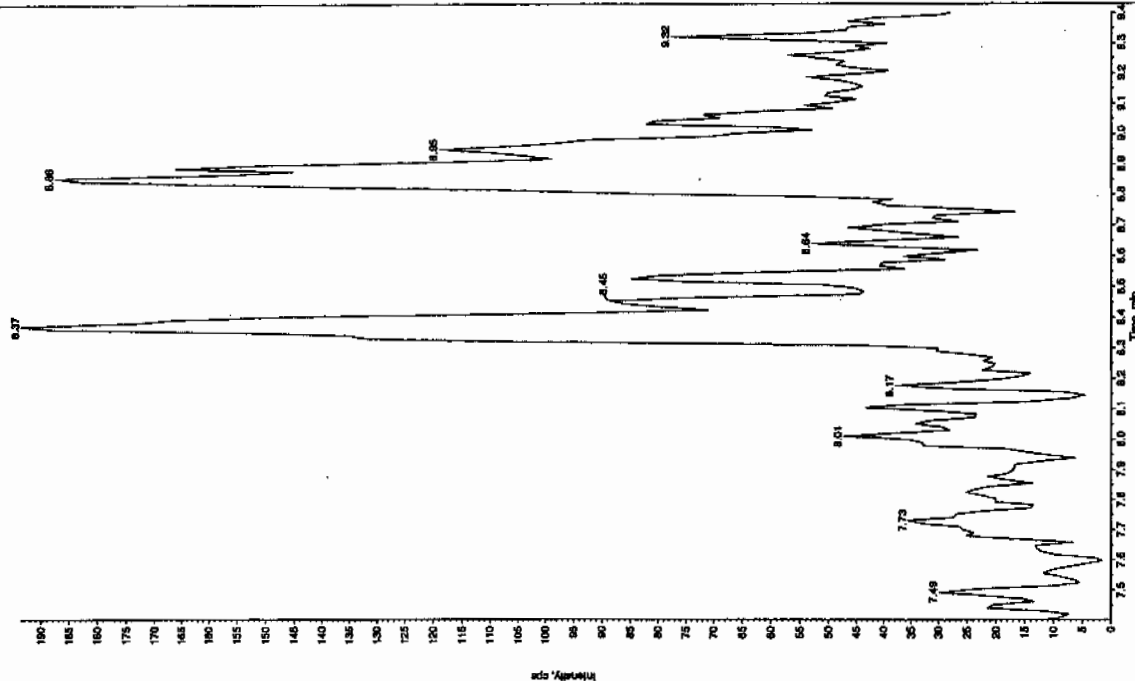
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.56
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/15/10

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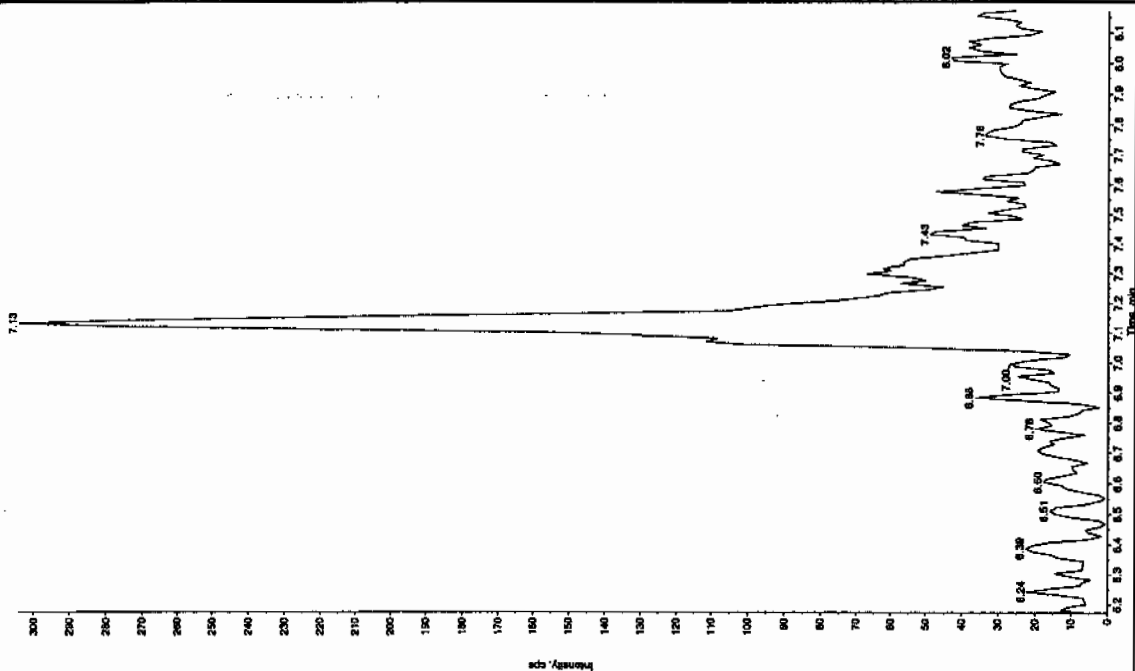
Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS02130001.wif"
 Peak Name: "35-Dinitroanisole" Mass(es): "182.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:12:45 AM
 Modified: No



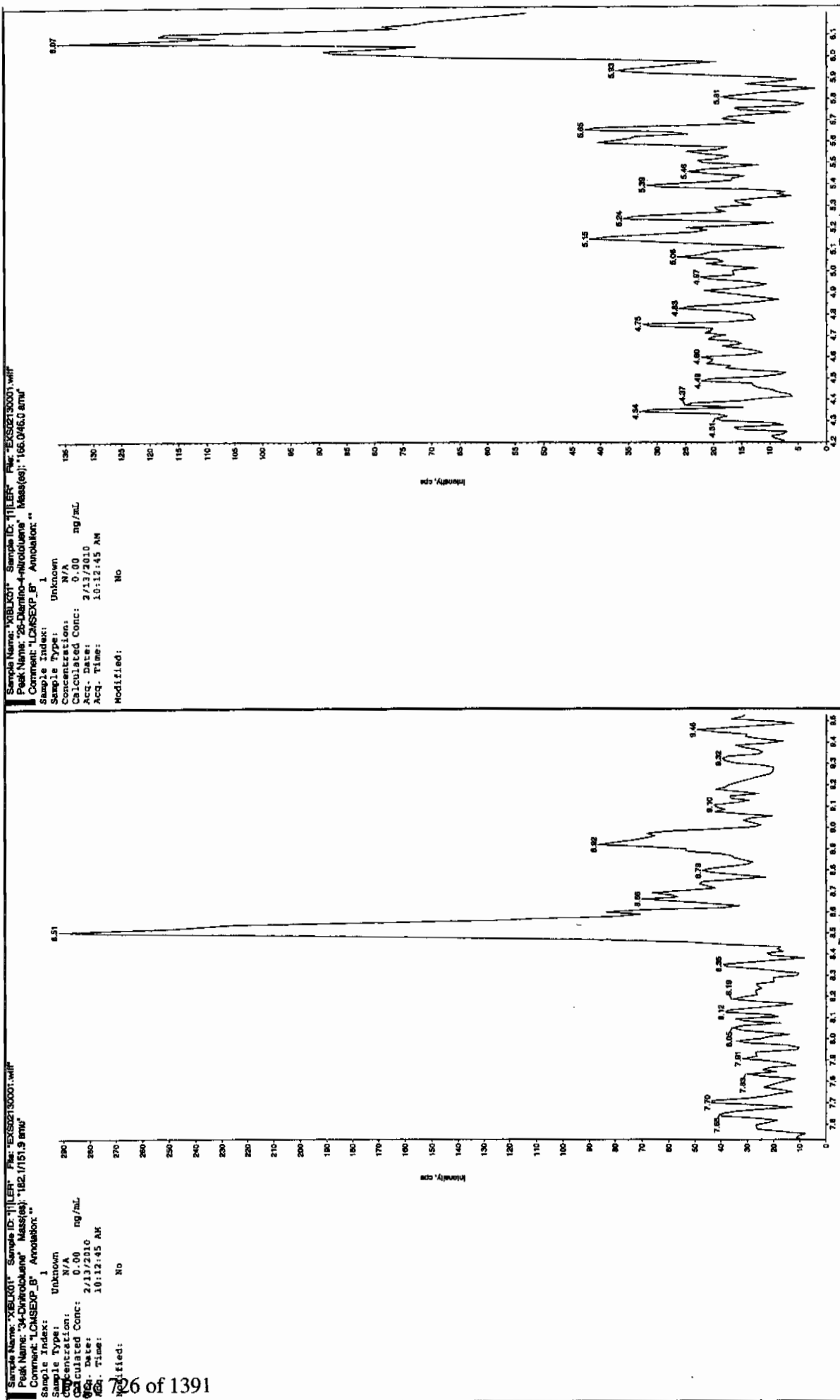
Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS02130001.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:12:45 AM
 Modified: No



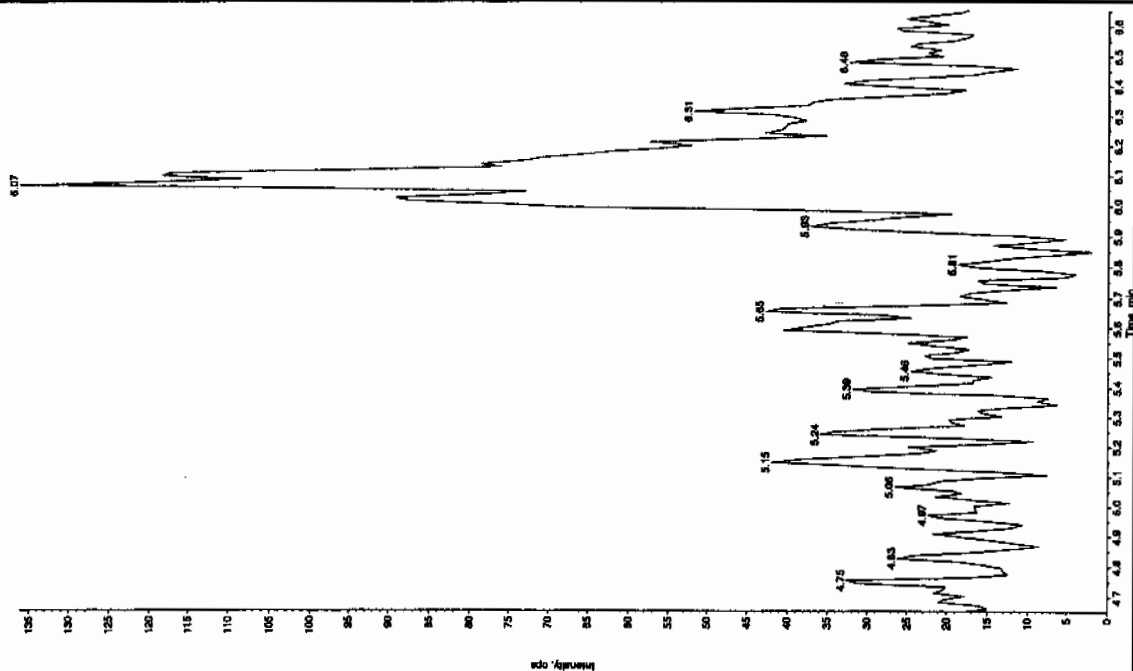
725 of 1391

See 2/15/10



Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS02130001.wif"
 Peak Name: "tris(2-ethyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.460 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:12:45 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: 11.0 min
 Area: 5.00e004 counts
 Height: 11916.587 cps
 Start Time: 10.5 min
 End Time: 11.5 min



Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS02130001.wif"
 Peak Name: "24-Diamino-6-nitroindole" Mass(es): "166.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:12:45 AM
 Modified: No

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 13-FEB-10 10:28

GEL Data File: EXS02130002.wiff

Instrument ID: LCMSMS

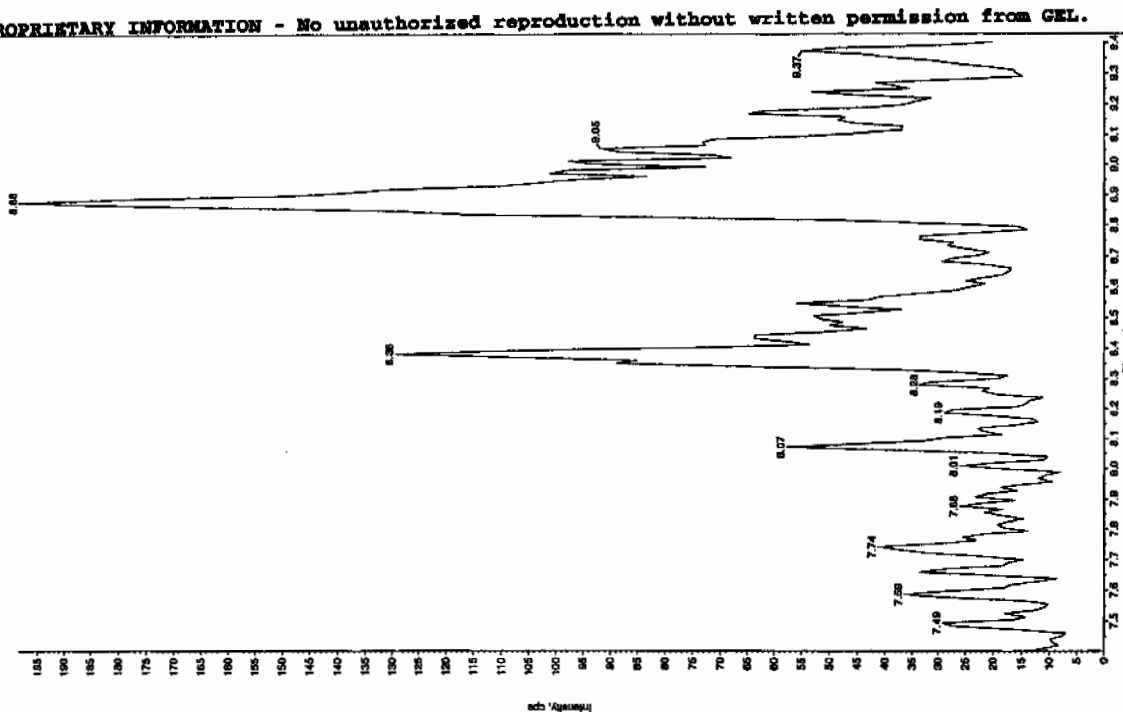
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 21/15/10

Sample Name: "X83101" Sample ID: "111ER" File: "EXS02130002.will"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

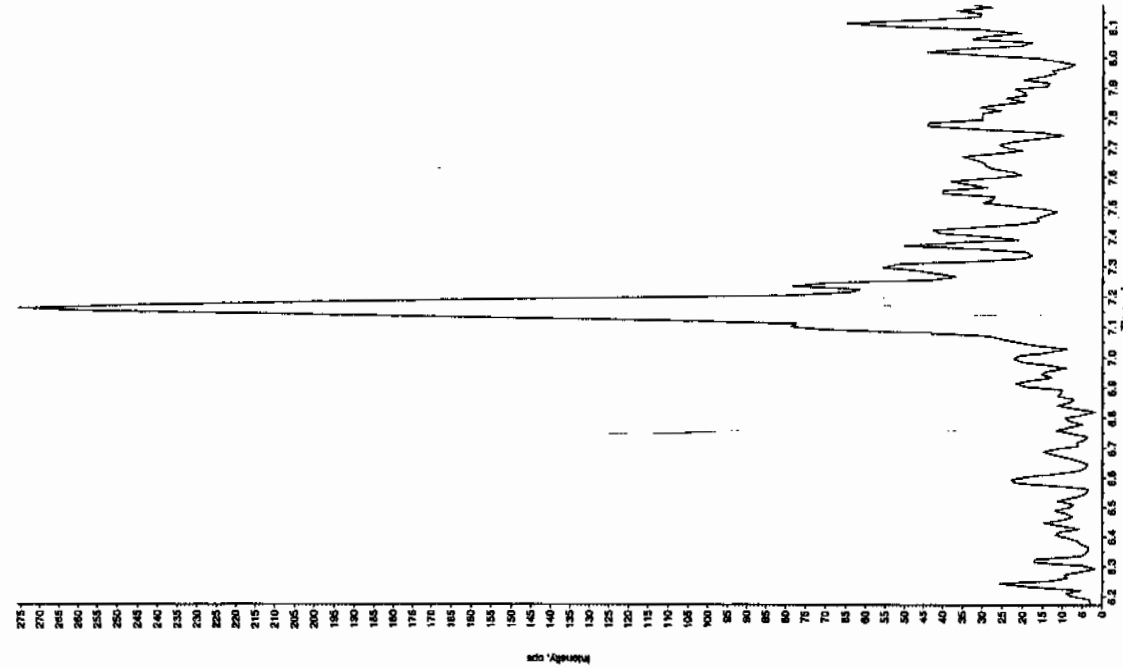
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:28:33 AM
 Modified: No



Jan 21/15/10

Sample Name: "X83101" Sample ID: "111ER" File: "EXS02130002.will"
 Peak Name: "TAIB" Mass(es): "257.2204.8 amu"
 Comment: "LCMSEXP_B" Annotation: ""

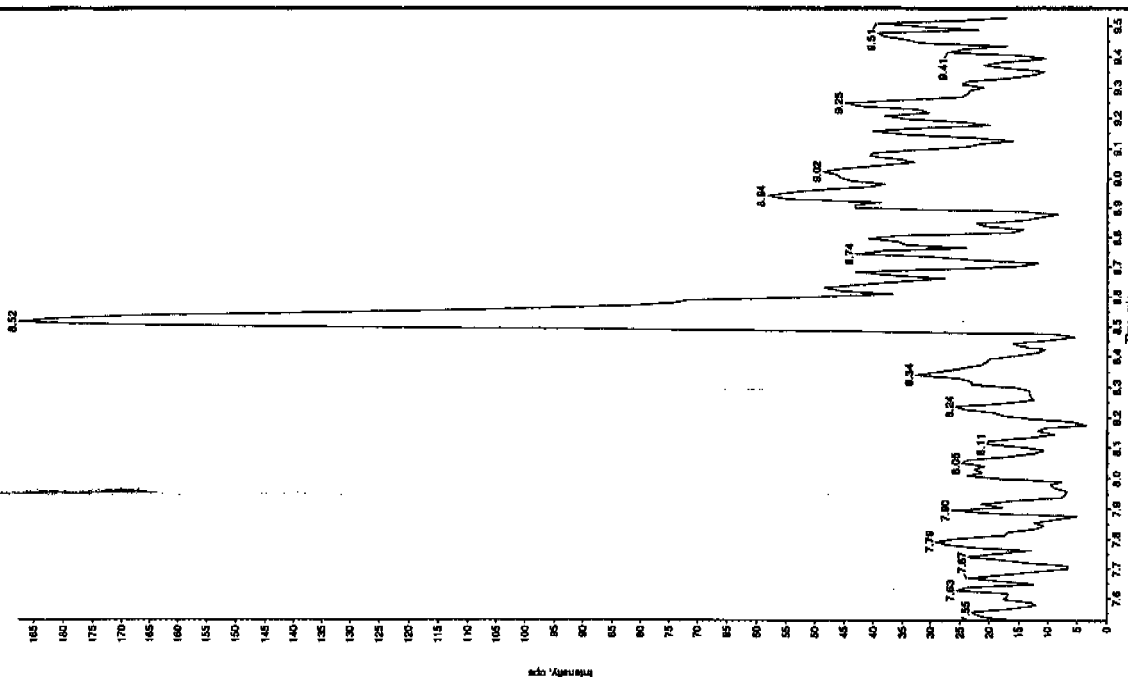
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:28:33 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

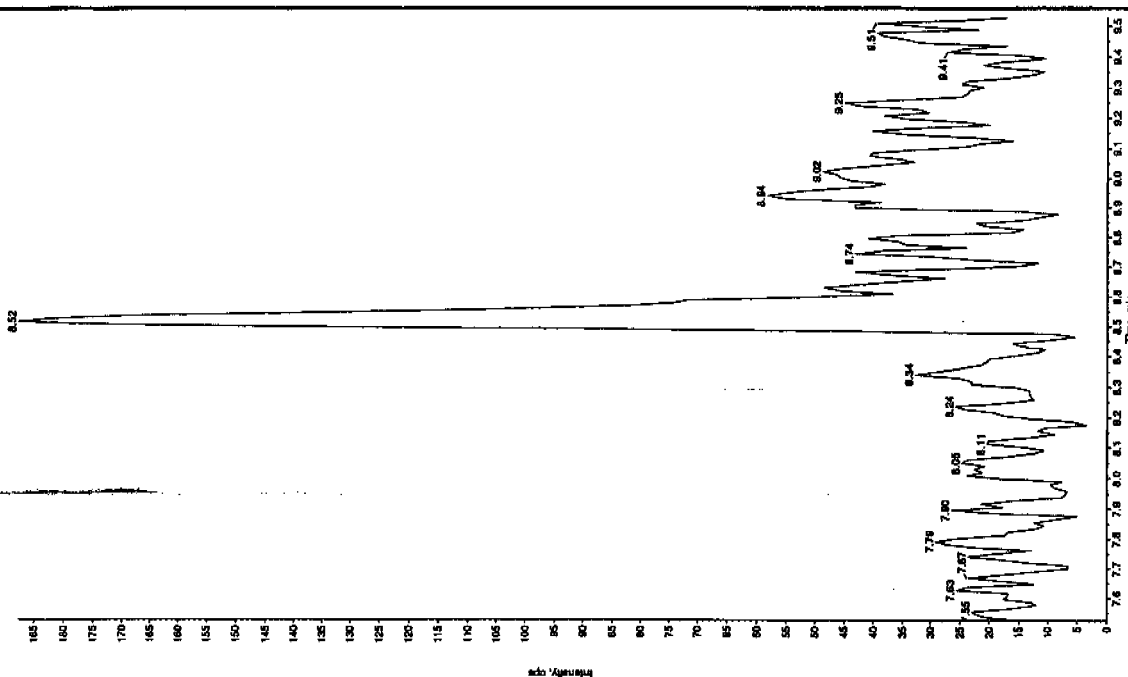
Sample Name: "XIBLX01" Sample ID: "111ER" File: "EXS02130002.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

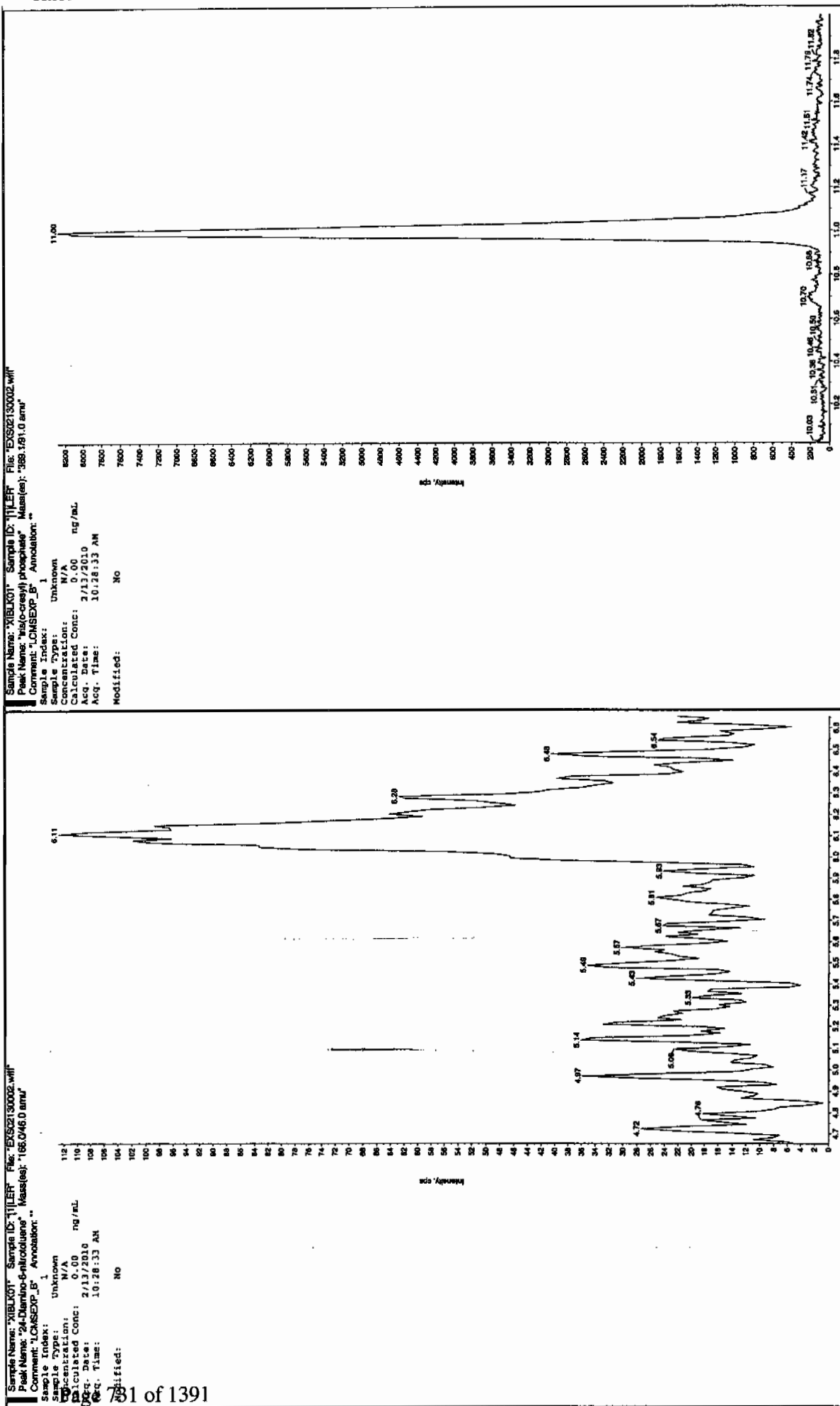
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 10:28:33 AM
 Modified: No



Sample Name: "XIBLX01" Sample ID: "111ER" File: "EXS02130002.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1451.9 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: 10:28:33 AM
 Modified: No





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:17

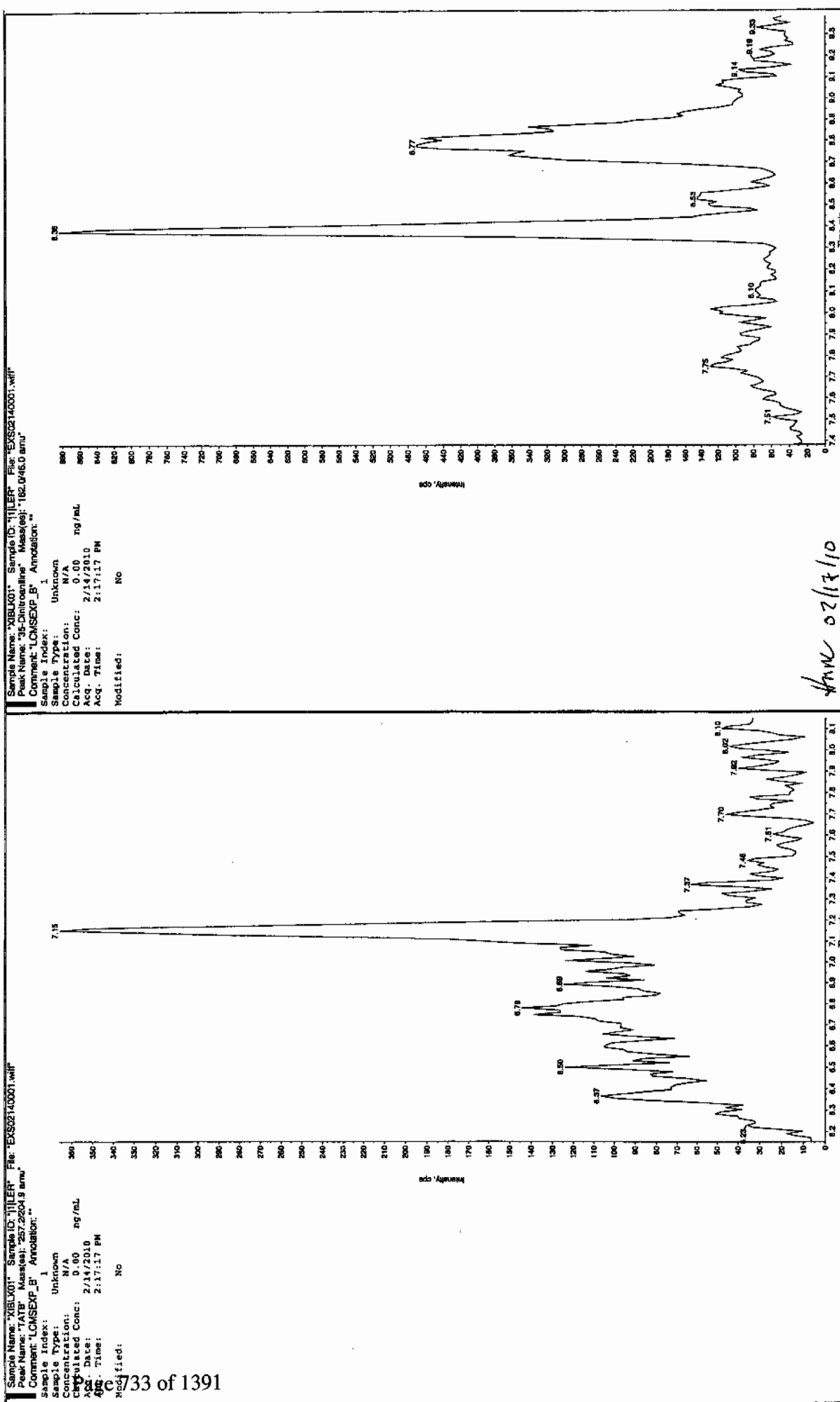
GEL Data File: EXS02140001.wiff

Instrument ID: LCMSMS

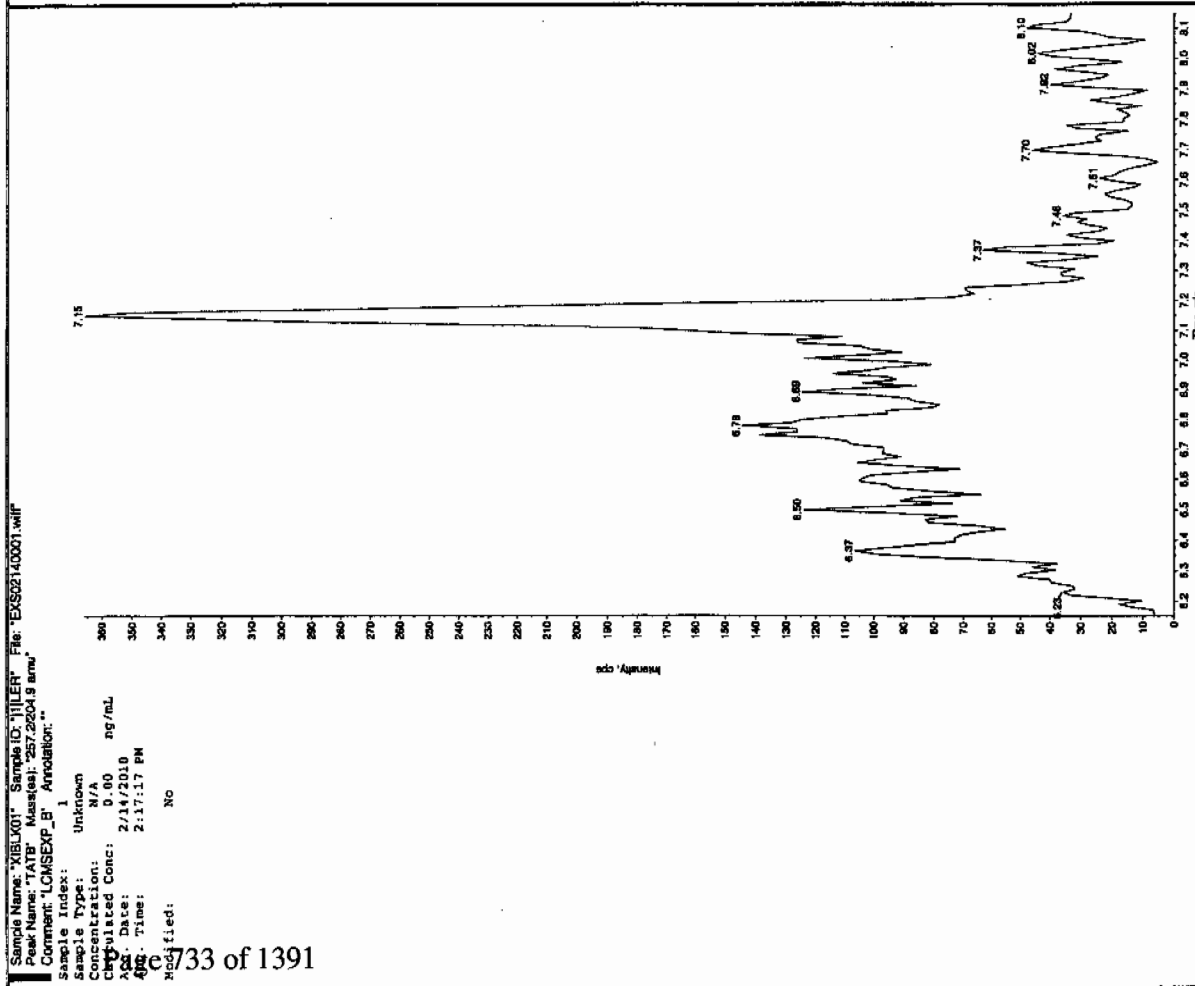
Column: Phenomenex Ultracarb 5u ODS(20)

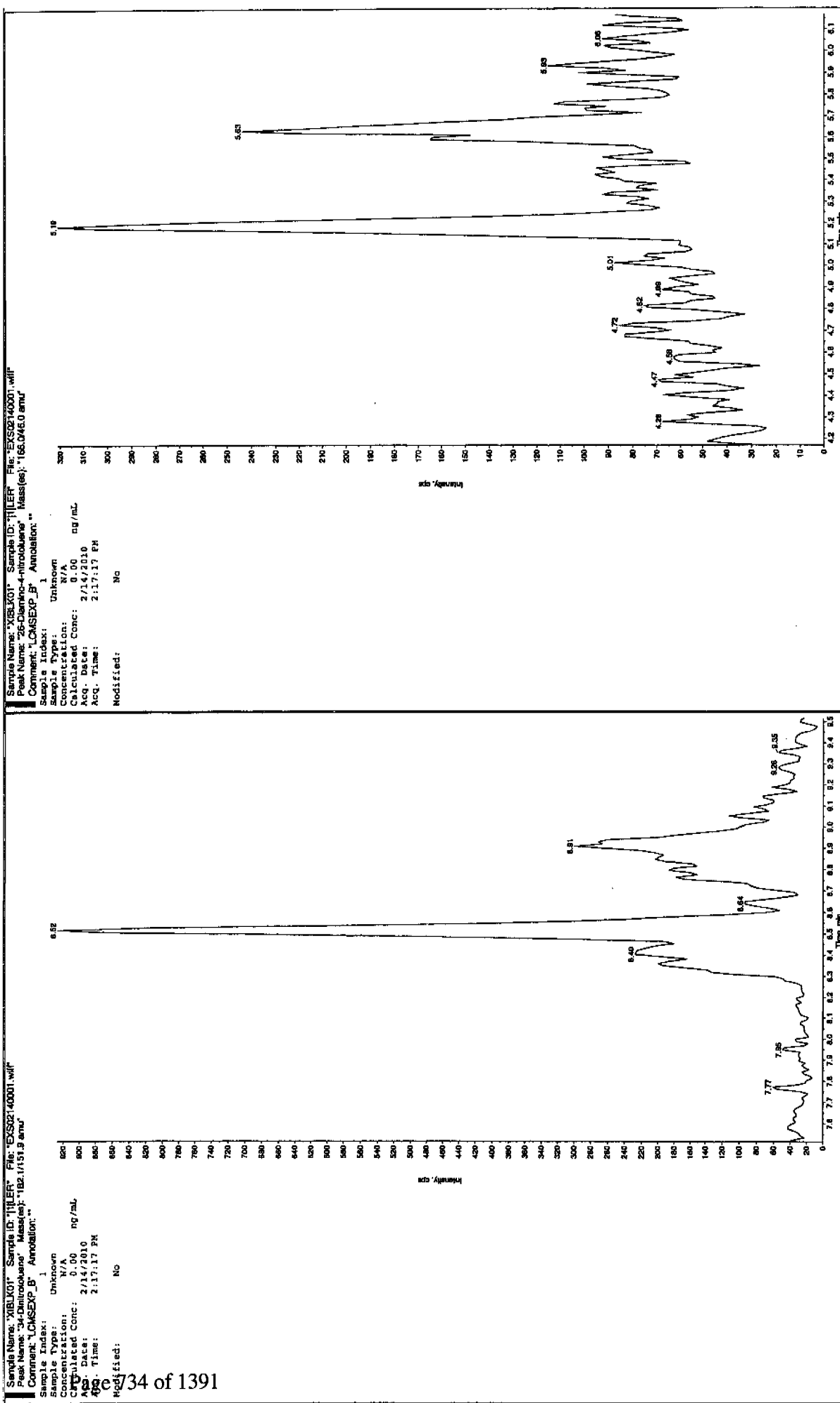
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.28
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

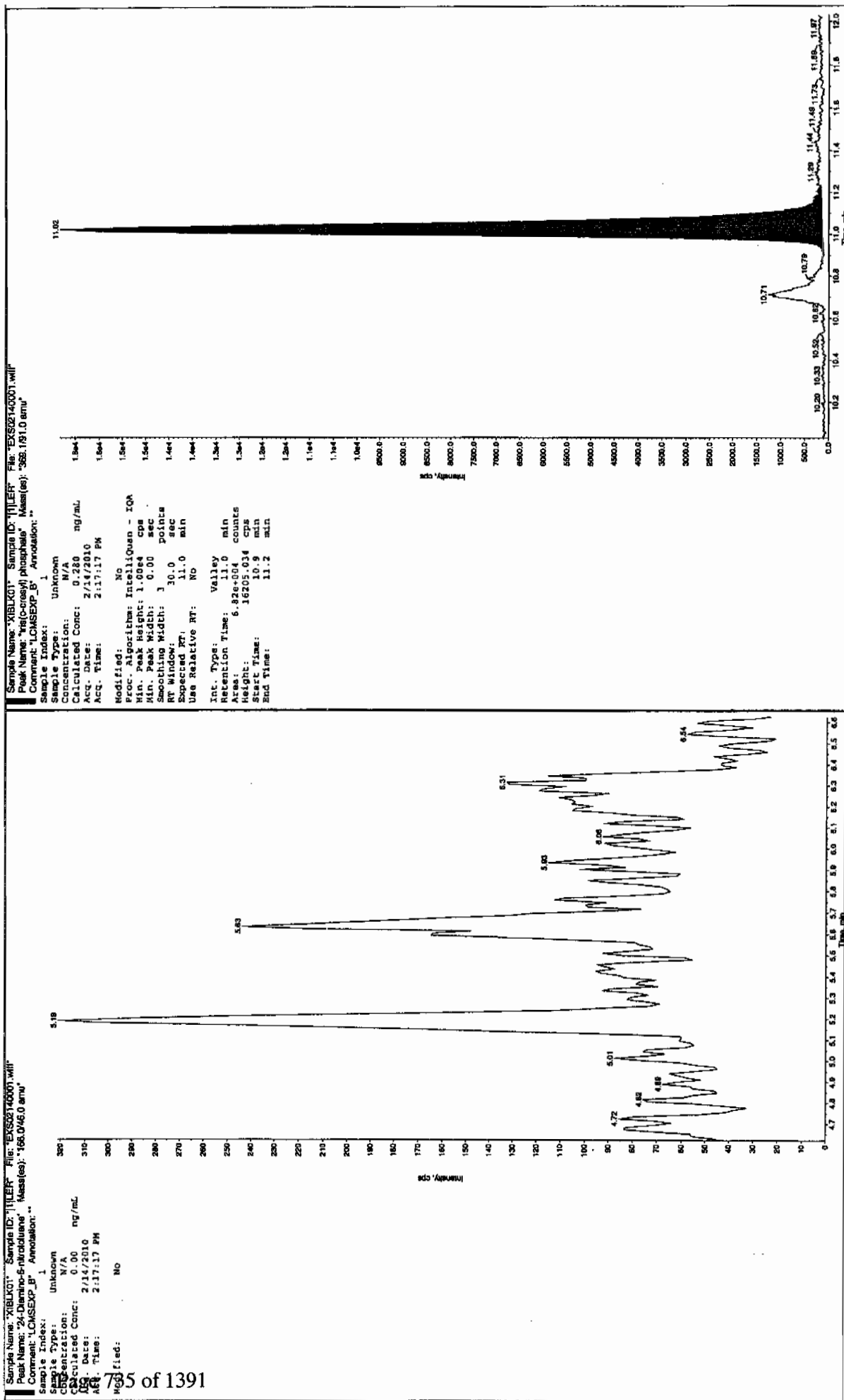
Run 2/16/10



Run 02/17/10







Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:33

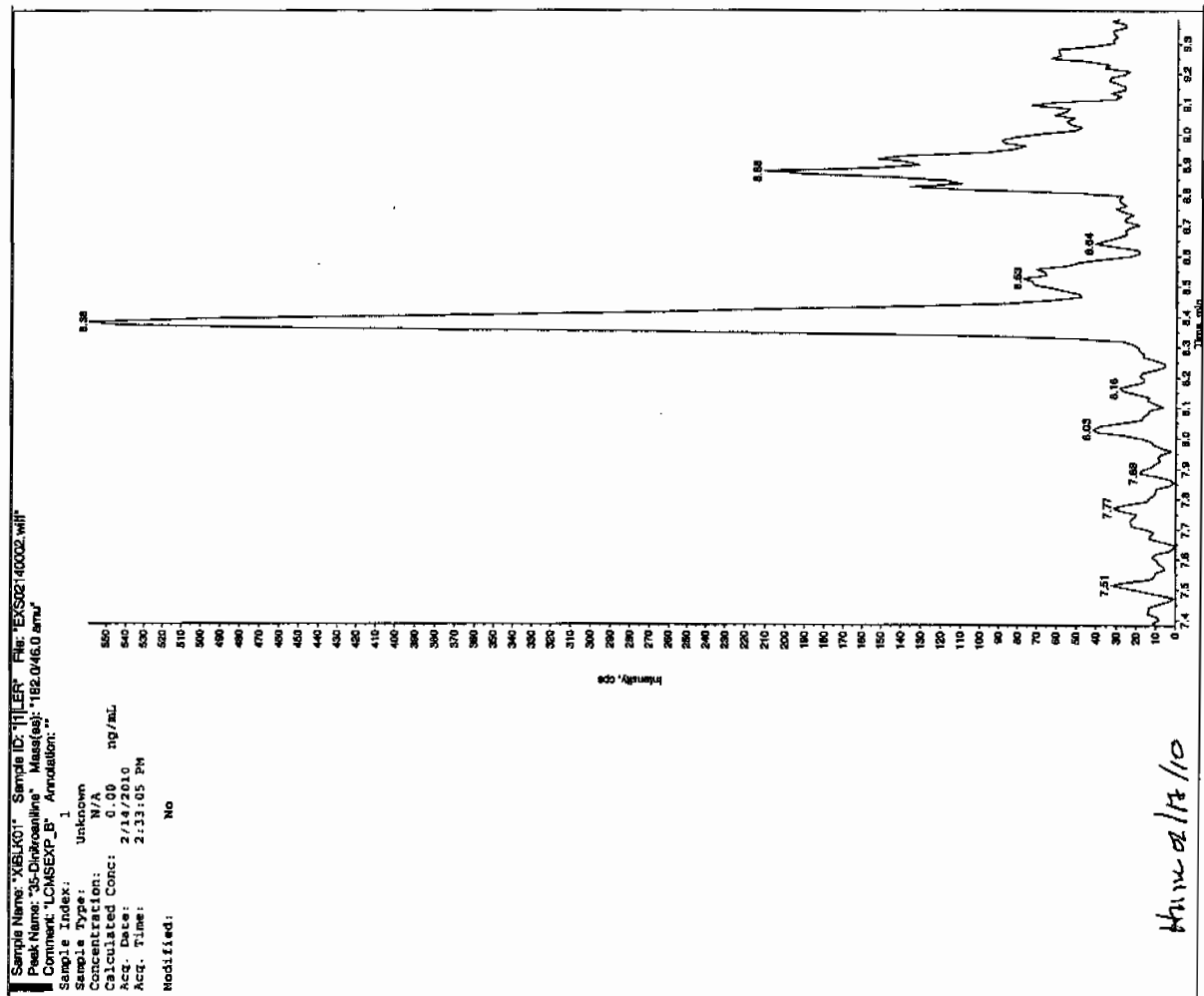
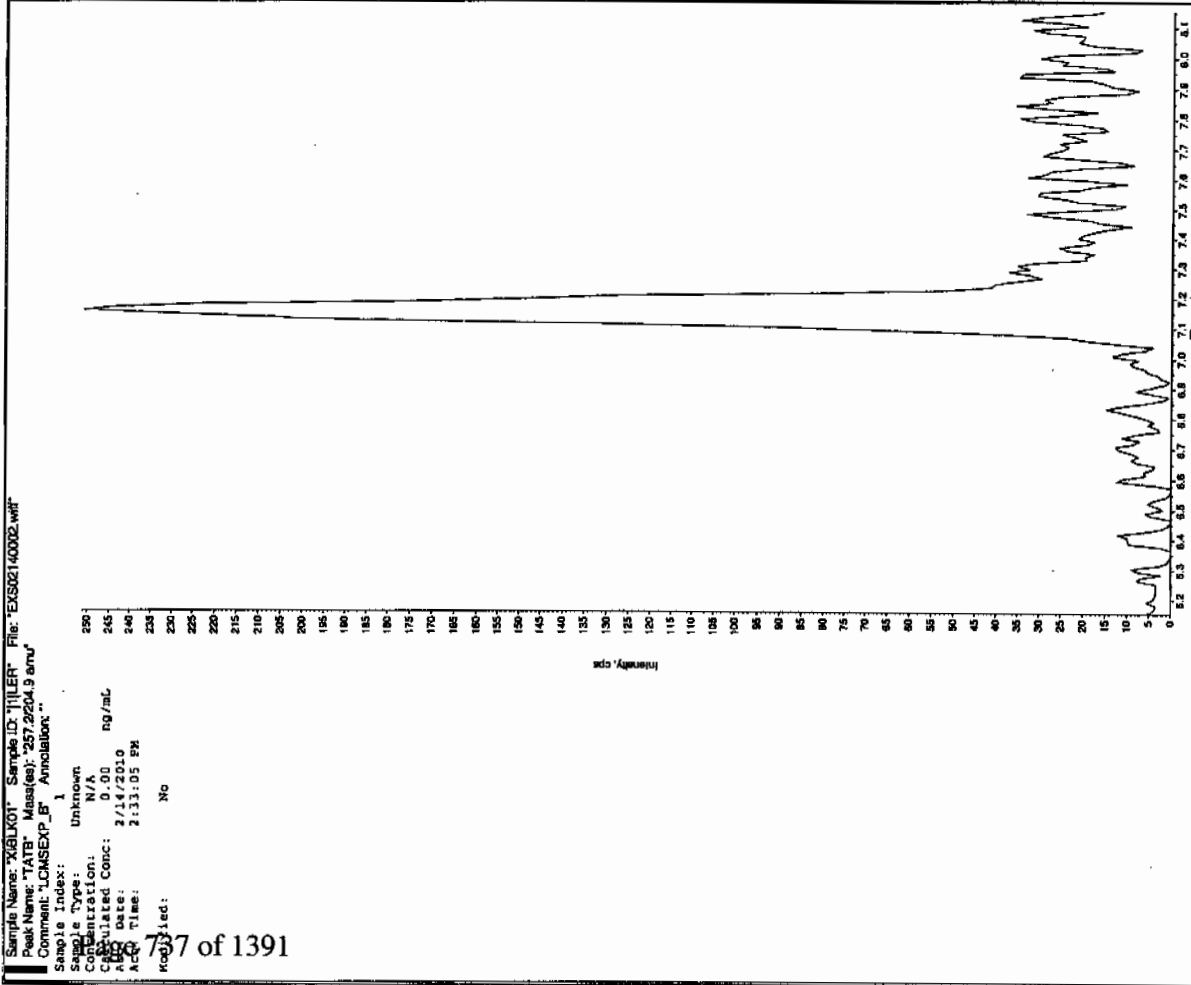
GEL Data File: EXS02140002.wiff

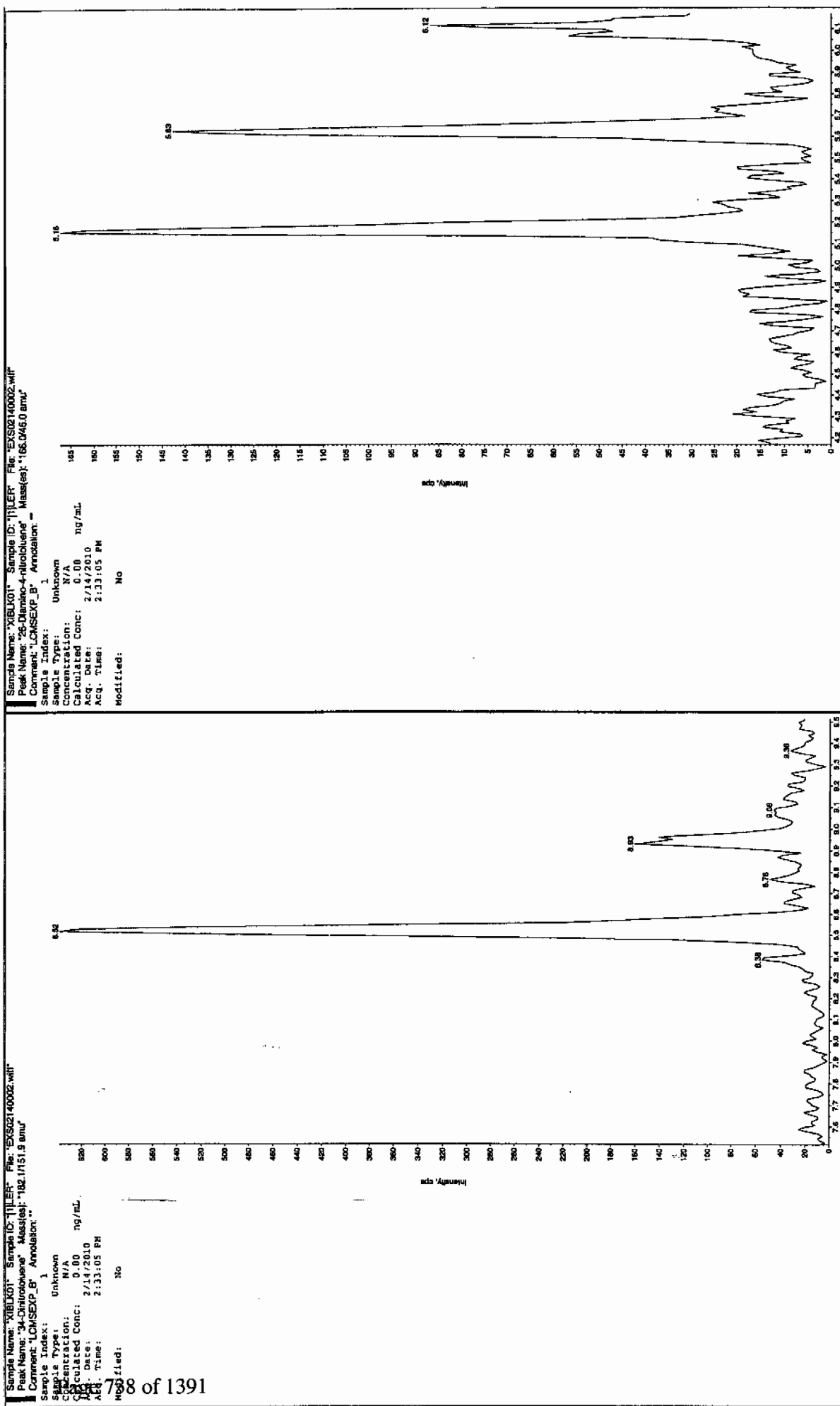
Instrument ID: LCMSMS

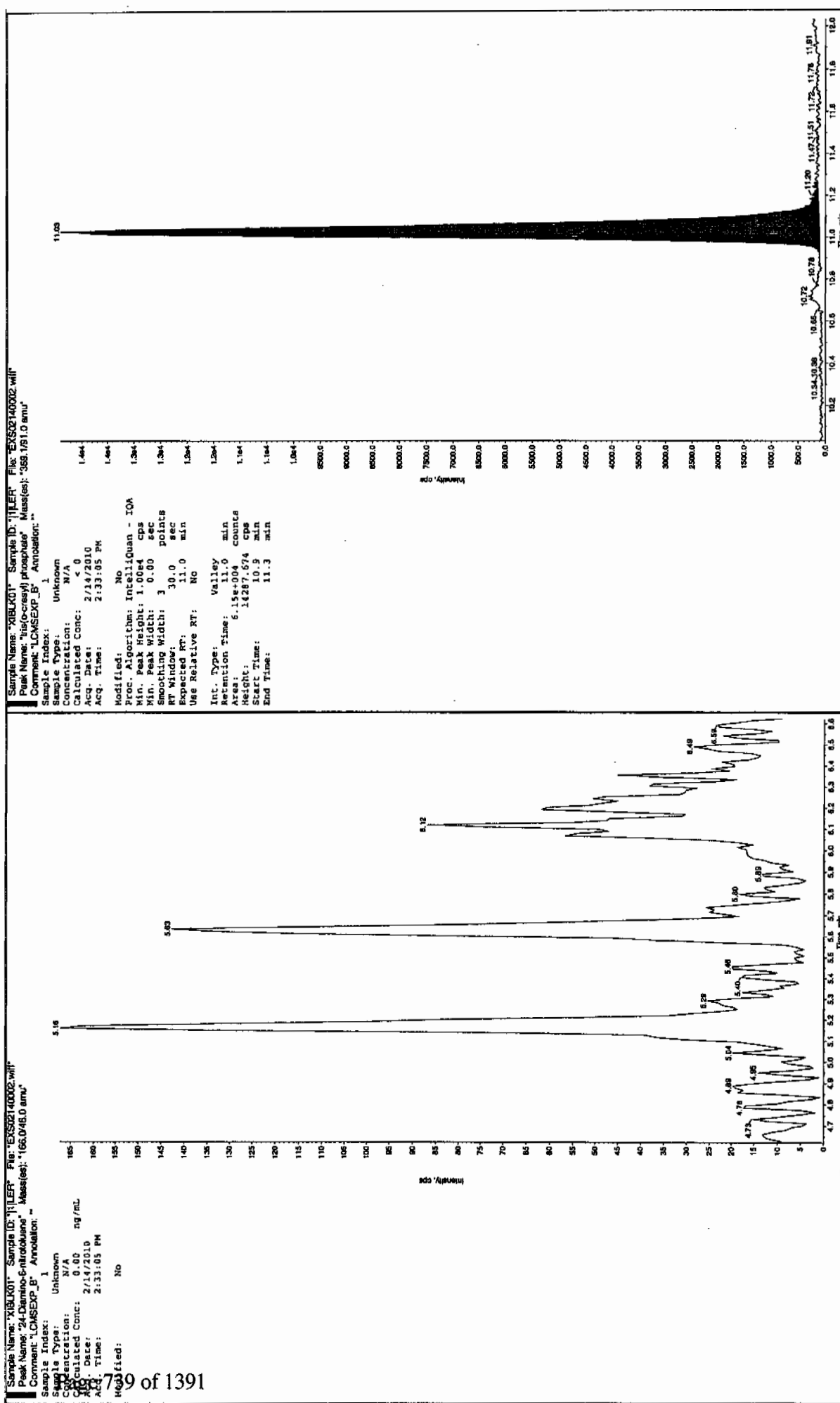
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 2/16/10







4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 08-FEB-10 18:40

GEL Data File: EXP0208009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	519.67
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	546.786
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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208009a

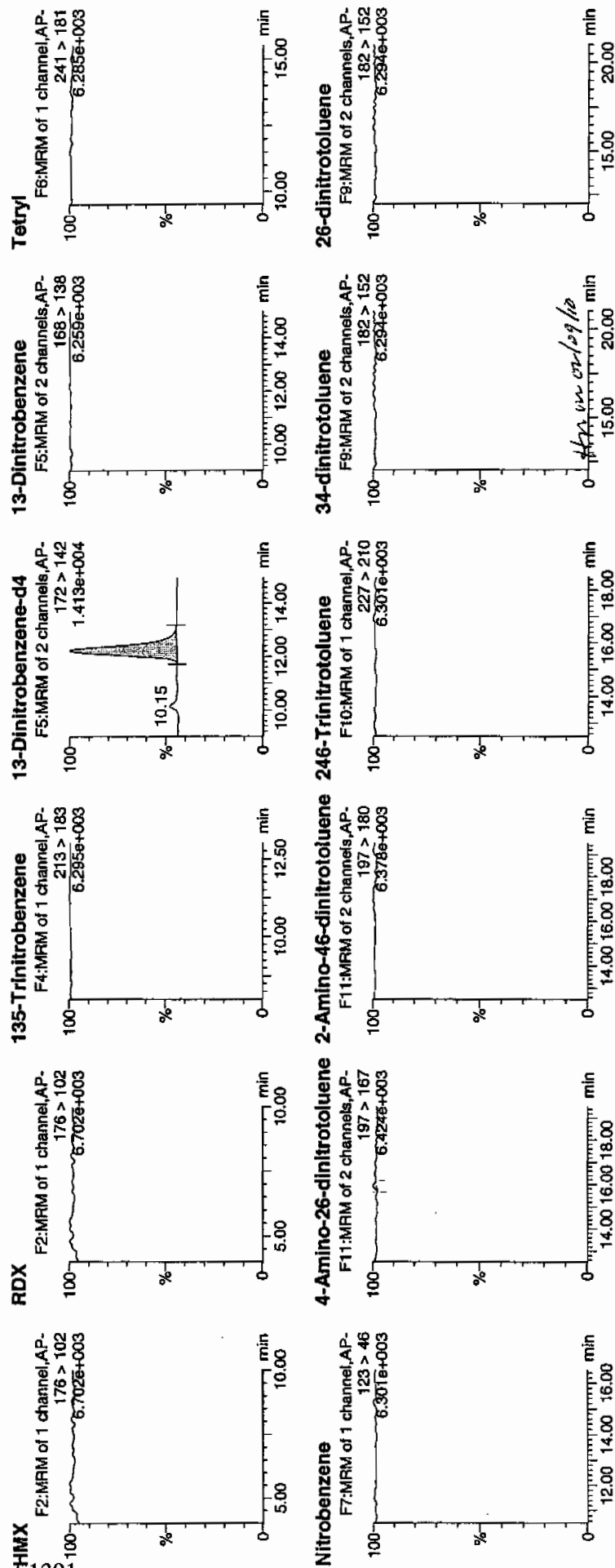
Date: 08-Feb-2010

Time: 18:40:36

ID: XIBLK02

Vial: 1:1,A

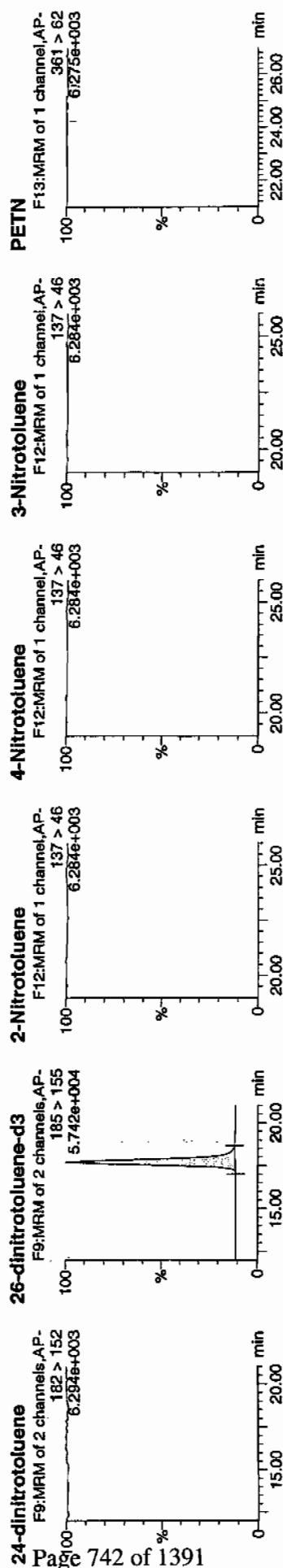
WAT
2/9/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	mg/ml	% Rec	% Dev	S/N
XIBLK02	HMx	176 > 102			3341.034									
XIBLK02	RDX	176 > 102			3341.034									
XIBLK02	135-Trinitrobenzene	213 > 183			3341.034									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.20	3341.034		3341.034	3341.034	bb			519.6698	103.9	3.9	344.2
XIBLK02	13-Dinitrobenzene	168 > 138			3341.034									
XIBLK02	Tetryl	241 > 181			3341.034									
XIBLK02	Nitrobenzene	123 > 46			3341.034									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			20186.990			MM-	09-Feb-10	10:07:01				
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			20186.990									
XIBLK02	246-Trinitrotoluene	227 > 210			20186.990									
XIBLK02	34-dinitrotoluene	182 > 152			20186.990									
XIBLK02	26-dinitrotoluene	182 > 152			20186.990									
XIBLK02	24-dinitrotoluene	182 > 152			20186.990									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.71	20186.990		20186.990	20186.990	bb			546.7860	109.4	9.4	1811.7
XIBLK02	2-Nitrotoluene	137 > 46			20186.990									
XIBLK02	4-Nitrotoluene	137 > 46			20186.990									
XIBLK02	3-Nitrotoluene	137 > 46			20186.990									
XIBLK02	PETN	361 > 62			20186.990			MM-	09-Feb-10	10:12:32				

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 08-FEB-10 19:39

GEL Data File: EXP0208011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	534.714
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	583.46
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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208011a

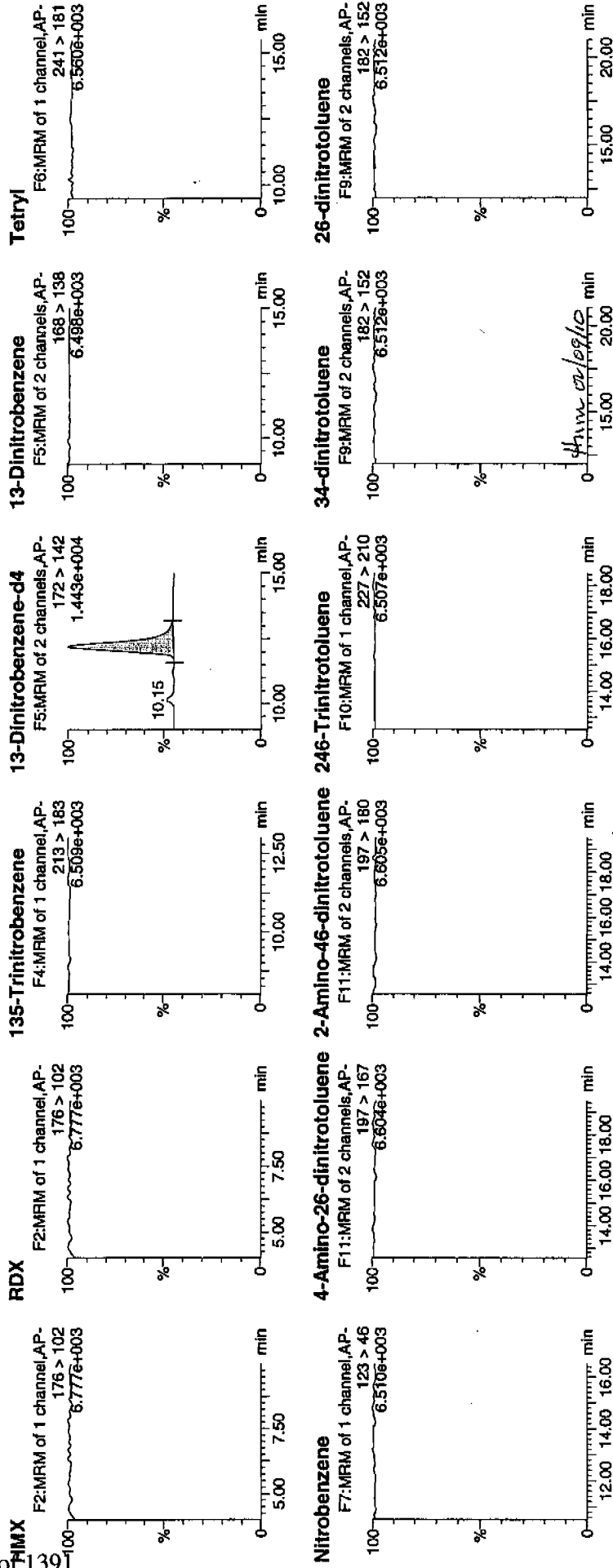
Date: 08-Feb-2010

Time: 19:39:33

ID: XIBLK03

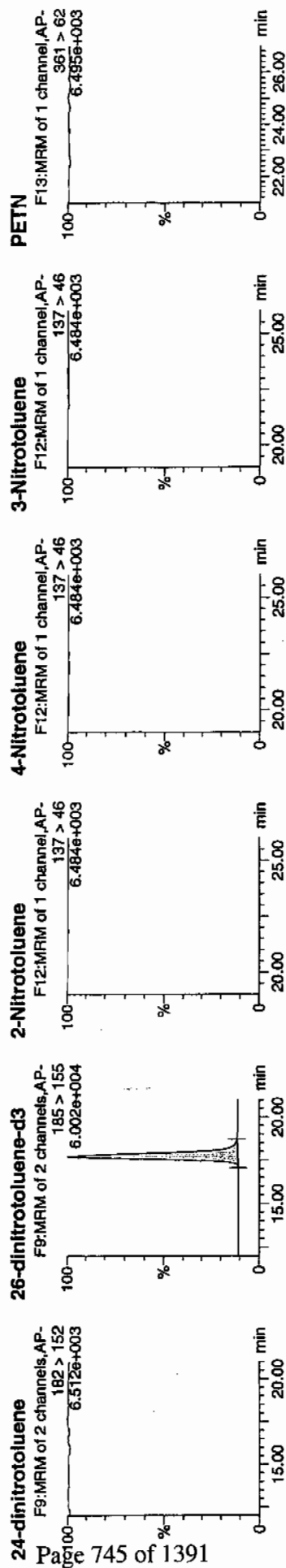
Ratio: 1:1,A

MR
2/9/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

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ID	Name	Trace	RT	Area	S/Area	Abs:Resp	Response	Flags	Mod.Date	Mod.Time	Inj.Vol	%Rec	%Dev	S/N
XIBLK03	HMXX	176 > 102			3437.753									
XIBLK03	RDX	176 > 102			3437.753									
XIBLK03	135-Trinitrobenzene	213 > 183			3437.753									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	12.20	3437.753		3437.753	3437.753	bb			534.7137	106.9	6.9	235.9
XIBLK03	13-Dinitrobenzene	168 > 138			3437.753									
XIBLK03	Tetryl	241 > 181			3437.753									
XIBLK03	Nitrobenzene	123 > 46			3437.753									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			21540.977									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			21540.977									
XIBLK03	246-Trinitrotoluene	227 > 210			21540.977									
XIBLK03	34-dinitrotoluene	182 > 152			21540.977									
XIBLK03	26-dinitrotoluene	182 > 152			21540.977									
XIBLK03	24-dinitrotoluene	182 > 152			21540.977									
XIBLK03	26-dinitrotoluene-d3	185 > 155	17.72	21540.977		21540.977	21540.977	bb			583.4602	116.7	16.7	396.6
XIBLK03	2-Nitrotoluene	137 > 46			21540.977									
XIBLK03	4-Nitrotoluene	137 > 46			21540.977									
XIBLK03	3-Nitrotoluene	137 > 46			21540.977									
XIBLK03	PETN	361 > 62			21540.977									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-FEB-10 02:02

GEL Data File: EXP0208024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	594.411
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	592.137
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208024a

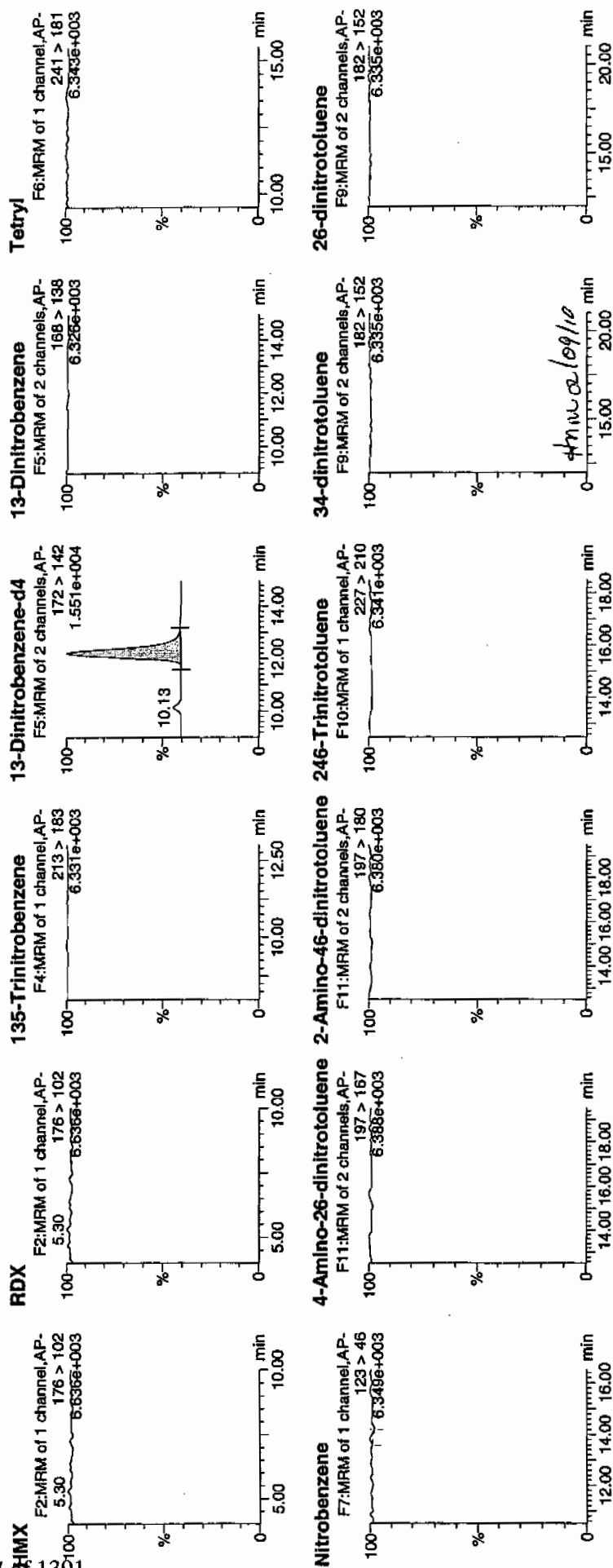
Date: 09-Feb-2010

Time: 02:02:53

ID: XIBLK04

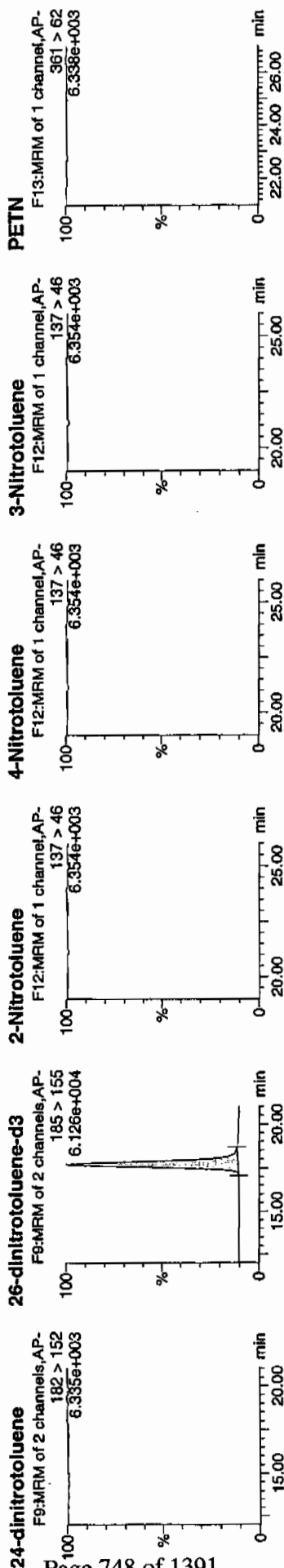
Vial: 1:1,A

100%
2/1/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Mod Date	Mod Time	Norm	Dec	Day	SN
XIBLK04	HMX	176 > 102		3821.559								
XIBLK04	RDX	176 > 102		3821.559								
XIBLK04	135-Trinitrobenzene	213 > 183		3821.559								
XIBLK04	13-Dinitrobenzene-d4	172 > 142	12.20	3821.559								
XIBLK04	13-Dinitrobenzene	168 > 138		3821.559								
XIBLK04	Tetryl	241 > 181		3821.559								
XIBLK04	Nitrobenzene	123 > 46		3821.559								
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167		21861.324								
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180		21861.324								
XIBLK04	246-Trinitrotoluene	227 > 210		21861.324								
XIBLK04	34-dinitrotoluene	182 > 152		21861.324								
XIBLK04	26-dinitrotoluene	182 > 152		21861.324								
XIBLK04	24-dinitrotoluene	182 > 152		21861.324								
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.71	21861.324								
XIBLK04	2-Nitrotoluene	137 > 46		21861.324								
XIBLK04	4-Nitrotoluene	137 > 46		21861.324								
XIBLK04	3-Nitrotoluene	137 > 46		21861.324								
XIBLK04	PETN	361 > 62										

MM- 09-Feb-10 10:05:00

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-FEB-10 08:26

GEL Data File: EXP0208037a

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	592.976
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	568.449
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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208037a

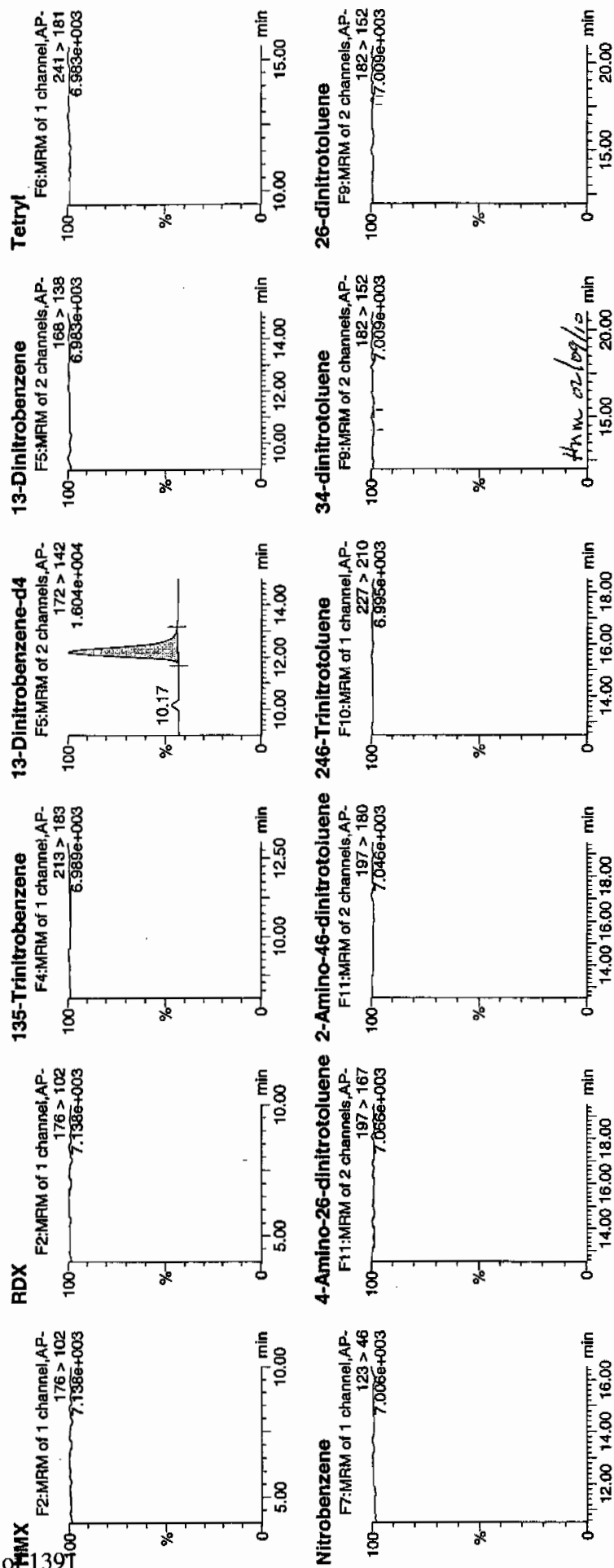
Date: 09-Feb-2010

Time: 08:26:48

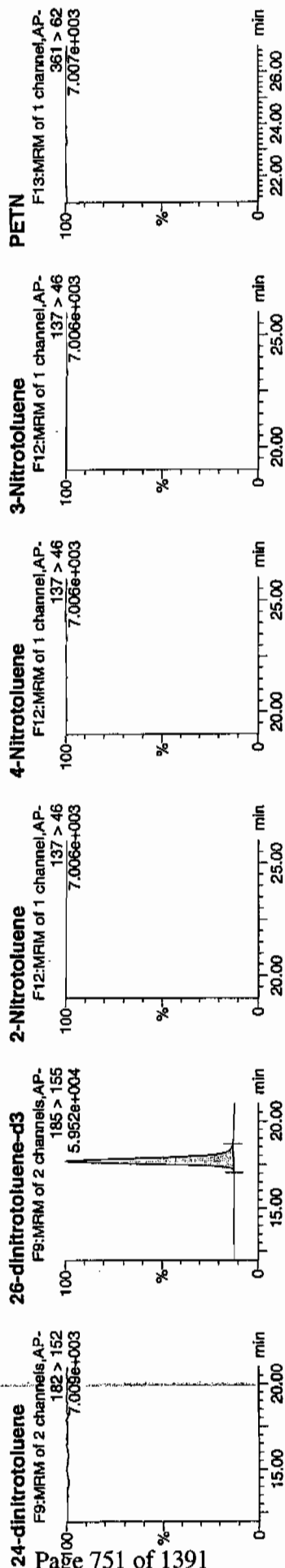
ID: XIBLK05

Mail: 1:1,A

10/10
2/10/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



ID	Name	RT	Area	Area	Response	Flags	Mod	Date	Mod	Time	Conc	%Dev	%Rec	%S/N
XIBLK05	HMX	176 > 102		3812.331										
XIBLK05	RDX	176 > 102		3812.331										
XIBLK05	135-Trinitrobenzene	213 > 183		3812.331										
XIBLK05	13-Dinitrobenzene-d4	172 > 142	12.20	3812.331							592.9761	118.6	18.6	397.2
XIBLK05	13-Dinitrobenzene	168 > 138		3812.331										
XIBLK05	Tetryl	241 > 181		3812.331										
XIBLK05	Nitrobenzene	123 > 46		3812.331										
XIBLK05	4-Amino-26-dinitrotoluene	197 > 167		20986.781										
XIBLK05	2-Amino-46-dinitrotoluene	197 > 180		20986.781										
XIBLK05	246-Trinitrotoluene	227 > 210		20986.781										
XIBLK05	34-dinitrotoluene	182 > 152		20986.781						MM- 09-Feb-10 10:09:37				
XIBLK05	26-dinitrotoluene	182 > 152		20986.781						MM- 09-Feb-10 10:15:23				
XIBLK05	24-dinitrotoluene	182 > 152		20986.781										
XIBLK05	26-dinitrotoluene-d3	185 > 155	17.71	20986.781							568.4492	113.7	13.7	1868.8
XIBLK05	2-Nitrotoluene	137 > 46		20986.781										
XIBLK05	4-Nitrotoluene	137 > 46		20986.781										
XIBLK05	3-Nitrotoluene	137 > 46		20986.781										
XIBLK05	PETN	361 > 62		20986.781										

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 09-FEB-10 14:50

GEL Data File: EXP0208050a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	619.031
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	615.609

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208050a

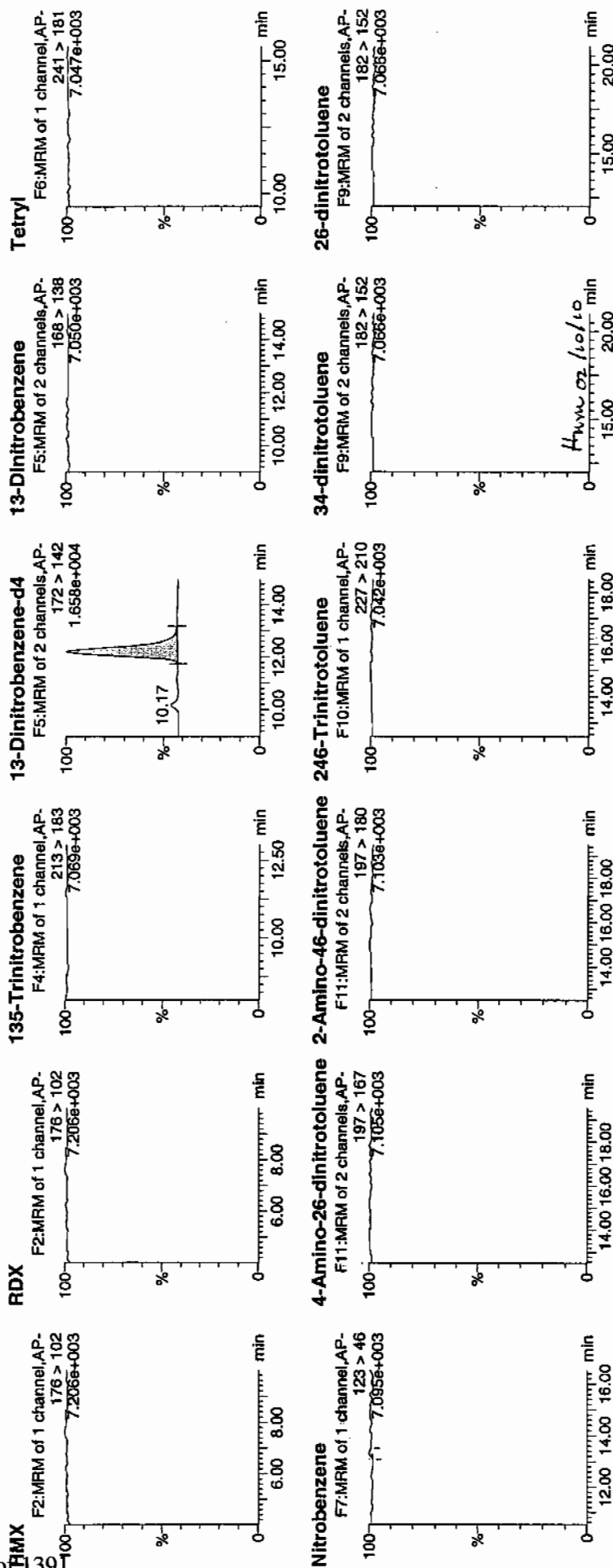
Date: 09-Feb-2010

Time: 14:50:17

ID: XIBLK06

Vial: 1:1,A

2/10/10

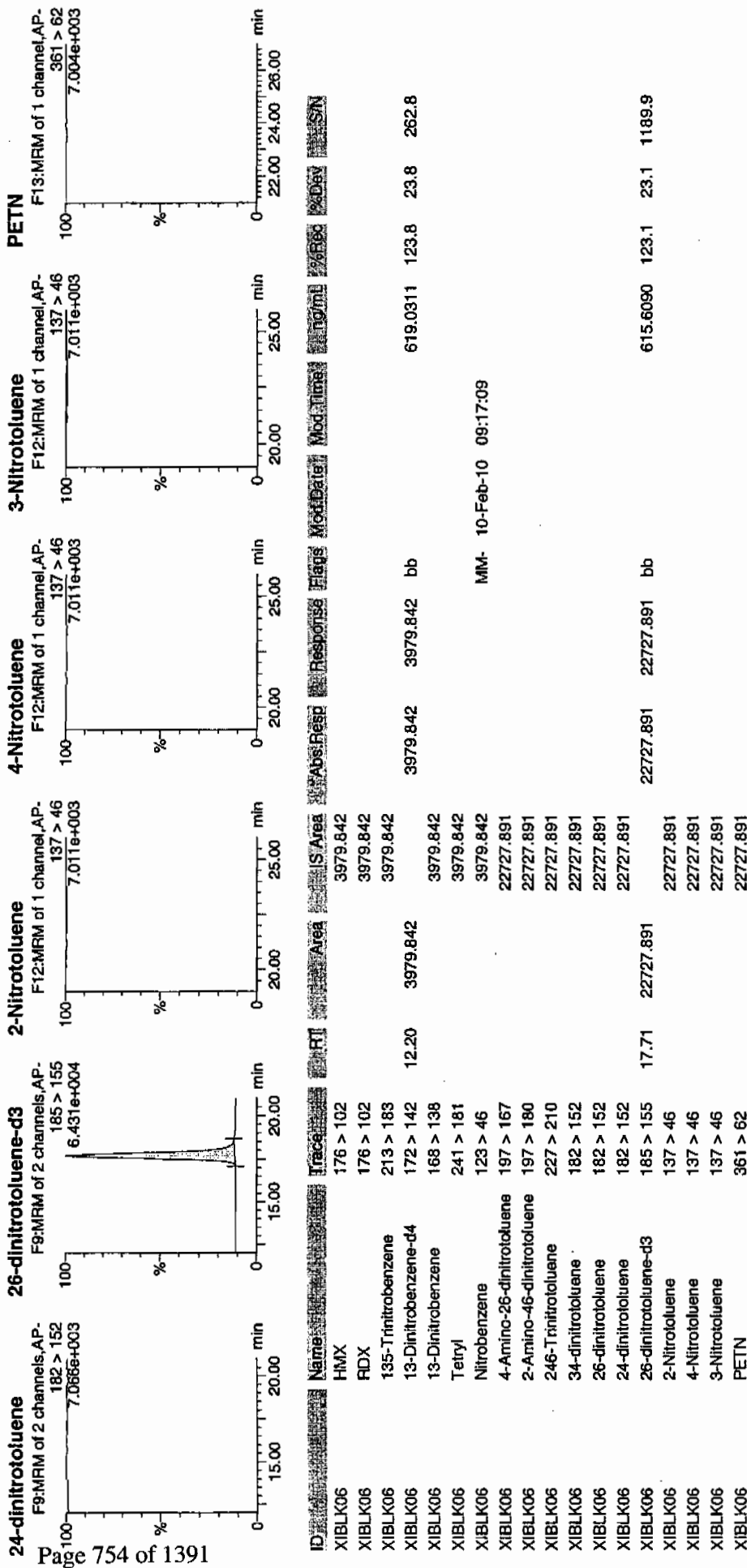


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 24 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 09-FEB-10 21:13

GEL Data File: EXP0208063a

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	602.957
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	577.242
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\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208063a

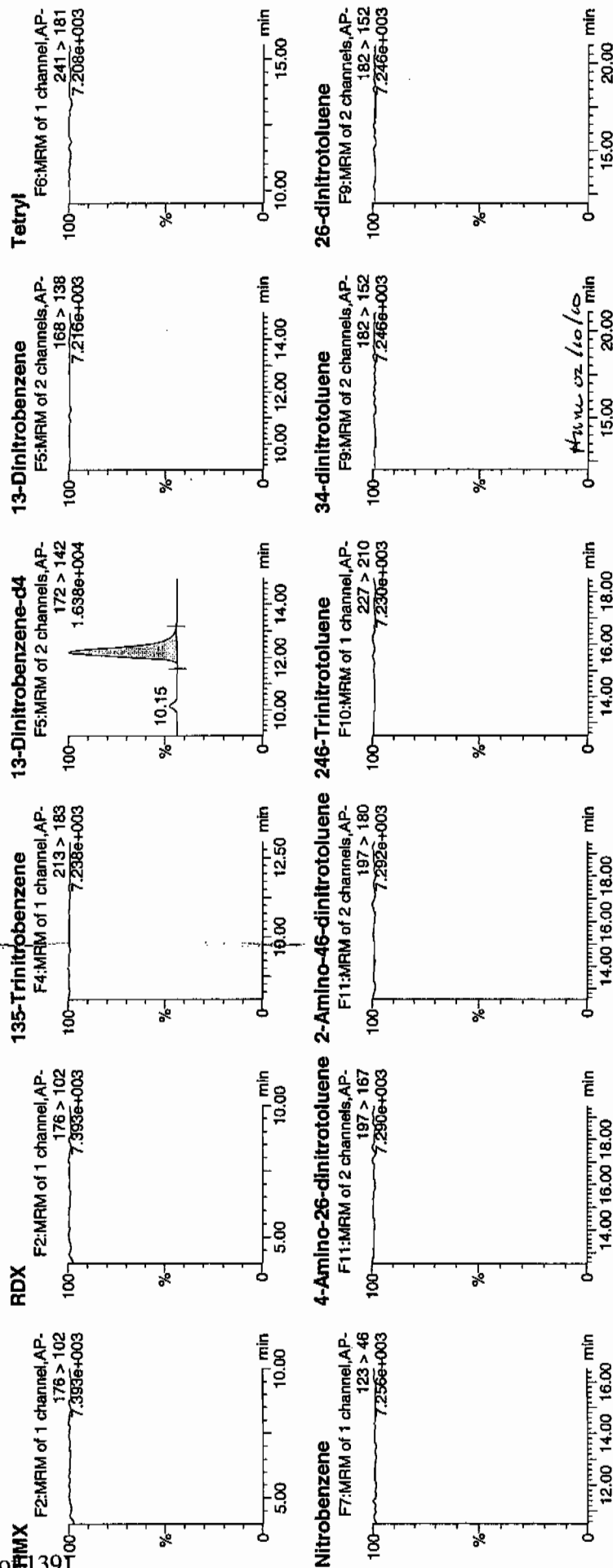
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Time: 21:13:58

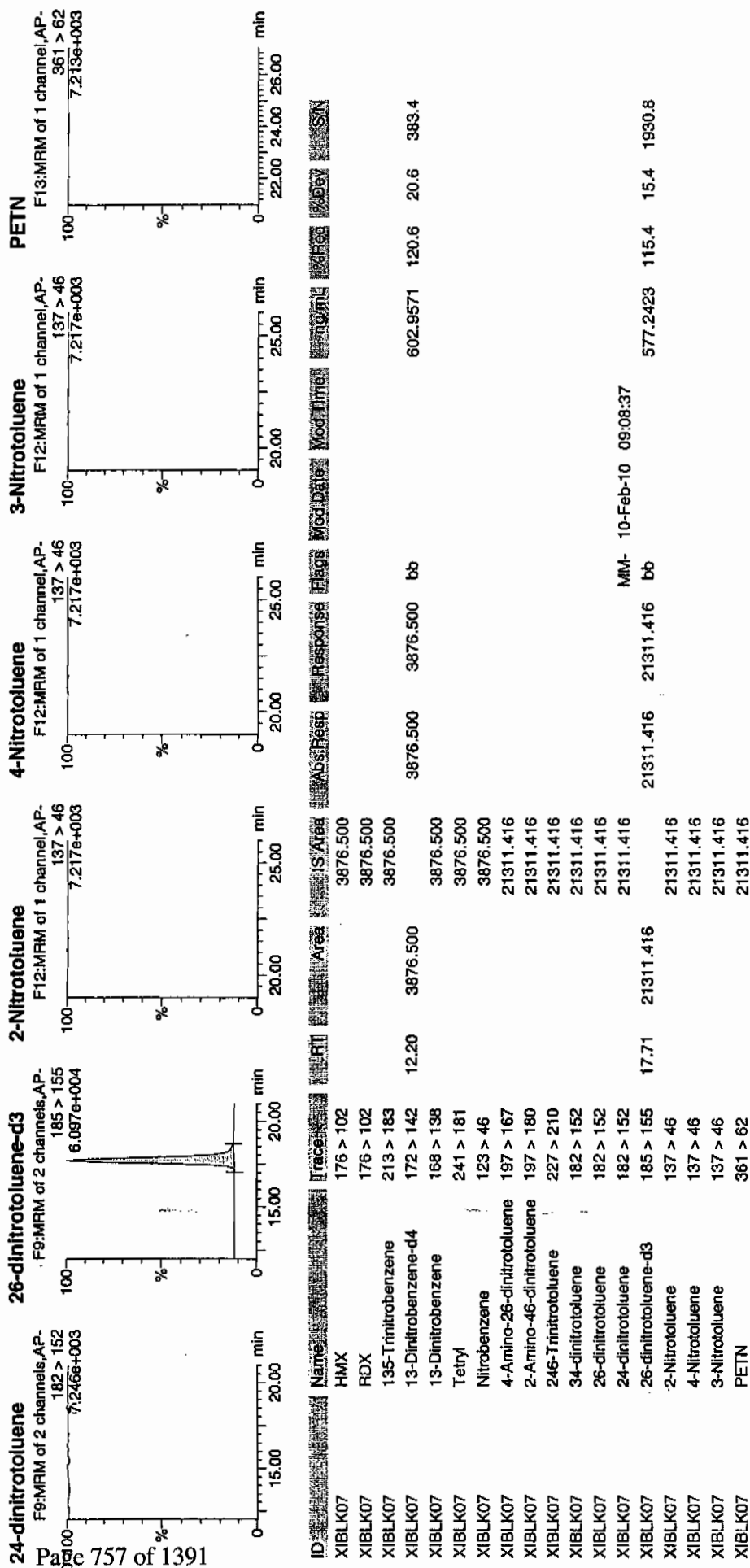
ID: XIBLK07

Vial: 1:1,A

μg
2/10/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 10-FEB-10 03:37

GEL Data File: EXP0208076a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
2,6-Dinitrotoluene-d3	500	557.496
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	571.729
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208076a

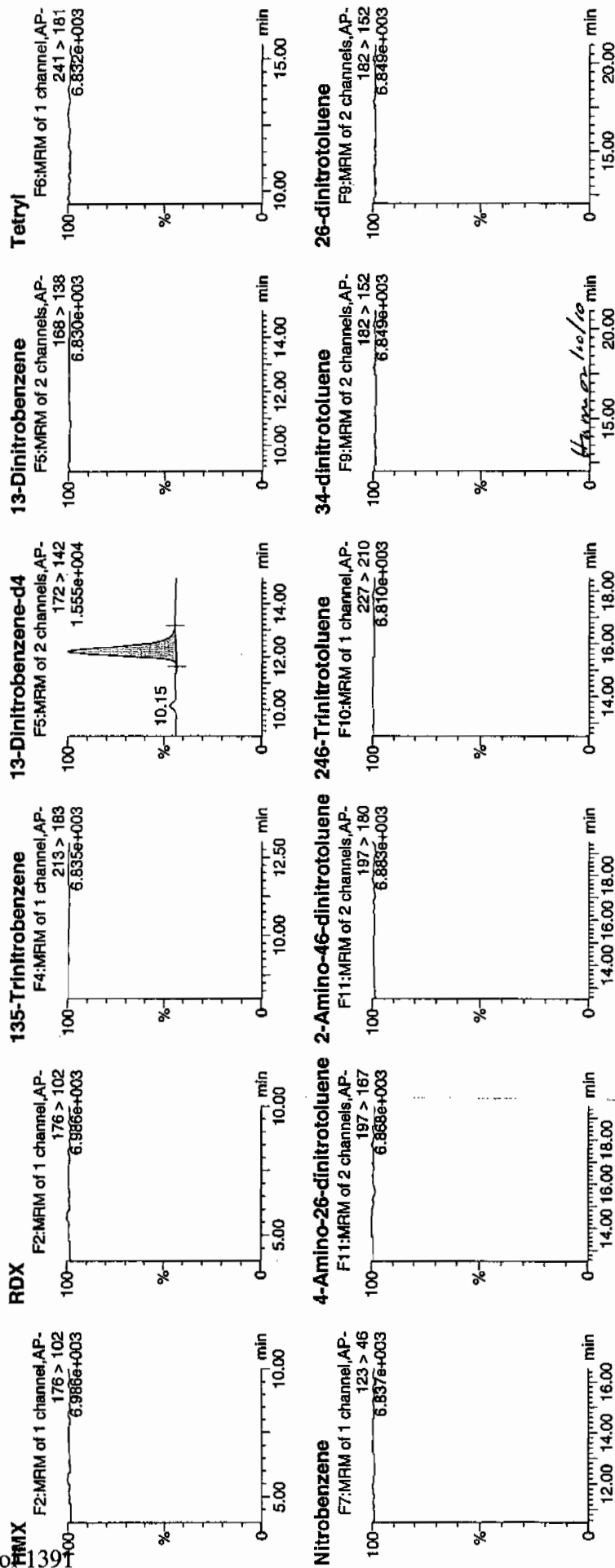
Date: 10-Feb-2010

Time: 03:37:30

ID: XIBLK08

Vial: 1:1,A

2/10/10

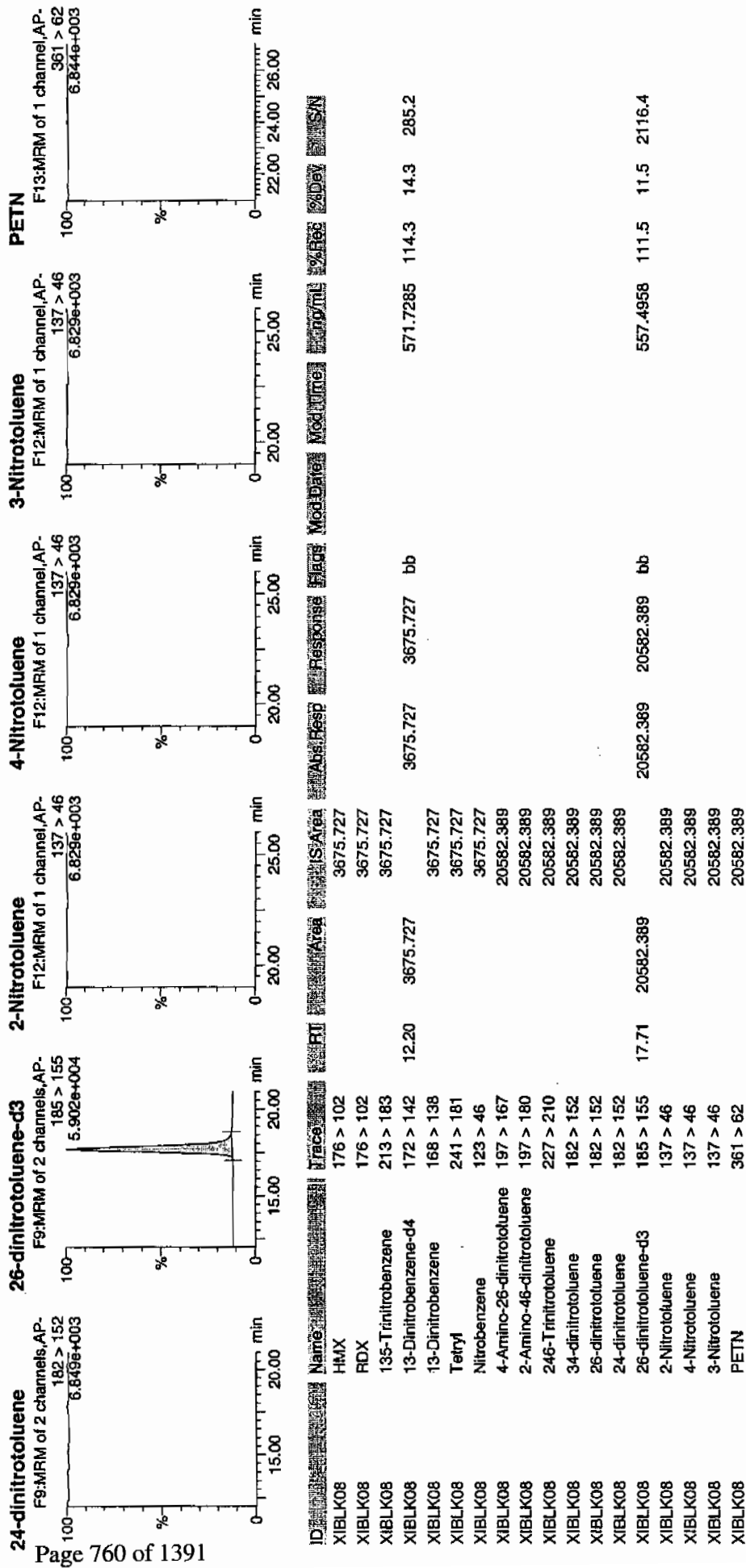


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 76 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 10-FEB-10 10:01

GEL Data File: EXP0208089a

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	589.535
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	534.323
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208089a

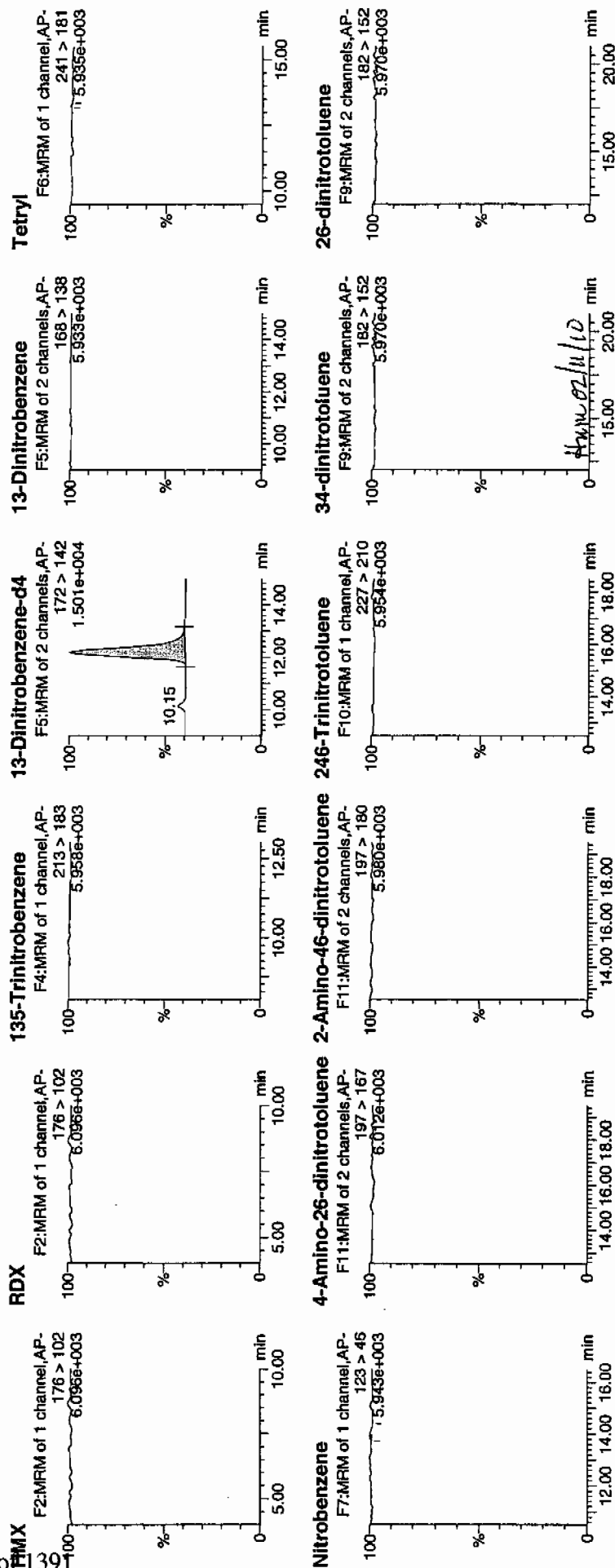
Date: 10-Feb-2010

Time: 10:01:12

ID: XIBLK09

Anal: 1:1,A

MT
2/11/10

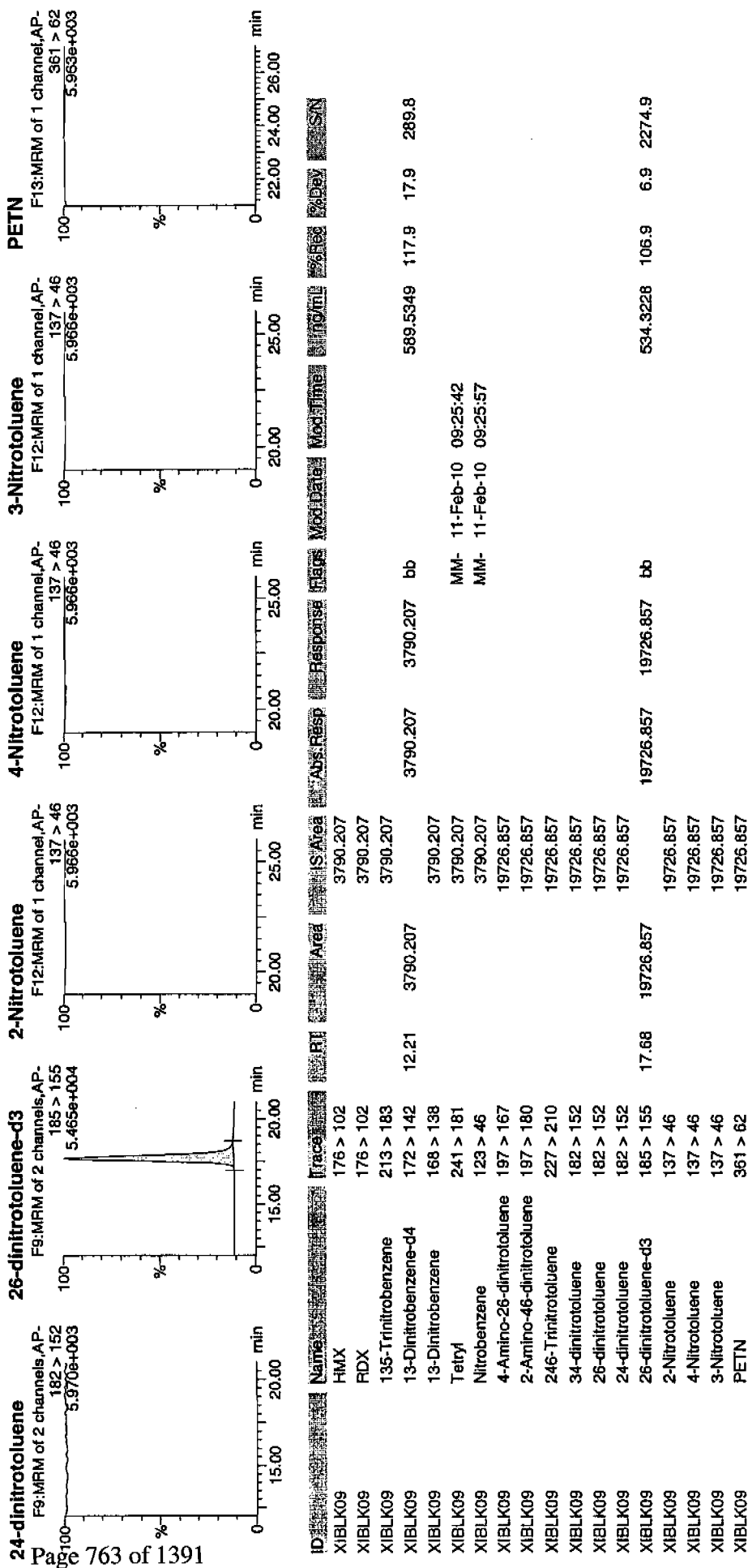


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 24 of 117

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 10-FEB-10 11:59

GEL Data File: EXP0208093a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	590.034
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	518.982
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208093a

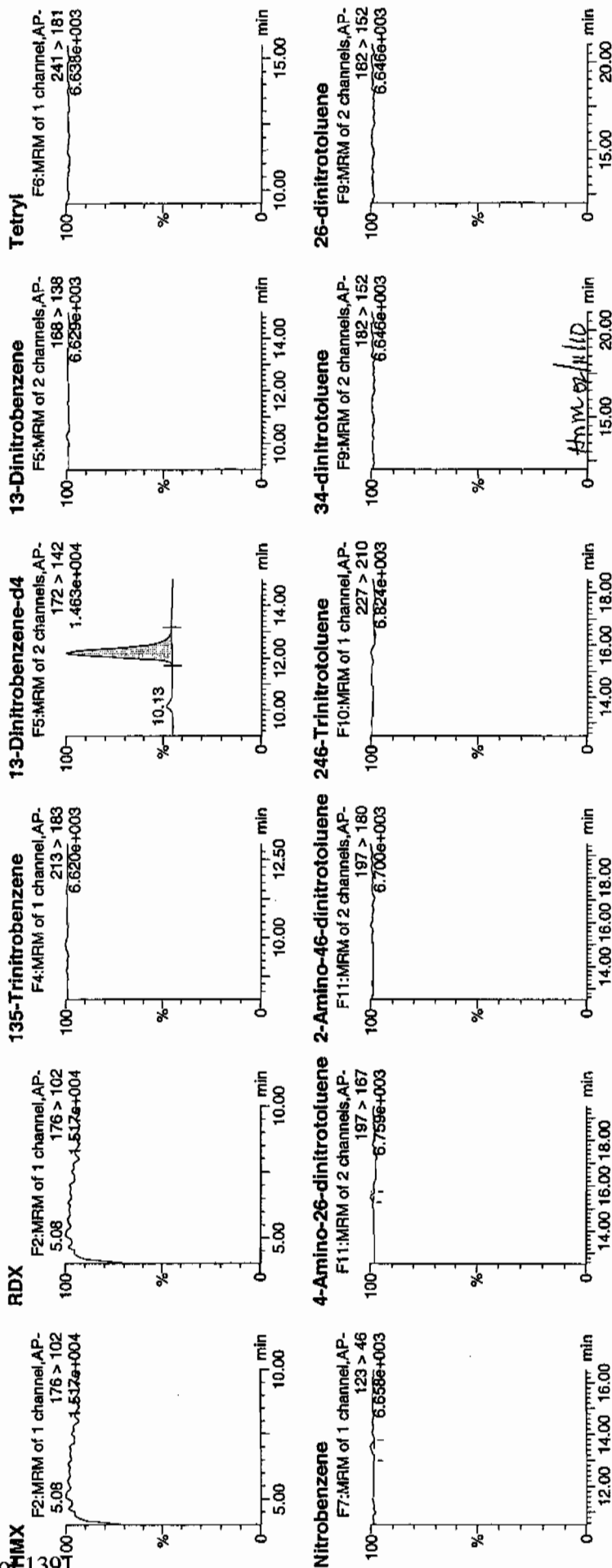
Date: 10-Feb-2010

Time: 11:59:19

ID: XIBLK10

Ratio: 1:1,F

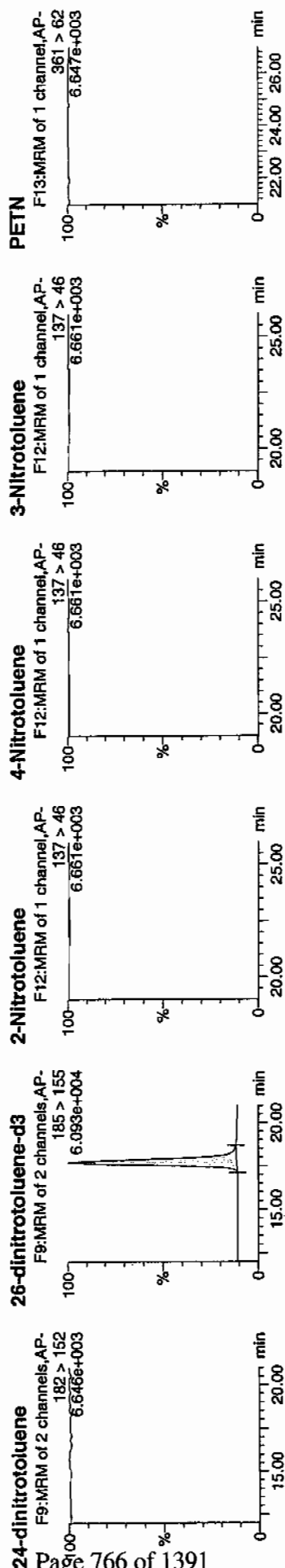
2/11/10



Quantify Sample Report

Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Run nm	%Rec	Day	SN
XIBLK10	HMx	176 > 102			3336.610									
XIBLK10	RDX	176 > 102			3336.610									
XIBLK10	135-Trinitrobenzene	213 > 183			3336.610									
XIBLK10	13-Dinitrobenzene-d4	172 > 142	12.21	3336.610		3336.610	3336.610	bb			518.9817	103.8	3.8	444.8
XIBLK10	13-Dinitrobenzene	168 > 138			3336.610									
XIBLK10	Tetryl	241 > 181			3336.610									
XIBLK10	Nitrobenzene	123 > 46			3336.610				MM-	11-Feb-10	09:26:00			
XIBLK10	4-Amino-26-dinitrotoluene	197 > 167			21783.670				MM-	11-Feb-10	09:29:33			
XIBLK10	2-Amino-46-dinitrotoluene	197 > 180			21783.670									
XIBLK10	246-Trinitrotoluene	227 > 210			21783.670									
XIBLK10	34-dinitrotoluene	182 > 152			21783.670									
XIBLK10	26-dinitrotoluene	182 > 152			21783.670									
XIBLK10	24-dinitrotoluene	182 > 152			21783.670									
XIBLK10	26-dinitrotoluene-d3	185 > 155	17.71	21783.670		21783.670	21783.670	bb			590.0337	118.0	18.0	1654.2
XIBLK10	2-Nitrotoluene	137 > 46			21783.670									
XIBLK10	4-Nitrotoluene	137 > 46			21783.670									
XIBLK10	3-Nitrotoluene	137 > 46			21783.670									
XIBLK10	PETN	361 > 82			21783.670									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 10-FEB-10 13:28

GEL Data File: EXP0208096a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	515.625
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	487.539
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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208095a

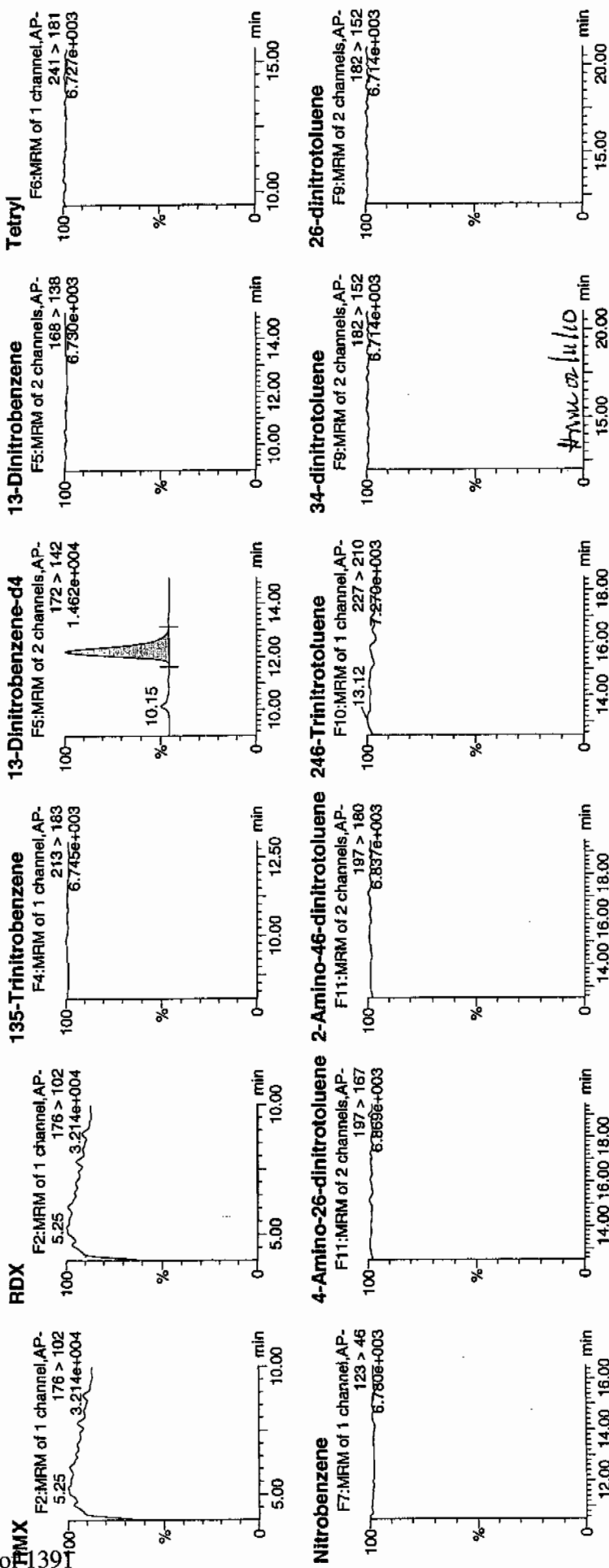
Date: 10-Feb-2010

Time: 13:28:03

ID: XIBLK11

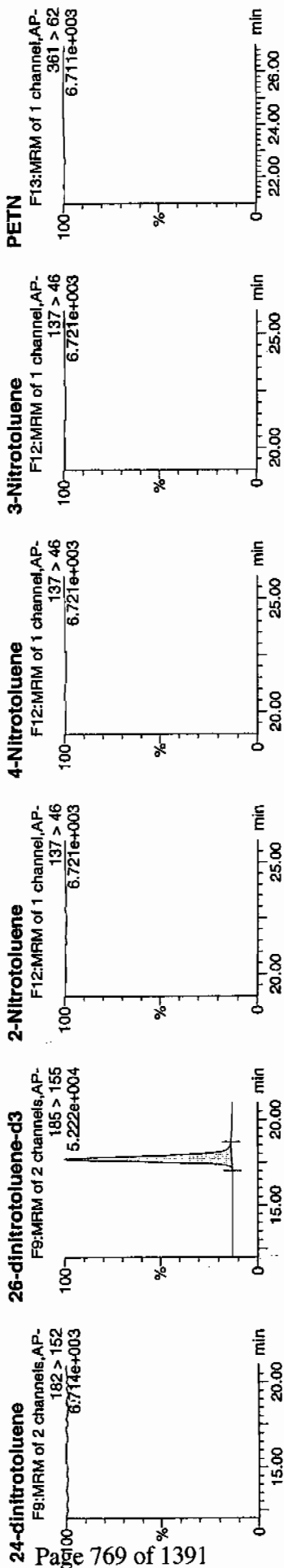
Ratio: 1:1,F

10/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod	Date	%Rec	%Det	SSN
XIBLK11	HMX	176 > 102		3315.031									
XIBLK11	RDX	176 > 102		3315.031									
XIBLK11	135-Trinitrobenzene	213 > 183		3315.031									
XIBLK11	13-Dinitrobenzene-d4	172 > 142	12.21	3315.031				bb	515.6253	103.1	3.1	246.5	
XIBLK11	13-Dinitrobenzene	168 > 138		3315.031									
XIBLK11	Tetryl	241 > 181		3315.031									
XIBLK11	Nitrobenzene	123 > 46		3315.031									
XIBLK11	4-Amino-26-dinitrotoluene	197 > 167		17999.613									
XIBLK11	2-Amino-46-dinitrotoluene	197 > 180		17999.613									
XIBLK11	246-Trinitrotoluene	227 > 210		17999.613									
XIBLK11	34-dinitrotoluene	182 > 152		17999.613									
XIBLK11	26-dinitrotoluene	182 > 152		17999.613									
XIBLK11	24-dinitrotoluene	182 > 152		17999.613									
XIBLK11	26-dinitrotoluene-d3	185 > 155	17.70	17999.613				bb	487.5386	97.5	-2.5	1653.3	
XIBLK11	2-Nitrotoluene	137 > 46		17999.613									
XIBLK11	4-Nitrotoluene	137 > 46		17999.613									
XIBLK11	3-Nitrotoluene	137 > 46		17999.613									
XIBLK11	PETN	361 > 62		17999.613									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 10-FEB-10 15:55

GEL Data File: EXP0208101a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	444.368
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
2,4-Dinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	493.427
2,4,6-Trinitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208101a

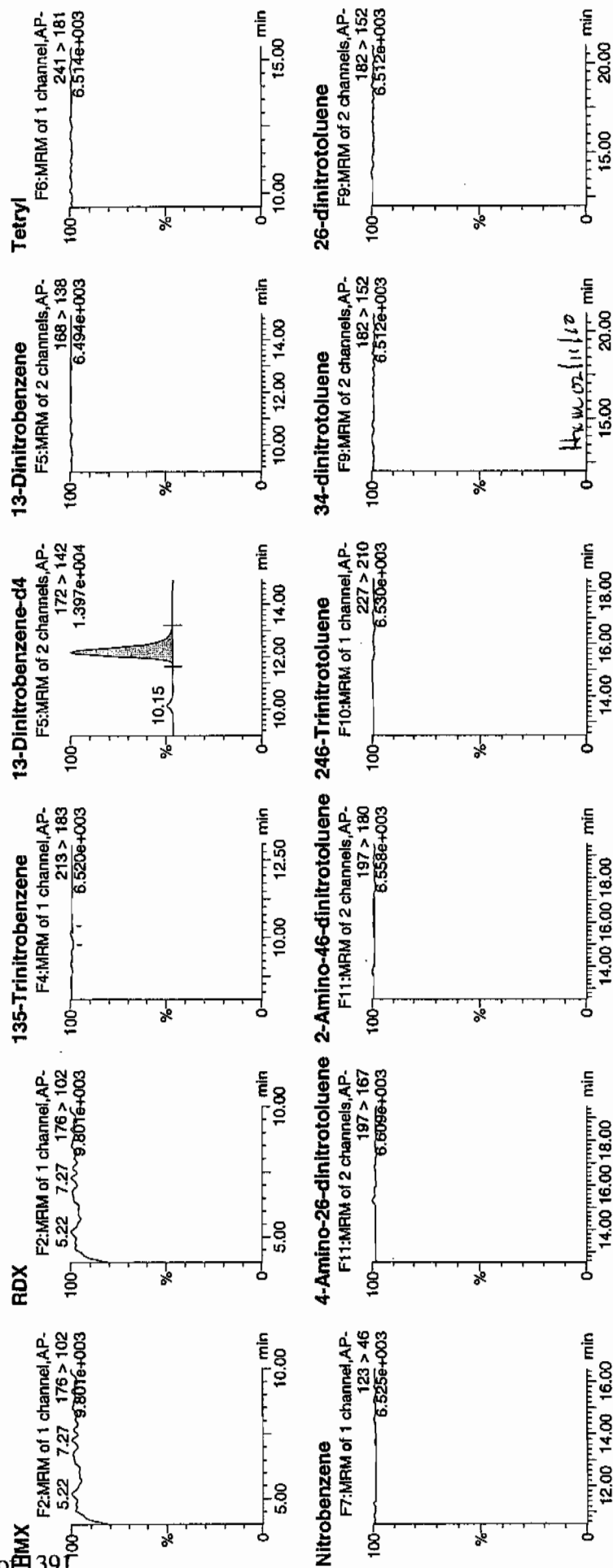
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Time: 15:55:49

ID: XIBLK12

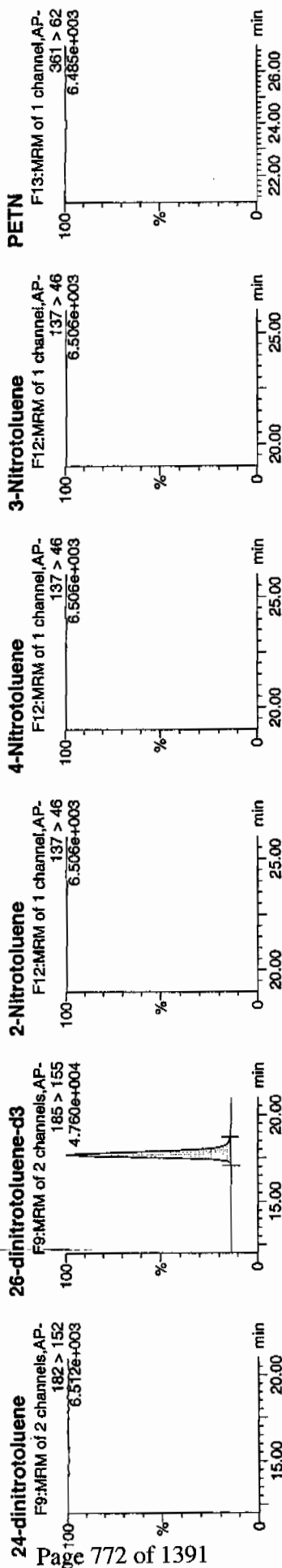
Vial: 1:1,A

10/11/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 10-FEB-10 22:19

GEL Data File: EXP0208114a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	507.231
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	572.472
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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208114a

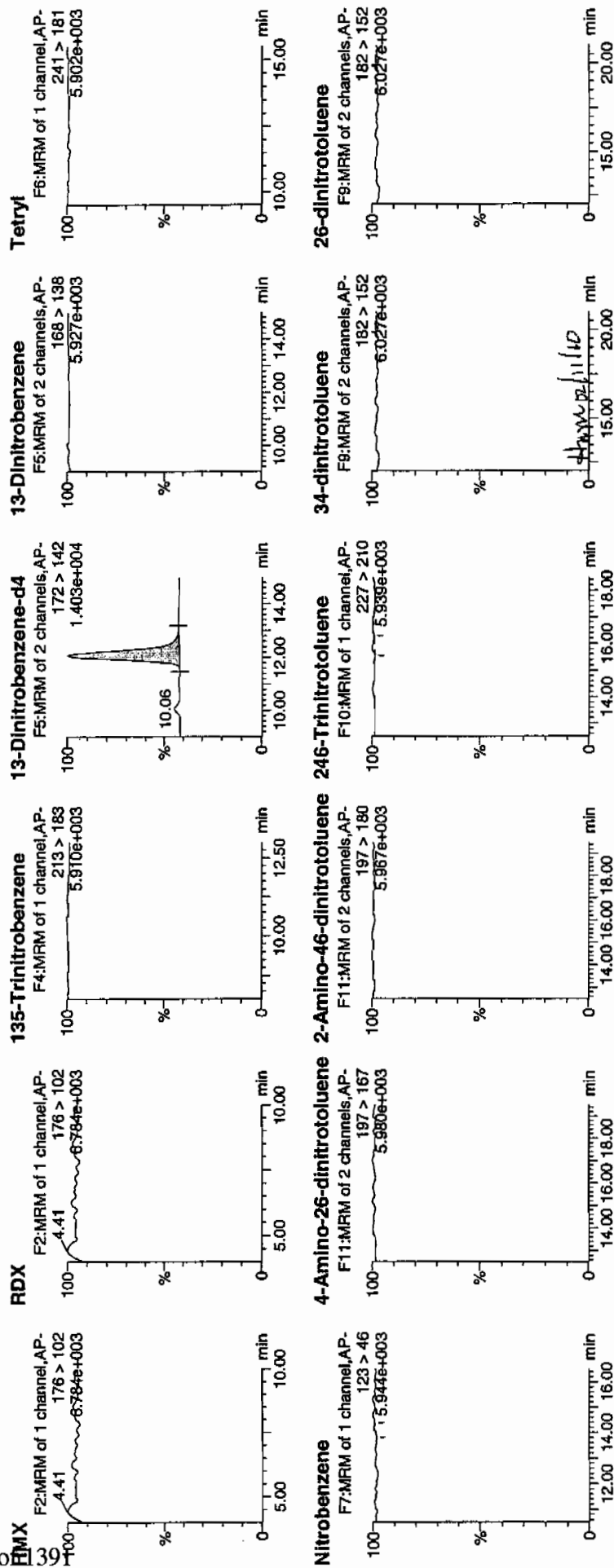
Date: 10-Feb-2010

Time: 22:19:14

ID: XIBLK13

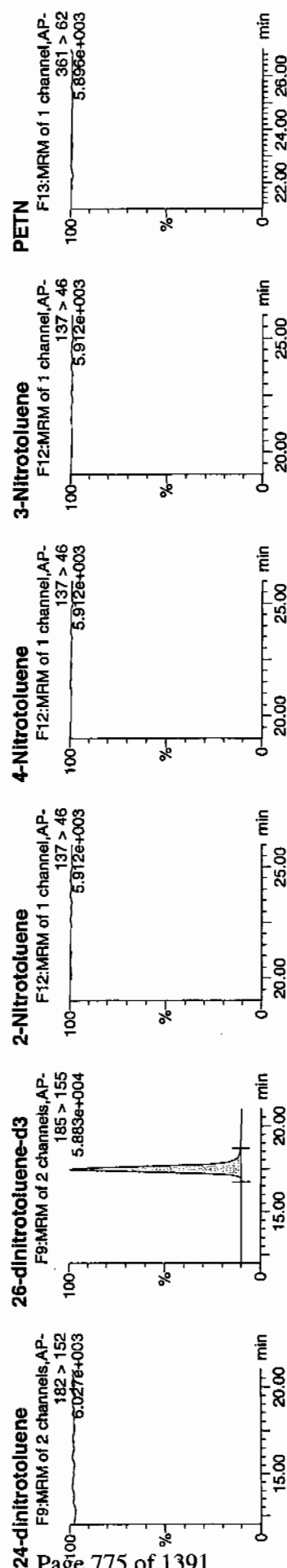
Rel: 1:1,A

WRT
2/11/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Acq Date	Acq Time
XIBLK13	HMX	176 > 102		3261.062								
XIBLK13	RDX	176 > 102		3261.062								
XIBLK13	135-Trinitrobenzene	213 > 183		3261.062								
XIBLK13	13-Dinitrobenzene-d4	172 > 142	12.07	3261.062								
XIBLK13	13-Dinitrobenzene	168 > 138		3261.062								
XIBLK13	Tetryl	241 > 181		3261.062								
XIBLK13	Nitrobenzene	123 > 46		3261.062								
XIBLK13	4-Amino-26-dinitrotoluene	197 > 167		21135.303								
XIBLK13	2-Amino-46-dinitrotoluene	197 > 180		21135.303								
XIBLK13	246-Trinitrotoluene	227 > 210		21135.303								
XIBLK13	34-dinitrotoluene	182 > 152		21135.303								
XIBLK13	26-dinitrotoluene	182 > 152		21135.303								
XIBLK13	24-dinitrotoluene	182 > 152		21135.303								
XIBLK13	26-dinitrotoluene-d3	185 > 155	17.46	21135.303								
XIBLK13	2-Nitrotoluene	137 > 46		21135.303								
XIBLK13	4-Nitrotoluene	137 > 46		21135.303								
XIBLK13	3-Nitrotoluene	137 > 46		21135.303								
XIBLK13	PETN	361 > 62		21135.303								
						3261.062	3261.062	bb	MM- 11-Feb-10	09:26:18		
						3261.062	3261.062	bb	MM- 11-Feb-10	09:55:57		
						21135.303	21135.303	bb			572.4720	114.5 2332.9
											507.2309	101.4 412.3

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 11-FEB-10 01:45

GEL Data File: EXP0208121a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	460.845
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	484.127
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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 87 of 117

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208121a

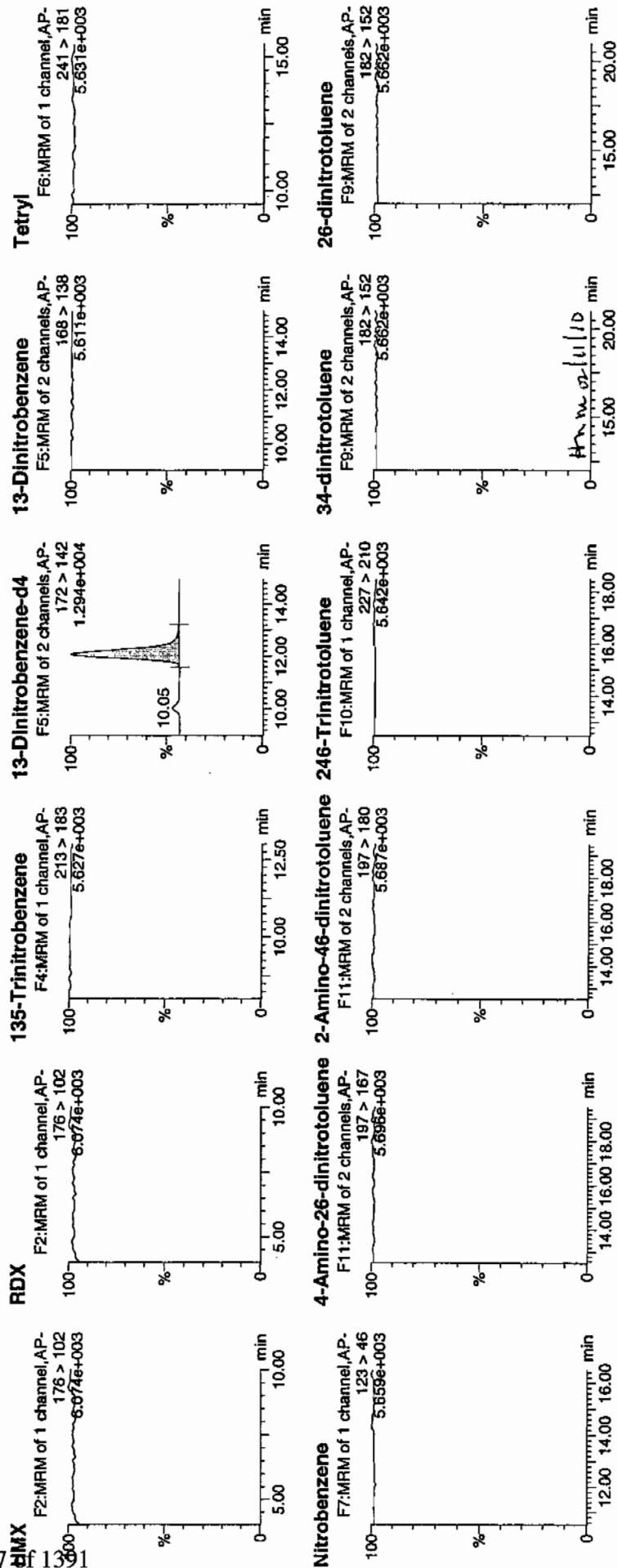
Date: 11-Feb-2010

Time: 01:45:43

ID: XIBLK14

Vial: 1:1,A

2/11/10
M.A.P.

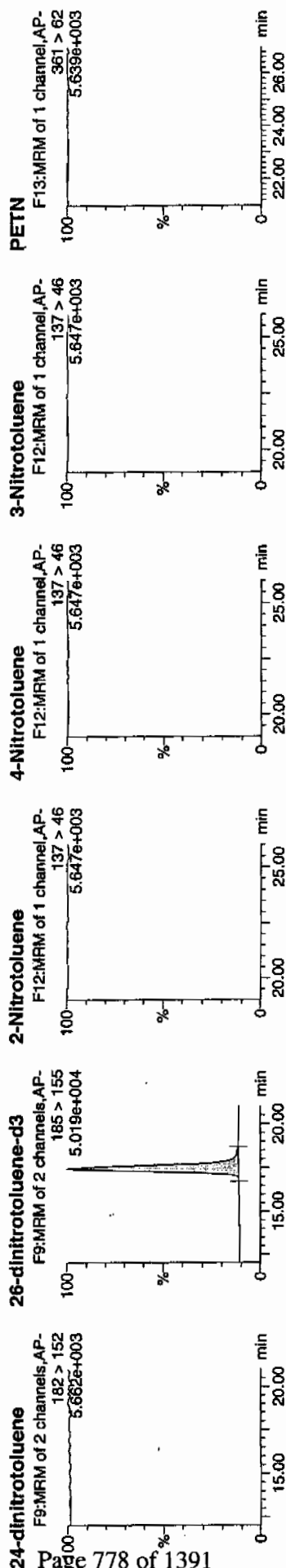


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 88 of 117

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	SI Area	Abs Resp	Response	Flags	Mod Date	Mod Time	% Rec	% Dev	SIN
XIBLK14	HMx	176 > 102			2962.838								
XIBLK14	RDX	176 > 102			2962.838								
XIBLK14	135-Trinitrobenzene	213 > 183			2962.838								
XIBLK14	13-Dinitrobenzene-d4	172 > 142	12.07	2962.838		2962.838	2962.838	bb		460.8446	92.2	-7.8	93.8
XIBLK14	13-Dinitrobenzene	168 > 138			2962.838								
XIBLK14	Tetryl	241 > 181			2962.838								
XIBLK14	Nitrobenzene	123 > 46			2962.838								
XIBLK14	4-Amino-26-dinitrotoluene	197 > 167			17873.645								
XIBLK14	2-Amino-46-dinitrotoluene	197 > 180			17873.645								
XIBLK14	246-Trinitrotoluene	227 > 210			17873.645								
XIBLK14	34-dinitrotoluene	182 > 152			17873.645								
XIBLK14	26-dinitrotoluene	182 > 152			17873.645								
XIBLK14	24-dinitrotoluene	182 > 152			17873.645								
XIBLK14	26-dinitrotoluene-d3	185 > 155	17.46	17873.645		17873.645	17873.645	bb		484.1266	96.8	-3.2	1654.2
XIBLK14	2-Nitrotoluene	137 > 46			17873.645								
XIBLK14	4-Nitrotoluene	137 > 46			17873.645								
XIBLK14	3-Nitrotoluene	137 > 46			17873.645								
XIBLK14	PETN	361 > 62			17873.645								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 11-FEB-10 08:09

GEL Data File: EXP0208134a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	574.283
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	594.383
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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208134a

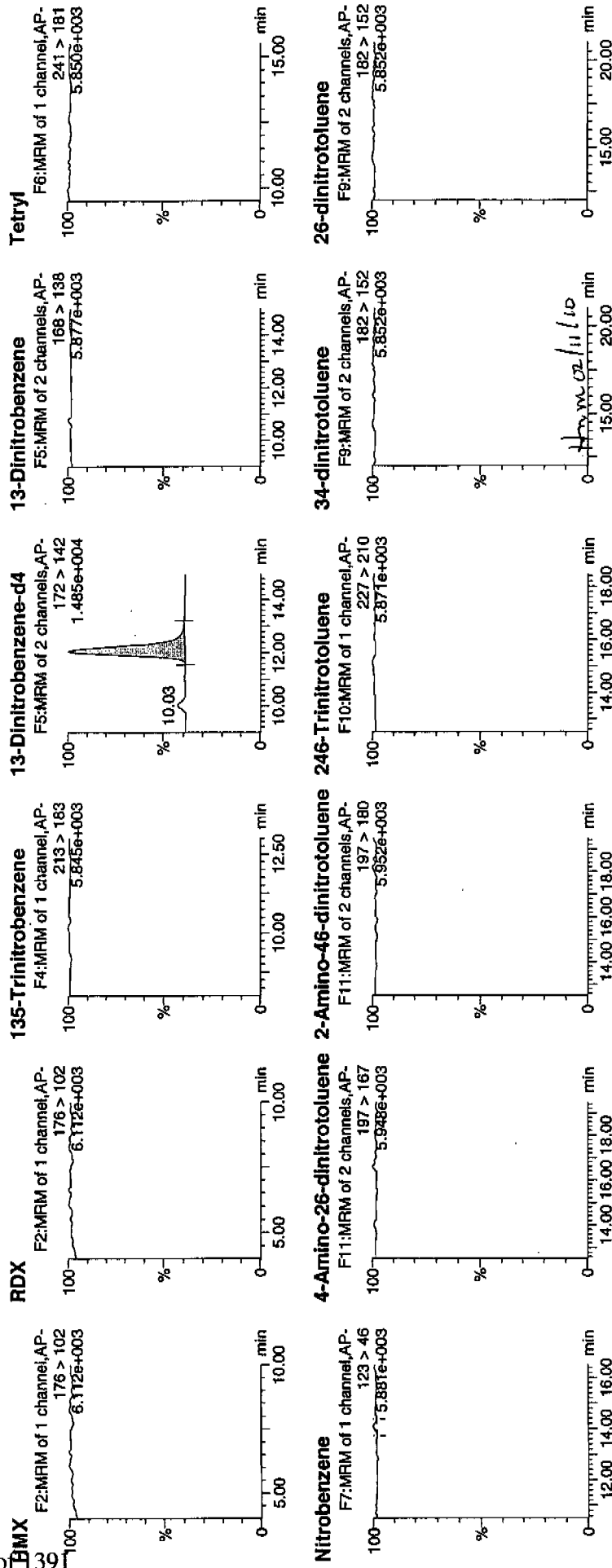
Date: 11-Feb-2010

Time: 08:09:15

ID: XIBLK15

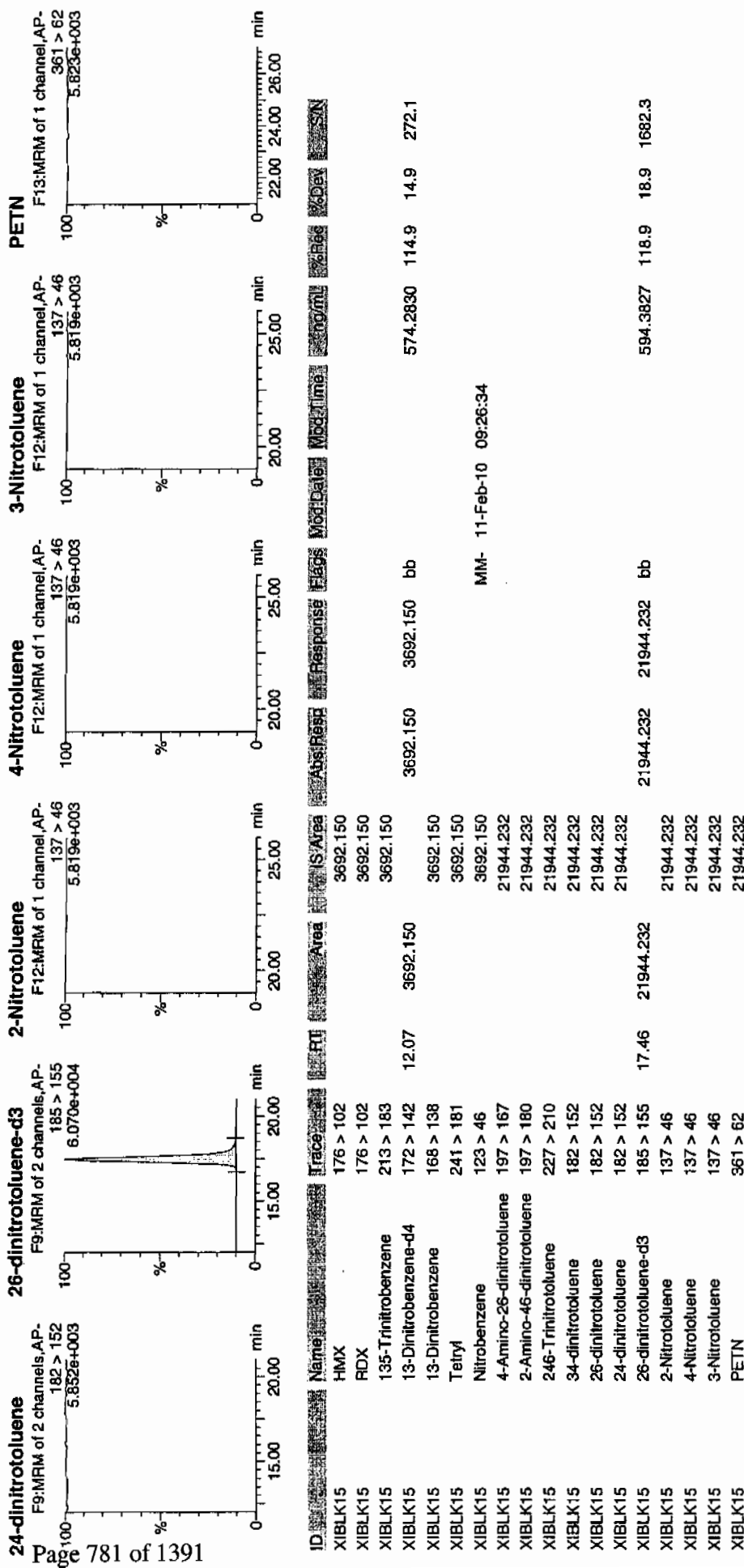
Signal: 1:1,A

2/11/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 11-FEB-10 14:03

GEL Data File: EXP0208146a

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	571.158
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	588.501
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 12 08:13:51 2010, Page 21 of 93

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208146a

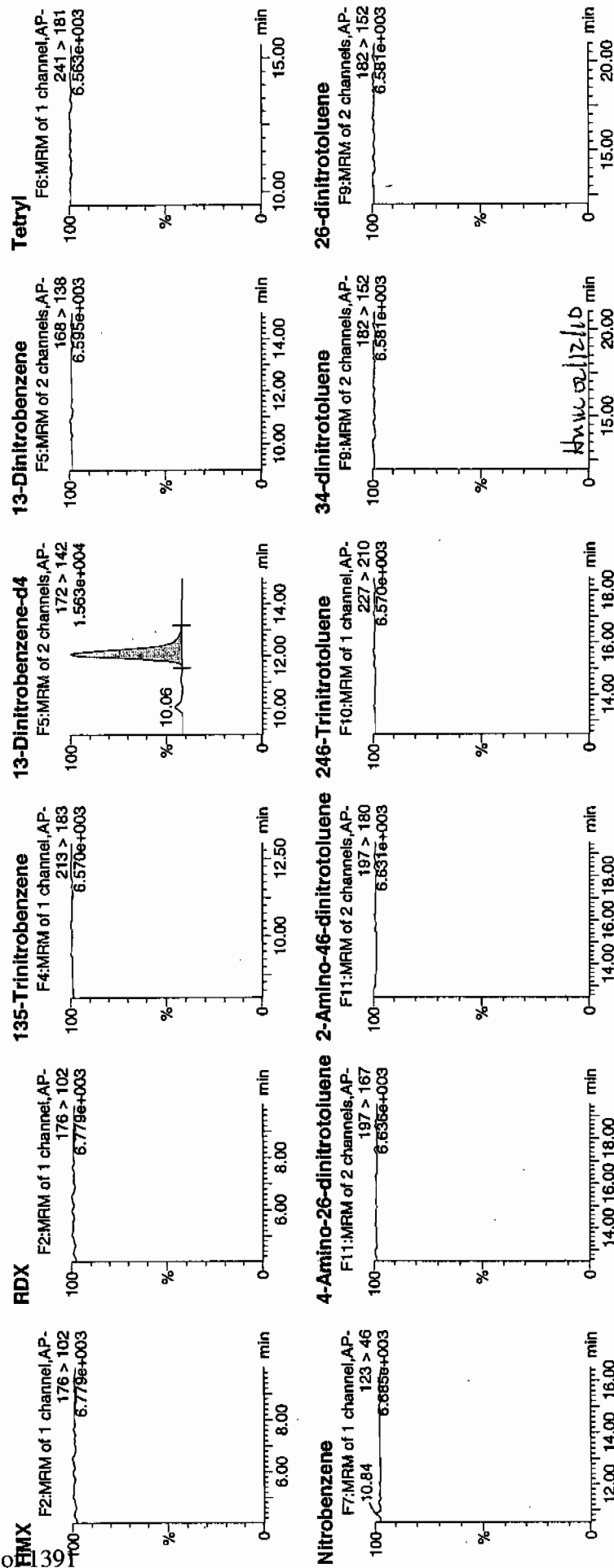
Date: 11-Feb-2010

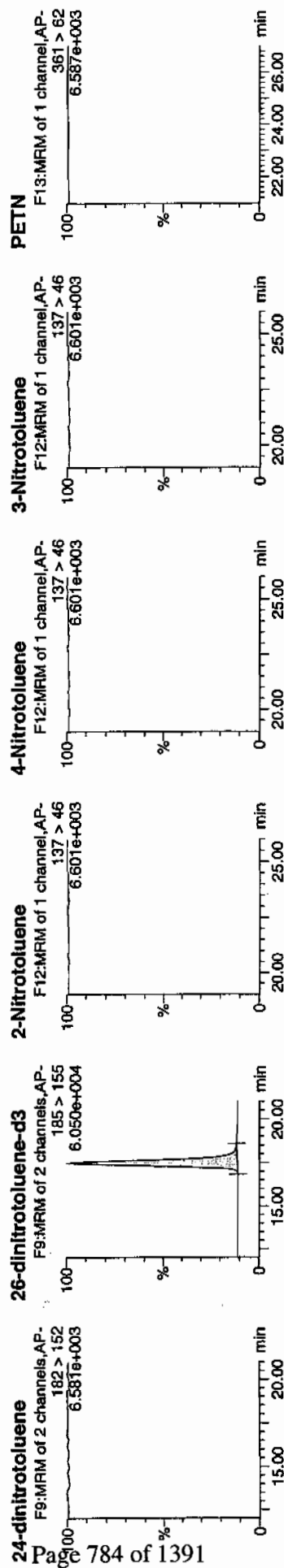
Time: 14:03:38

ID: XIBLK16

Ratio: 1:1,A

2/12/10





ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flag	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK16	HMX	176 > 102			3672.062									
XIBLK16	RDX	176 > 102			3672.062									
XIBLK16	135-Trinitrobenzene	213 > 183			3672.062									
XIBLK16	13-Dinitrobenzene-d4	172 > 142	12.07	3672.062		3672.062	3672.062	bb			571.1585	114.2	14.2	399.7
XIBLK16	13-Dinitrobenzene	168 > 138			3672.062									
XIBLK16	Tetryl	241 > 181			3672.062									
XIBLK16	Nitrobenzene	123 > 46			3672.062									
XIBLK16	4-Amino-26-dinitrotoluene	197 > 167			21727.074									
XIBLK16	2-Amino-46-dinitrotoluene	197 > 180			21727.074									
XIBLK16	246-Trinitrotoluene	227 > 210			21727.074									
XIBLK16	34-dinitrotoluene	182 > 152			21727.074									
XIBLK16	26-dinitrotoluene	182 > 152			21727.074									
XIBLK16	24-dinitrotoluene	182 > 152			21727.074									
XIBLK16	26-dinitrotoluene-d3	185 > 155	17.46	21727.074		21727.074	21727.074	bb			588.5008	117.7	17.7	2034.5
XIBLK16	2-Nitrotoluene	137 > 46			21727.074									
XIBLK16	4-Nitrotoluene	137 > 46			21727.074									
XIBLK16	3-Nitrotoluene	137 > 46			21727.074									
XIBLK16	PETN	361 > 62			21727.074									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 11-FEB-10 18:58

GEL Data File: EXP0208156a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	492.787
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	564
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208156a

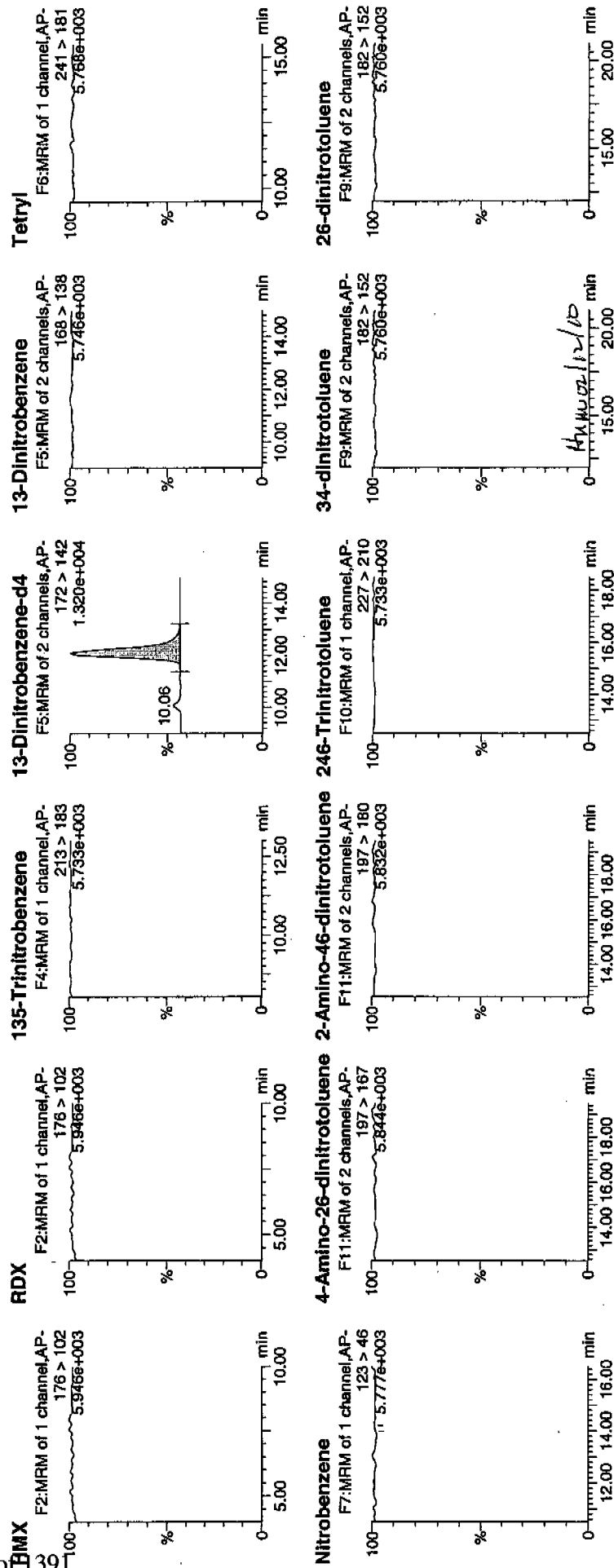
Date: 11-Feb-2010

Time: 18:58:59

ID: XIBLK17

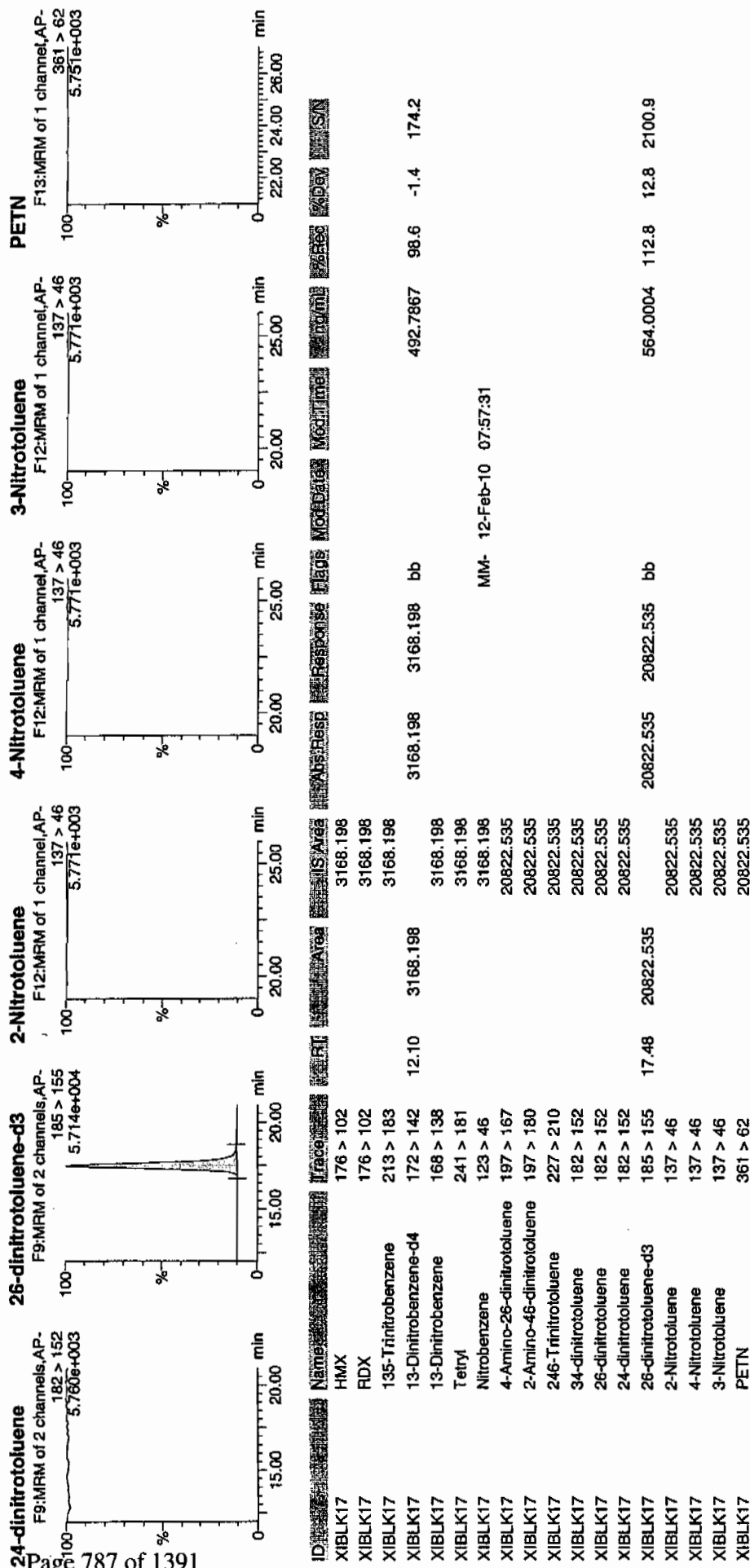
Sample: 1:1,A

WAP
1/12/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 12-FEB-10 01:22

GEL Data File: EXP0208169a

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	437.531
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	440.022
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\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208169a

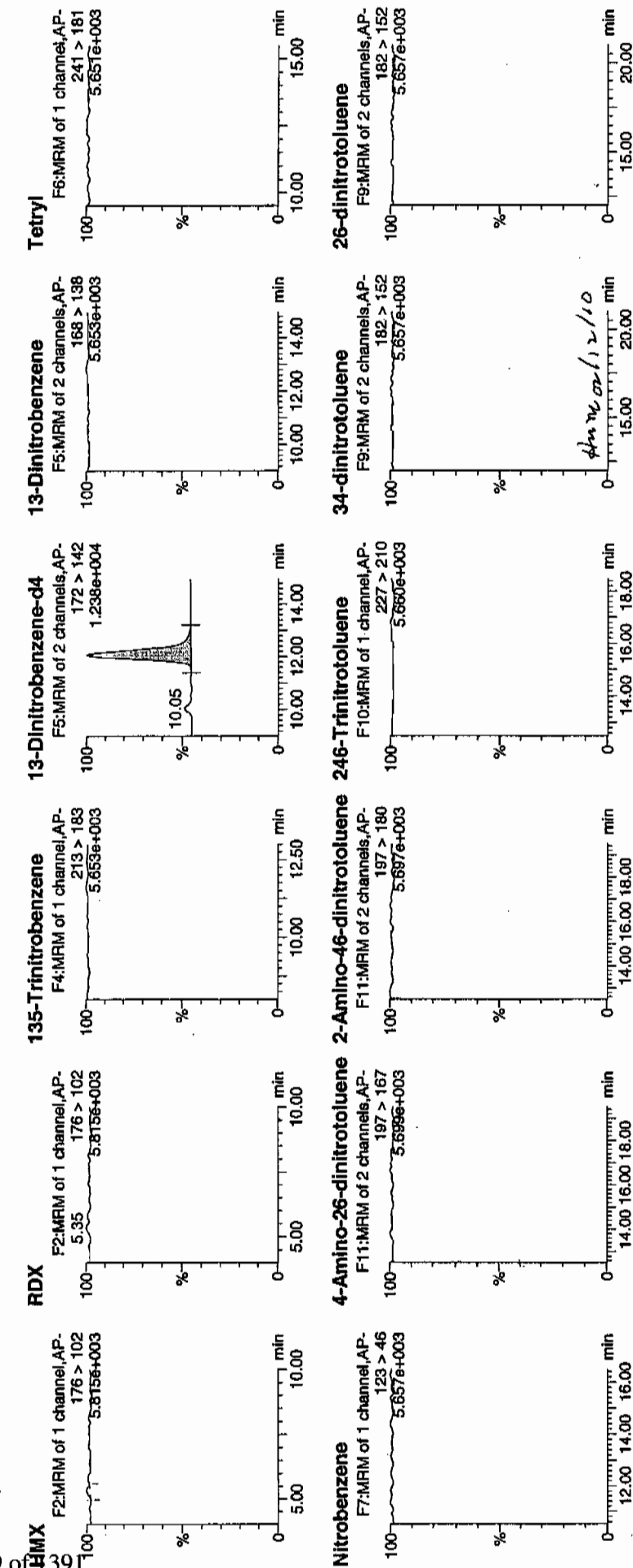
Date: 12-Feb-2010

Time: 01:22:24

ID: XIBLK18

Cal: 1:1,A

WAT
2/10/10

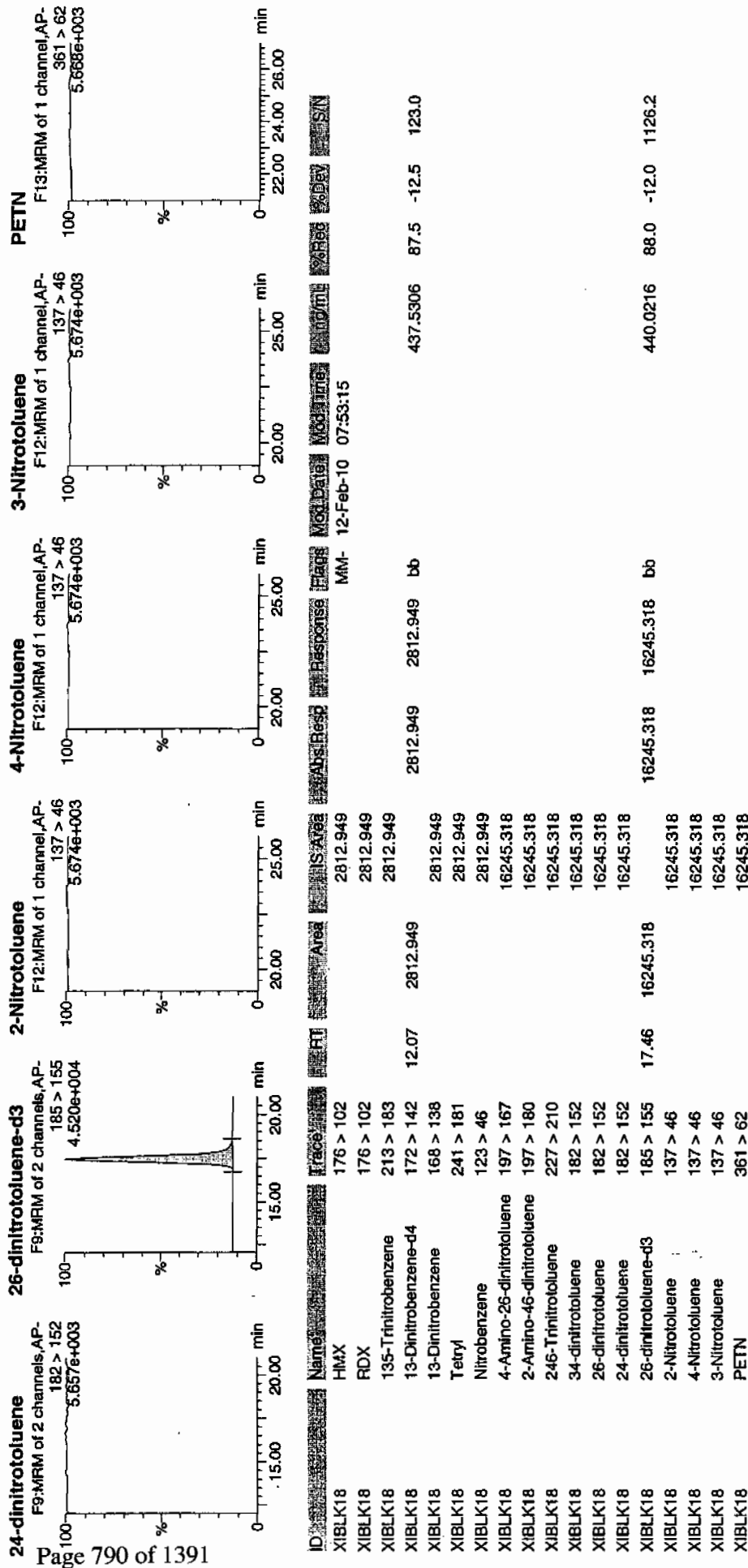


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 68 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 12-FEB-10 06:47

GEL Data File: EXP0208180a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	487.474
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.411
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 12 08:13:51 2010, Page 89 of 93

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208180a

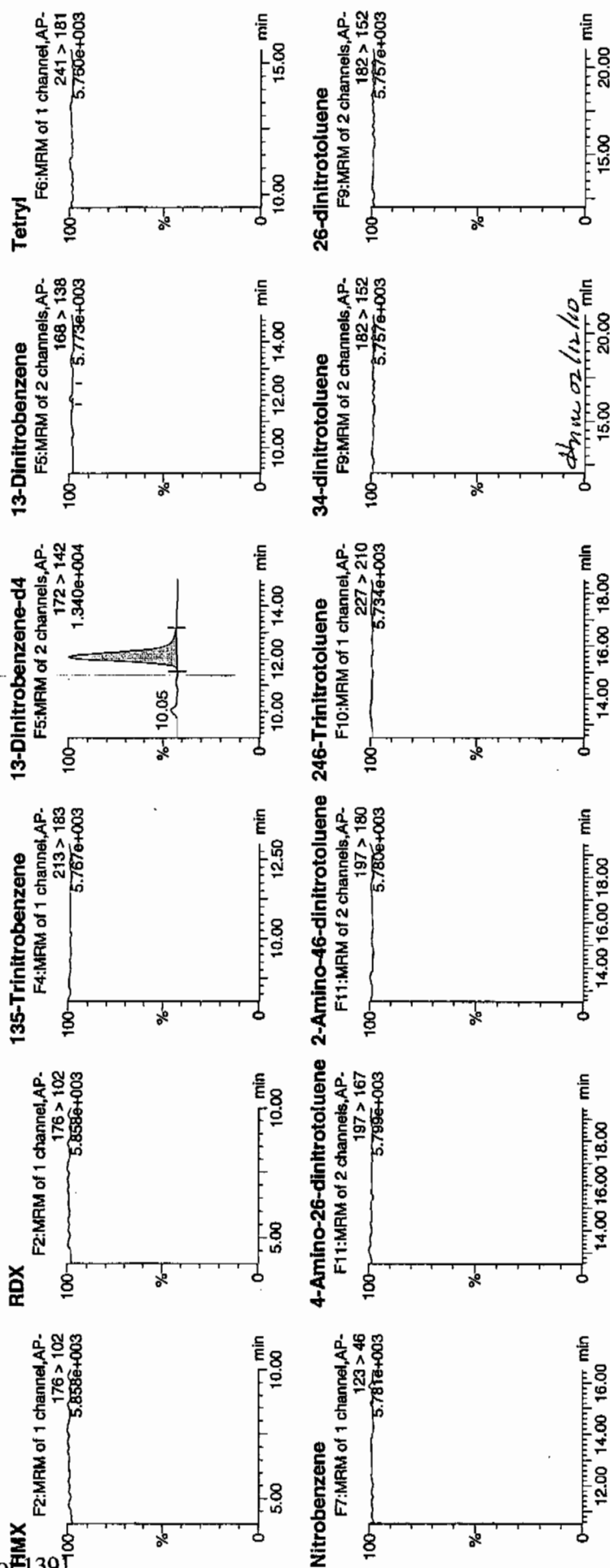
Date: 12-Feb-2010

Time: 06:47:03

ID: XIBLK19

Vial: 1:1,A

2/12/10



Quantify Sample Report

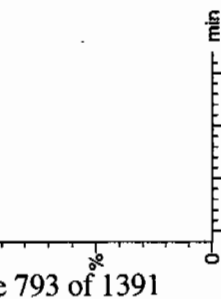
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 90 of 93

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

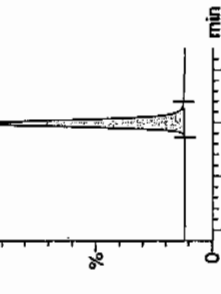
24-dinitrotoluene

F9:MRM of 2 channels, AP-
182 > 152
5.757e+003



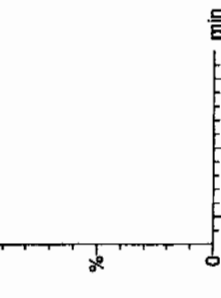
26-dinitrotoluene-d3

F9:MRM of 2 channels, AP-
185 > 155
4.908e+004



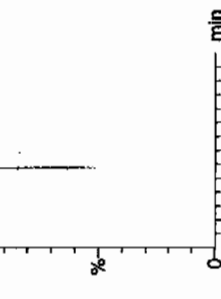
2-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.750e+003



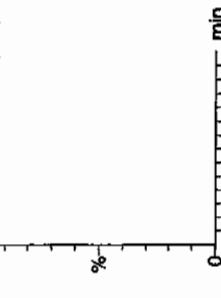
4-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.750e+003



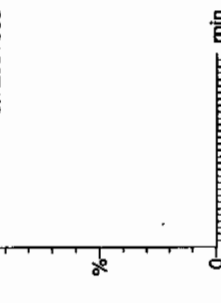
3-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.750e+003



PETN

F13:MRM of 1 channel, AP-
361 > 62
5.726e+003



ID	Name	Trace	RT	Area	IS Area	Abst Resp	Response	Flags	Mod Date	Mod Time	Int Amt	% Rec	Adov	SN
XIBLK19	HMx	176 > 102			3134.045									
XIBLK19	RDX	176 > 102			3134.045									
XIBLK19	135-Trinitrobenzene	213 > 183			3134.045									
XIBLK19	13-Dinitrobenzene-d4	172 > 142	12.07	3134.045										
XIBLK19	13-Dinitrobenzene	168 > 138			3134.045									
XIBLK19	Tetryl	241 > 181			3134.045									
XIBLK19	Nitrobenzene	123 > 46			17551.871									
XIBLK19	4-Amino-26-dinitrotoluene	197 > 167			17551.871									
XIBLK19	2-Amino-46-dinitrotoluene	197 > 180			17551.871									
XIBLK19	246-Trinitrotoluene	227 > 210			17551.871									
XIBLK19	34-dinitrotoluene	182 > 152			17551.871									
XIBLK19	26-dinitrotoluene	182 > 152			17551.871									
XIBLK19	24-dinitrotoluene	182 > 152			17551.871									
XIBLK19	26-dinitrotoluene-d3	185 > 155	17.47	17551.871										
XIBLK19	2-Nitrotoluene	137 > 46			17551.871									
XIBLK19	4-Nitrotoluene	137 > 46			17551.871									
XIBLK19	3-Nitrotoluene	137 > 46			17551.871									
XIBLK19	PETN	361 > 62			17551.871									
						3134.045	3134.045	bb	MM-	12-Feb-10	07:55:22			
						17551.871	17551.871	bb				475.4110	95.1	-4.9
												487.4744	97.5	-2.5
														275.0
														1700.9

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 12-FEB-10 13:11

GEL Data File: EXP0208193a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene-d3	500	467.617
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	497.184
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0

Printed: Sat Feb 13 09:33:08 2010, Page 23 of 93

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qtd, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208193a

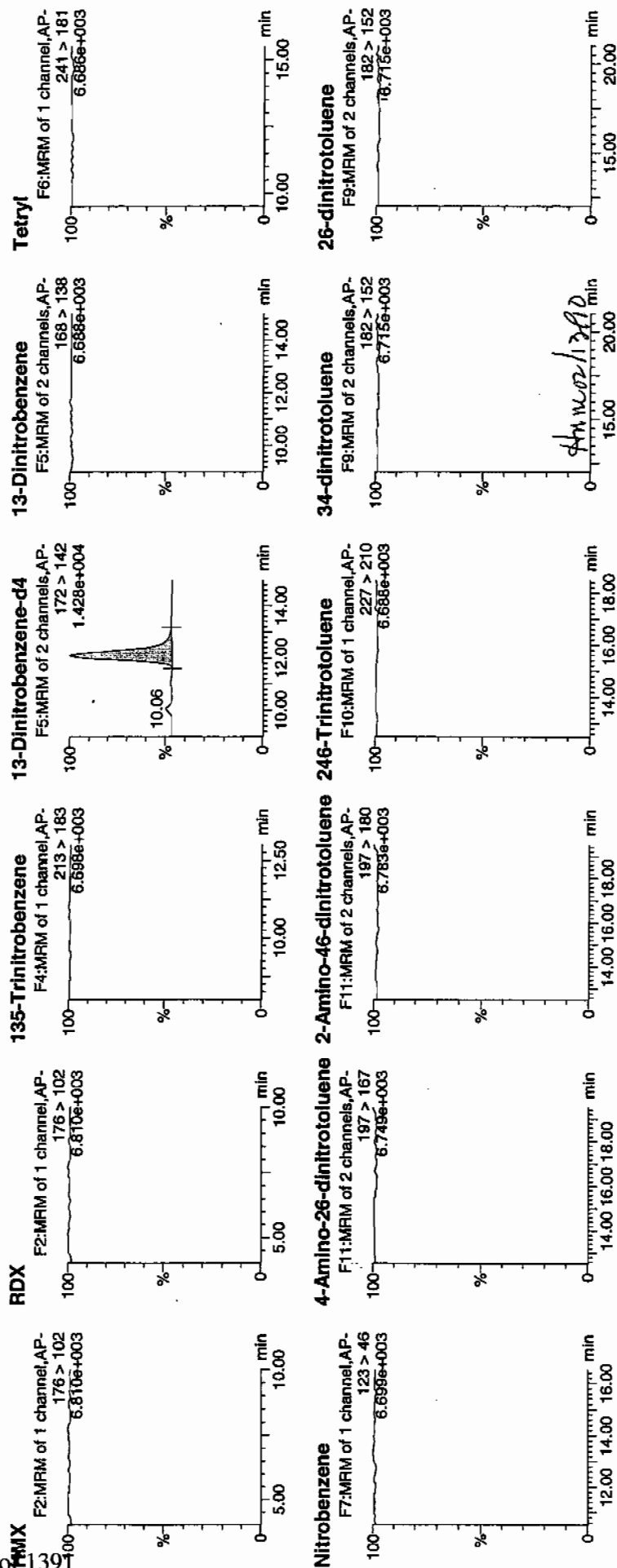
Date: 12-Feb-2010

Time: 13:11:28

ID: XIBLK20

Anal: 1:1,A

WFF
2/13/10

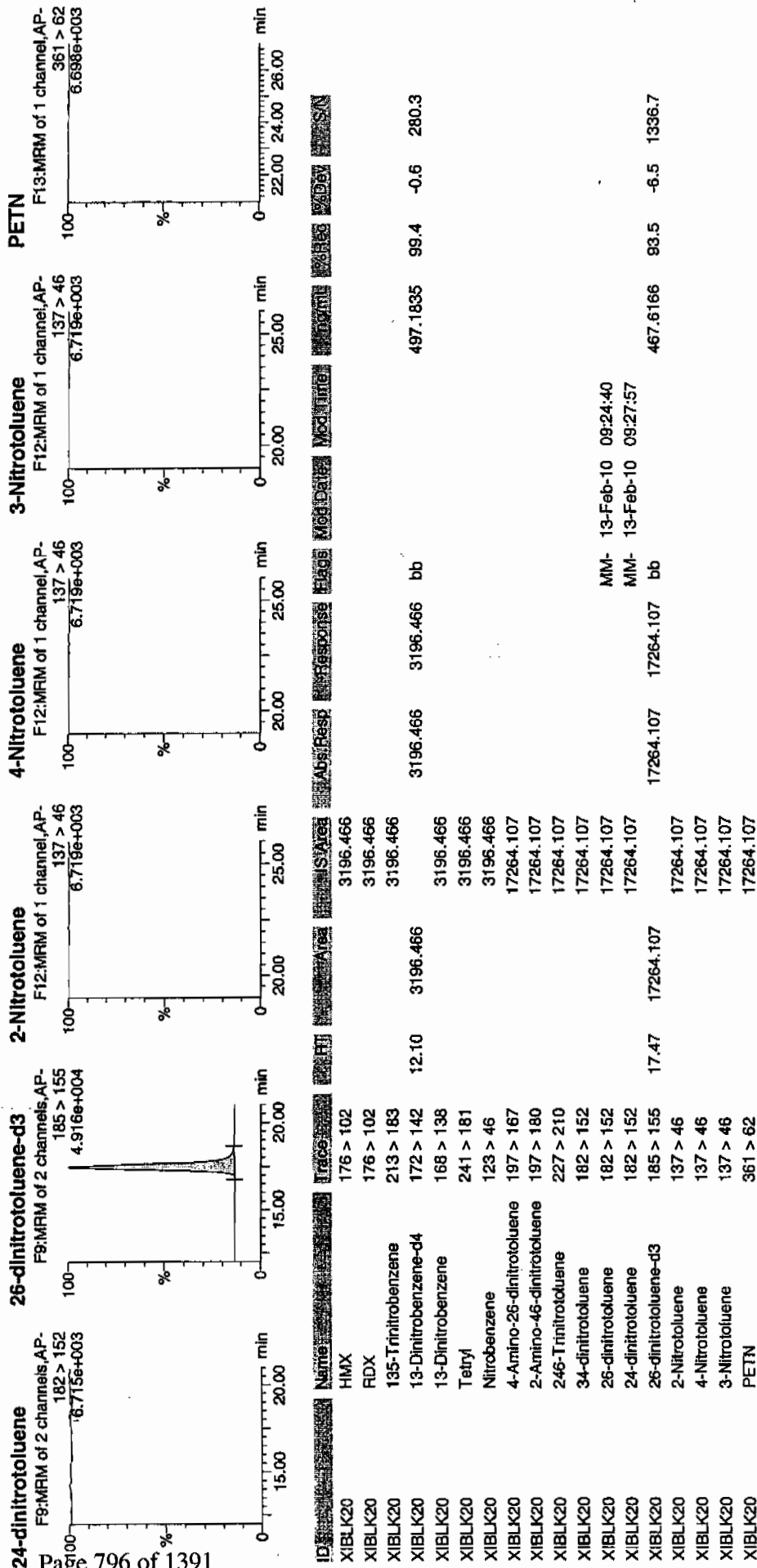


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Feb 13 09:33:08 2010, Page 24 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 12-FEB-10 19:05

GEL Data File: EXP0208205a

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	437.64
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	490.15
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\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208205a

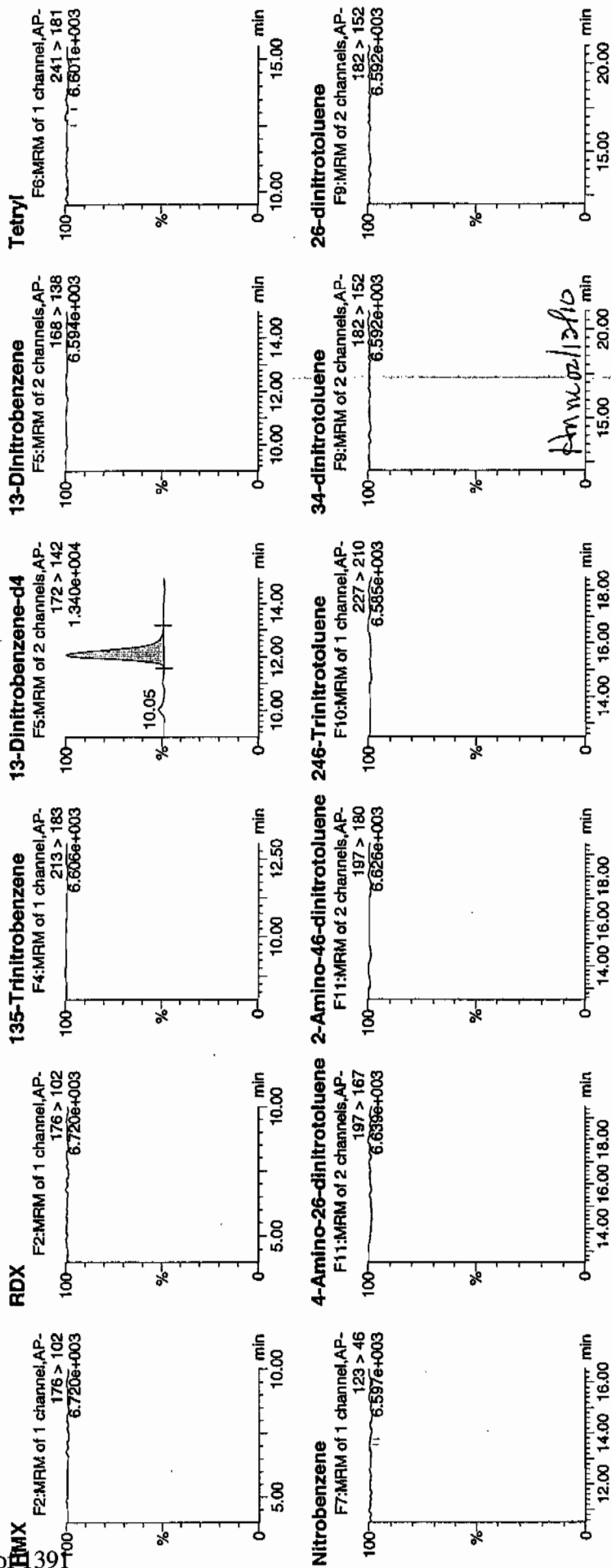
Date: 12-Feb-2010

Time: 19:05:45

ID: XIBLK21

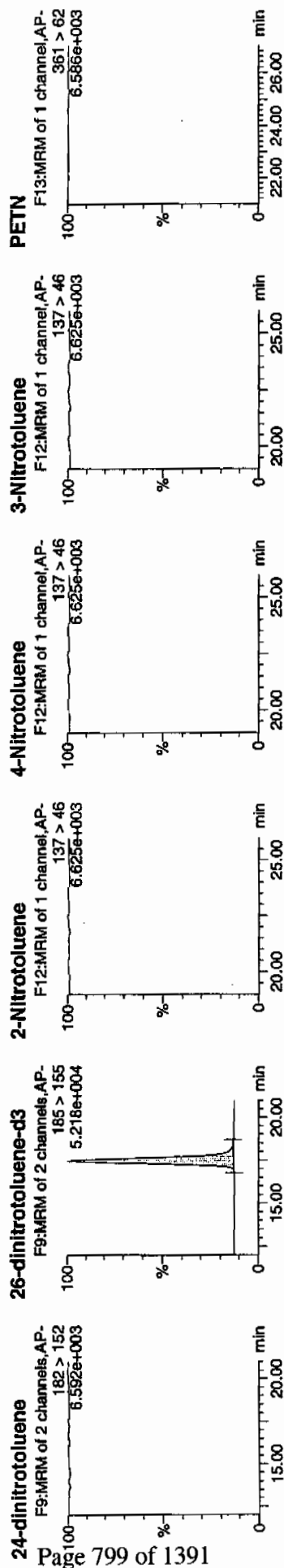
Ratio: 1:1,A

2/13/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



ID	Name	RT	Area	SA Area	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
XIBLK21	HMX	176 > 102		2813.650							
XIBLK21	RDX	176 > 102		2813.650							
XIBLK21	135-Trinitrobenzene	213 > 183		2813.650							
XIBLK21	13-Dinitrobenzene-d4	172 > 142	12.07	2813.650							
XIBLK21	13-Dinitrobenzene	168 > 138		2813.650							
XIBLK21	Tetryl	241 > 181		2813.650							
XIBLK21	Nitrobenzene	123 > 46		18096.025							
XIBLK21	4-Amino-26-dinitrotoluene	197 > 167		18096.025							
XIBLK21	2-Amino-46-dinitrotoluene	197 > 180		18096.025							
XIBLK21	246-Trinitrotoluene	227 > 210		18096.025							
XIBLK21	34-dinitrotoluene	182 > 152		18096.025							
XIBLK21	26-dinitrotoluene	182 > 152		18096.025							
XIBLK21	24-dinitrotoluene	182 > 152		18096.025							
XIBLK21	26-dinitrotoluene-d3	185 > 155	17.47	18096.025							
XIBLK21	2-Nitrotoluene	137 > 46		18096.025							
XIBLK21	4-Nitrotoluene	137 > 46		18096.025							
XIBLK21	3-Nitrotoluene	137 > 46		18096.025							
XIBLK21	PETN	361 > 62		18096.025							
					2813.650	2813.650	bb	MM- 13-Feb-10 09:17:32			
					2813.650	2813.650	bb	MM- 13-Feb-10 09:18:58			
					18096.025	18096.025	bb				
					490.1500	490.1500	98.0	-2.0	1864.4		

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK22

Analysis Date: 13-FEB-10 01:29

GEL Data File: EXP0208218a

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	483.394
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	560.546
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\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208218a

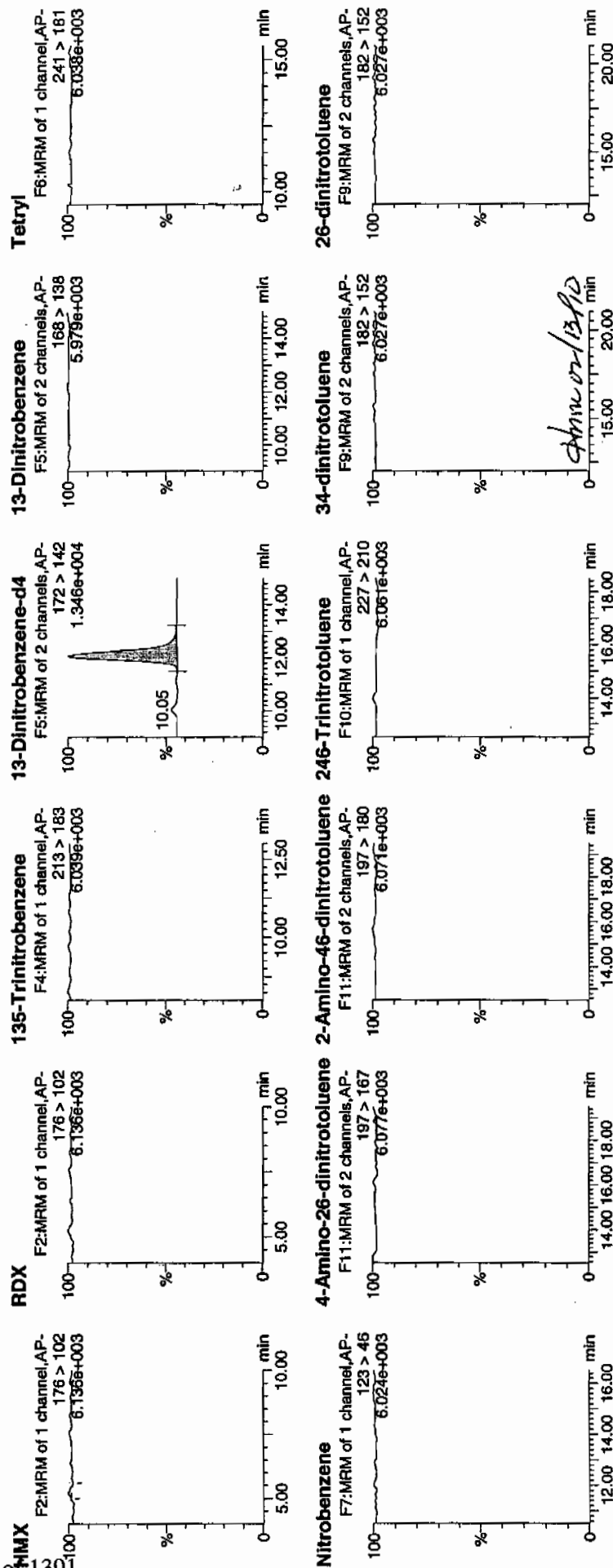
Date: 13-Feb-2010

Time: 01:29:19

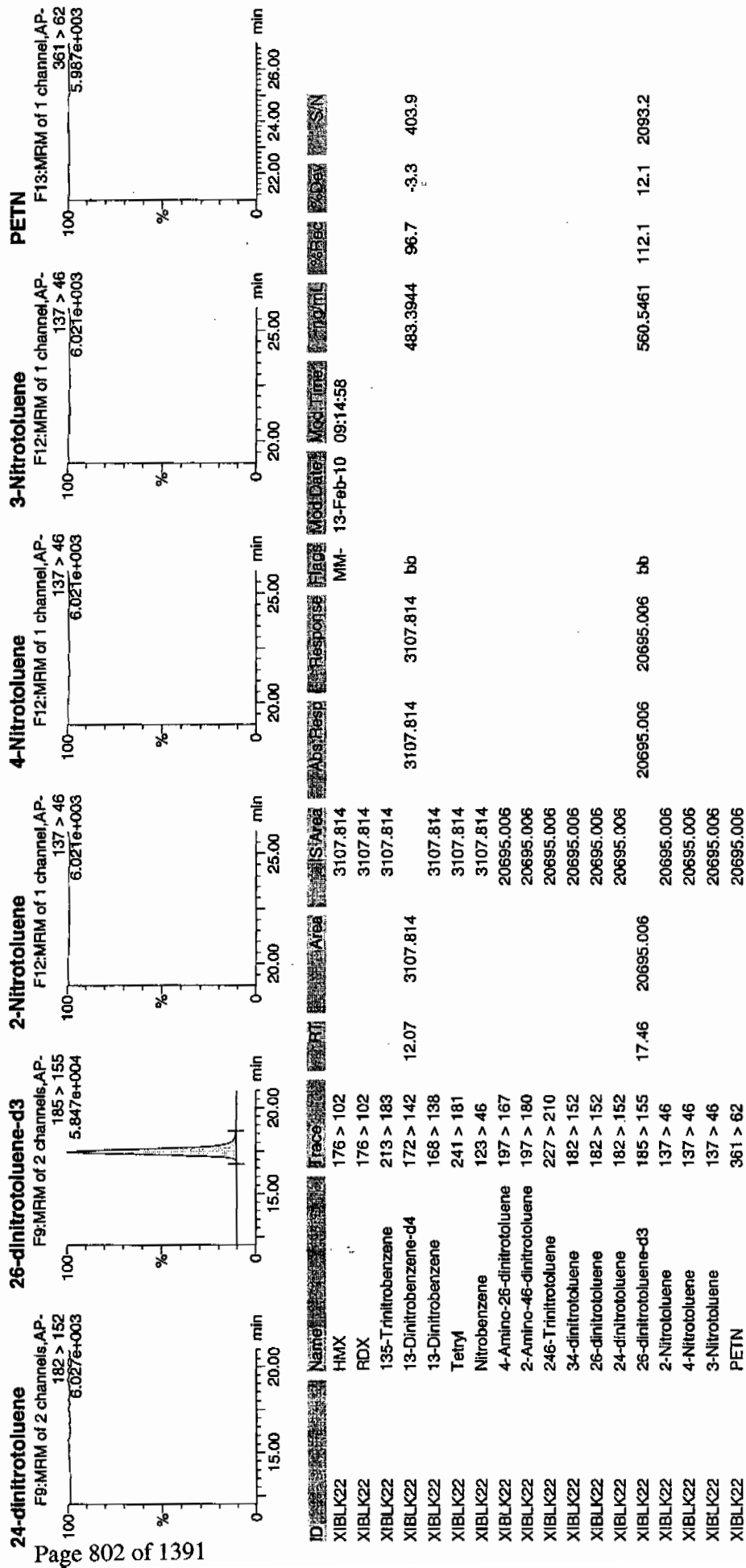
id: XIBLK22

Vial: 1:1,A

2/13/10



Dataset: C:\MASSLYNX\New_Exp\PRO\020810\expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK23

Analysis Date: 13-FEB-10 05:25

GEL Data File: EXP0208226a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	462.967
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	437.383
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208226a

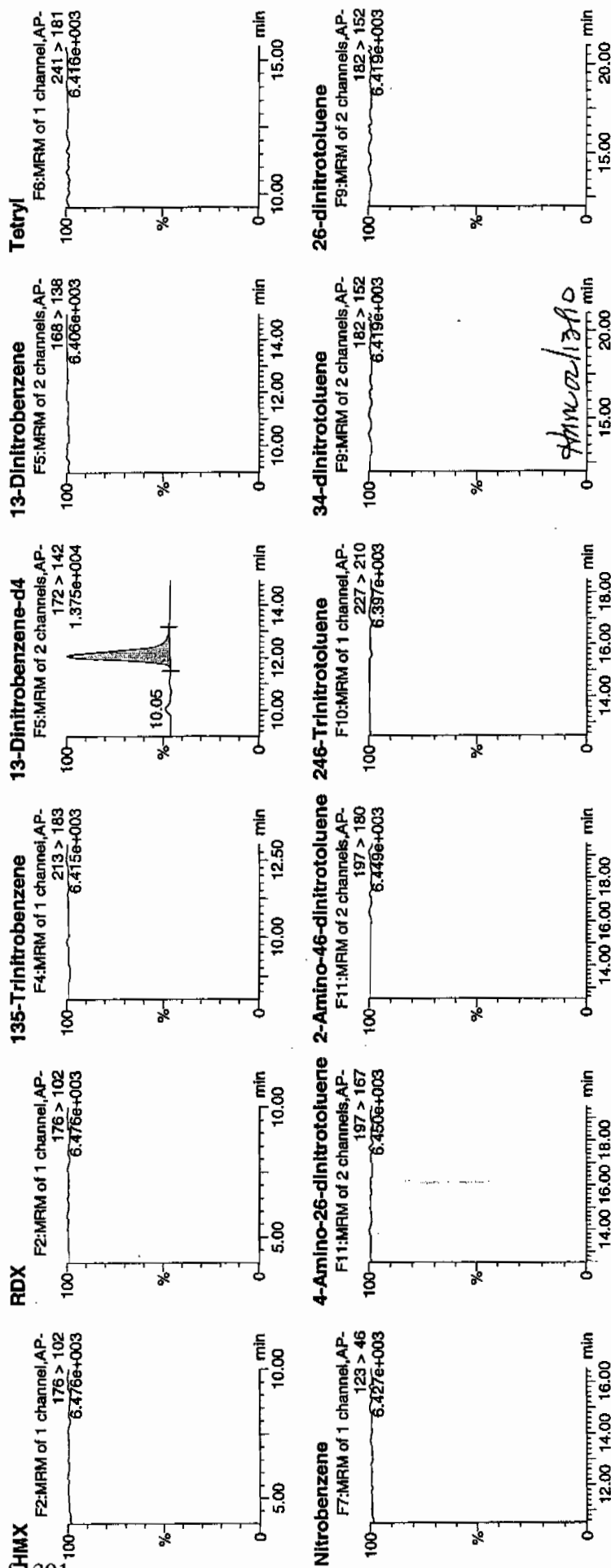
Date: 13-Feb-2010

Time: 05:25:41

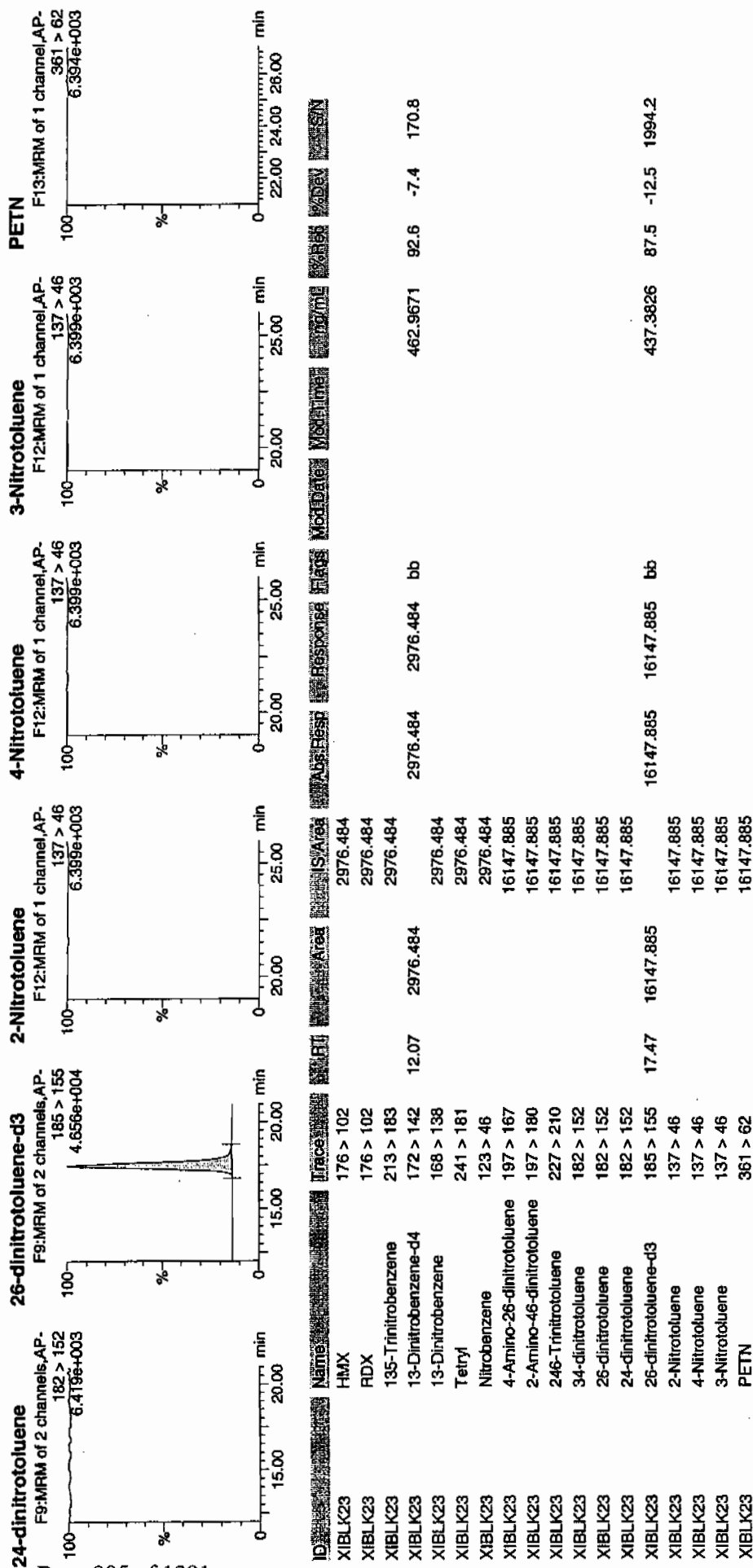
ID: XIBLK23

Vial: 1:1,A

177
2/13/10



Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK24

Analysis Date: 13-FEB-10 11:50

GEL Data File: EXP0208239a

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	501.563
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	508.159
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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208239a

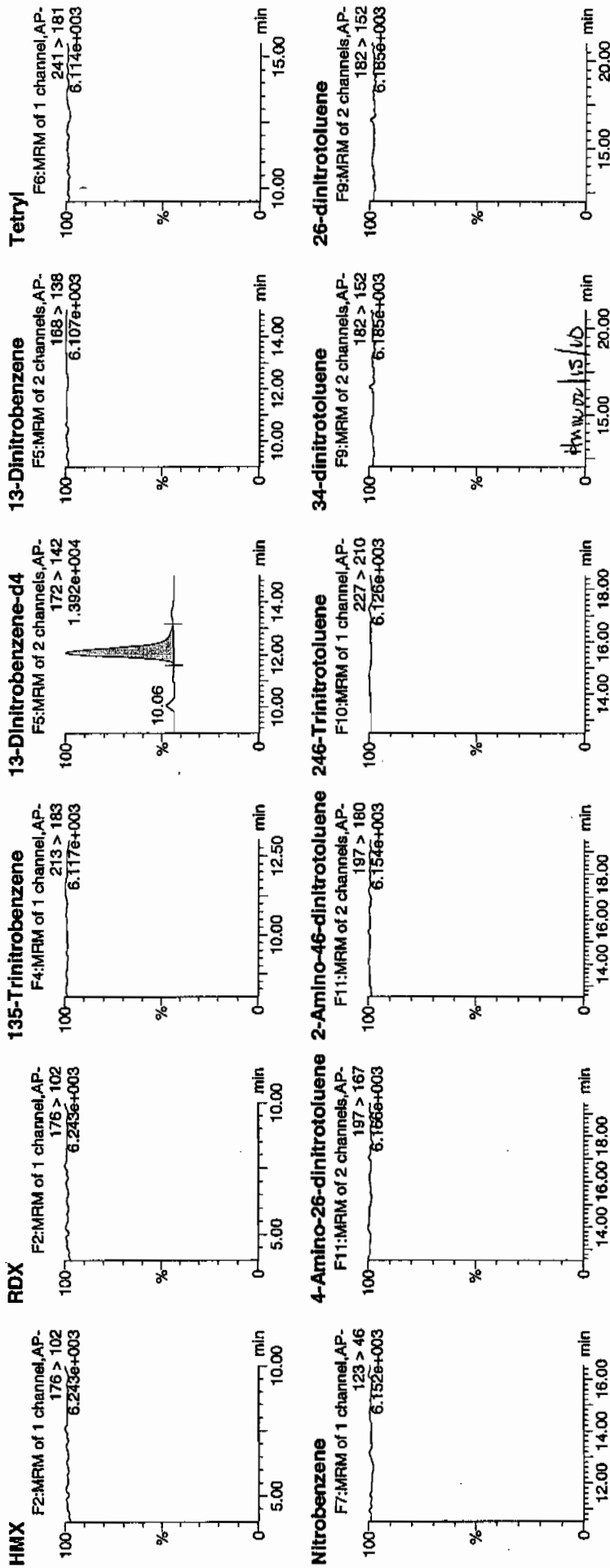
Date: 13-Feb-2010

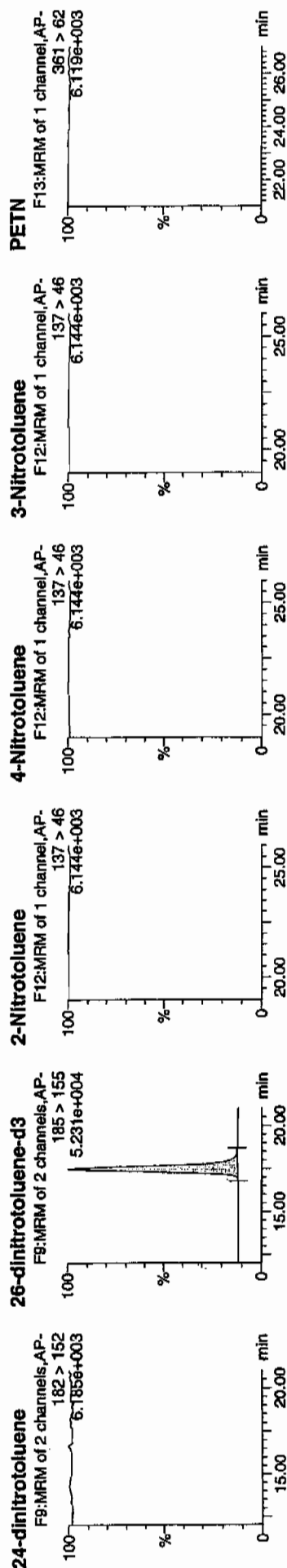
Time: 11:50:16

ID: XIBLK24

Vial: 1:1,A

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2/14/10



[illegible]

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK25

Analysis Date: 13-FEB-10 18:13

GEL Data File: EXP0208252a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
m-Dinitrobenzene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	554.342
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	540.338
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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208252a

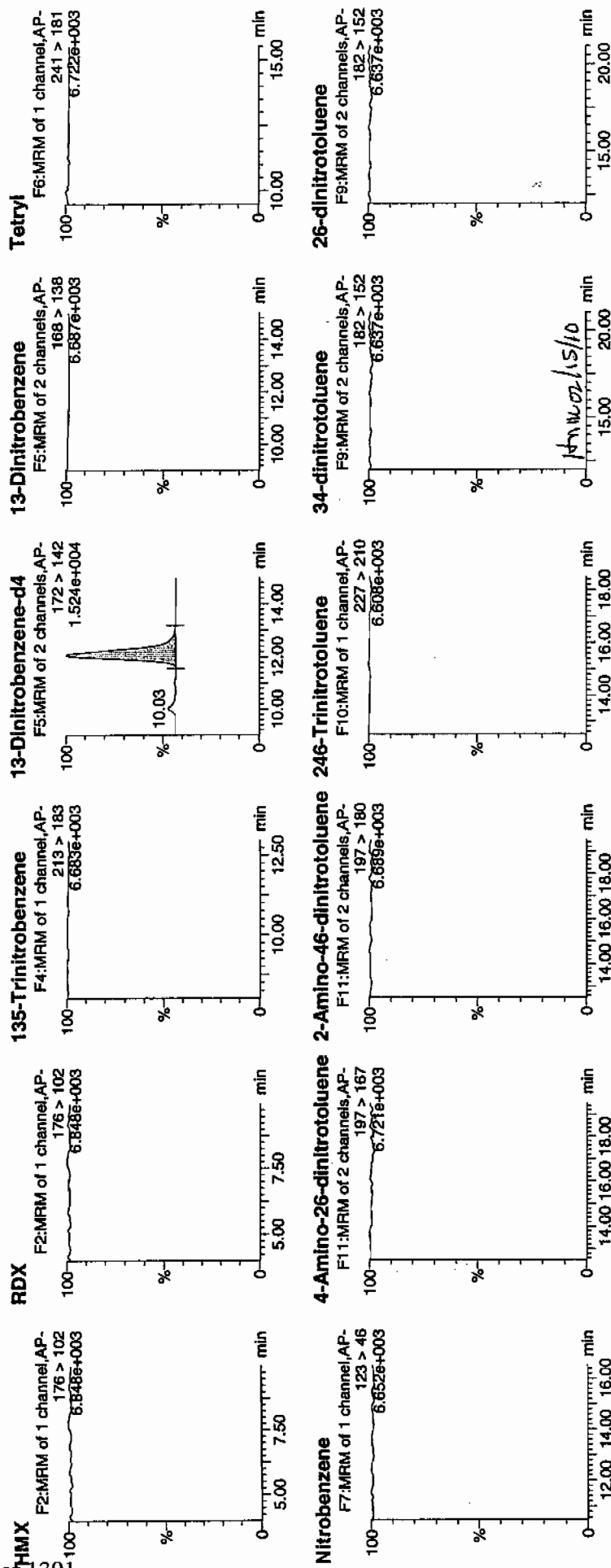
Date: 13-Feb-2010

Time: 18:13:44

ID: XIBLK25

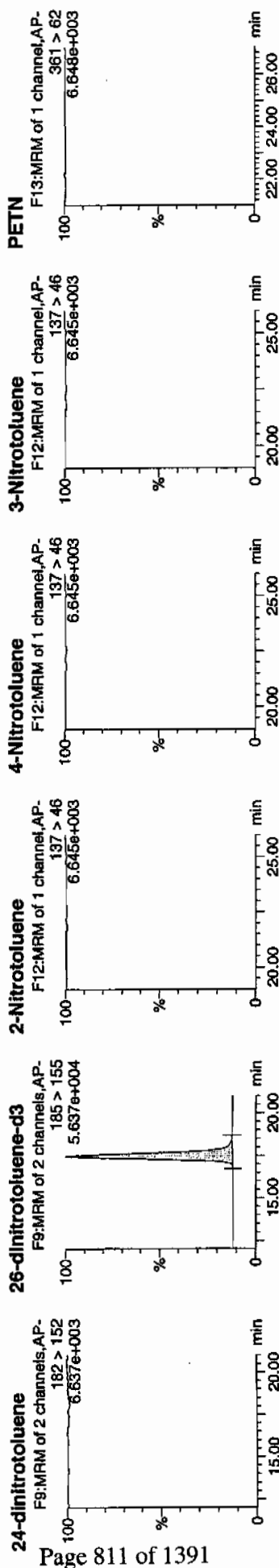
Vial: 1:1,A

2/14/10



Quantity Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	Trace	RT	Area	IS Area	Response	Flags	Mod time	Time	%Rec	Label
XIBLK25	HMX	176 > 102			3563.945						
XIBLK25	RDX	176 > 102			3563.945						
XIBLK25	135-Trinitrobenzene	213 > 183			3563.945						
XIBLK25	13-Dinitrobenzene-d4	172 > 142	12.07	3563.945					554.3418	110.9	406.5
XIBLK25	13-Dinitrobenzene	168 > 138			3563.945						
XIBLK25	Tetryl	241 > 181			3563.945						
XIBLK25	Nitrobenzene	123 > 46			3563.945						
XIBLK25	4-Amino-26-dinitrotoluene	197 > 167			19948.941						
XIBLK25	2-Amino-46-dinitrotoluene	197 > 180			19948.941						
XIBLK25	246-Trinitrotoluene	227 > 210			19948.941						
XIBLK25	34-dinitrotoluene	182 > 152			19948.941						
XIBLK25	26-dinitrotoluene	182 > 152			19948.941						
XIBLK25	24-dinitrotoluene	182 > 152			19948.941						
XIBLK25	26-dinitrotoluene-d3	185 > 155	17.46	19948.941					540.3382	108.1	8.1 1578.8
XIBLK25	2-Nitrotoluene	137 > 46			19948.941						
XIBLK25	4-Nitrotoluene	137 > 46			19948.941						
XIBLK25	3-Nitrotoluene	137 > 46			19948.941						
XIBLK25	PETN	361 > 62			19948.941						

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 13-FEB-10 12:34

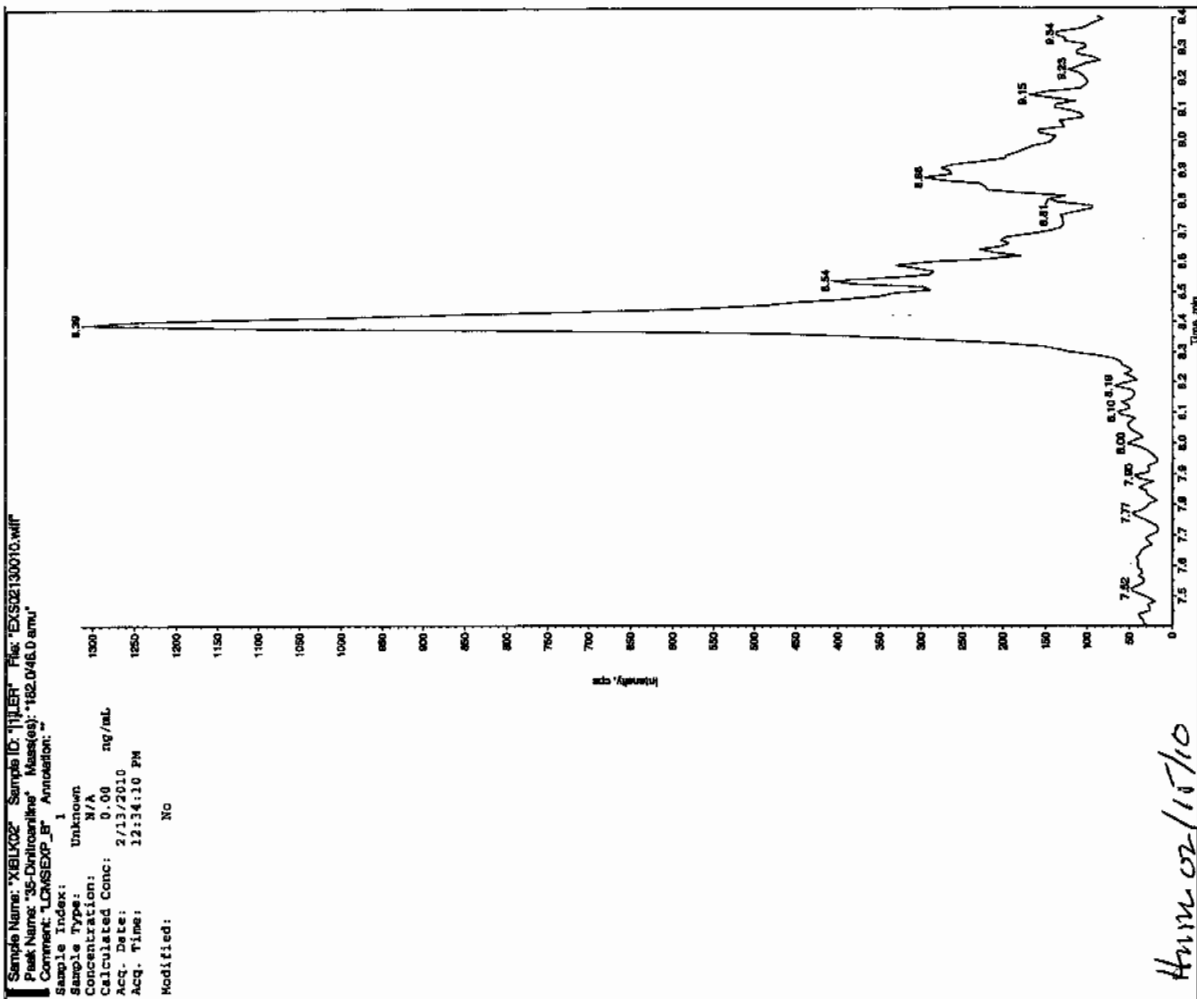
GEL Data File: EXS02130010.wiff

Instrument ID: LCMSMS

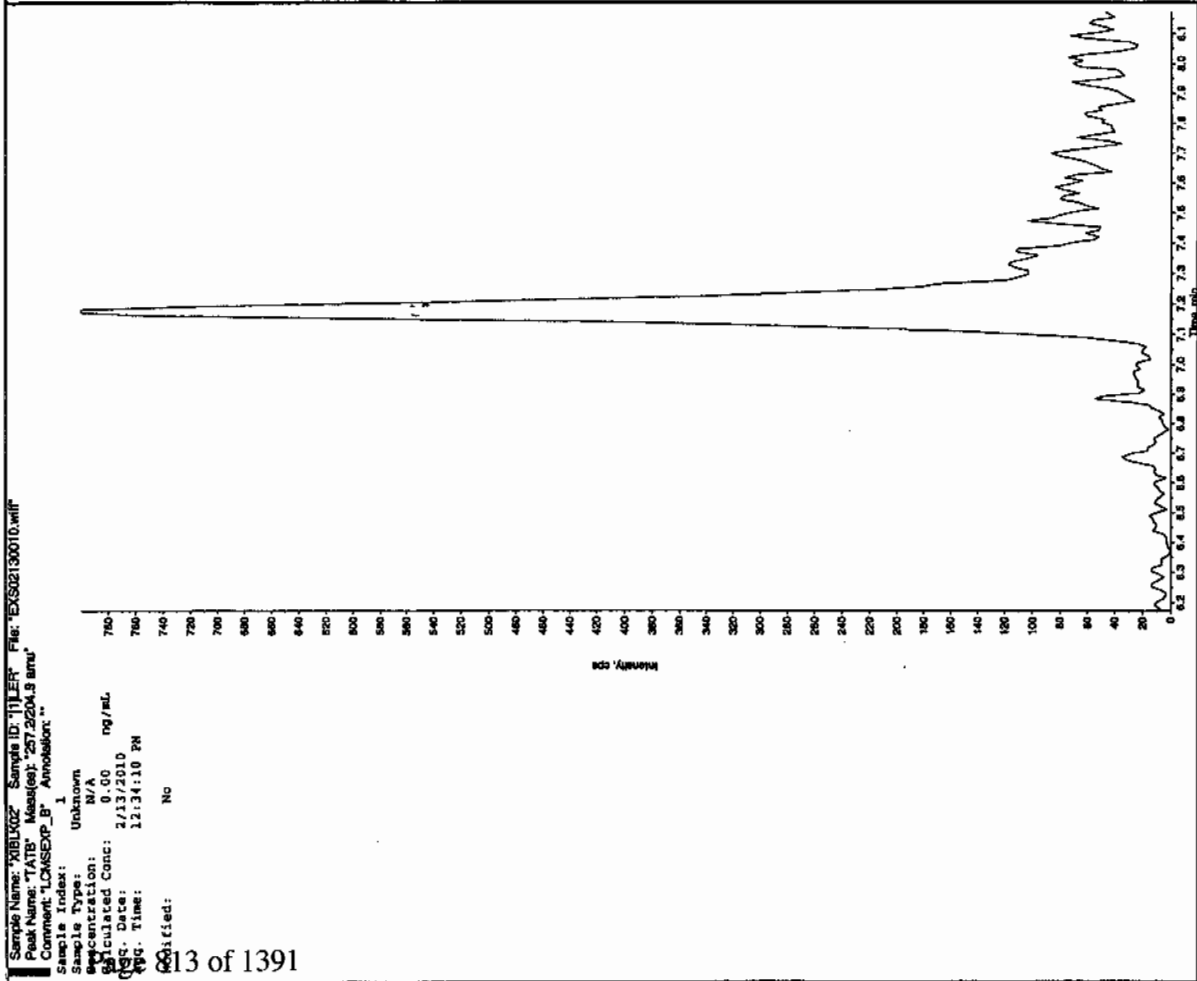
Column: Phenomenex Ultracarb 5u ODS(20)

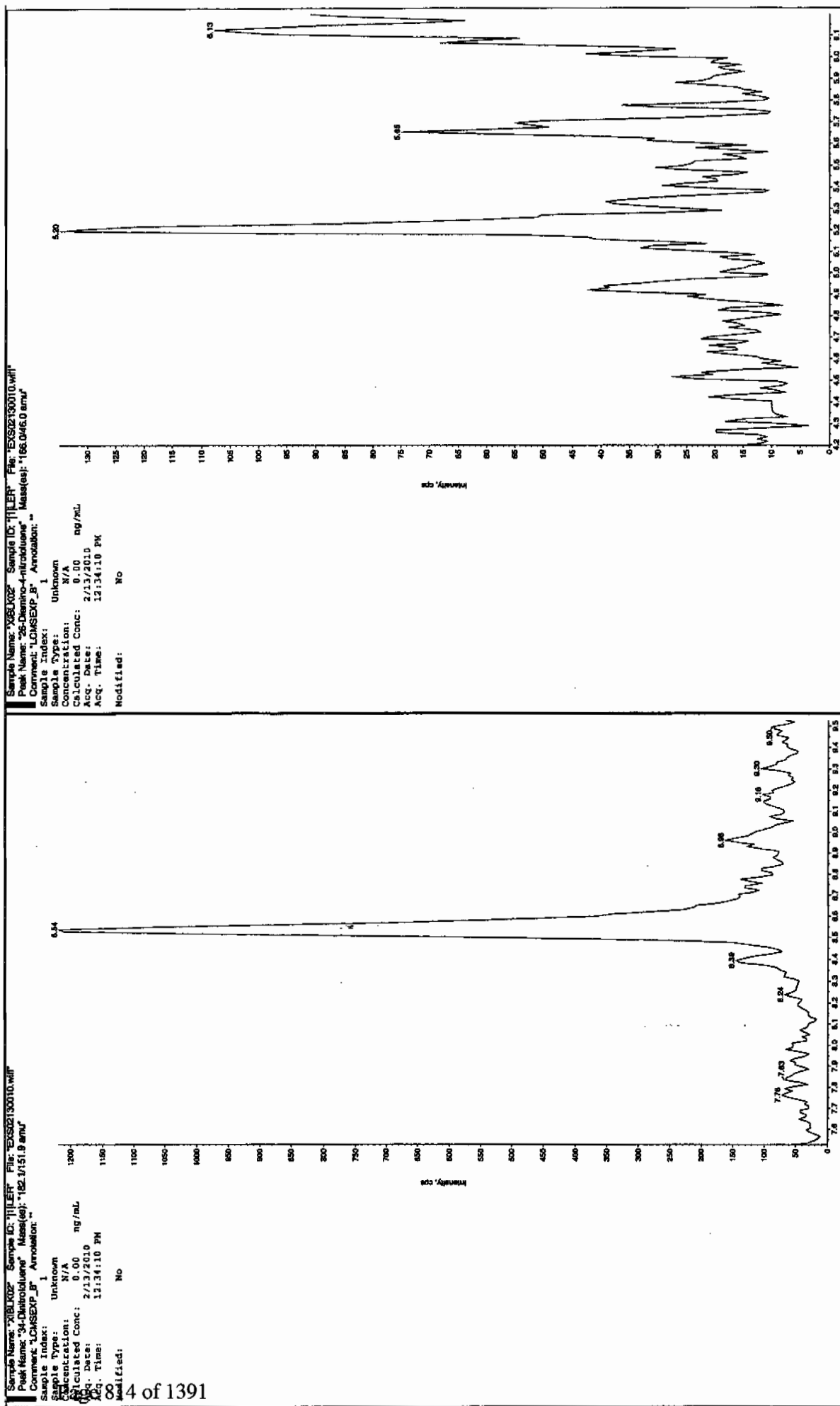
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	9.65
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

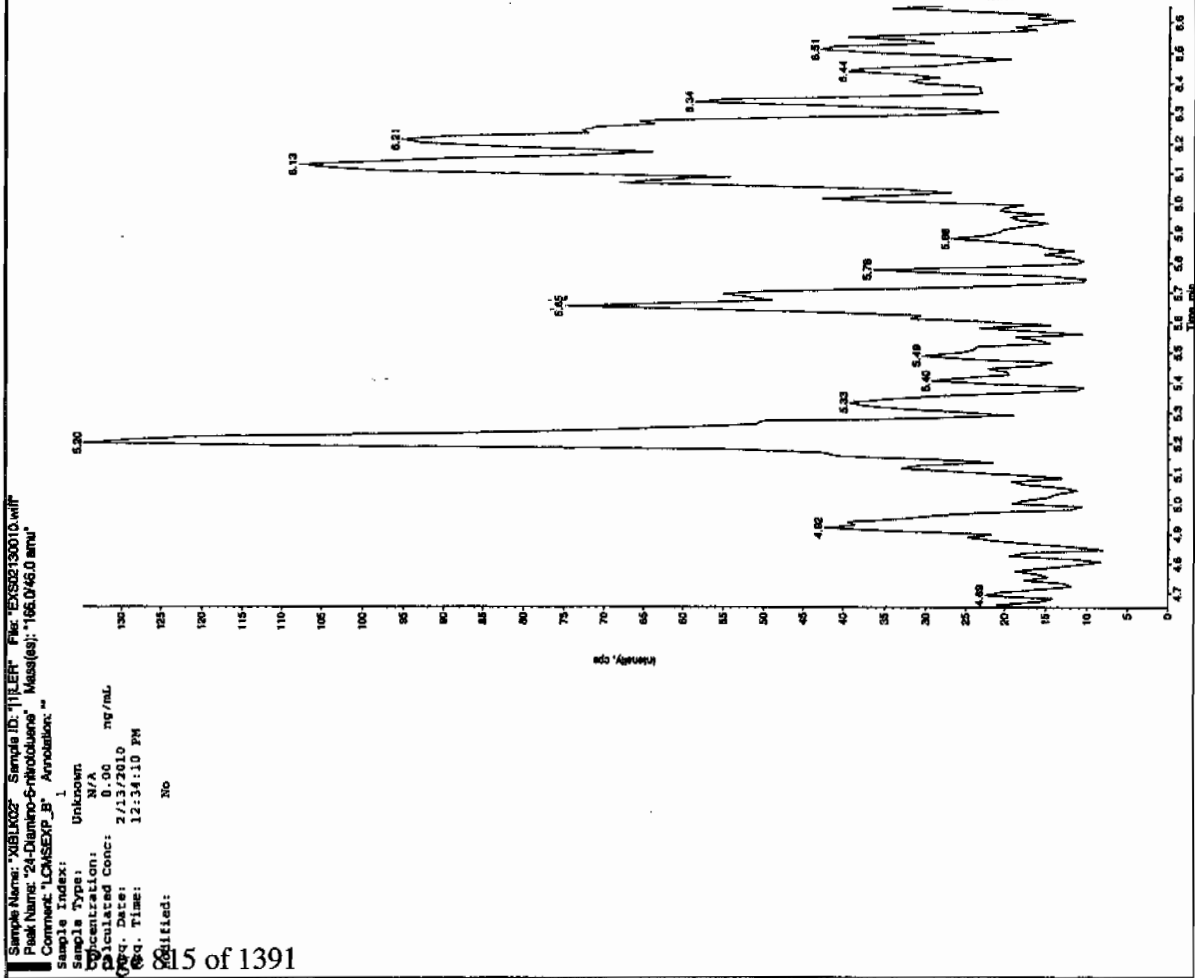
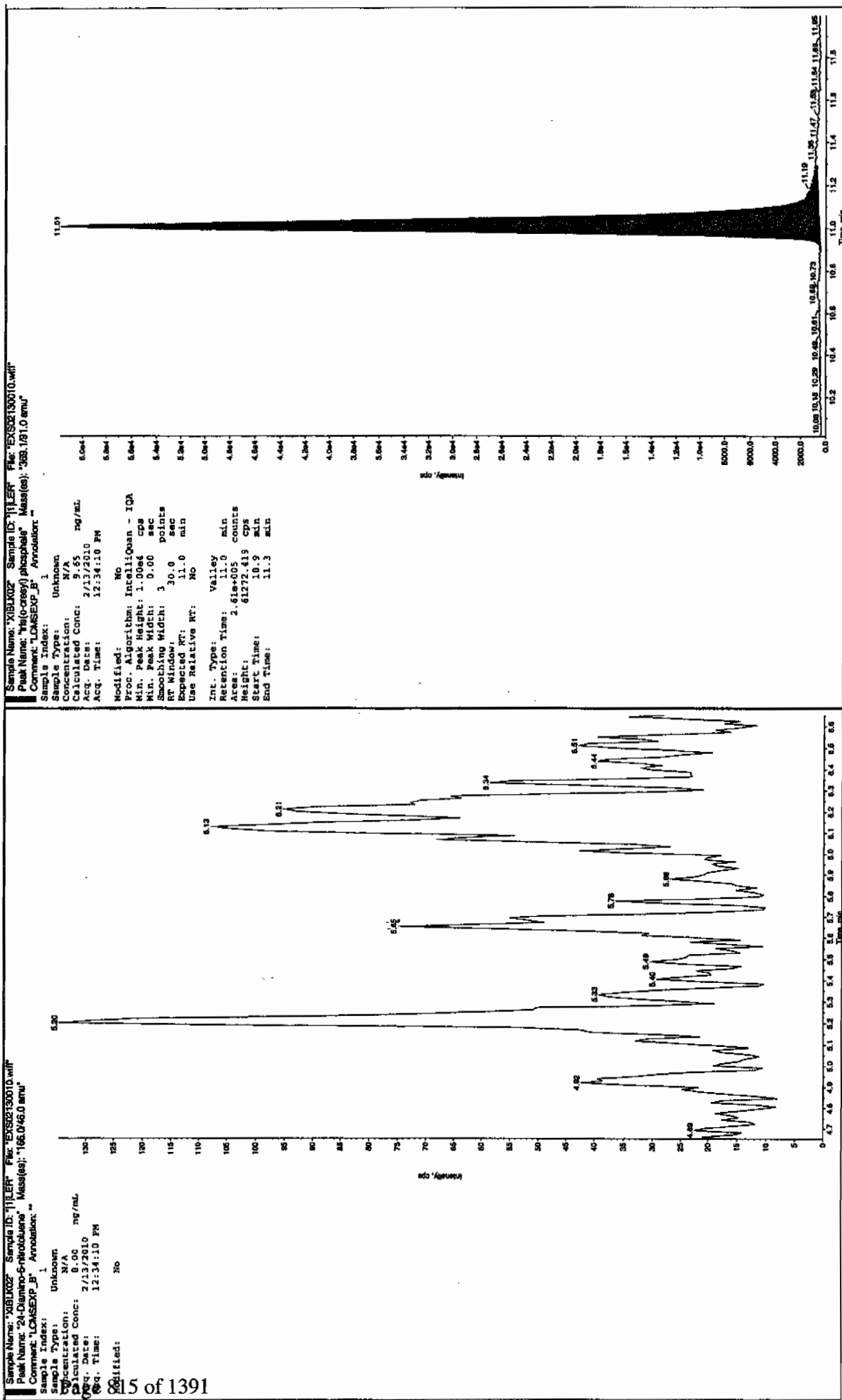
Jan 2/15/10



Jan 02/15/10







*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 13-FEB-10 13:05

GEL Data File: EXS02130012.wiff

Instrument ID: LCMSMS

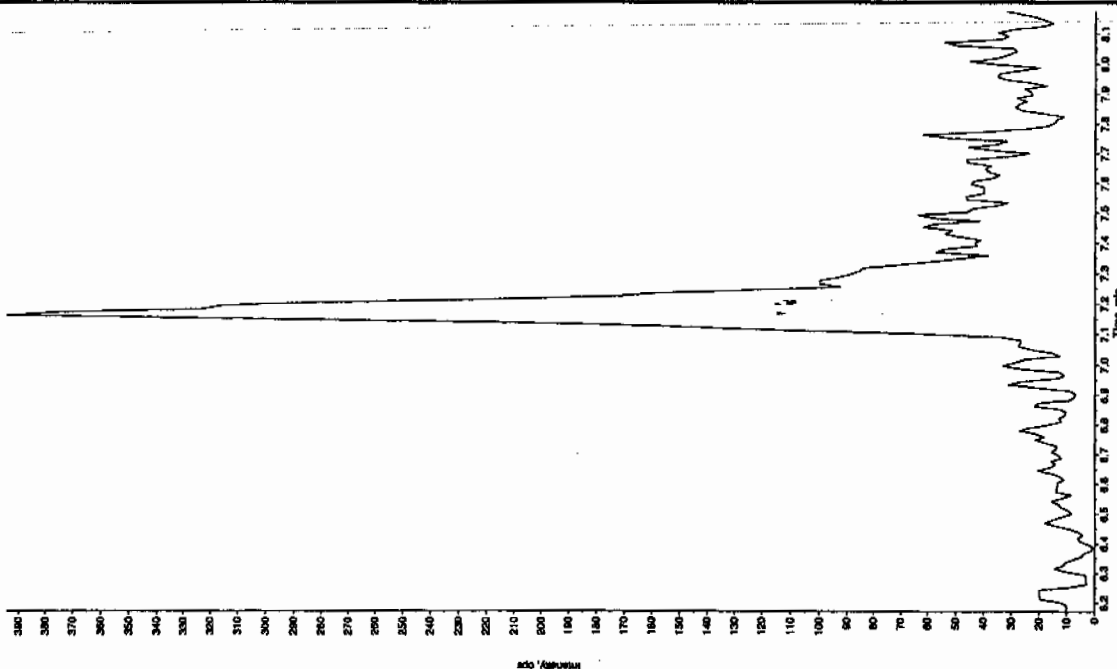
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.76
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/15/10

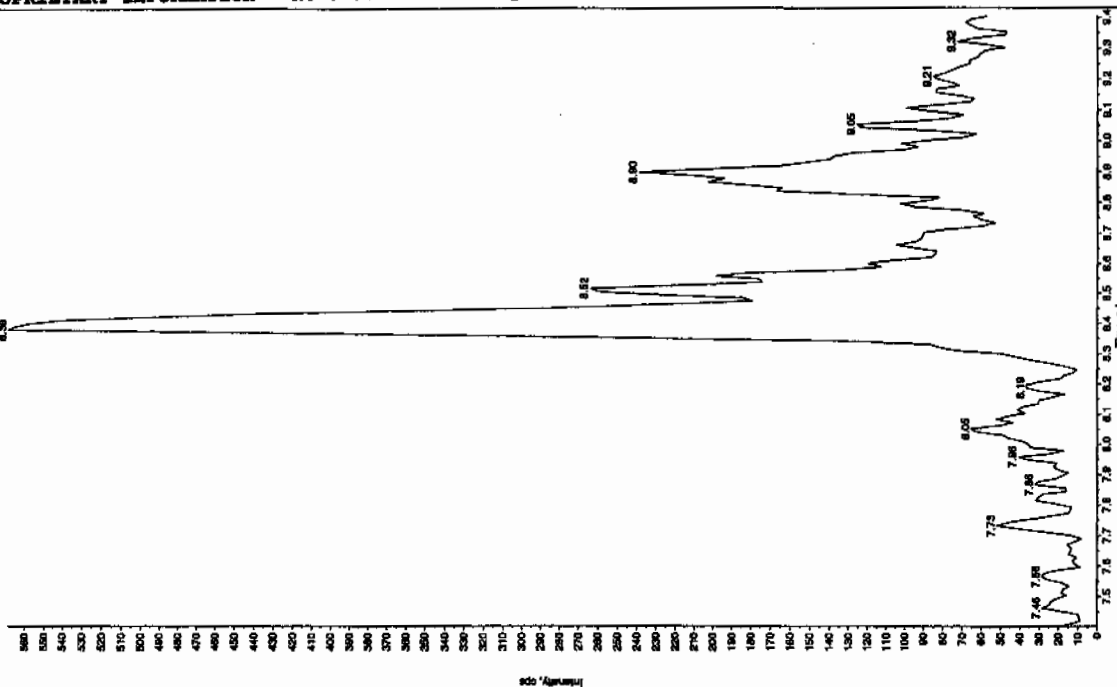
Sample Name: "XIBLX03" Sample ID: "HILFER" File: "EX02130012.wif"
 Peak Name: "TATB" Mass(es): "257.204.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/13/2010
 Acq. Date: 1:05:35 PM
 Acq. Time: No
 Modified: No

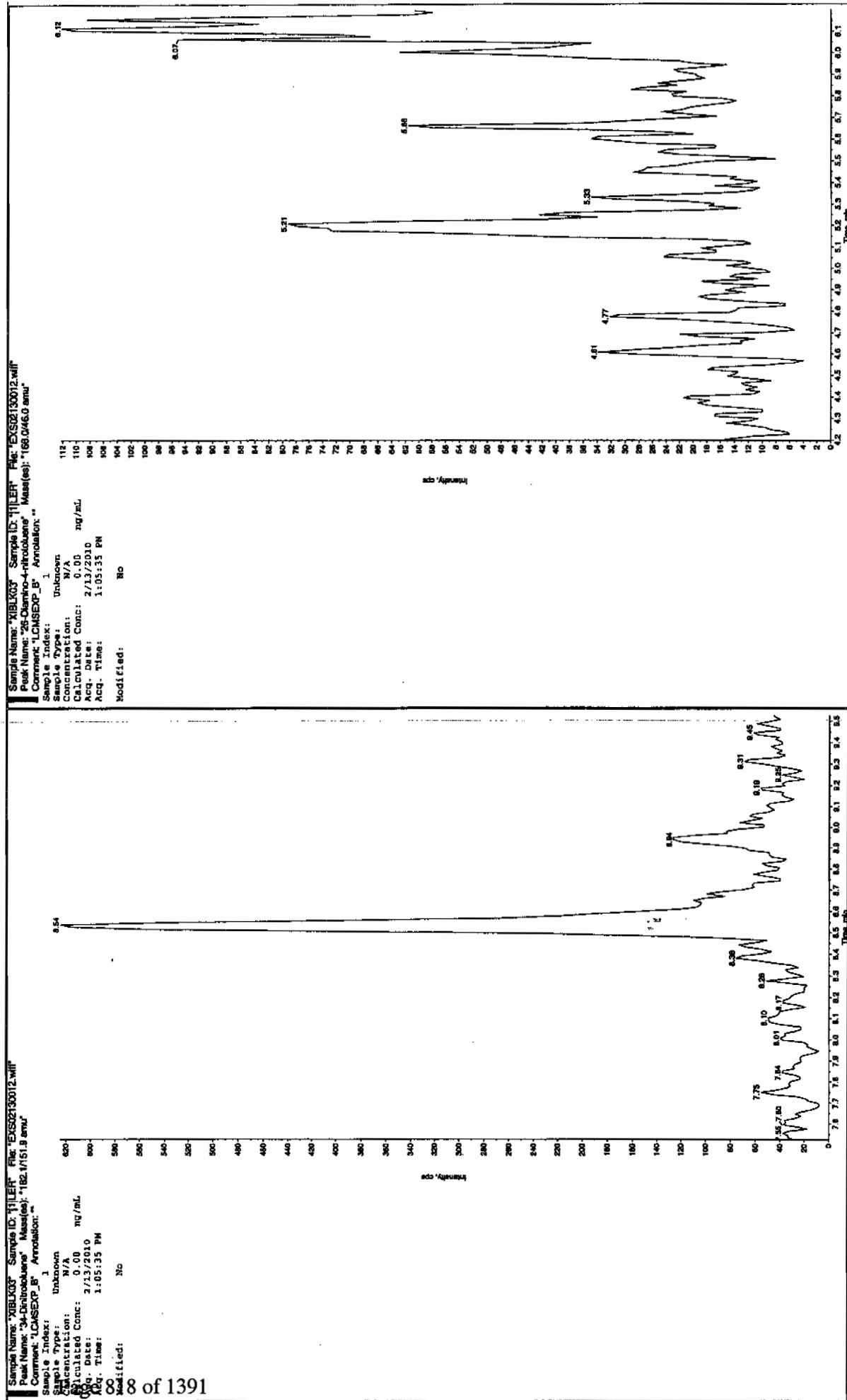


Sample Name: "XIBLX03" Sample ID: "HILFER" File: "EX02130012.wif"
 Peak Name: "3S-Dinitroanthracene" Mass(es): "182.048.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/13/2010
 Acq. Date: 1:05:35 PM
 Acq. Time: No
 Modified: No

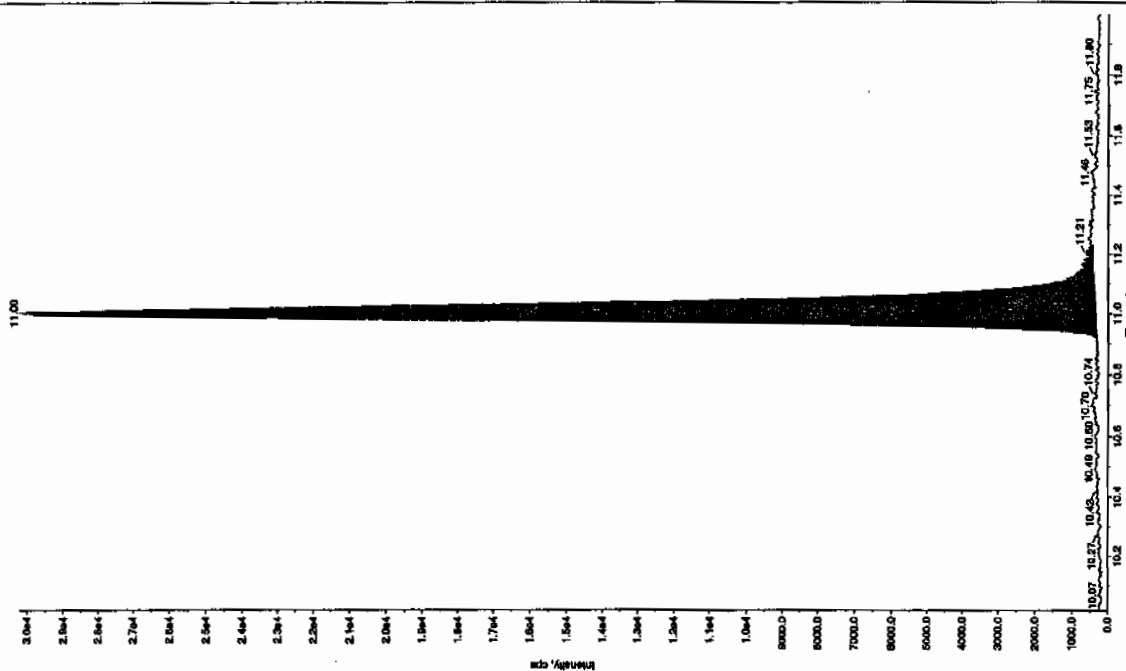


See 2/15/10



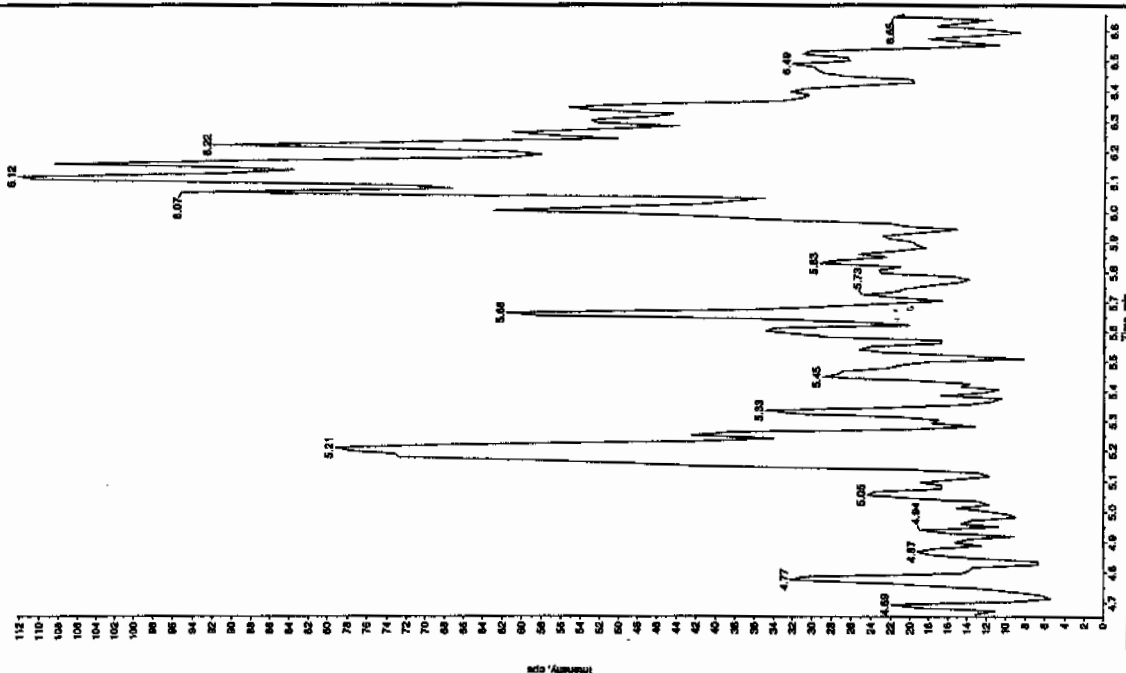
Sample Name: "XBLK03" Sample ID: "TJLER" File: "E:\S02130012.wif"
 Peak Name: "tri(o-cresyl) phosphate" Mass(es): "353.191.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.76 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:05:35 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: 11.0 min
 Area: 1.24e+005 counts
 Height: 29857.605 cps
 Start Time: 10.9 min
 End Time: 11.2 min



Sample Name: "XBLK03" Sample ID: "TJLER" File: "E:\S02130012.wif"
 Peak Name: "24-Chloro-6-iodo-2-phenyl-1,3-bis(4-chlorophenyl)-5-methyl-4H-pyrimidin-4-one" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.76 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:05:35 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 13-FEB-10 16:29

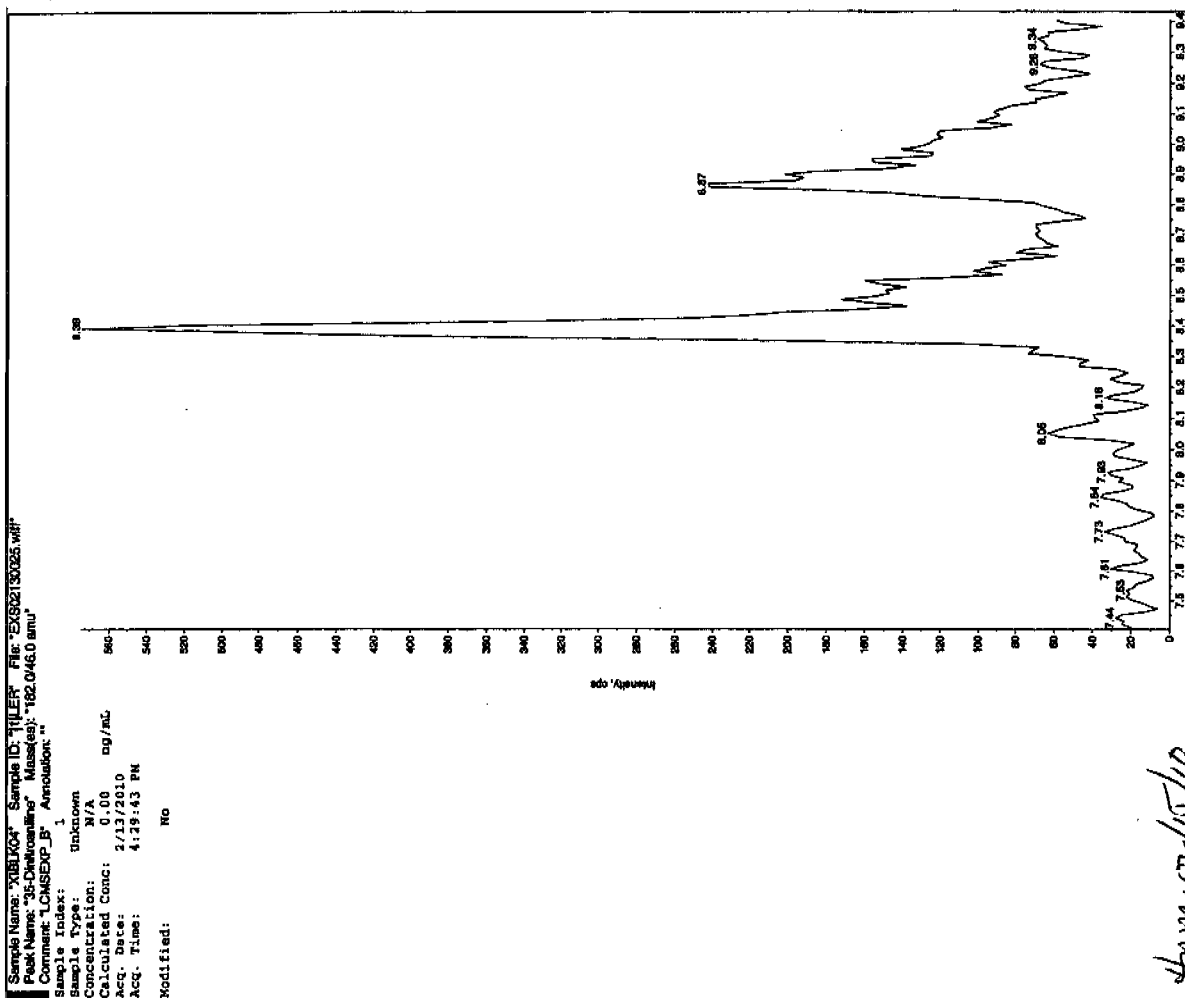
GEL Data File: EXS02130025.wiff

Instrument ID: LCMSMS

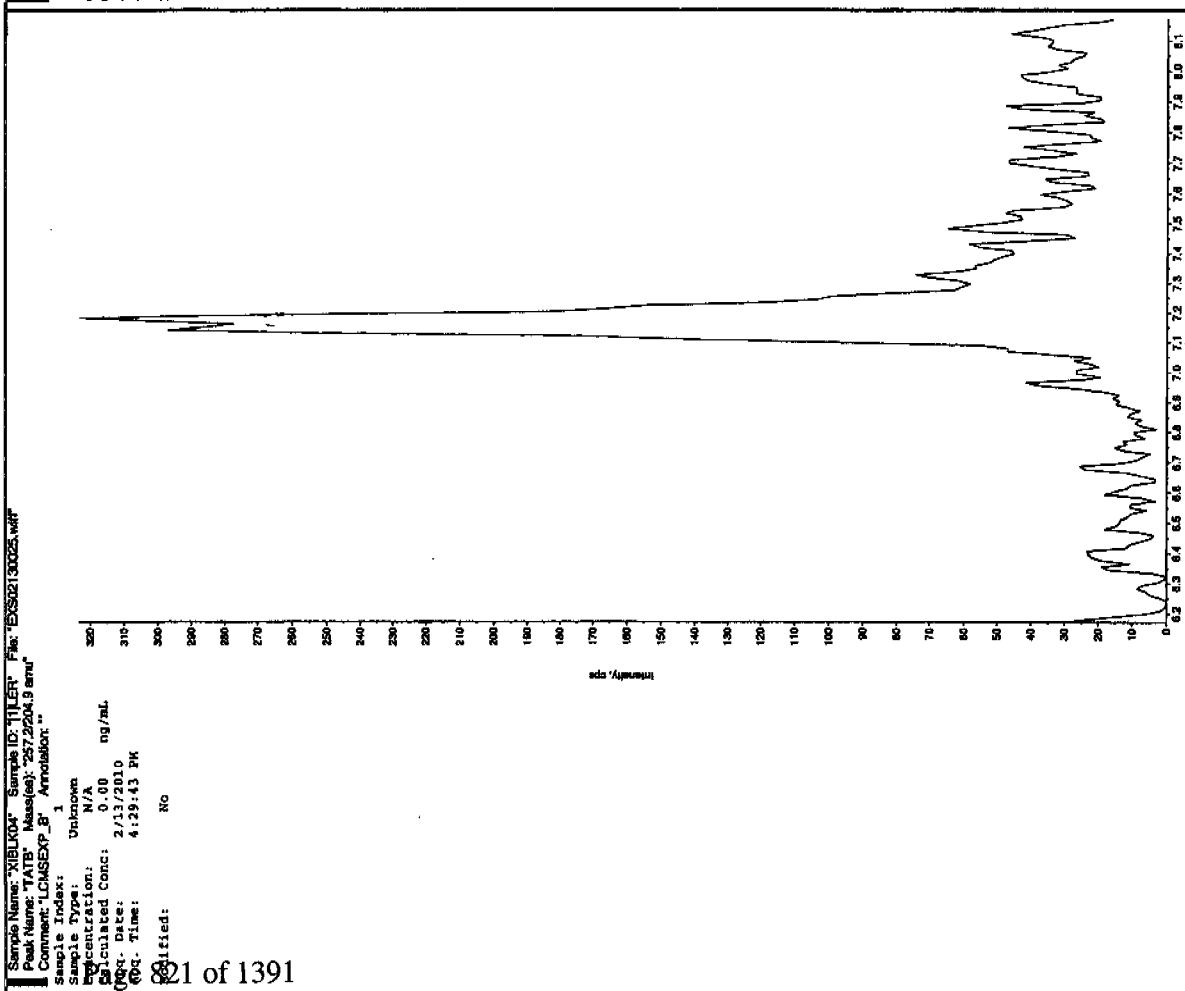
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.63
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

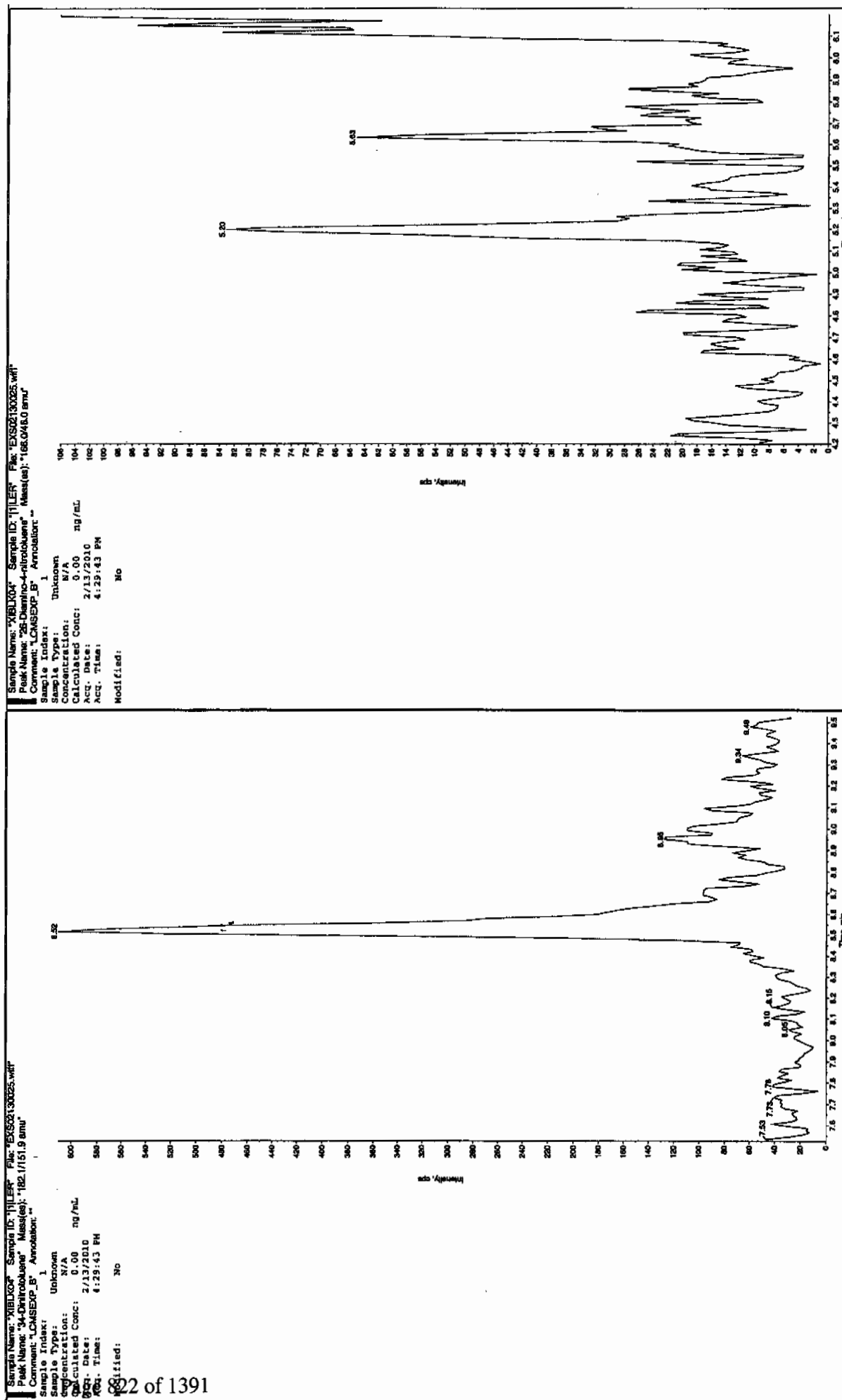
Sen 2/15/10



Ann 02/15/10

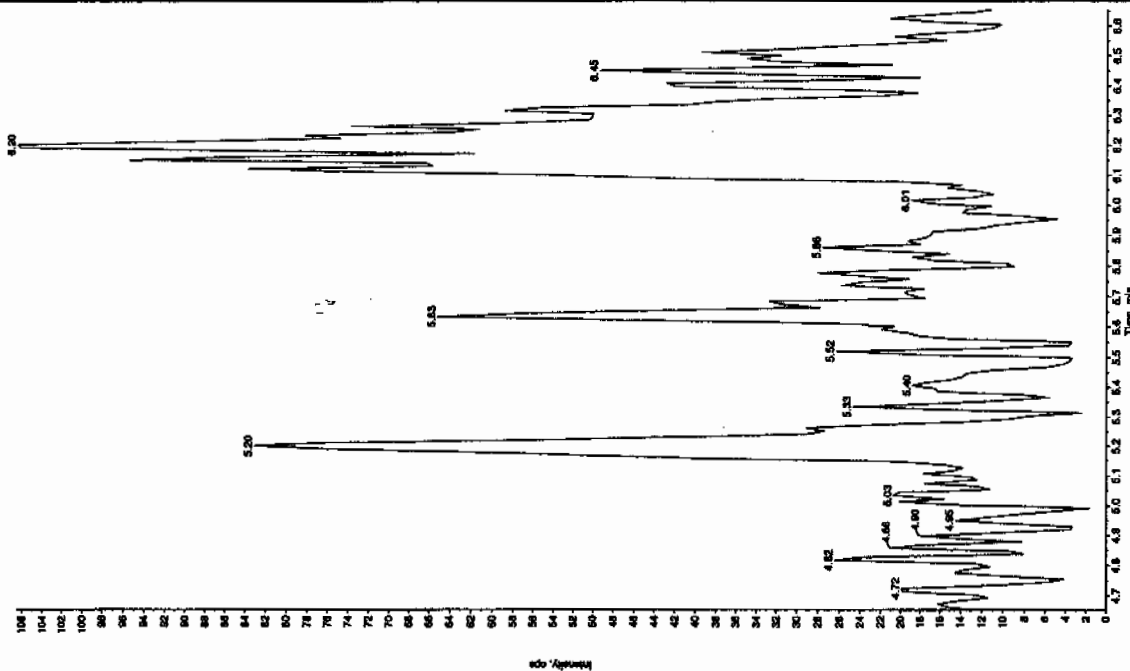


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XBLK04" Sample ID: "11LEF" File: "E55213025.wif"
 Peak Name: "165.046.0 amu" Mass(es): "165.046.0 amu"
 Comment: "LCMS-EXP_B" Acquisition: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2.63 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 4:29:43 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 ST Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 9.81e+004 counts
 Height: 23090.134 cps
 Start Time: 10.9 min
 End Time: 11.3 min



Sample Name: "XBLK04" Sample ID: "11LEF" File: "E55213025.wif"
 Peak Name: "24-Diamino-6-nitrophenol" Mass(es): "165.046.0 amu"
 Comment: "LCMS-EXP_B" Acquisition: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 4:29:43 PM
 Modified: No

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 13-FEB-10 19:38

GEL Data File: EXS02130037.wiff

Instrument ID: LCMSMS

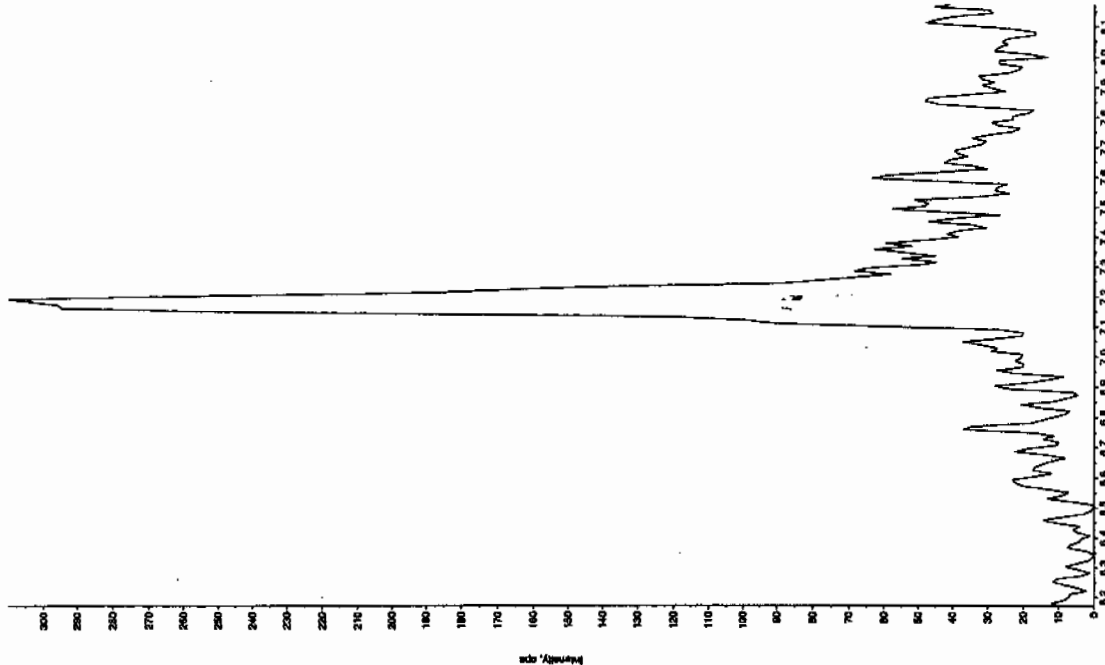
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.67
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/15/10

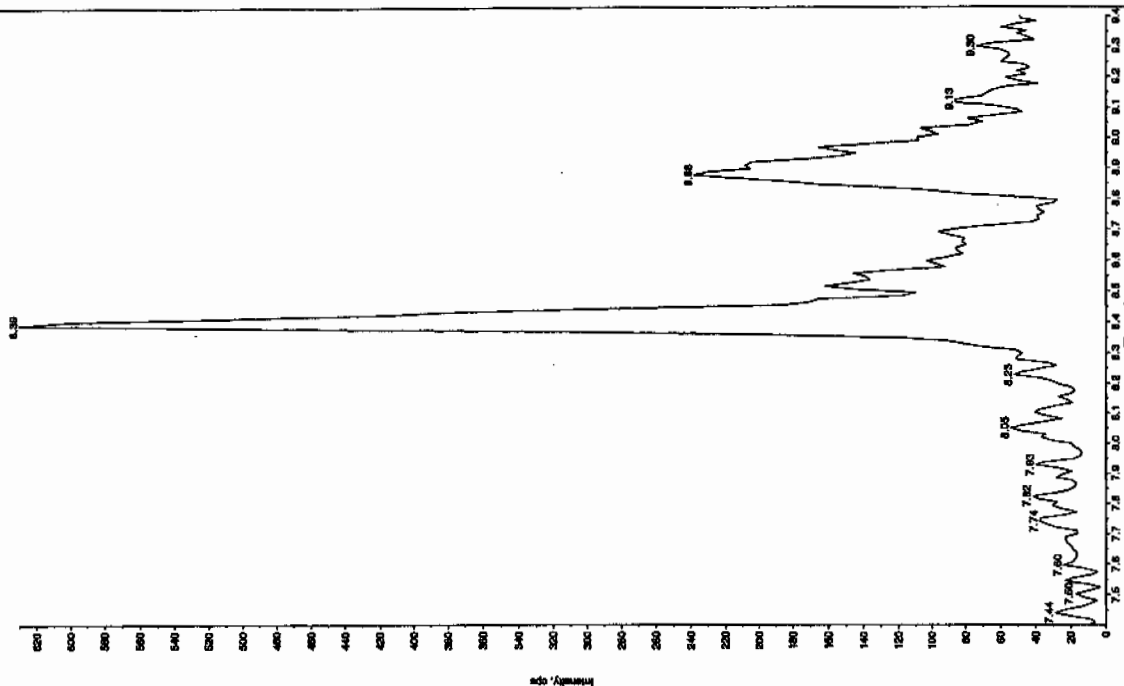
Sample Name: "XBLK08" Sample ID: "HILF" File: "EXS02130037.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/10
 Acq. Time: 7:36:01 PM
 Modified: No

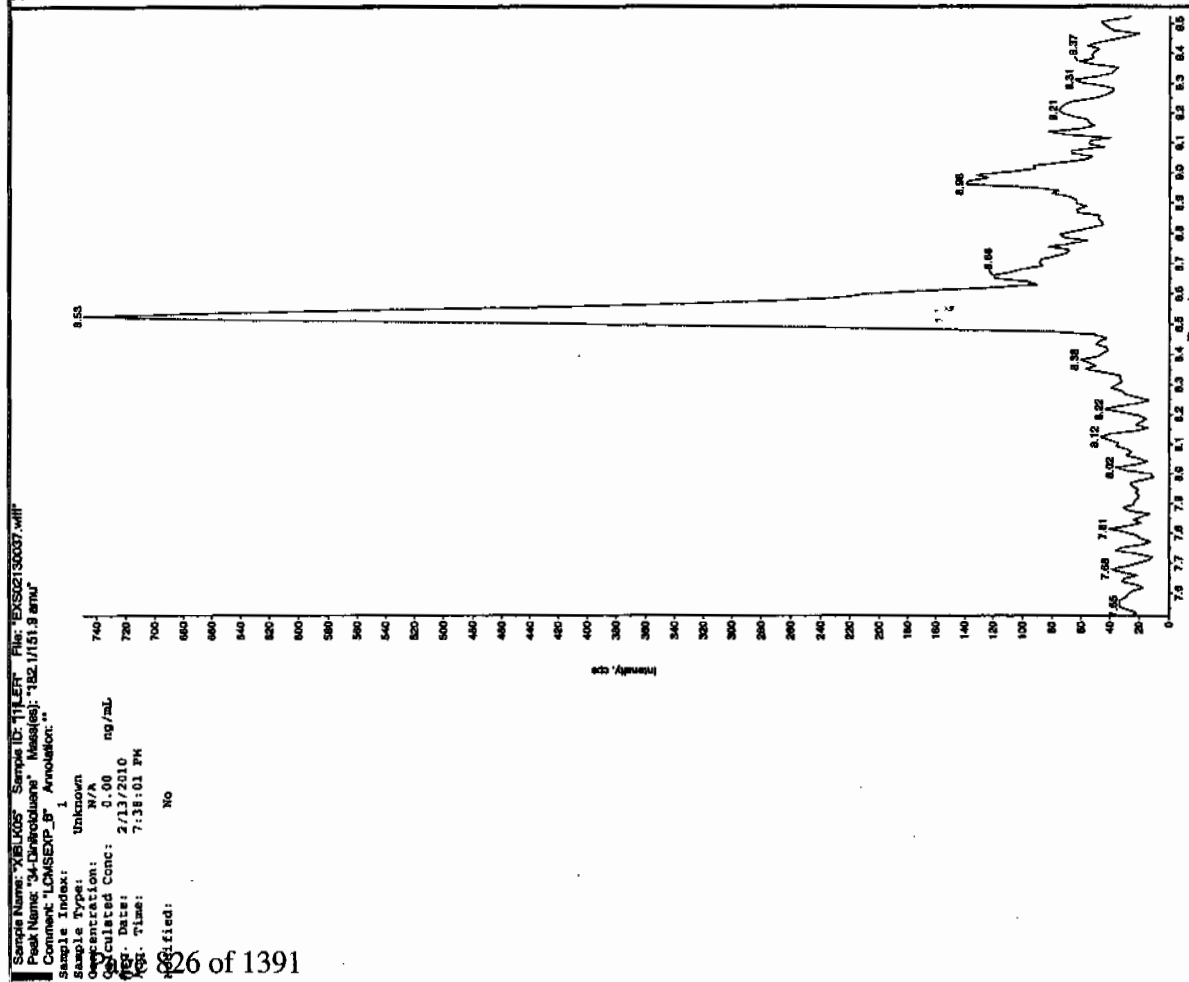


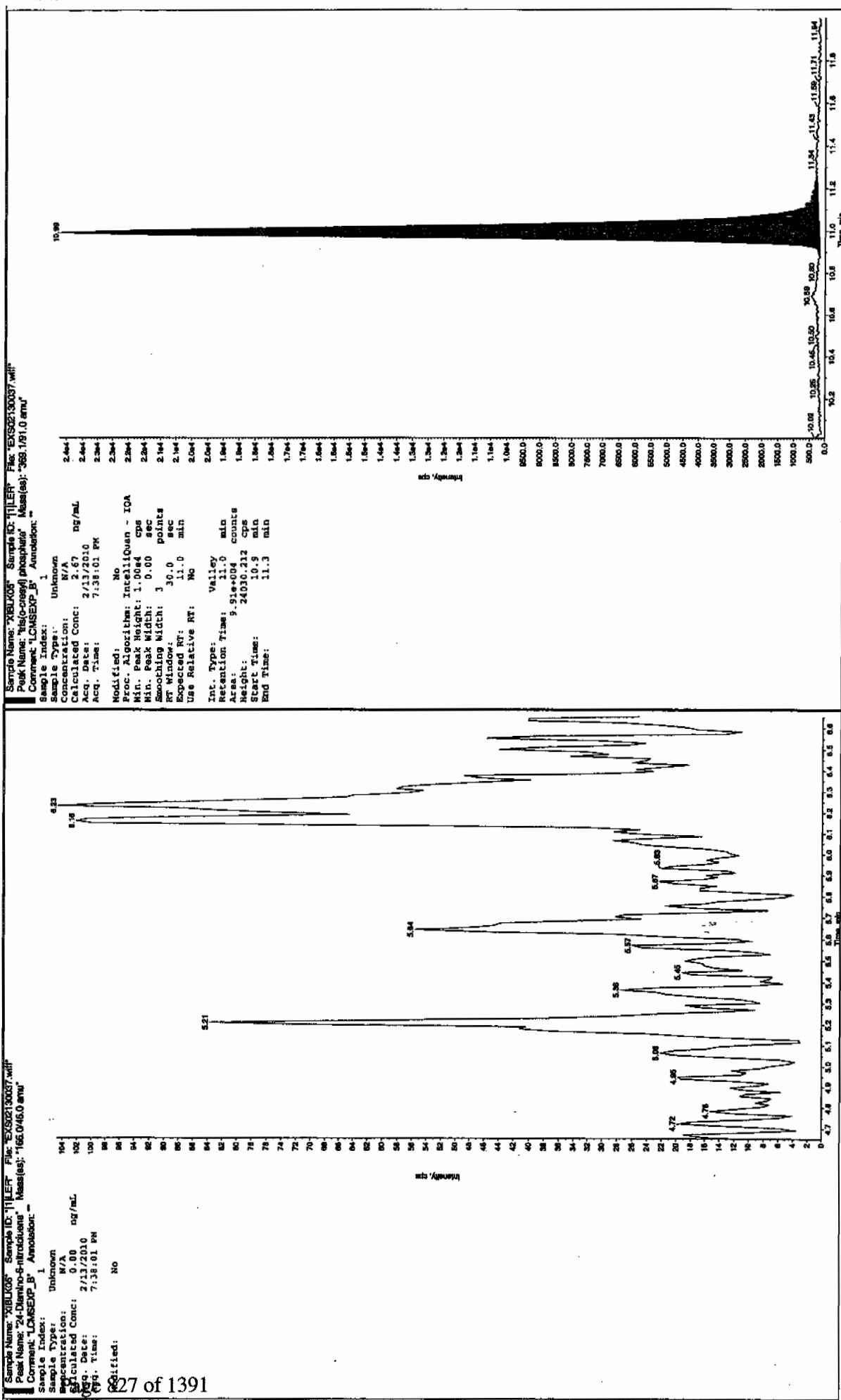
Sample Name: "XBLK08" Sample ID: "HILF" File: "EXS02130037.wif"
 Peak Name: "35-Oxitroline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/10
 Acq. Time: 7:38:01 PM
 Modified: No



See 02/15/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 13-FEB-10 20:25

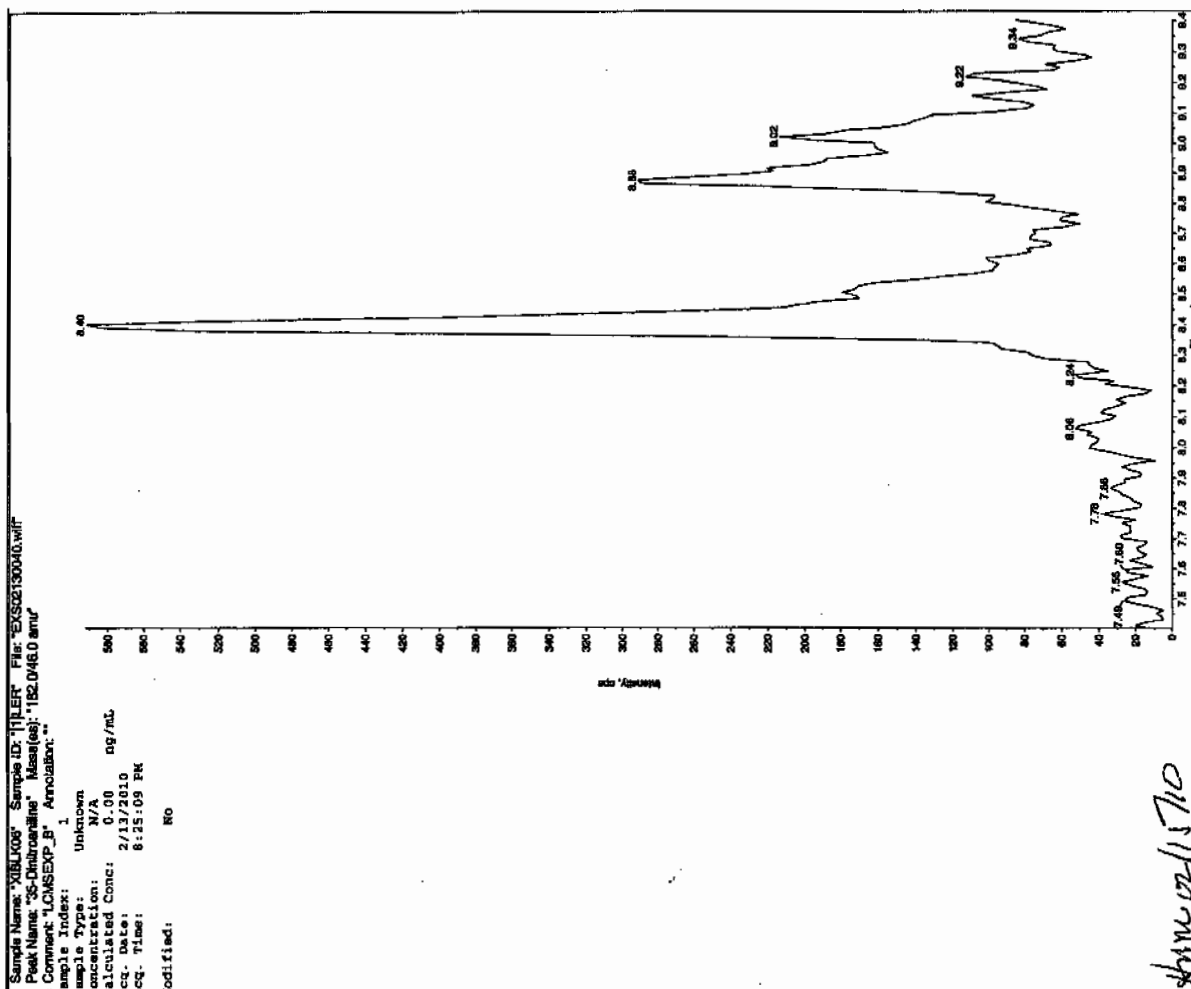
GEL Data File: EXS02130040.wiff

Instrument ID: LCMSMS

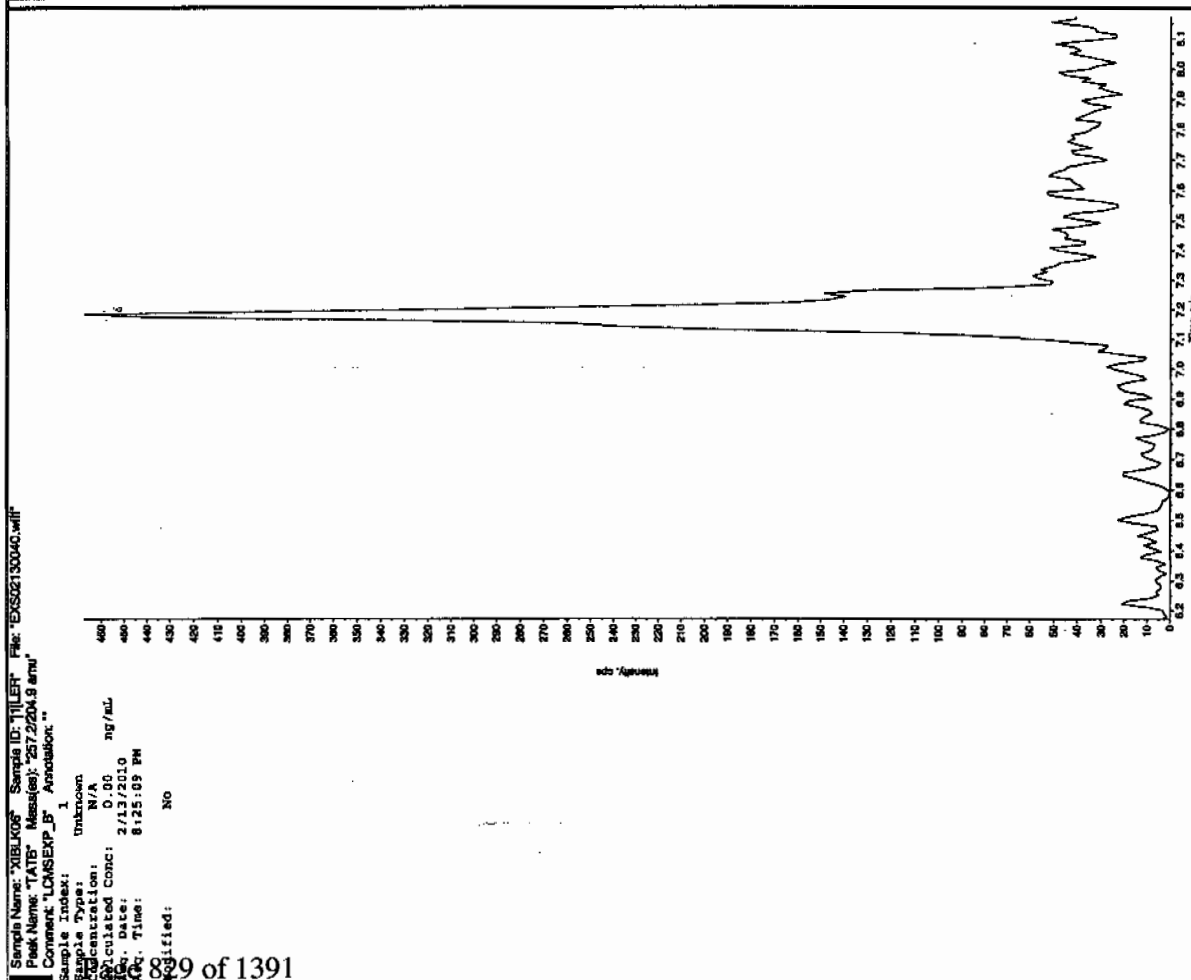
Column: Phenomenex Ultracarb 5u ODS(20)

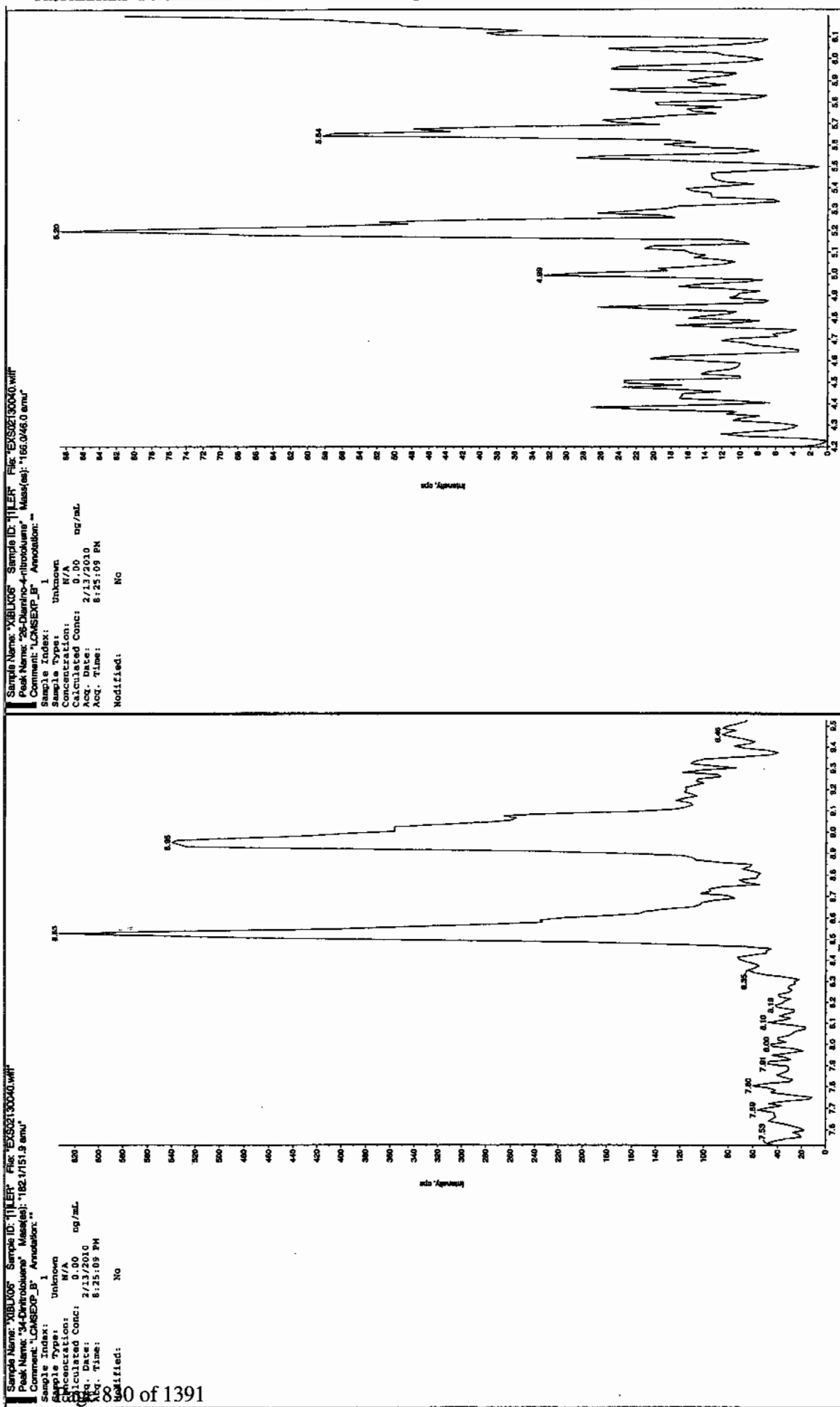
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.58
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

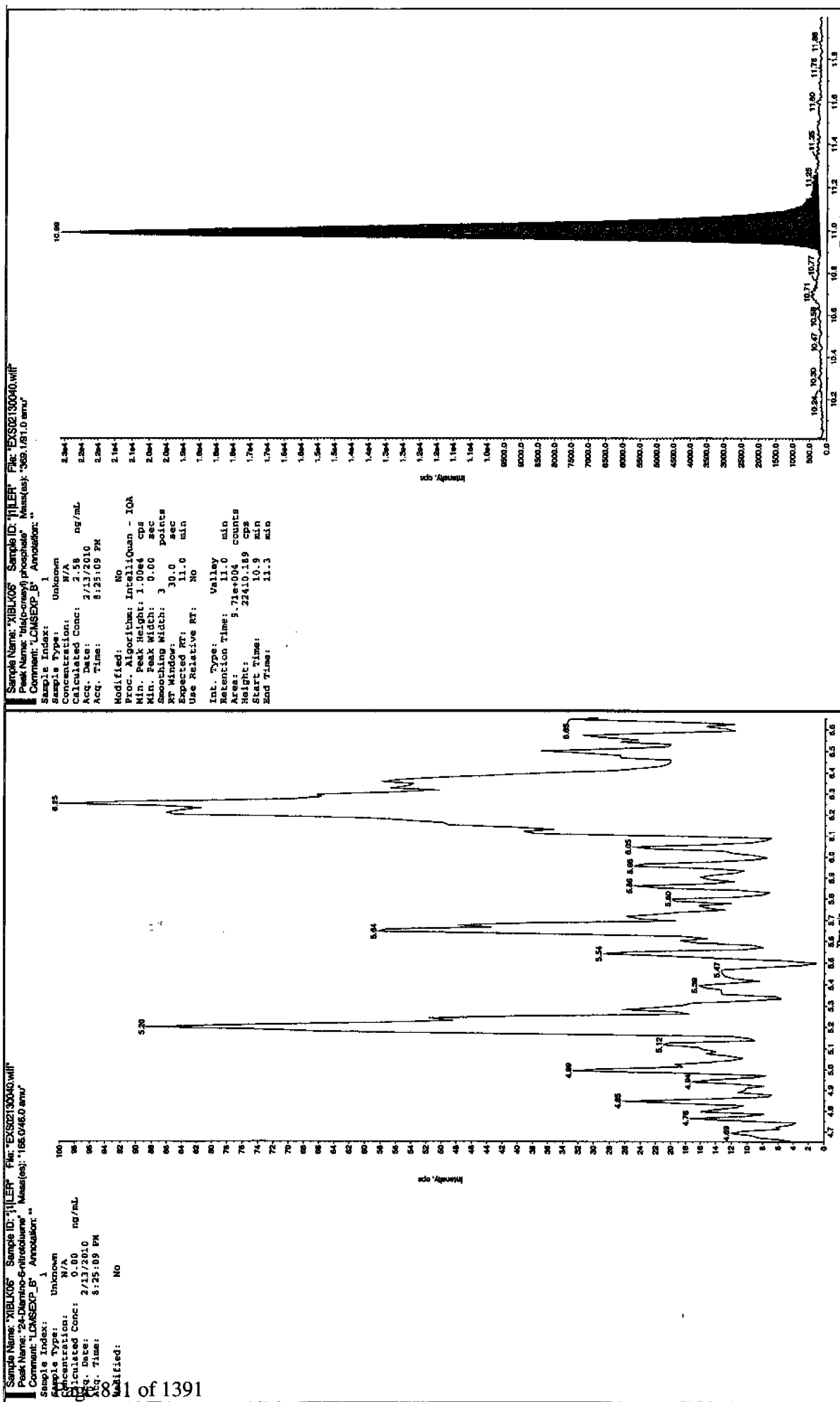
flow 2/13/10



flow 02-13-10







*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 13-FEB-10 23:02

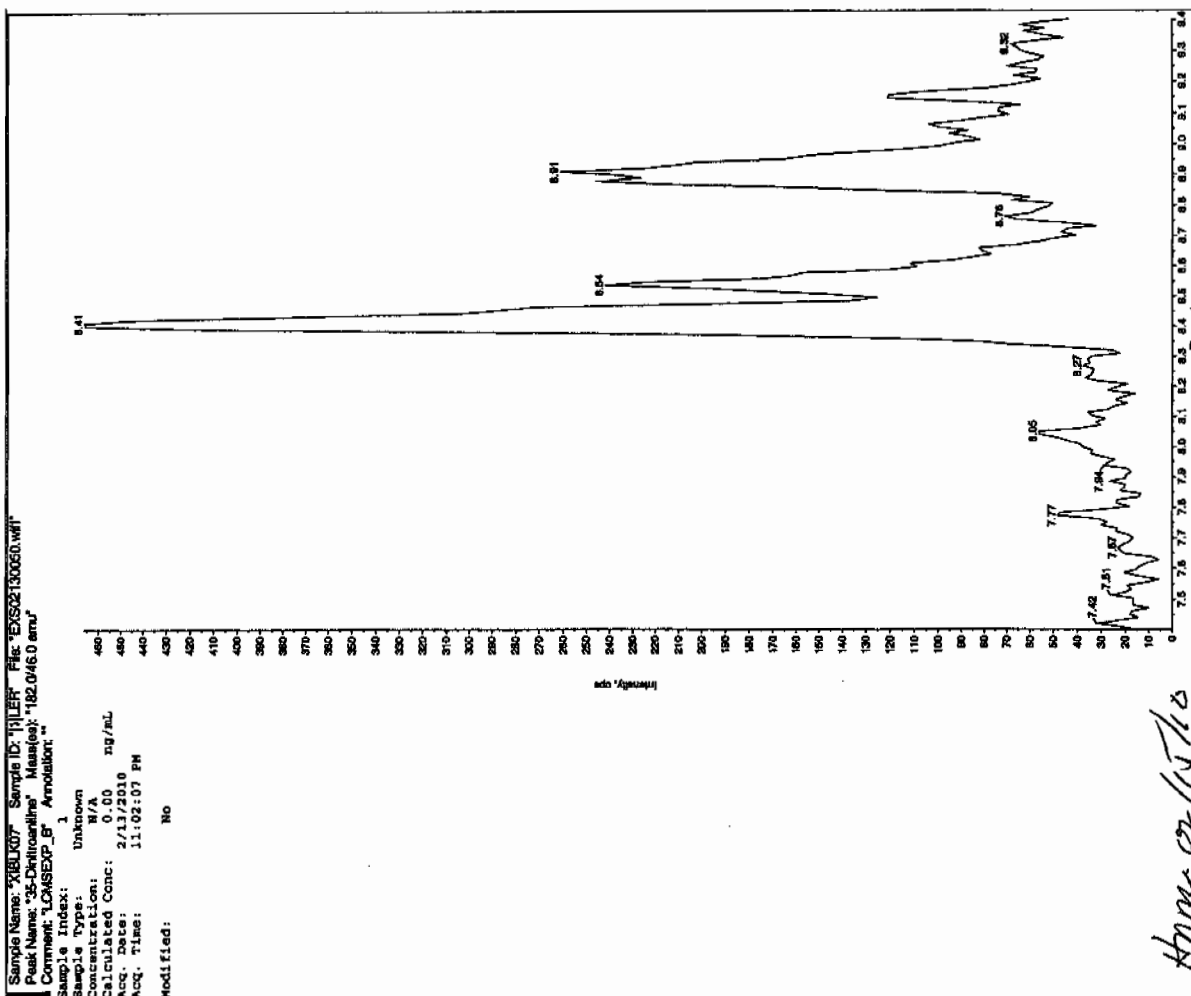
GEL Data File: EXS02130050.wiff

Instrument ID: LCMSMS

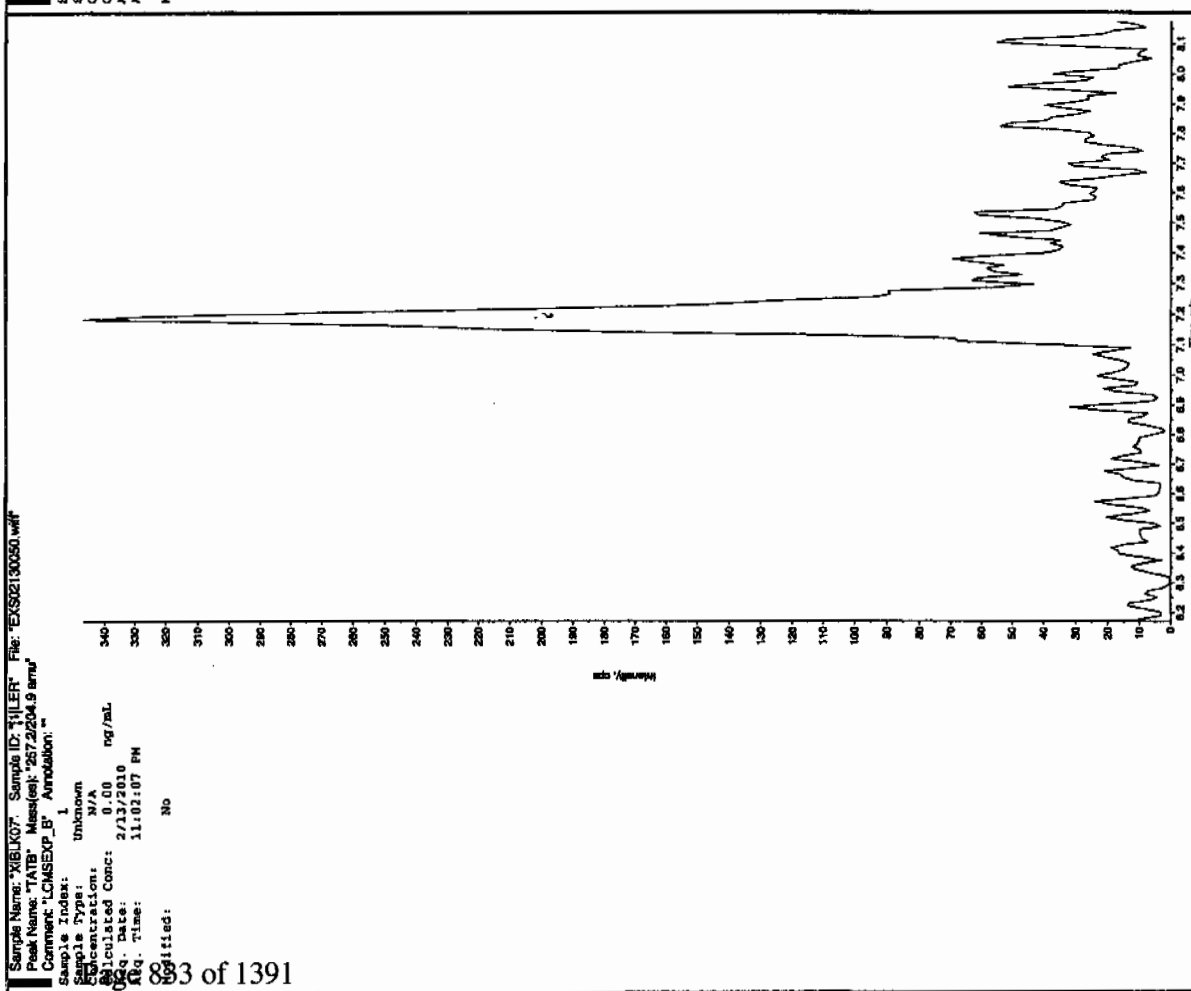
Column: Phenomenex Ultracarb 5u ODS(20)

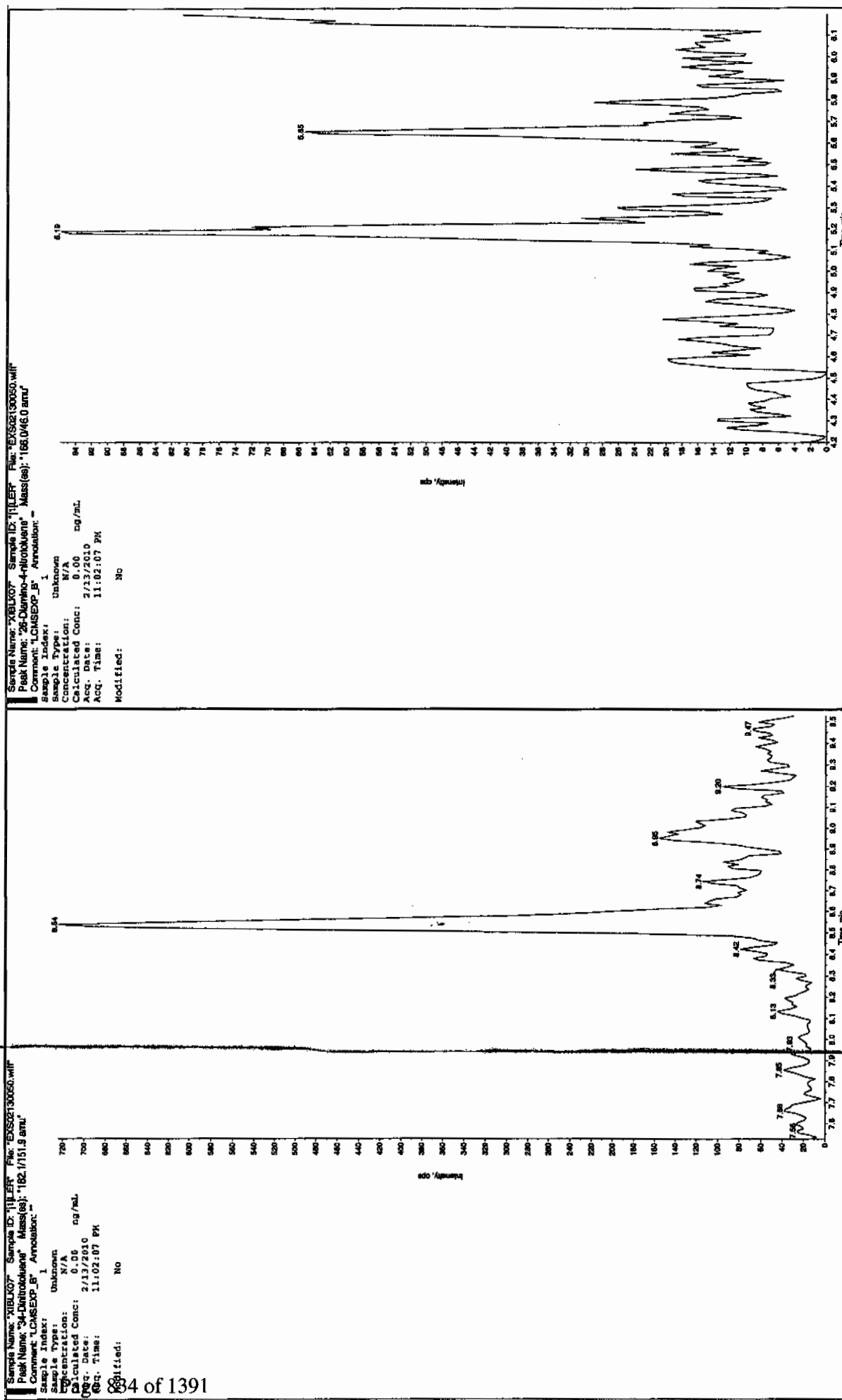
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.83
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

OK 2/15/10

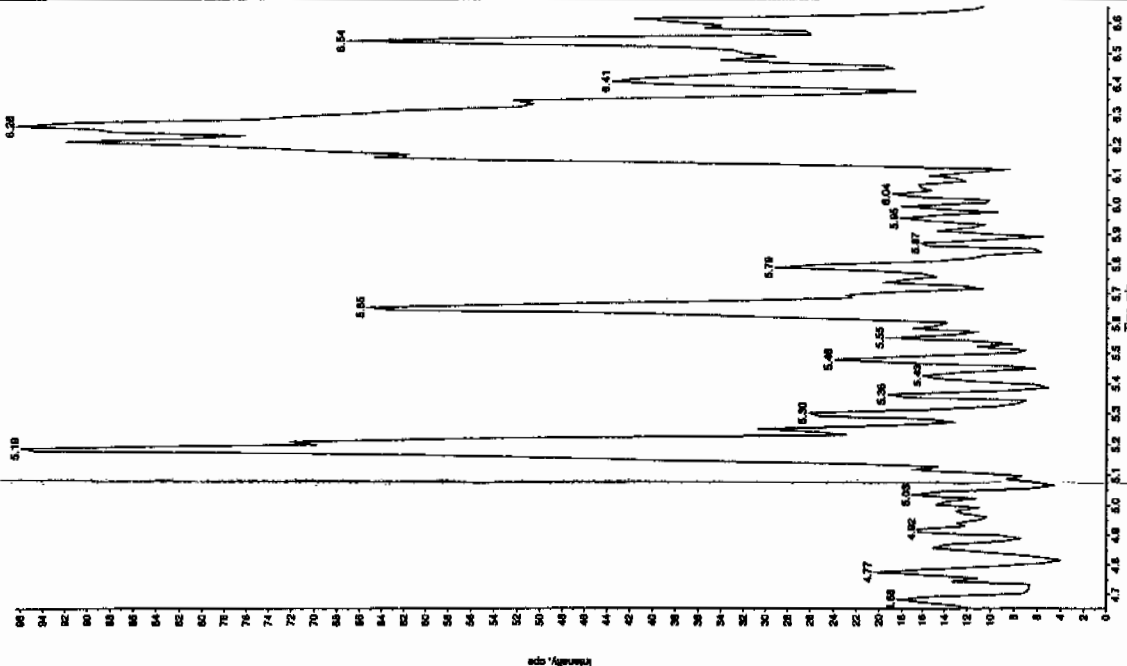


Area: 115110





Sample Name: "XBLK07" Sample ID: "HILF" File: "EXS02130050.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "165.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:02:07 PM
 Modified: No



Sample Name: "XBLK07" Sample ID: "HILF" File: "EXS02130050.wif"
 Peak Name: "His(3-cisyl) phosphate" Mass(es): "388.191.0 amu"
 Comment: "LCMSXP_B" Annotation: ""
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2.83 ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 11:02:07 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - ICA
 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: 1.03e+005 counts
 Height: 23455.389 cps
 Start Time: 10.9 min
 End Time: 11.4 min



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 14-FEB-10 01:23

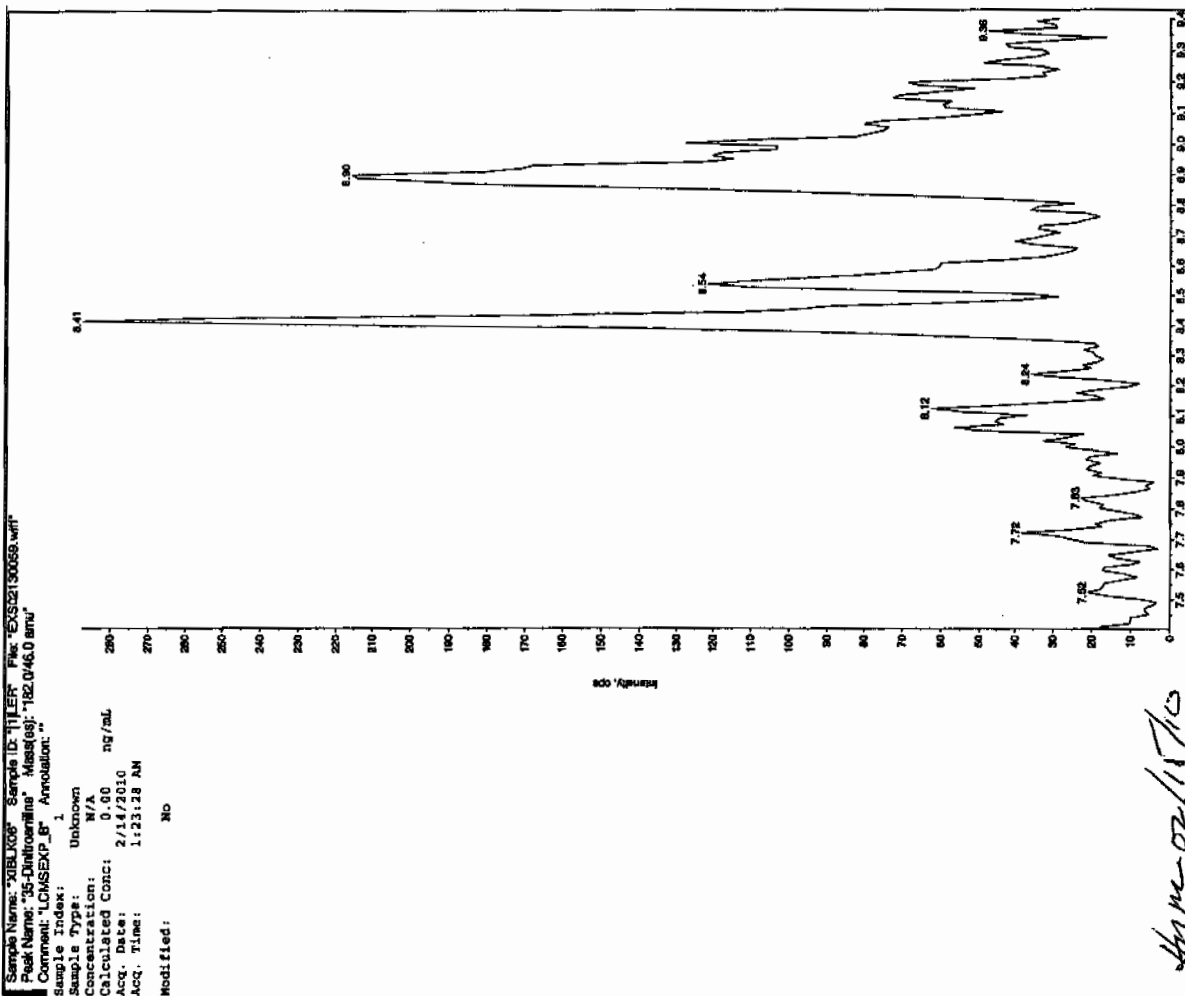
GEL Data File: EXS02130059.wiff

Instrument ID: LCMSMS

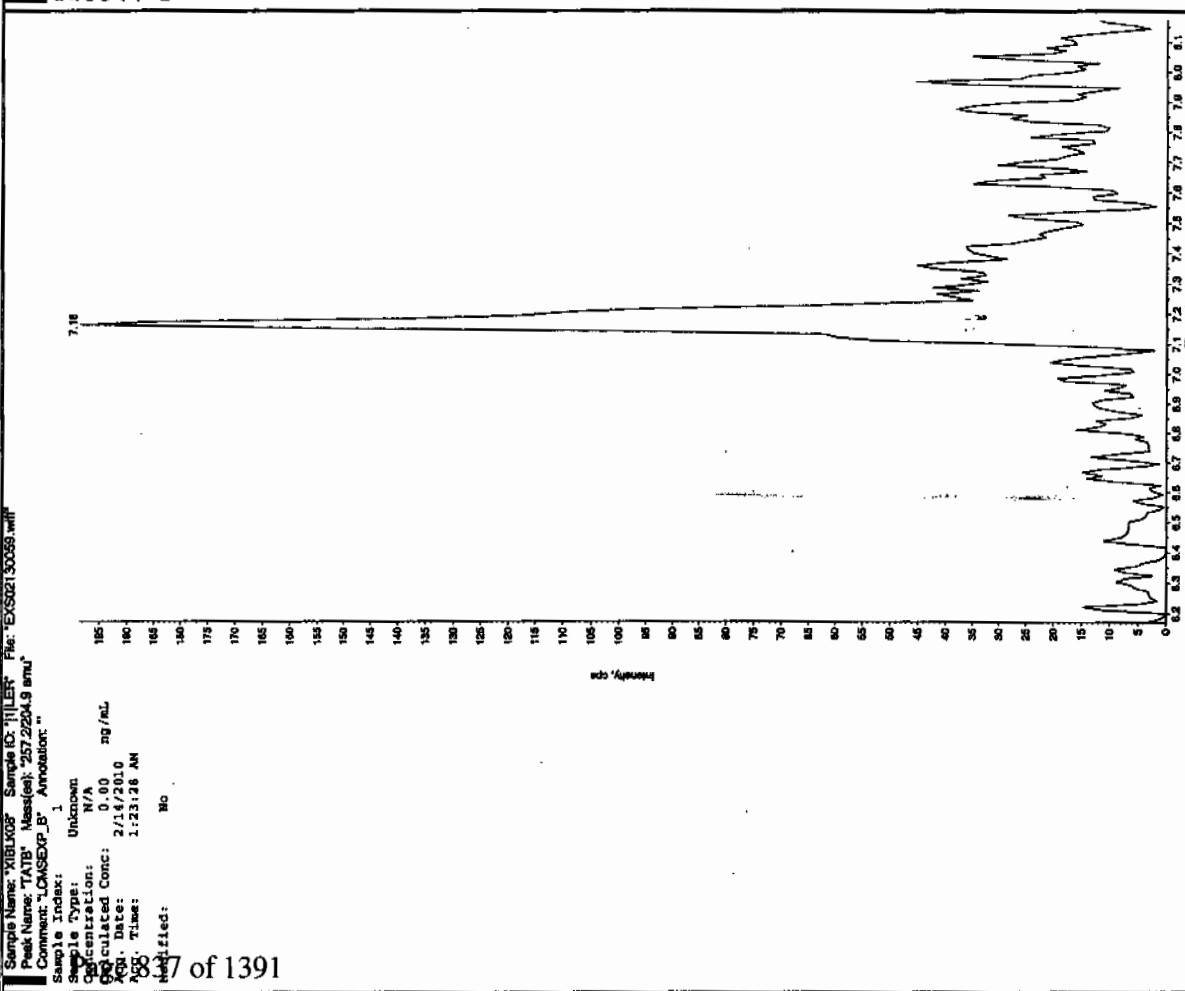
Column: Phenomenex Ultracarb 5u ODS(20)

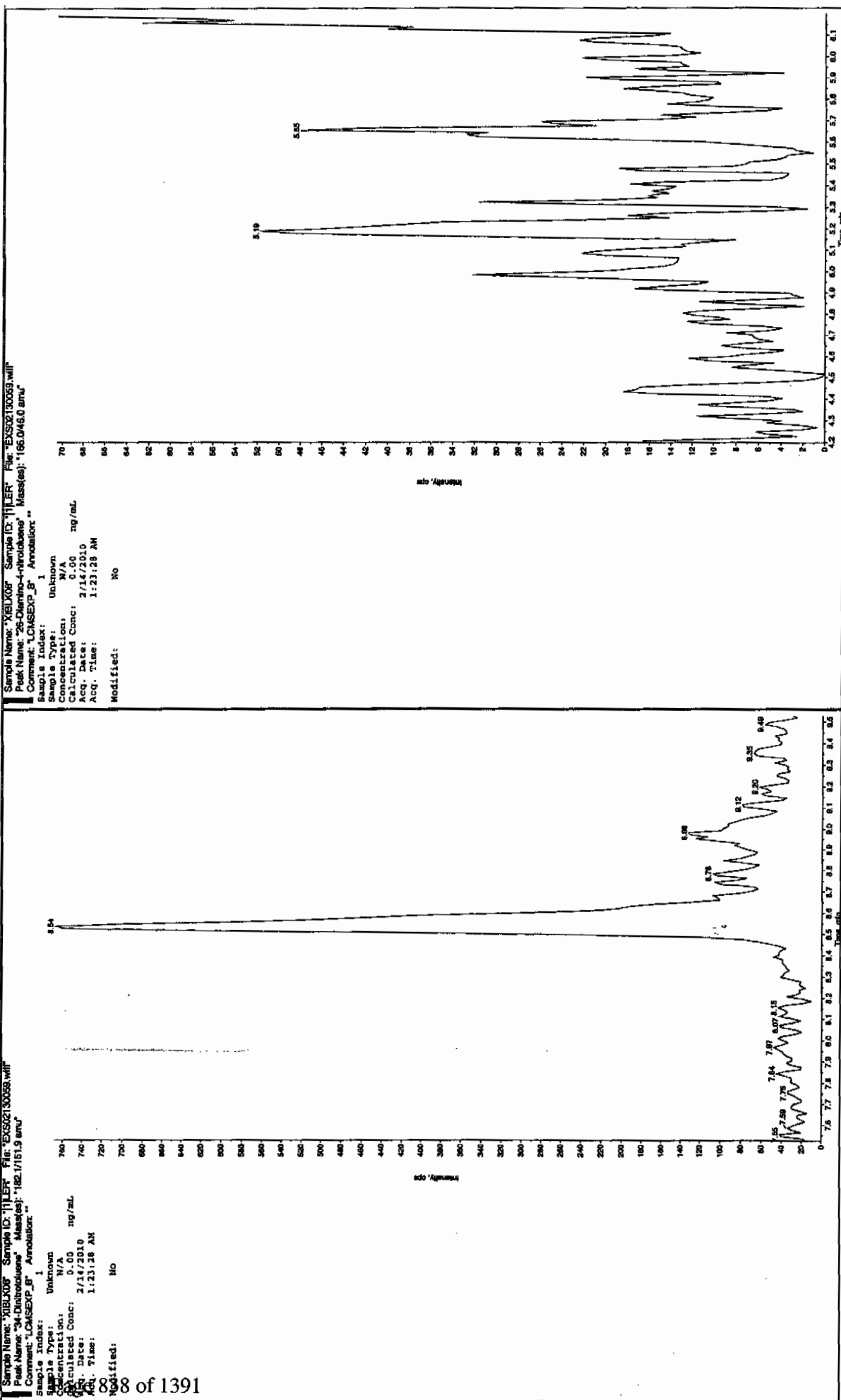
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.642
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/15/10



See 02/18/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 14-FEB-10 02:10

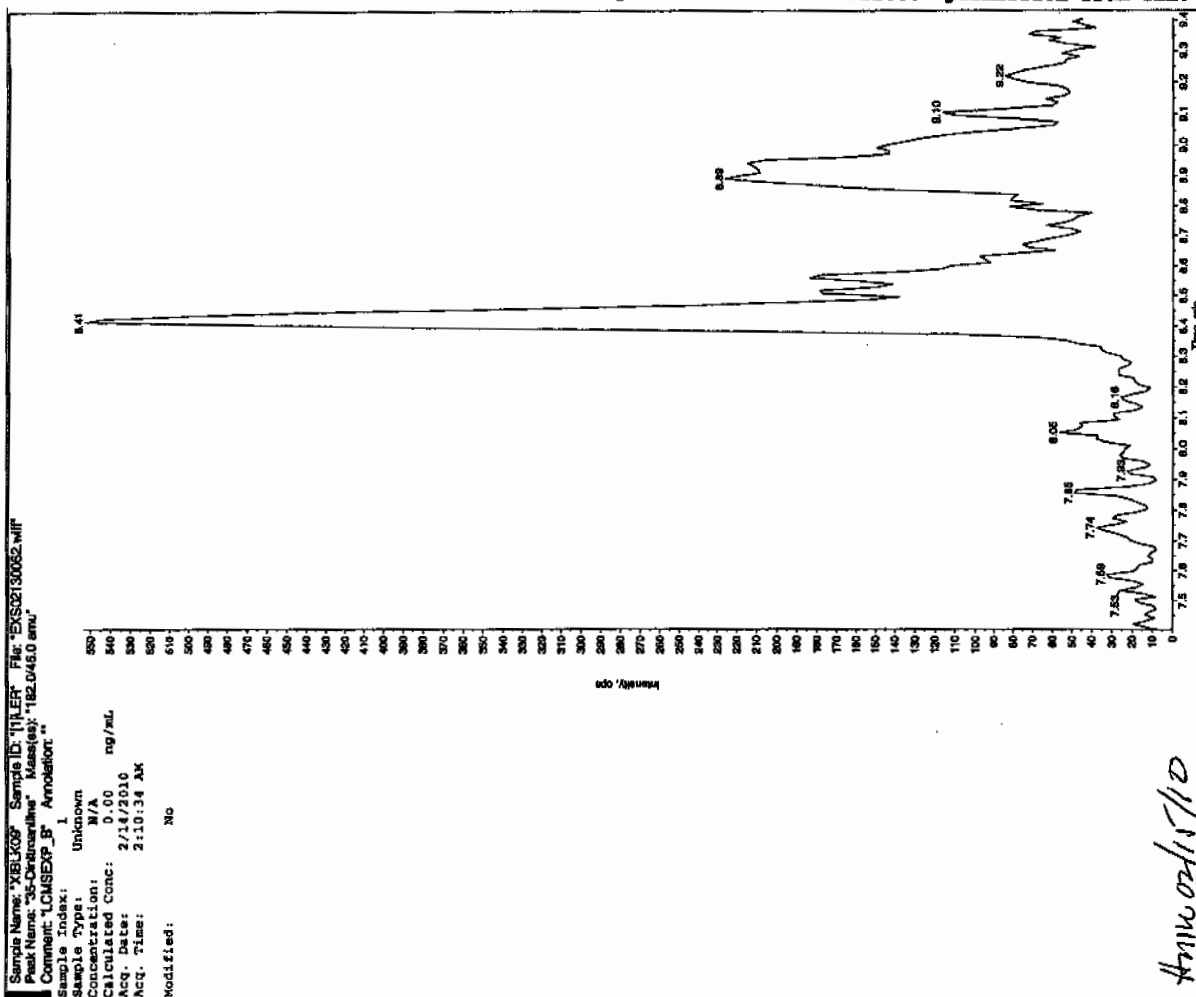
GEL Data File: EXS02130062.wiff

Instrument ID: LCMSMS

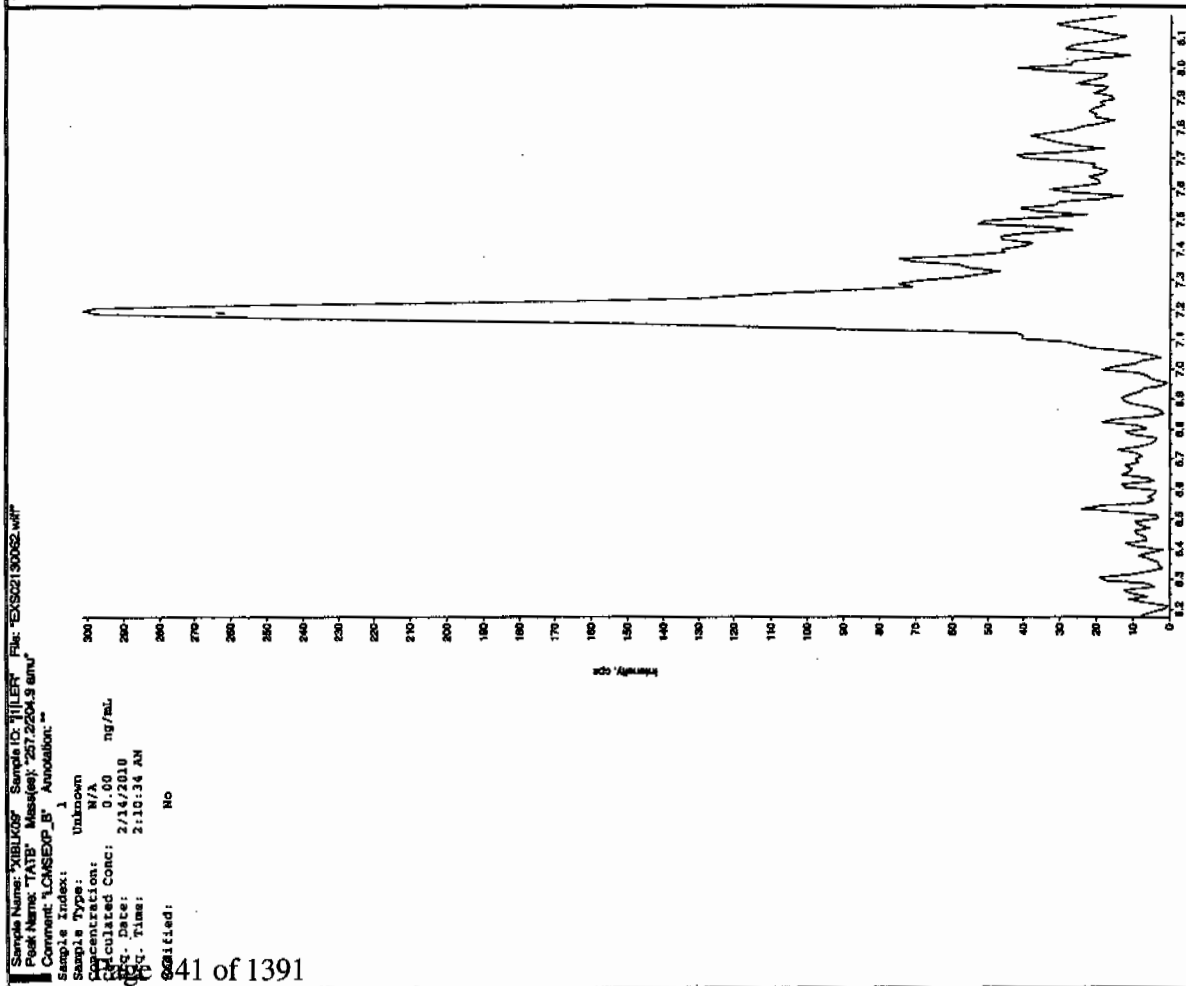
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.66
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Gen 2/15/10



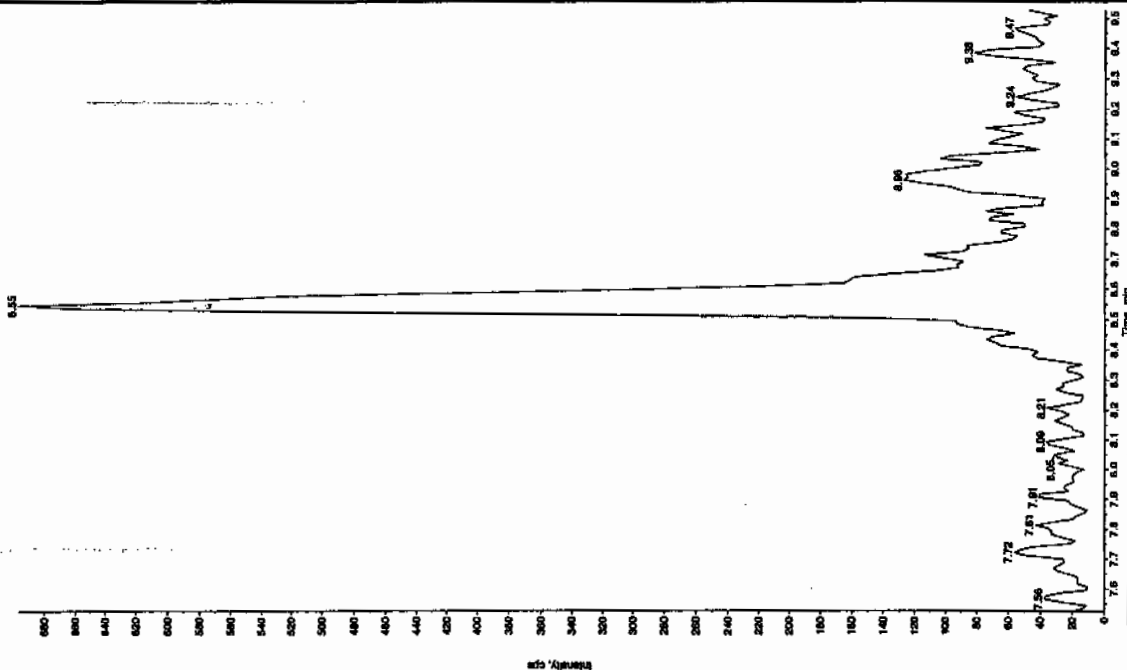
Amc 02/15/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

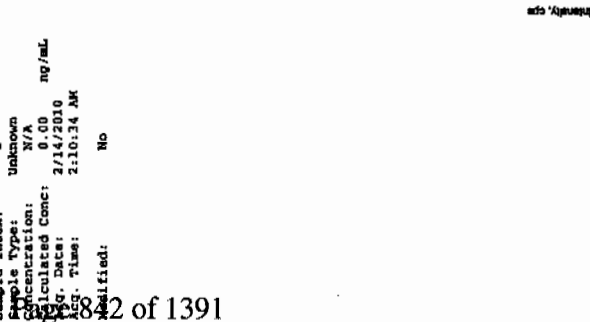
Sample Name: "XBLK02" Sample ID: "111ER" File: "EX0213002.wif"
 Peak Name: "34-Chlorobutene" Mass(es): "182.1/151.9 amu"
 Comment: "LONSEP_5" Annotation: "

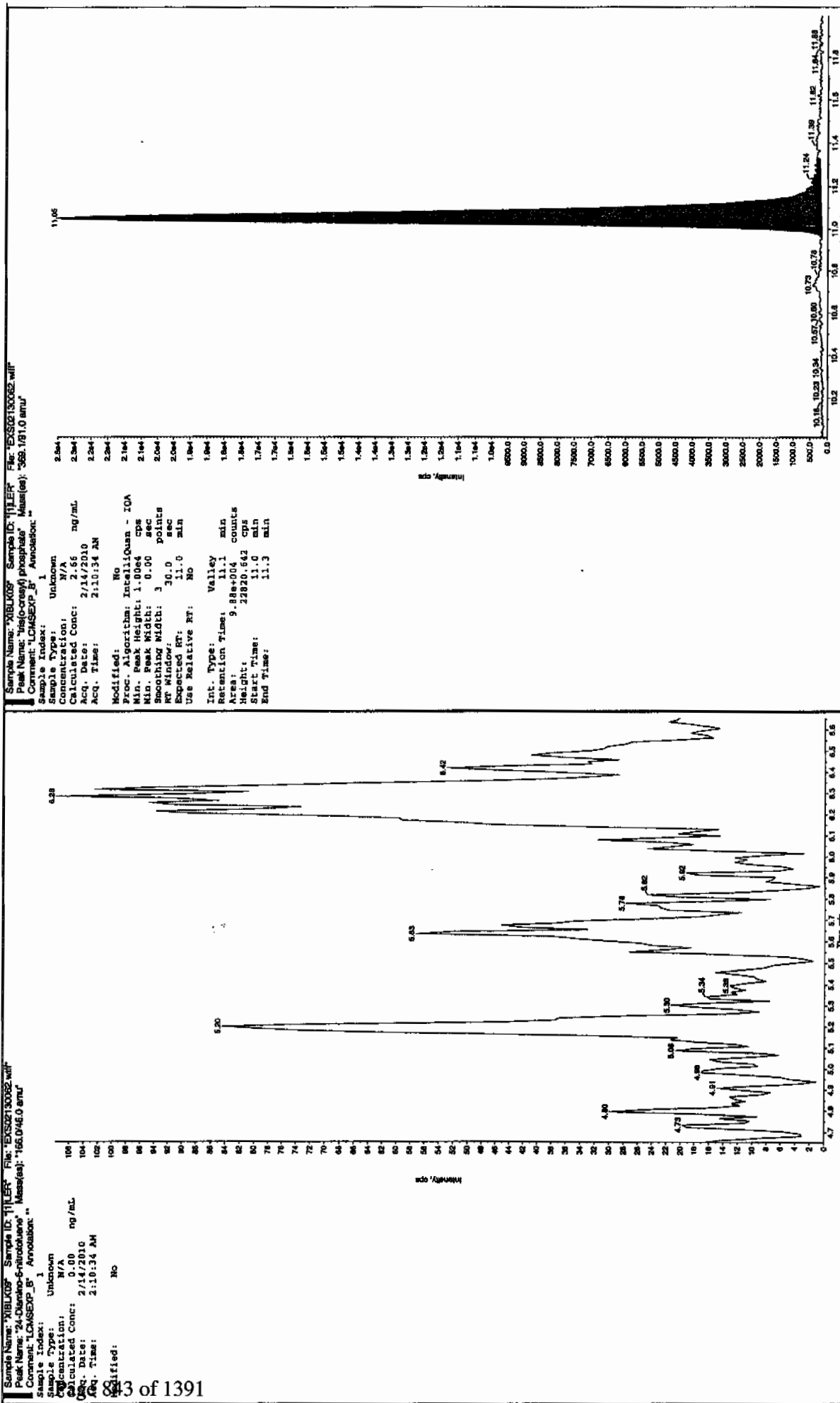
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 2:10:34 AM
 Modified: No



Sample Name: "XBLK02" Sample ID: "111ER" File: "EX0213002.wif"
 Peak Name: "34-Chlorobutene" Mass(es): "182.1/151.9 amu"
 Comment: "LONSEP_5" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 2:10:34 AM
 Modified: No





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 14-FEB-10 05:34

GEL Data File: EXS02130075.wiff

Instrument ID: LCMSMS

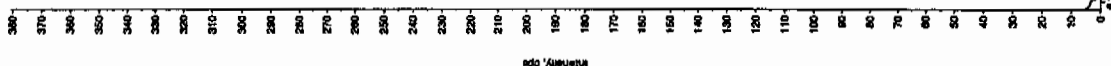
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Gen 2/15/10

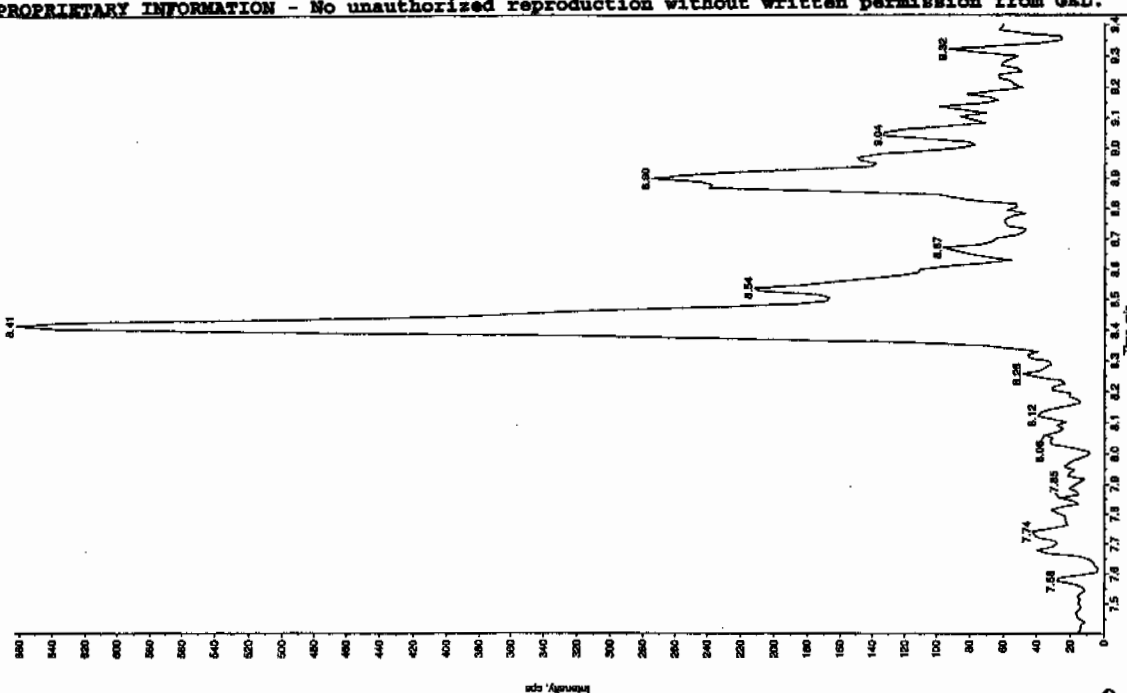
Sample Name: "XBLK10" Sample ID: "JULIER" File: "EXS02130075.wif"
 Peak Name: "TATB" Mass(es): "267.2204.9 amu"
 Comment: "LCMS-EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:34:42 AM
 Modified: No

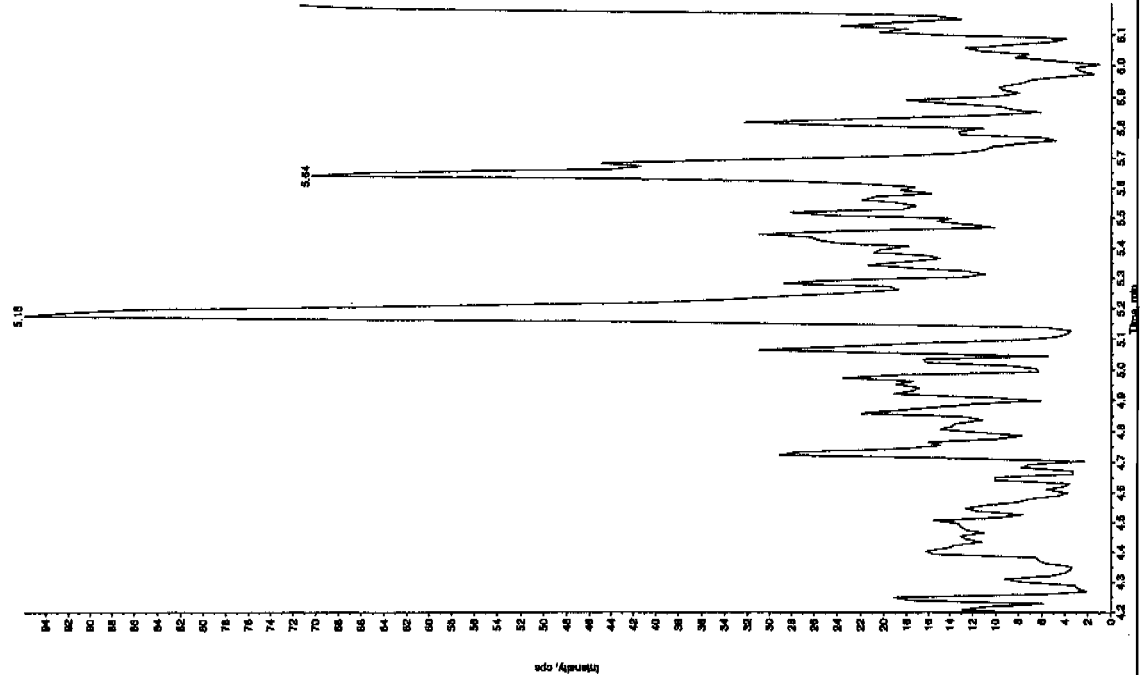


Sample Name: "XBLK10" Sample ID: "JULIER" File: "EXS02130075.wif"
 Peak Name: "35-Ortho" Mass(es): "182.04610 amu"
 Comment: "LCMS-EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:34:42 AM
 Modified: No

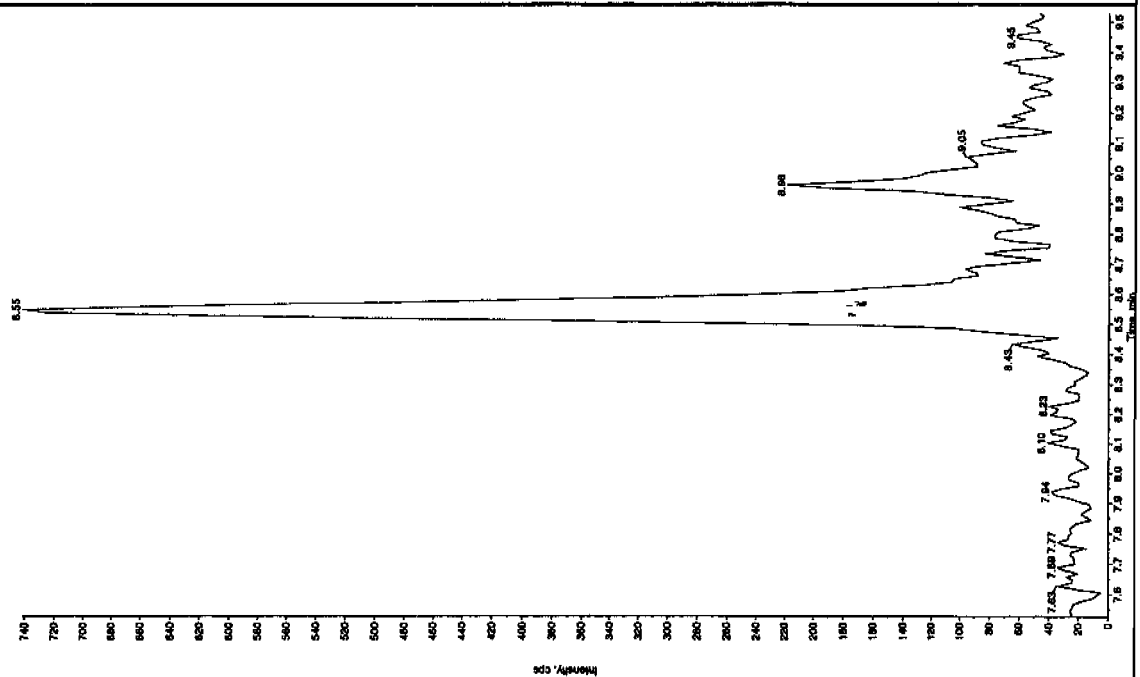


Gen 2/15/10



Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	2/14/2010
Acq. Time:	5:34:42 AM
Modified:	NO

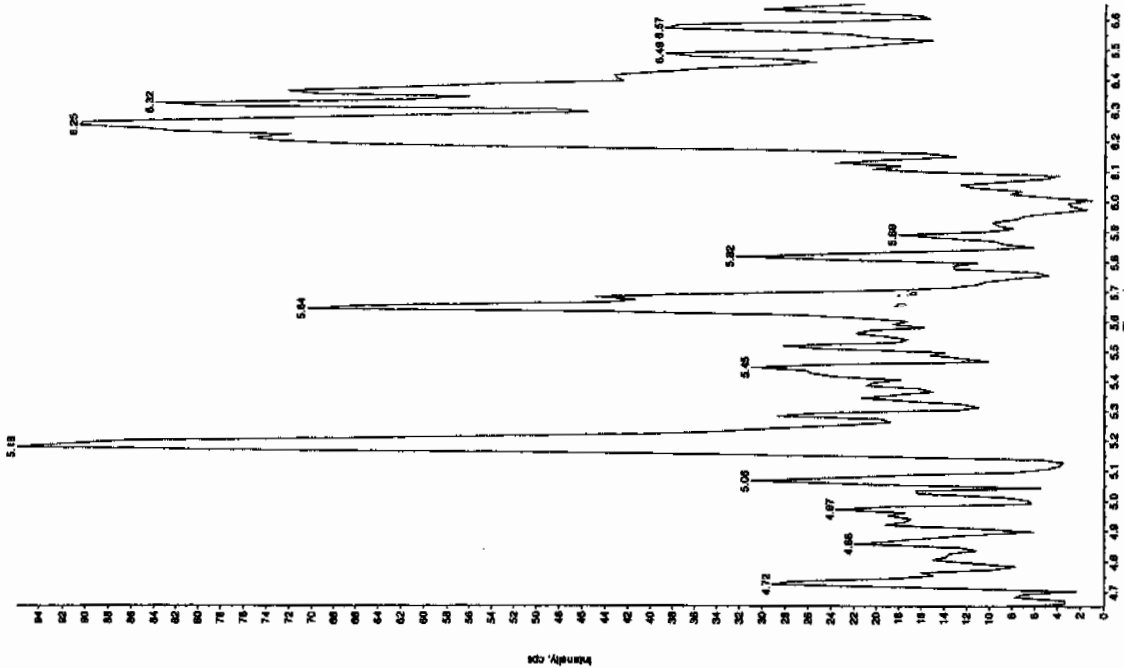
Sample Name: "XBLK10" Sample ID: "11LER" File: "XS02130075.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.8 amu"
Comment: "LCMSEXP_B" Annotation: "



Sample Index:	1	Unknown
Sample Type:	N/A	
Concentration:		
Calculated Conc:	0.00	ng/mL
Req. Date:	2/14/2010	
Req. Time:	5:34:42 AM	
Modified:		No

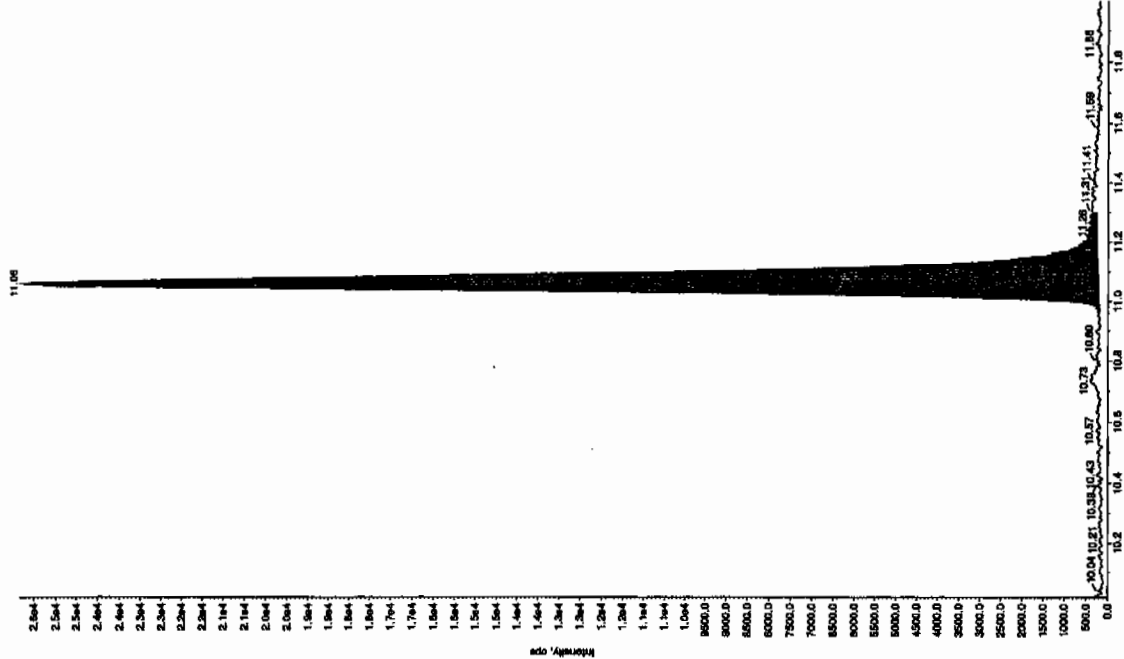
Sample Name: "XIBLK10" Sample ID: "HILER" File: "EX02130075.wif"
 Peak Name: "24-Diamino-8-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.10 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:34:42 AM
 Modified: No



Sample Name: "XIBLK10" Sample ID: "HILER" File: "EX02130075.wif"
 Peak Name: "11-(O-cresyl) phosphate" Mass(es): "269.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.10 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:34:42 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.000 cps
 Min. Peak Width: 3.000 points
 Smoothing Width: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.1 min
 Area: 1.09e+005 counts
 Height: 25629.297 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): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 14-FEB-10 16:38

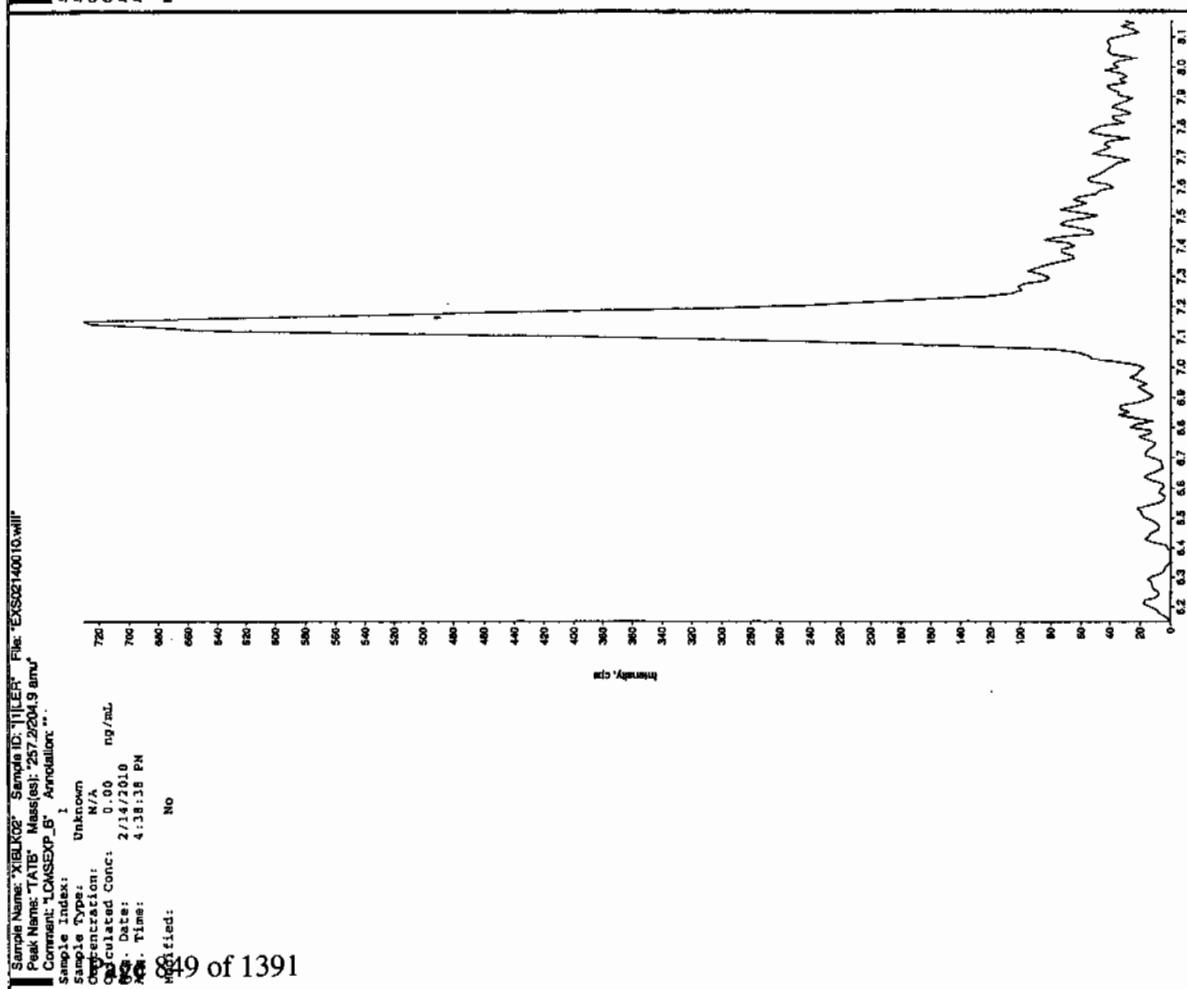
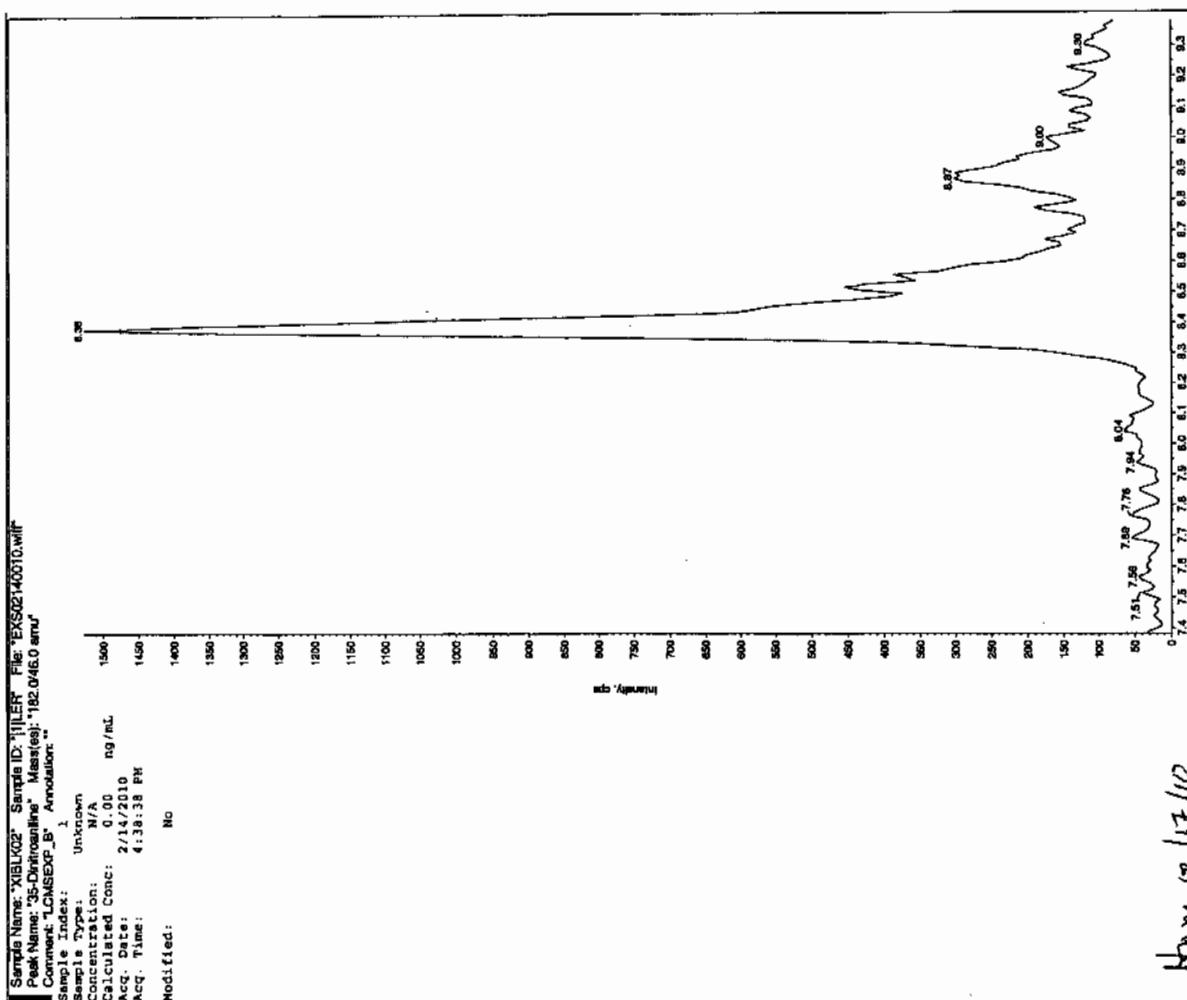
GEL Data File: EXS02140010.wiff

Instrument ID: LCMSMS

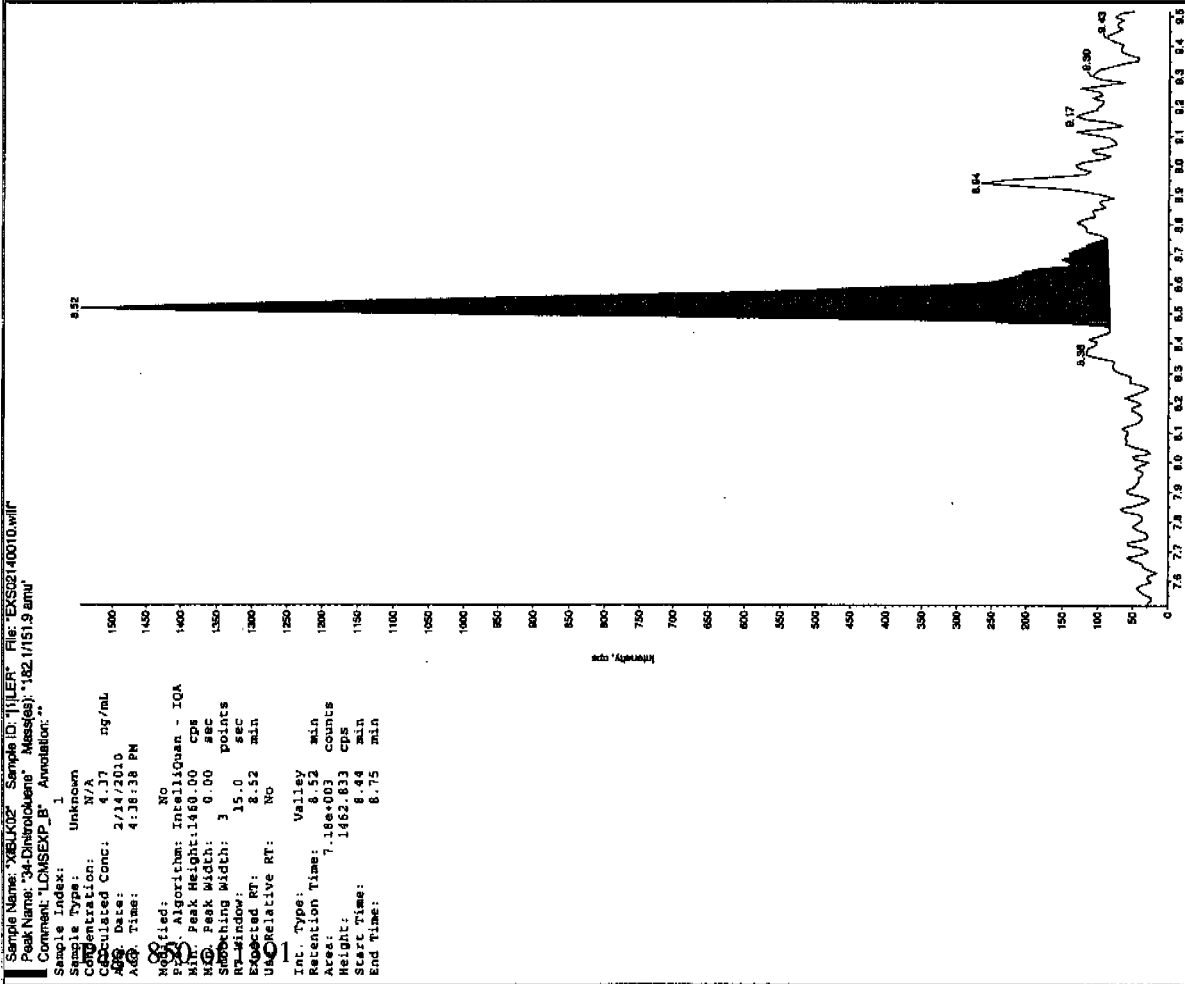
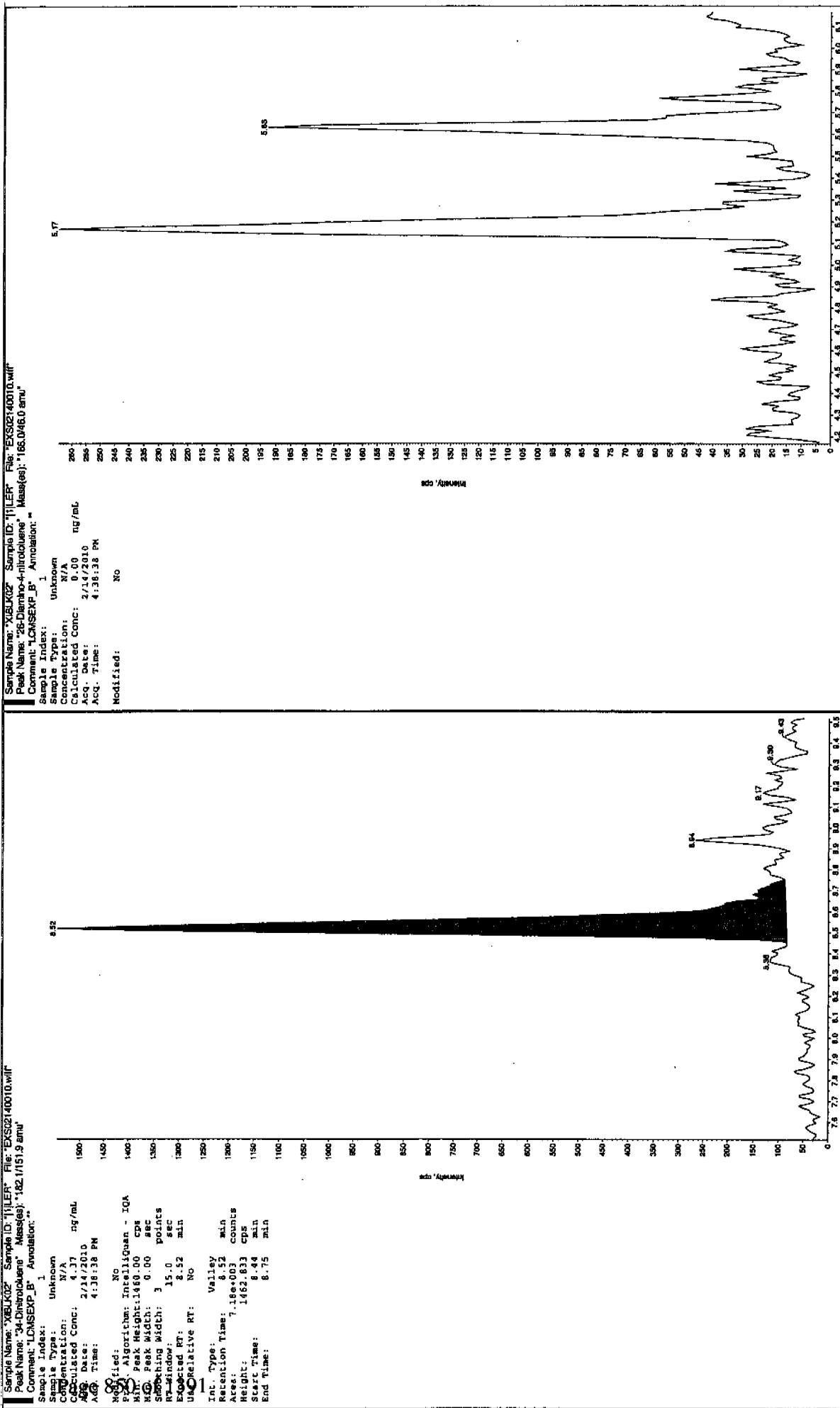
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	4.37
tris(o-cresyl) phosphate	0	8.68
TATB	0	0
3,5-Dinitroaniline	0	0

Jan 21/10



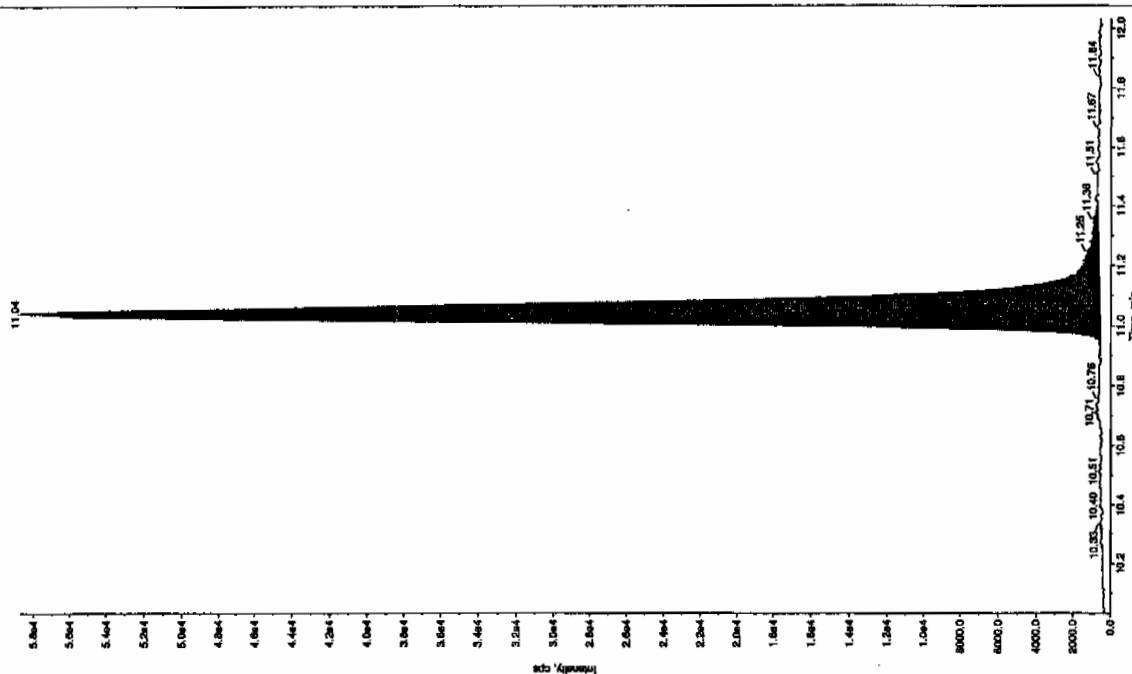
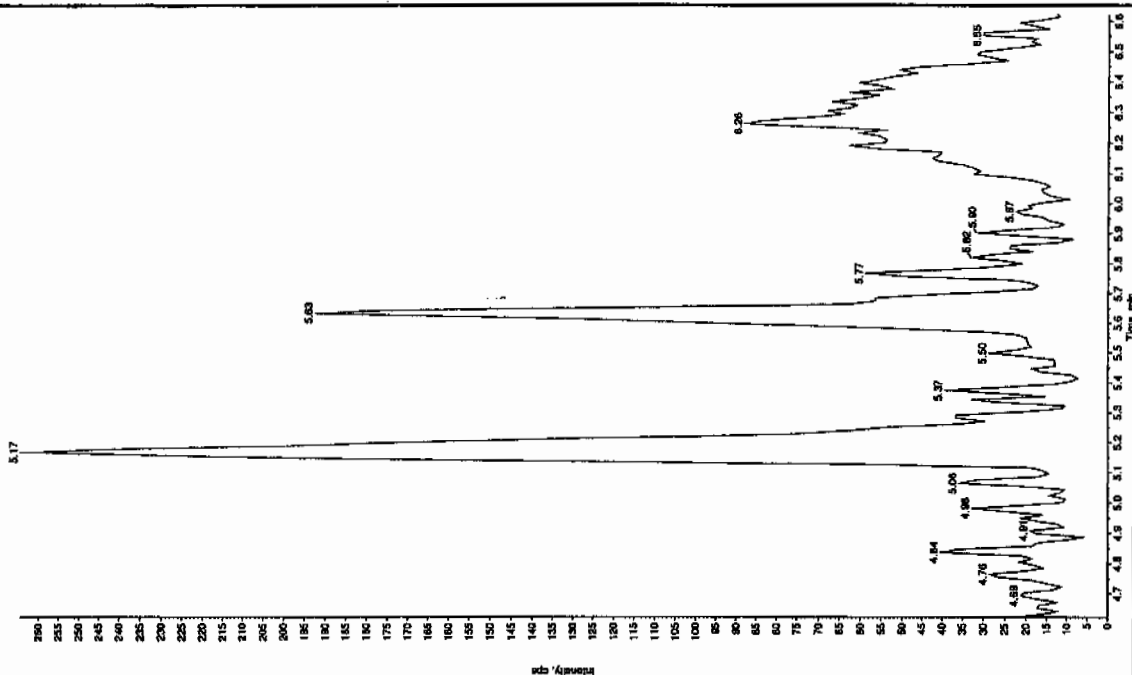
Jan 22/10



Sample Name: XBLK02 Sample ID: 111ER File: EX932140010.wiff
 Peak Name: 24-Diamino-6-nitroindene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_B Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:38:38 PM
 Acq. Time: 4:38:38 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Height: 2.57e4 counts
 Area: 5818.289 cps
 Start Time: 11.0 min
 End Time: 11.4 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK03

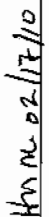
Analysis Date: 14-FEB-10 17:10

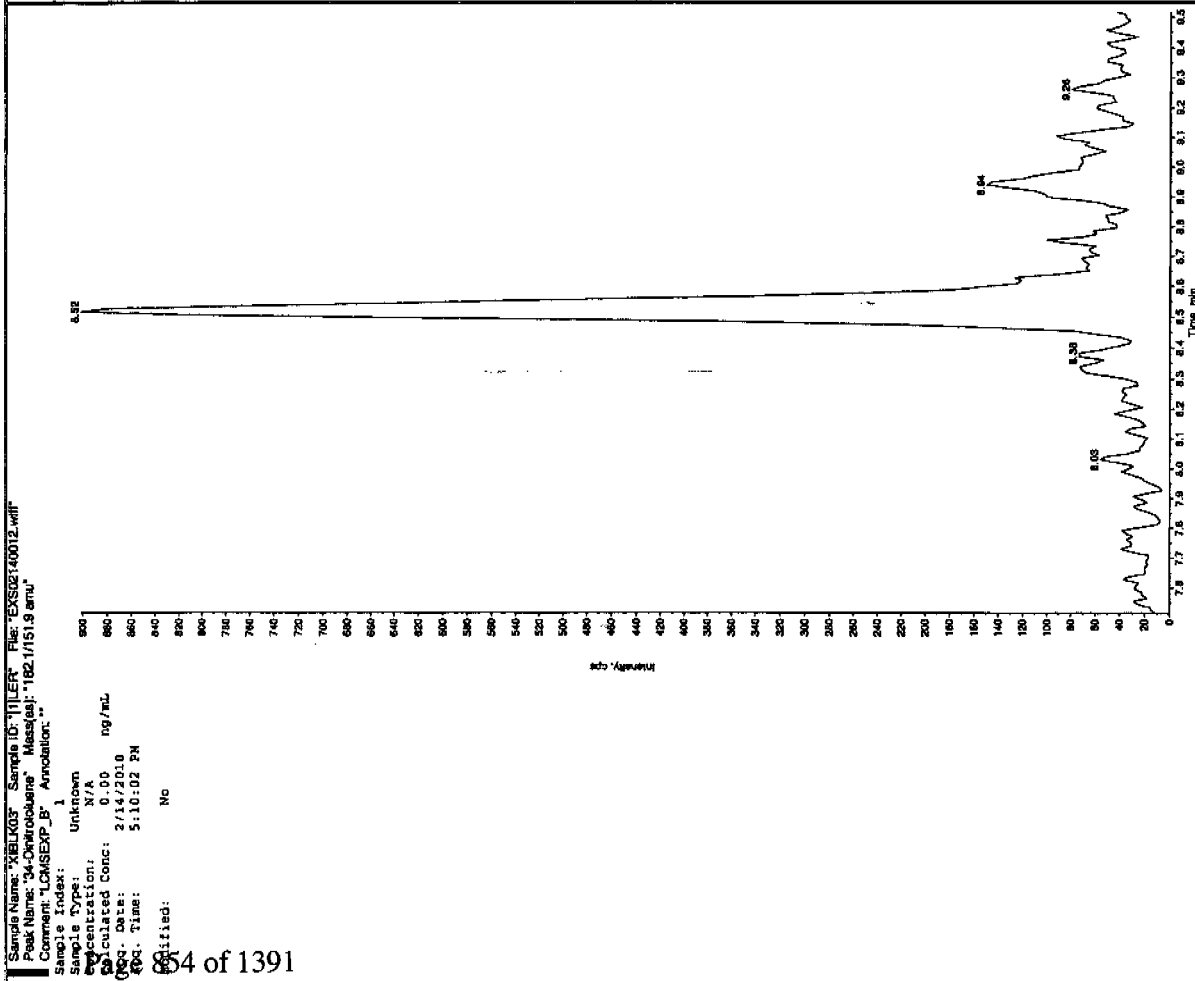
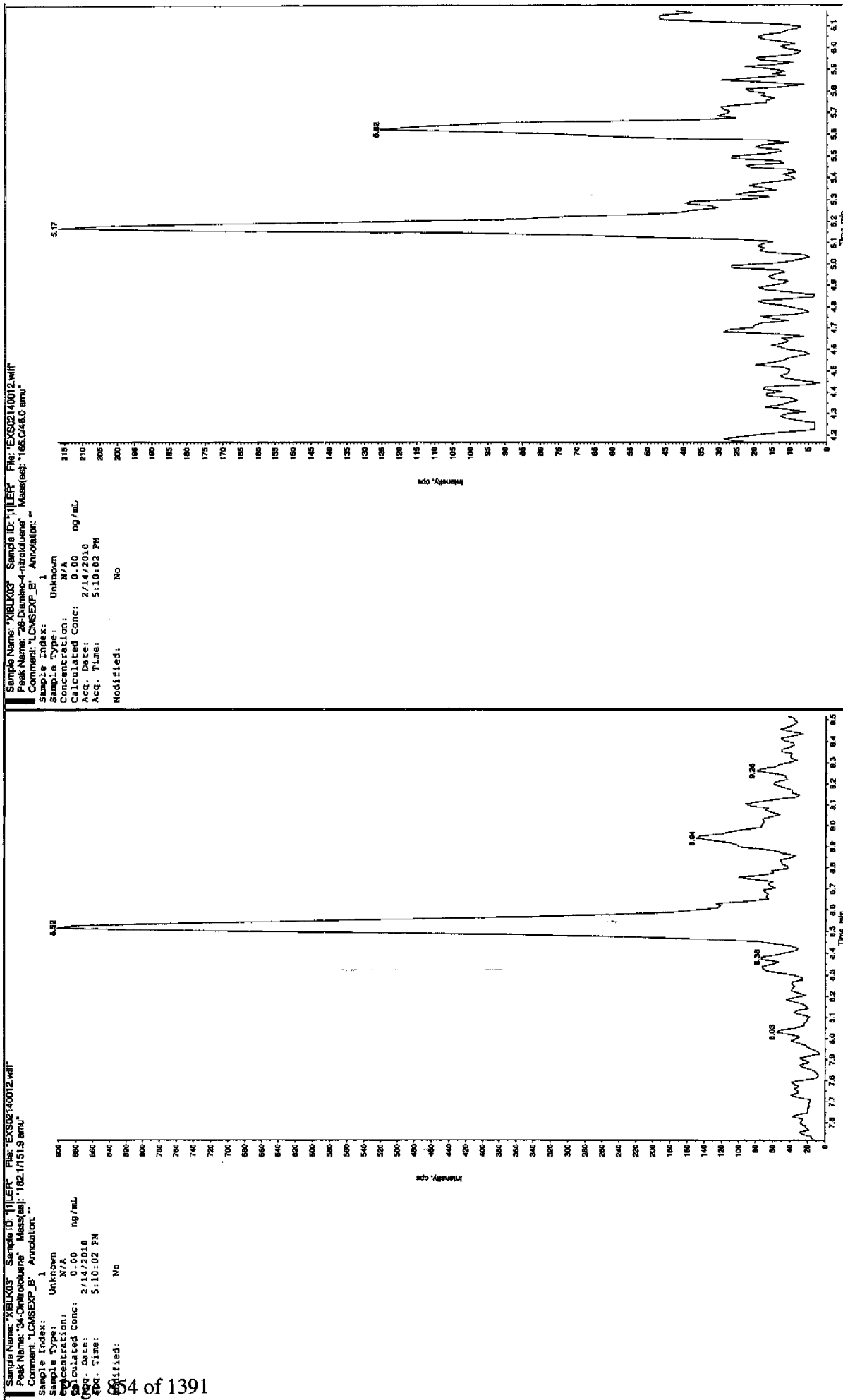
GEL Data File: EXS02140012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

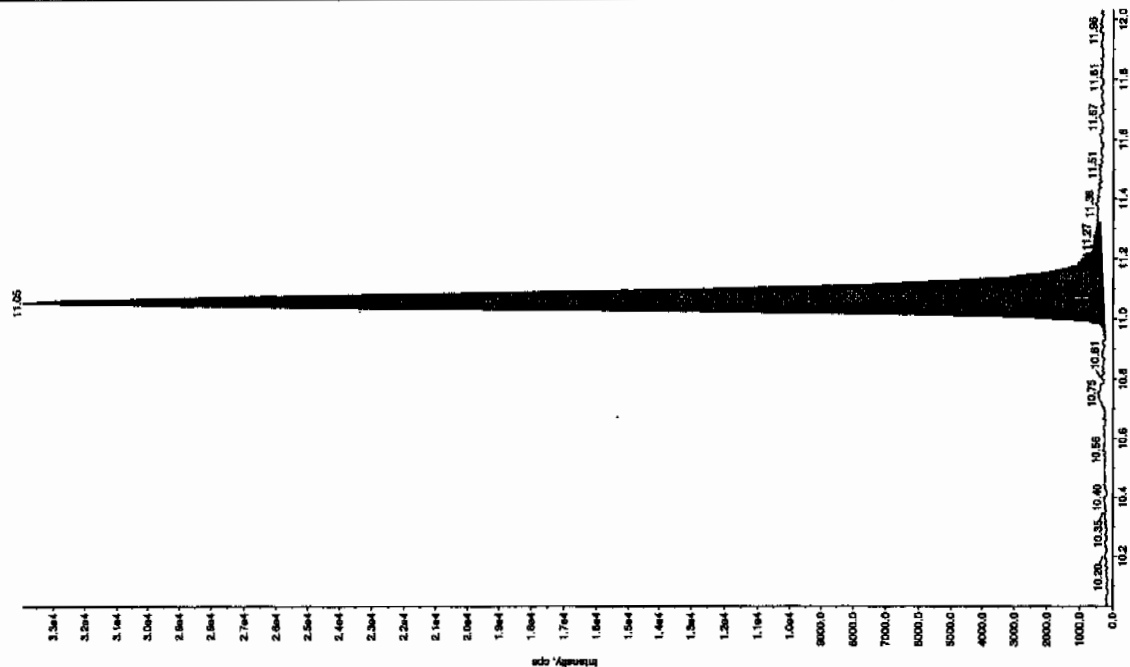
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.62
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0





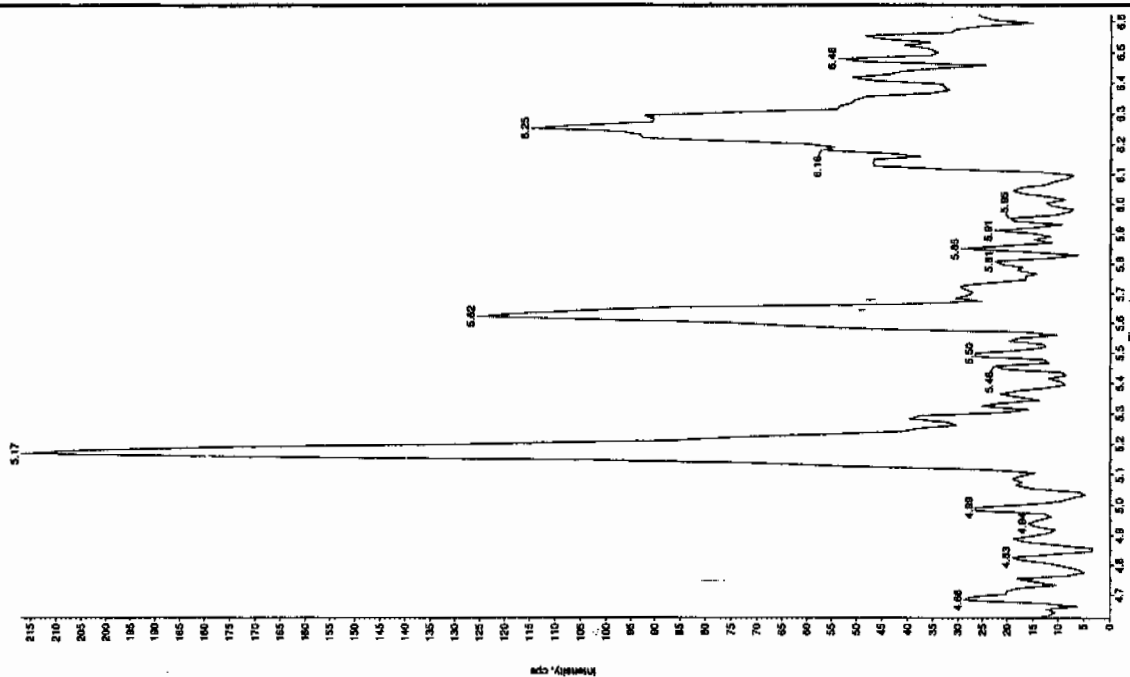
Sample Name: "XBLK03" Sample ID: "JLLEP" File: "EX502140012.wif"
 Peak Name: "Nido-cresyl phosphate" Mass(es): "366.181.0 amu"
 Comment: "LCMSXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 3.62 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:10:02 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Ret. Min. Width: 30.0 points
 RT Min. Width: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.1 min
 Area: 1.47e+005 counts
 Height: 33661.540 cps
 Start Time: 10.9 min
 End Time: 11.3 min



Sample Name: "XBLK03" Sample ID: "JLLEP" File: "EX502140012.wif"
 Peak Name: "24-Diamino-6-alkolduans" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 5:10:02 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1384

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 14-FEB-10 18:44

GEL Data File: EXS02140018.wiff

Instrument ID: LCMSMS

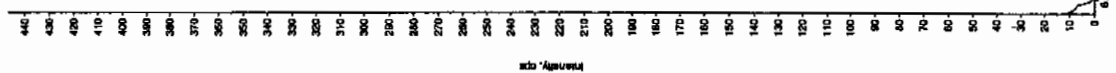
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
2,6-Diamino-4-nitrotoluene	0	0

See 2/17/10

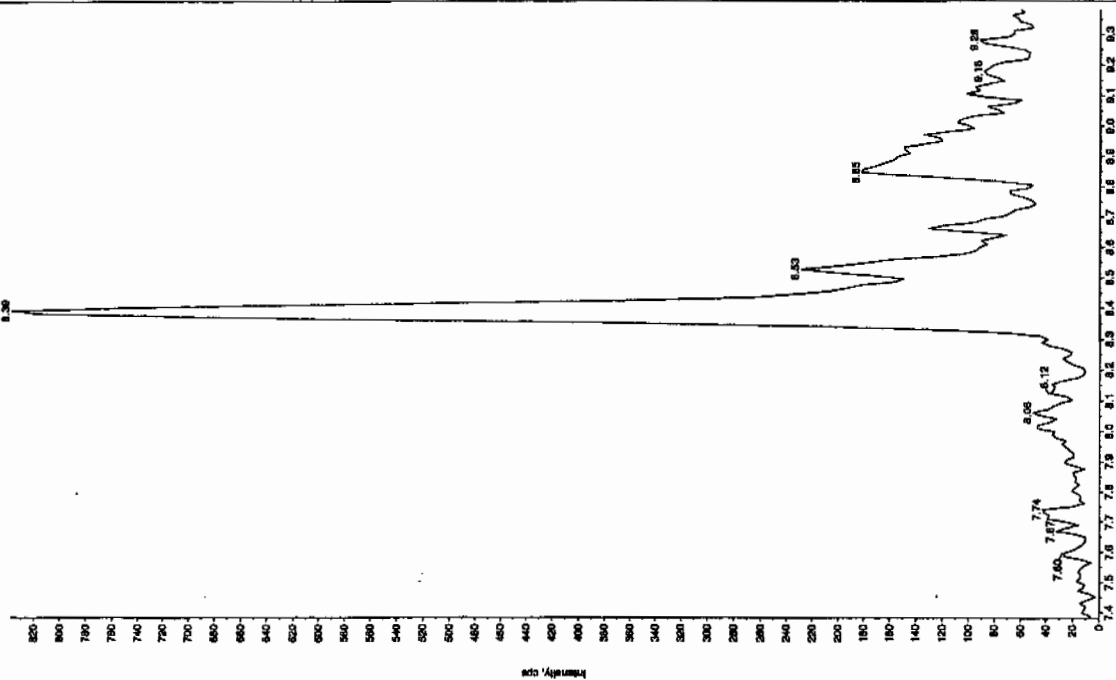
Sample Name: "XELK04" Sample ID: "JILLER" File: "EX502140018.wif"
 Peak Name: "TATB" Mass(es): "267.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:44:17 PM
 Modified: No

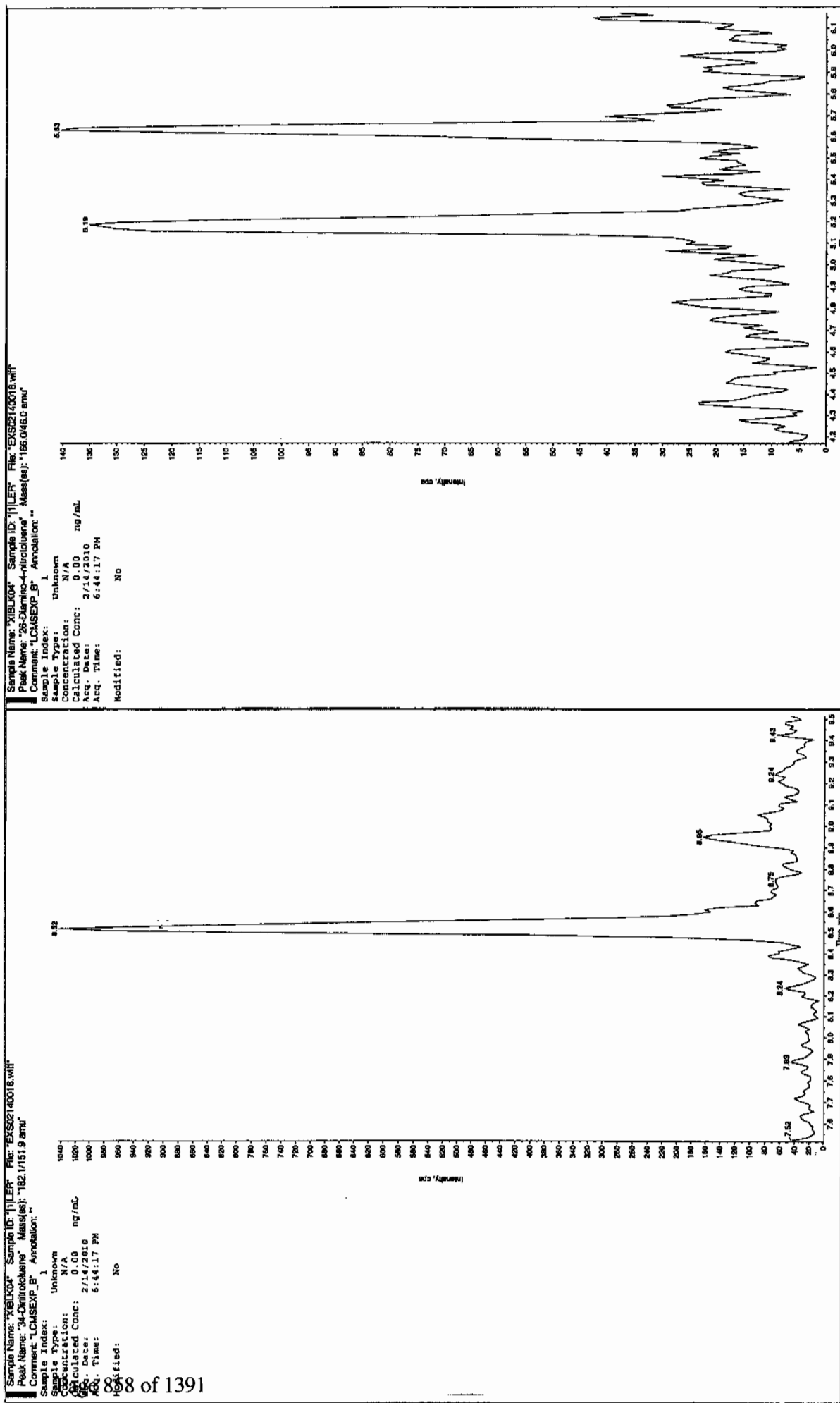


Sample Name: "XELK04" Sample ID: "JILLER" File: "EX502140018.wif"
 Peak Name: "35-Dikroalene" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:44:17 PM
 Modified: No



See 2/17/10

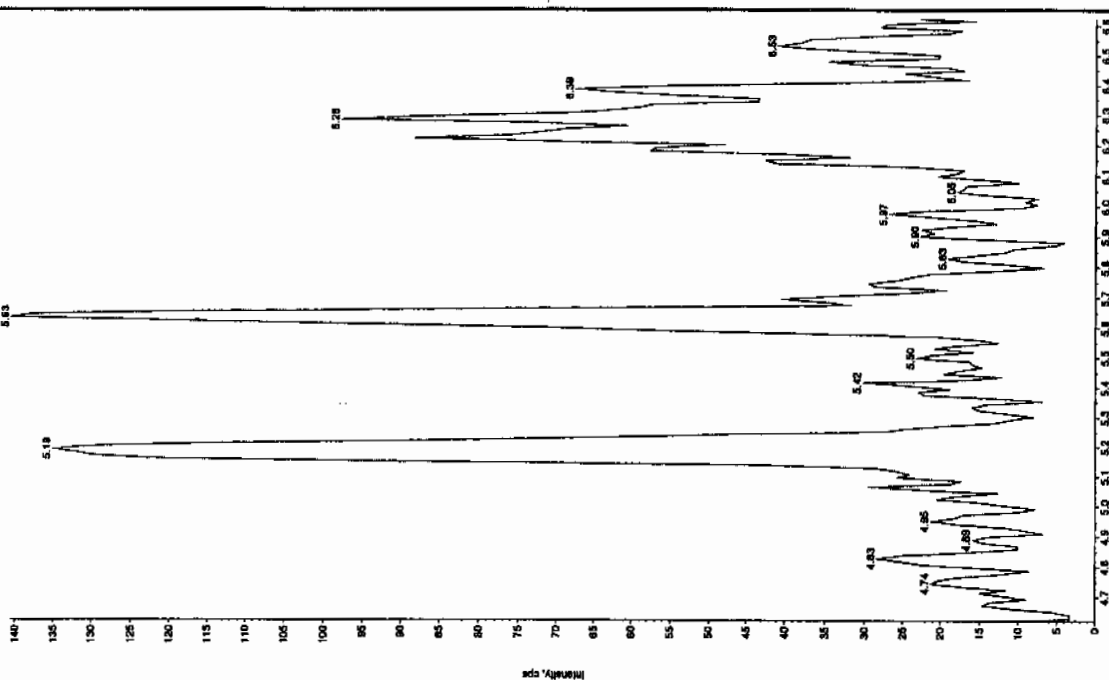


Sample Name: "XBLK04" Sample ID: "JL1ER" File: "EXS02140018.wif"
 Peak Name: "24-Diamino-6-phosphoribose" Mass(es): "162.046.0 amu"
 Comment: "LONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:44:17 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: 11.0 min
 Area: 1.35e+005 counts
 Height: 30031.994 cps
 Start Time: 10.9 min
 End Time: 11.3 min

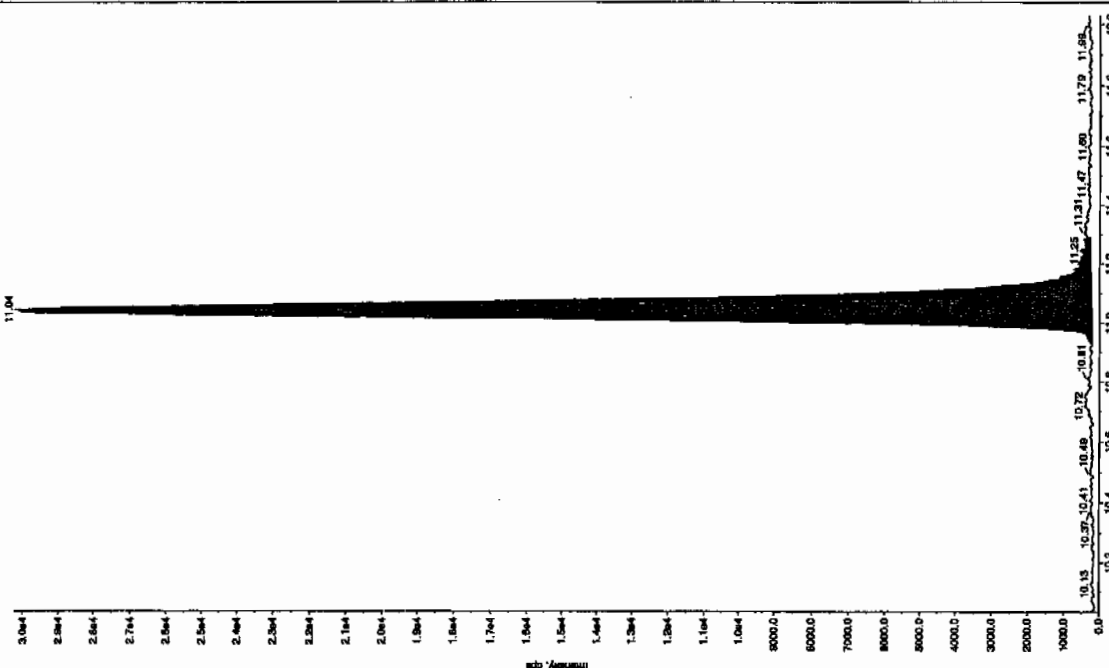


Sample Name: "XBLK04" Sample ID: "JL1ER" File: "EXS02140018.wif"
 Peak Name: "24-Diamino-6-phosphoribose" Mass(es): "162.046.0 amu"
 Comment: "LONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 3.11 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:44:17 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: 11.0 min
 Area: 1.35e+005 counts
 Height: 30031.994 cps
 Start Time: 10.9 min
 End Time: 11.3 min



Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

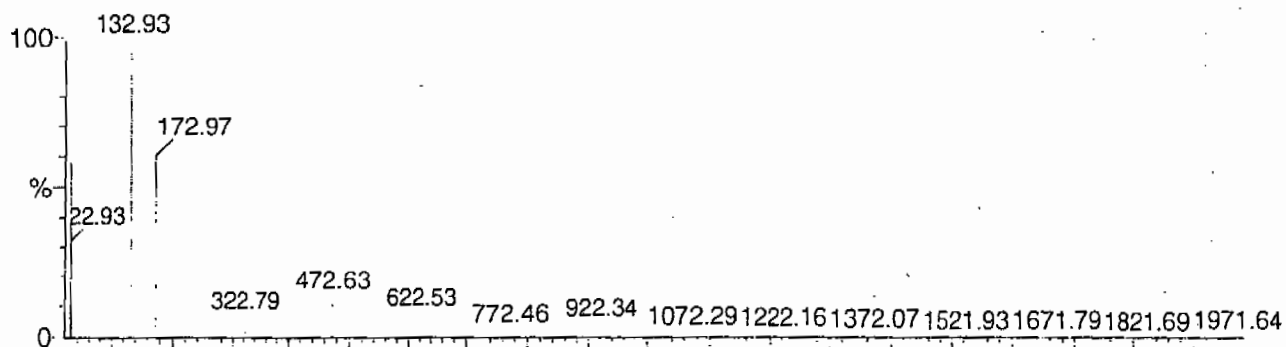
Calibration Report - MS1 Static

Page 1 of 1

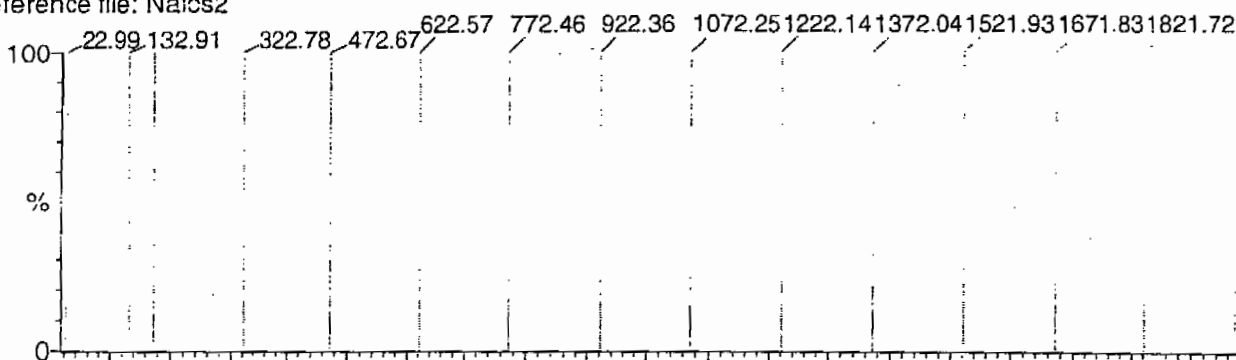
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

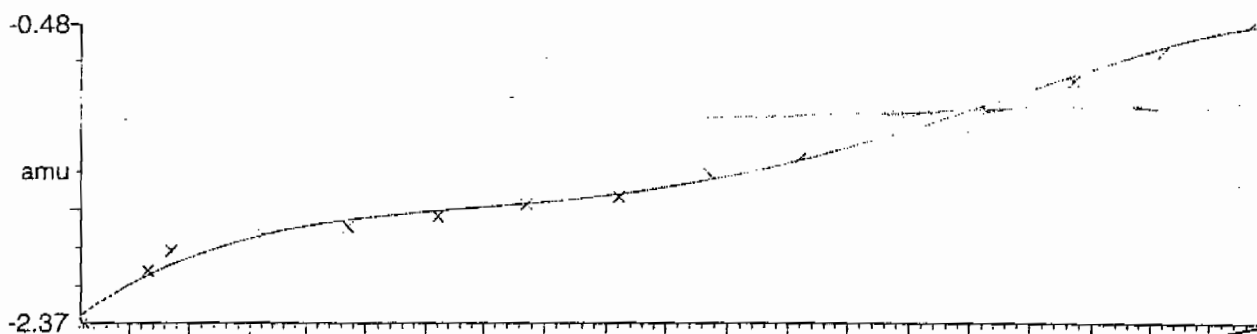
15 matches of 15 tested references



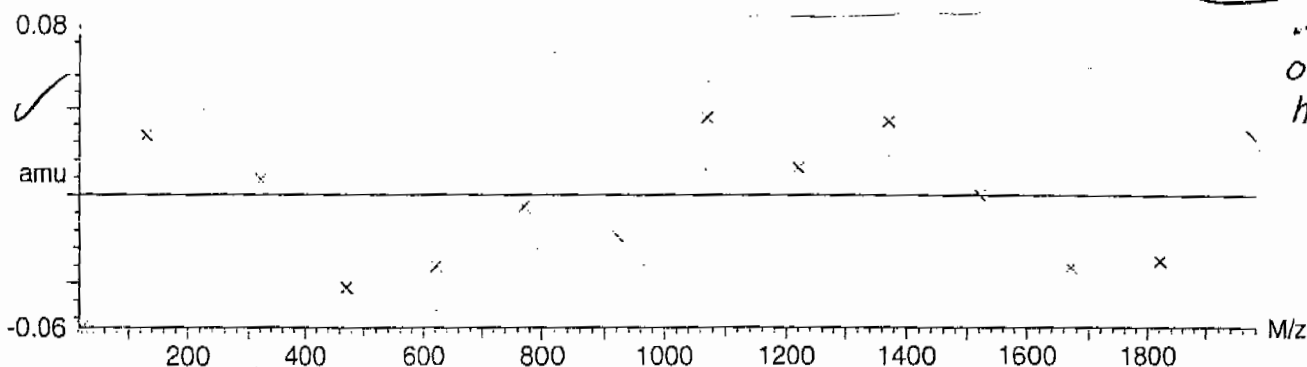
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



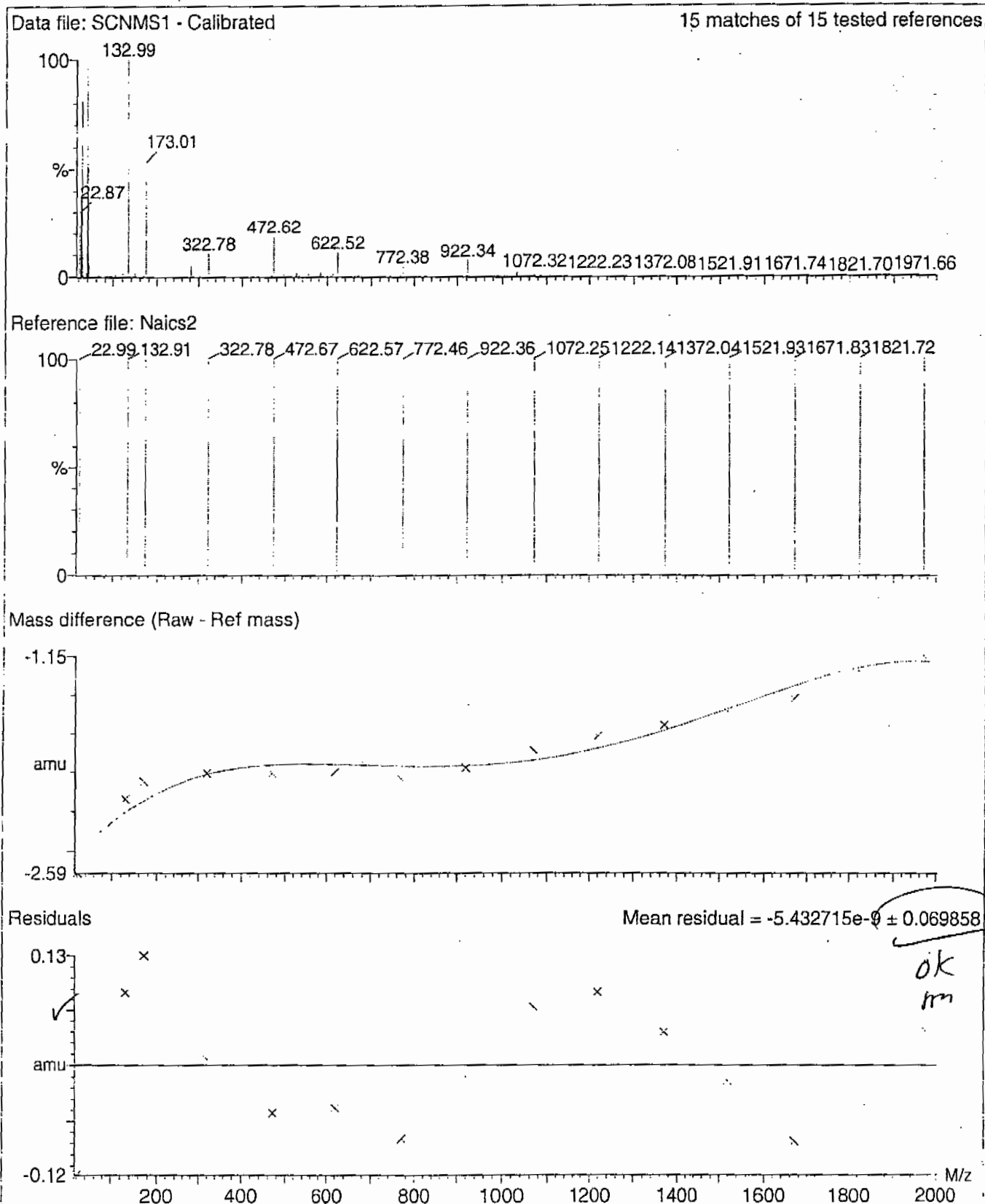
Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$

ok
hm

Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006



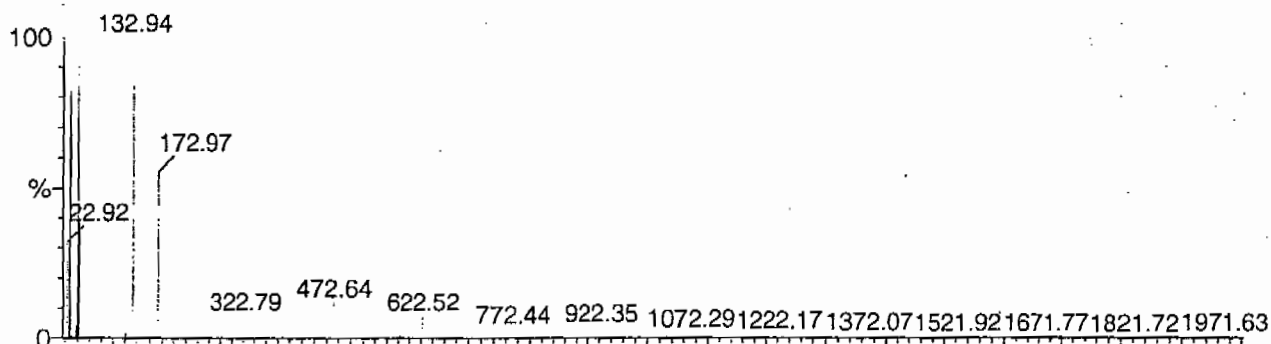
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

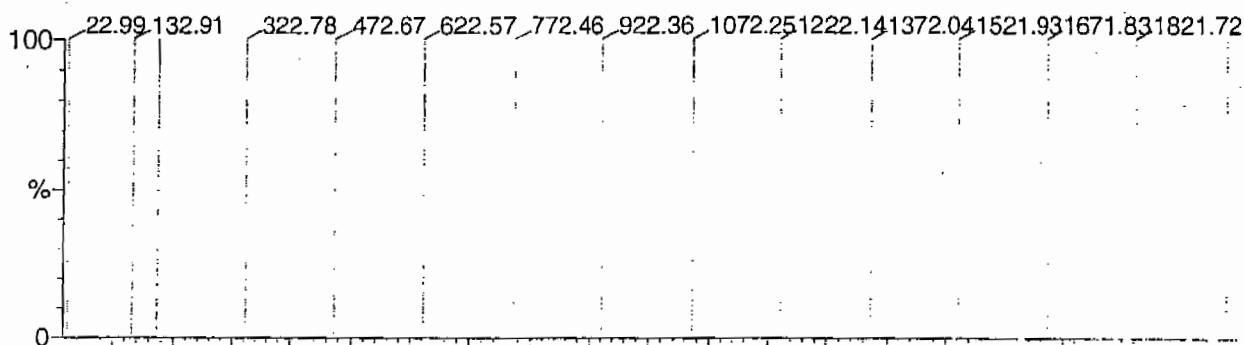
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

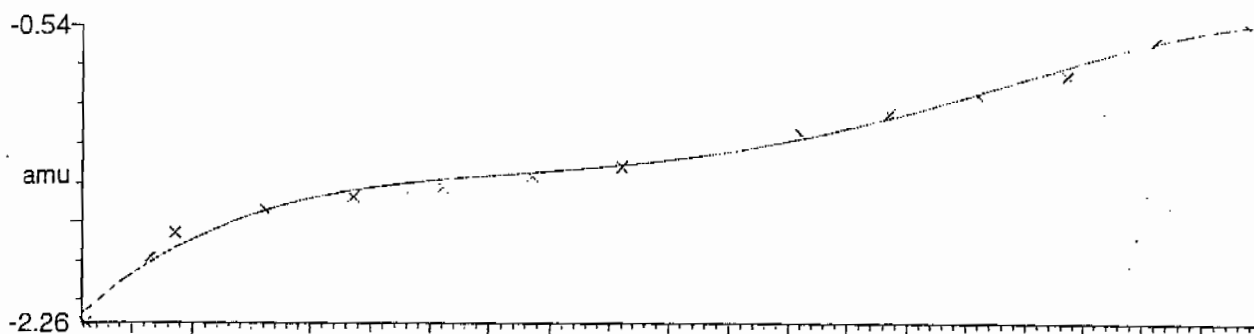
15 matches of 15 tested references



Reference file: Naics2

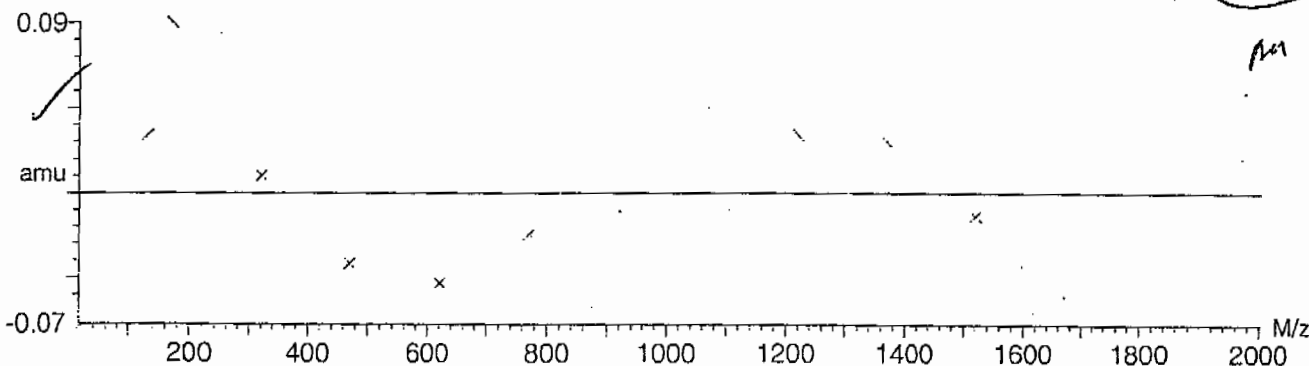


Mass difference (Raw - Ref mass)



Residuals

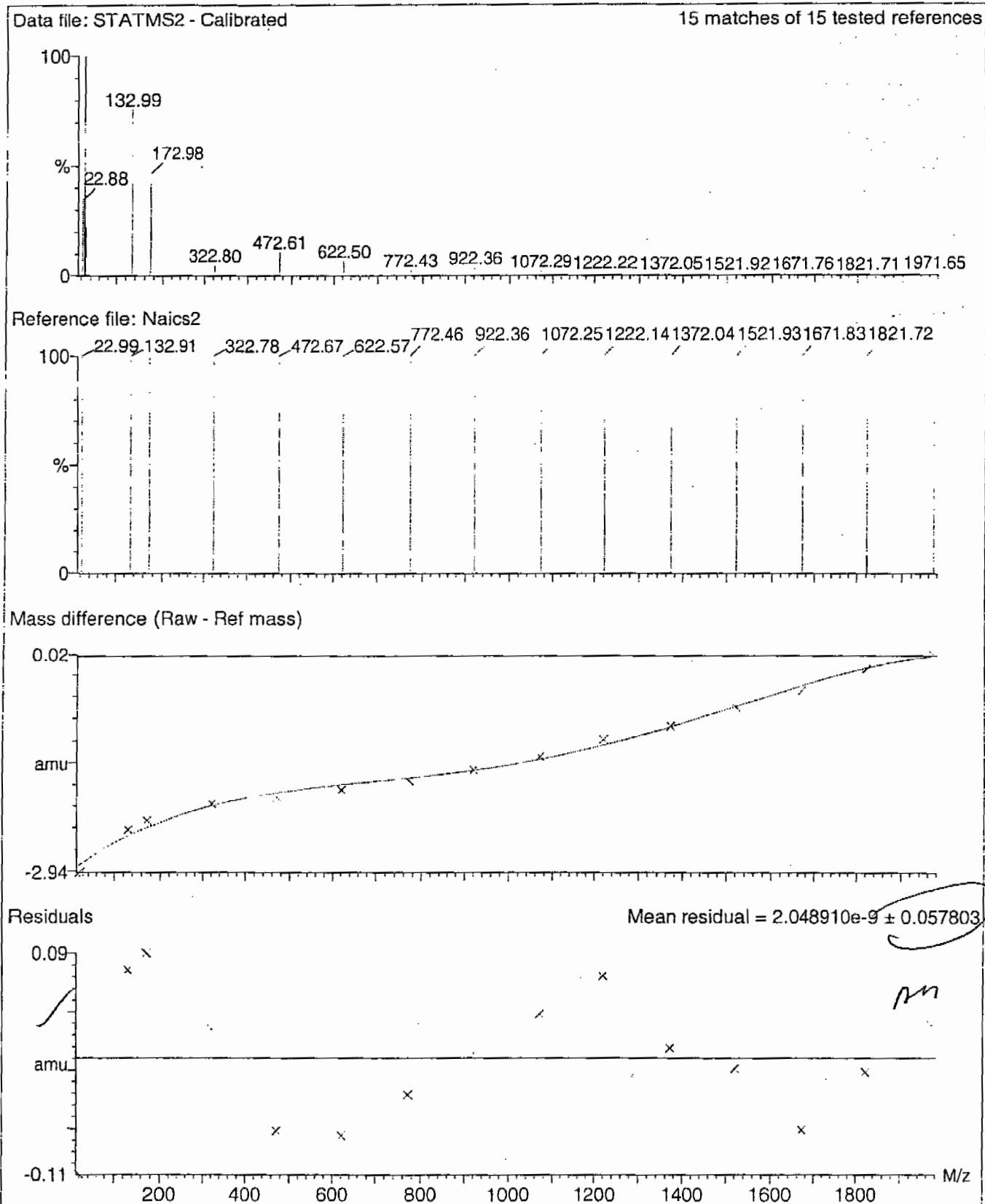
Mean residual = $3.486639e-9 \pm 0.040487$



Calibration Report - MS2 Static

Page 1 of 1

Printed: Fri Aug 25 10:52:54 2006



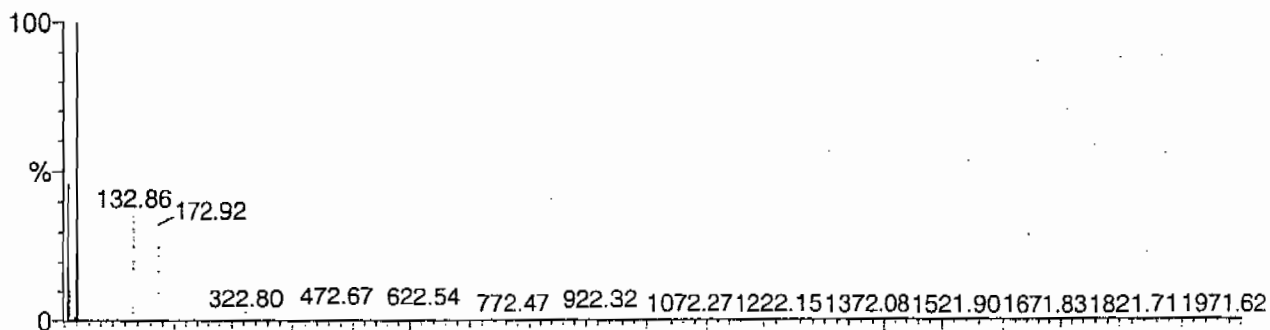
Calibration Report - MS2 Scanning

Page 1 of 1

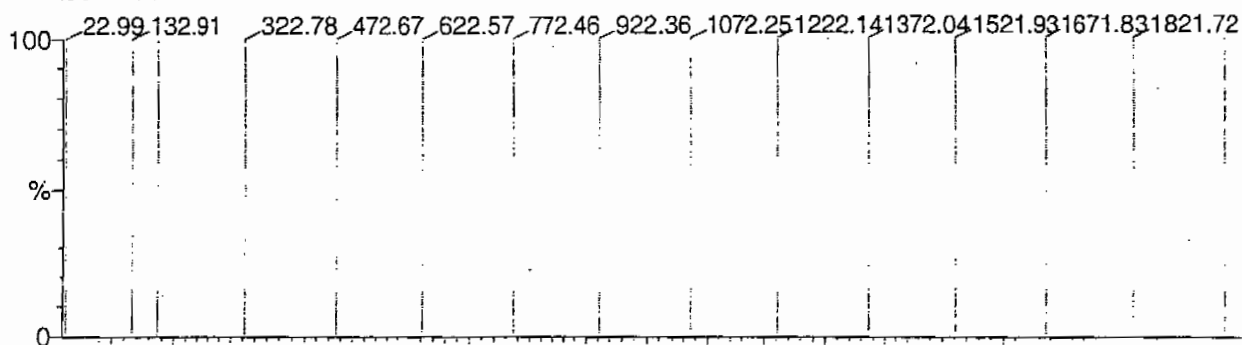
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

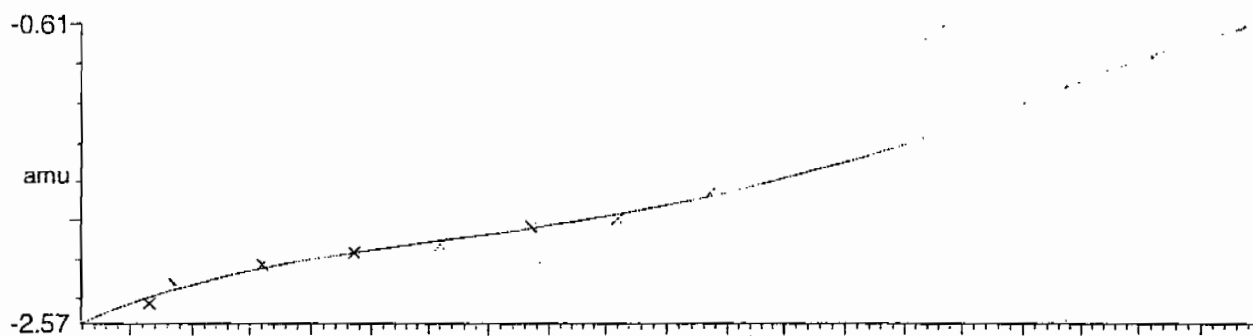
14 matches of 15 tested references



Reference file: Naics2

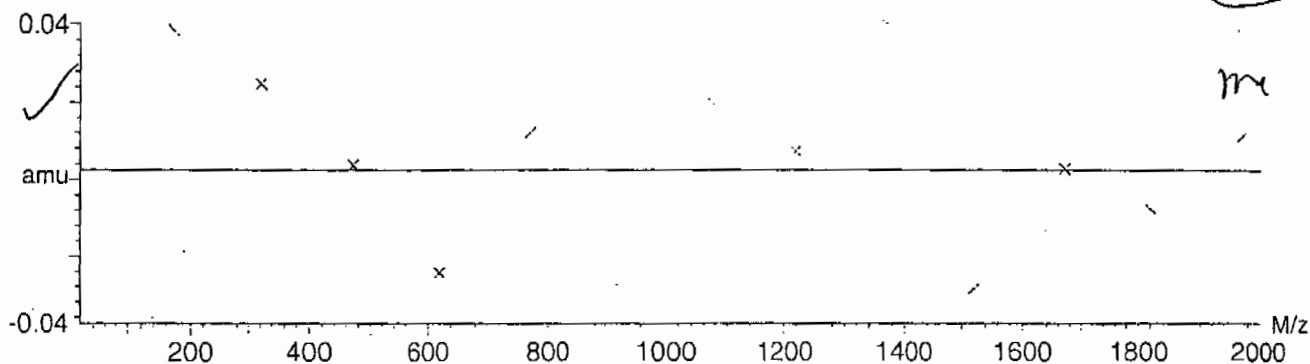


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



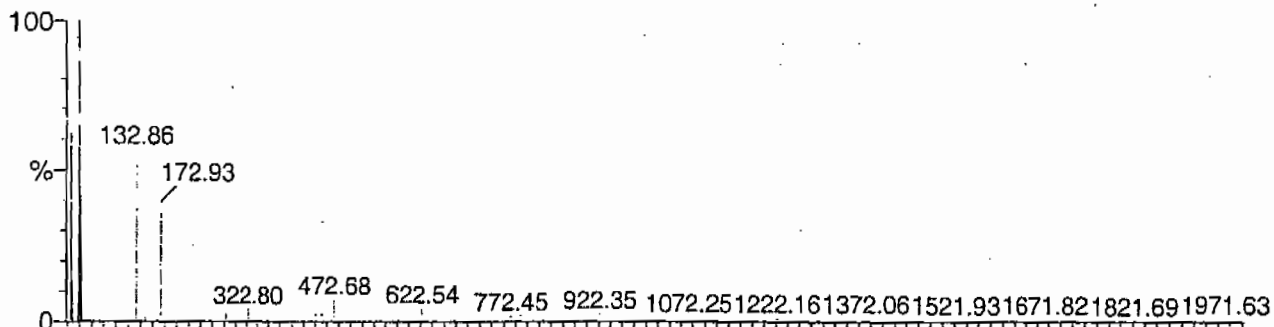
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

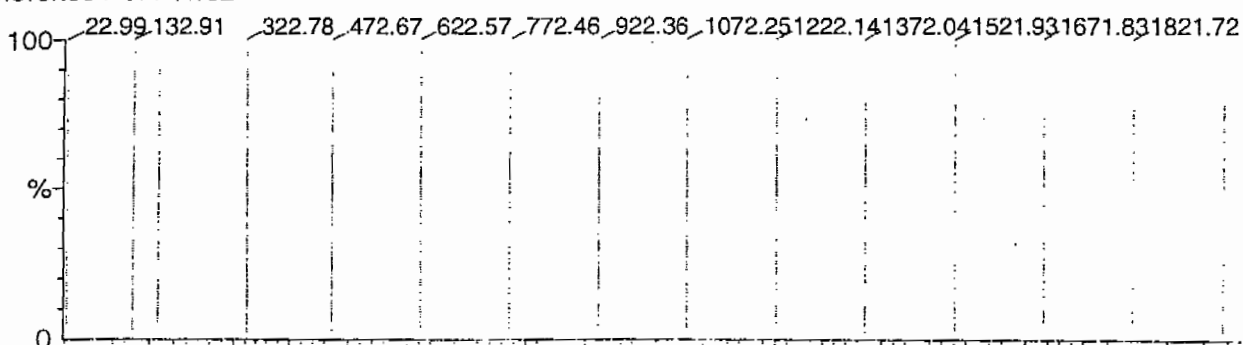
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

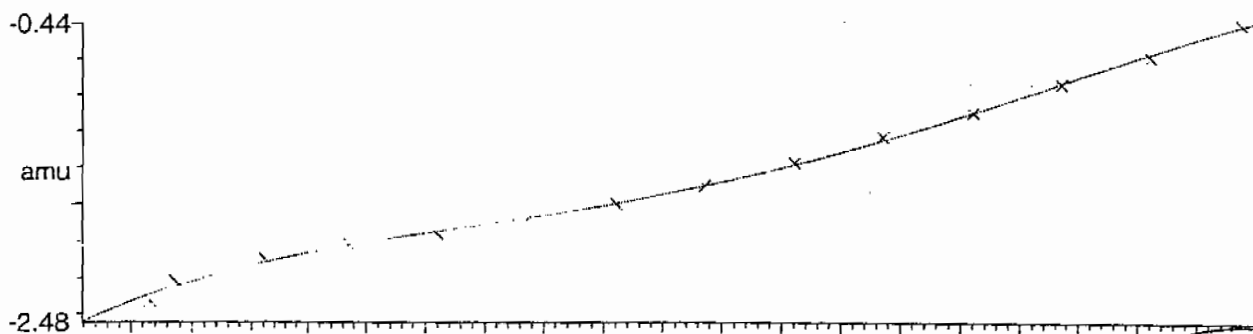
14 matches of 15 tested references



Reference file: Naics2

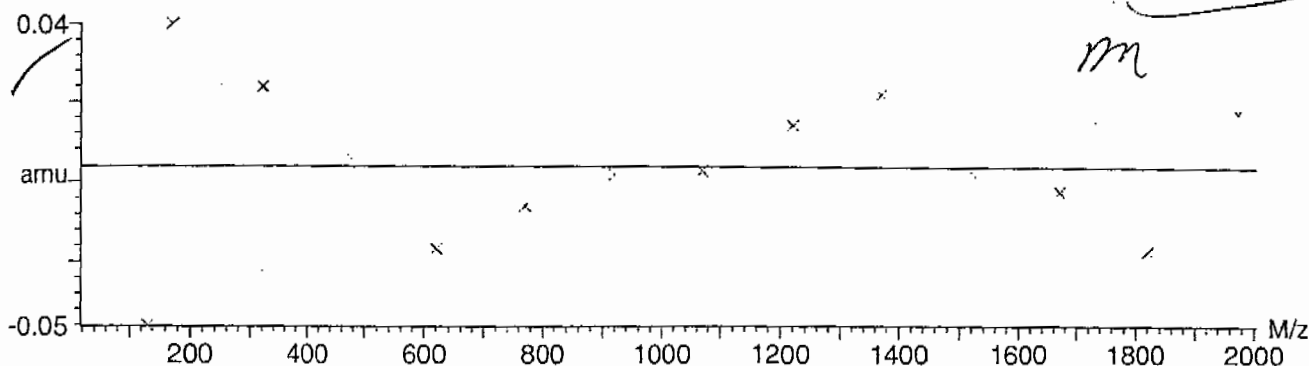


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350e-9 \pm 0.023134$

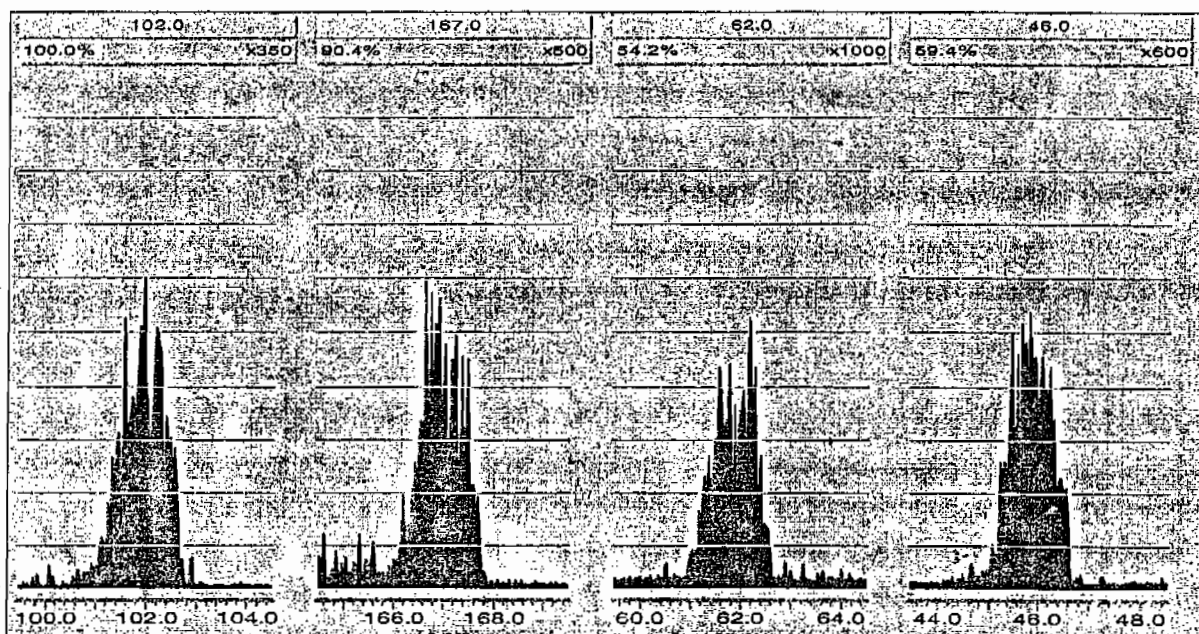


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUBD\explosives04.ipr

Printed : Mon Feb 08 14:05:58 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

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) #
			3214.577	12.205	18459.667	17.697
Upper Limit			4178.9501	12.705	23997.5671	18.197
Lower Limit			2250.2039	11.705	12921.7669	17.197
MB for batch 944905	13-feb-10 06:24	EXP0208228a	2471.18	12.067	14096.8	17.466
LCS for batch 944905	13-feb-10 06:54	EXP0208229a	2610.1	12.067	15156.8	17.444
RE14-10-7689	13-feb-10 07:23	EXP0208230a	2988.18	12.067	16632.2	17.466
RE14-10-7689(245387001MS)	13-feb-10 07:53	EXP0208231a	3281.22	12.068	18744.7	17.445
RE14-10-7689(245387001MSD)	13-feb-10 08:22	EXP0208232a	3001.9	12.067	17042.5	17.444
RE14-10-7679	13-feb-10 08:52	EXP0208233a	3033.55	12.067	17047.2	17.466
RE14-10-7680	13-feb-10 09:21	EXP0208234a	2568.6	12.072	15394.9	17.464
RE14-10-7686	13-feb-10 09:51	EXP0208235a	2922.9	12.065	15902.8	17.455
RE14-10-7688	13-feb-10 10:20	EXP0208236a	2835.94	12.101	15887.3	17.466
RE14-10-7684	13-feb-10 10:50	EXP0208237a	3135.25	12.069	16438.2	17.464
RE14-10-7687	13-feb-10 12:49	EXP0208241a	3284.98	12.102	18389	17.466
RE14-10-7681	13-feb-10 13:18	EXP0208242a	3508.76	12.065	19300.5	17.478
RE14-10-7682	13-feb-10 13:48	EXP0208243a	3357.03	12.102	20311.9	17.467
RE14-10-7685	13-feb-10 14:17	EXP0208244a	3281.51	12.07	18122	17.465
RE14-10-7683	13-feb-10 14:47	EXP0208245a	3158.94	12.069	17970.6	17.464

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: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208230a

Date Analyzed: 13-FEB-10 07:23

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208230a

Date: 13-Feb-2010

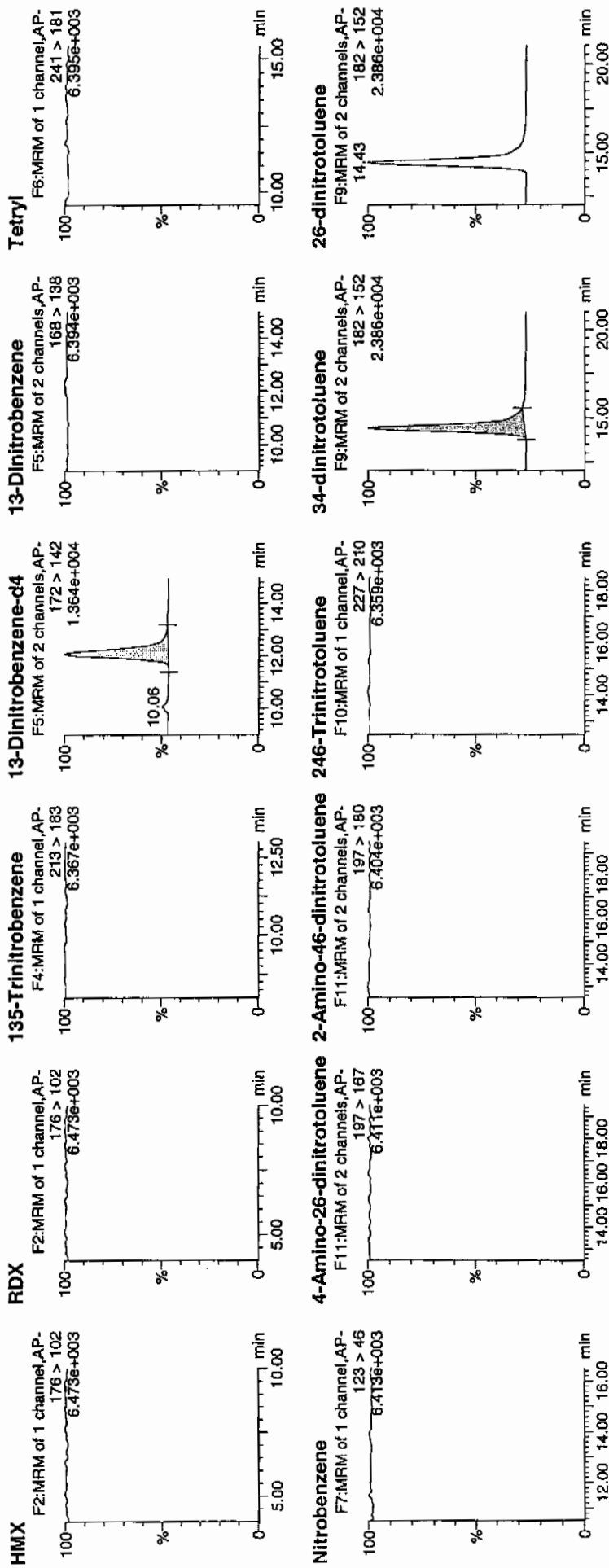
Time: 07:23:41

ID: 245387001

Vial: 2:1,C

1.477
2/14/10

WAL 944907 / 2 /



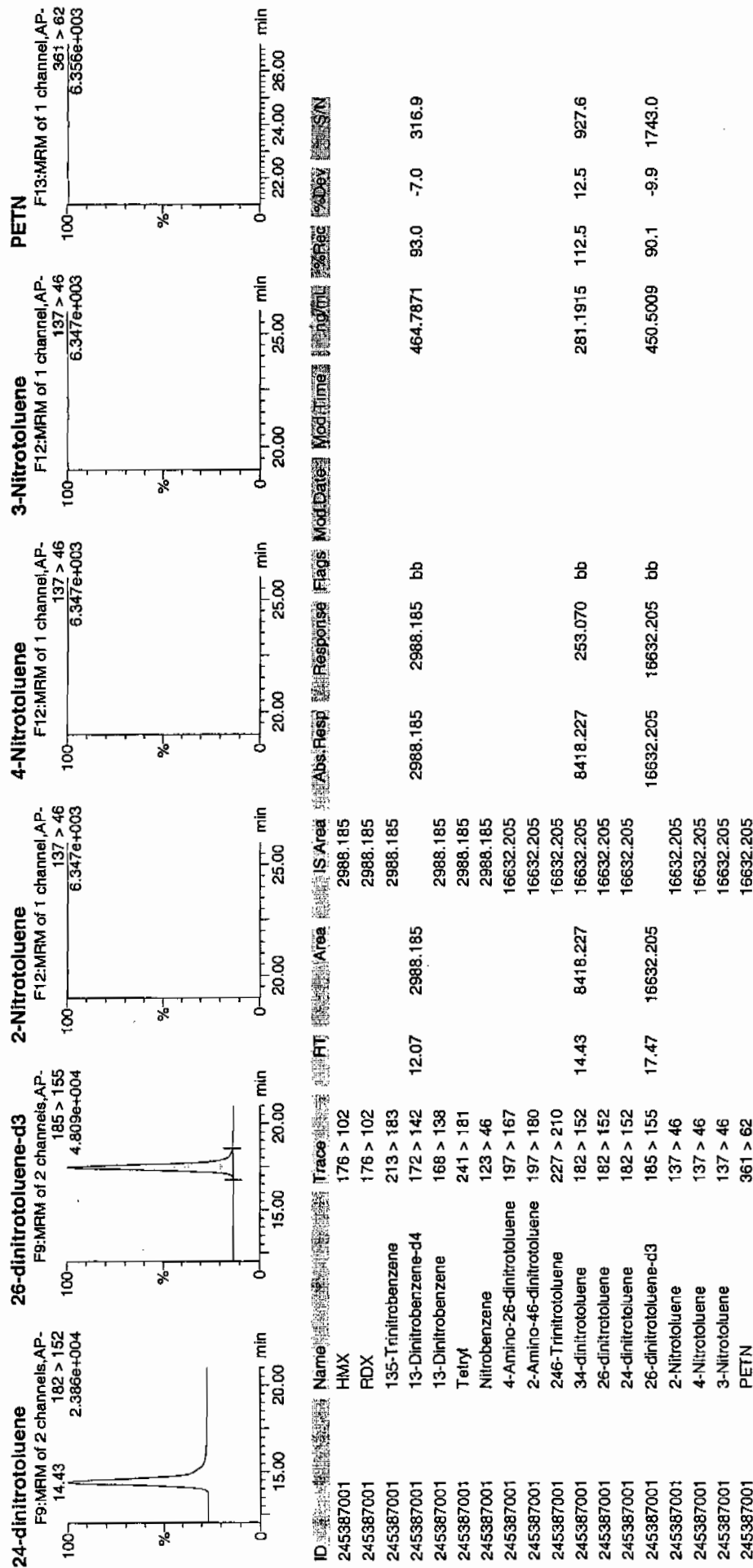
Handwritten signature/initials.

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Printed: Sun Feb 14 11:45:22 2010, Page 6 of 95



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387001

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130066.wiff

Date Analyzed: 14-FEB-10 03:13

Units: ug/kg

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

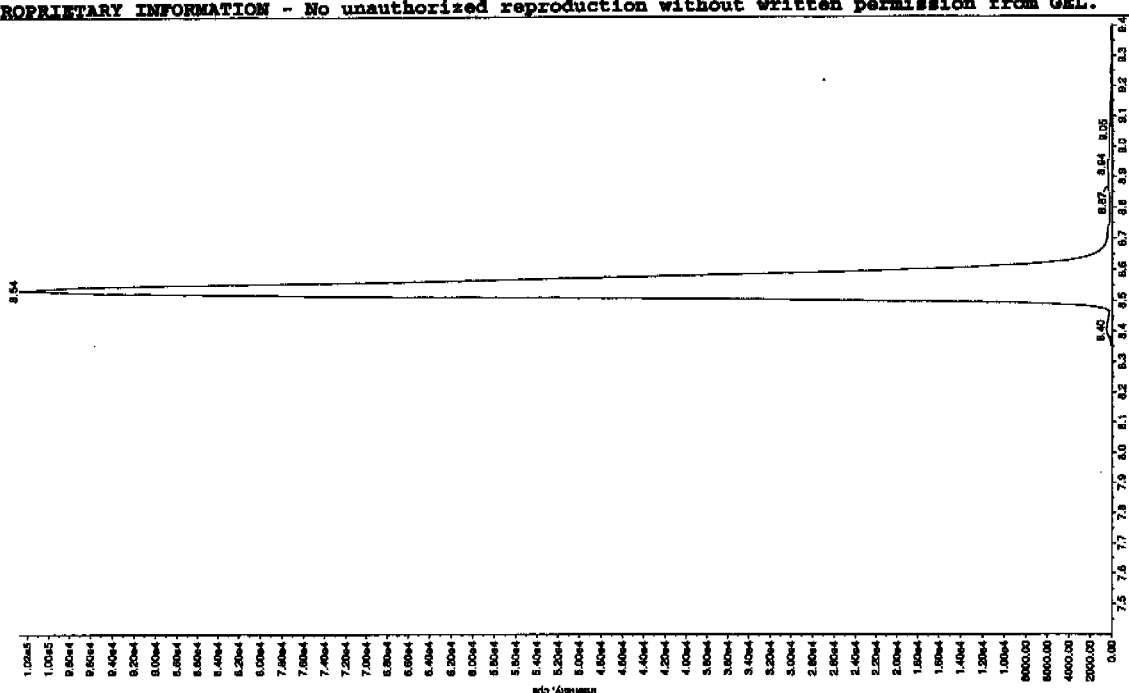
*Concentration =

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

Gen 2/15/10

Sample Name: "245397001" Sample ID: "94490721ER" File: "EXS2130055.wif"
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 3:13:28 AM
 Modified: No

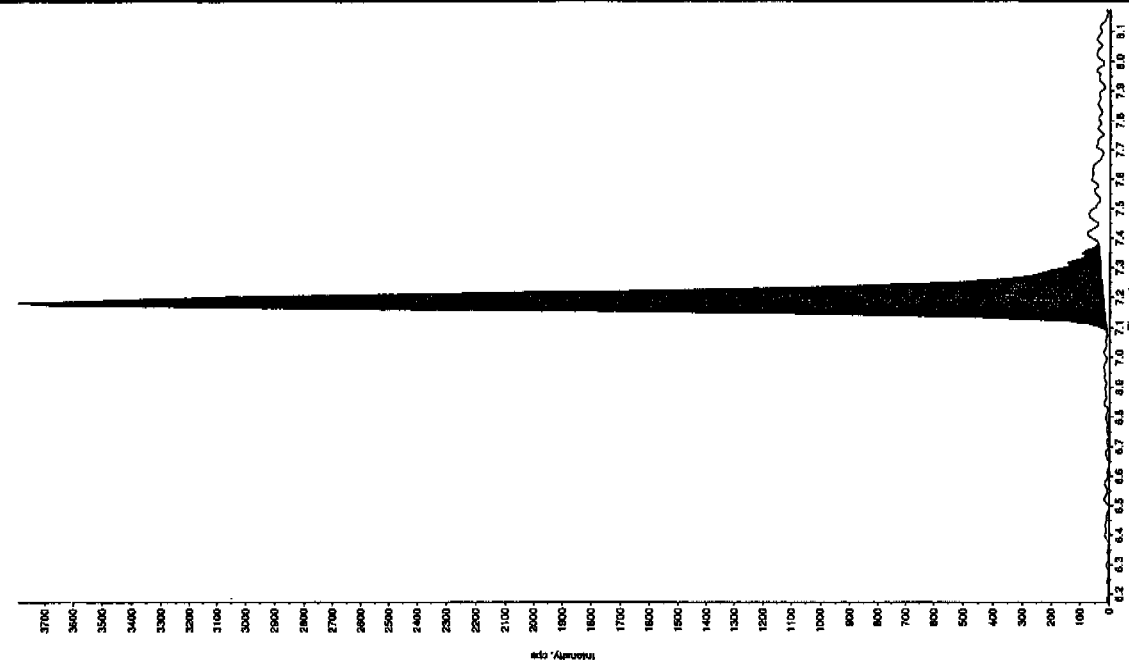


Amc 2/17/10

Sample Name: "245397001" Sample ID: "94490721ER" File: "EXS2130055.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX83212S" Annotation: ""

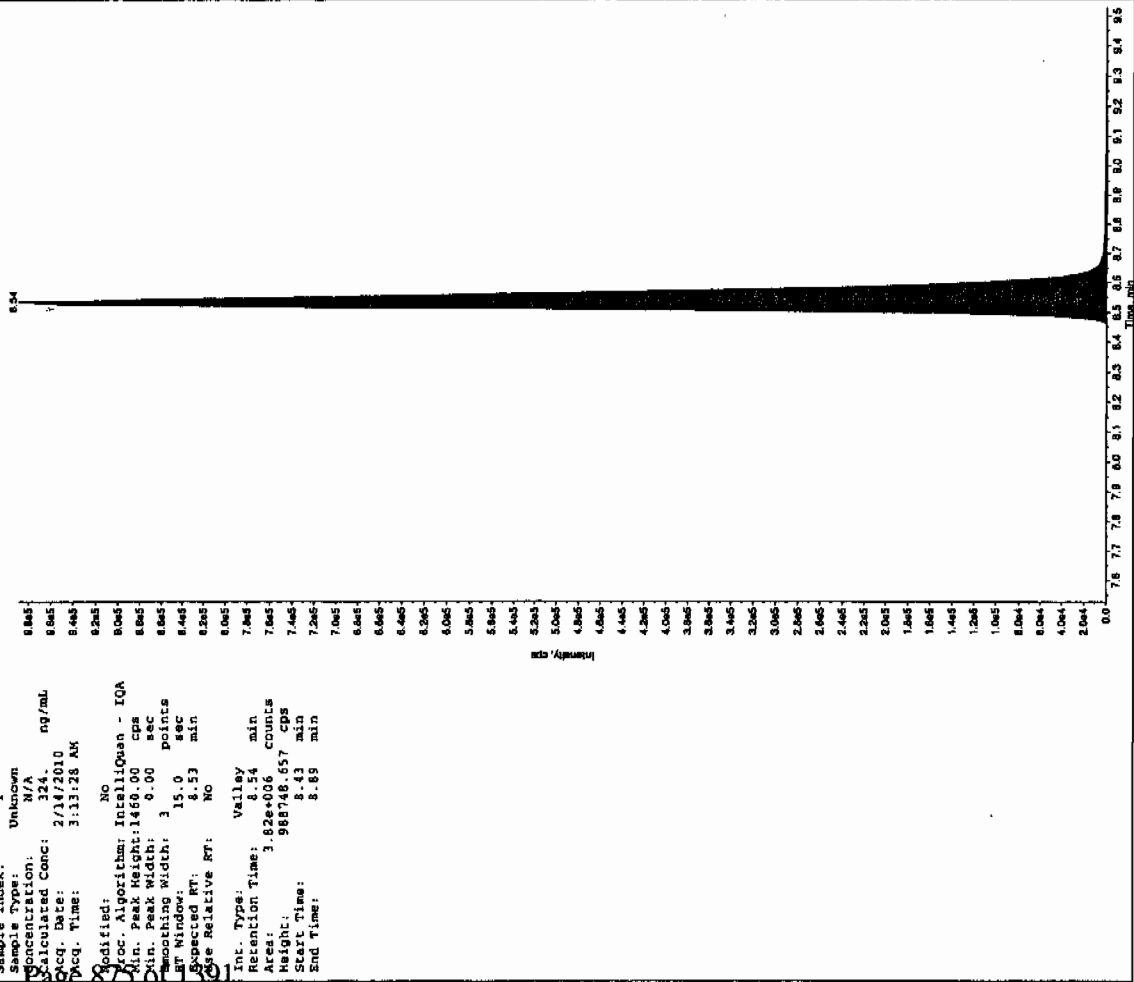
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.1 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 3:13:28 AM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 7.17 min
 Mass Relative RT: No
 Int. Type: Valley
 Retention Time: 7.18 min
 Area: 1.71e+004 counts
 Height: 3776.555 cps
 Start Time: 7.08 min
 End Time: 7.36 min



Sample Name: "245387001" Sample ID: "84490721.ER" File: "EXS02130056.wif"
 Peak Name: "25-Chloro-4-nitrobenzene" Mass(es): "186.0460 amu"
 Comment: "LCX032125" Annotation: "Anionation"

Sample Index: 1
 Sample Name: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 3:13:28 AM
 Modified: No



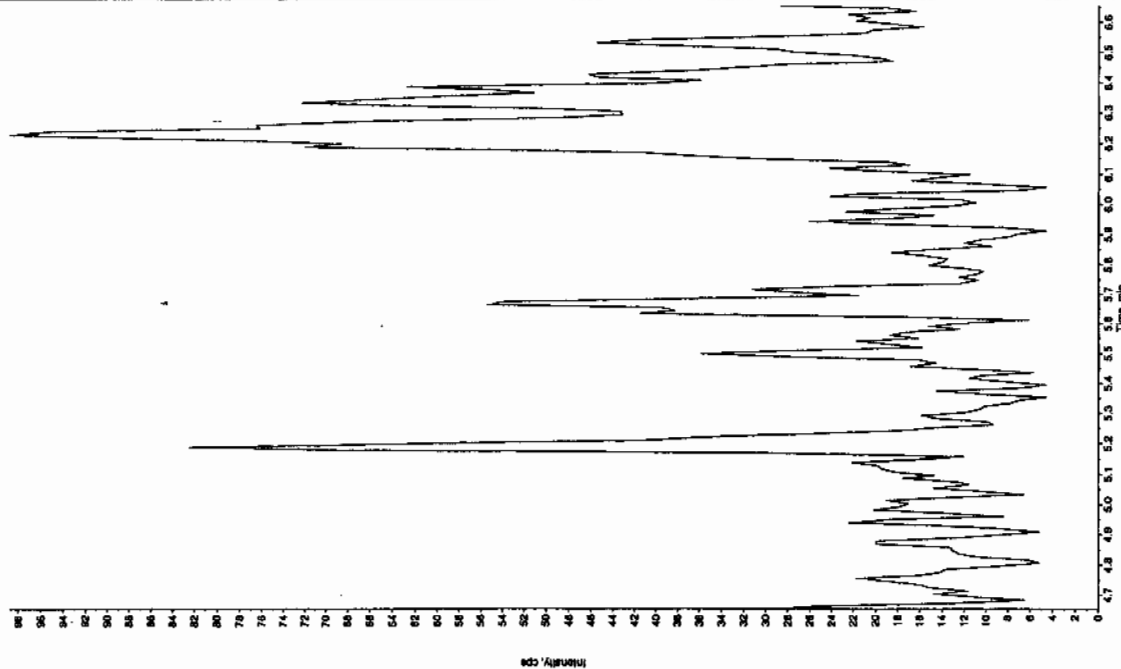
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245387001" Sample ID: "94480721ER" File: "EXS02130068.wif"
 Peak Name: "24-Dinitro-5-nitroourea" Mass(es): "156.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 2/14/2010
 Acq. Time: 3:13:28 AM
 Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.09e4 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: 7.99e+004 counts
 Height: 18464.176 cps
 Start Time: 10.9 min
 End Time: 11.3 min

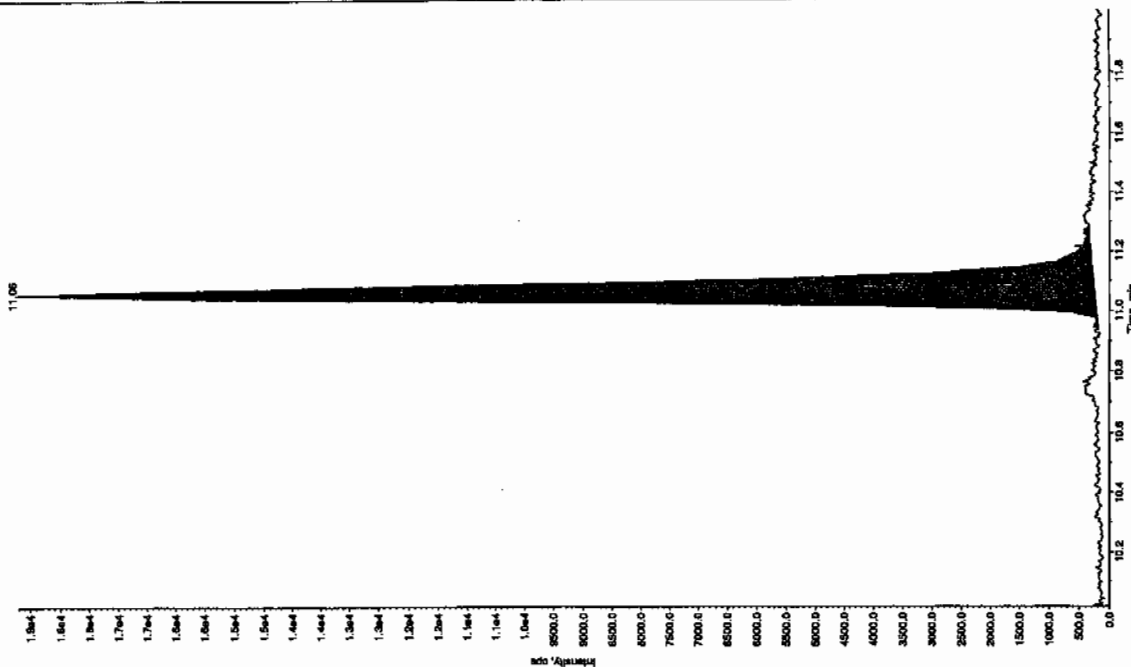


Sample Name: "245387001" Sample ID: "94480721ER" File: "EXS02130068.wif"
 Peak Name: "trifluoromethyl phosphate" Mass(es): "359.119.10 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 2/14/2010
 Acq. Time: 3:13:28 AM
 Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.09e4 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: 7.99e+004 counts
 Height: 18464.176 cps
 Start Time: 10.9 min
 End Time: 11.3 min



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208233a

Date Analyzed: 13-FEB-10 08:52

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208233a

Date: 13-Feb-2010

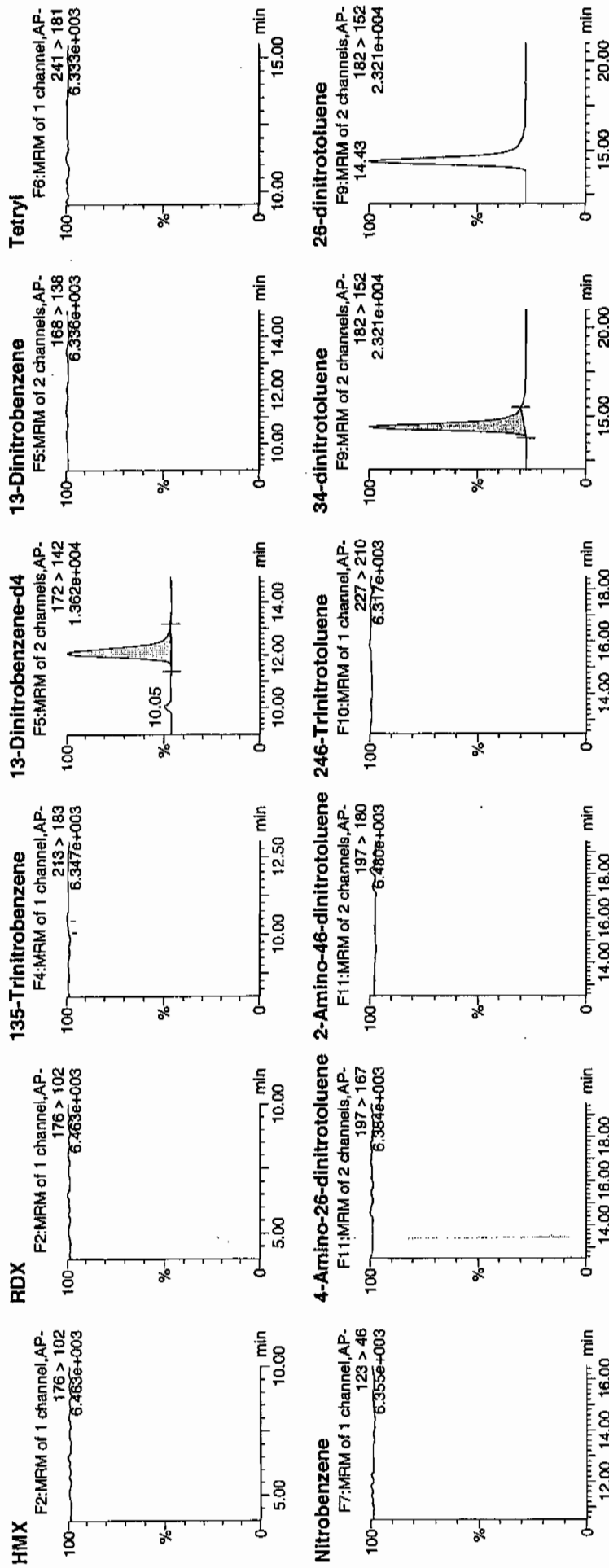
Time: 08:52:18

ID: 245387002

Vial: 2:1,F

WAL 944907 / 2 /

1.477
2/14/10



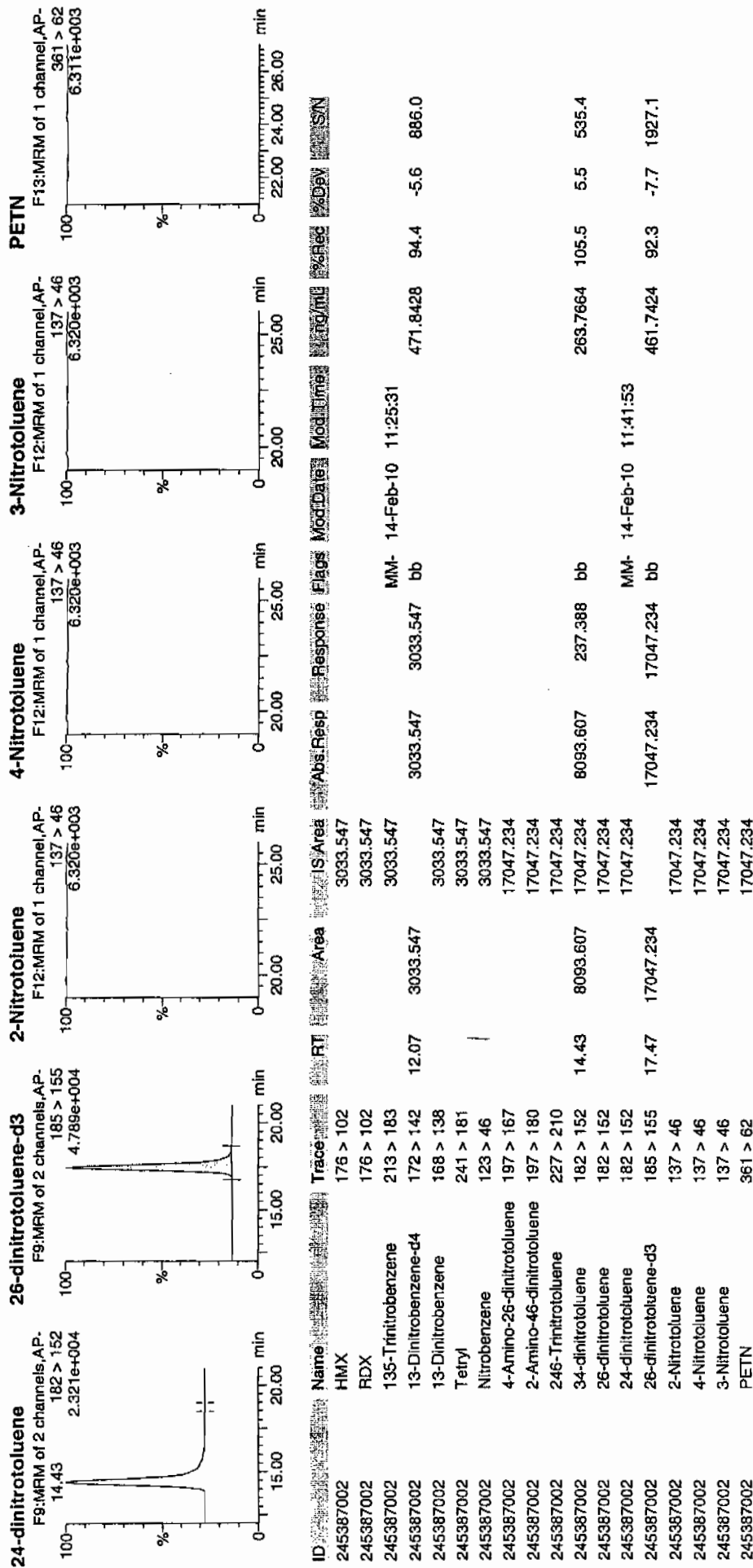
Handwritten signature/initials.

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 12 of 95

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7679

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387002

Sample Amount 2

Moisture: 21.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130069.wiff

Date Analyzed: 14-FEB-10 04:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1200	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

Scan 2/15/10

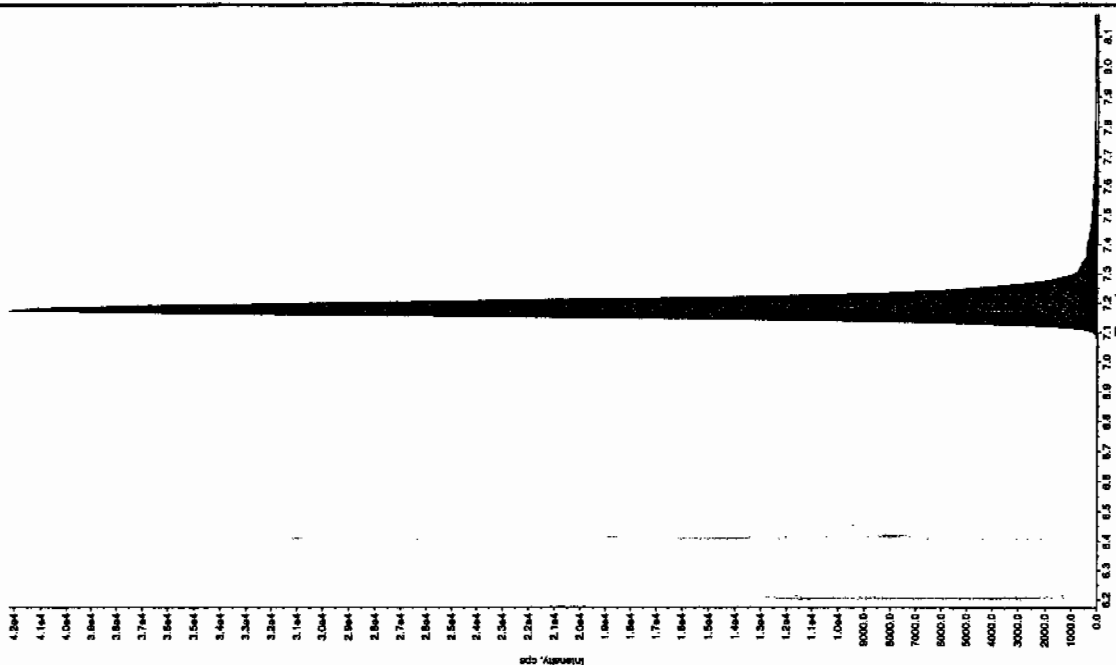
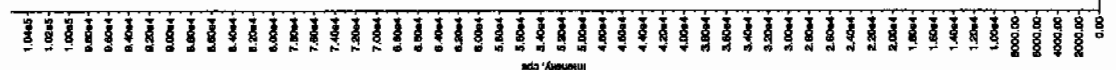
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: 245397025 Sample ID: 245397025 File: E:\5021\00589.wif
 Peak Name: 120.00 Mass(es): 182.046.0 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:00:34 AM
 Acq. Time: 4:00:34 AM
 Modified: No

Sample Name: 245397025 Sample ID: 245397025 File: E:\5021\00589.wif
 Peak Name: 120.00 Mass(es): 182.046.0 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 120.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:00:34 AM
 Acq. Time: 4:00:34 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 Run Window: 30.0 sec
 Expected RT: 7.17 min
 Sample Relative RT: No
 Int. Type: Valley
 Retention Time: 7.17 min
 Area: 1.86e+005 counts
 Height: 42173.431 cps
 Start Time: 7.05 min
 End Time: 7.73 min

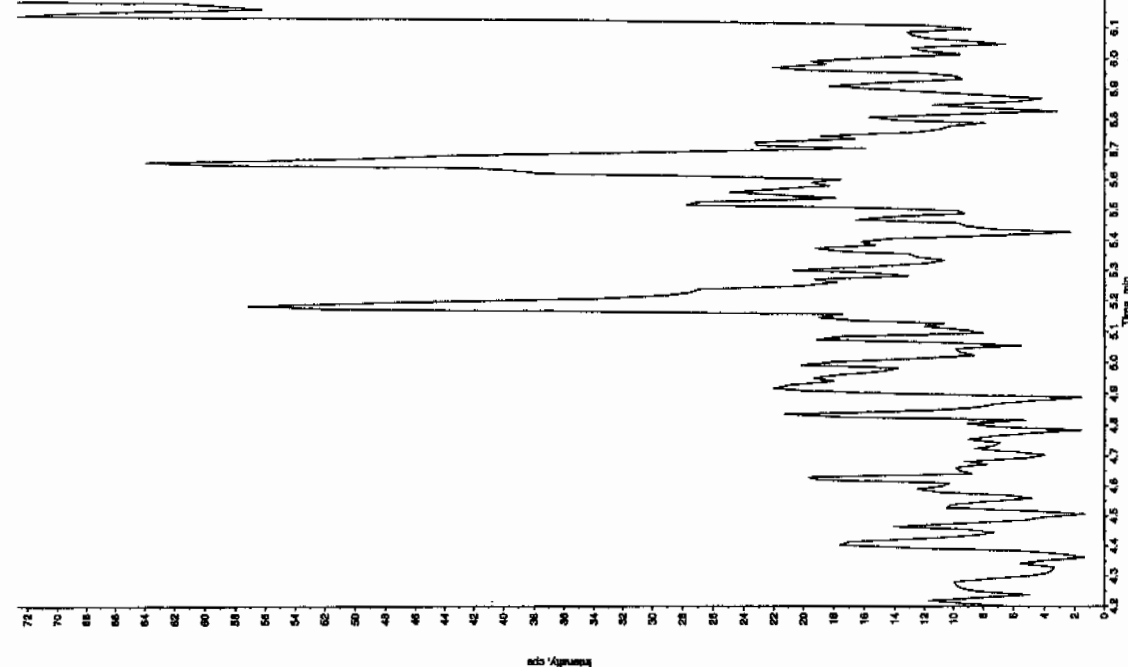


4/20/07 17:16

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

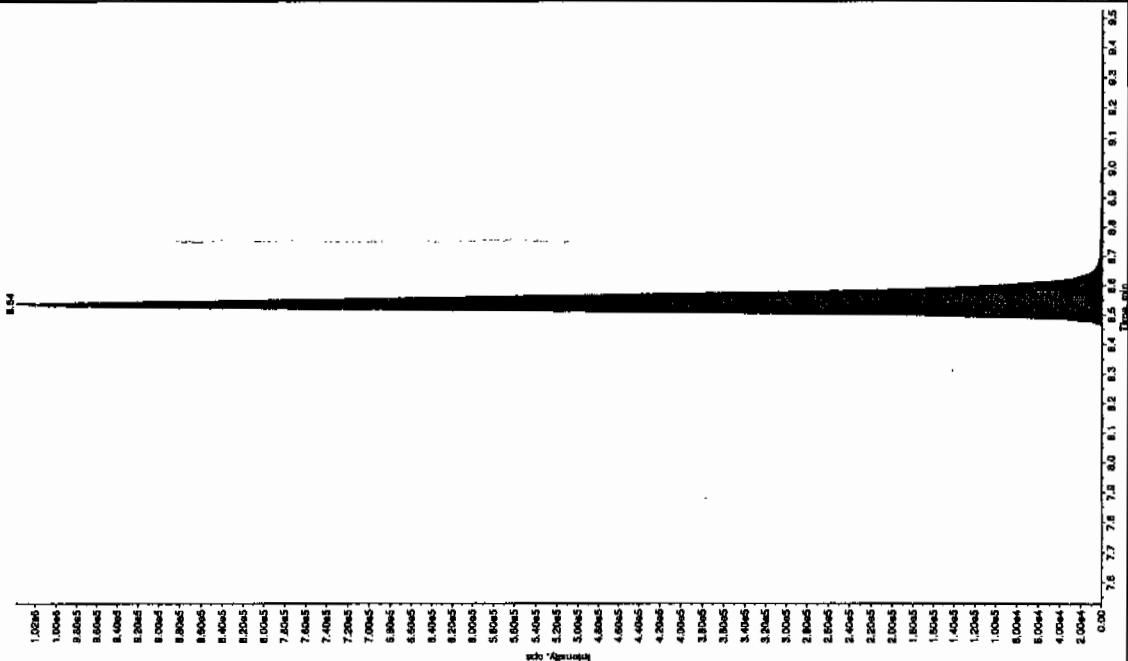
Sample Name: "245387002" Sample ID: "9449701LRF" File: "EX502130089.wif"
 Peak Name: "25-Chloro-4-nitrofluorene" Mass(es): "168.046.0 amu"
 Comment: "LCX85212S" Acquisition: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:00:34 AM
 Modified: No



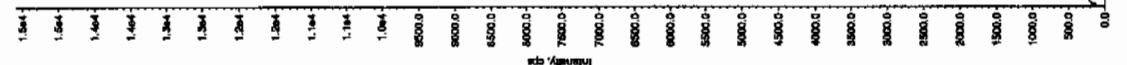
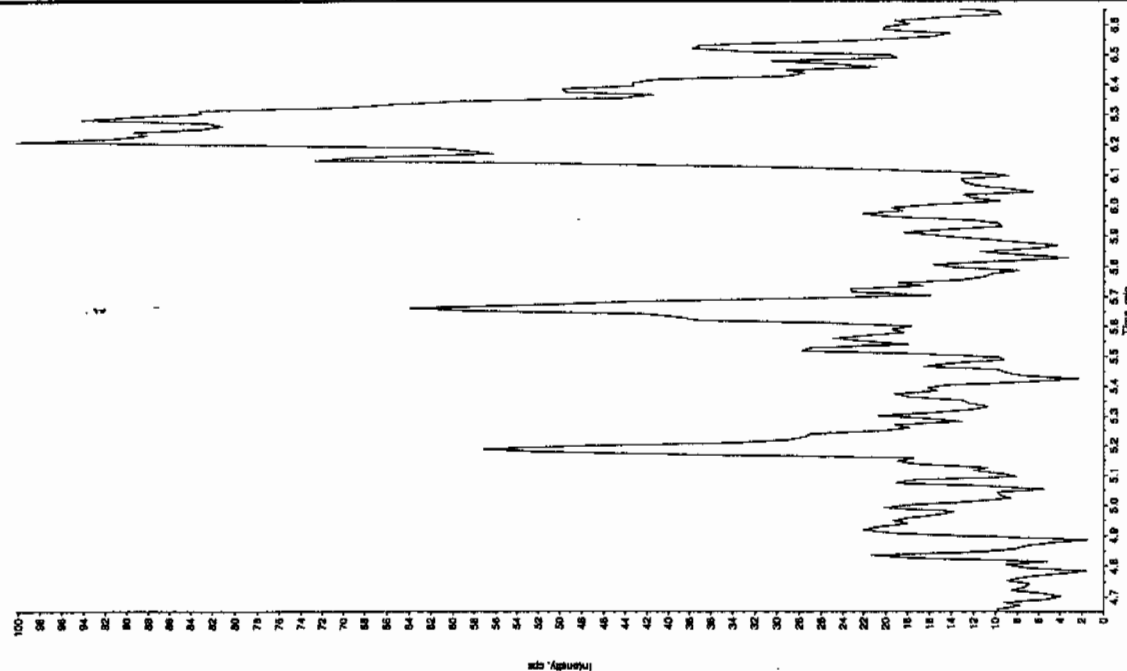
Sample Name: "245387002" Sample ID: "9449701LRF" File: "EX502130089.wif"
 Peak Name: "25-Chloro-4-nitrofluorene" Mass(es): "168.046.0 amu"
 Comment: "LCX85212S" Acquisition: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:00:34 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Ret. Window: 15.0 sec
 Expected RT: 8.53 min
 Peak Relative RT: No
 Int. Type: Valley
 Retention Time: 8.54 min
 Area: 3.90e+006 counts
 Height: 1037750.732 cps
 Start Time: 8.44 min
 End Time: 8.68 min



Sample Name: "245387002" Sample ID: "94490721ER" File: "EXS02130069.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1791.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	ng/mL
Calculated Conc:	2/14/2010	
Acq. Date:	4/00:38 AM	
Acq. Time:		
Modified:	No	
Proc. Algorithm:	Interpol	Quant - IQA
Min. Peak Height:	1.00E4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	30.0	points
Start Window:	3.00	sec
Expected Rf:	11.0	min
Use Relative RT:	No	
Inst. Type:	Valley	
Retention Time:	11.1	min
Area:	6.48E+004	counts
Height:	1.484E3.151	cps
Start Time:	10.9	min
End Time:	11.4	min



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7680

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208234a

Date Analyzed: 13-FEB-10 09:21

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\EXP0208234a

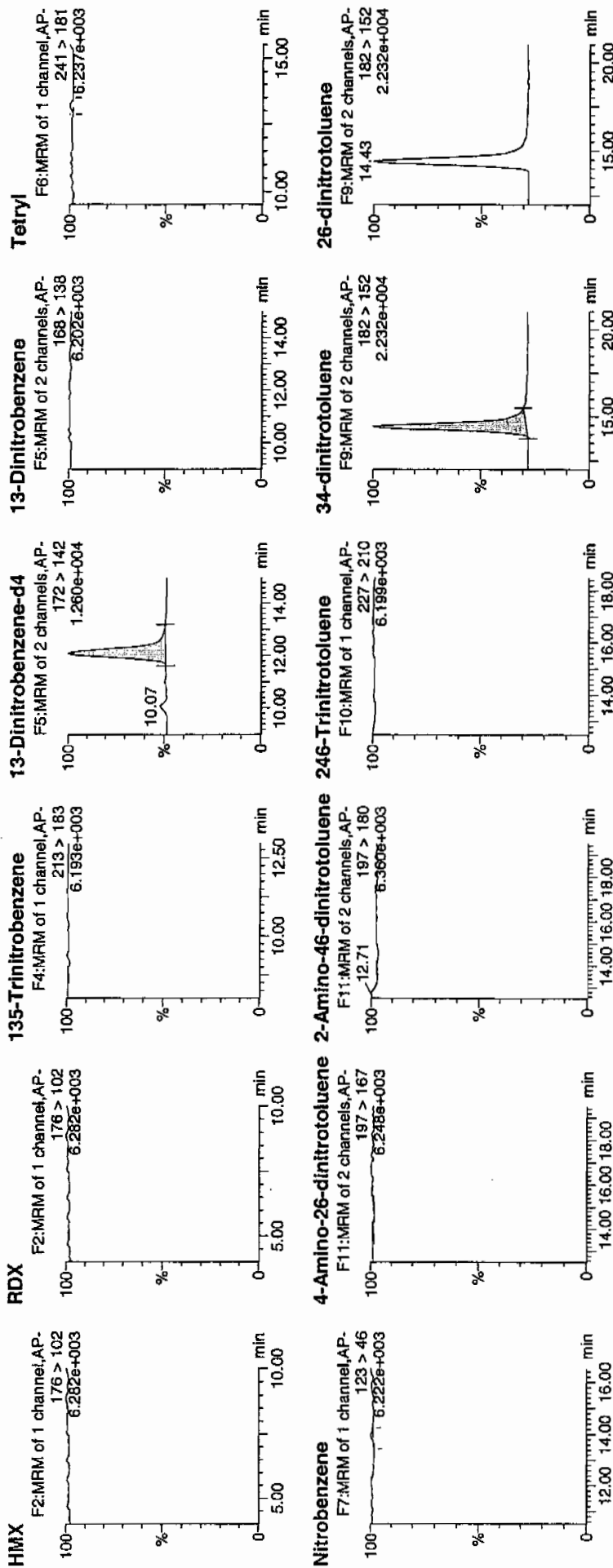
Date: 13-Feb-2010

Time: 09:21:45

ID: 245387003

Vial: 2:2,A

Handwritten: *CAVU 944907 / 8022 / 2*
1407 2/14/10



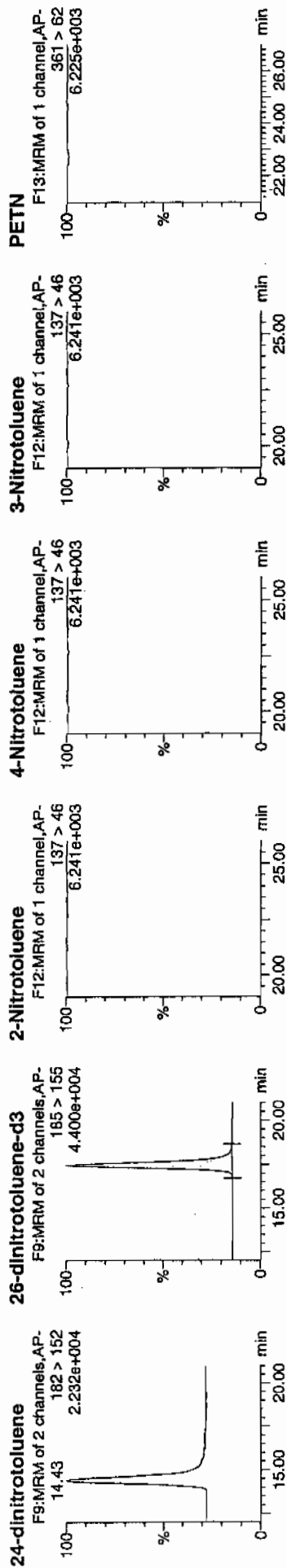
Handwritten: *4mm 11/10*

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 14 of 95

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	%Rec	%Dev	SN
245387003	HMX	176 > 102		2568.604	2568.604								
245387003	RDX	176 > 102		2568.604	2568.604								
245387003	135-Trinitrobenzene	213 > 183		2568.604	2568.604								
245387003	13-Dinitrobenzene-d4	172 > 142	12.07	2568.604	2568.604	2568.604	2568.604	bb			399.5248	79.9	140.7
245387003	13-Dinitrobenzene	168 > 138		2568.604	2568.604								
245387003	Tetryl	241 > 181		2568.604	2568.604								
245387003	Nitrobenzene	123 > 46		15394.868	15394.868								
245387003	4-Amino-26-dinitrotoluene	197 > 167		15394.868	15394.868								
245387003	2-Amino-46-dinitrotoluene	197 > 180		15394.868	15394.868								
245387003	246-Trinitrotoluene	227 > 210		15394.868	15394.868								
245387003	34-dinitrotoluene	182 > 152	14.43	7821.282	15394.868	7821.282	254.022	bb	MM- 14-Feb-10	11:26:11	282.2496	112.9	505.5
245387003	26-dinitrotoluene	182 > 152		15394.868	15394.868								
245387003	24-dinitrotoluene	182 > 152		15394.868	15394.868								
245387003	26-dinitrotoluene-d3	185 > 155	17.46	15394.868	15394.868	15394.868	15394.868	bb	MM- 14-Feb-10	11:29:13	416.9863	83.4	1187.6
245387003	2-Nitrotoluene	137 > 46		15394.868	15394.868								
245387003	4-Nitrotoluene	137 > 46		15394.868	15394.868								
245387003	3-Nitrotoluene	137 > 46		15394.868	15394.868								
245387003	PETN	361 > 62		15394.868	15394.868								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7680

Lab Code: GEI

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130070.wiff

Date Analyzed: 14-FEB-10 04:16

Units: ug/kg

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

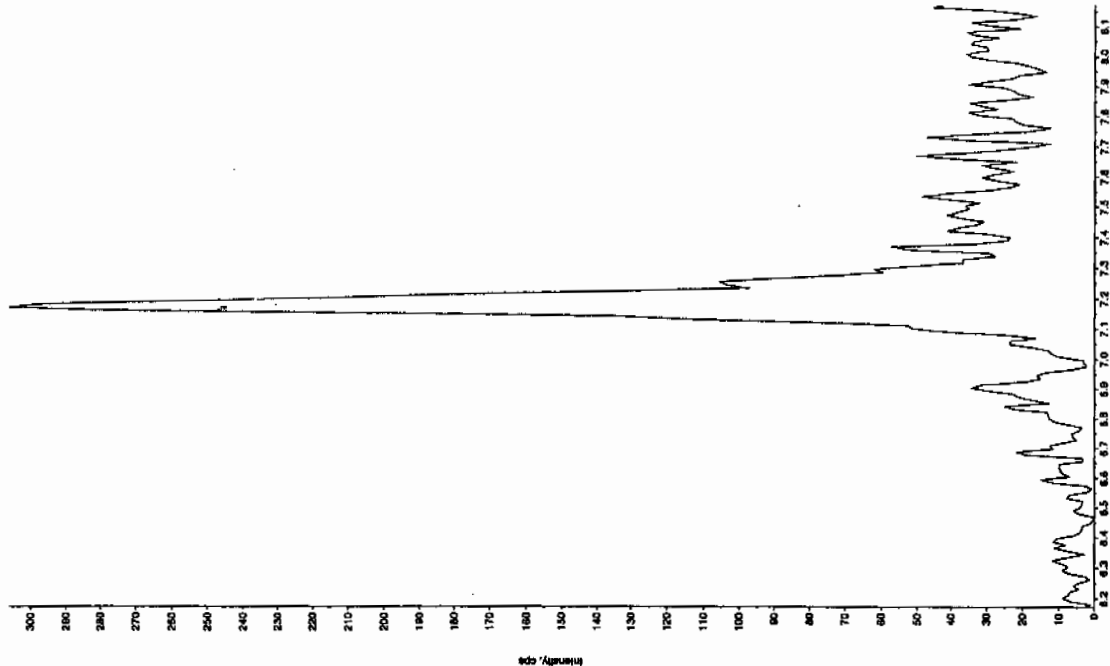
*Concentration =

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

2/15/10

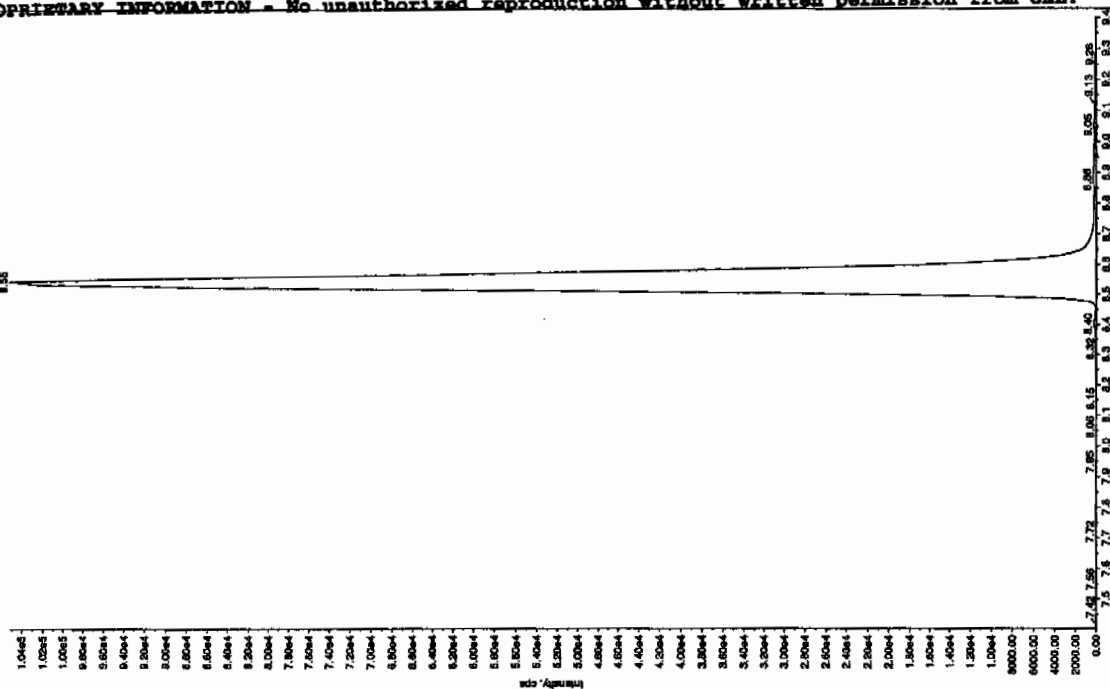
Sample Name: "24597003" Sample ID: "94460721.E" File: "EX502130070.wif"
 Peak Name: "TATP" Mass(es): "257.2204.9 amu"
 Comment: "LCX632125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:16:16 AM
 Acq. Time: 4:16:16 AM
 Modified: No



Sample Name: "24597003" Sample ID: "94460721.E" File: "EX502130070.wif"
 Peak Name: "3S-Dihydrocannab" Mass(es): "182.046.0 amu"
 Comment: "LCX632125" Annotation: ""

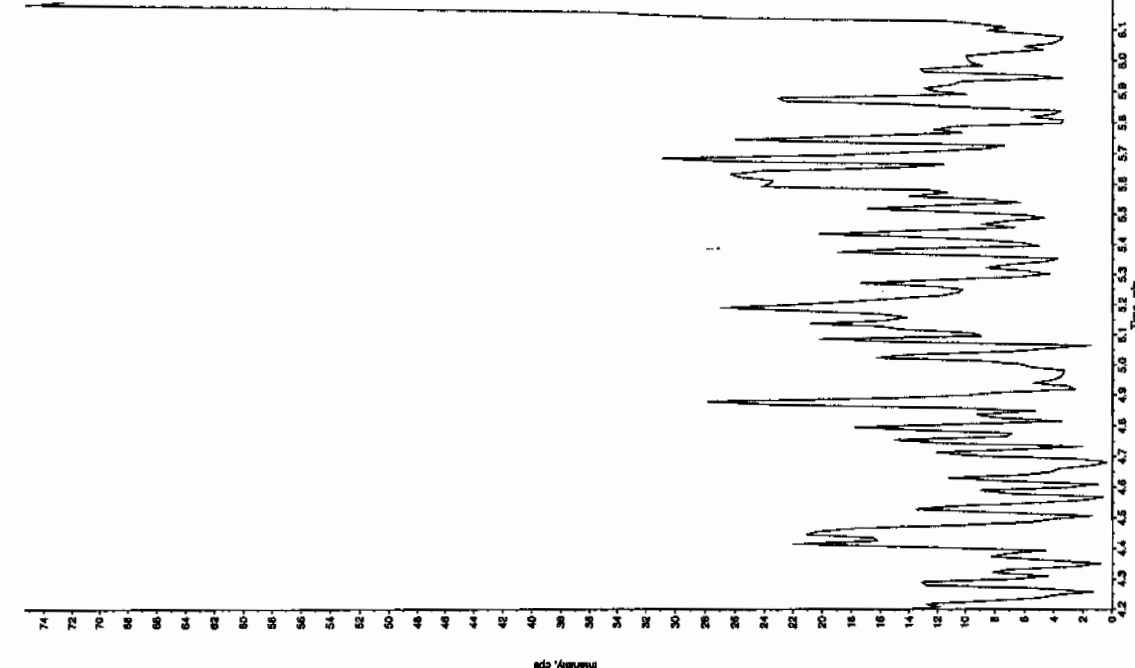
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:16:16 AM
 Acq. Time: 4:16:16 AM
 Modified: No



4/14/10 02:17:10

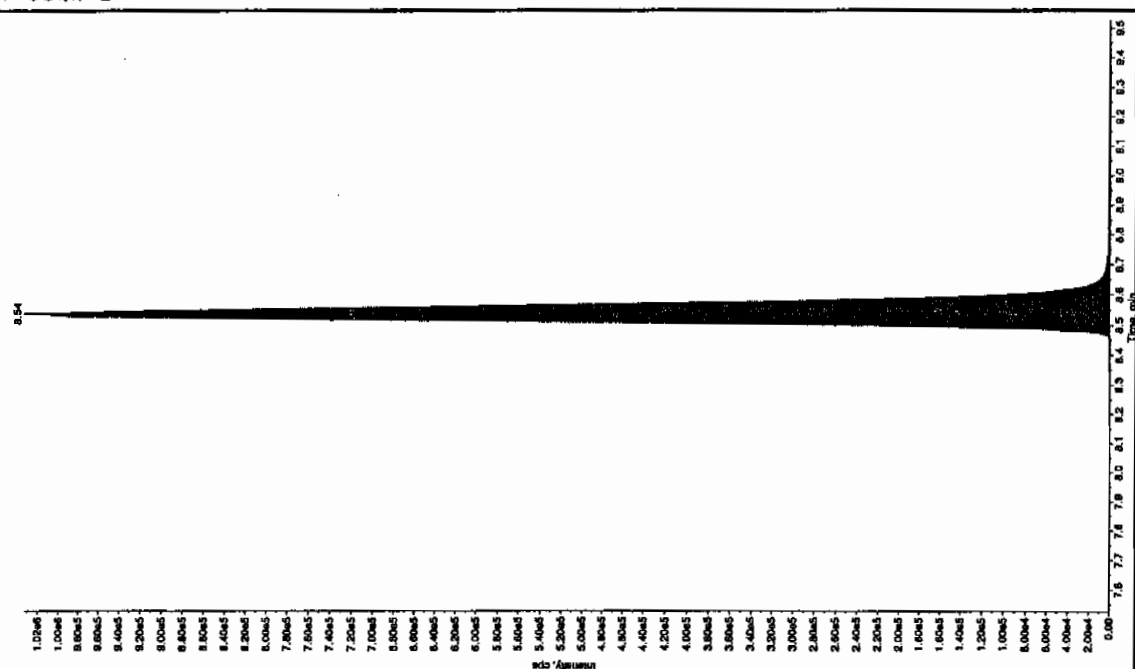
Sample Name: "245367003" Sample ID: "944807121.ER" File: "EXS02130070.wif"
 Peak Name: "29-Dinitro-4-nitrofluorene" Mass(es): "165.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:16:16 AM
 Acq. Time: 4:16:16 AM
 Modified: No



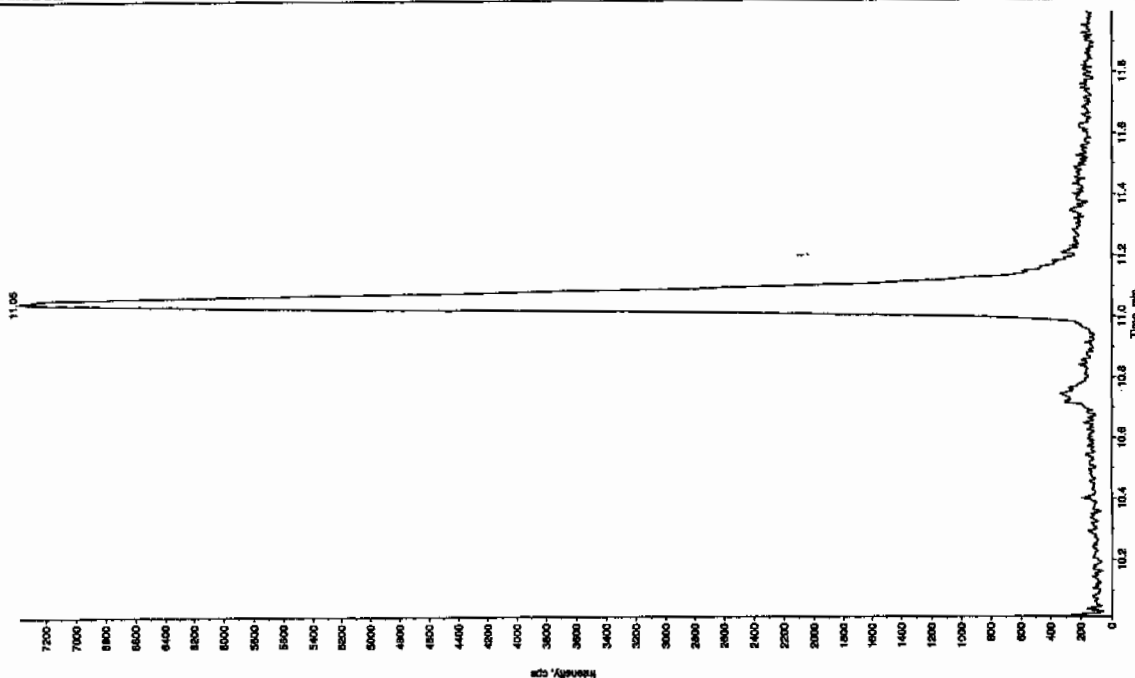
Sample Name: "245367003" Sample ID: "944807121.ER" File: "EXS02130070.wif"
 Peak Name: "14-Dinitrofluorene" Mass(es): "182.1751.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:16:16 AM
 Acq. Time: 4:16:16 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.0 points
 Ret. Window: 15.0 sec
 Ret. Offset: 0.5 min
 Ret. Relative RT: No
 Int. Type: Valley
 Retention Time: 8.54 min
 Area: 3.99e+006 counts
 Height: 1032965.942 cps
 Start Time: 8.43 min
 End Time: 8.91 min



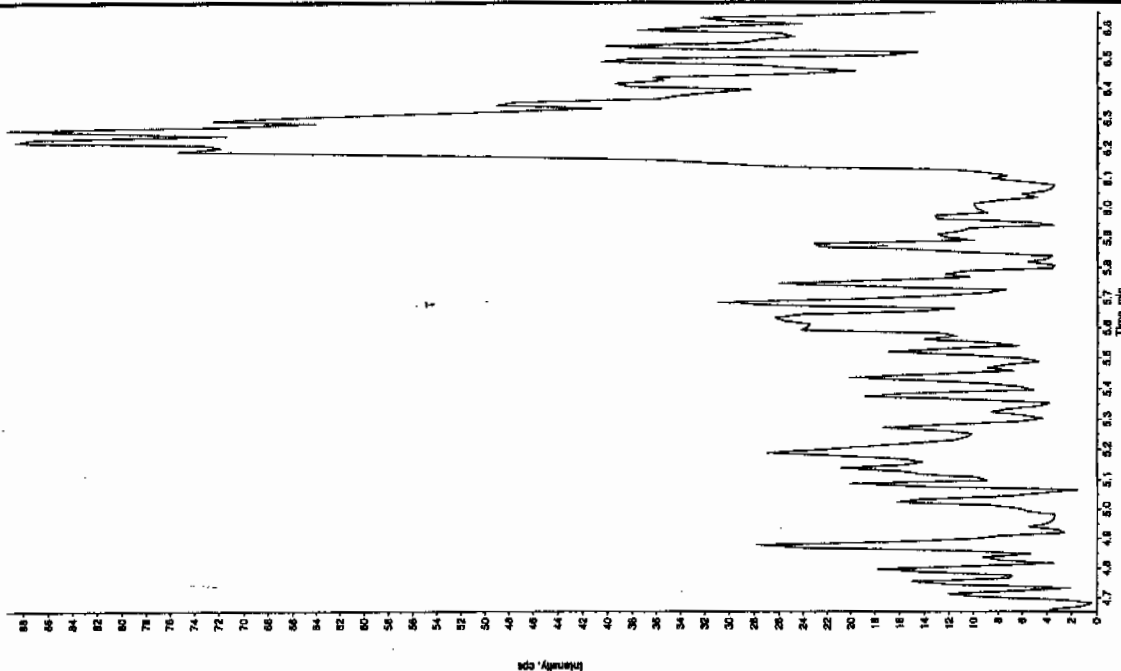
Sample Name: "245357003" Sample ID: "94490721LRF" File: "EXS2130070.wif"
 Peak Name: "Isi(ocresyl) phosphate" Mass(es): "359.1/91.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:16:16 AM
 Modified: No



Sample Name: "245357003" Sample ID: "94490721LRF" File: "EXS2130070.wif"
 Peak Name: "24-Dimino-6-nitroindane" Mass(es): "156.0/48.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:16:16 AM
 Modified: No



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208235a

Date Analyzed: 13-FEB-10 09:51

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 15 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208235a

Date: 13-Feb-2010

Time: 09:51:30

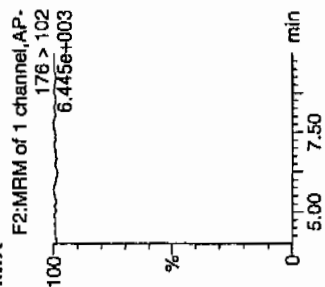
ID: 245387004

Vial: 2:2,B

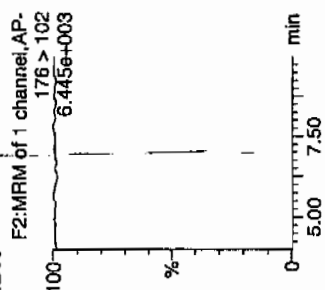
1477
2/14/10

194907/Sa22/121

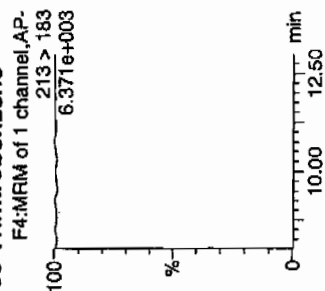
HMX



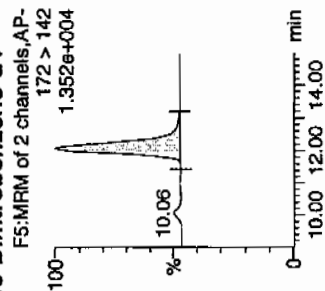
RDX



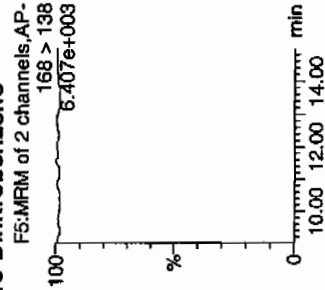
135-Trinitrobenzene



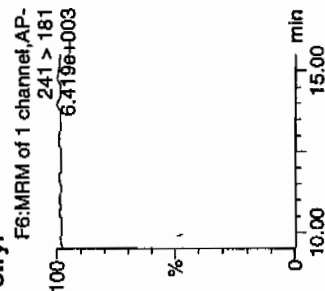
13-Dinitrobenzene-d4



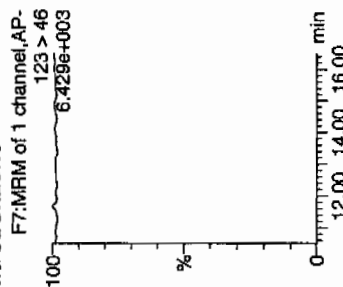
13-Dinitrobenzene



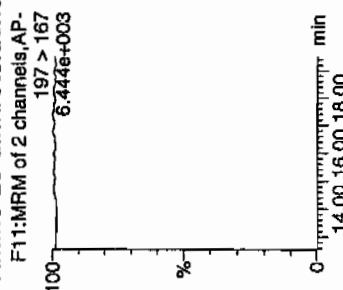
Tetryl



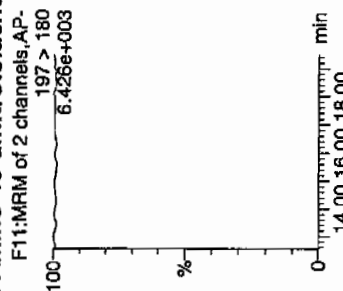
Nitrobenzene



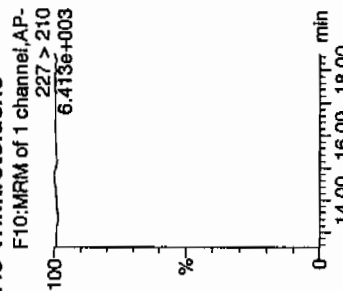
4-Amino-26-dinitrotoluene



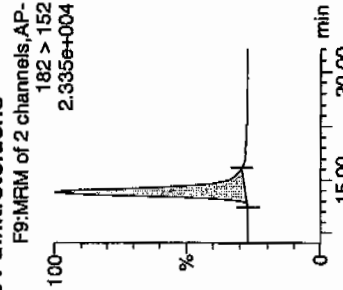
2-Amino-46-dinitrotoluene



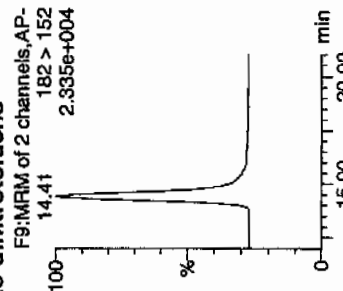
246-Trinitrotoluene



34-dinitrotoluene

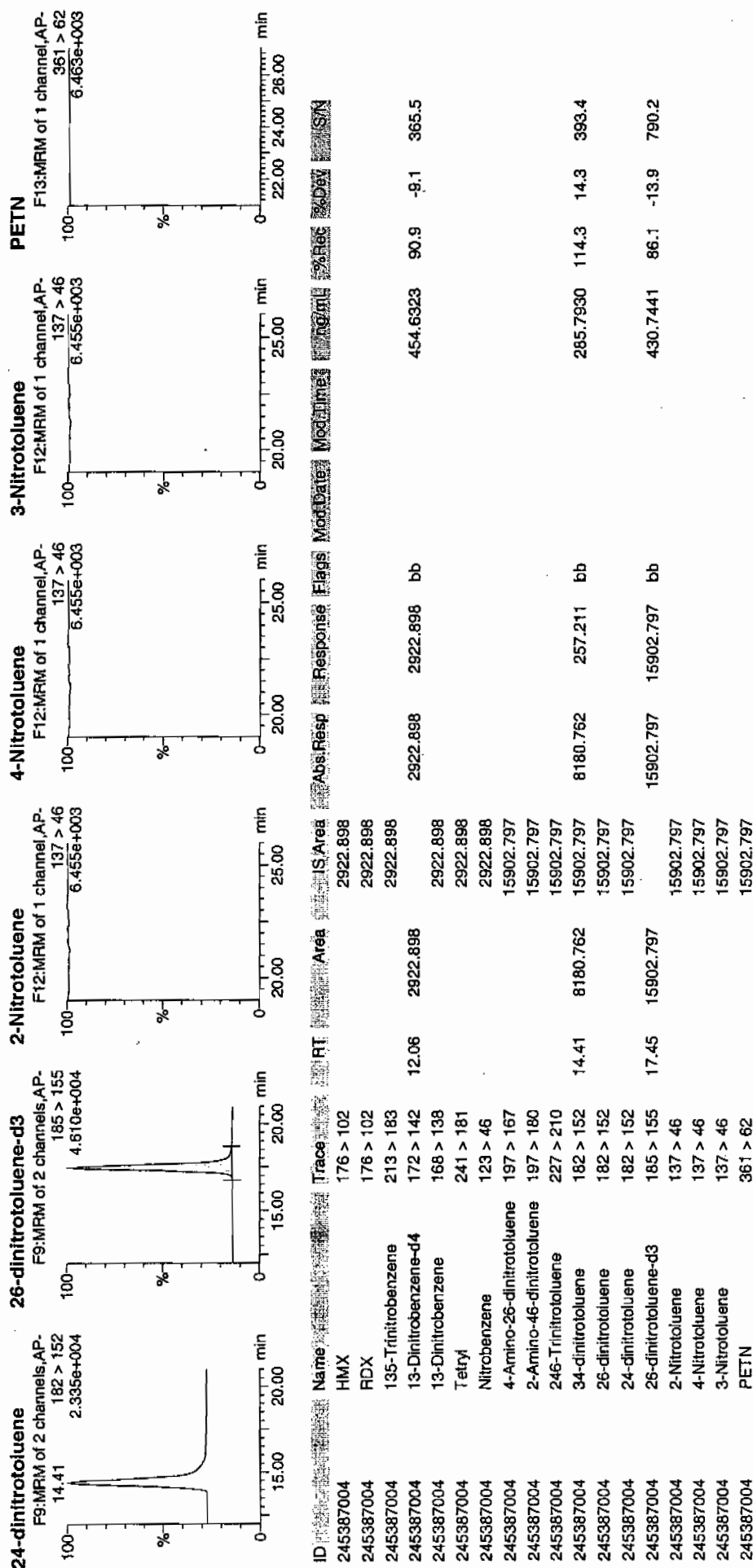


26-dinitrotoluene



Handwritten signature

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7686

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387004

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130071.wiff

Date Analyzed: 14-FEB-10 04:31

Units: ug/kg

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

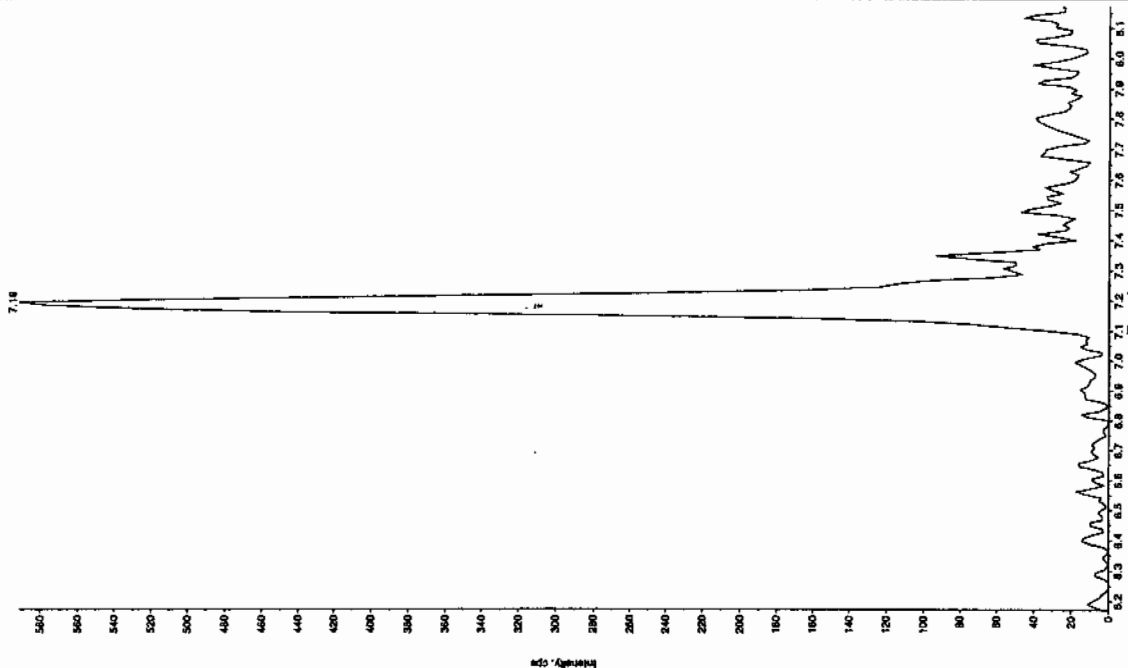
*Concentration =

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

Jan 2/15/10

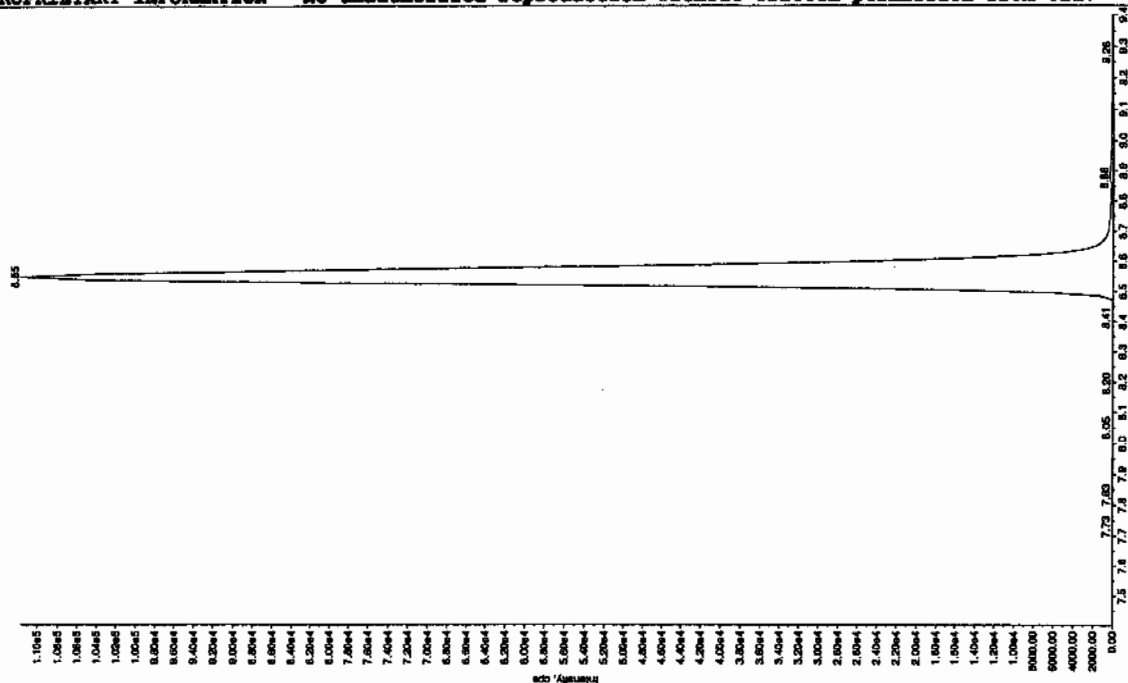
Sample Name: "245387004" Sample ID: "94490721LER" File: "EX602130071.wif"
 Peak Name: "ATB" Mass(es): "267.2/204.9 amu"
 Concent: "LCX8212S" Acquisition: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:31:58 AM
 Modified: No



Sample Name: "245387004" Sample ID: "94490721LER" File: "EX602130071.wif"
 Peak Name: "ATB" Mass(es): "182.0/46.0 amu"
 Concent: "LCX8212S" Acquisition: "1"

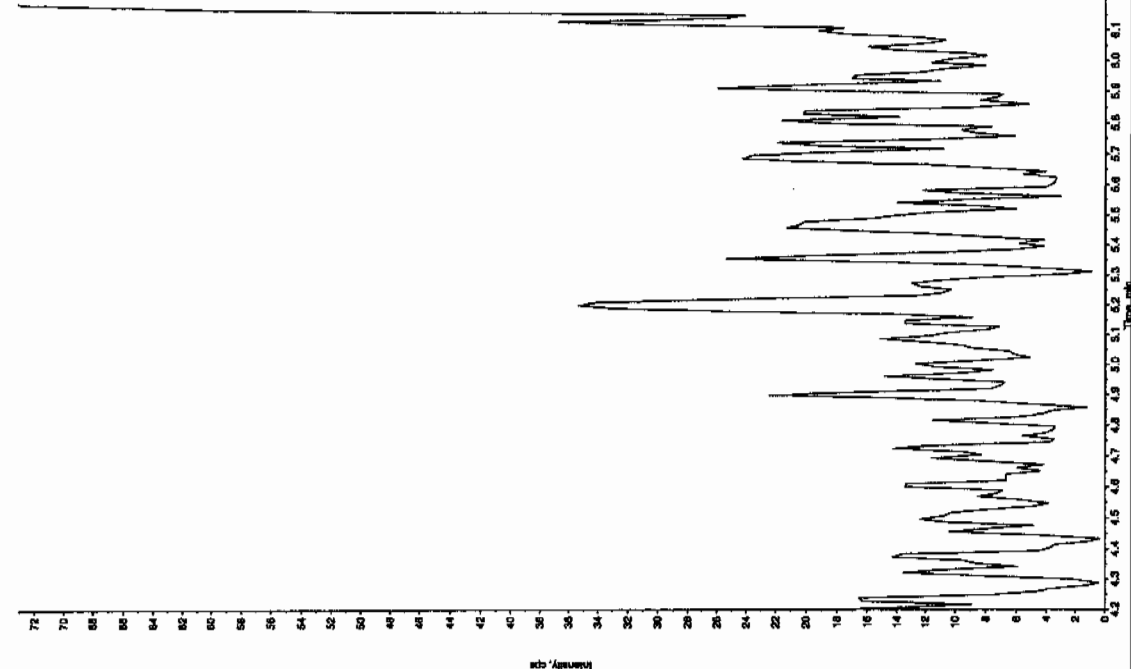
Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:31:58 AM
 Modified: No



Jan 2/17/10

Sample Name: "245387004" Sample ID: "94490721ER" File: "EXS02130071.wif"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "186.045.0 amu"
 Comment: "LCX032125" Annotation: "

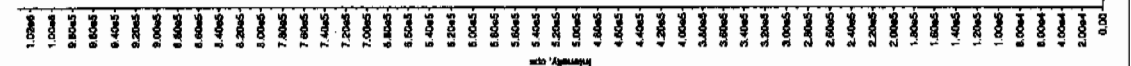
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:31:58 AM
 Modified: NO

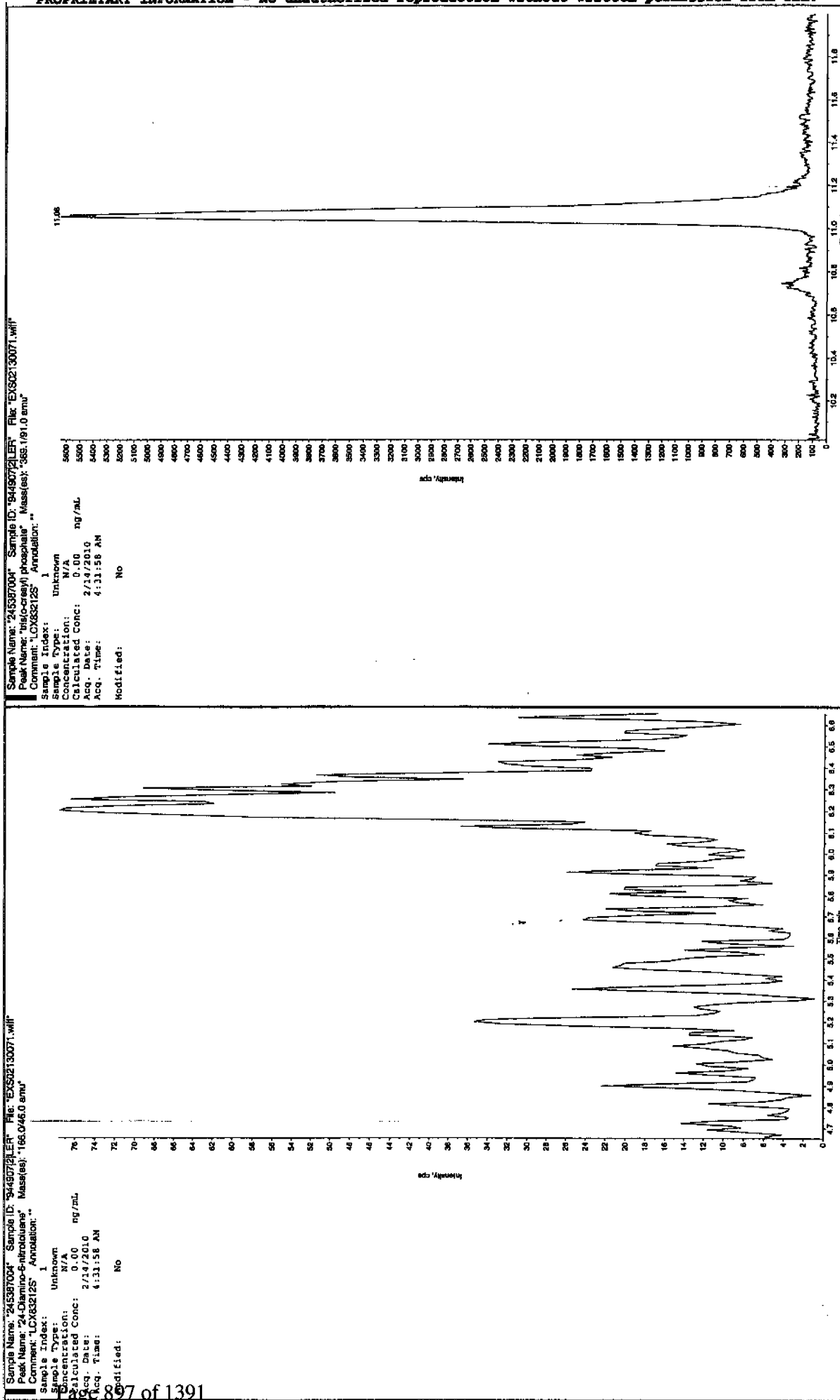


Sample Name: "245387004" Sample ID: "94490721ER" File: "EXS02130071.wif"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "186.045.0 amu"
 Comment: "LCX032125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:31:58 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 FT Window: 15.0 sec
 Expected RT: 8.53 min
 Relative RT: NO

Int. Type: Valley
 Retention Time: 8.54 min
 Area: 4.05e+05 counts
 Height: 103279.175 cps
 Start Time: 8.43 min
 End Time: 8.64 min





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208236a

Date Analyzed: 13-FEB-10 10:20

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208236a

Date: 13-Feb-2010

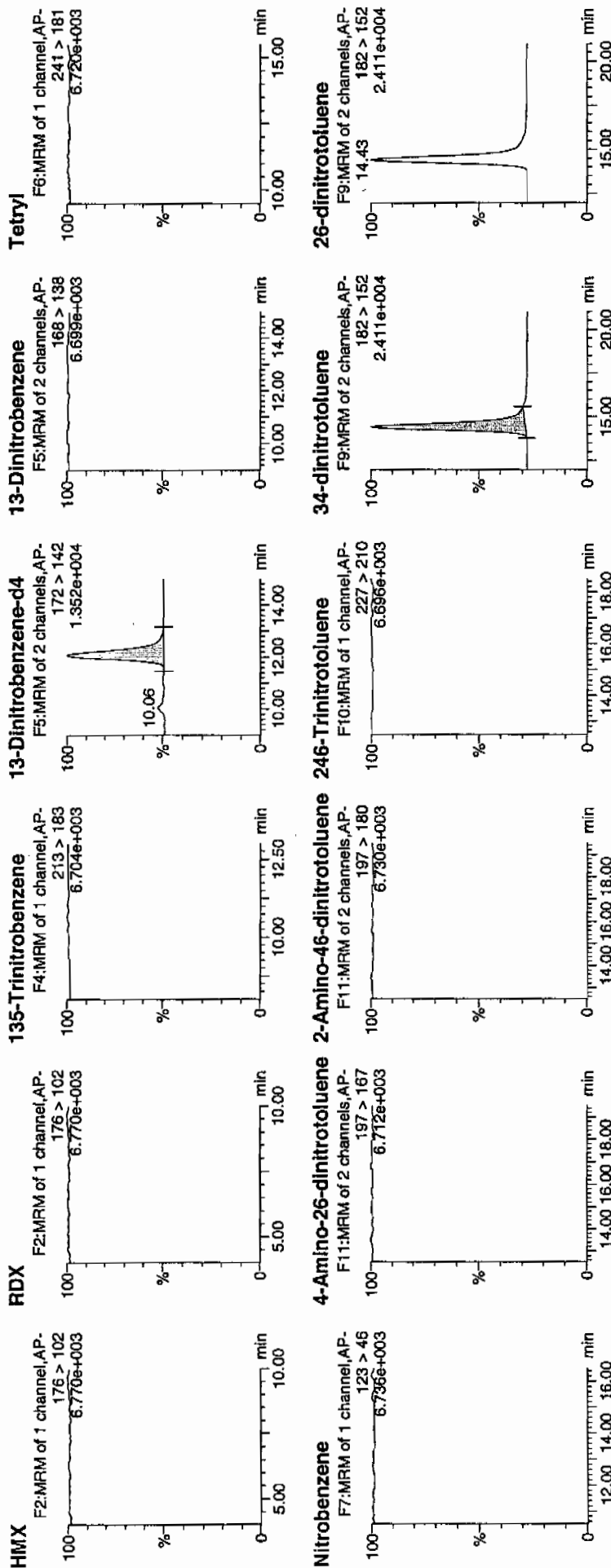
Time: 10:20:58

ID: 245387005

Vial: 2:2,C

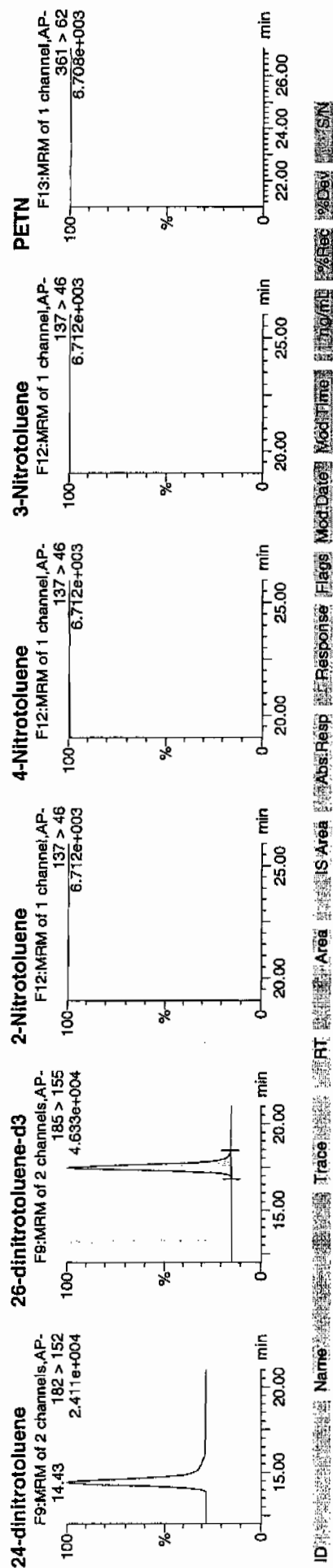
Handwritten: 121
Handwritten: 944907 / 8023

Handwritten: 1407
Handwritten: 2/14/10



Handwritten: 12/13/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Inj. Vol	% Rec	% Dev	SN
245387005	HMX	176 > 102			2835.941									
245387005	RDX	176 > 102			2835.941									
245387005	135-Trinitrobenzene	213 > 183			2835.941									
245387005	13-Dinitrobenzene-d4	172 > 142	12.10	2835.941		2835.941	2835.941	bb			441.1069	88.2	-11.8	321.0
245387005	13-Dinitrobenzene	168 > 136			2835.941									
245387005	Tetryl	241 > 181			2835.941									
245387005	Nitrobenzene	123 > 46			2835.941									
245387005	4-Amino-26-dinitrotoluene	197 > 167			15887.293									
245387005	2-Amino-46-dinitrotoluene	197 > 180			15887.293									
245387005	246-Trinitrotoluene	227 > 210			15887.293									
245387005	34-dinitrotoluene	182 > 152	14.43	8331.804	15887.293	8331.804	262.216	bb			291.3537	116.5	16.5	646.9
245387005	26-dinitrotoluene	182 > 152			15887.293									
245387005	24-dinitrotoluene	182 > 152			15887.293									
245387005	26-dinitrotoluene-d3	185 > 155	17.47	15887.293		15887.293	15887.293	bb			430.3241	86.1	-13.9	722.1
245387005	2-Nitrotoluene	137 > 46			15887.293									
245387005	4-Nitrotoluene	137 > 46			15887.293									
245387005	3-Nitrotoluene	137 > 46			15887.293									
245387005	PETN	361 > 62			15887.293									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7688

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387005

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130072.wiff

Date Analyzed: 14-FEB-10 04:47

Units: ug/kg

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

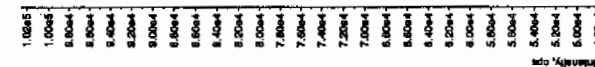
*Concentration =

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

See 2/15/10

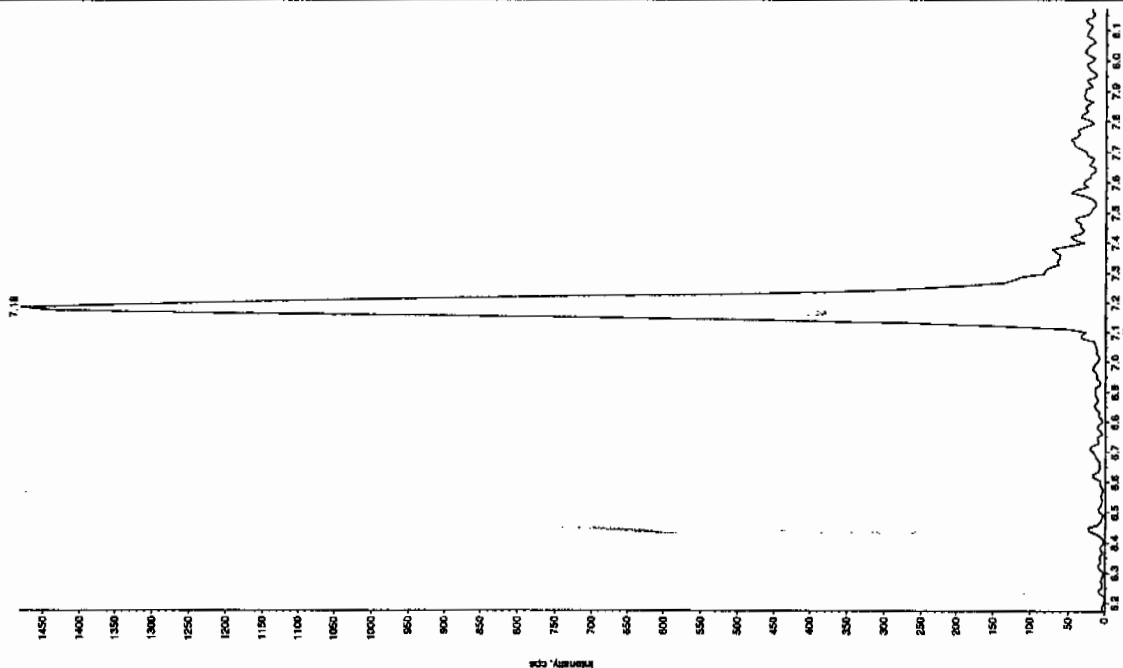
Sample Name: "245387005" Sample ID: "94480721.ER" File: "EX502130072.wif"
 Peak Name: "35 Chloroquine" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:47:39 AM
 Modified: No



Sample Name: "245387005" Sample ID: "94480721.ER" File: "EX502130072.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: "

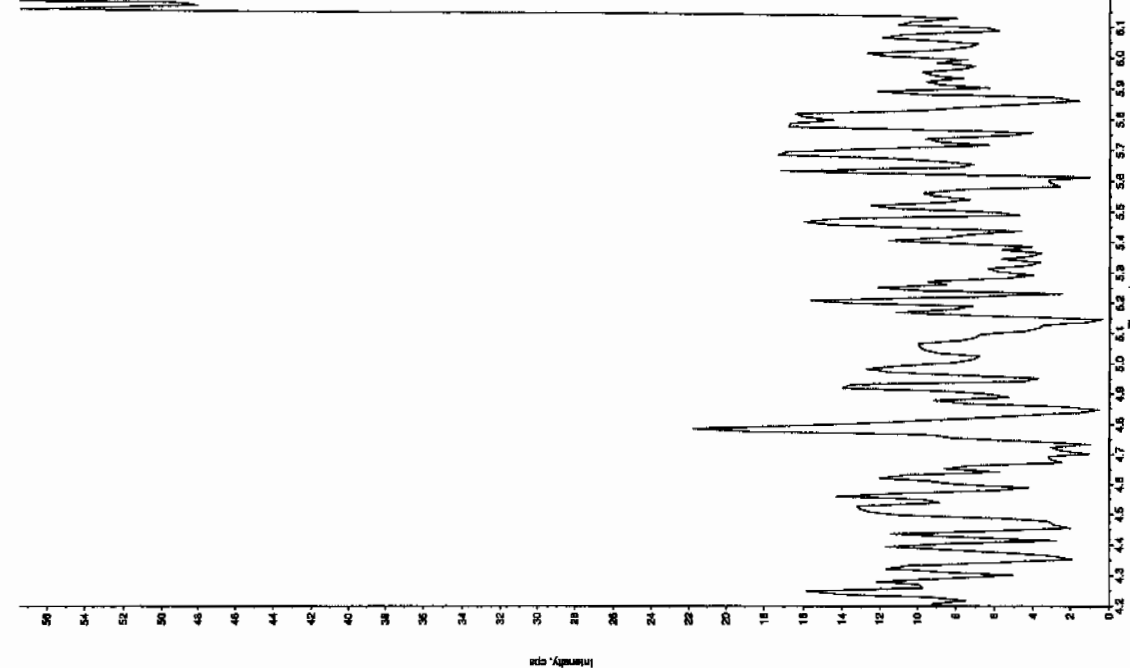
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:47:39 AM
 Modified: No



See 02/17/10

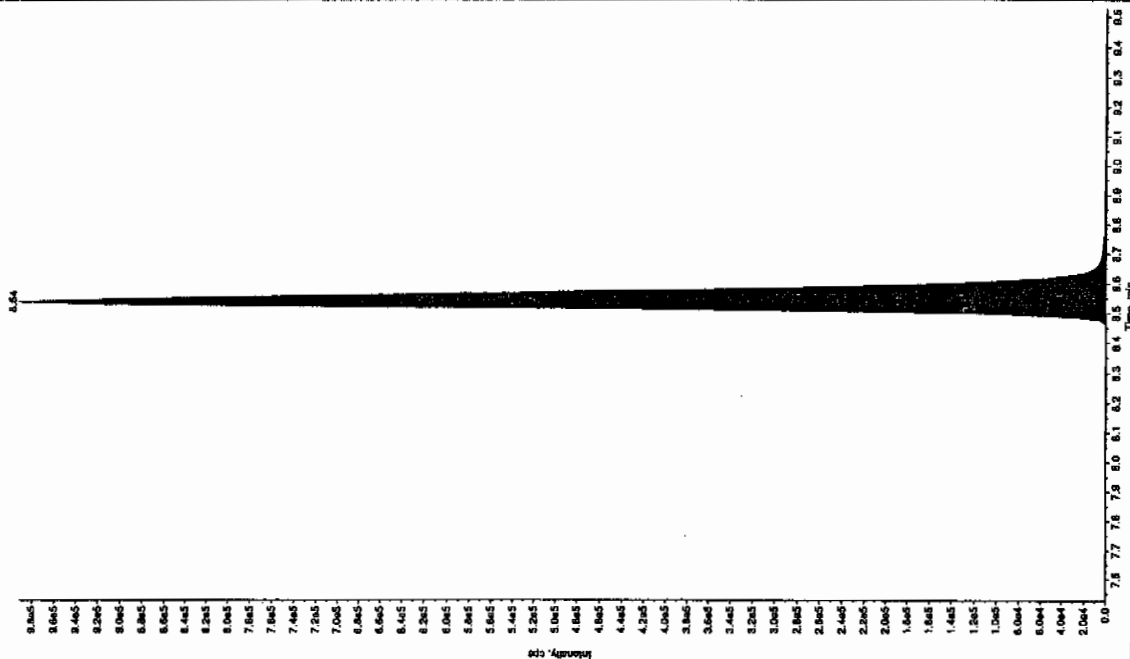
Sample Name: "245387005" Sample ID: "944807P1L1" File: "EXS02130072.wif"
 Peak Name: "24-Diamino-4-nitrobenzene" Mass(es): "188.0460 amu"
 Comment: "LCX032125" Annotation: ""

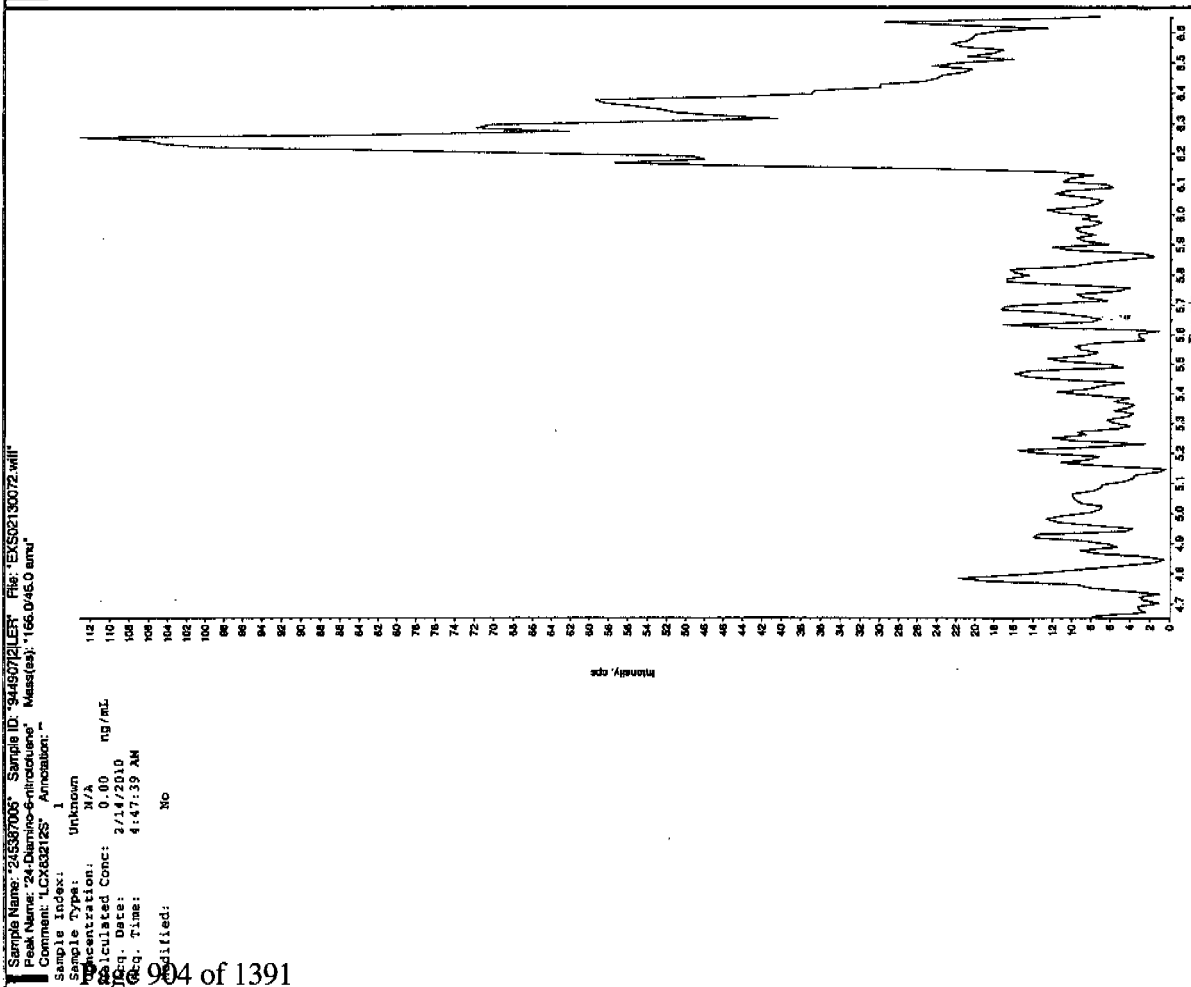
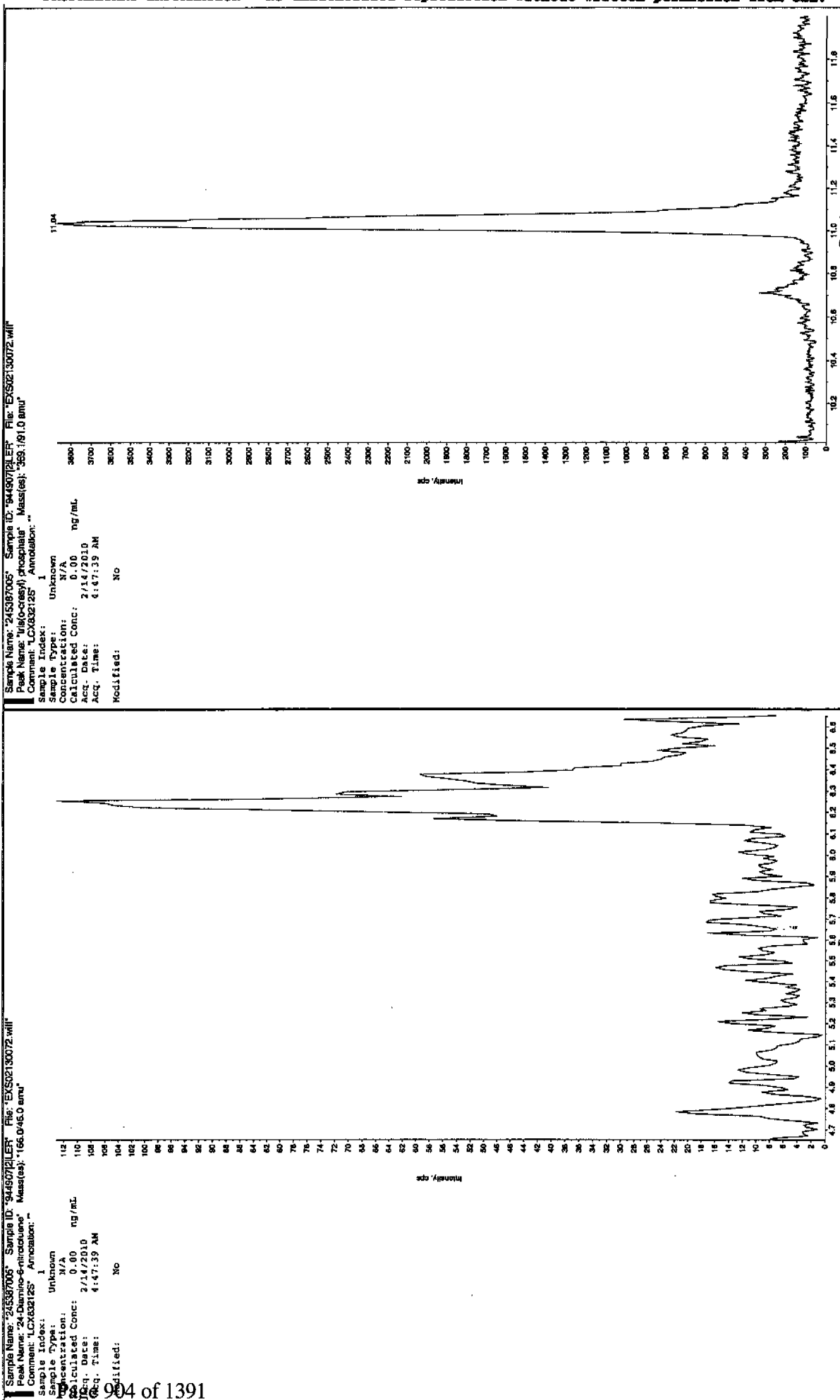
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:47:39 AM
 Modified: No



Sample Name: "245387005" Sample ID: "944807P1L1" File: "EXS02130072.wif"
 Peak Name: "24-Diamino-4-nitrobenzene" Mass(es): "182.1515 amu"
 Comment: "LCX032125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 324. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 4:47:39 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Time Window: 15.0 sec
 Expected RT: 8.53 min
 Peak Relative RT: No
 Int. Type: Valley
 Retention Time: 8.54 min
 Area: 3.82e+006 counts
 Height: 991850.403 cps
 Start Time: 8.43 min
 End Time: 8.92 min





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208237a

Date Analyzed: 13-FEB-10 10:50

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208237a

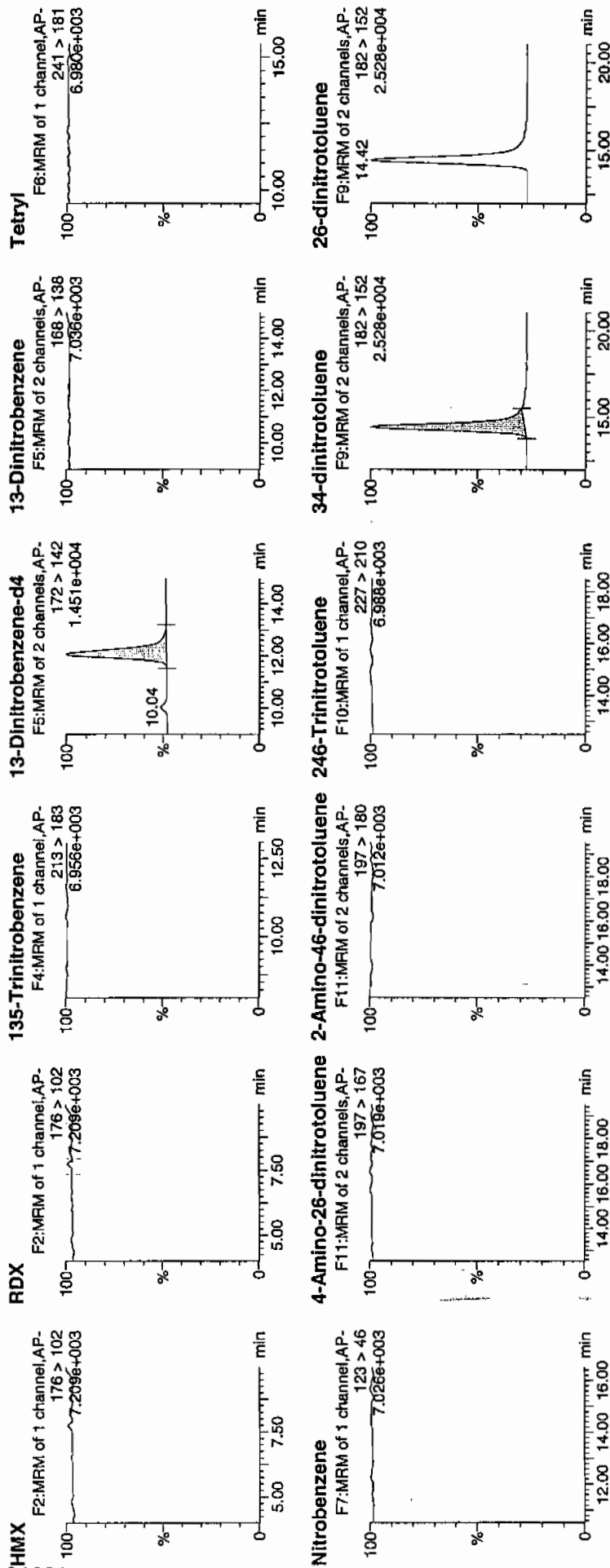
Date: 13-Feb-2010

Time: 10:50:42

ID: 245387006

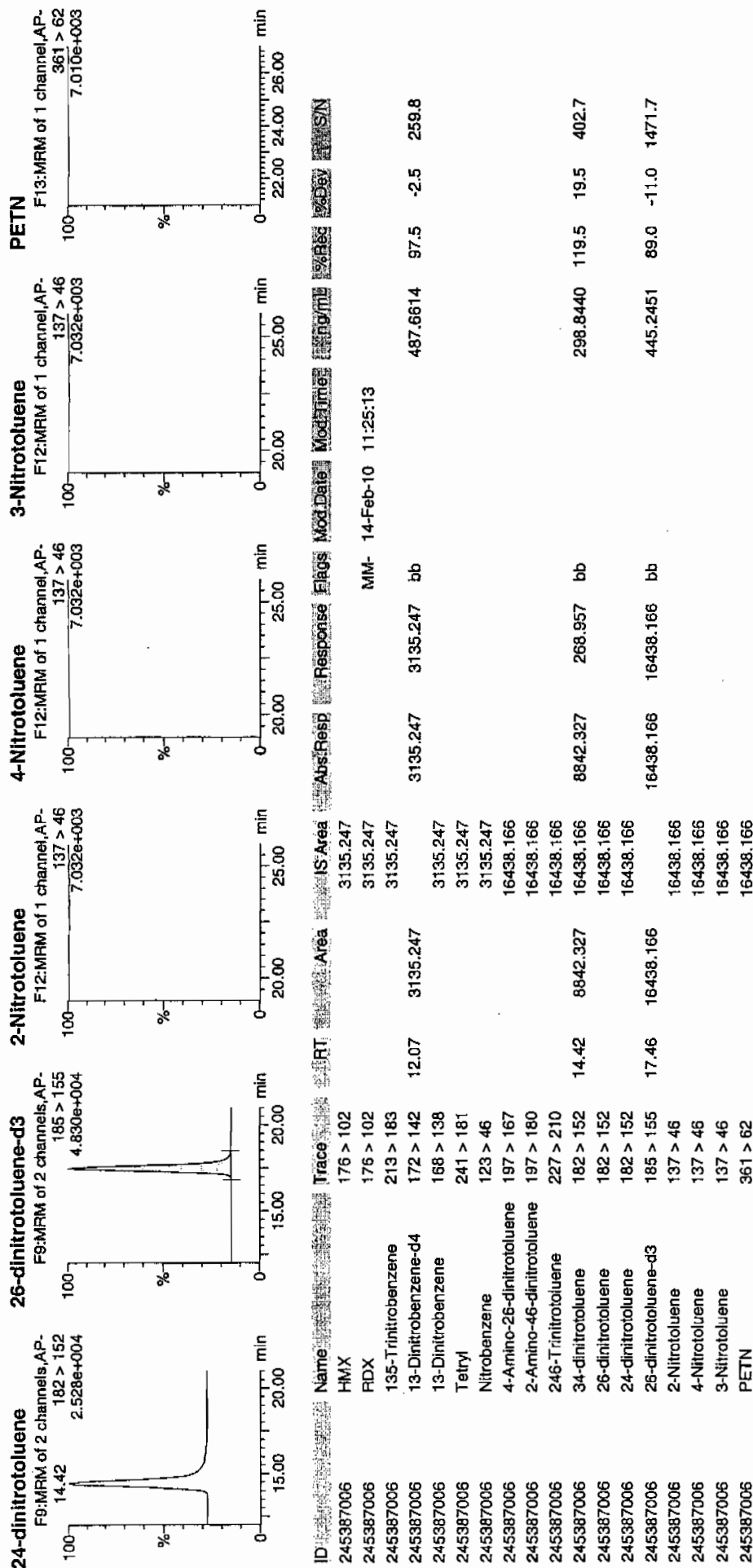
Vial: 2:2,D

Handwritten: 2/14/10 94407 / 8000 / 21



Handwritten: 2/14/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7684

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130073.wiff

Date Analyzed: 14-FEB-10 05:03

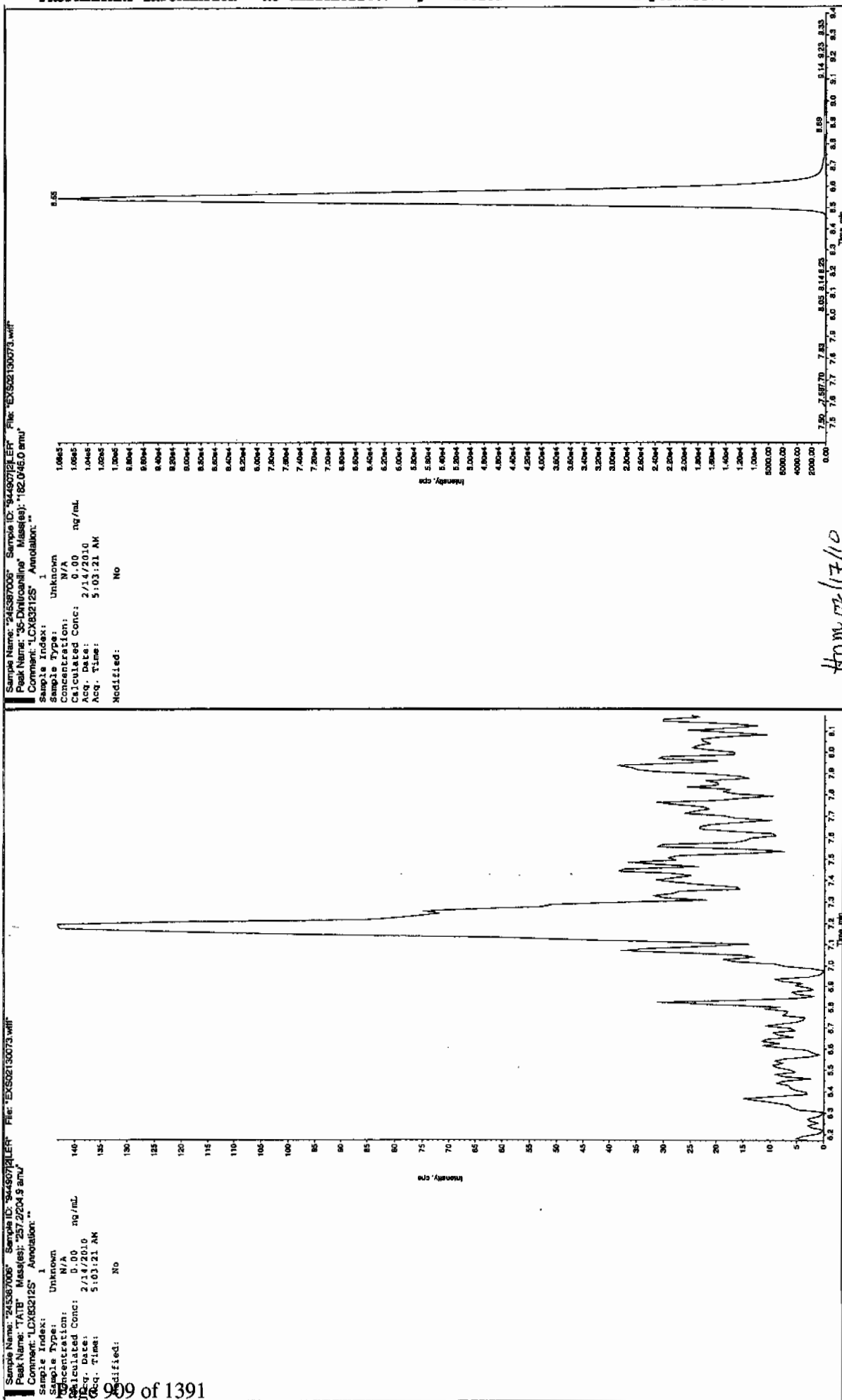
Units: ug/kg

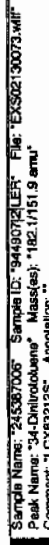
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

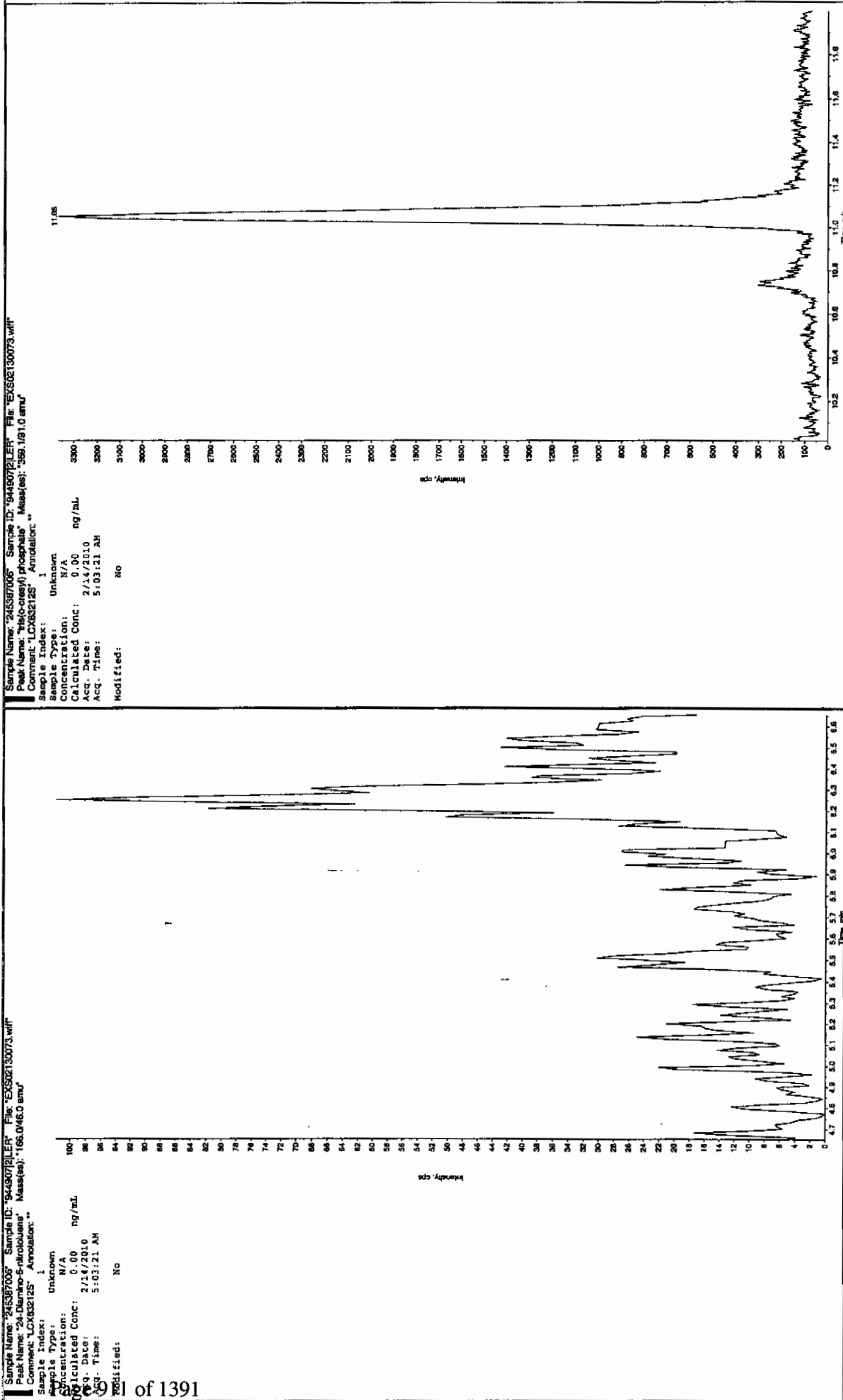
*Concentration =

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

See 2/15/10







*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Moisture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208241a

Date Analyzed: 13-FEB-10 12:49

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 27 of 95

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208241a

Date: 13-Feb-2010

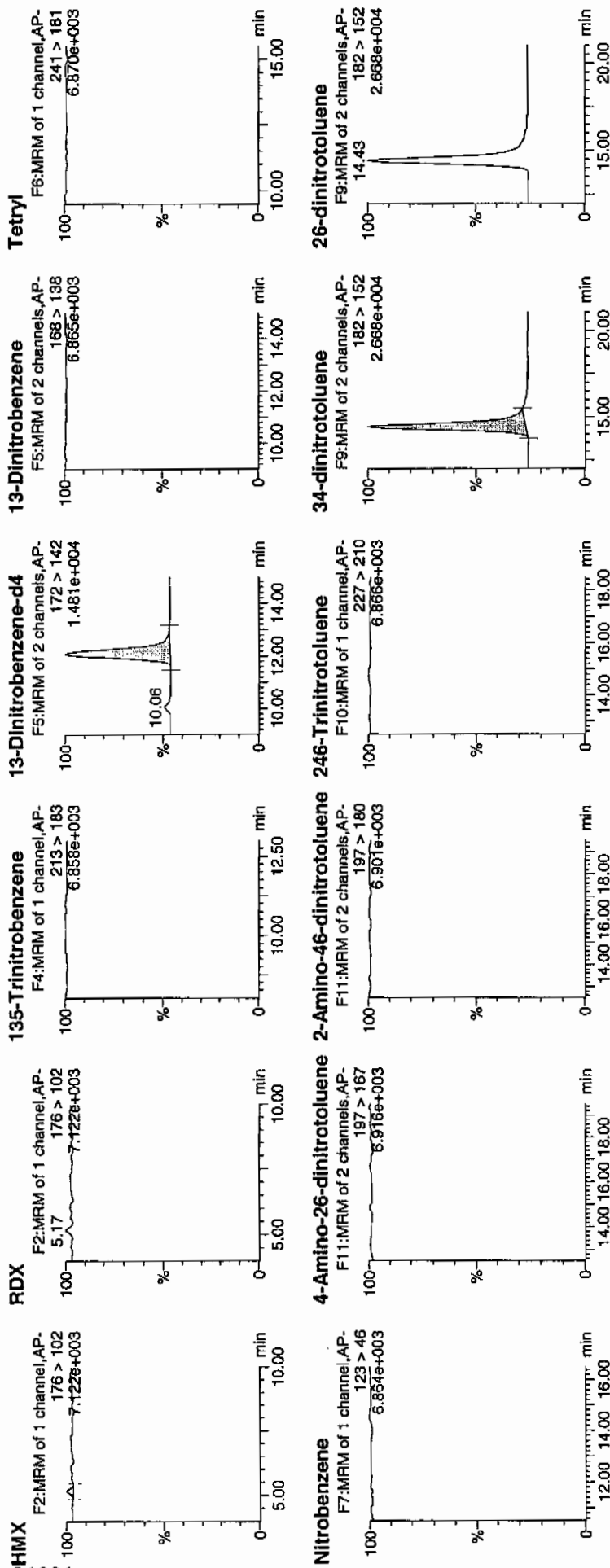
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ID: 245387007

Vial: 2;2,E

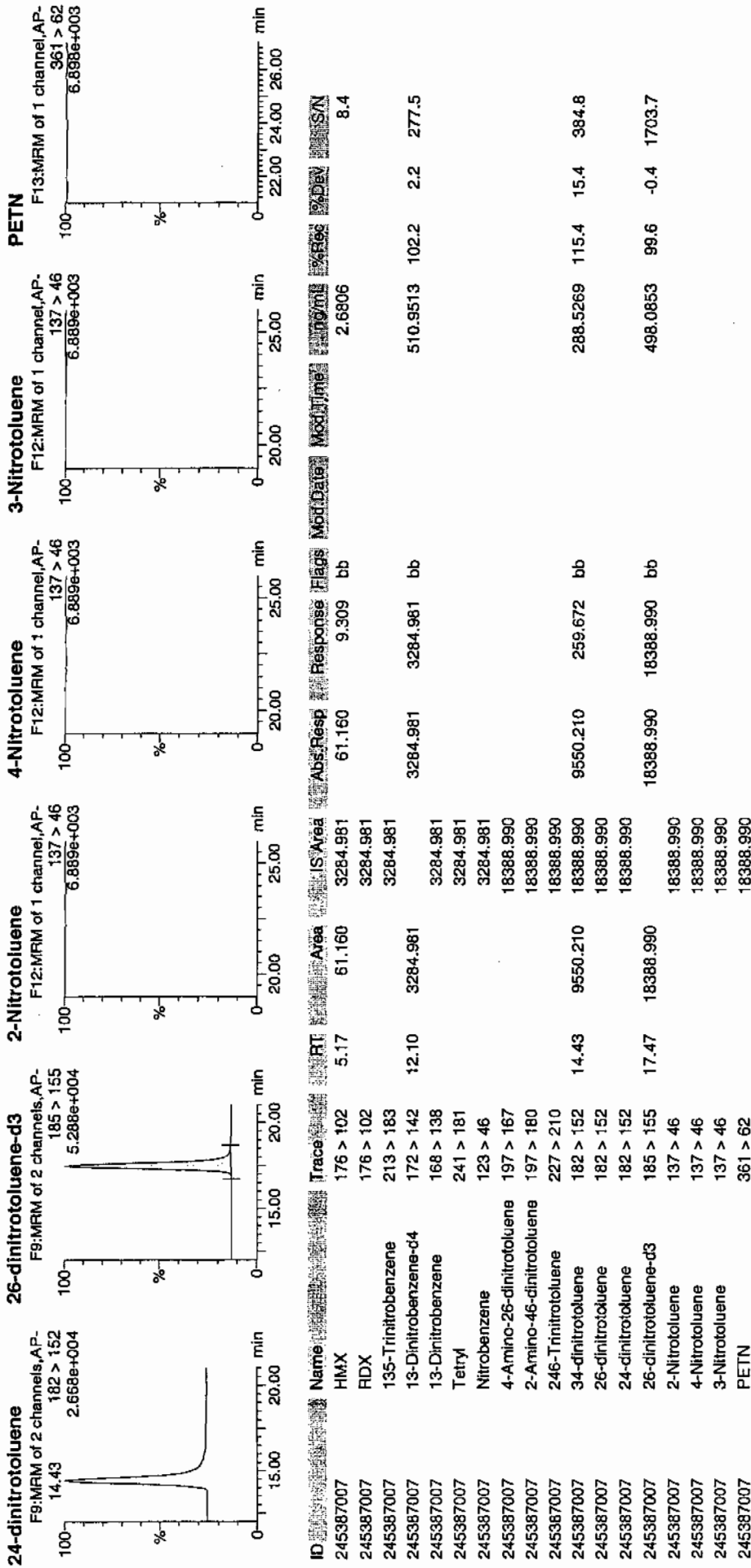
1407
2/14/10

1407
2/14/10
944907 / 8000 / 2 /



4000 12/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7687

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387007

Sample Amount 2

Moisture: 26.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130077.wiff

Date Analyzed: 14-FEB-10 06:06

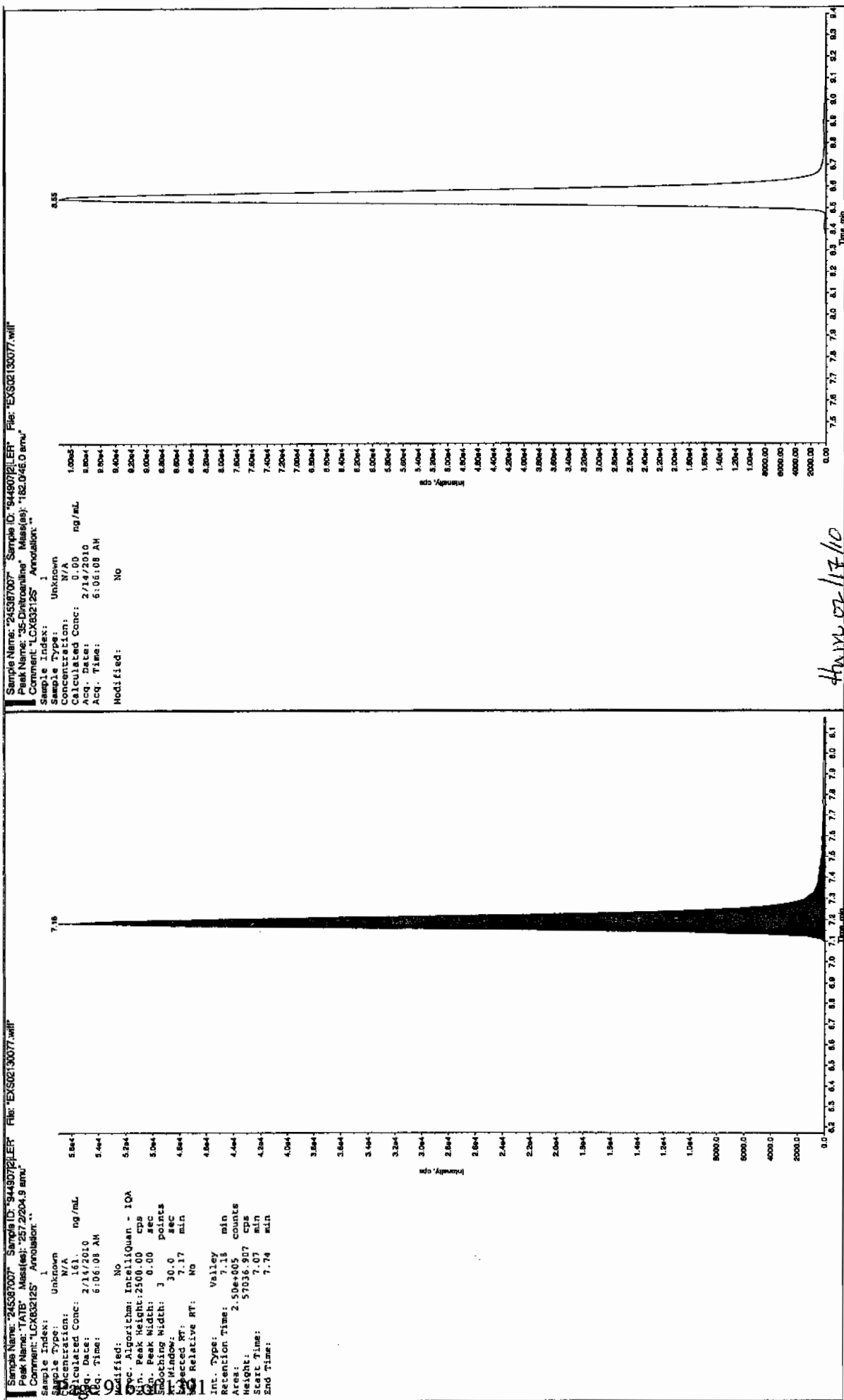
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1610	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

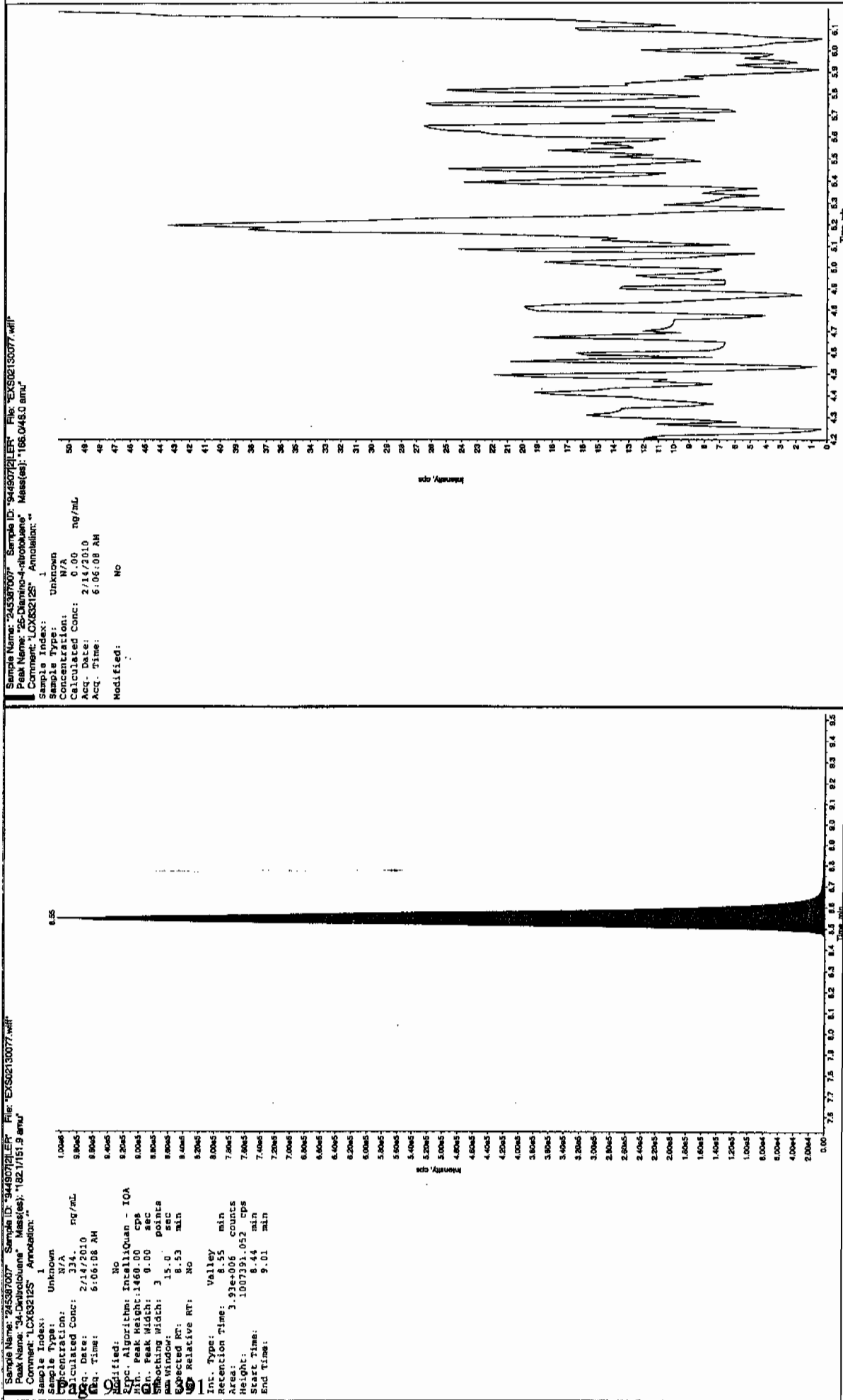
*Concentration =

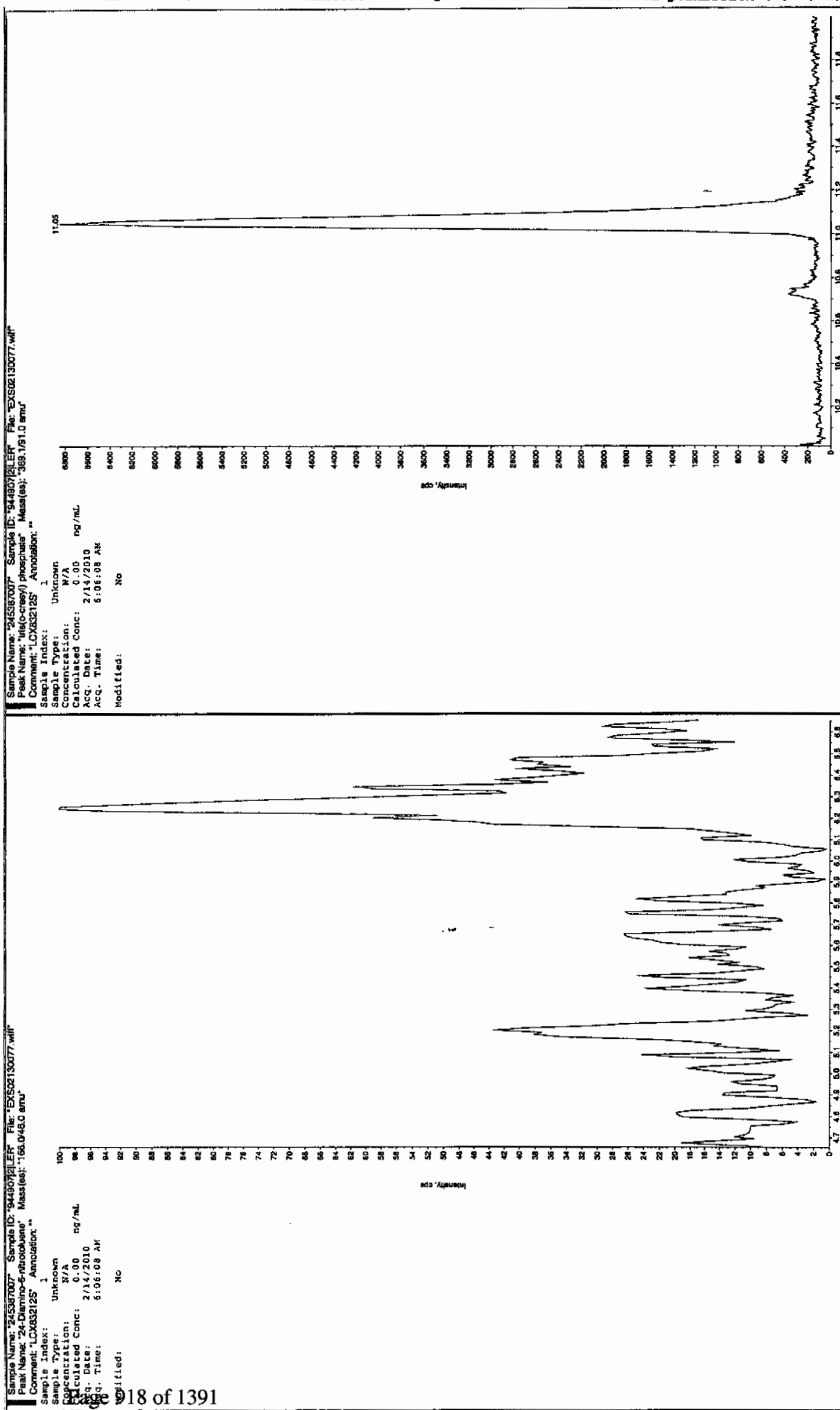
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Run 215110



Run 215110





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208242a

Date Analyzed: 13-FEB-10 13:18

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

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Date: 13-Feb-2010

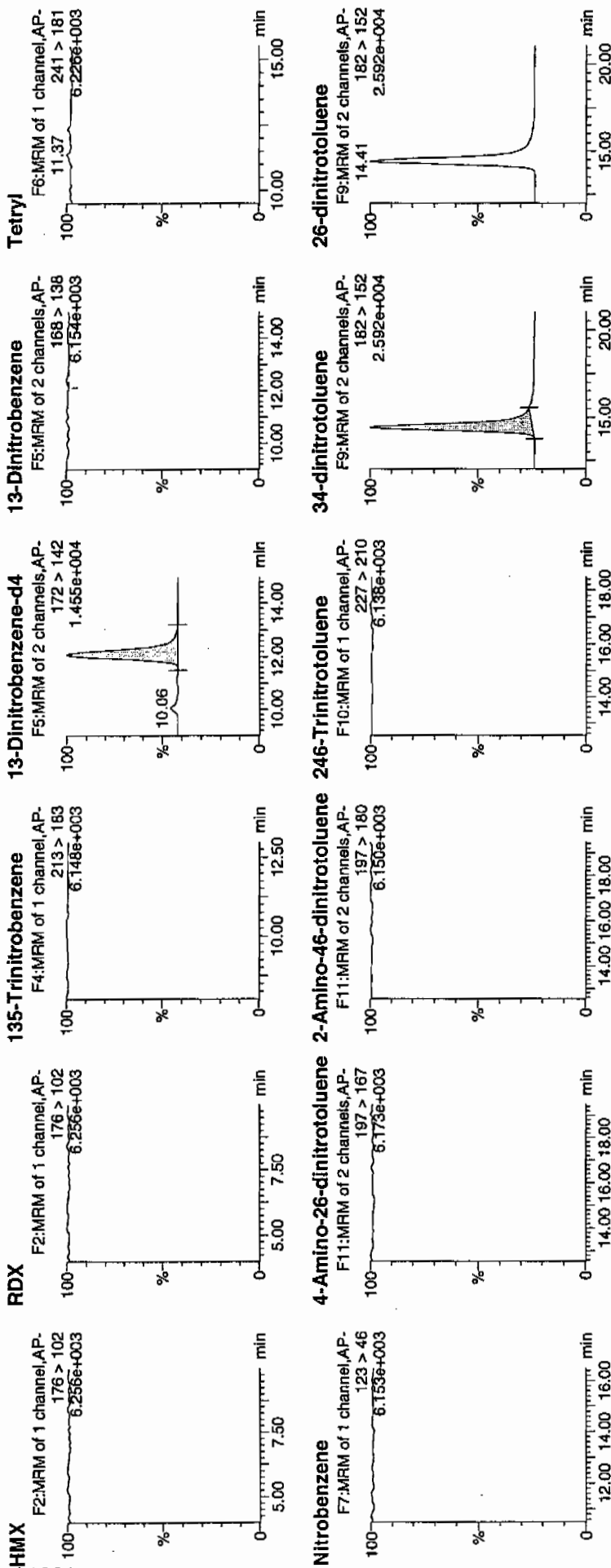
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ID: 245387008

Vial: 2:2,F

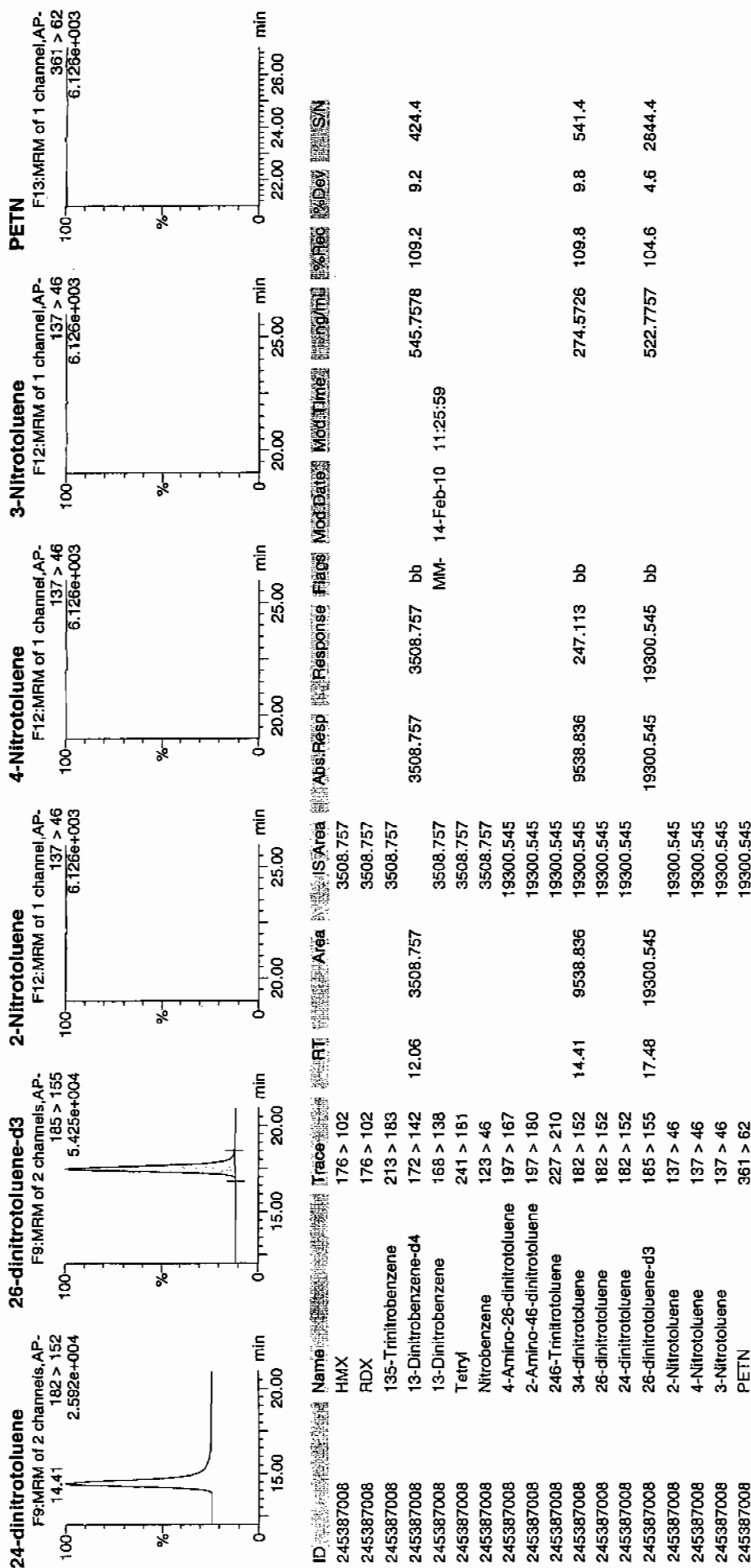
1477
2/14/10

1477
2/14/10



done 2/17/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7681

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387008

Sample Amount 2

Moisture: 22.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140014.wiff

Date Analyzed: 14-FEB-10 17:41

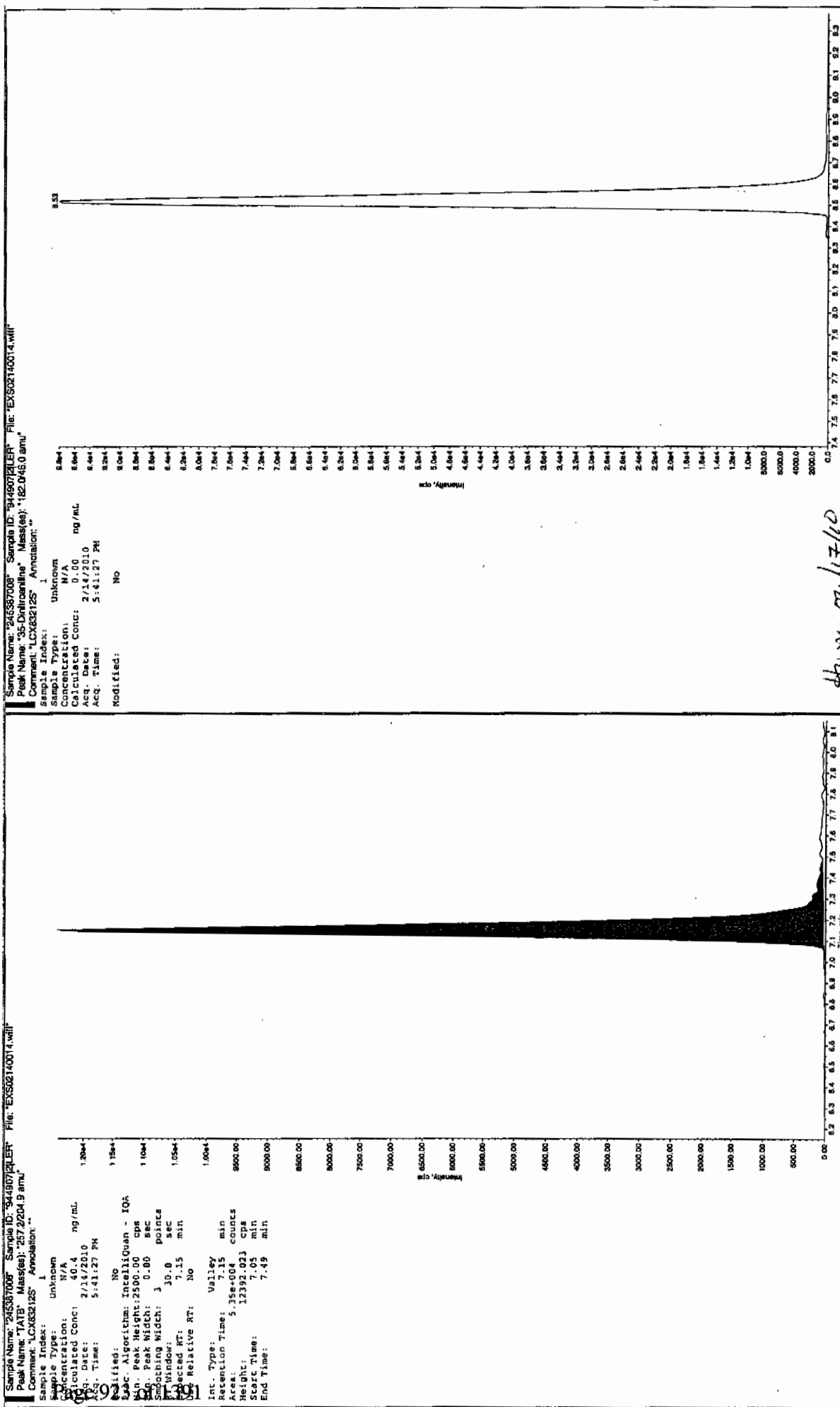
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	404	J
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

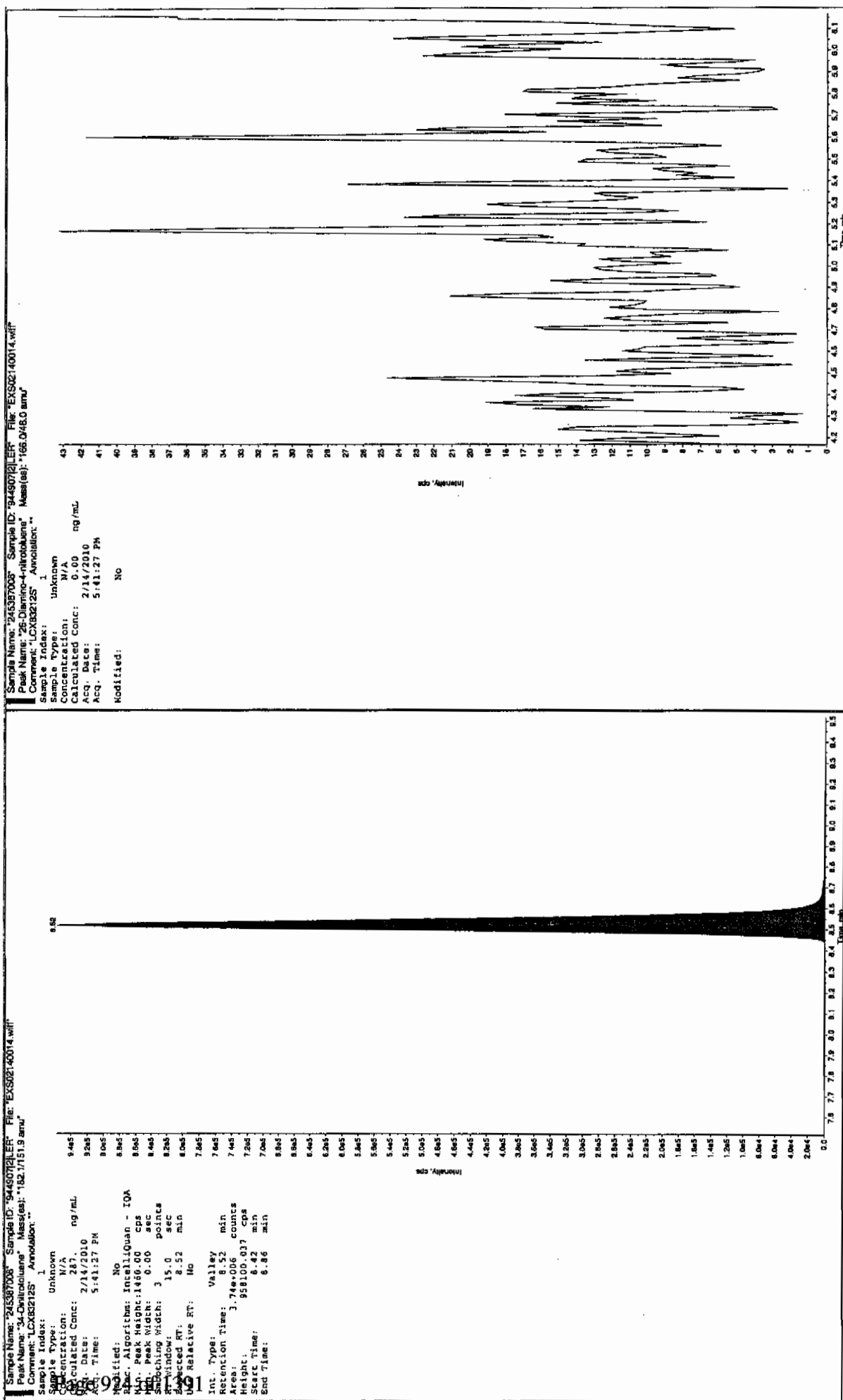
*Concentration =

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

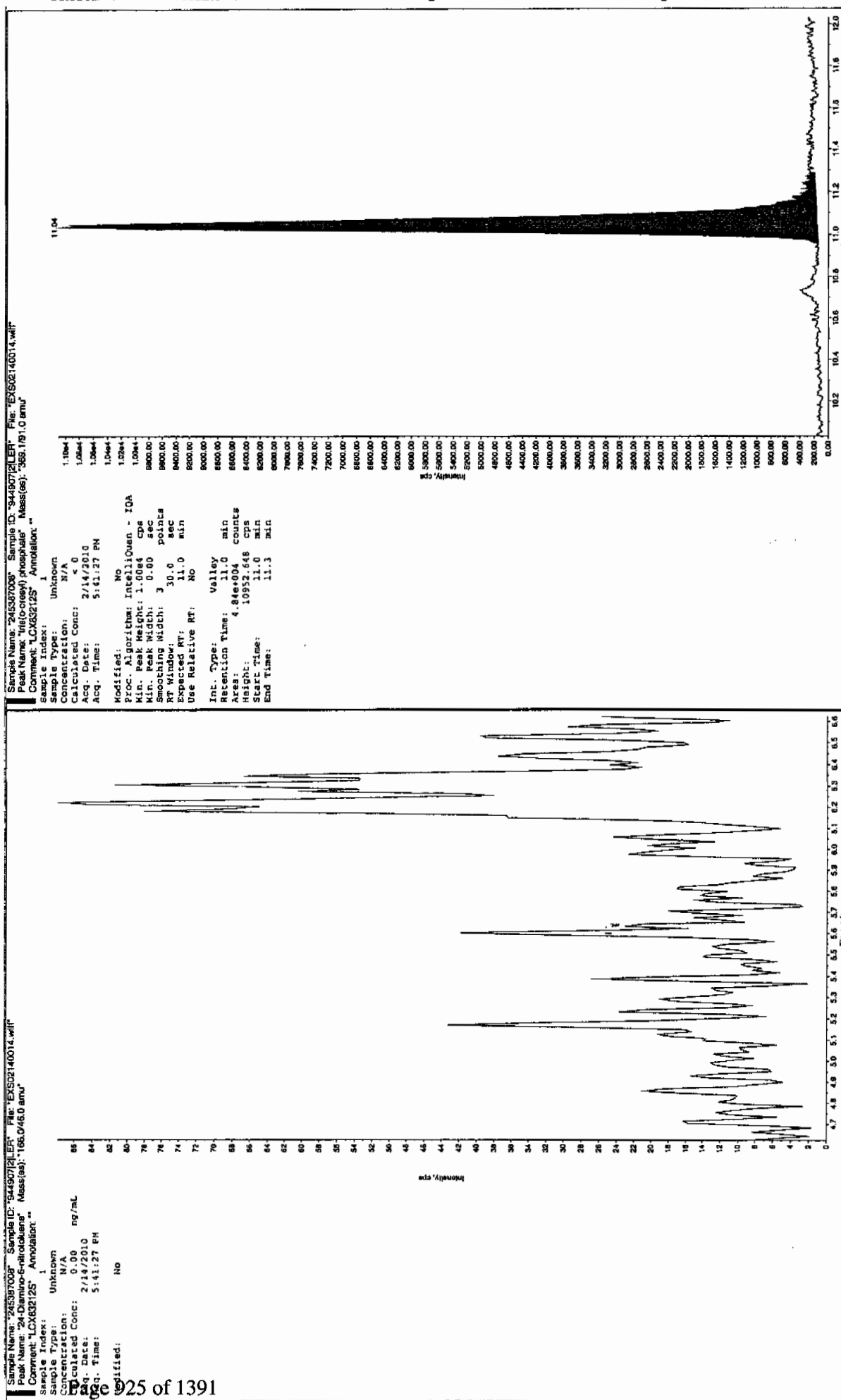
See 2/17/10



thru 02/17/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Page 925 of 1391

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208243a

Date Analyzed: 13-FEB-10 13:48

Units: ug/kg

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

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208243a

Date: 13-Feb-2010

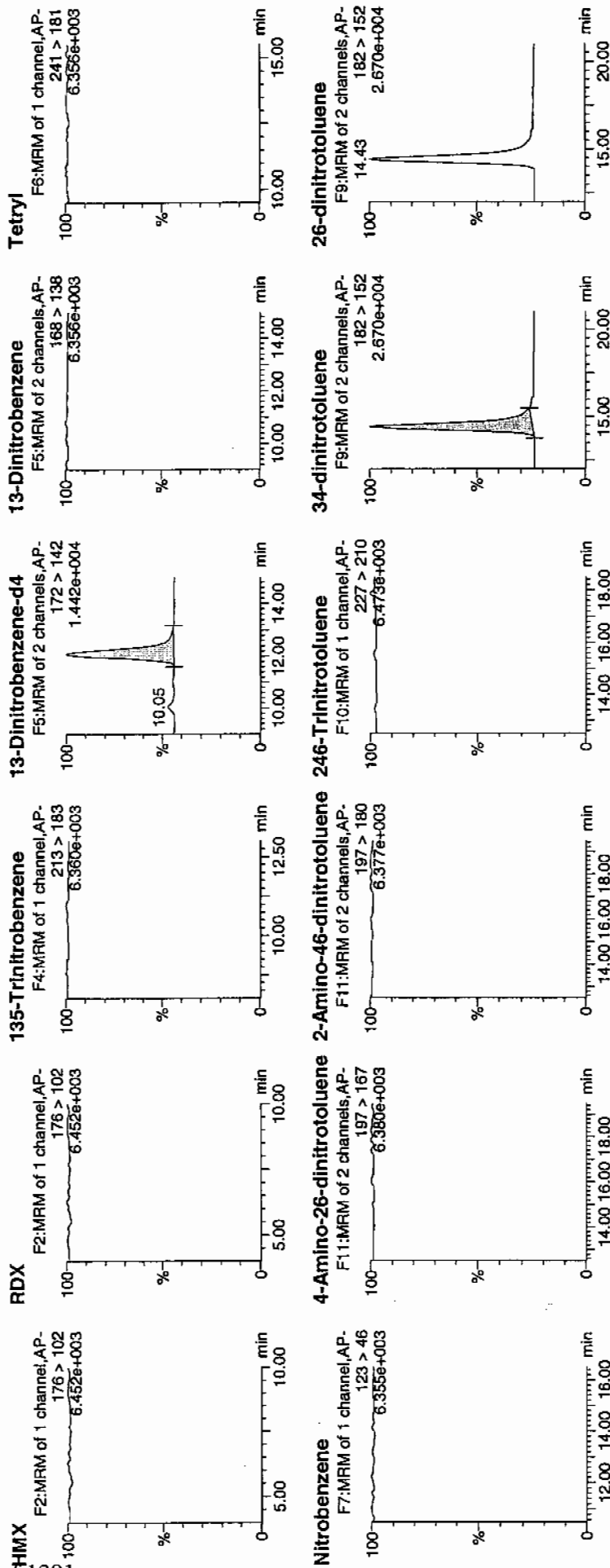
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ID: 245387009

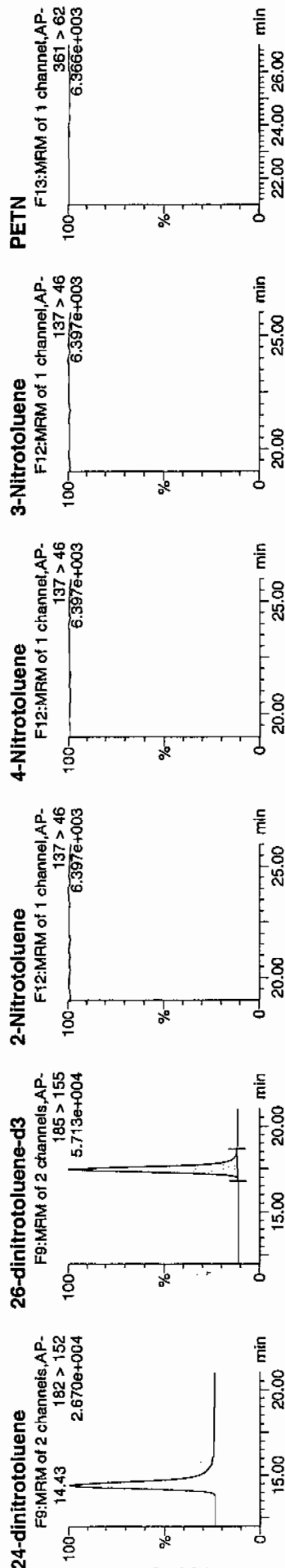
Vial: 2:3.A

100%
2/14/10

WAX 944907 / Savar / 21



Ham 02/17/10



ID	Name	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	S/N
245387009	HMZ	176 > 102	3357.028	3357.028								
245387009	RDX	176 > 102	3357.028	3357.028								
245387009	135-Trinitrobenzene	213 > 183	3357.028	3357.028								
245387009	13-Dinitrobenzene-d4	172 > 142	12.10	3357.028	3357.028	3357.028	bb			522.1576	104.4	4.4
245387009	13-Dinitrobenzene	168 > 138										
245387009	Teiry	241 > 181										
245387009	Nitrobenzene	123 > 46										
245387009	4-Amino-26-dinitrotoluene	197 > 167										
245387009	2-Amino-46-dinitrotoluene	197 > 180										
245387009	246-Trinitrotoluene	227 > 210										
245387009	34-dinitrotoluene	182 > 152	14.43	9935.102	9935.102	244.564	bb			271.7397	108.7	8.7
245387009	26-dinitrotoluene	182 > 152										
245387009	24-dinitrotoluene	182 > 152										
245387009	26-dinitrotoluene-d3	185 > 155	17.47	20311.900	20311.900	20311.900	bb			550.1693	110.0	10.0
245387009	2-Nitrotoluene	137 > 46										
245387009	4-Nitrotoluene	137 > 46										
245387009	3-Nitrotoluene	137 > 46										
245387009	PETN	361 > 62										

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7682

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387009

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140015.wiff

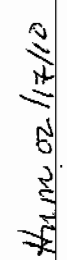
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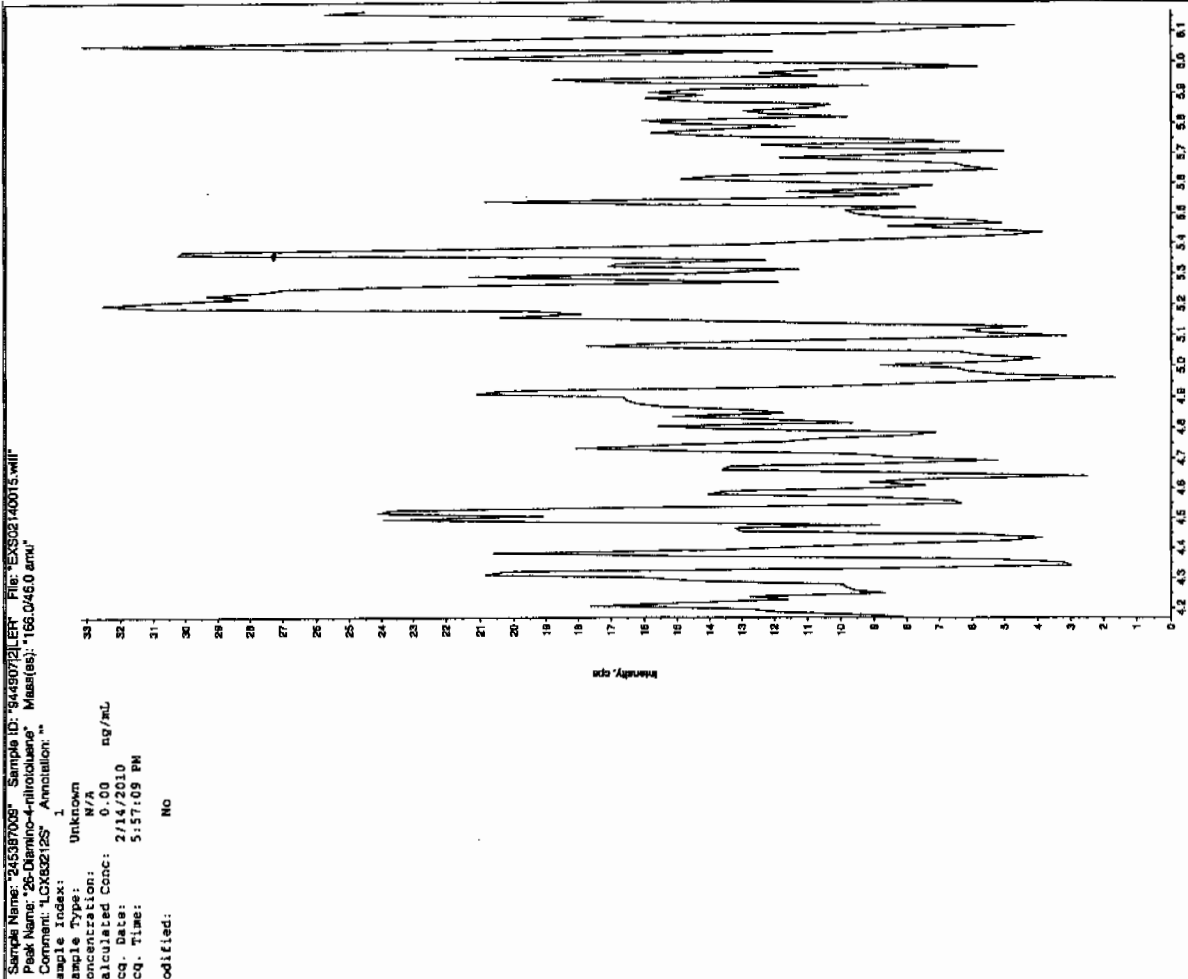
Units: ug/kg

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

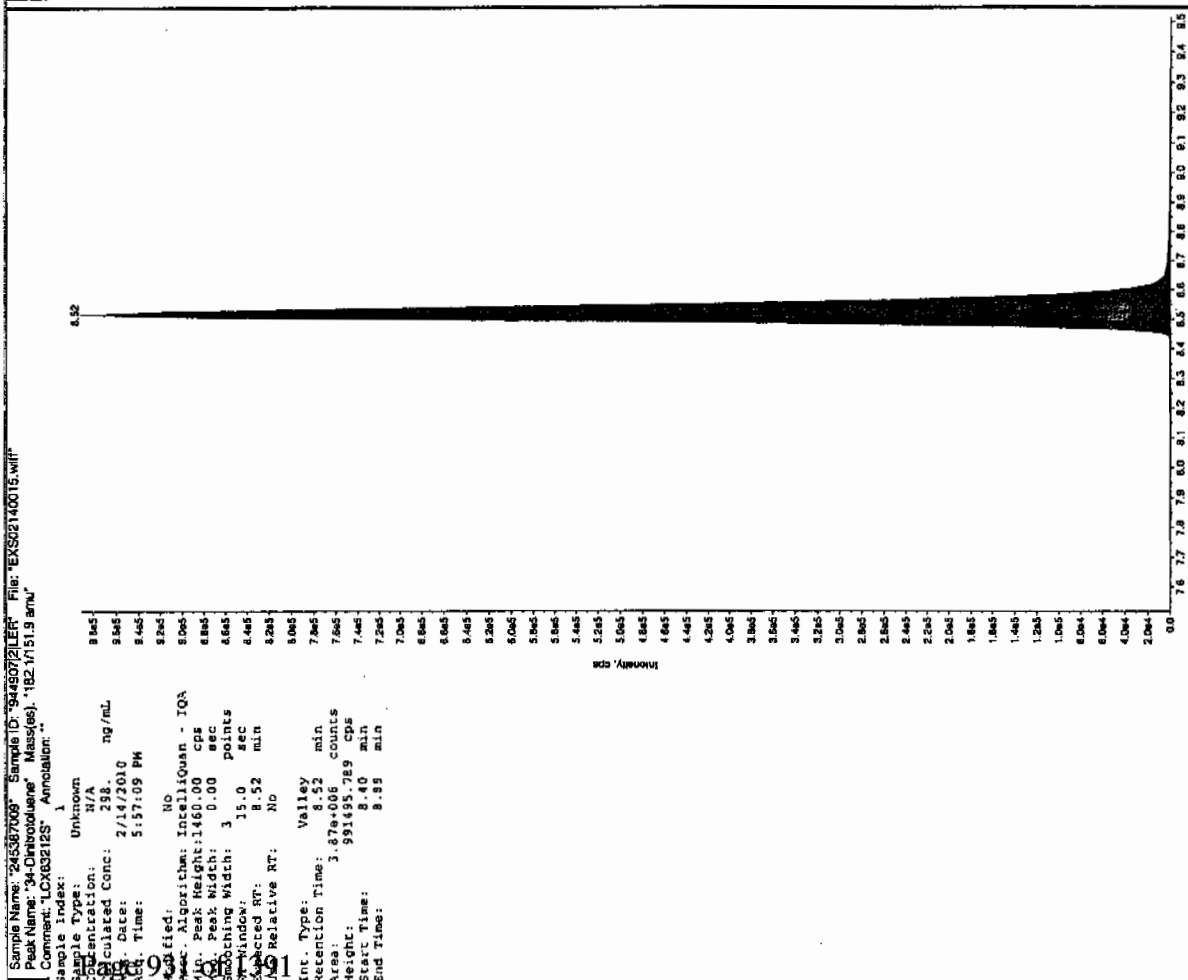
*Concentration =

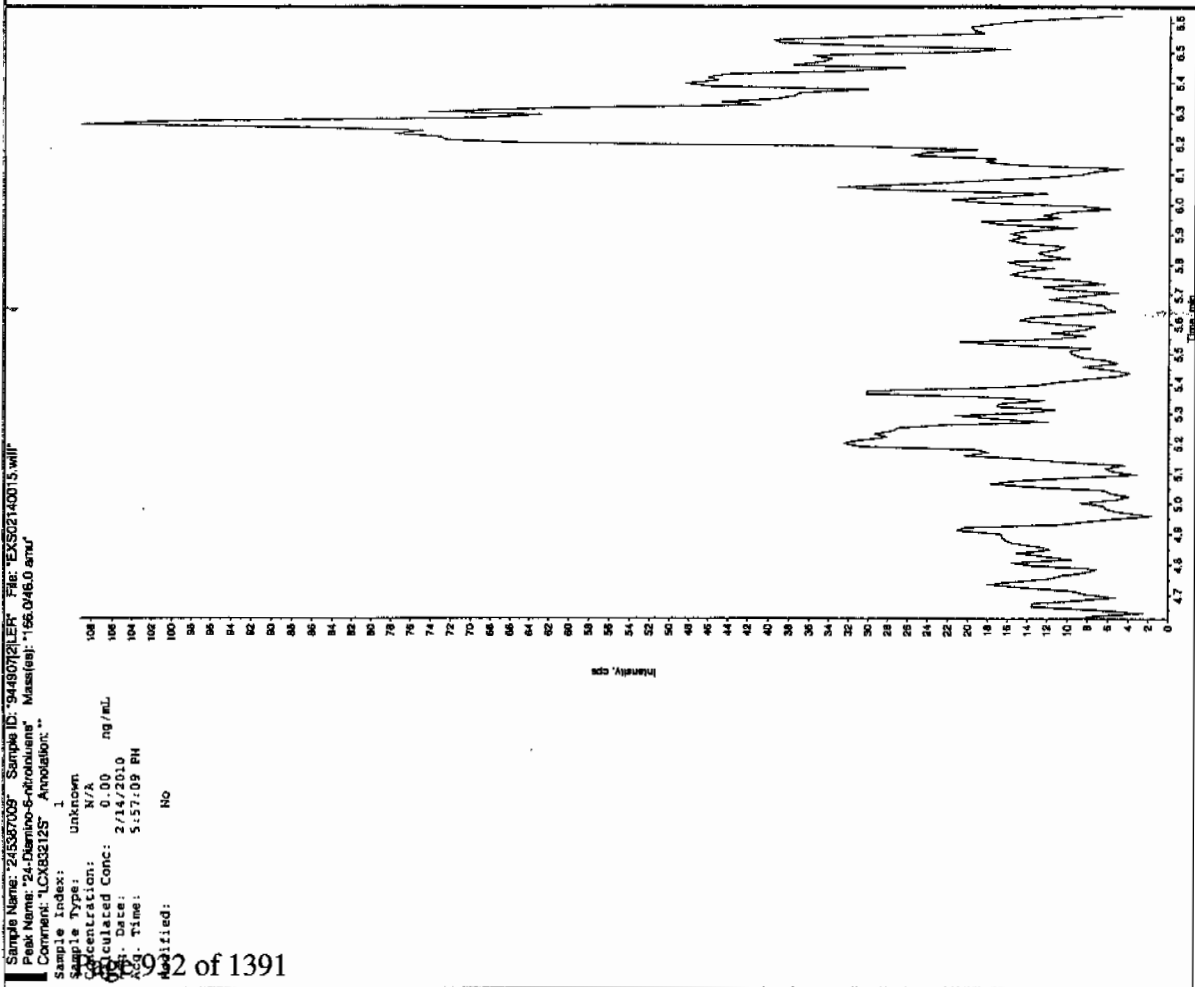
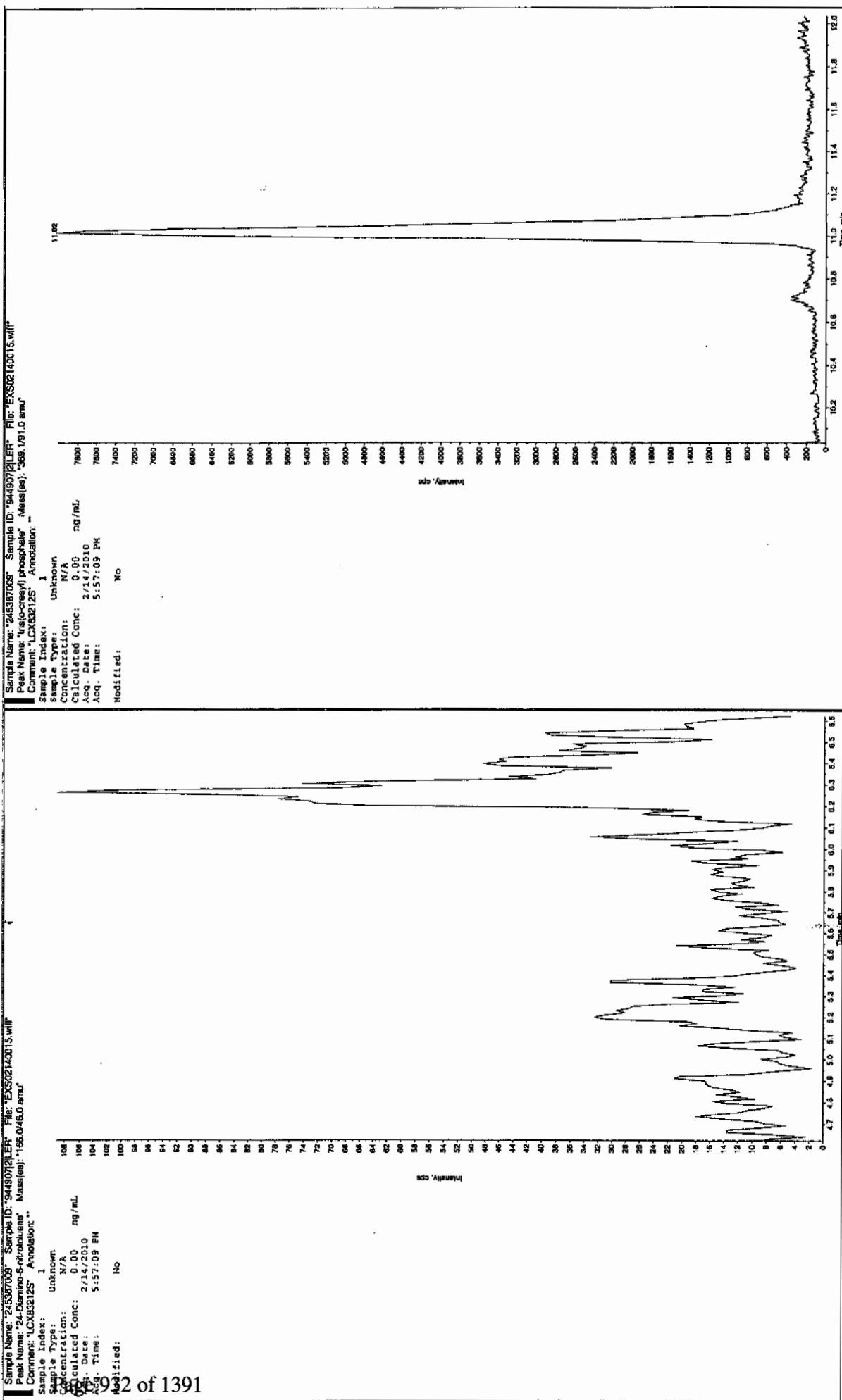
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor





Sample Name: "245387009" Sample ID: "94490721LER" File: "EXS02140015.wiff"
Peak Name: "34-Chlorobutylene" Mass(es): "182 1/151.9 amu"
Comment: "LCX63212S" Annotation: ""





1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208244a

Date Analyzed: 13-FEB-10 14:17

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208244a

Date: 13-Feb-2010

Time: 14:17:47

ID: 245387010

Vial: 2:3,B

2/14/10

WAVE/944902/Saved/21

34

1391

0-HMX

F2:MRM of 1 channel,AP-

176 > 102

6.251e+003

min

10.00

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100

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min

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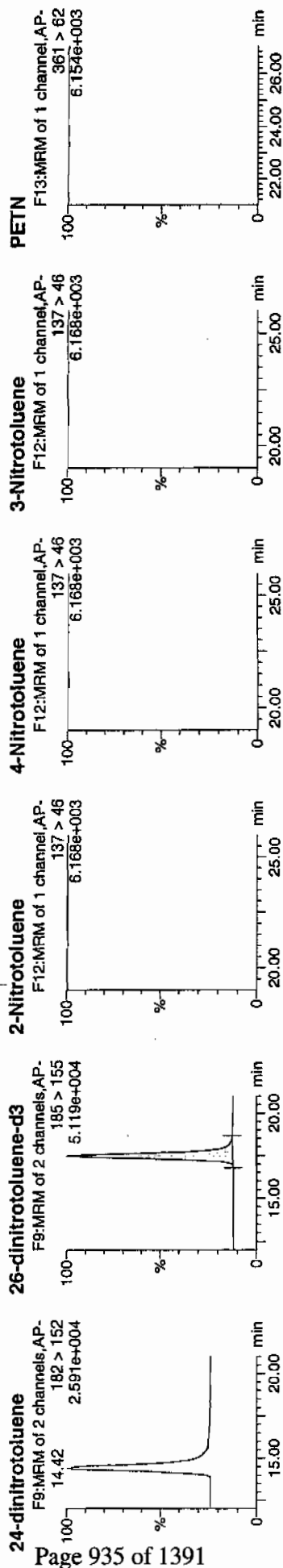
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min</

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ID	Name	Trace	RT	Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Inj Vol	% Rec	% Dev	SN
245387010	HMX	176 > 102		3281.512									
245387010	RDX	176 > 102		3281.512									
245387010	135-Trinitrobenzene	213 > 183		3281.512									
245387010	13-Dinitrobenzene-d4	172 > 142	12.07	3281.512	3281.512	3281.512	bb			510.4117	102.1	2.1	159.4
245387010	13-Dinitrobenzene	168 > 138		3281.512									
245387010	Tetryl	241 > 181		3281.512									
245387010	Nitrobenzene	123 > 46		3281.512									
245387010	4-Amino-26-dinitrotoluene	197 > 167		18122.037									
245387010	2-Amino-46-dinitrotoluene	197 > 180		18122.037									
245387010	246-Trinitrotoluene	227 > 210		18122.037									
245387010	34-dinitrotoluene	182 > 152	14.42	9468.749	9468.749	261.250	bb			290.2799	116.1	16.1	764.9
245387010	26-dinitrotoluene	182 > 152		18122.037									
245387010	24-dinitrotoluene	182 > 152		18122.037									
245387010	26-dinitrotoluene-d3	185 > 155	17.46	18122.037	18122.037	18122.037	bb			490.8545	98.2	-1.8	1712.8
245387010	2-Nitrotoluene	137 > 46		18122.037									
245387010	4-Nitrotoluene	137 > 46		18122.037									
245387010	3-Nitrotoluene	137 > 46		18122.037									
245387010	PETN	361 > 62		18122.037									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7685

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387010

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140016.wiff

Date Analyzed: 14-FEB-10 18:12

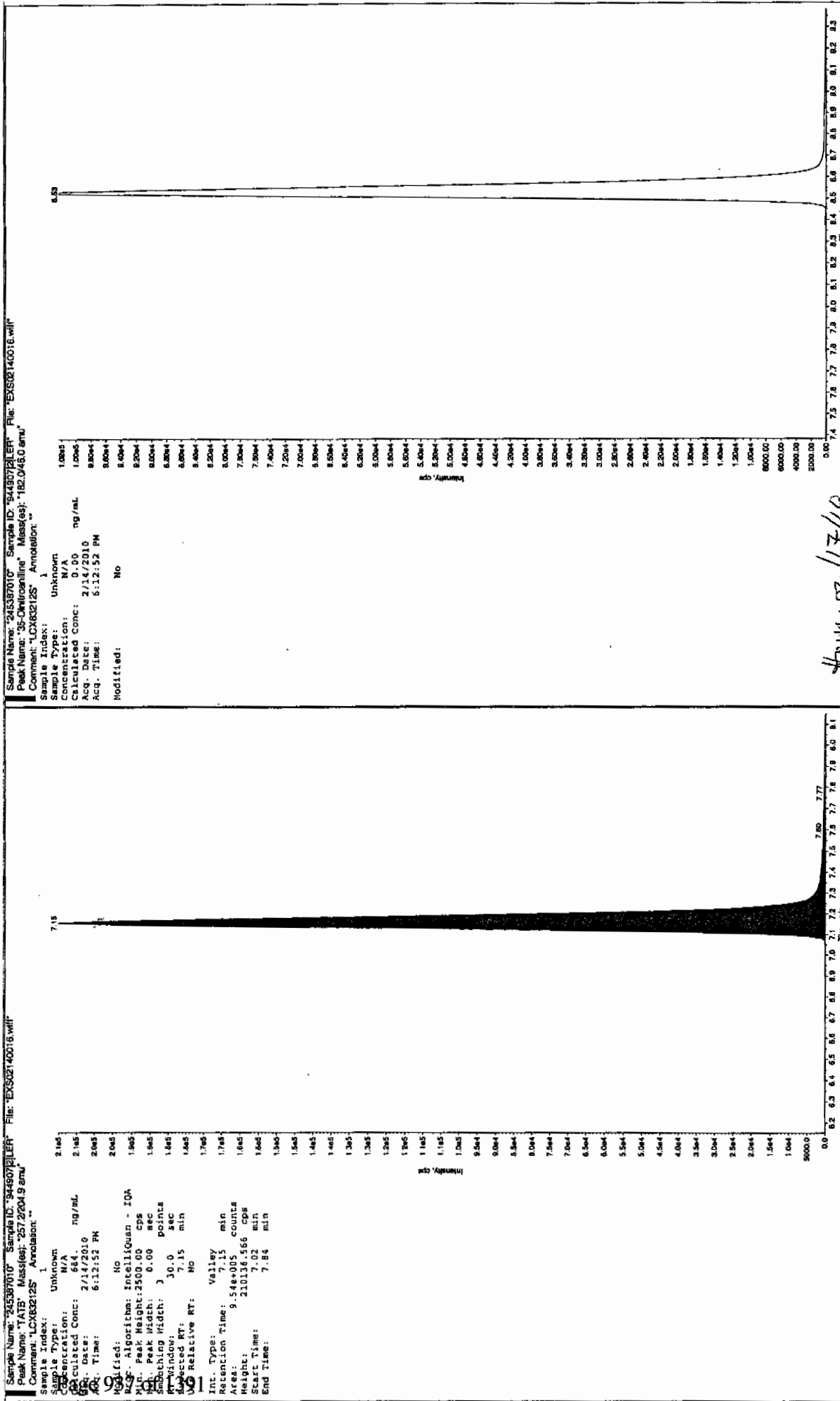
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6840	
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

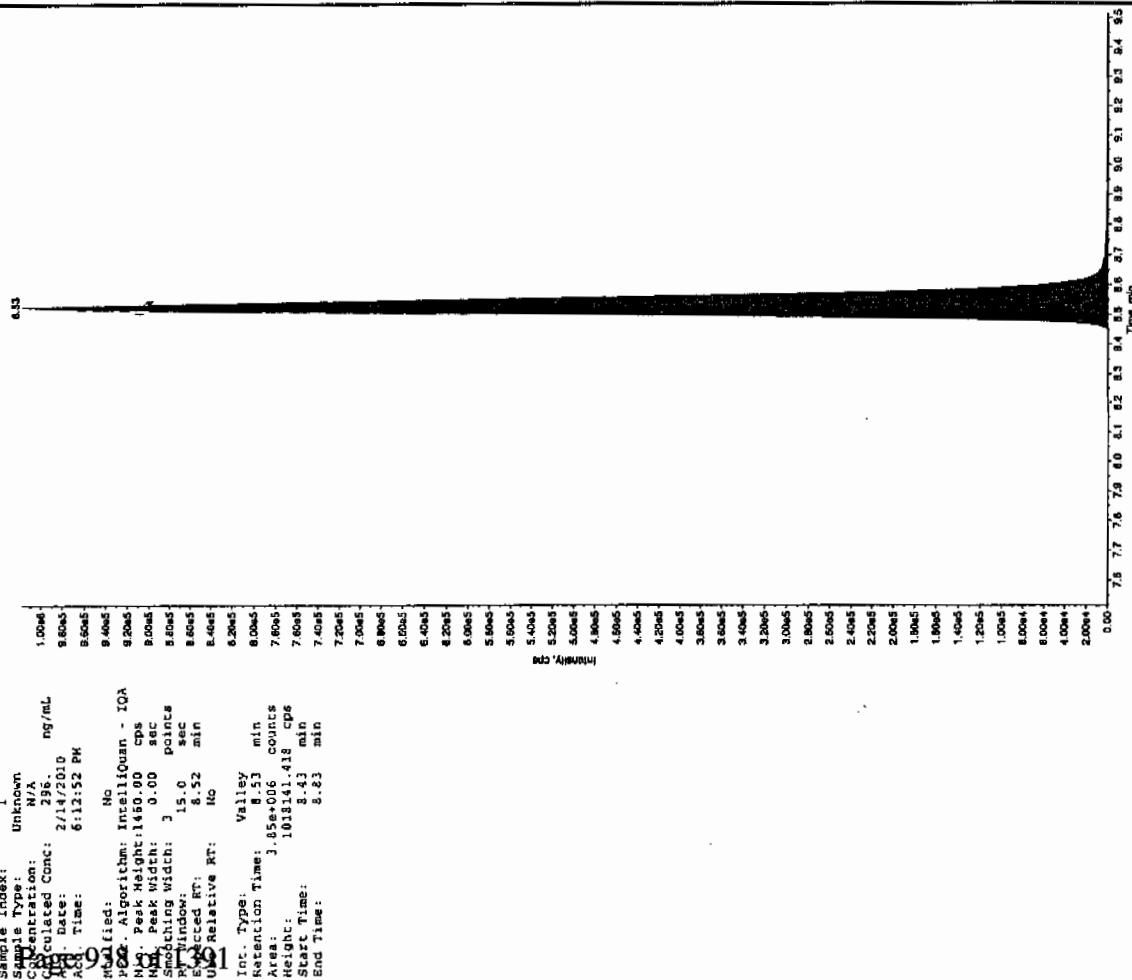


Jan 2/17/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

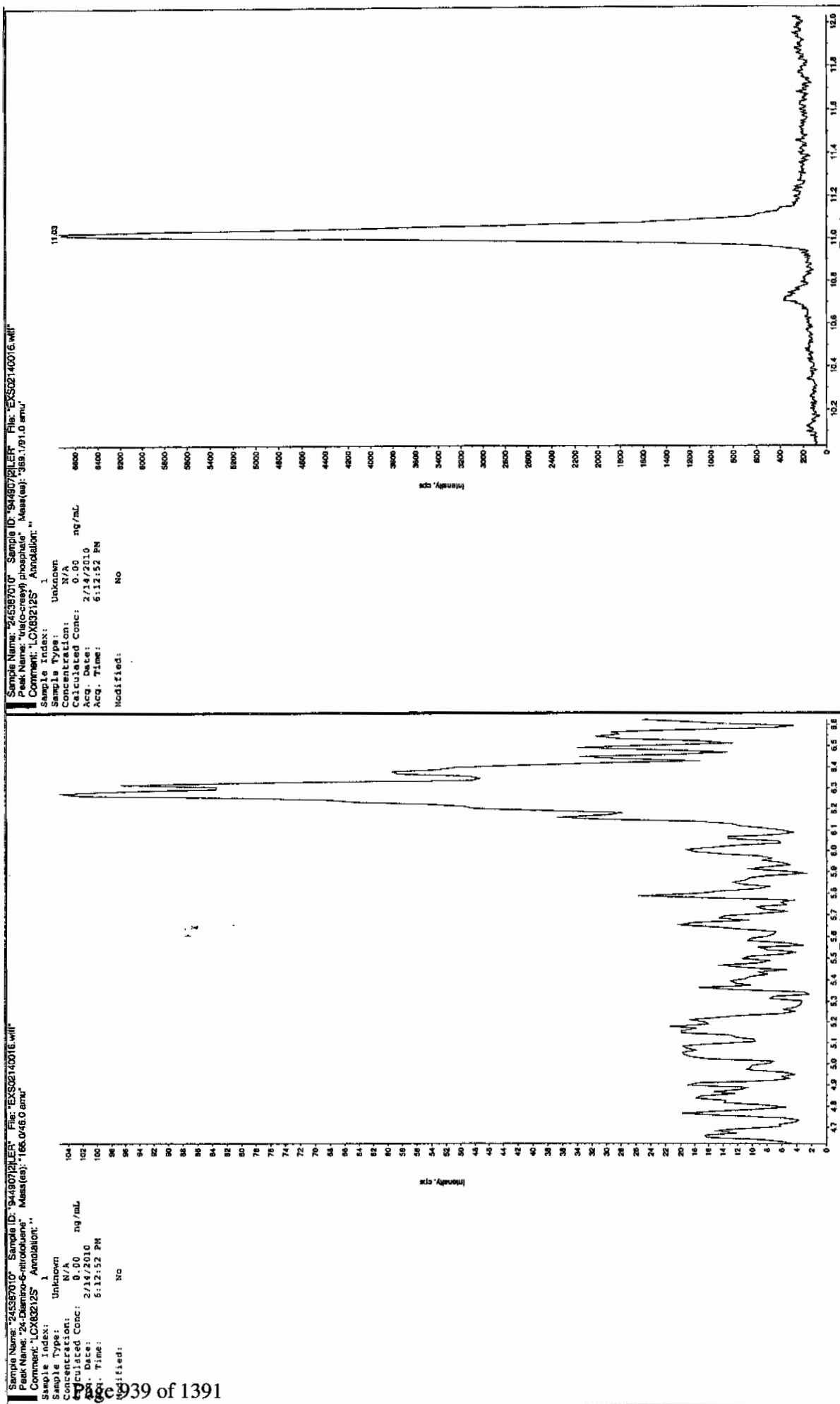
Sample Name: 245367010 Sample ID: 944507212LFF File: EX502140016.wif
 Peak Name: 26-Dinitro-4-nitrofluorene Mass(es): 166.046.0 amu
 Comment: LCX032125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:12:52 PM
 Modified: No



Sample Name: 245367010 Sample ID: 944507212LFF File: EX502140016.wif
 Peak Name: 34-Dinitrofluorene Mass(es): 162.17151.9 amu
 Comment: LCX032125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 296 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:12:52 PM
 Modified: No
 POC Algorithm: IntelliQuan - IOA
 Mq. Peak Height: 1450.00 cps
 Mq. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.52 min
 Obs. Relative RT: No
 Int. Type: Valley
 Retention Time: 8.53 min
 Area: 3.65e+006 counts
 Height: 1018141.418 cps
 Start Time: 8.43 min
 End Time: 8.63 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208245a

Date Analyzed: 13-FEB-10 14:47

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208245a

Date: 13-Feb-2010

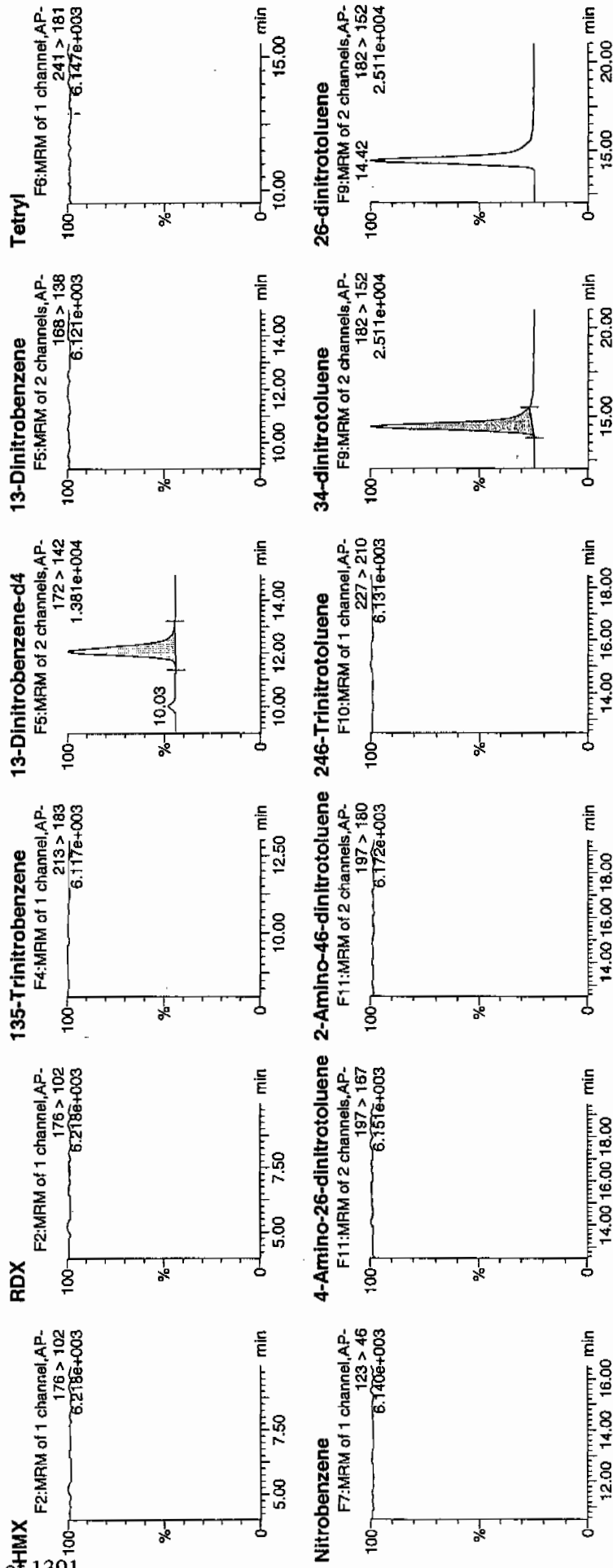
Time: 14:47:16

ID: 245387011

Vial: 2:3,C

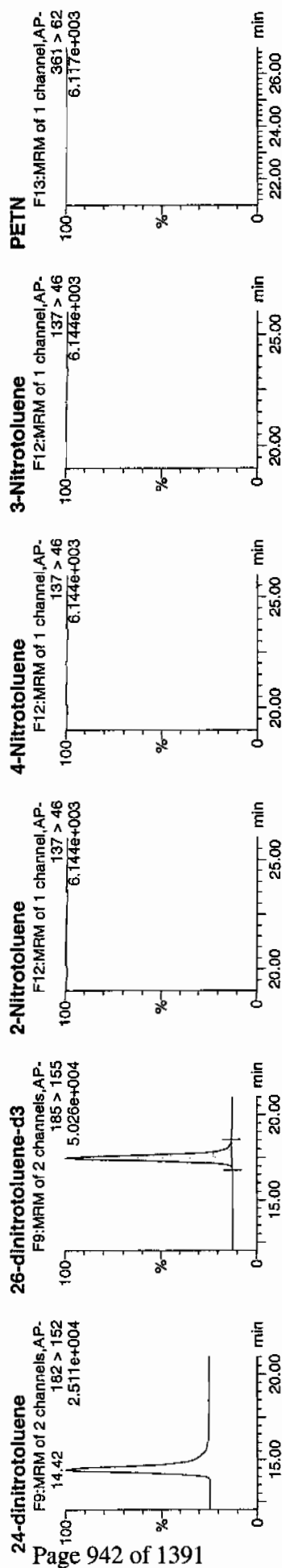
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2/14/10

LAU 944907 / 8022 / 2-1



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ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	%Det	Area	S/N
245387011	HMX	176 > 102			3158.942								
245387011	RDX	176 > 102			3158.942								
245387011	135-Trinitrobenzene	213 > 183			3158.942								
245387011	13-Dinitrobenzene-d4	172 > 142	12.07	3158.942		3158.942	3158.942	bb		14-Feb-10	11:26:19	491.3470	98.3
245387011	13-Dinitrobenzene	168 > 138			3158.942								
245387011	Tetryl	241 > 181			3158.942								
245387011	Nitrobenzene	123 > 46			3158.942								
245387011	4-Amino-26-dinitrotoluene	197 > 167			17970.598								
245387011	2-Amino-46-dinitrotoluene	227 > 180			17970.598								
245387011	246-Trinitrotoluene	227 > 210			17970.598								
245387011	34-dinitrotoluene	182 > 152	14.42	9220.978	17970.598	9220.978	256.557	bb				285.0662	114.0
245387011	26-dinitrotoluene	182 > 152			17970.598								
245387011	24-dinitrotoluene	182 > 152			17970.598								
245387011	26-dinitrotoluene-d3	185 > 155	17.46	17970.598		17970.598	17970.598	bb				486.7527	97.4
245387011	2-Nitrotoluene	137 > 46			17970.598								
245387011	4-Nitrotoluene	137 > 46			17970.598								
245387011	3-Nitrotoluene	137 > 46			17970.598								
245387011	PETN	361 > 62			17970.598								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7683

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 245387011

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130081.wiff

Date Analyzed: 14-FEB-10 07:08

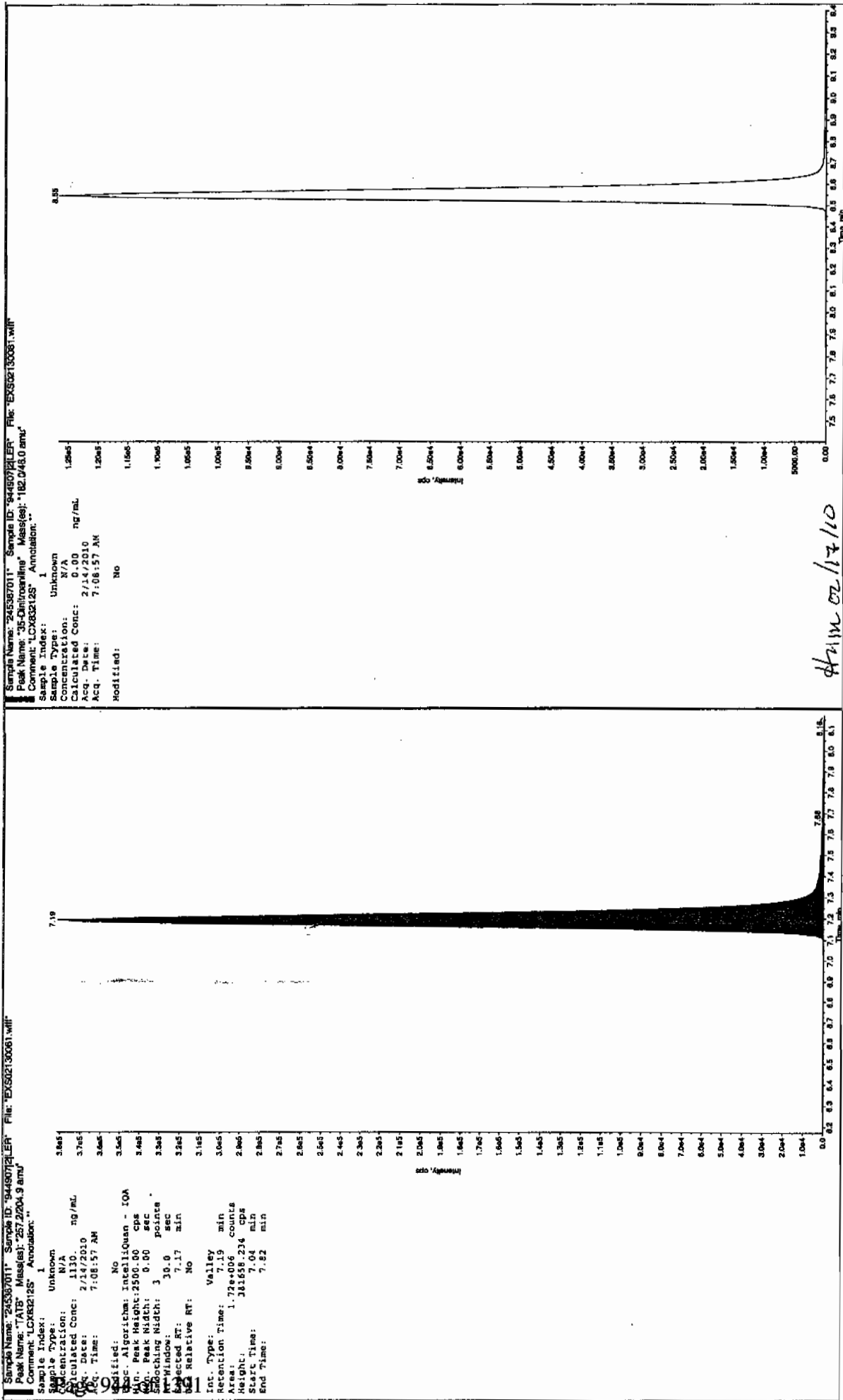
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	11300	
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

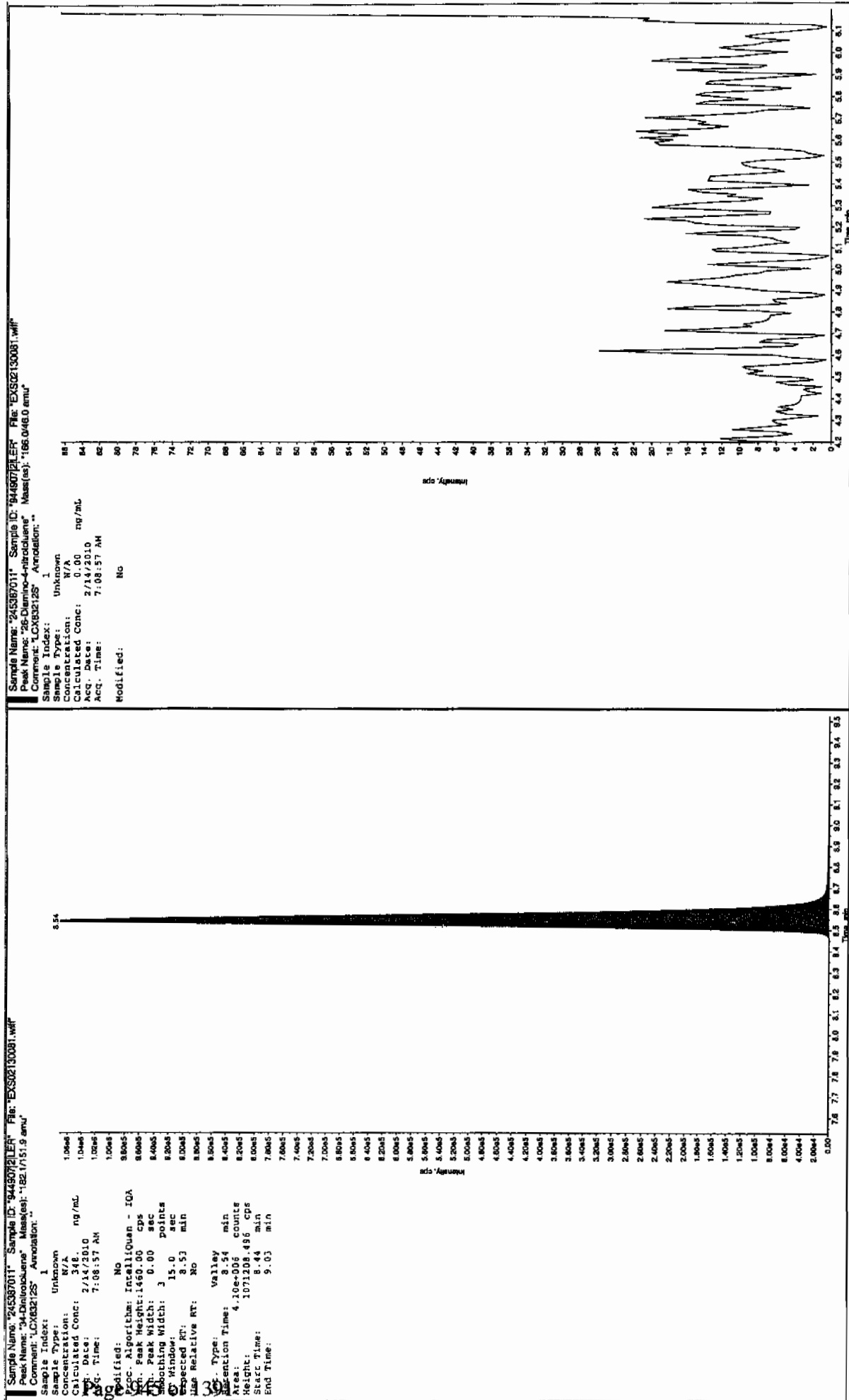
*Concentration =

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

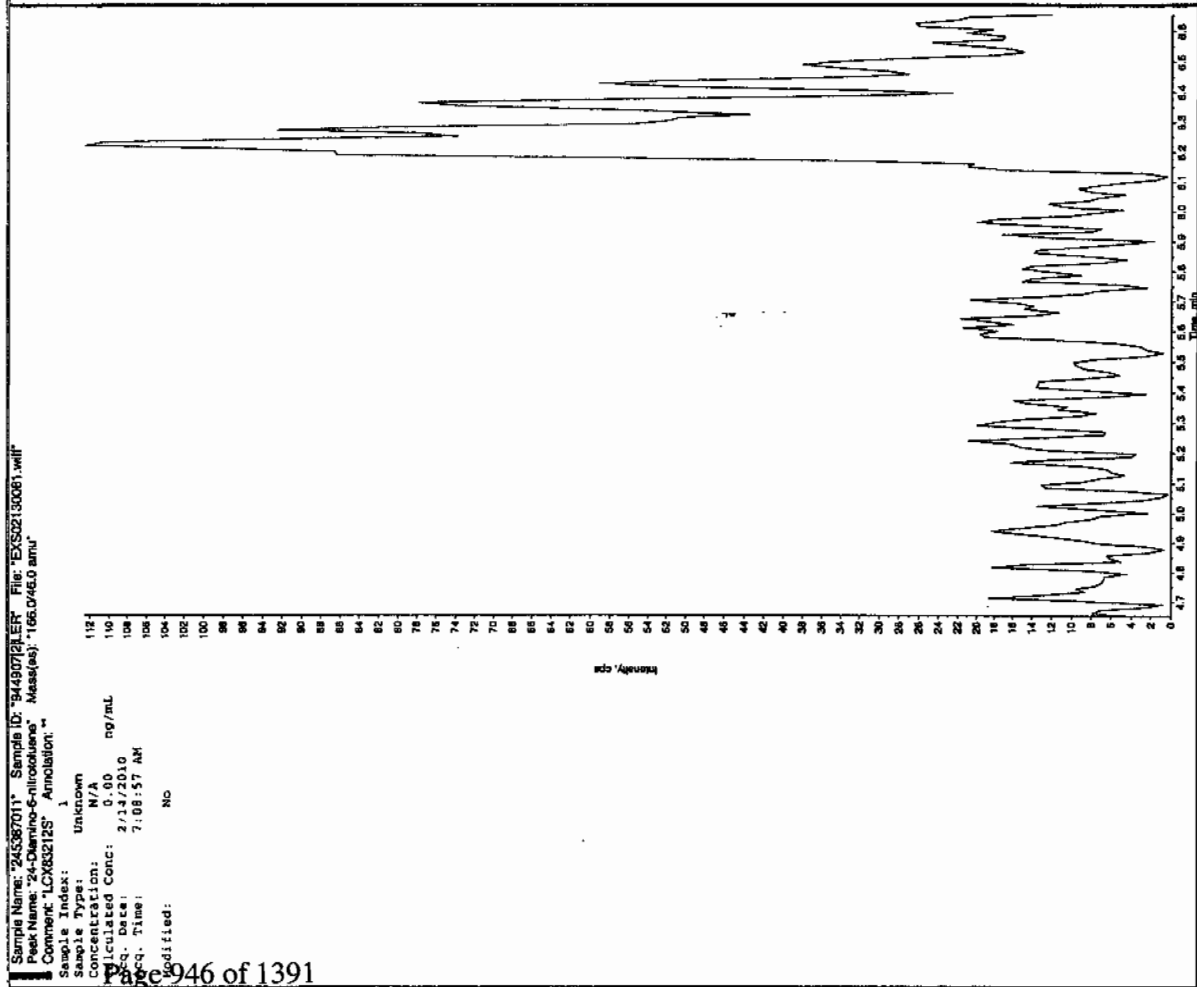
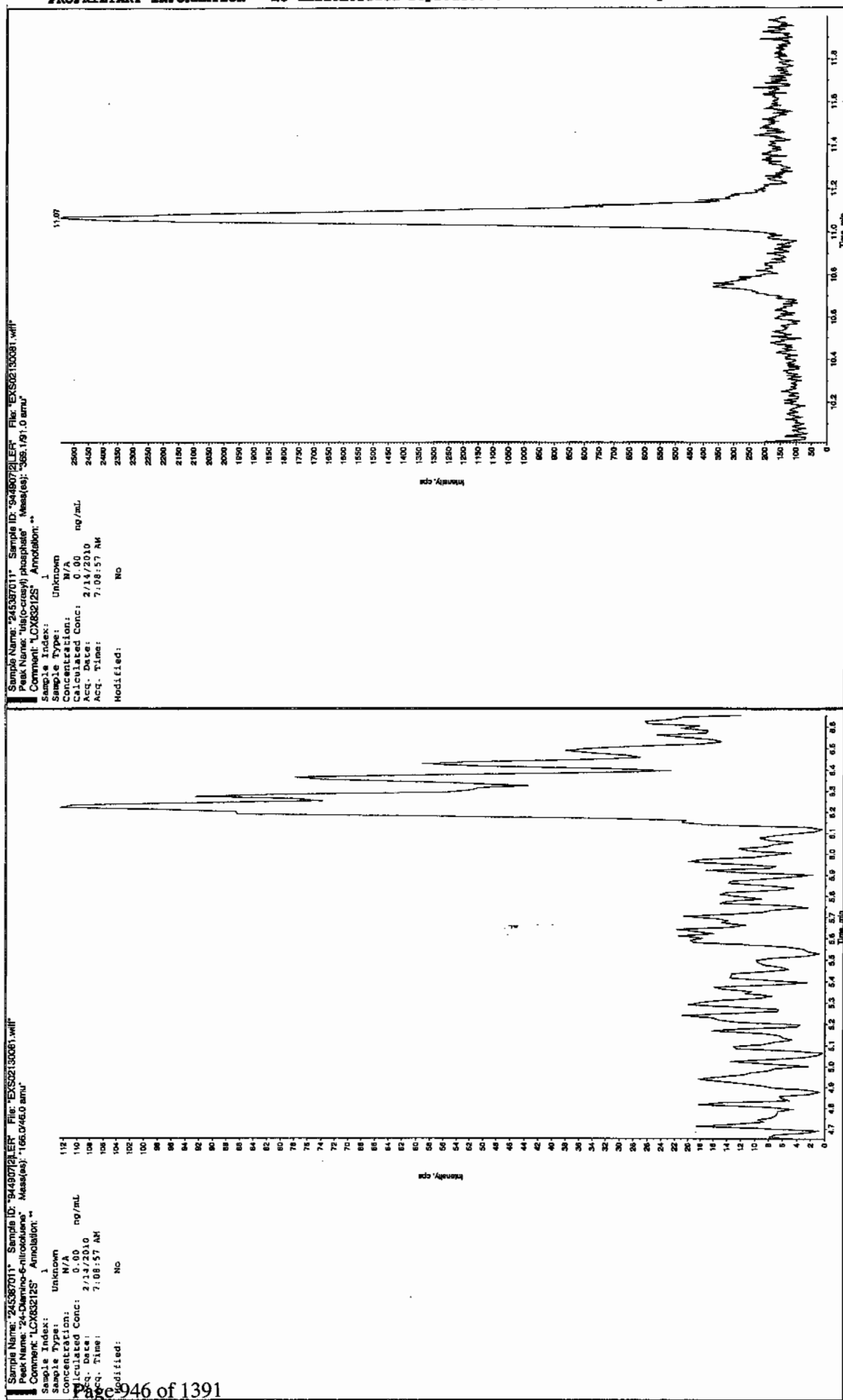
Jan 2/15/10



Jan 02/17/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

STANDARDS DATA

**SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels**

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1384

Lab Code: GEL

Run Date: 08-FEB-10.13-FEB-10.14-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a			
Data File:									
1,3,5-Trinitrobenzene	3.548	3.943	4.247	3.451	3.361	3.547	3.683	9.244	
1,3-Dinitrobenzene- d_4	6.149	6.436	6.465	6.633	6.717	6.174	6.429	3.612	
2,4,6-Trinitrotoluene	.299	.308	.311	.323	.348	.347	0.323	6.431	
2,4-Dinitrotoluene	.243	.236	.232	.24	.256	.258	0.244	4.271	
2,6-Dinitrotoluene	1.071	1.092	1.068	1.066	1.112	1.095	1.074	3.4	
2,6-Dinitrotoluene- d_3	34.376	37.613	37.768	39.993	37.032	34.734	36.919	5.669	
2-Amino-4,6-dinitrotoluene	.361	.359	.391	.411	.422	.432	0.396	7.897	
3,4-Dinitrotoluene	.793	.884	.838	.907	.976	1	0.900	8.794	
4-Amino-2,6-dinitrotoluene	.279	.278	.264	.289	.311	.303	0.287	6.027	
HMX	3.402	3.005	4.021	3.584	3.432	3.392	3.473	9.511	
Nitrobenzene	.773	.761	.821	.856	.825	.812	0.808	4.332	
RDX	2.405	2.171	2.783	2.361	2.379	2.47	2.428	8.269	
m-Dinitrobenzene	1.257	1.065	1.193	1.226	1.214	1.259	1.202	5.994	
m-Nitrotoluene	.103	.107	.082	.087	.09	.089	0.093	10.689	
o-Nitrotoluene	.173	.148	.144	.152	.156	.157	0.155	6.405	
p-Nitrotoluene	.071	.091	.069	.074	.076	.075	0.076	10.145	

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: 10-1384

Lab Code: GEL

Run Date: 08-FEB-10.13-FEB-10.14-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Calibration Level:											
Data File:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a					
Parmname:											
PETN	1686.42	3643.3	12841.7	23262.7	39238.6	44182	1.544	-0002977	21.056	.9994	
Tetryl	213.659	359.657	1210.76	2567.13	4763.44	5400.44	.962	-0000981	8.004	.9996	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

Quantify Calibration Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 1 of 9

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Method: C:\MASSLYNX\New_Exp\PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010

Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

Compound name: HMX

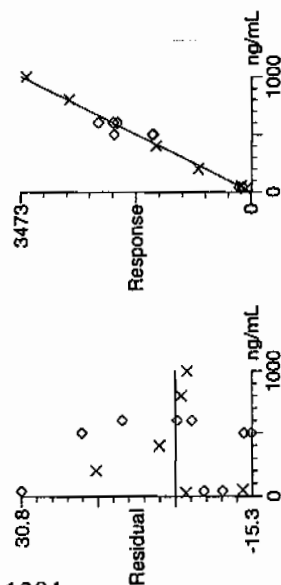
Response Factor: 3.4728

RRF SD: 0.330307, % Relative SD: 9.51126

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF

1391



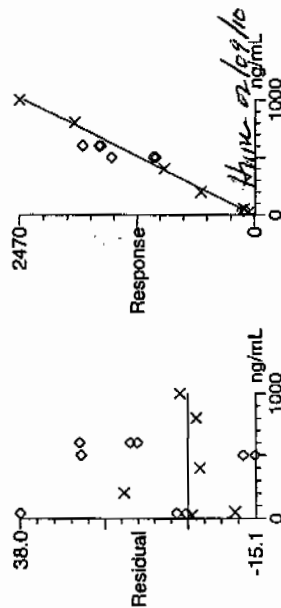
Compound name: RDX

Response Factor: 2.42814

RRF SD: 0.200785, % Relative SD: 8.26908

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

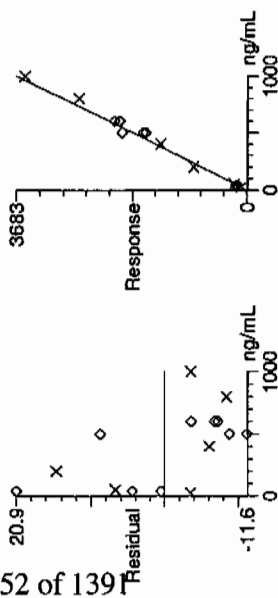
Curve type: RF



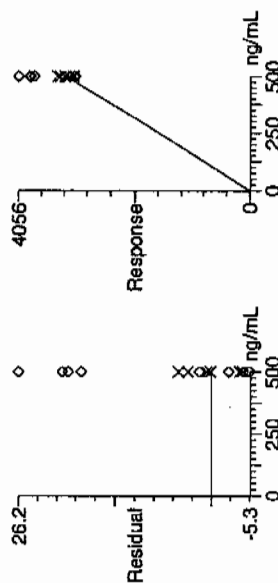
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 135-Trinitrobenzene
 Response Factor: 3.68306
 RRF SD: 0.340458, % Relative SD: 9.2439
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 13-Dinitrobenzene-d4
 Response Factor: 6.42915
 RRF SD: 0.232214, % Relative SD: 3.6119
 Response type: External Std, Area
 Curve type: RF



Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

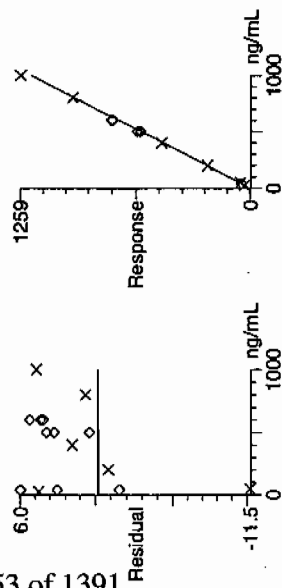
Compound name: 13-Dinitrobenzene

Response Factor: 1.2024

RF SD: 0.0720671, % Relative SD: 5.99362

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF



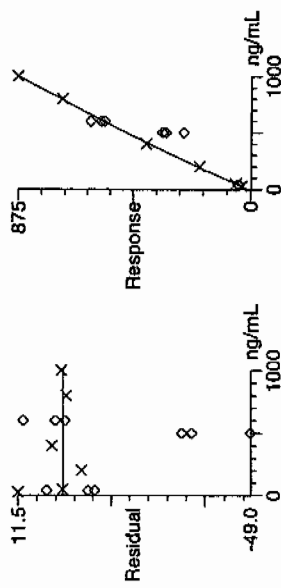
Compound name: Tetryl

Coefficient of Determination: 0.999624

Calibration curve: $-9.80877e-005 * x^2 + 0.962233 * x + 8.00395$

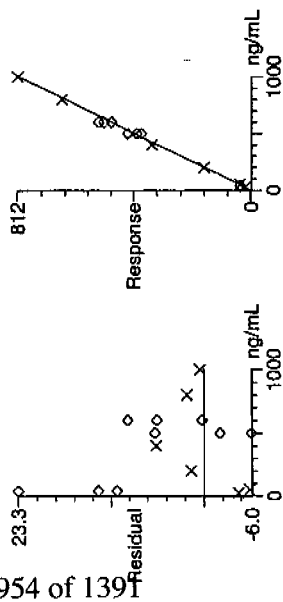
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None

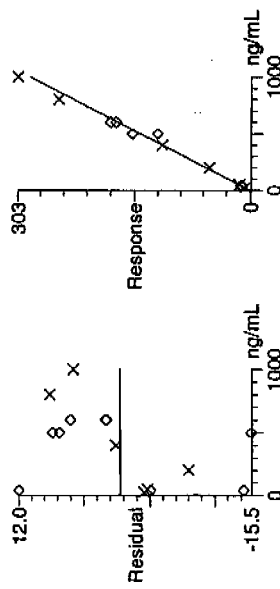


Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: Nitrobenzene
Response Factor: 0.807771
RRF SD: 0.034992, % Relative SD: 4.33192
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



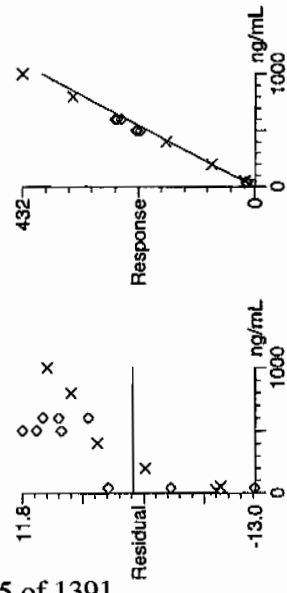
Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.287245
RRF SD: 0.0173125, % Relative SD: 6.02707
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



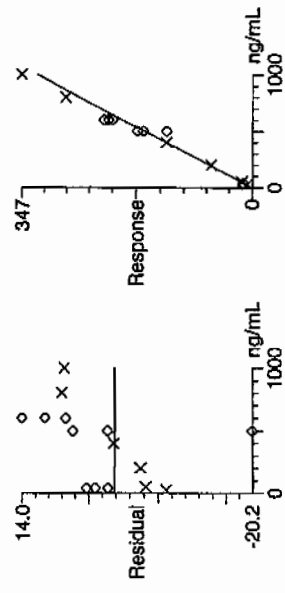
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.39603
R²: 0.9999, % Relative SD: 7.8967
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



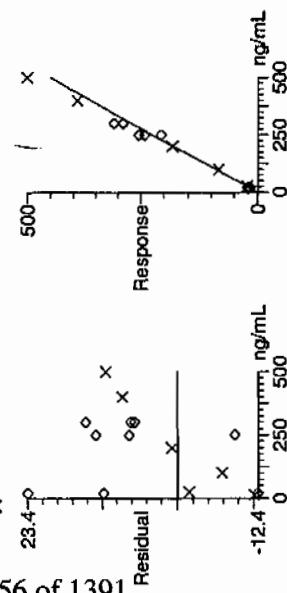
Compound name: 246-Trinitrotoluene
Response Factor: 0.322663
R²: 0.9999, % Relative SD: 6.43088
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



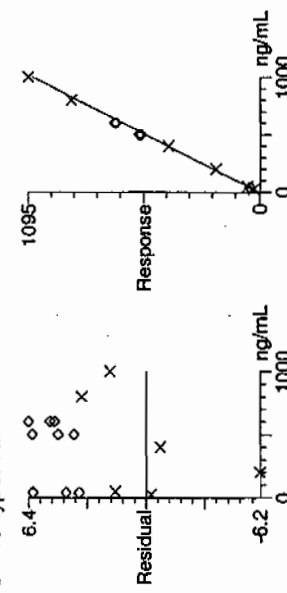
Quantity Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 34-dinitrotoluene
Response Factor: 0.899992
RRF SD: 0.0791463, % Relative SD: 8.79411
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



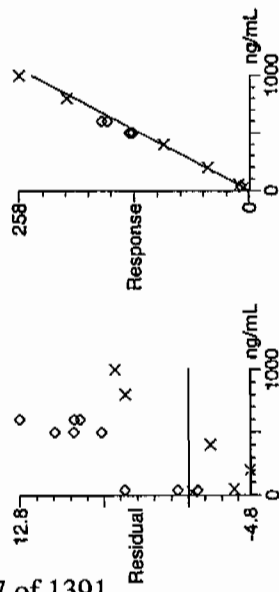
Compound name: 26-dinitrotoluene
Response Factor: 1.07409
RRF SD: 0.0365192, % Relative SD: 3.40002
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



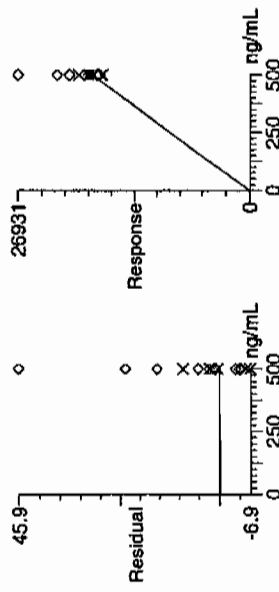
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YXX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.244052
RRF SD: 0.010423, % Relative SD: 4.27082
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



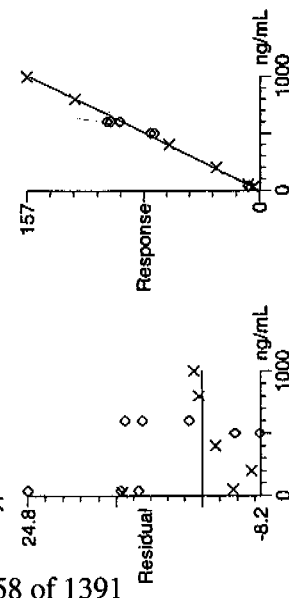
Compound name: 26-dinitrotoluene-d3
Response Factor: 36.9194
RRF SD: 2.09302, % Relative SD: 5.66917
Response type: External Std, Area
Curve type: RF



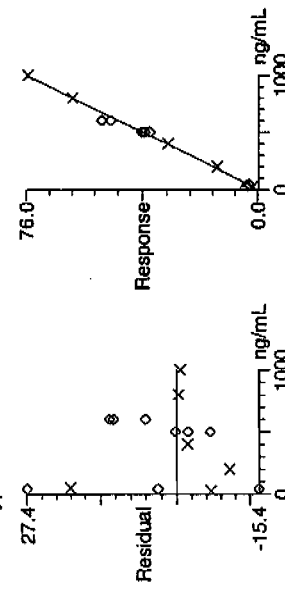
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Nitrotoluene
Response Factor: 0.155048
RRF SD: 0.00993156, % Relative SD: 6.40546
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



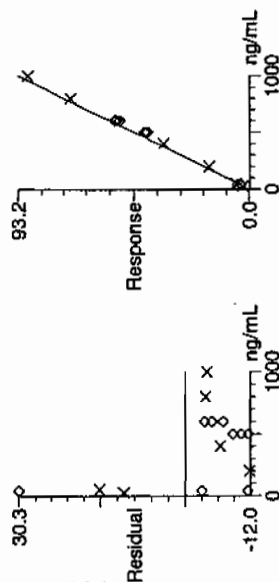
Compound name: 4-Nitrotoluene
Response Factor: 0.0760026
RRF SD: 0.00771034, % Relative SD: 10.1448
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



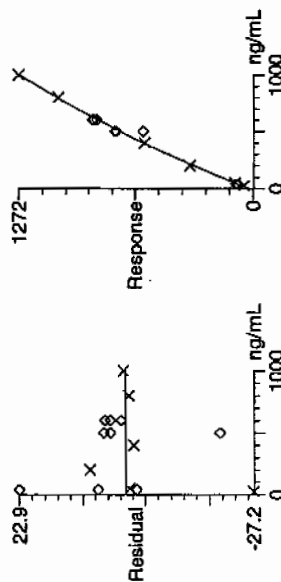
Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.0931713
RRF SD: 0.009588, % Relative SD: 10.6887
Response type: Internal Std (Ref.14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.999420
Calibration curve: $-0.000297734 \cdot x^2 + 1.54409 \cdot x + 21.0556$
Response type: Internal Std (Ref.14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0208010a

Analysis Date: 08-FEB-10 19:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	577.44	96	
1,3-Dinitrobenzene-d4	500	477.774	96	
2,4,6-Trinitrotoluene	600	643.695	107	
2,4-Dinitrotoluene	600	652.405	109	
2,6-Dinitrotoluene	600	631.529	105	
2,6-Dinitrotoluene-d3	500	481.745	96	
2-Amino-4,6-dinitrotoluene	600	657.981	110	
3,4-Dinitrotoluene	300	321.546	107	
4-Amino-2,6-dinitrotoluene	600	609.28	102	
HMX	600	598.223	100	
Nitrobenzene	600	634.828	106	
PETN	600	620.504	103	
RDX	600	679.292	113	
Tetryl	600	611.62	102	
m-Dinitrobenzene	600	625.274	104	
m-Nitrotoluene	600	570.29	95	
o-Nitrotoluene	600	651.604	109	
p-Nitrotoluene	600	672.143	112	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208010a

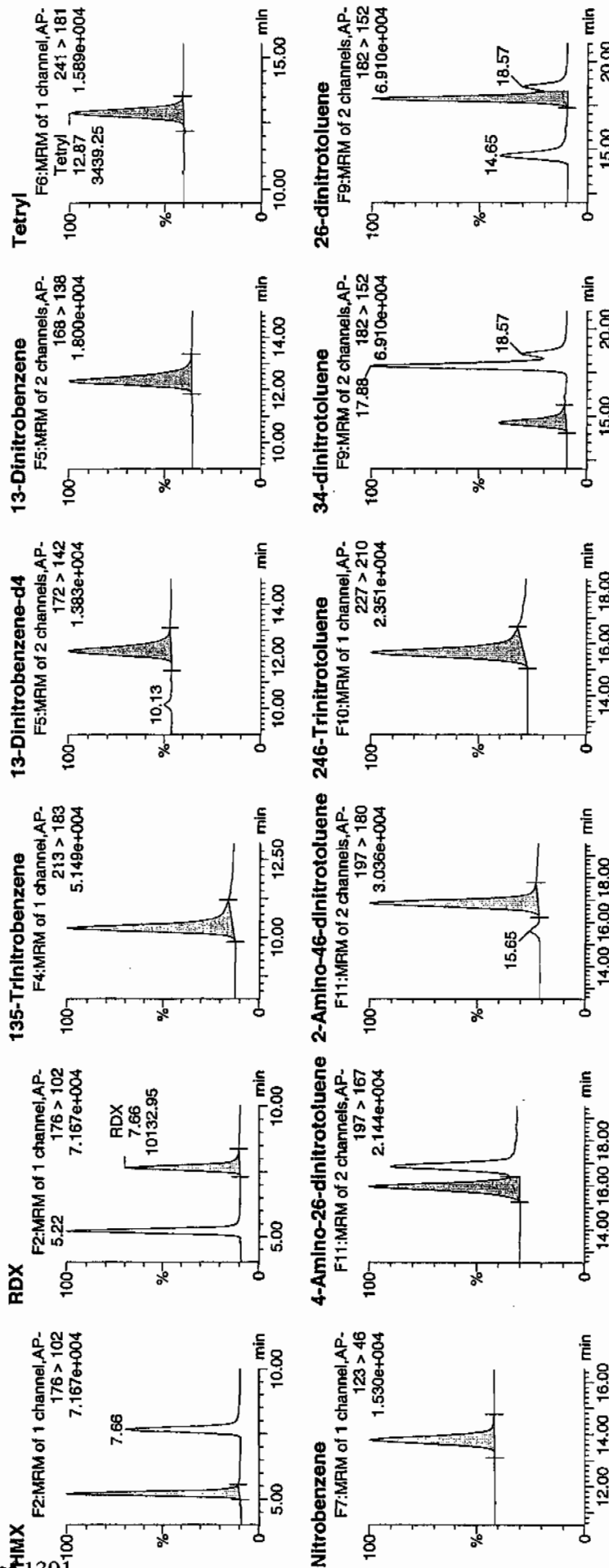
Date: 08-Feb-2010

Time: 19:10:05

ID: WXX100208-071CV

Vial: 1:1,B

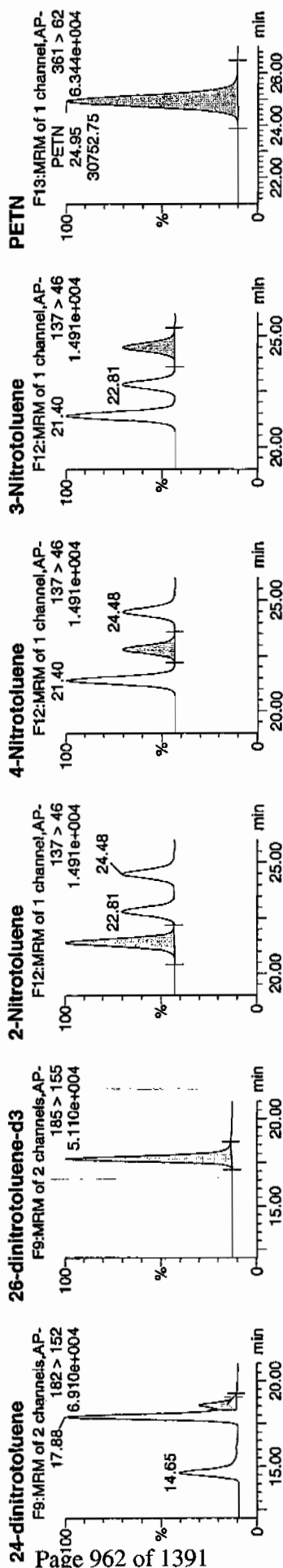
WXX100208-071CV



WXX100208-071CV

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

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ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Inj Vol	% Rec	GC	SN
WXX100208-07ICV	HMX	176 > 102	5.22	12762.877	3071.677	12762.877	2077.510	bb			598.2226	99.7	-0.3	901.4
WXX100208-07ICV	RDX	176 > 102	7.66	10132.953	3071.677	10132.953	1649.417	bb			679.2915	113.2	13.2	602.3
WXX100208-07ICV	135-Trinitrobenzene	213 > 183	10.30	13065.338	3071.677	13065.338	2126.743	bb			577.4399	96.2	-3.8	1489.3
WXX100208-07ICV	13-Dinitrobenzene-d4	172 > 142	12.21	3071.677		3071.677	3071.677	bb			477.7736	95.6	-4.4	264.9
WXX100208-07ICV	13-Dinitrobenzene	168 > 138	12.34	4618.735	3071.677		751.826	bb			625.2737	104.2	4.2	460.8
WXX100208-07ICV	Tetryl	241 > 181	12.87	3439.246	3071.677	3439.246	559.832	bb			611.6196	101.9	1.9	207.7
WXX100208-07ICV	Nitrobenzene	123 > 46	13.76	3150.282	3071.677	3150.282	512.795	bb			634.8275	105.8	5.8	437.9
WXX100208-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.95	6225.456	17785.730	6225.456	175.013	MM	09-Feb-10	10:07:09	609.2803	101.5	1.5	219.6
WXX100208-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.84	9269.226	17785.730	9269.226	260.580	bb			657.9810	109.7	9.7	257.1
WXX100208-07ICV	246-Trinitrotoluene	227 > 210	15.64	7388.070	17785.730	7388.070	207.697	bb			643.6946	107.3	7.3	286.9
WXX100208-07ICV	34-dinitrotoluene	182 > 152	14.65	10293.978	17785.730	10293.978	289.389	bb			321.5458	107.2	7.2	346.9
WXX100208-07ICV	26-dinitrotoluene	182 > 152	17.88	24128.742	17785.730	24128.742	678.317	MM	09-Feb-10	10:13:53	631.5288	105.3	5.3	1020.2
WXX100208-07ICV	24-dinitrotoluene	182 > 152	18.57	5863.705	17785.730	5863.705	159.220	MM	09-Feb-10	10:16:51	652.4052	108.7	8.7	223.1
WXX100208-07ICV	26-dinitrotoluene-d3	185 > 155	17.71	17785.730		17785.730	17785.730	bb			481.7453	96.3	-3.7	1501.7
WXX100208-07ICV	2-Nitrotoluene	137 > 46	21.40	3593.784	17785.730	3593.784	101.030	bb			651.6036	108.6	8.6	770.9
WXX100208-07ICV	4-Nitrotoluene	137 > 46	22.81	1817.156	17785.730	1817.156	51.085	bb			672.1432	112.0	12.0	368.6
WXX100208-07ICV	3-Nitrotoluene	137 > 46	24.48	1890.078	17785.730	1890.078	53.135	bb			570.2904	95.0	-5.0	366.4
WXX100208-07ICV	PETN	361 > 62	24.95	30752.746	17785.730	30752.746	864.534	bb			620.5038	103.4	3.4	4586.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/08/10
 Time of Injection: 1910
 Standard Number: WXX100208-07ICV
 Data File: EXP0208010a

HMX	99.7
RDX	113.2
135-TNB	96.2
13-DNB	104.2
Tetryl	101.9
Nitrobenzene	105.8
4A-26-DNT	101.5
2A-46-DNT	109.7
246-TNT	107.3
34-DNT(surr)	107.2
26-DNT	105.3
24-DNT	108.7
2-NT	108.6
4-NT	112.0
3-NT	95.0
PETN	103.4

*1017
2/9/10*

Total 1679.7

Average 105.0

1017 on 10/9/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1384

Lab Code: GEL

Run Date: 08-FEB-10.13-FEB-10.14-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:	EXS02130063.wiff	EXS02130004.wiff	EXS02130005.wiff	EXS02130006.wiff	EXS02130007.wiff	EXS02130008.wiff	EXS02130009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	69200	161000	406000	857000	1260000	1740000	3150000	-35800	1870	-139	.9998	
2,6-Diamino-4-nitrotoluene	124000	261000	621000	1330000	1880000	2670000	5260000	-12700	2620	.009	.9997	
3,4-Dinitrotoluene	300000	580000	1420000	2730000	4160000	5660000	10400000	-67600	12700	-2.26	.9988	
3,5-Dinitroaniline	334000	612000	1410000	2880000	4620000	5850000	10700000	-60100	6420	-509	.9996	
TATB	79400	155000	384000	753000	1200000	1510000	2940000	-5110	1600	-063	.9997	
tris(o-cresyl) phosphate	1230000	2370000	5560000	10600000	15300000	19600000	31300000	36900	23300	-3.82	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

021310ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.11e+003			
a1	1.6e+003			
a2	-0.0629			
Correlation coefficient 0.9997				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.01e+004			
a1	6.42e+003			
a2	-0.509			
Correlation coefficient 0.9996				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.76e+004			
a1	1.27e+004			
a2	-2.26			
Correlation coefficient 0.9988				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.27e+004			
a1	2.62e+003			
a2	0.00918			
Correlation coefficient 0.9997				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Lur
2/15/10

Hume
02/15/10

021310ICAL

Iterate No

None

Weighting

Fit Quadratic
a0 -3.58e+004
a1 1.87e+003
a2 -0.139

Correlation coefficient 0.9998
Use Area

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

Iterate No

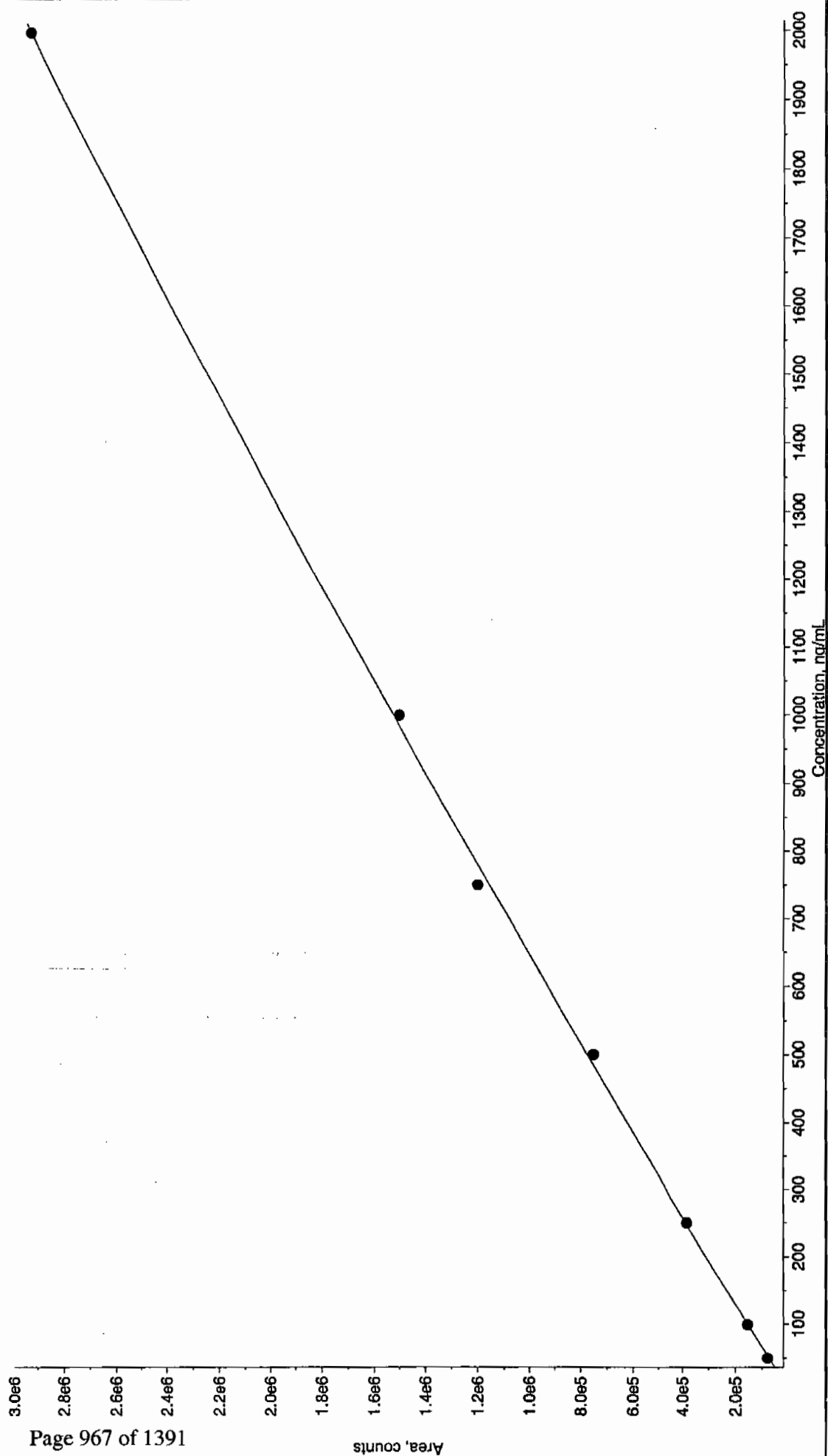
None

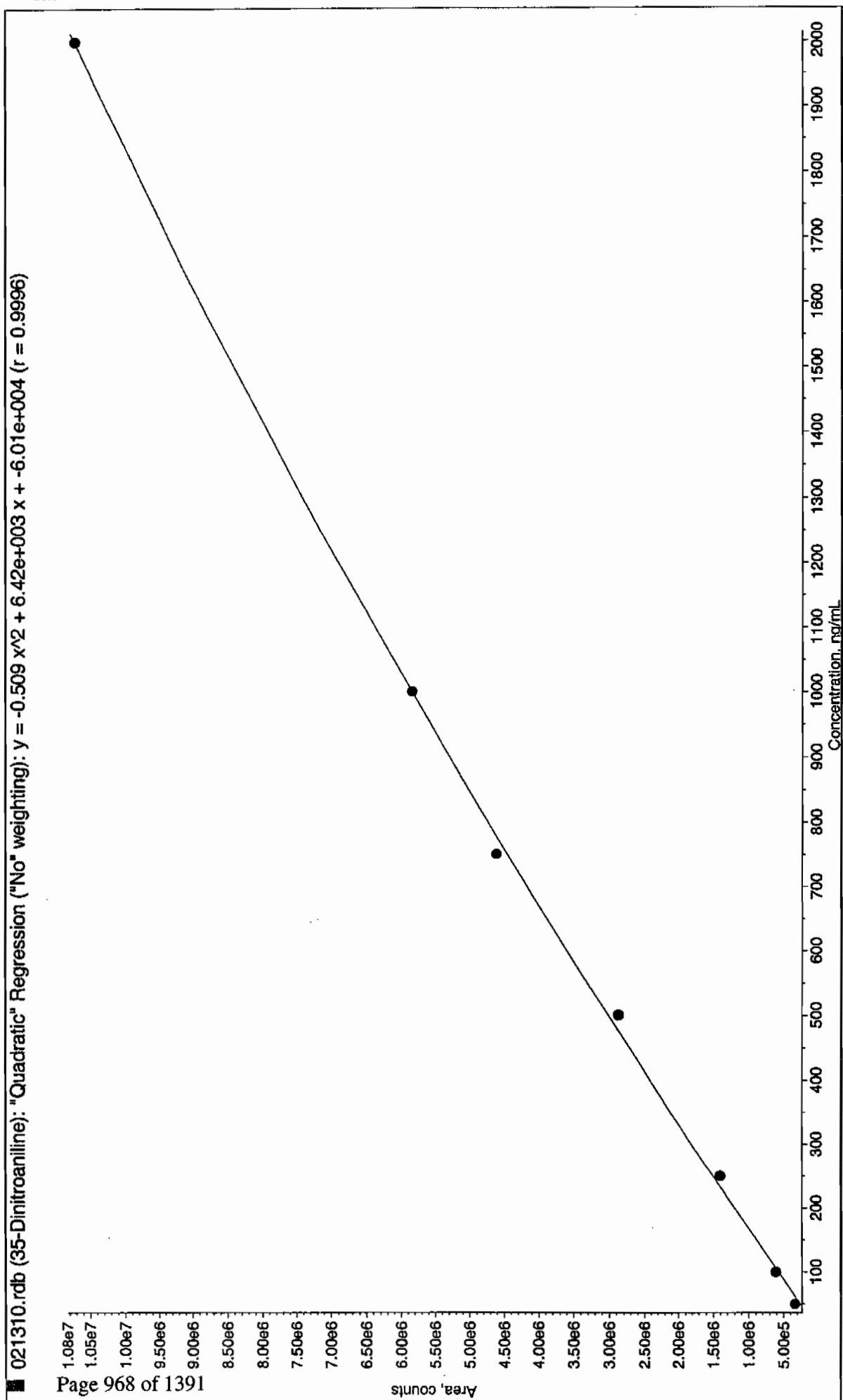
Weighting

Fit Quadratic
a0 3.69e+004
a1 2.33e+004
a2 -3.82

Correlation coefficient 1.0000
Use Area

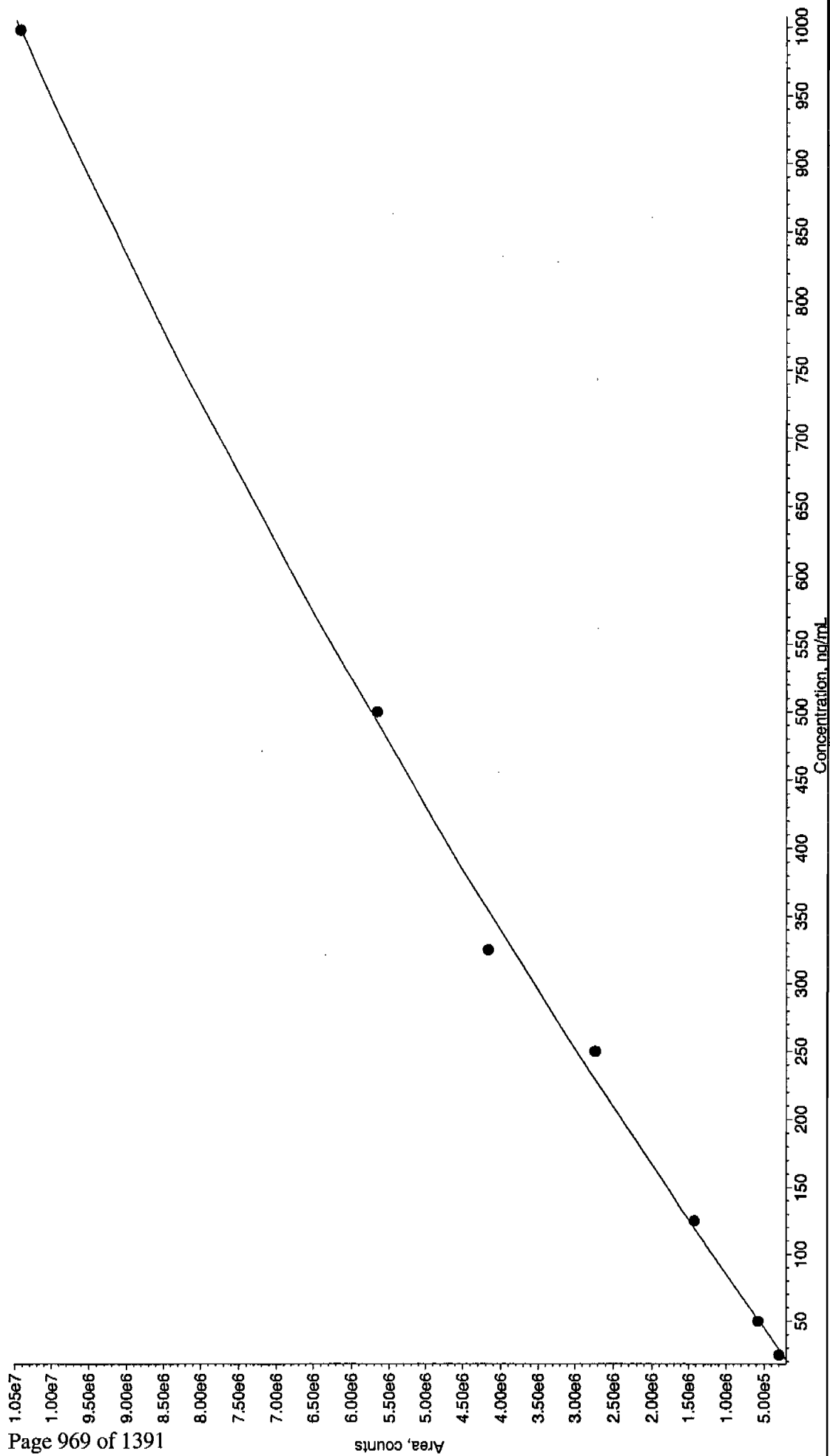
021310.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.0629 x^2 + 1.6e+003 x + -5.11e+003$ ($r = 0.9997$)





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

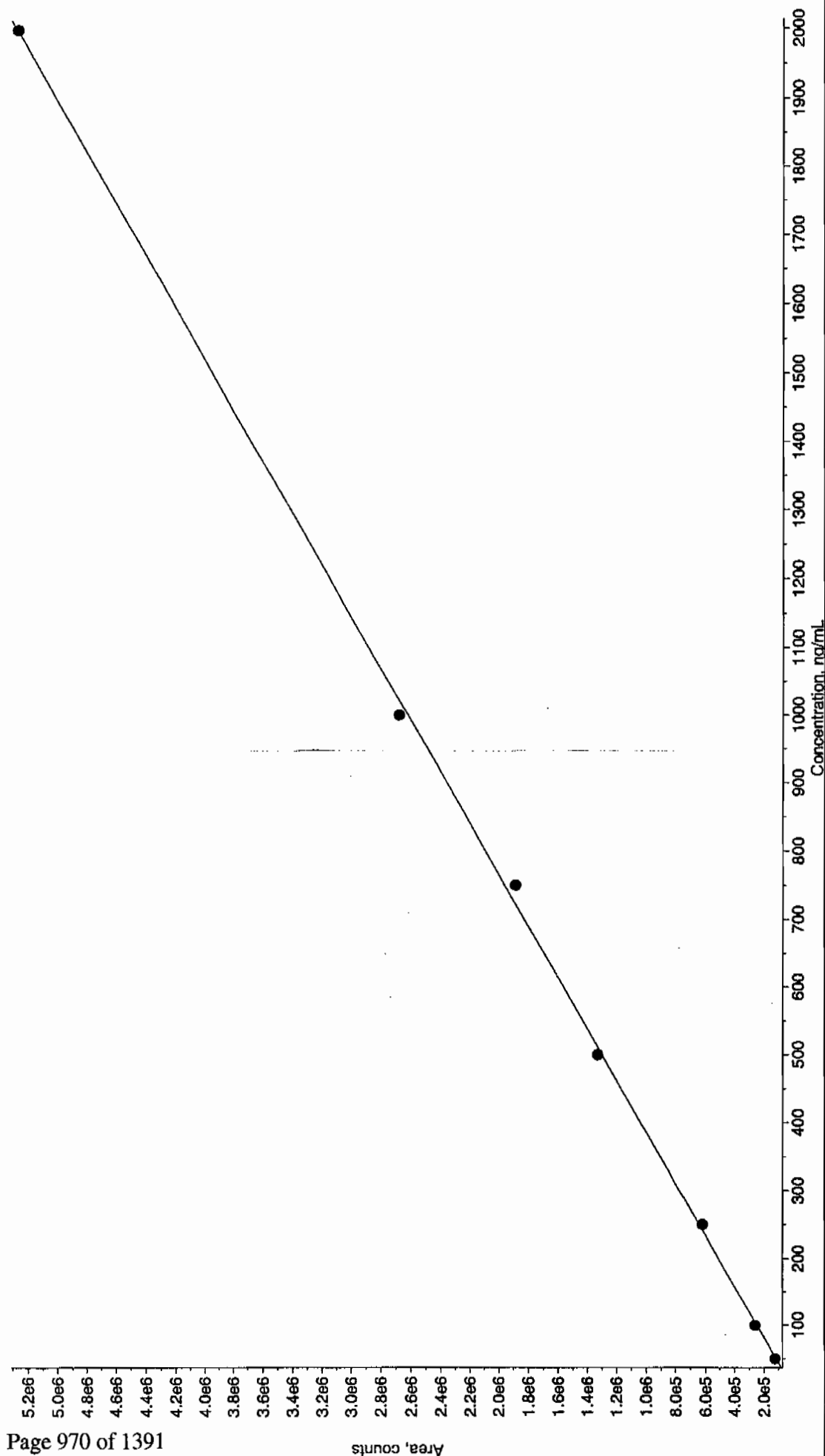
021310.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.26 x^2 + 1.27e+004 x + -6.76e+004$ ($r = 0.9988$)



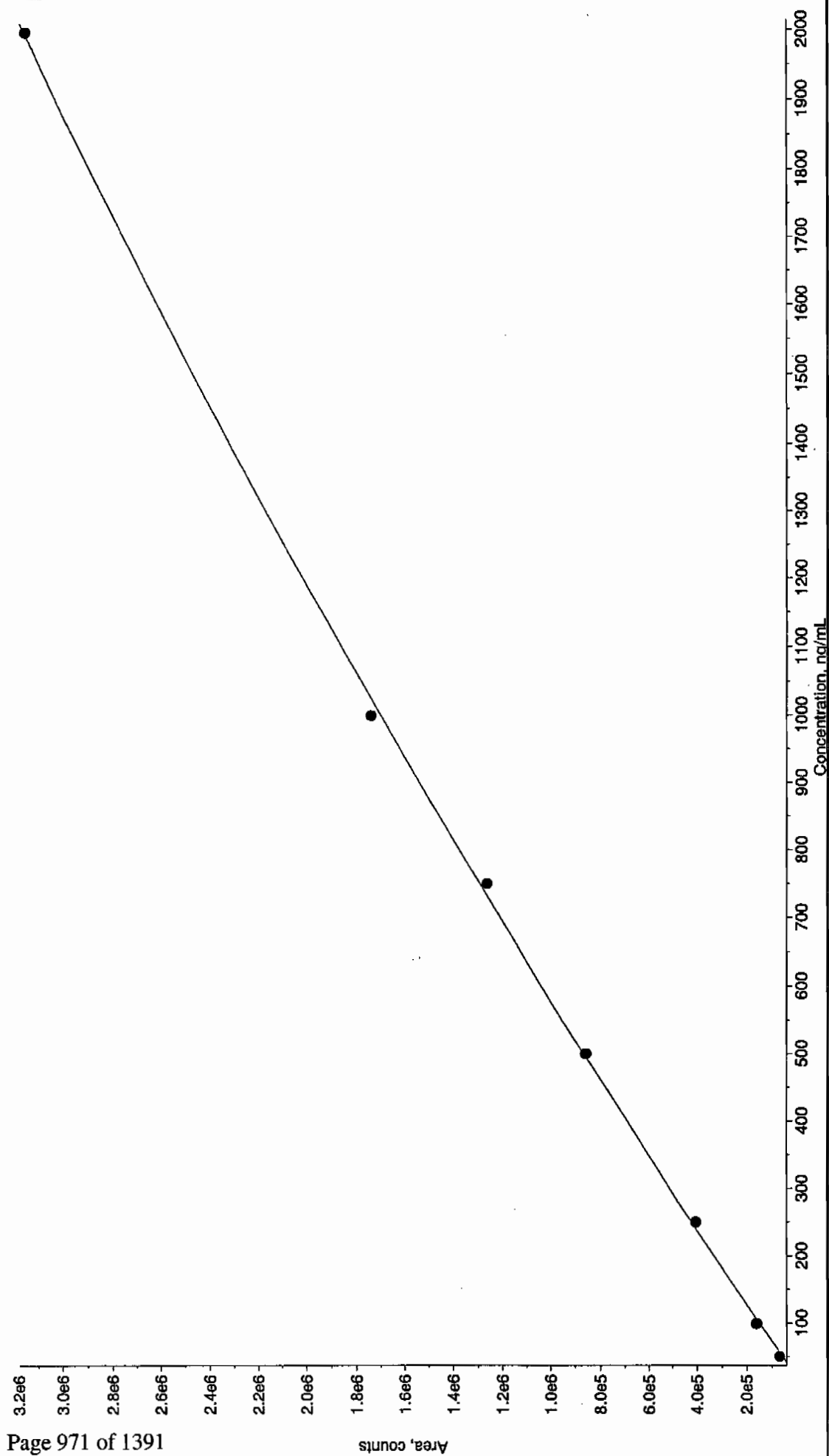
Page 969 of 1391

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

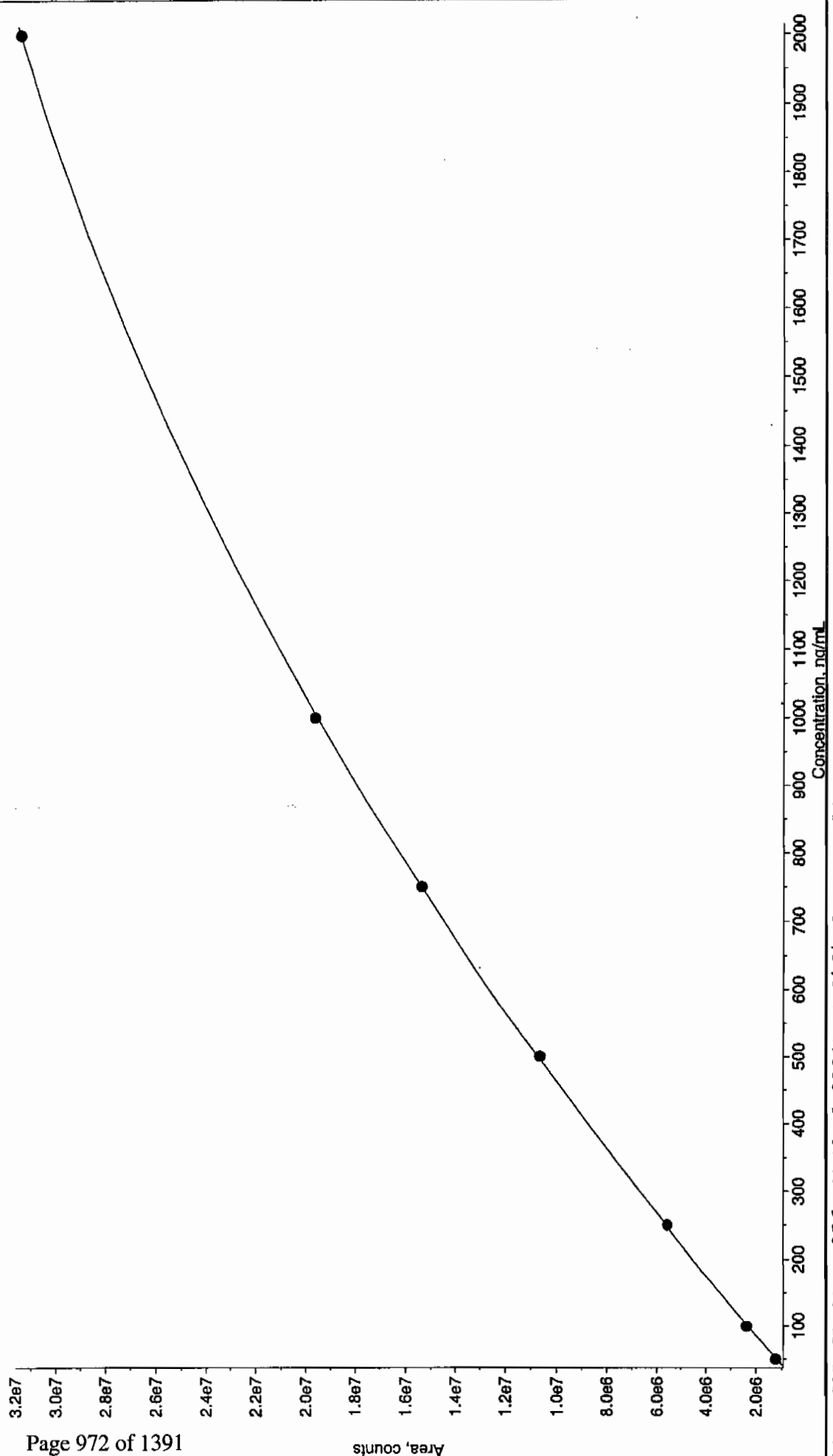
021310.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.00918 x^2 + 2.62e+003 x + -1.27e+004$ ($r = 0.9997$)



021310.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.139x^2 + 1.87e+003x + -3.58e+004$ ($r = 0.9998$)



021310.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.82 x^2 + 2.33e+004 x + 3.69e+004$ ($r = 1.0000$)



7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02130011.wiff

Analysis Date: 13-FEB-10 12:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	503	101	
2,6-Diamino-4-nitrotoluene	500	509	102	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	503	101	
TATB	500	514	103	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

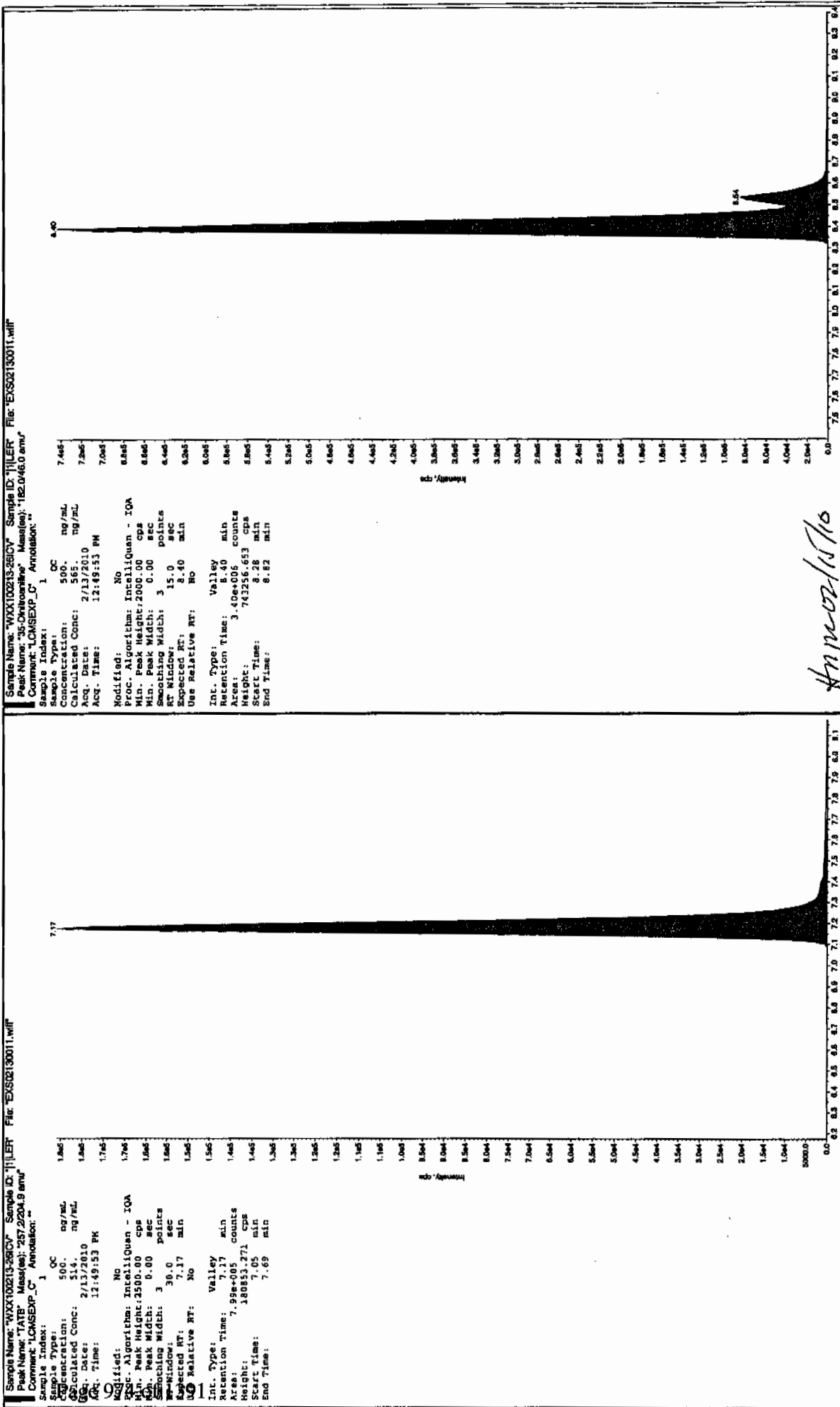
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

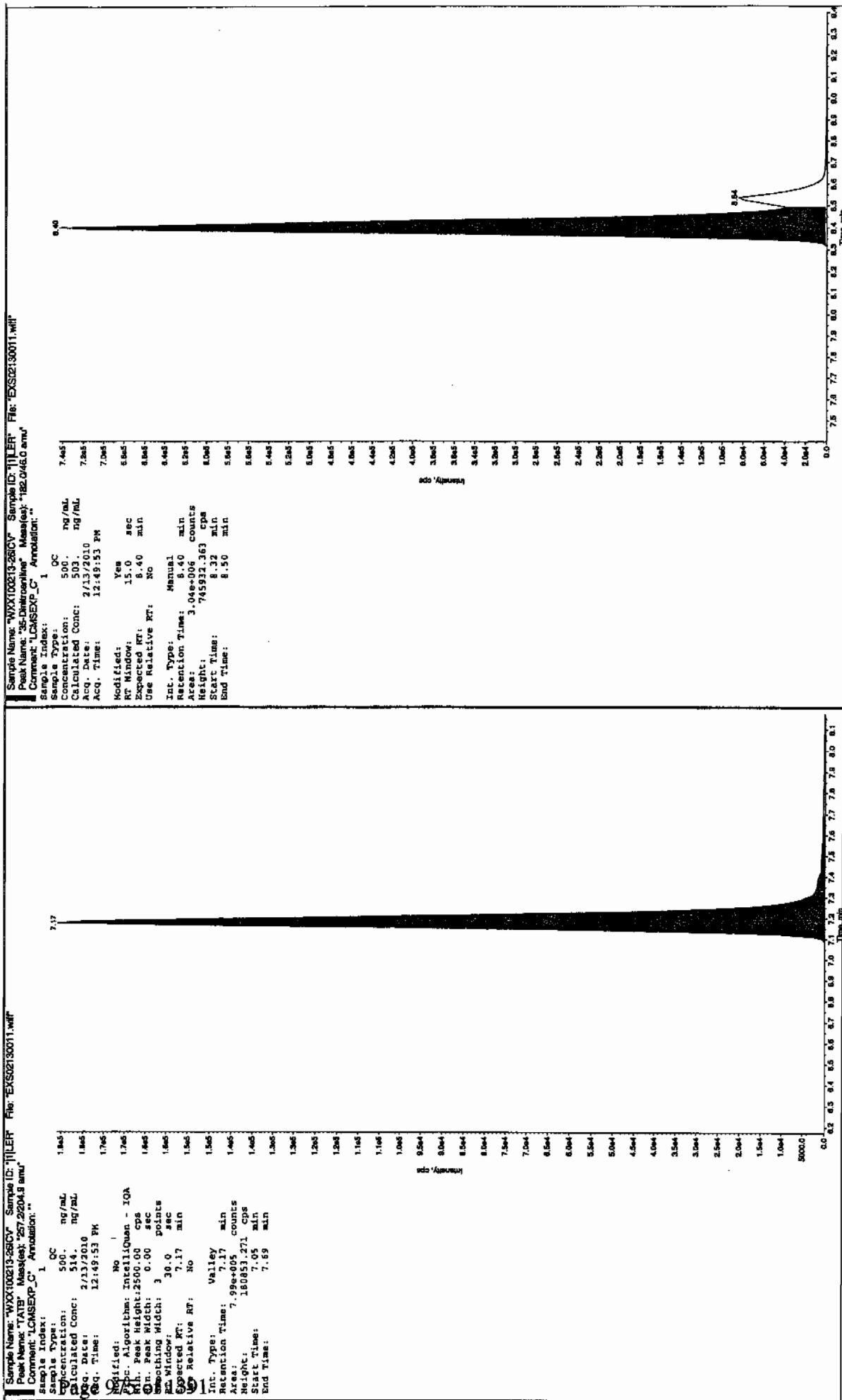
* Value outside of Recovery Limits

Before Jan 21/10



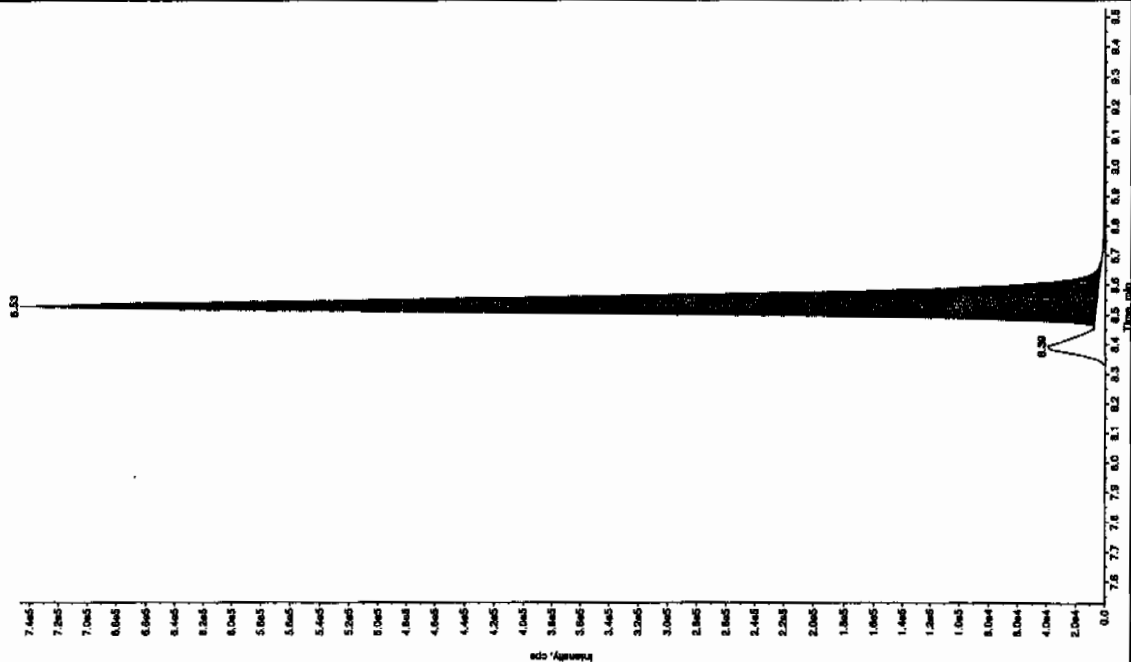
After Jan 21/10

after Jan 21/5/10



Sample Name: "WXX100213-250V" Sample ID: "111EP" File: "EXS02130011.wif"
 Peak Name: "25-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

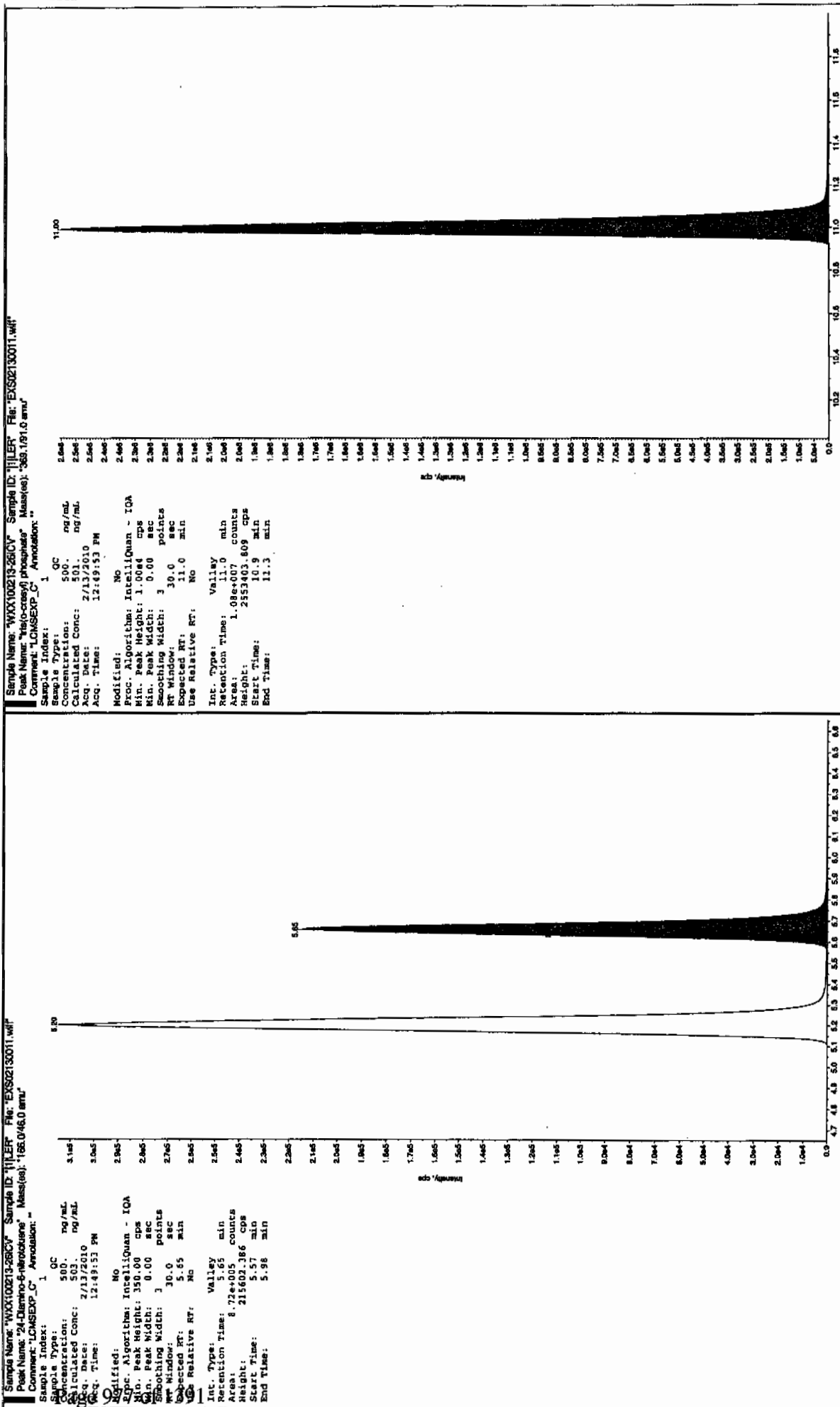
Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Concentrated Conc: 2/13/2010
 Acq. Date: 12/49:53 PM
 Acq. Time: 12:49:53 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.20 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.20 min
 Area: 1.32e+006 counts
 Height: 315228.943 cps
 Start Time: 5.08 min
 End Time: 5.45 min



Sample Name: "WXX100213-250V" Sample ID: "111EP" File: "EXS02130011.wif"
 Peak Name: "34-Diaminobenzene" Mass(es): "162.1515.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 232 ng/mL
 Concentrated Conc: 2/13/2010
 Acq. Date: 12/49:53 PM
 Acq. Time: 12:49:53 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.53 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.53 min
 Area: 2.77e+006 counts
 Height: 140311.38 cps
 Start Time: 8.45 min
 End Time: 8.69 min





Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1384

Lab Code: GEL

Run Date: 08-FEB-10.13-FEB-10.14-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				

See 2/16/10

2/11/10

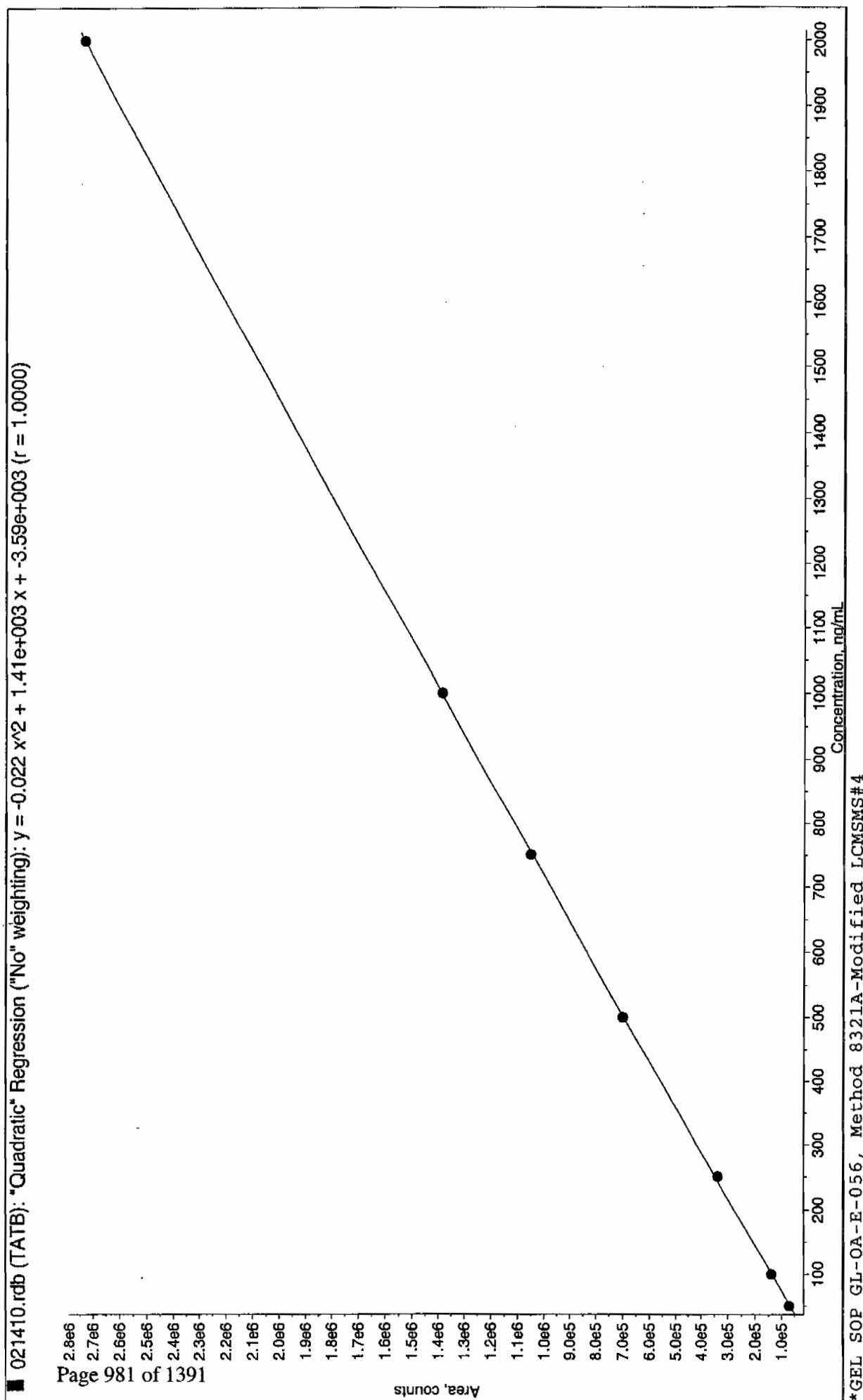
021410ICAL

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

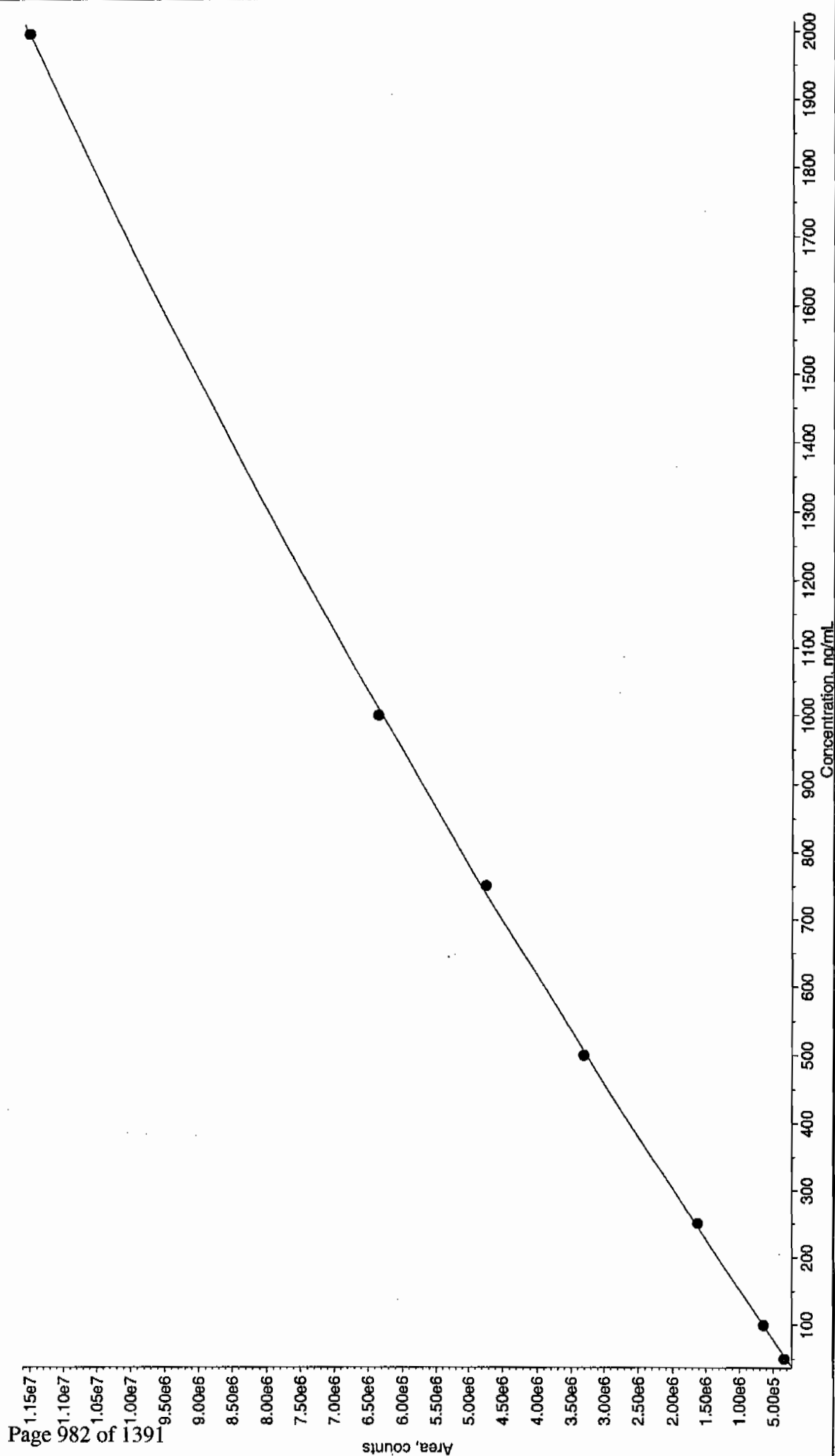
Fit	Quadratic	Weighting	None	Iterate No
a0	4.6e+003			
a1	1.9e+003			
a2	-0.0179			
Correlation coefficient 0.9998				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

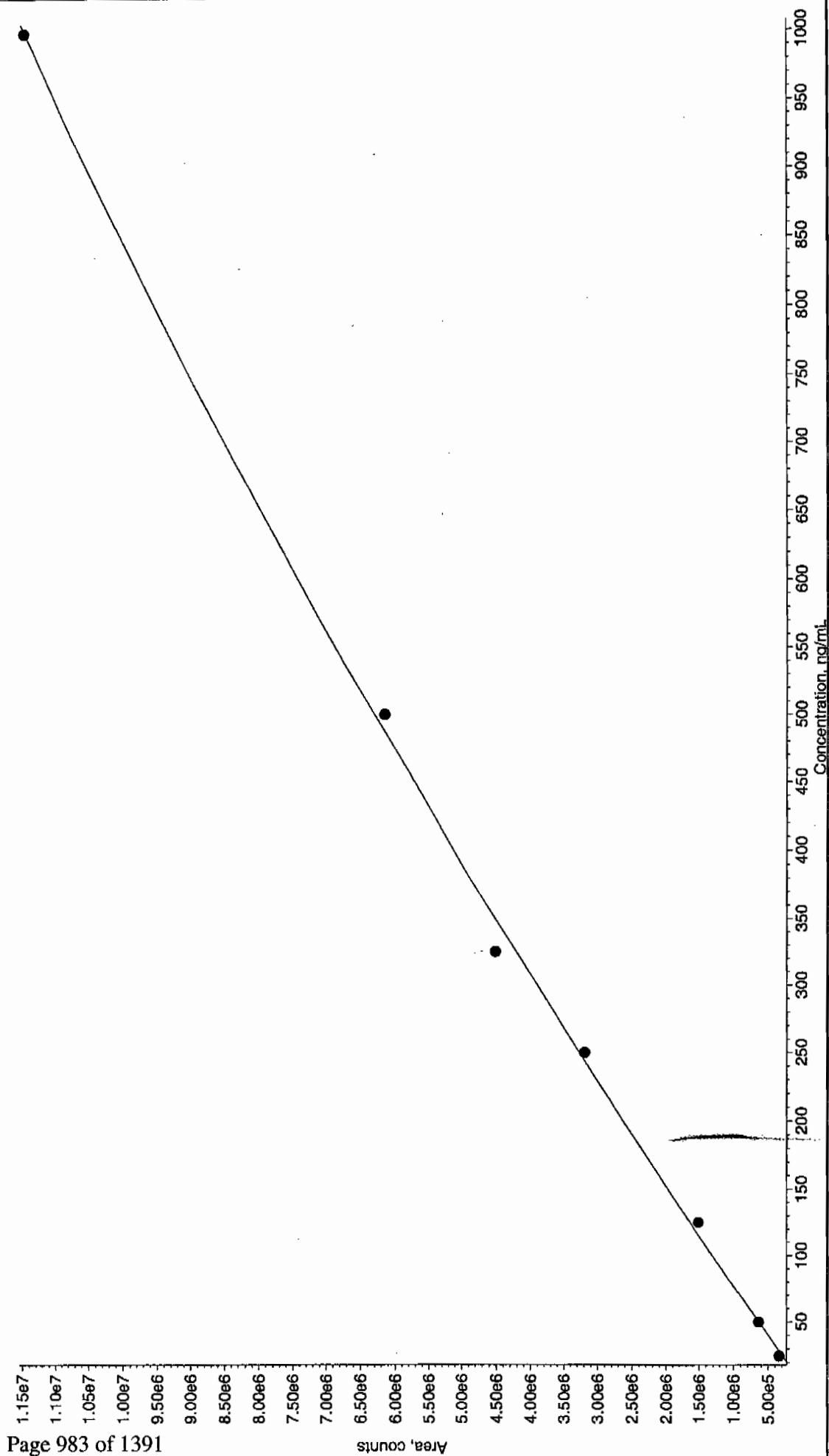
Fit	Quadratic	Weighting	None	Iterate No
a0	6.16e+004			
a1	2.37e+004			
a2	-3.92			
Correlation coefficient 1.0000				
Use Area				



021410.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.557 x^2 + 6.88e+003 x + -2.81e+004$ ($r = 0.9999$)

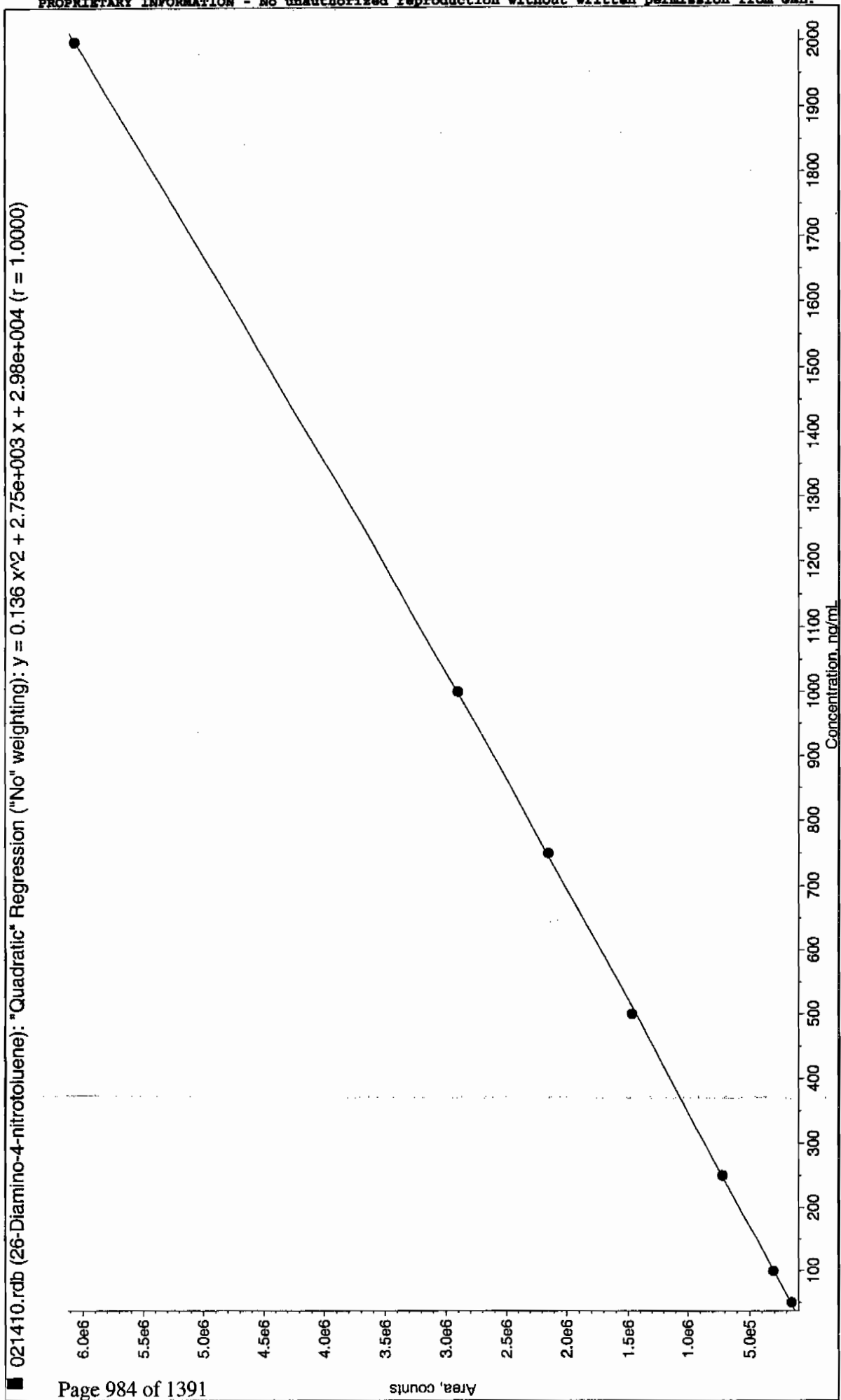


021410.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.42 x^2 + 1.39e+004 x + -5.35e+004$ ($r = 0.9993$)

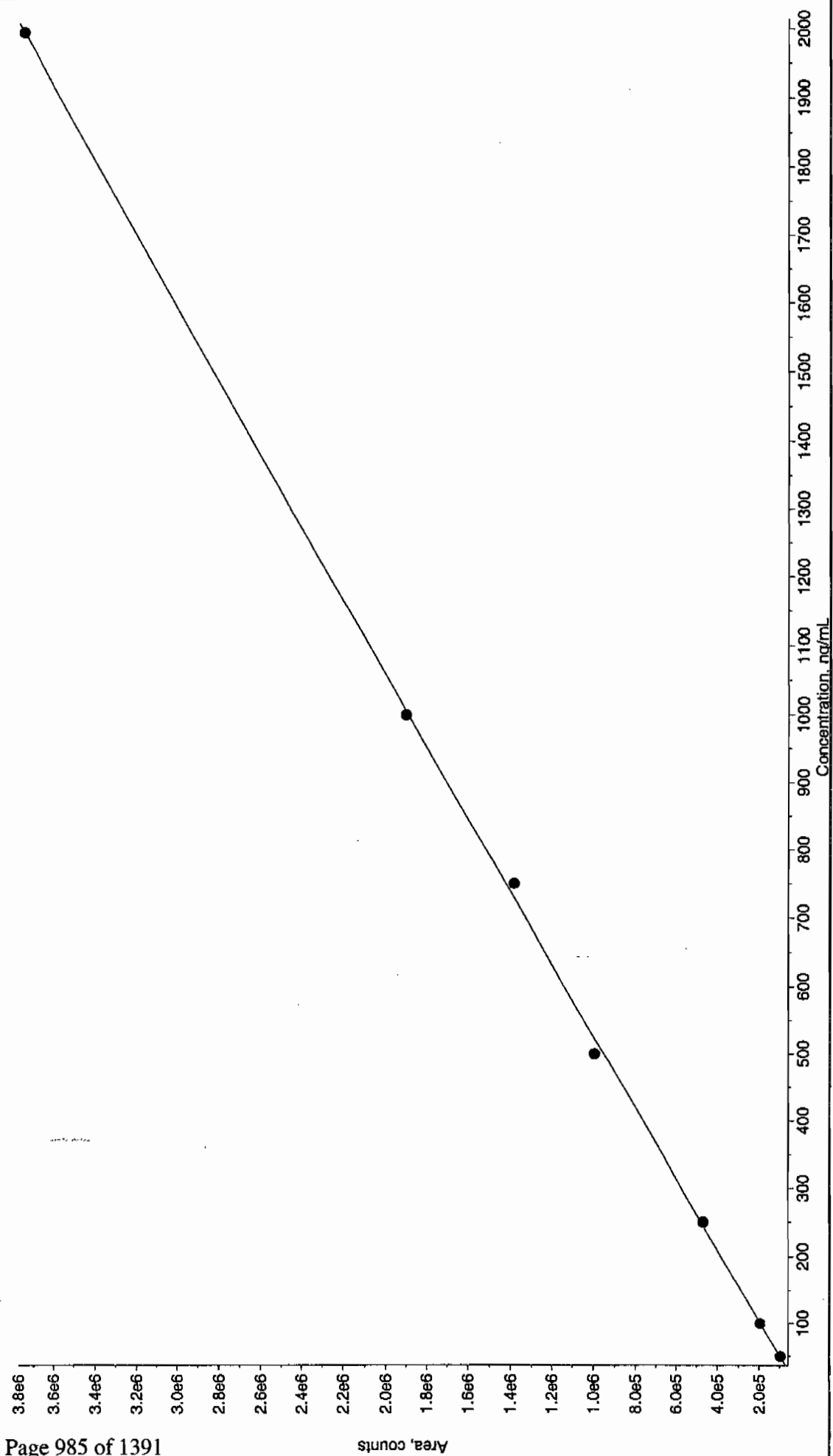


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

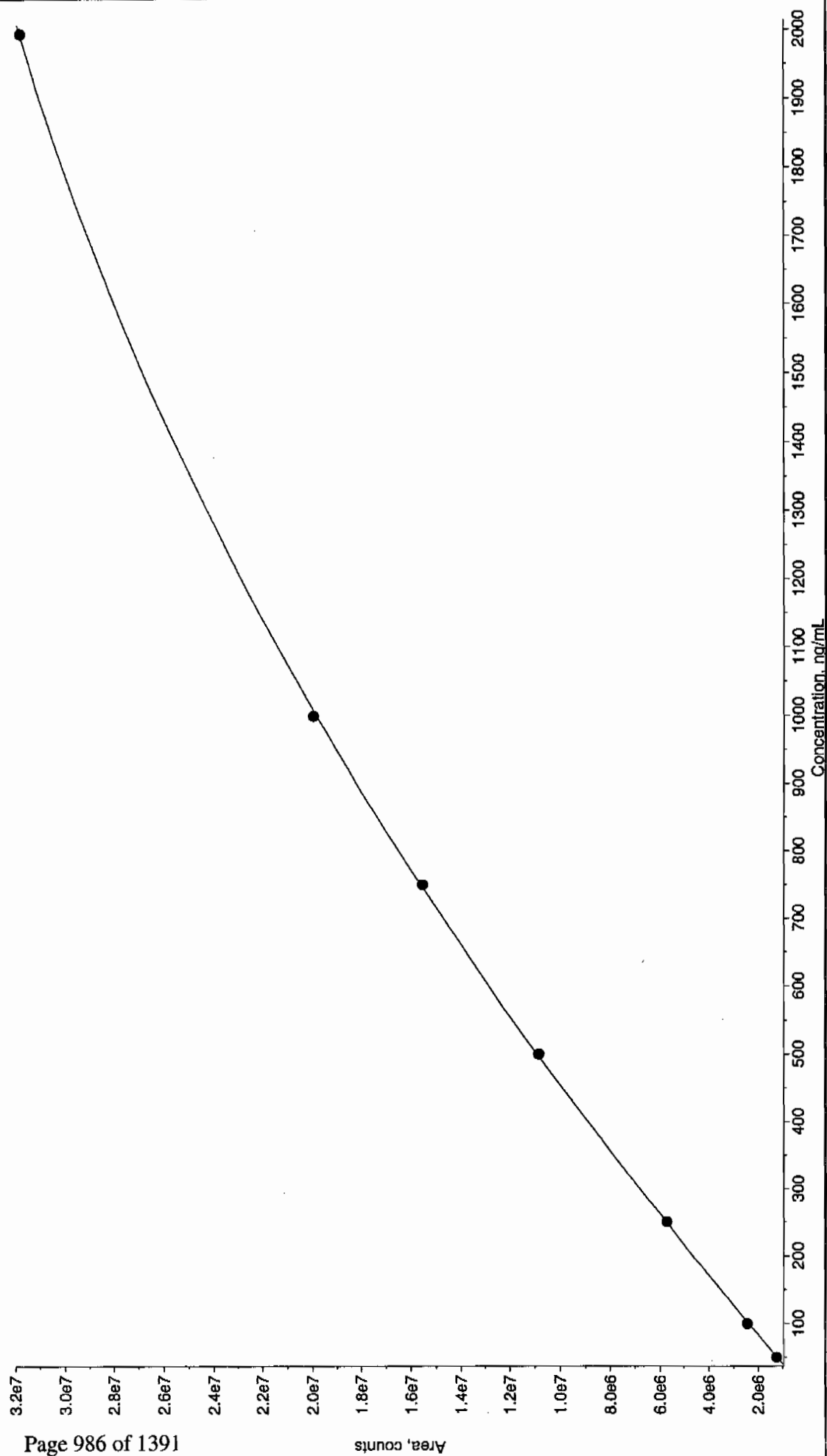
021410.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.136 x^2 + 2.75e+003 x + 2.98e+004$ ($r = 1.0000$)



021410.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0179 x^2 + 1.9e+003 x + 4.6e+003$ ($r = 0.9998$)



021410.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.92 x^2 + 2.37e+004 x + 6.16e+004$ ($r = 1.0000$)



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

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
3,5-Dinitroaniline	500	495	99	
TATB	500	501	100	
tris(o-cresyl) phosphate	500	493	99	
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	535	107	
3,4-Dinitrotoluene	250	215	86	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

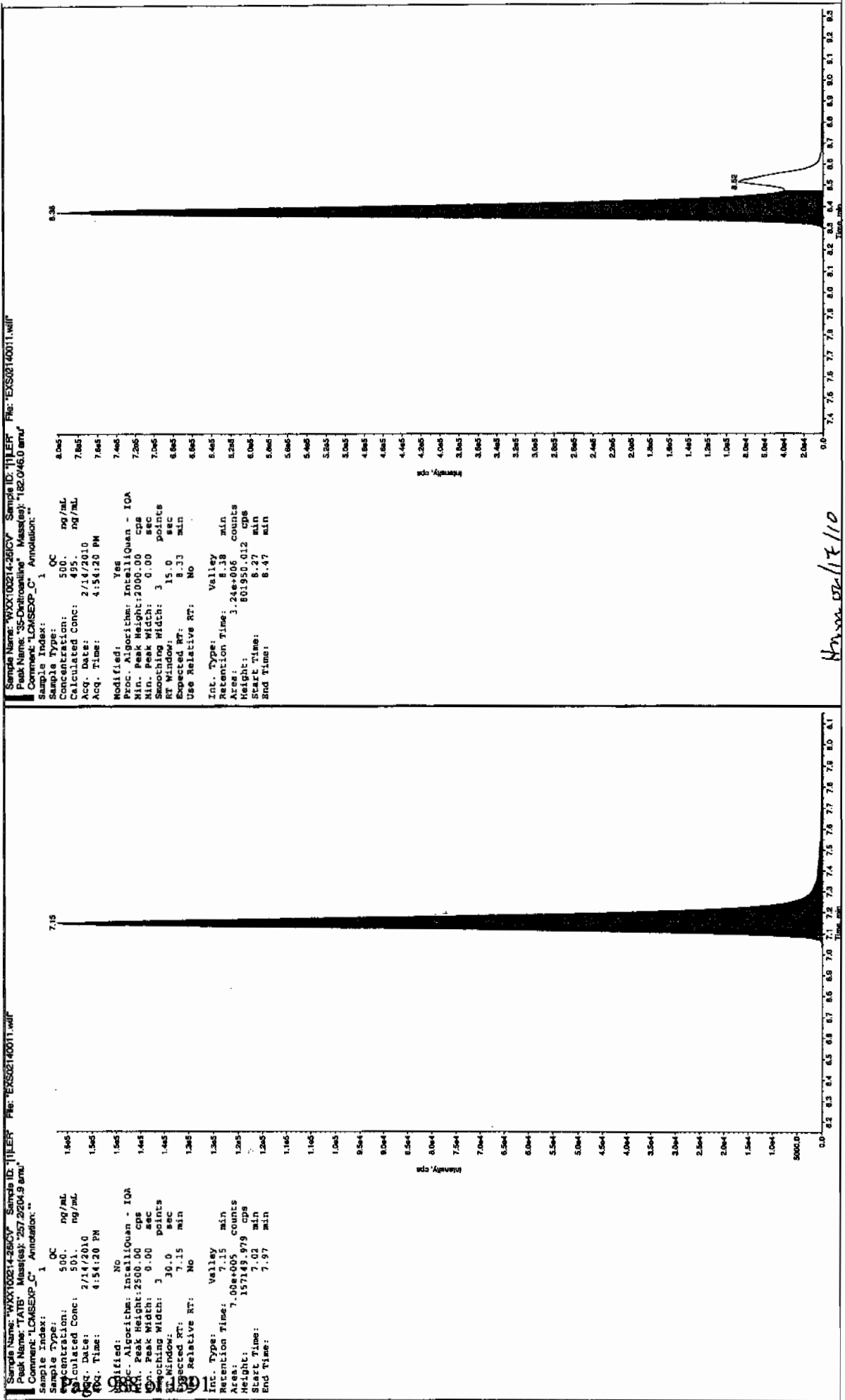
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

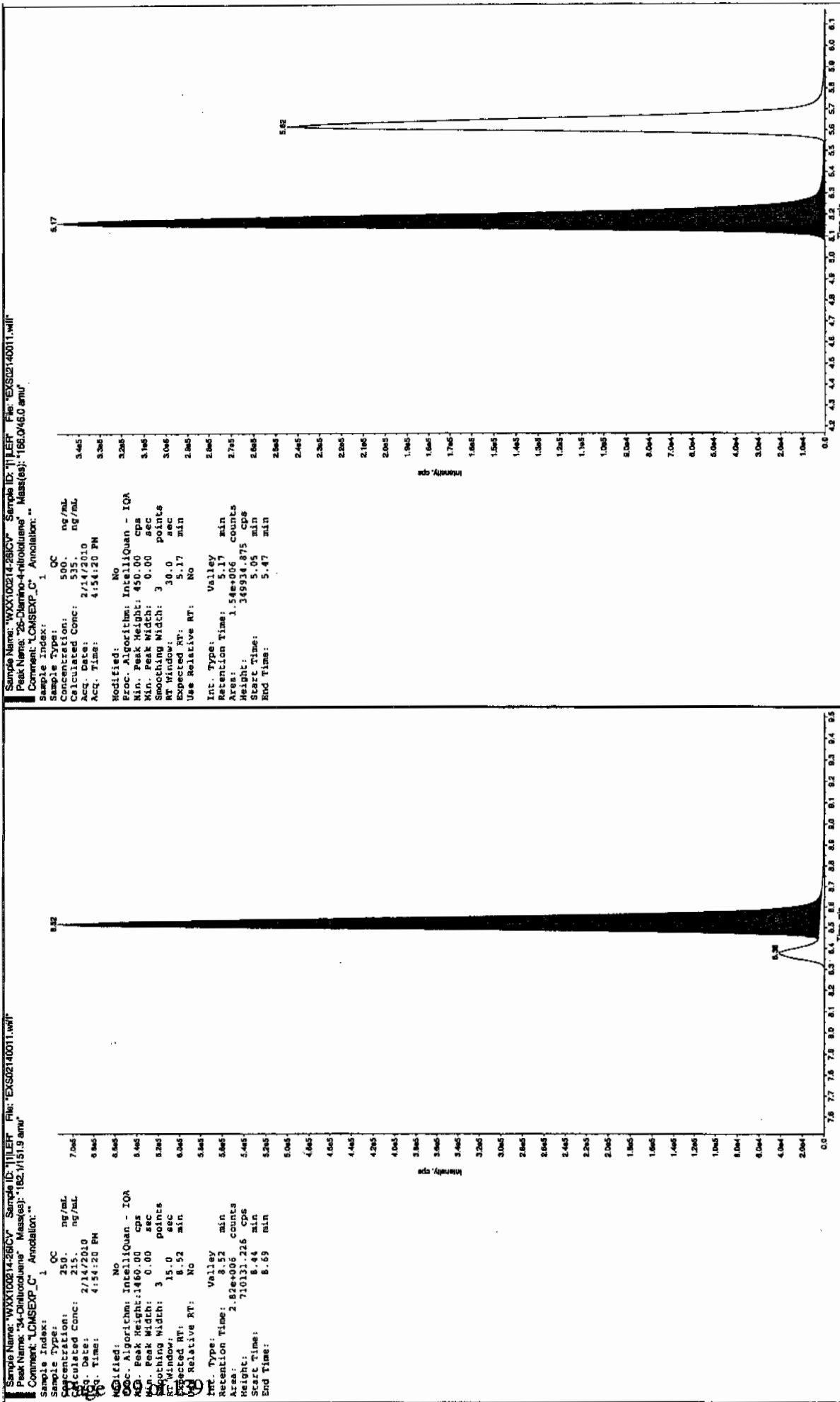
Column used to flag Recovery outside of Limits

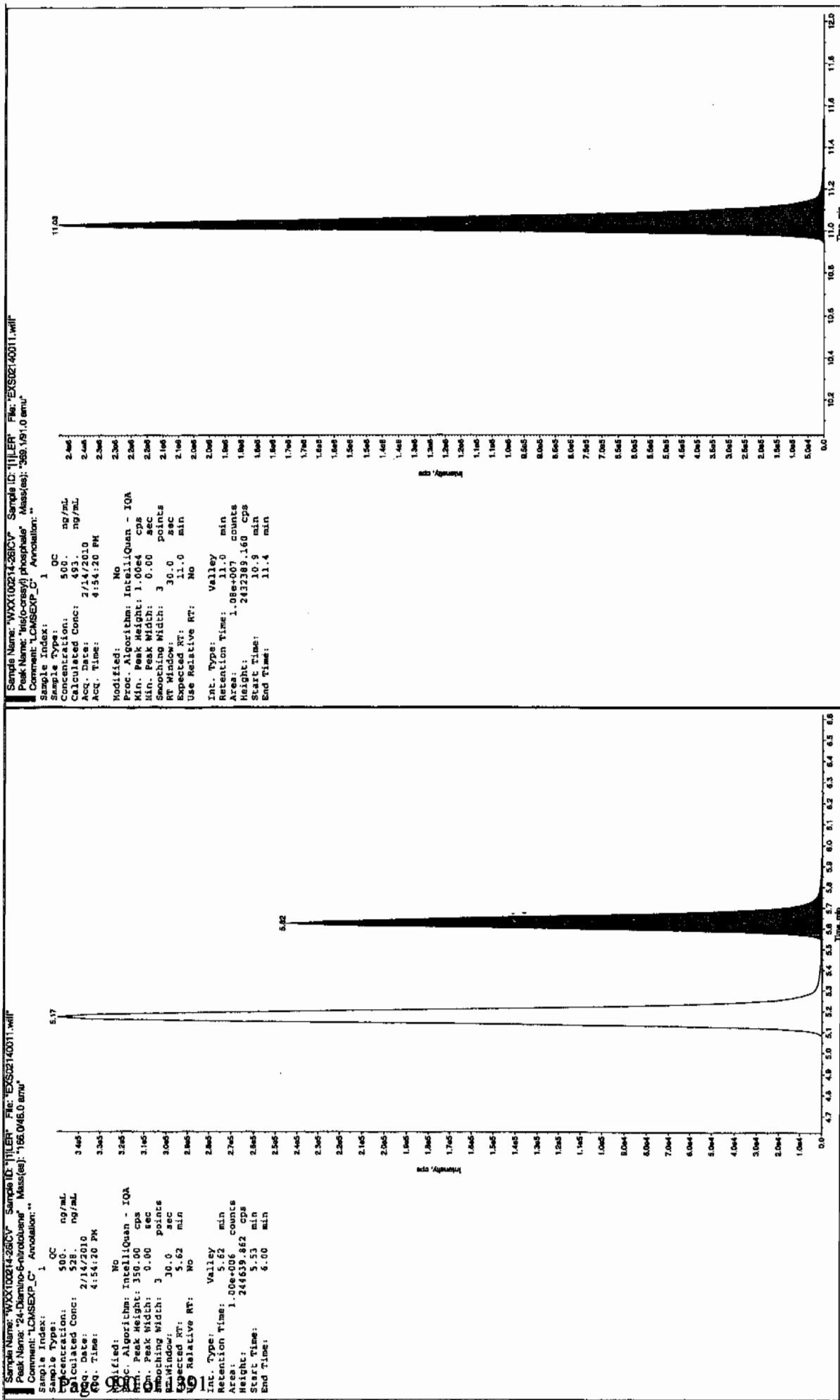
* Value outside of Recovery Limits

OK 2/16/10



Ammonia 17/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208012a

Analysis Date: 08-FEB-10 20:09

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40.21	101	
1,3-Dinitrobenzene-d4	500	487.883	98	
2,4,6-Trinitrotoluene	40	41.689	104	
2,4-Dinitrotoluene	40	40.338	101	
2,6-Dinitrotoluene	40	41.76	104	
2,6-Dinitrotoluene-d3	500	475.508	95	
2-Amino-4,6-dinitrotoluene	40	38.358	96	
3,4-Dinitrotoluene	20	17.528	88	
4-Amino-2,6-dinitrotoluene	40	38.578	96	
HMX	40	37.759	94	
Nitrobenzene	40	49.333	123	
PETN	40	39.026	98	
RDX	40	41.043	103	
Tetryl	40	37.278	93	
m-Dinitrobenzene	40	39.387	98	
m-Nitrotoluene	40	35.357	88	
o-Nitrotoluene	40	44.694	112	
p-Nitrotoluene	40	41.348	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208012a

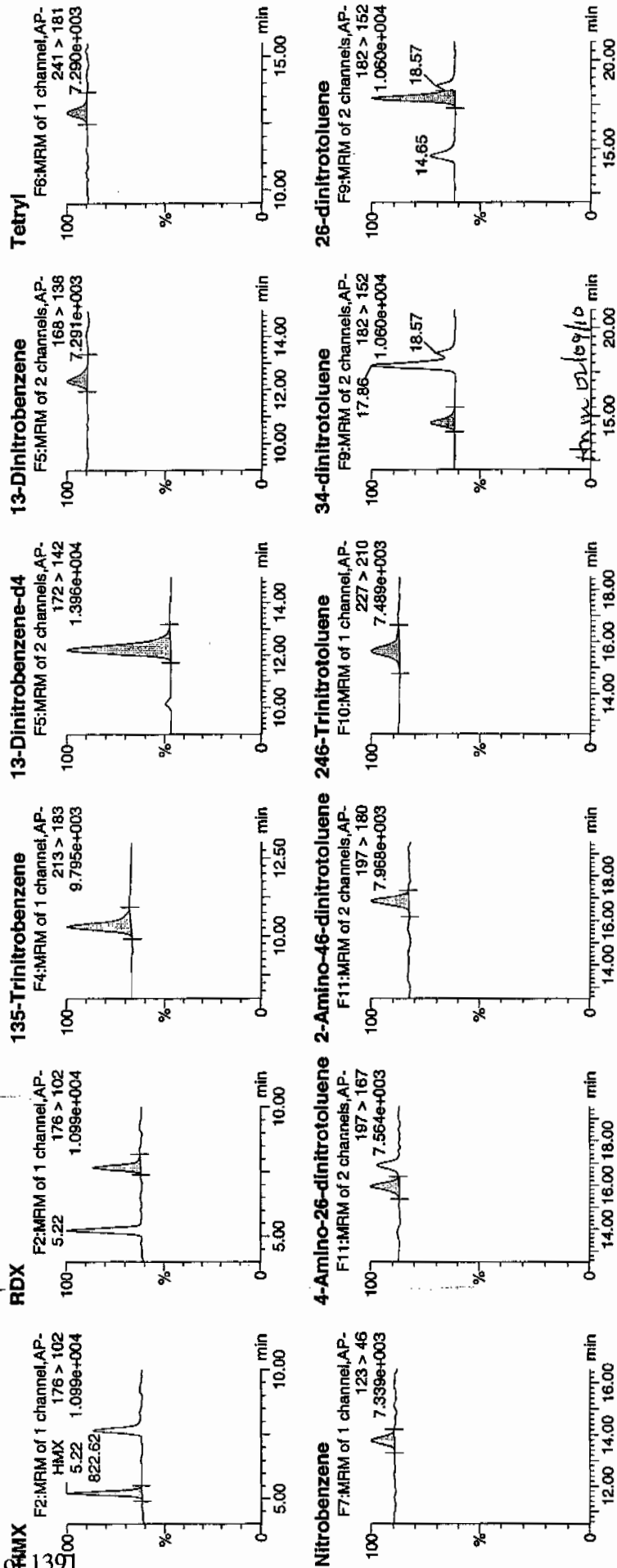
Date: 08-Feb-2010

Time: 20:09:03

ID: WXX100208-08CRI

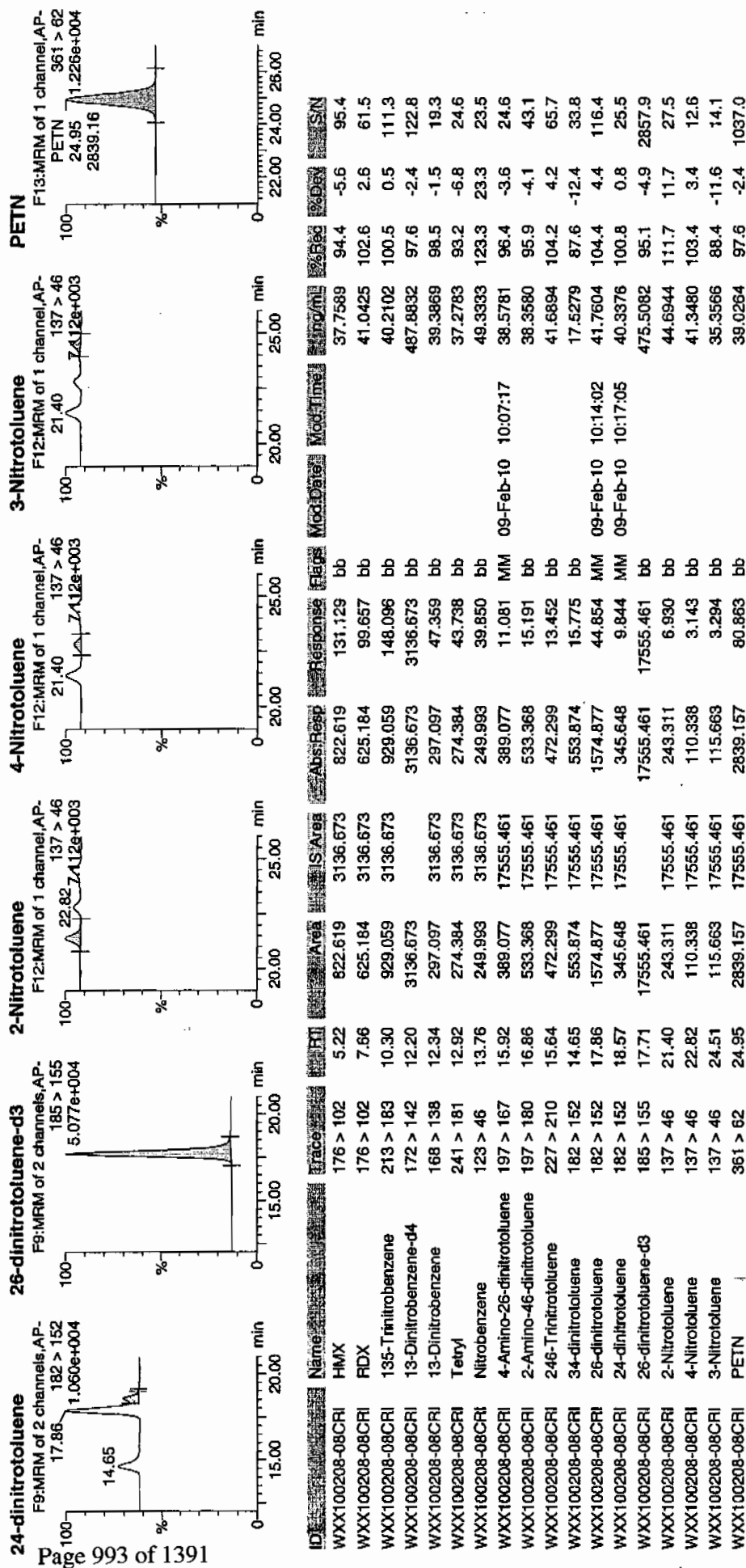
Gain: 1:1,C

WXX
2/9/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/08/10
 Time of Injection 2009
 Standard Number WXX100208-08CRI
 Data File EXP0208012a

HMX	94.4
RDX	102.6
135-TNB	100.5
13-DNB	98.5
Tetryl	93.2
Nitrobenzene	123.3
4A-26-DNT	96.4
2A-46-DNT	95.9
246-TNT	104.2
34-DNT(surr)	87.6
26-DNT	104.4
24-DNT	100.8
2-NT	111.7
4-NT	103.4
3-NT	88.4
PETN	97.6

*WAT
2/9/10*

Total 1602.9

Average 100.2

4/11/10 02/09/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208023a

Analysis Date: 09-FEB-10 01:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	600	663.13	111	
2,4-Dinitrotoluene	600	649.62	108	
2,6-Dinitrotoluene	600	630.157	105	
2,6-Dinitrotoluene-d3	500	523.831	105	
2-Amino-4,6-dinitrotoluene	600	647.652	108	
3,4-Dinitrotoluene	300	319.699	107	
4-Amino-2,6-dinitrotoluene	600	634.612	106	
HMX	600	662.759	110	
Nitrobenzene	600	657.025	110	
PETN	600	606.078	101	
RDX	600	749.058	125	*
Tetryl	600	660.942	110	
m-Dinitrobenzene	600	626.395	104	
m-Nitrotoluene	600	578.428	96	
o-Nitrotoluene	600	666.647	111	
p-Nitrotoluene	600	667.754	111	
1,3,5-Trinitrobenzene	600	554.897	92	
1,3-Dinitrobenzene-d4	500	508.101	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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208023a

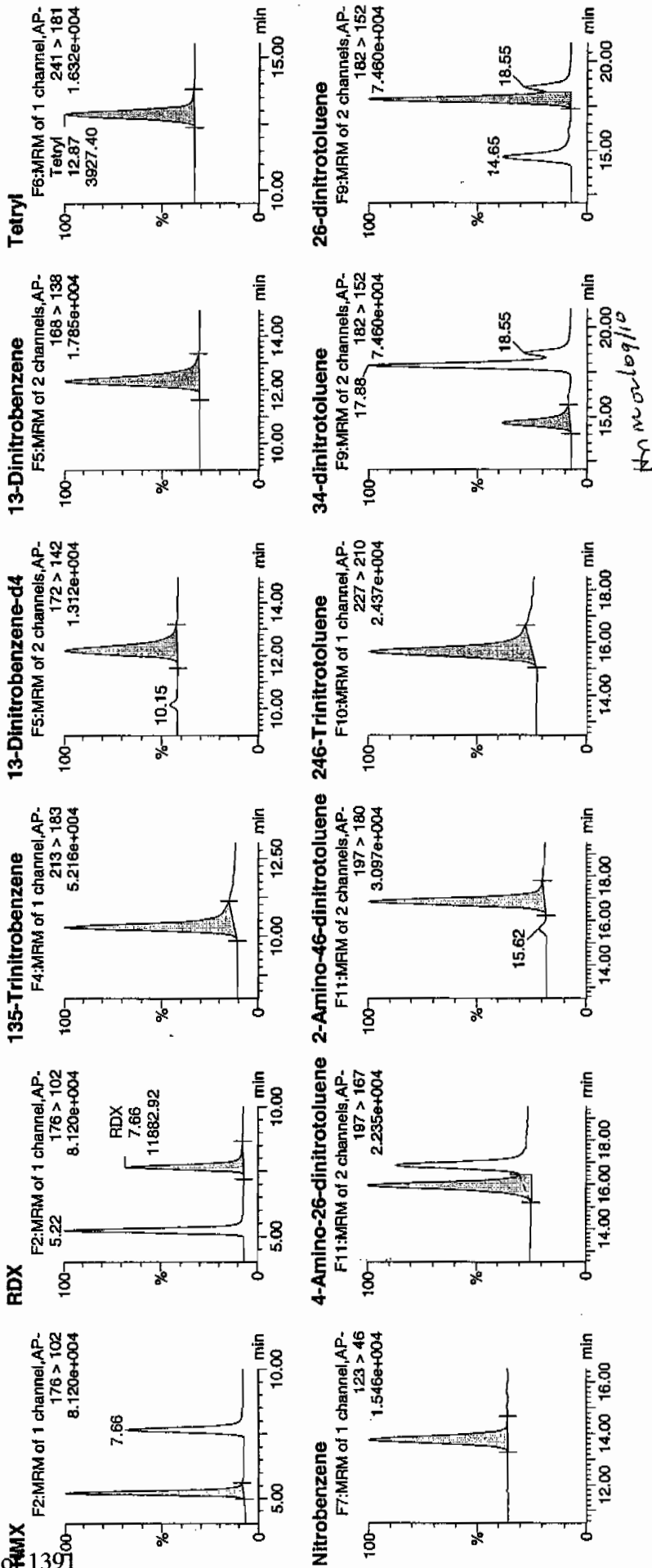
Date: 09-Feb-2010

Time: 01:33:25

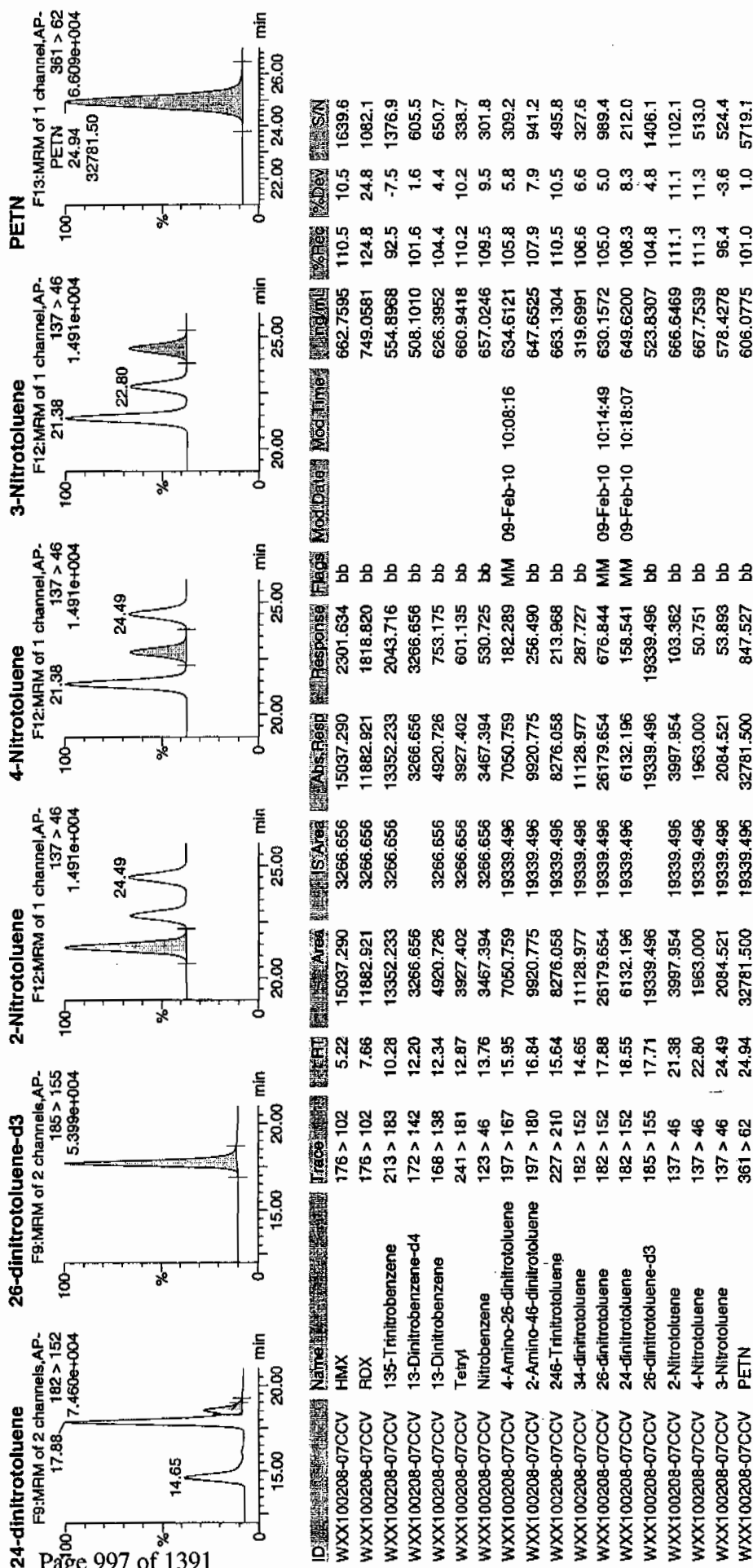
ID: WXX100208-07CCV

Gal: 1:1,B

10/10
2/9/10



Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 0133
 Standard Number: WXX100208-07CCV
 Data File: EXP0208023a

HMX	110.5
RDX	124.8
135-TNB	92.5
13-DNB	104.4
Tetryl	110.2
Nitrobenzene	109.5
4A-26-DNT	105.8
2A-46-DNT	107.9
246-TNT	110.5
34-DNT(surr)	106.6
26-DNT	105.0
24-DNT	108.3
2-NT	111.1
4-NT	111.3
3-NT	96.4
PETN	101.0

MAF
2/9/10

Total 1715.8

MAF on 2/9/10

Average 107.2

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): 10-1384

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXP0208025a

Analysis Date: 09-FEB-10 02:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	20	22.301	112	
4-Amino-2,6-dinitrotoluene	40	34.146	85	
HMX	40	52.317	131	*
Nitrobenzene	40	45.327	113	
PETN	40	49.164	123	
RDX	40	55.212	138	*
Tetryl	40	41.653	104	
m-Dinitrobenzene	40	42.381	106	
m-Nitrotoluene	40	52.115	130	*
o-Nitrotoluene	40	49.924	125	
p-Nitrotoluene	40	50.961	127	
1,3,5-Trinitrobenzene	40	48.344	121	
1,3-Dinitrobenzene-d4	500	473.5	95	
2,4,6-Trinitrotoluene	40	40.42	101	
2,4-Dinitrotoluene	40	41.928	105	
2,6-Dinitrotoluene	40	42.477	106	
2,6-Dinitrotoluene-d3	500	478.268	96	
2-Amino-4,6-dinitrotoluene	40	34.805	87	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208025a

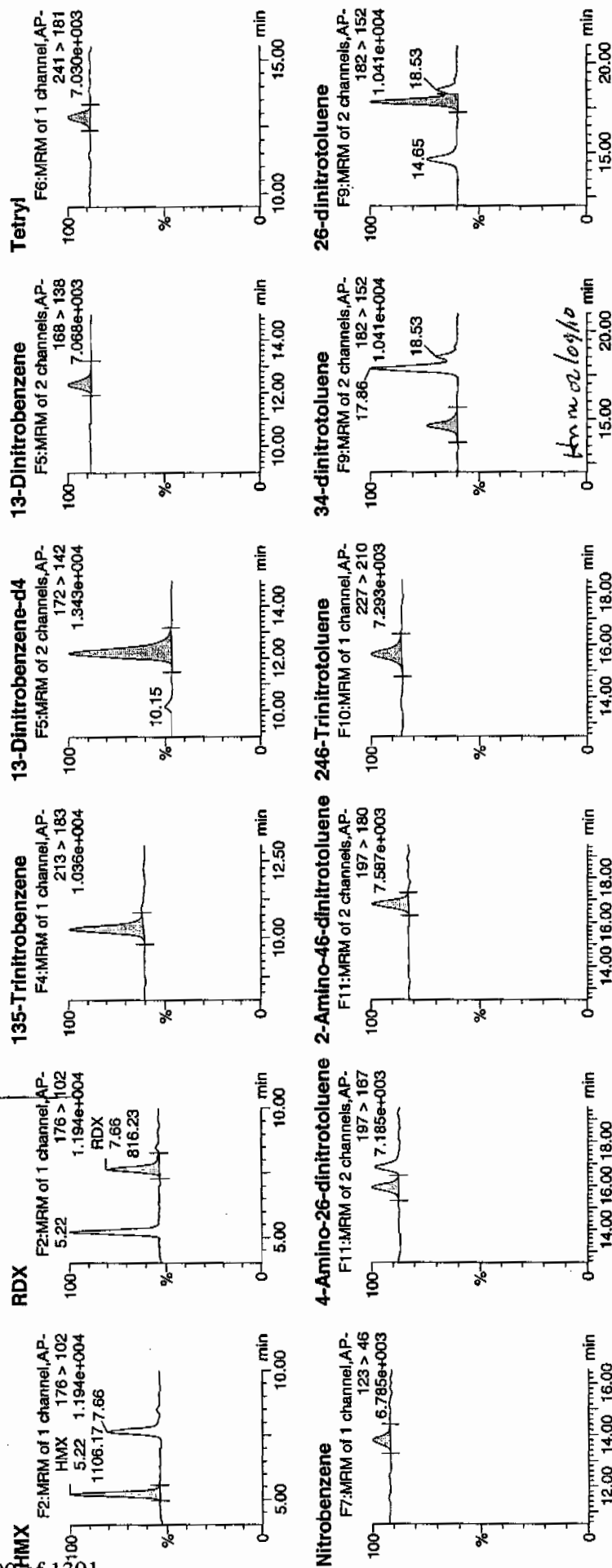
Date: 09-Feb-2010

Time: 02:32:22

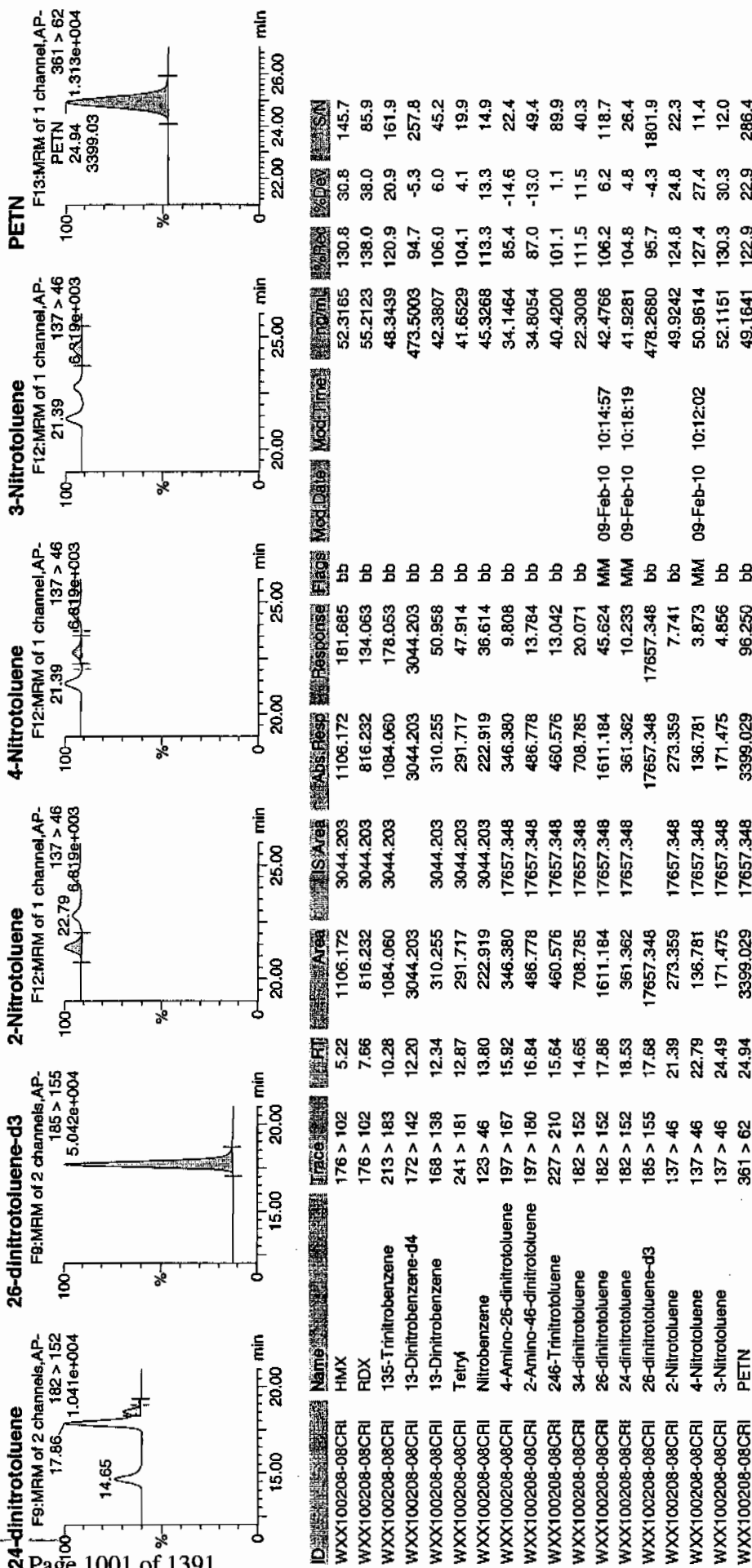
ID: WXX100208-08CRI

Vial: 1:1,C

1000 of 1391
 10/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 0232
 Standard Number WXX100208-08CRI
 Data File EXP0208025a

HMX	130.8
RDX	138.0
135-TNB	120.9
13-DNB	106.0
Tetryl	104.1
Nitrobenzene	113.3
4A-26-DNT	85.4
2A-46-DNT	87.0
246-TNT	101.1
34-DNT(surr)	111.5
26-DNT	106.2
24-DNT	104.8
2-NT	124.8
4-NT	127.4
3-NT	130.3
PETN	122.9
Total	1814.5

HTT
2/9/10

Average

113.4

HTT 02/09/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208036a

Analysis Date: 09-FEB-10 07:57

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	600	669.645	112	
Tetryl	600	596.357	99	
m-Dinitrobenzene	600	631.512	105	
m-Nitrotoluene	600	558.007	93	
o-Nitrotoluene	600	611.096	102	
p-Nitrotoluene	600	633.085	106	
1,3,5-Trinitrobenzene	600	557.726	93	
1,3-Dinitrobenzene-d4	500	507.978	102	
2,4,6-Trinitrotoluene	600	683.818	114	
2,4-Dinitrotoluene	600	677.06	113	
2,6-Dinitrotoluene	600	638.573	106	
2,6-Dinitrotoluene-d3	500	505.031	101	
2-Amino-4,6-dinitrotoluene	600	628.37	105	
3,4-Dinitrotoluene	300	343.206	114	
4-Amino-2,6-dinitrotoluene	600	610.088	102	
HMX	600	580.276	97	
Nitrobenzene	600	601.509	100	
PETN	600	627.319	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208036a

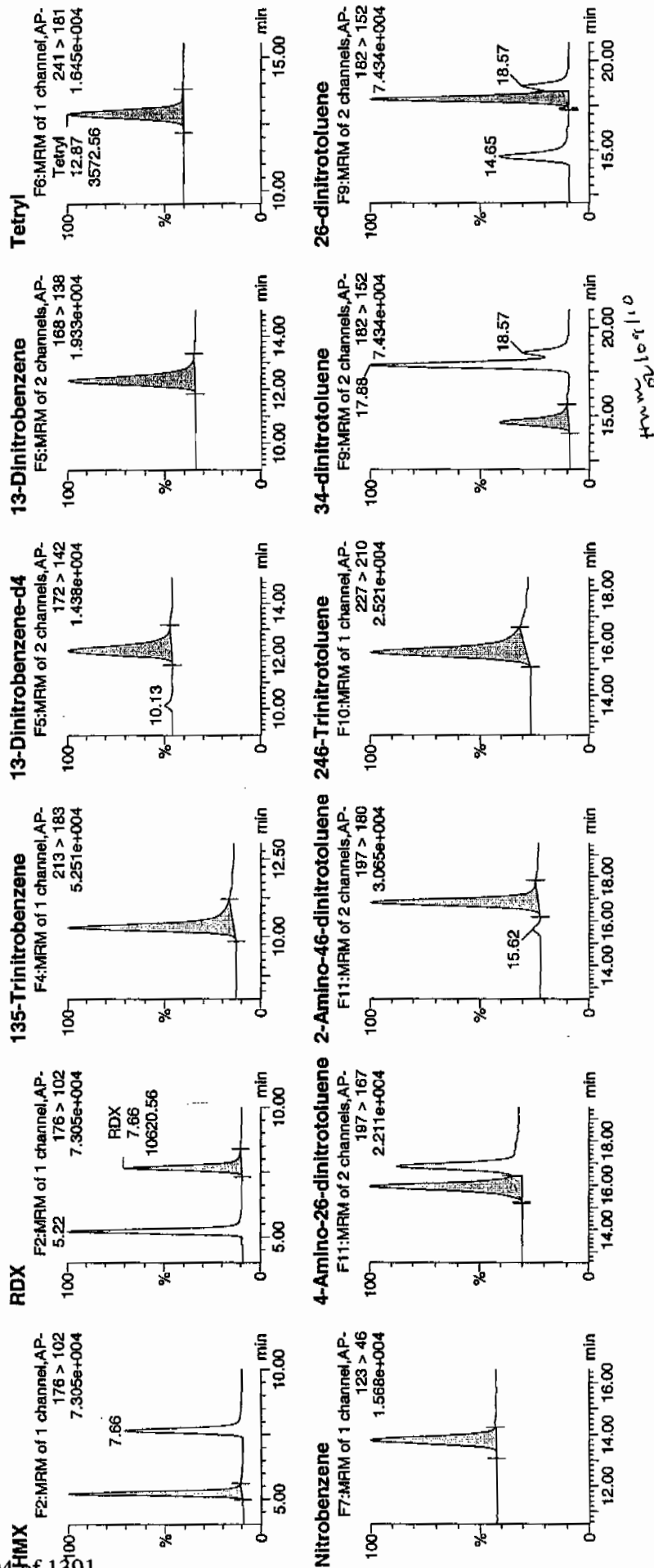
Date: 09-Feb-2010

Time: 07:57:19

ID: WXX100208-07CCV

Vial: 1:1,B

10/2/10

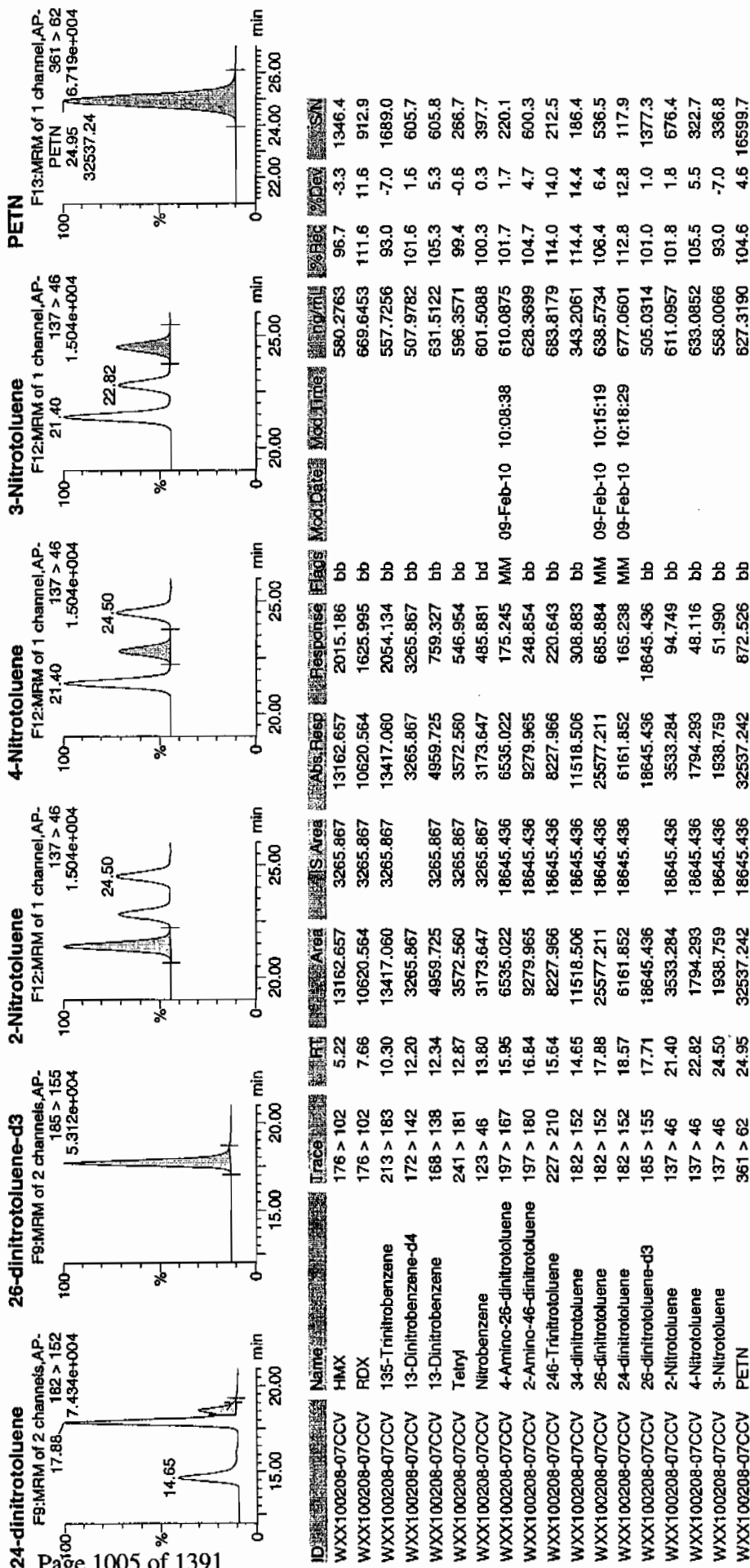


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 72 of 77

Dataset: C:\MASSLYNX\New_Exp_PROV020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 0757
 Standard Number: WXX100208-07CCV
 Data File: EXP0208036a

HMX	96.7
RDX	111.6
135-TNB	93.0
13-DNB	105.3
Tetryl	99.4
Nitrobenzene	100.3
4A-26-DNT	101.7
2A-46-DNT	104.7
246-TNT	114.0
34-DNT(surr)	114.4
26-DNT	106.4
24-DNT	112.8
2-NT	101.8
4-NT	105.5
3-NT	93.0
PETN	104.6

*mtf
2/9/10*

Total 1665.2

Average 104.1

Hum on 2/9/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208038a

Analysis Date: 09-FEB-10 08:56

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	41.878	105	
1,3-Dinitrobenzene-d4	500	600.974	120	
2,4,6-Trinitrotoluene	40	41.161	103	
2,4-Dinitrotoluene	40	39.718	99	
2,6-Dinitrotoluene	40	41.46	104	
2,6-Dinitrotoluene-d3	500	511.208	102	
2-Amino-4,6-dinitrotoluene	40	41.059	103	
3,4-Dinitrotoluene	20	24.686	123	
4-Amino-2,6-dinitrotoluene	40	44.787	112	
HMX	40	36.25	91	
Nitrobenzene	40	44.383	111	
PETN	40	42.434	106	
RDX	40	40.143	100	
Tetryl	40	36.6	92	
m-Dinitrobenzene	40	41.257	103	
m-Nitrotoluene	40	38.786	97	
o-Nitrotoluene	40	43.692	109	
p-Nitrotoluene	40	33.849	85	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208038a

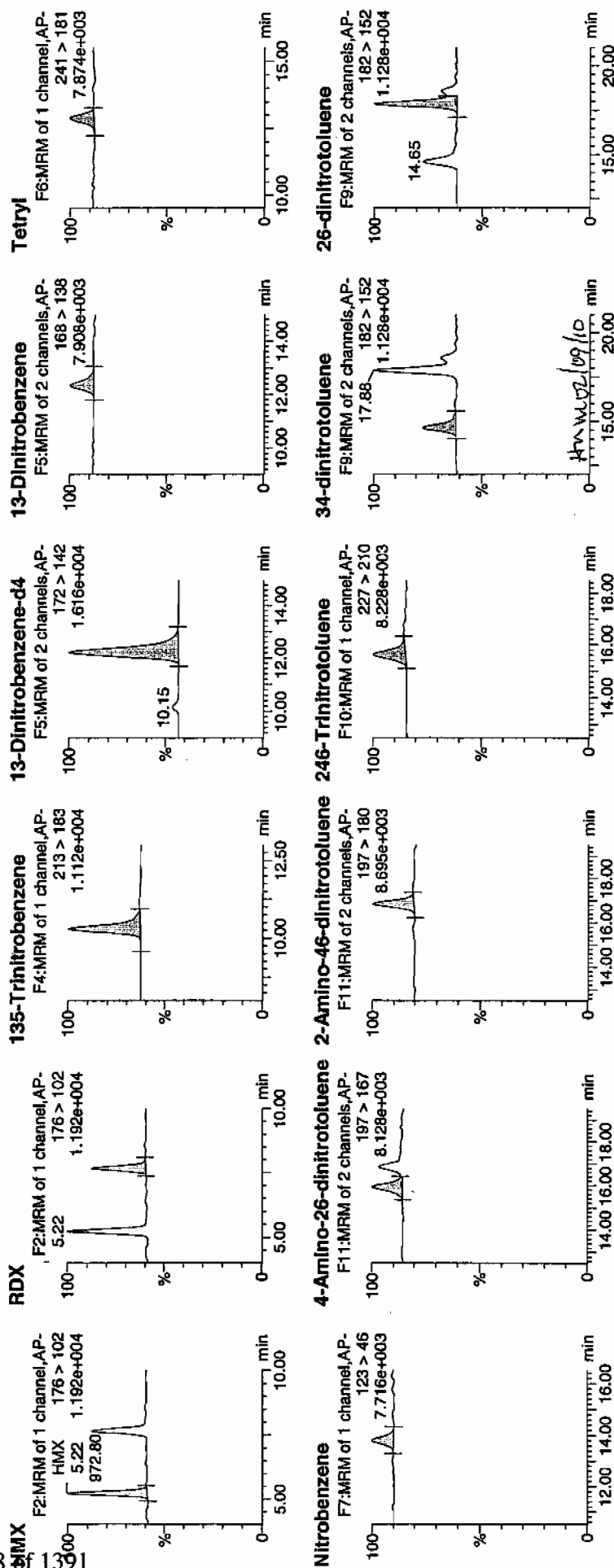
Date: 09-Feb-2010

Time: 08:56:17

ID: WXX100208-08CRI

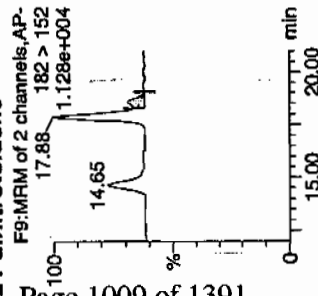
Ratio: 1:1,C

AT
2/9/10

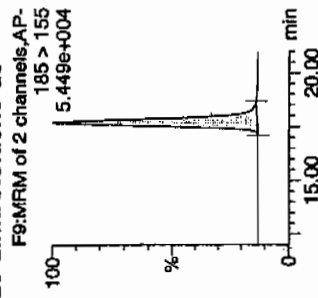


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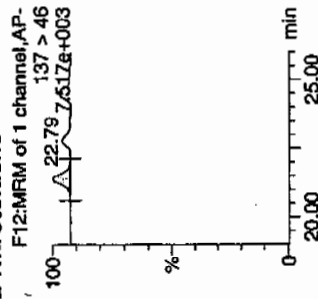
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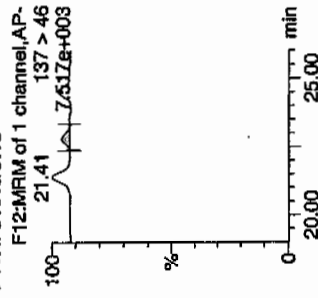
26-dinitrotoluene-d3



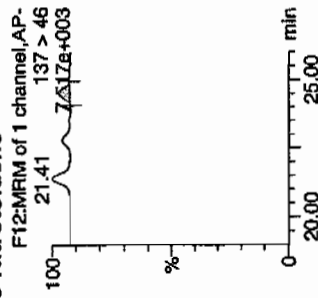
2-Nitrotoluene



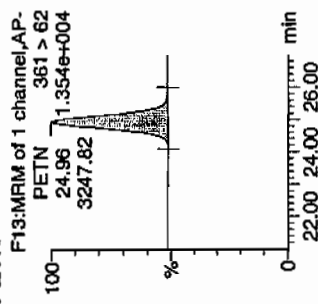
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Conc:ng/ml	%Rec	%Dev	SN
WXX100208-08CRI	HMX	176 > 102	5.22	972.801	3863.752	972.801	125.888	bb			36.2497	90.6	-9.4	111.9
WXX100208-08CRI	RDX	176 > 102	7.66	753.223	3863.752	753.223	97.473	bb			40.1430	100.4	0.4	77.4
WXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1191.883	3863.752	1191.883	154.239	bb			41.8780	104.7	4.7	118.4
WXX100208-08CRI	13-Dinitrobenzene	172 > 142	12.20	3863.752		3863.752	3863.752	bb			600.9743	120.2	20.2	435.6
WXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.34	383.336	3863.752	383.336	49.607	bb			41.2566	103.1	3.1	20.7
WXX100208-08CRI	Tetryl	241 > 181	12.87	332.982	3863.752	332.982	43.090	bb			36.6032	91.5	-8.5	27.6
WXX100208-08CRI	Nitrobenzene	123 > 46	13.80	277.043	3863.752	277.043	35.852	bb			44.3833	111.0	11.0	19.4
WXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.92	485.610	18873.490	485.610	12.865	MM	09-Feb-10	10:08:44	44.7871	112.0	12.0	52.7
WXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	613.793	18873.490	613.793	16.261	bb			41.0593	102.6	2.6	87.6
WXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	501.319	18873.490	501.319	13.281	bb			41.1607	102.9	2.9	66.2
WXX100208-08CRI	34-dinitrotoluene	182 > 152	14.65	838.618	18873.490	838.618	22.217	bb			24.6856	123.4	23.4	48.7
WXX100208-08CRI	26-dinitrotoluene	182 > 152	17.88	1680.954	18873.490	1680.954	44.532	MM	09-Feb-10	10:15:31	41.4604	103.7	3.7	121.8
WXX100208-08CRI	24-dinitrotoluene	182 > 152	18.59	365.888	18873.490	365.888	9.693	MM	09-Feb-10	10:18:38	39.7177	99.3	-0.7	22.8
WXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.71	18873.490		18873.490	18873.490	bb			511.2084	102.2	2.2	1598.8
WXX100208-08CRI	2-Nitrotoluene	137 > 46	21.41	255.711	18873.490	255.711	6.774	bb			43.6918	109.2	9.2	36.6
WXX100208-08CRI	4-Nitrotoluene	137 > 46	22.79	97.109	18873.490	97.109	2.573	bb			33.8492	84.6	-15.4	15.6
WXX100208-08CRI	3-Nitrotoluene	137 > 46	24.53	136.407	18873.490	136.407	3.614	bb			38.7858	97.0	-3.0	22.9
WXX100208-08CRI	PETN	361 > 62	24.96	3247.825	18873.490	3247.825	86.042	bb			42.4344	106.1	6.1	522.7

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 0856
 Standard Number WXX100208-08CRI
 Data File EXP0208038a

HMX	90.6
RDX	100.4
135-TNB	104.7
13-DNB	103.1
Tetryl	91.5
Nitrobenzene	111.0
4A-26-DNT	112.0
2A-46-DNT	102.6
246-TNT	102.9
34-DNT(surr)	123.4
26-DNT	103.7
24-DNT	99.3
2-NT	109.2
4-NT	84.6
3-NT	97.0
PETN	106.1

*not
2/9/10*

Total 1642.1

Average 102.6

from average

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208049a

Analysis Date: 09-FEB-10 14:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	581.172	97	
1,3-Dinitrobenzene-d4	500	549.978	110	
2,4,6-Trinitrotoluene	600	711.282	119	
2,4-Dinitrotoluene	600	646.244	108	
2,6-Dinitrotoluene	600	631.864	105	
2,6-Dinitrotoluene-d3	500	554.109	111	
2-Amino-4,6-dinitrotoluene	600	637.752	106	
3,4-Dinitrotoluene	300	327.767	109	
4-Amino-2,6-dinitrotoluene	600	652.073	109	
HMX	600	648.743	108	
Nitrobenzene	600	534.529	89	
PETN	600	566.64	94	
RDX	600	721.033	120	*
Tetryl	600	576.02	96	
m-Dinitrobenzene	600	635.781	106	
m-Nitrotoluene	600	523.672	87	
o-Nitrotoluene	600	534.766	89	
p-Nitrotoluene	600	557.168	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qtd, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208049a

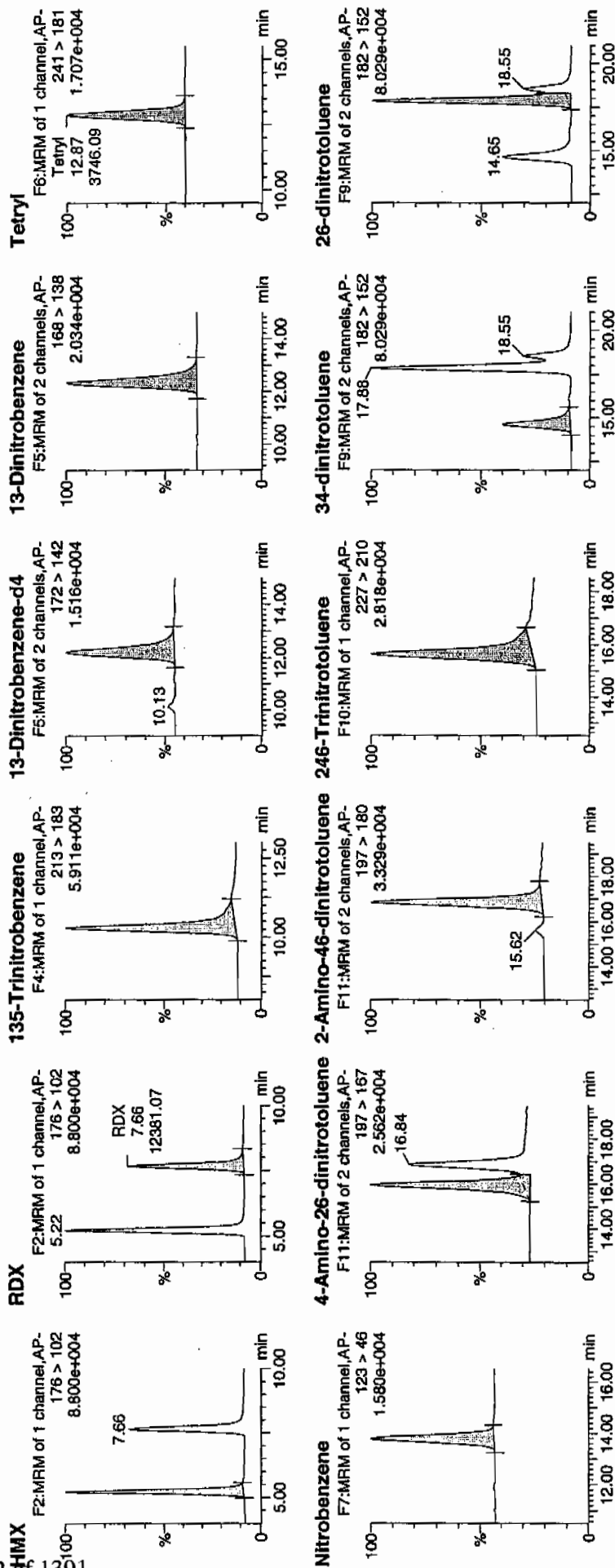
Date: 09-Feb-2010

Time: 14:20:41

ID: WXX100208-07CCV

Vial: 1:1,B

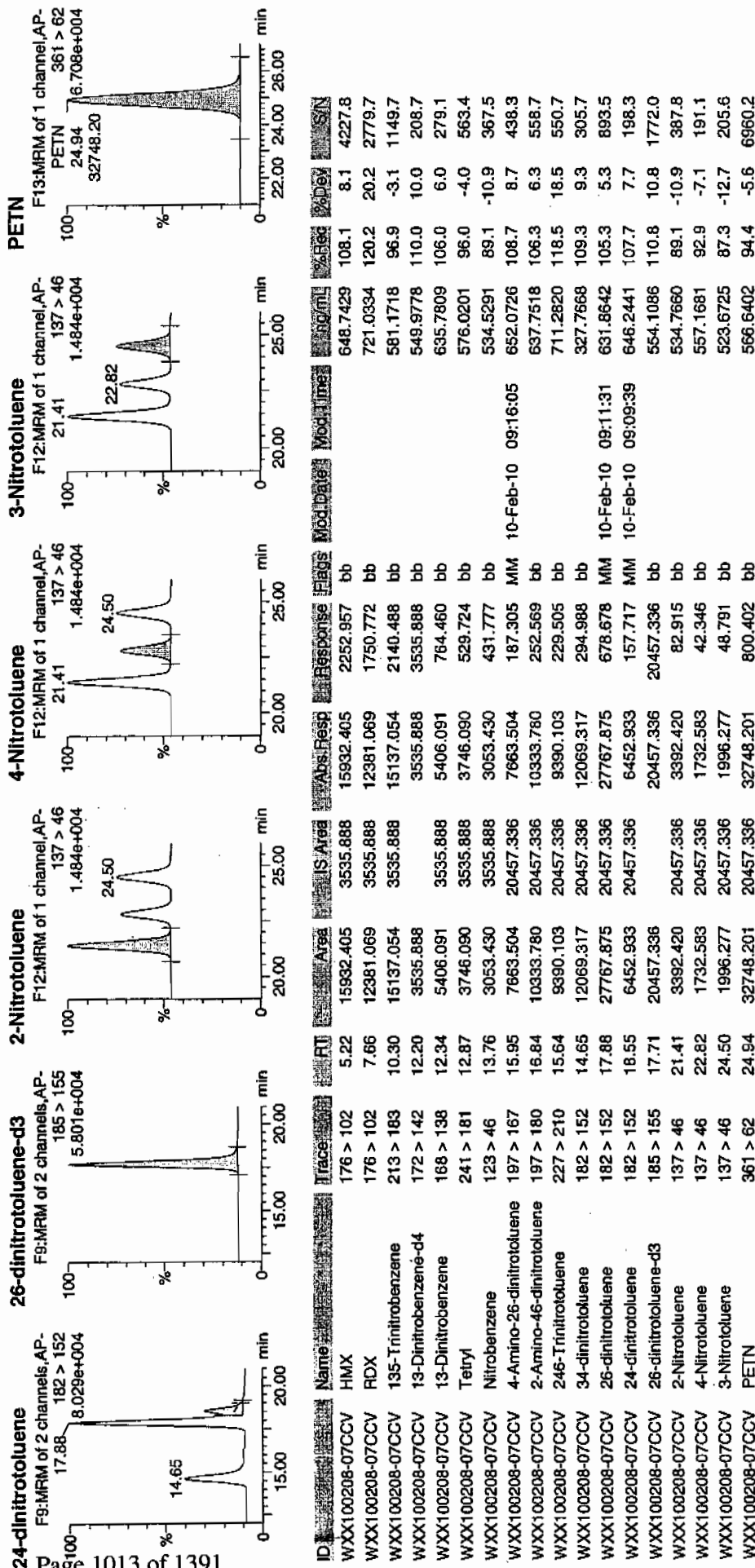
2/10/10



4/10/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 1420
 Standard Number: WXX100208-07CCV
 Data File: EXP0208049a

HMX	108.1
RDX	120.2
135-TNB	96.9
13-DNB	106.0
Tetryl	96.0
Nitrobenzene	89.1
4A-26-DNT	108.7
2A-46-DNT	106.3
246-TNT	118.5
34-DNT(surr)	109.3
26-DNT	105.3
24-DNT	107.7
2-NT	89.1
4-NT	92.9
3-NT	87.3
PETN	94.4

*not
2/10/10*

Total 1635.8

Average 102.2

done on 10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208051a

Analysis Date: 09-FEB-10 15:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.499	109	
1,3-Dinitrobenzene-d4	500	575.339	115	
2,4,6-Trinitrotoluene	40	37.174	93	
2,4-Dinitrotoluene	40	39.545	99	
2,6-Dinitrotoluene	40	44.458	111	
2,6-Dinitrotoluene-d3	500	556.656	111	
2-Amino-4,6-dinitrotoluene	40	44.445	111	
3,4-Dinitrotoluene	20	22.823	114	
4-Amino-2,6-dinitrotoluene	40	42.665	107	
HMX	40	42.028	105	
Nitrobenzene	40	40.451	101	
PETN	40	36.261	91	
RDX	40	37.937	95	
Tetryl	40	44.71	112	
m-Dinitrobenzene	40	44.913	112	
m-Nitrotoluene	40	32.902	82	
o-Nitrotoluene	40	39.318	98	
p-Nitrotoluene	40	38.91	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208051a

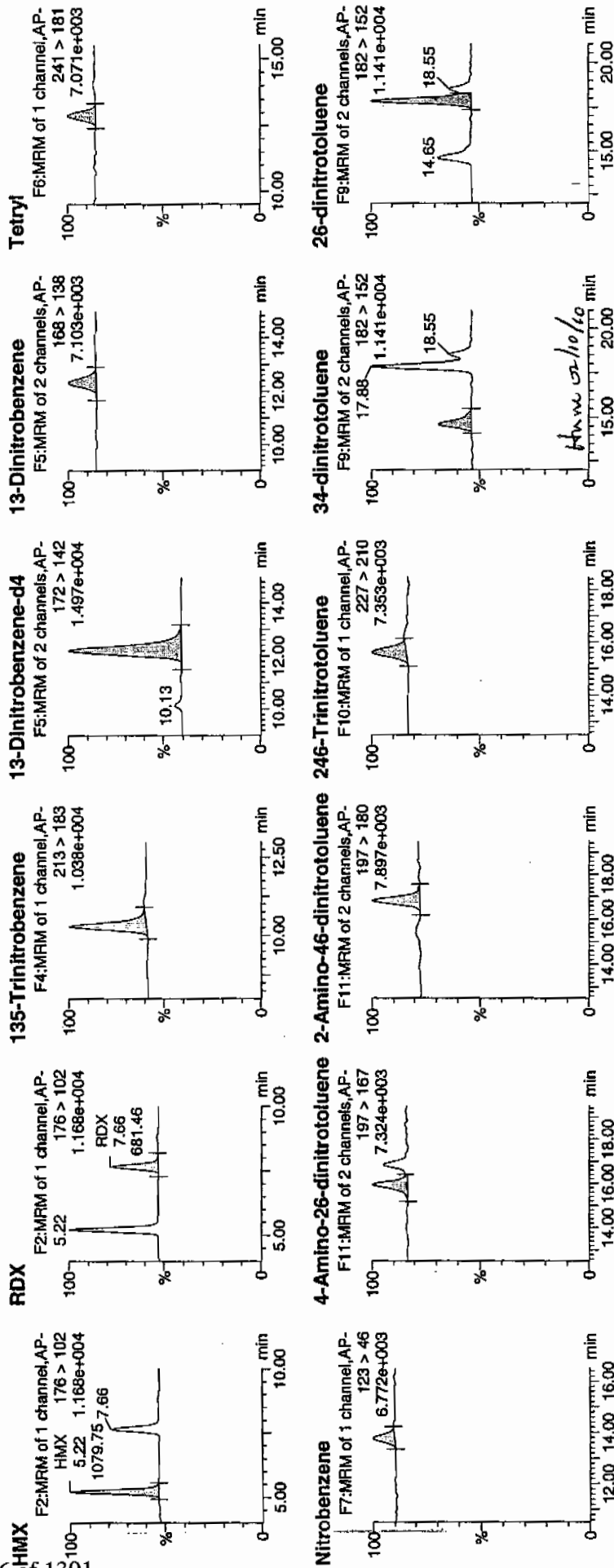
Date: 09-Feb-2010

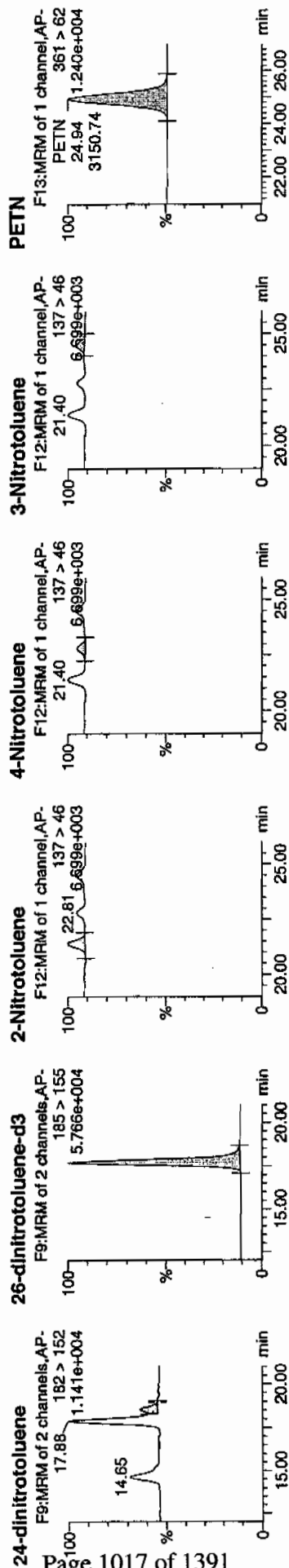
Time: 15:19:46

ID: WXX100208-08CRI

Vial: 1:1,C

10/10
2/10/10





ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Mod User	SN
WXX100208-08CRI	HMX	176 > 102	5.22	1079.752	3698.938	1079.752	145.954	bb				5.1
WXX100208-08CRI	RDX	176 > 102	7.66	681.462	3698.938	681.462	92.116	bb				5.2
WXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1185.200	3698.938	1185.200	160.208	bb				77.8
WXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.20	3698.938		3698.938	3698.938	bb				112.1
WXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.34	399.509	3698.938	399.509	54.003	bb				15.1
WXX100208-08CRI	Tetryl	241 > 181	12.87	376.028	3698.938	376.028	50.829	bb				12.3
WXX100208-08CRI	Nitrobenzene	123 > 46	13.76	241.726	3698.938	241.726	32.675	bb				11.8
WXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.95	503.725	20551.385	503.725	12.255	MM	10-Feb-10	09:15:53		1.1
WXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	723.475	20551.385	723.475	17.602	bb				6.7
WXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	493.014	20551.385	493.014	11.995	bb				11.1
WXX100208-08CRI	34-dinitrotoluene	182 > 152	14.65	844.283	20551.385	844.283	20.541	bb				37.3
WXX100208-08CRI	26-dinitrotoluene	182 > 152	17.88	1962.747	20551.385	1962.747	47.752	MM	10-Feb-10	09:11:38		14.1
WXX100208-08CRI	24-dinitrotoluene	182 > 152	18.55	396.684	20551.385	396.684	9.651	MM	10-Feb-10	09:09:28		11.1
WXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.71	20551.385		20551.385	20551.385	bb				98.9
WXX100208-08CRI	2-Nitrotoluene	137 > 46	21.40	250.572	20551.385	250.572	6.096	bb				11.3
WXX100208-08CRI	4-Nitrotoluene	137 > 46	22.81	121.550	20551.385	121.550	2.957	bb				98.3
WXX100208-08CRI	3-Nitrotoluene	137 > 46	24.48	126.001	20551.385	126.001	3.066	bb				97.3
WXX100208-08CRI	PETN	361 > 62	24.94	3150.736	20551.385	3150.736	76.655	bb				82.3
												90.7
												631.2

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 1519
 Standard Number WXX100208-08CRI
 Data File EXP0208051a

HMX	105.1
RDX	94.8
135-TNB	108.7
13-DNB	112.3
Tetryl	111.8
Nitrobenzene	101.1
4A-26-DNT	106.7
2A-46-DNT	111.1
246-TNT	92.9
34-DNT(surr)	114.1
26-DNT	111.1
24-DNT	98.9
2-NT	98.3
4-NT	97.3
3-NT	82.3
PETN	90.7

*mtf
2/10/10*

Total 1637.2

Average 102.3

4/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208062a

Analysis Date: 09-FEB-10 20:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	600	637.73	106	
2,6-Dinitrotoluene-d3	500	528.196	106	
2-Amino-4,6-dinitrotoluene	600	658.061	110	
3,4-Dinitrotoluene	300	330.267	110	
4-Amino-2,6-dinitrotoluene	600	627.96	105	
HMX	600	599.91	100	
Nitrobenzene	600	551.5	92	
PETN	600	580.031	97	
RDX	600	625.098	104	
Tetryl	600	563.424	94	
m-Dinitrobenzene	600	616.138	103	
m-Nitrotoluene	600	563.078	94	
o-Nitrotoluene	600	586.398	98	
p-Nitrotoluene	600	590.193	98	
1,3,5-Trinitrobenzene	600	547.737	91	
1,3-Dinitrobenzene-d4	500	567.181	113	
2,4,6-Trinitrotoluene	600	715.292	119	
2,4-Dinitrotoluene	600	646.614	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208062a

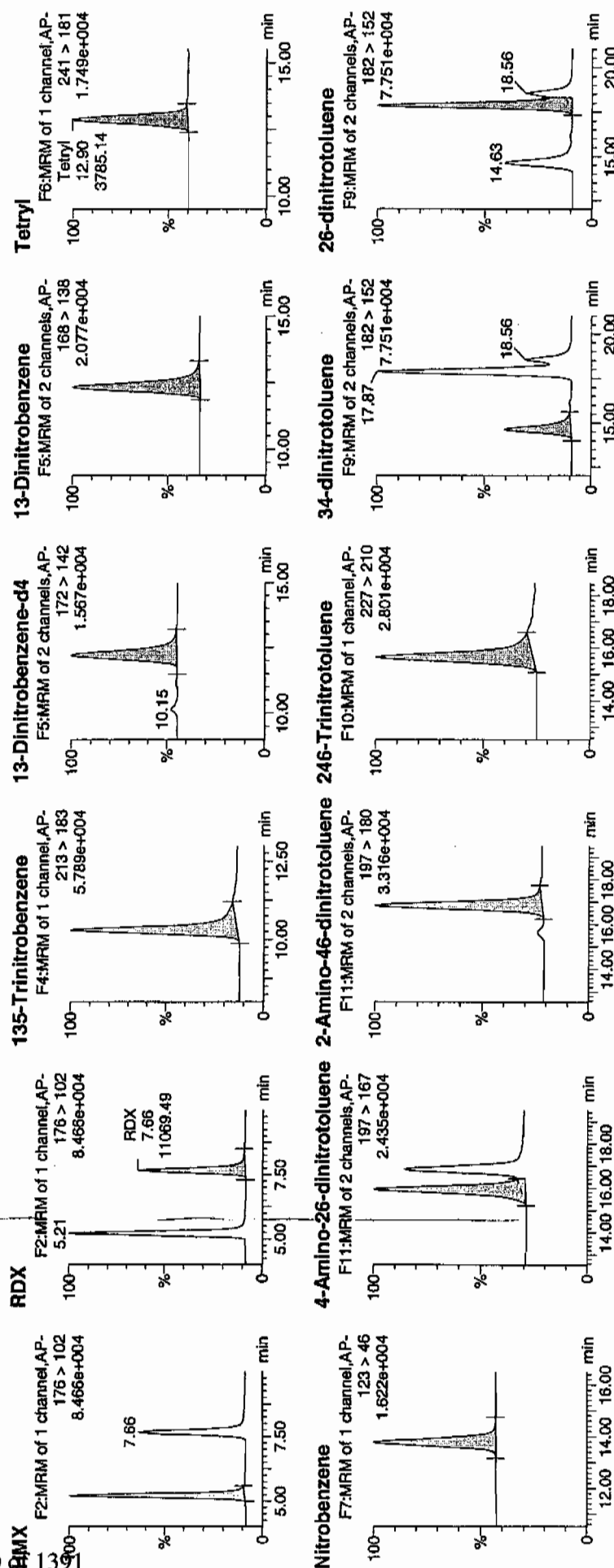
Date: 09-Feb-2010

Time: 20:44:30

ID: WXX100208-07CCV

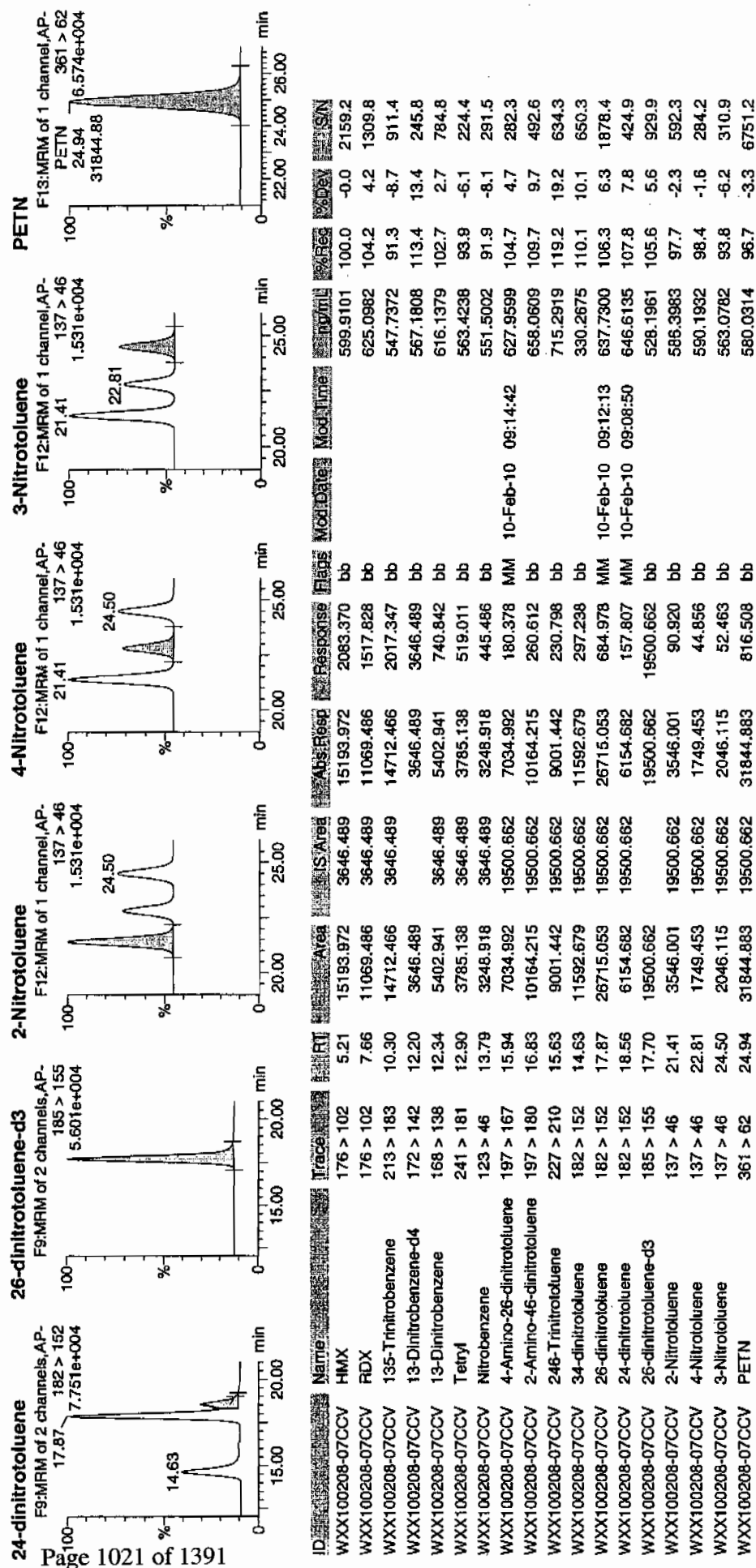
Gal: 1:1,B

2/10/10



4/10/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 2044
 Standard Number: WXX100208-07CCV
 Data File: EXP0208062a

HMX	100.0
RDX	104.2
135-TNB	91.3
13-DNB	102.7
Tetryl	93.9
Nitrobenzene	91.9
4A-26-DNT	104.7
2A-46-DNT	109.7
246-TNT	119.2
34-DNT(surr)	110.1
26-DNT	106.3
24-DNT	107.8
2-NT	97.7
4-NT	98.4
3-NT	93.8
PETN	96.7

*100%
2/10/10*

Total 1628.4

Average 101.8

100% or 100/100

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208064a

Analysis Date: 09-FEB-10 21:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	38.933	97	
PETN	40	36.686	92	
RDX	40	36.427	91	
Tetryl	40	34.123	85	
m-Dinitrobenzene	40	38.756	97	
m-Nitrotoluene	40	38.95	97	
o-Nitrotoluene	40	40.457	101	
p-Nitrotoluene	40	34.567	86	
1,3,5-Trinitrobenzene	40	43.241	108	
1,3-Dinitrobenzene-d4	500	602.61	121	
2,4,6-Trinitrotoluene	40	38.148	95	
2,4-Dinitrotoluene	40	39.085	98	
2,6-Dinitrotoluene	40	43.106	108	
2,6-Dinitrotoluene-d3	500	567.8	114	
2-Amino-4,6-dinitrotoluene	40	39.591	99	
3,4-Dinitrotoluene	20	24.084	120	
4-Amino-2,6-dinitrotoluene	40	41.143	103	
HMX	40	39.239	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208064a

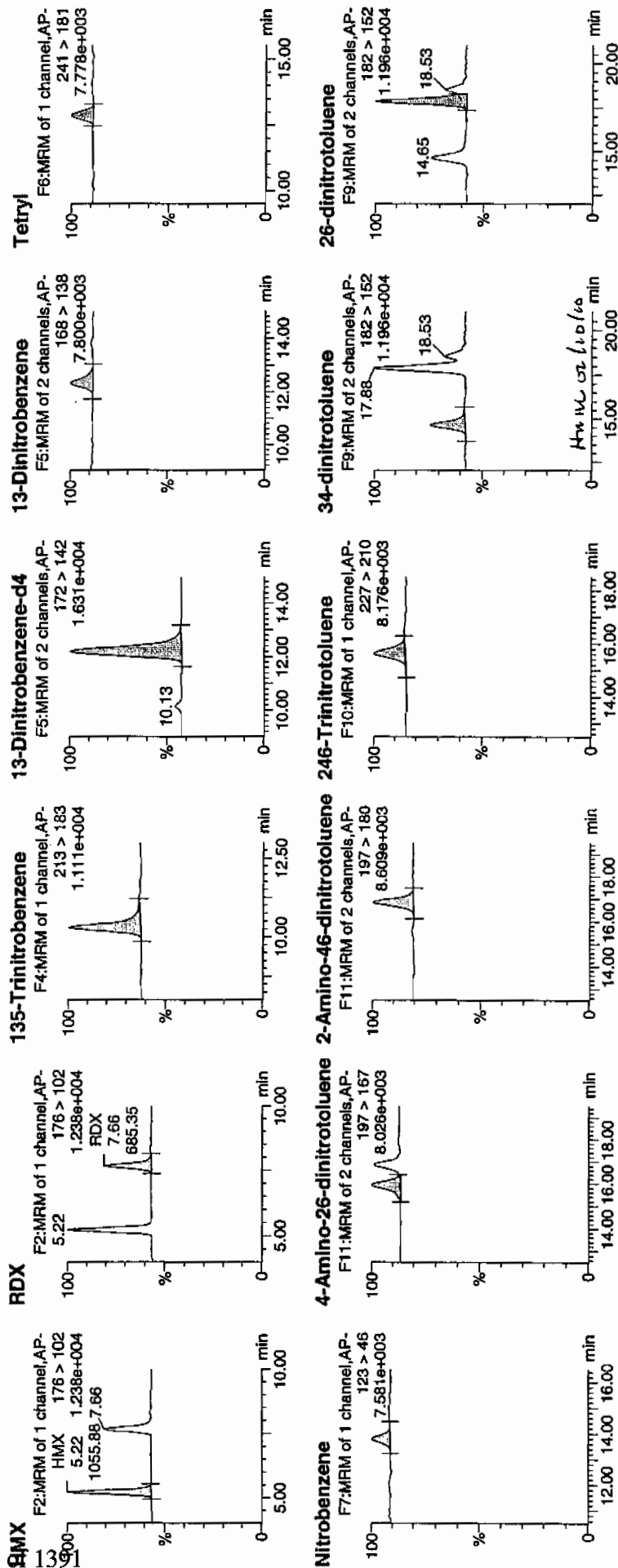
Date: 09-Feb-2010

Time: 21:43:27

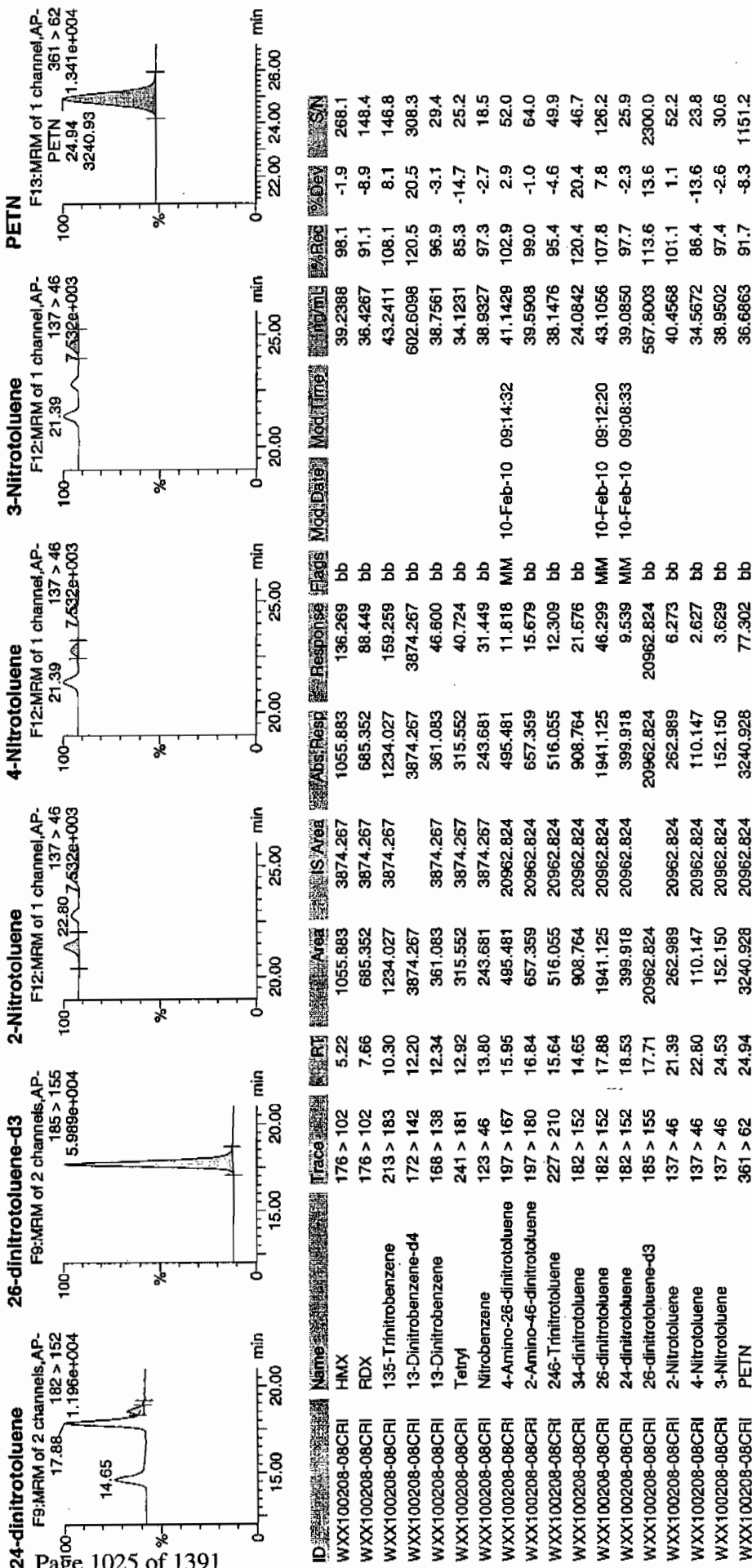
ID: WXX100208-08CRI

Val: 1:1,C

WXX
2/10/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
Date of Analysis 02/09/10
Time of Injection 2143
Standard Number WXX100208-08CRI
Data File EXP0208064a

HMX		98.1
RDX		91.1
135-TNB		108.1
13-DNB		96.9
Tetryl		85.3
Nitrobenzene		97.3
4A-26-DNT		102.9
2A-46-DNT		99.0
246-TNT		95.4
34-DNT(surr)		120.4
26-DNT		107.8
24-DNT		97.7
2-NT		101.1
4-NT		86.4
3-NT		97.4
PETN		91.7

2/10/10

Total	1576.6
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Average	98.5
---------	------

4/11/10 or 10/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

alyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208075a

Analysis Date: 10-FEB-10 03:07

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	600	613.819	102	
m-Nitrotoluene	600	614.037	102	
o-Nitrotoluene	600	663.004	111	
p-Nitrotoluene	600	675.946	113	
1,3,5-Trinitrobenzene	600	550.541	92	
1,3-Dinitrobenzene-d4	500	536.255	107	
2,4,6-Trinitrotoluene	600	692.977	115	
2,4-Dinitrotoluene	600	649.004	108	
2,6-Dinitrotoluene	600	623.523	104	
2,6-Dinitrotoluene-d3	500	505.287	101	
2-Amino-4,6-dinitrotoluene	600	658.154	110	
3,4-Dinitrotoluene	300	327.707	109	
4-Amino-2,6-dinitrotoluene	600	625.18	104	
HMX	600	619.895	103	
Nitrobenzene	600	588.662	98	
PETN	600	650.959	108	
RDX	600	712.542	119	
Tetryl	600	559.722	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208075a

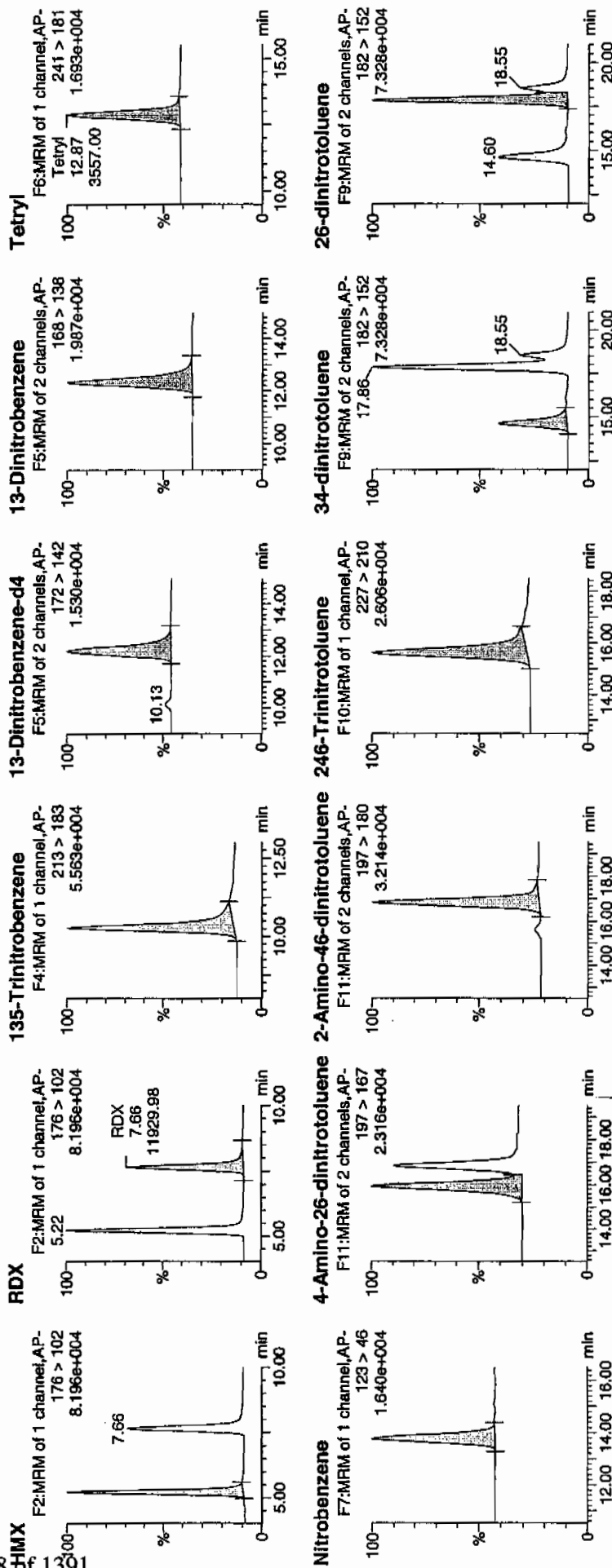
Date: 10-Feb-2010

Time: 03:07:54

ID: WXX100208-07CCV

Vial: 1:1,B

2/10/10



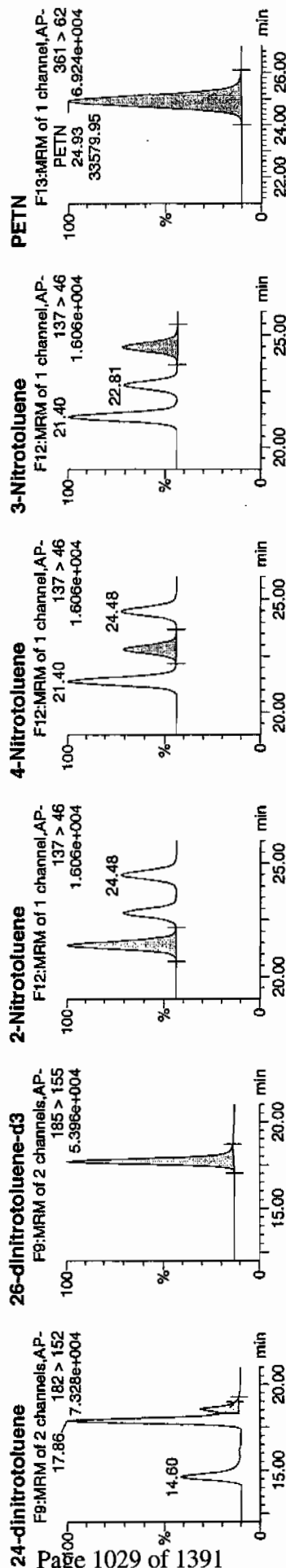
Handwritten note: 2/10/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 74 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Ind ML	Area	SN
WXX100208-07CCV	HMX	176 > 102	5.22	14844.065	3447.663	14844.065	2152.772	bb			619.8946	103.3	3.3
WXX100208-07CCV	ROX	176 > 102	7.66	11929.981	3447.663	11929.981	1730.155	bb			712.5423	118.8	18.8
WXX100208-07CCV	135-Trinitrobenzene	213 > 183	10.28	13981.463	3447.663	13981.463	2027.673	bb			550.5408	91.8	-8.2
WXX100208-07CCV	13-Dinitrobenzene-d4	172 > 142	12.20	3447.663		3447.663	3447.663	bb			536.2551	107.3	7.3
WXX100208-07CCV	13-Dinitrobenzene	168 > 138	12.34	5089.118	3447.663	5089.118	738.053	bb			613.8190	102.3	2.3
WXX100208-07CCV	Tetryl	241 > 181	12.87	3557.003	3447.663	3557.003	515.857	bb			559.7220	93.3	-6.7
WXX100208-07CCV	Nitrobenzene	123 > 46	13.76	3278.754	3447.663	3278.754	475.504	bb			588.6618	98.1	-1.9
WXX100208-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.92	6700.083	18654.883	6700.083	179.580	MM	10-Feb-10	09:13:53	625.1803	104.2	4.2
WXX100208-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.84	9724.758	18654.883	9724.758	260.649	bb			658.1545	109.7	9.7
WXX100208-07CCV	246-Trinitrotoluene	227 > 210	15.64	8342.395	18654.883	8342.395	223.598	bb			692.9769	115.5	15.5
WXX100208-07CCV	34-dinitrotoluene	182 > 152	14.60	11003.918	18654.883	11003.918	294.934	bb			327.7073	109.2	9.2
WXX100208-07CCV	26-dinitrotoluene	182 > 152	17.86	24987.027	18654.883	24987.027	669.718	MM	10-Feb-10	09:12:57	623.5227	103.9	3.9
WXX100208-07CCV	24-dinitrotoluene	182 > 152	18.55	5909.508	18654.883	5909.508	158.390	MM	10-Feb-10	09:07:37	649.0039	108.2	8.2
WXX100208-07CCV	26-dinitrotoluene-d3	185 > 155	17.71	18654.883		18654.883	18654.883	bb			505.2872	101.1	1.1
WXX100208-07CCV	2-Nitrotoluene	137 > 46	21.40	3835.353	18654.883	3835.353	102.798	bb			663.0038	110.5	10.5
WXX100208-07CCV	4-Nitrotoluene	137 > 46	22.81	1916.741	18654.883	1916.741	51.374	bb			675.9463	112.7	12.7
WXX100208-07CCV	3-Nitrotoluene	137 > 46	24.48	2134.515	18654.883	2134.515	57.211	bb			614.0372	102.3	2.3
WXX100208-07CCV	PETN	361 > 62	24.93	33579.945	18654.883	33579.945	900.031	bb			650.9591	108.5	8.5

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 0307
 Standard Number: WXX100208-07CCV
 Data File: EXP0208075a

HMX	103.3
RDX	118.8
135-TNB	91.8
13-DNB	102.3
Tetryl	93.3
Nitrobenzene	98.1
4A-26-DNT	104.2
2A-46-DNT	109.7
246-TNT	115.5
34-DNT(surr)	109.2
26-DNT	103.9
24-DNT	108.2
2-NT	110.5
4-NT	112.7
3-NT	102.3
PETN	108.5

*WXX
2/10/10*

Total 1692.3

Average 105.8

WXX 02/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208077a

Analysis Date: 10-FEB-10 04:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.814	110	
1,3-Dinitrobenzene-d4	500	565.719	113	
2,4,6-Trinitrotoluene	40	37.653	94	
2,4-Dinitrotoluene	40	39.671	99	
2,6-Dinitrotoluene	40	41.489	104	
2,6-Dinitrotoluene-d3	500	565.139	113	
2-Amino-4,6-dinitrotoluene	40	39.866	100	
3,4-Dinitrotoluene	20	21.452	107	
4-Amino-2,6-dinitrotoluene	40	37.145	93	
HMX	40	44.845	112	
Nitrobenzene	40	36.774	92	
PETN	40	41.094	103	
RDX	40	40.397	101	
Tetryl	40	40.051	100	
m-Dinitrobenzene	40	42.442	106	
m-Nitrotoluene	40	42.653	107	
o-Nitrotoluene	40	37.743	94	
p-Nitrotoluene	40	39.09	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208077a

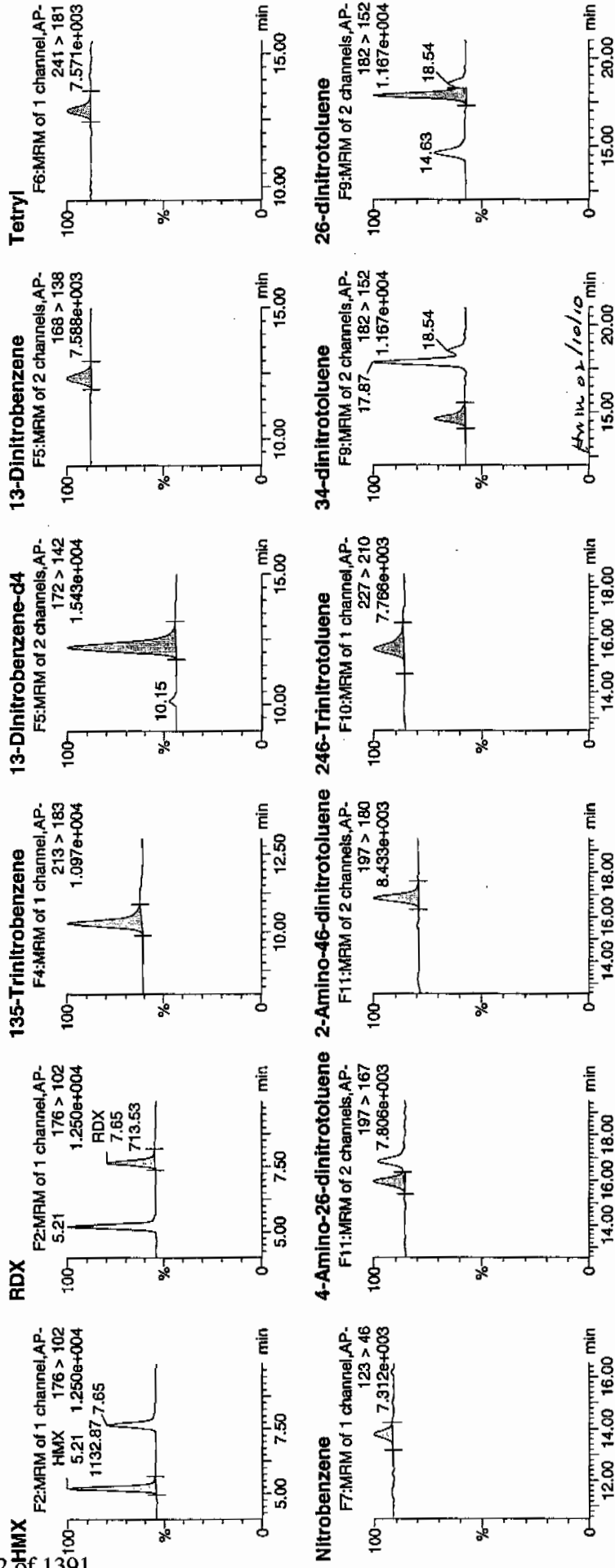
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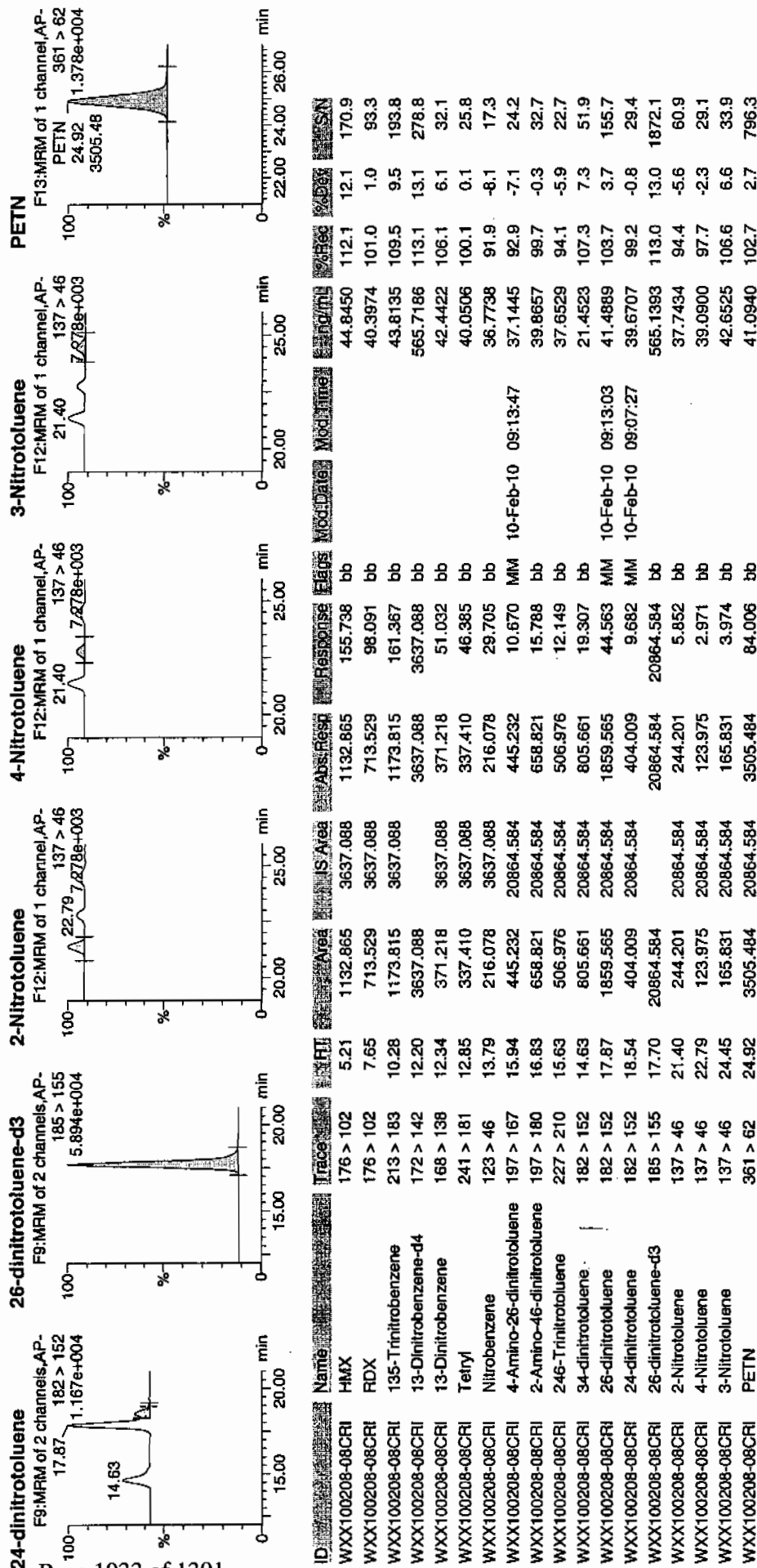
ID: WXX100208-08CRI

Vial: 1:1,C

MR
2/10/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 0406
 Standard Number WXX100208-08CRI
 Data File EXP0208077a

HMX	112.1
RDX	101.0
135-TNB	109.5
13-DNB	106.1
Tetryl	100.1
Nitrobenzene	91.9
4A-26-DNT	92.9
2A-46-DNT	99.7
246-TNT	94.1
34-DNT(surr)	107.3
26-DNT	103.7
24-DNT	99.2
2-NT	94.4
4-NT	97.7
3-NT	106.6
PETN	102.7

*101.2
2/10/10*

Total 1619.0

Average 101.2

Handwritten: 101.2 2/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208088a

Analysis Date: 10-FEB-10 09:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	541.95	90	
1,3-Dinitrobenzene-d4	500	565.857	113	
2,4,6-Trinitrotoluene	600	708.706	118	
2,4-Dinitrotoluene	600	606.731	101	
2,6-Dinitrotoluene	600	600.008	100	
2,6-Dinitrotoluene-d3	500	520.615	104	
2-Amino-4,6-dinitrotoluene	600	614.083	102	
3,4-Dinitrotoluene	300	347.135	116	
4-Amino-2,6-dinitrotoluene	600	606.995	101	
HMX	600	579.88	97	
Nitrobenzene	600	606.863	101	
PETN	600	627.526	105	
RDX	600	633.367	106	
Tetryl	600	602.321	100	
m-Dinitrobenzene	600	605.649	101	
m-Nitrotoluene	600	598.093	100	
o-Nitrotoluene	600	665.518	111	
p-Nitrotoluene	600	667.409	111	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208088a

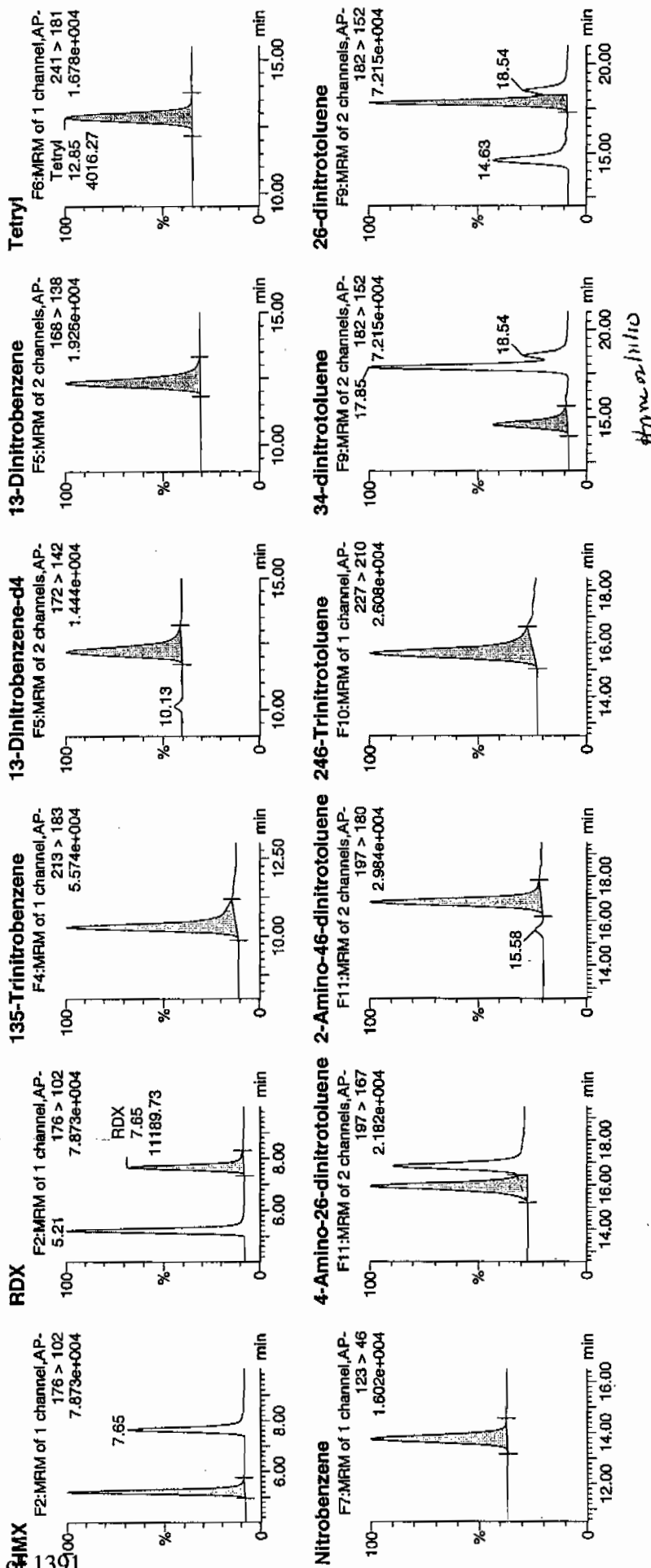
Date: 10-Feb-2010

Time: 09:31:30

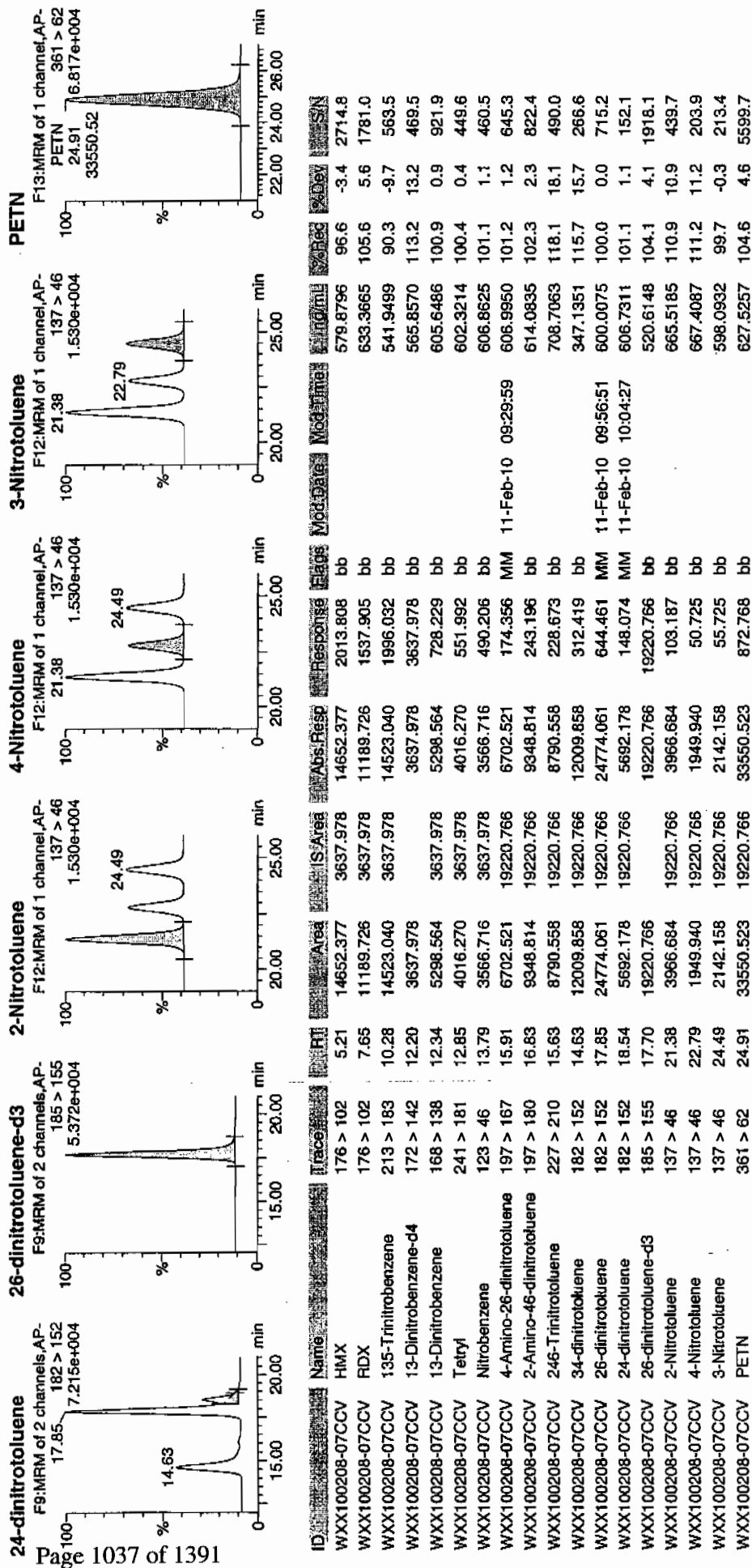
ID: WXX100208-07CCV

Sial: 1:1,B

36



Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 0931
 Standard Number: WXX100208-07CCV
 Data File: EXP0208088a

HMX	96.6	✓
RDX	105.6	✓
135-TNB	90.3	✓
13-DNB	100.9	
Tetryl	100.4	
Nitrobenzene	101.1	
4A-26-DNT	101.2	
2A-46-DNT	102.3	
246-TNT	118.1	
34-DNT(surr)	115.7	
26-DNT	100.0	
24-DNT	101.1	
2-NT	110.9	
4-NT	111.2	
3-NT	99.7	
PETN	104.6	
Total	1659.7	

Handwritten: 2/11/10

Average

103.7

Handwritten: HMX 02/11/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208090a

Analysis Date: 10-FEB-10 10:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	36.402	91	
2,6-Dinitrotoluene	40	40.121	100	
2,6-Dinitrotoluene-d3	500	599.331	120	
2-Amino-4,6-dinitrotoluene	40	39.239	98	
3,4-Dinitrotoluene	20	21.64	108	
4-Amino-2,6-dinitrotoluene	40	37.109	93	
HMX	40	43.322	108	
Nitrobenzene	40	42.181	105	
PETN	40	34.532	86	
RDX	40	50.422	126	
Tetryl	40	35.418	89	
m-Dinitrobenzene	40	44.912	112	
m-Nitrotoluene	40	42.094	105	
o-Nitrotoluene	40	35.885	90	
p-Nitrotoluene	40	39.742	99	
1,3,5-Trinitrobenzene	40	39.025	98	
1,3-Dinitrobenzene-d4	500	604.965	121	
2,4,6-Trinitrotoluene	40	40.552	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208090a

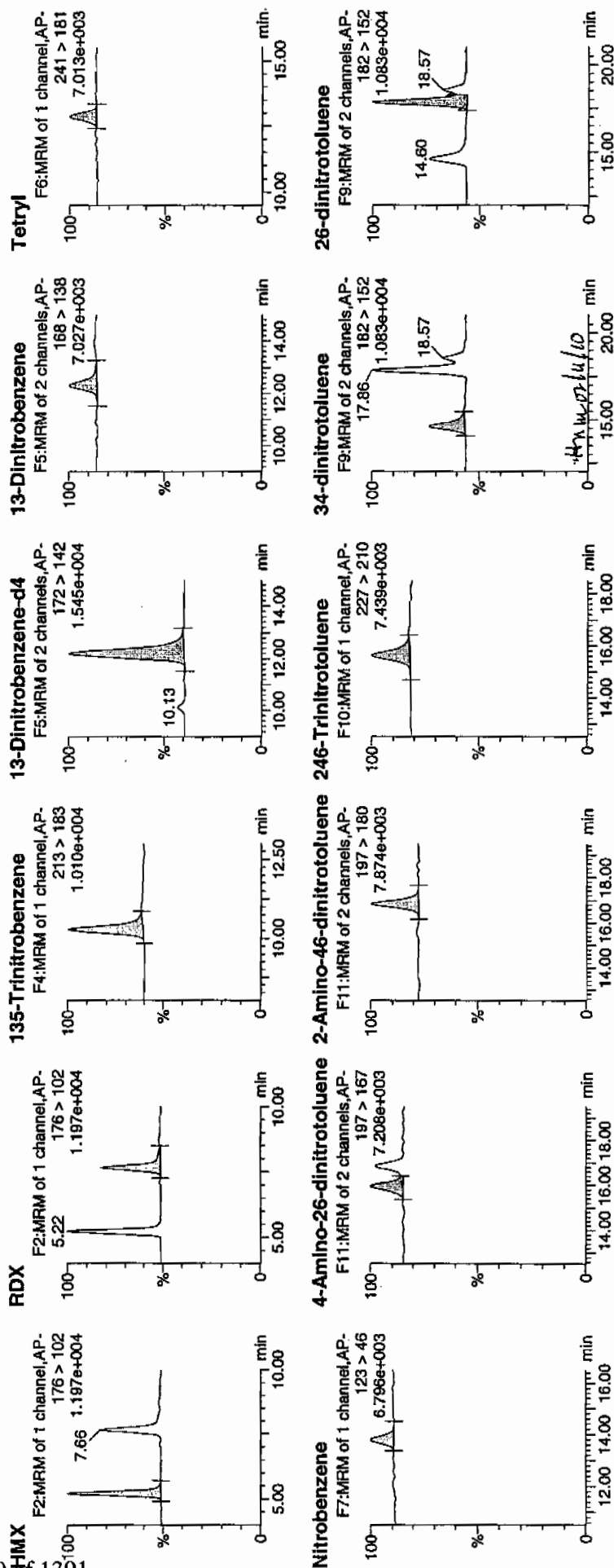
Date: 10-Feb-2010

Time: 10:30:41

ID: WXX100208-08CRI

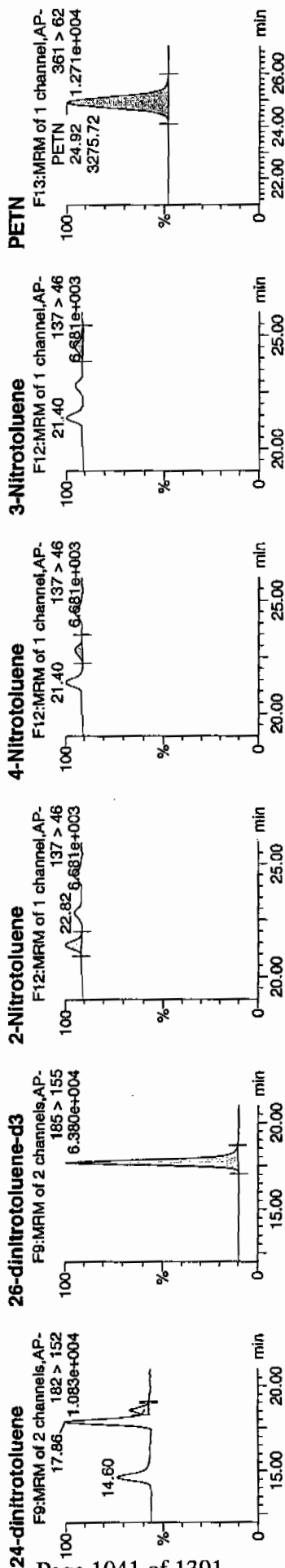
Vial: 1:1,C

2/11/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Int. Int	% Rec	% Dev	SN
WXX100208-08CRI	HMX	176 > 102	5.22	1170.302	3889.412	1170.302	150.447	bb			43.3215	108.3	8.3	180.4
WXX100208-08CRI	RDX	176 > 102	7.66	952.380	3889.412	952.380	122.432	bb			50.4222	126.1	26.1	117.0
WXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1118.047	3889.412	1118.047	143.730	bb			39.0245	97.6	-2.4	121.4
WXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.21	3889.412		3889.412		bb			604.9654	121.0	21.0	317.4
WXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.31	420.071	3889.412	420.071	54.002	bb			44.9119	112.3	12.3	59.5
WXX100208-08CRI	Tetryl	241 > 181	12.87	326.408	3889.412	326.408	41.961	bb			35.4178	88.5	-11.5	30.5
WXX100208-08CRI	Nitrobenzene	123 > 46	13.80	265.042	3889.412	265.042	34.072	bb			42.1806	105.5	5.5	27.2
WXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.95	471.715	22126.934	471.715	10.659	MM	11-Feb-10	09:29:49	37.1087	92.8	-7.2	31.2
WXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	687.696	22126.934	687.696	15.540	bb			39.2389	98.1	-1.9	58.8
WXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	579.040	22126.934	579.040	13.085	bb			40.5516	101.4	1.4	19.2
WXX100208-08CRI	34-dinitrotoluene	182 > 152	14.60	861.880	22126.934	861.880	19.476	bb			21.6400	108.2	8.2	20.7
WXX100208-08CRI	26-dinitrotoluene	182 > 152	17.86	1907.043	22126.934	1907.043	43.093	MM	11-Feb-10	09:57:00	40.1208	100.3	0.3	55.2
WXX100208-08CRI	24-dinitrotoluene	182 > 152	18.57	393.149	22126.934	393.149	8.884	MM	11-Feb-10	10:04:19	36.4019	91.0	-9.0	12.3
WXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.69	22126.934		22126.934	22126.934	bb			599.3314	119.9	19.9	1771.2
WXX100208-08CRI	2-Nitrotoluene	137 > 46	21.40	246.227	22126.934	246.227	5.564	bb			35.8854	89.7	-10.3	58.2
WXX100208-08CRI	4-Nitrotoluene	137 > 46	22.82	133.668	22126.934	133.668	3.020	bb			39.7418	99.4	-0.6	27.5
WXX100208-08CRI	3-Nitrotoluene	137 > 46	24.48	173.561	22126.934	173.561	3.922	bb			42.0939	105.2	5.2	29.3
WXX100208-08CRI	PETN	361 > 62	24.92	3275.725	22126.934	3275.725	74.021	bb			34.5321	86.3	-13.7	1180.0

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 1030
 Standard Number WXX100208-08CRI
 Data File EXP0208090a

HMX	108.3
RDX	126.1
135-TNB	97.6
13-DNB	112.3
Tetryl	88.5
Nitrobenzene	105.5
4A-26-DNT	92.8
2A-46-DNT	98.1
246-TNT	101.4
34-DNT(surr)	108.2
26-DNT	100.3
24-DNT	91.0
2-NT	89.7
4-NT	99.4
3-NT	105.2
PETN	86.3

*WXX
2/10/10*

Total 1610.7

Average 100.7

4/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208100a

Analysis Date: 10-FEB-10 15:26

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	600	680.607	113	
3,4-Dinitrotoluene	300	353.233	118	
4-Amino-2,6-dinitrotoluene	600	676.006	113	
HMX	600	642.868	107	
Nitrobenzene	600	663.429	111	
PETN	600	712.886	119	
RDX	600	779.218	130	*
Tetryl	600	638.511	106	
m-Dinitrobenzene	600	612.801	102	
m-Nitrotoluene	600	608.261	101	
o-Nitrotoluene	600	723.623	121	*
p-Nitrotoluene	600	679.247	113	
1,3,5-Trinitrobenzene	600	588.141	98	
1,3-Dinitrobenzene-d4	500	493.709	99	
2,4,6-Trinitrotoluene	600	720.831	120	*
2,4-Dinitrotoluene	600	626.987	104	
2,6-Dinitrotoluene	600	612.193	102	
2,6-Dinitrotoluene-d3	500	468.676	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

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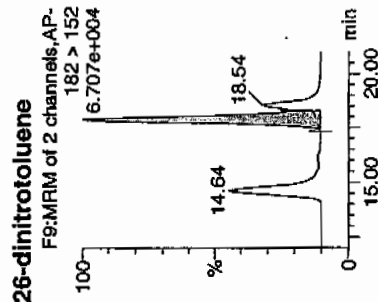
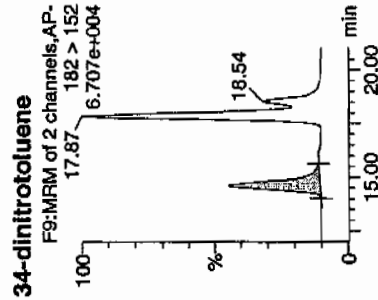
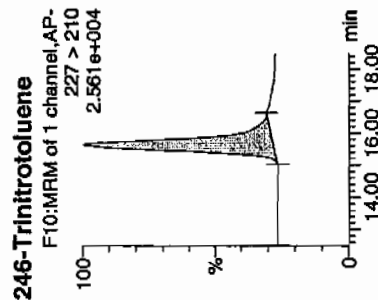
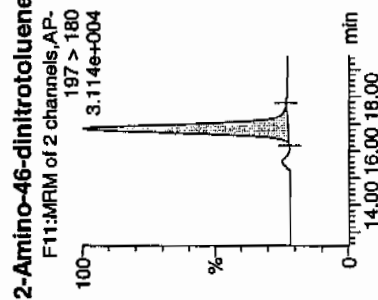
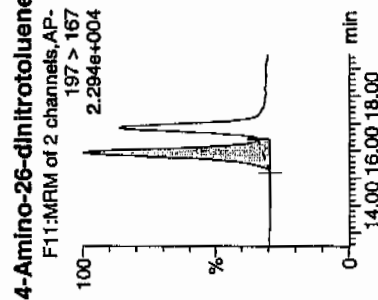
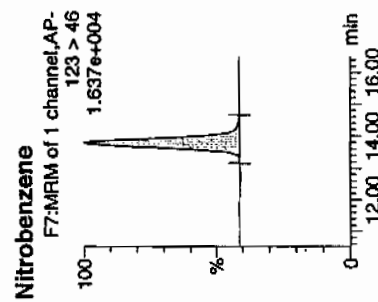
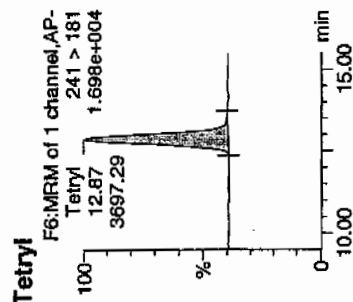
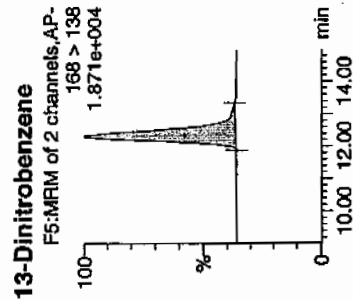
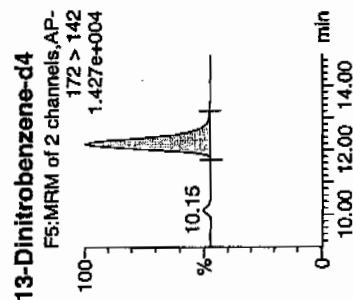
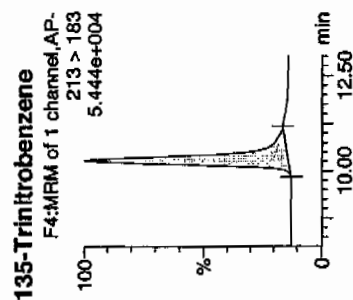
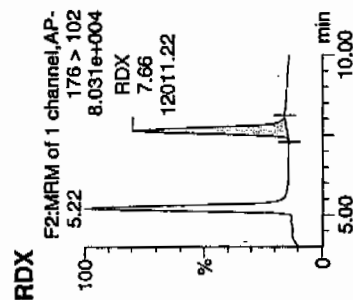
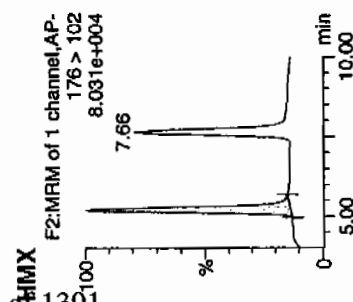
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Date: 10-Feb-2010

Time: 15:26:15

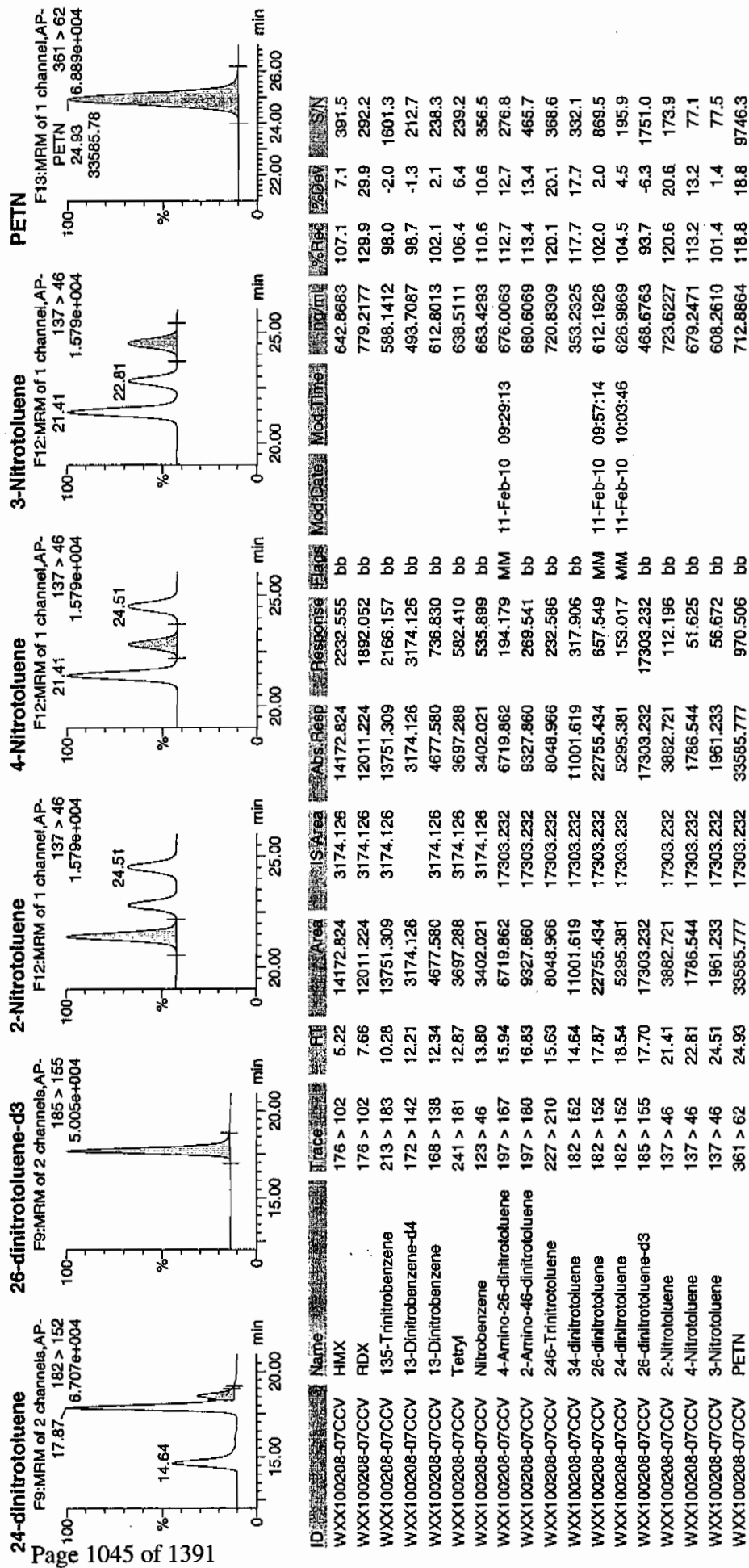
ID: WXX100208-07CCV

Vial: 1:1.B



09/11/2007

Dataset: C:\MASSLYNX\New_Exp_PRO\1020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 1526
 Standard Number: WXX100208-07CCV
 Data File: EXP0208100a

HMX	107.1
RDX	129.9
135-TNB	98.0
13-DNB	102.1
Tetryl	106.4
Nitrobenzene	110.6
4A-26-DNT	112.7
2A-46-DNT	113.4
246-TNT	120.1
34-DNT(surr)	117.7
26-DNT	102.0
24-DNT	104.5
2-NT	120.6
4-NT	113.2
3-NT	101.4
PETN	118.8

*MDP
2/10/10*

Total 1778.5

Average 111.2

HMM on 2/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208102a

Analysis Date: 10-FEB-10 16:25

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	40	46.526	116	
m-Nitrotoluene	40	50.438	126	
o-Nitrotoluene	40	44.438	111	
p-Nitrotoluene	40	54.684	137	*
1,3,5-Trinitrobenzene	40	51.131	128	
1,3-Dinitrobenzene-d4	500	552.166	110	
2,4,6-Trinitrotoluene	40	40.399	101	
2,4-Dinitrotoluene	40	39.25	98	
2,6-Dinitrotoluene	40	40.673	102	
2,6-Dinitrotoluene-d3	500	556.942	111	
2-Amino-4,6-dinitrotoluene	40	39.187	98	
3,4-Dinitrotoluene	20	23.623	118	
4-Amino-2,6-dinitrotoluene	40	45.282	113	
HMX	40	50.098	125	
Nitrobenzene	40	41.549	104	
PETN	40	52.922	132	*
RDX	40	49.375	123	
Tetryl	40	43.062	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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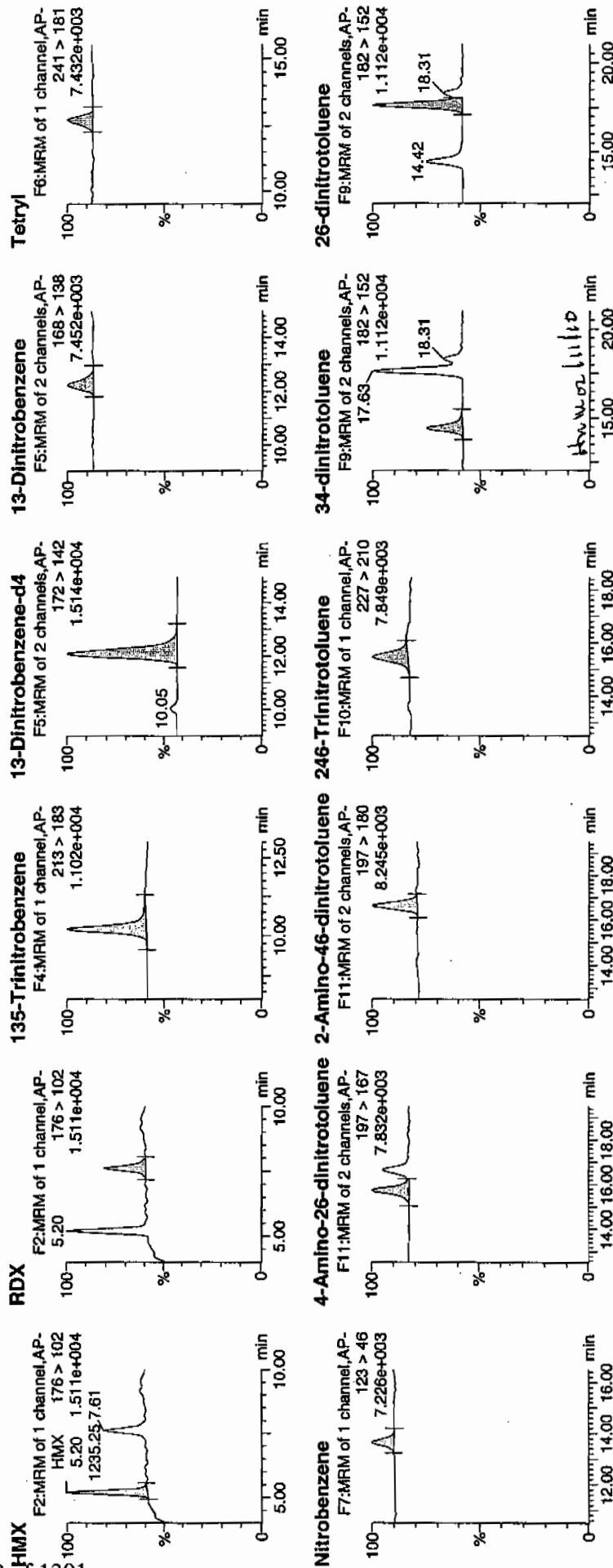
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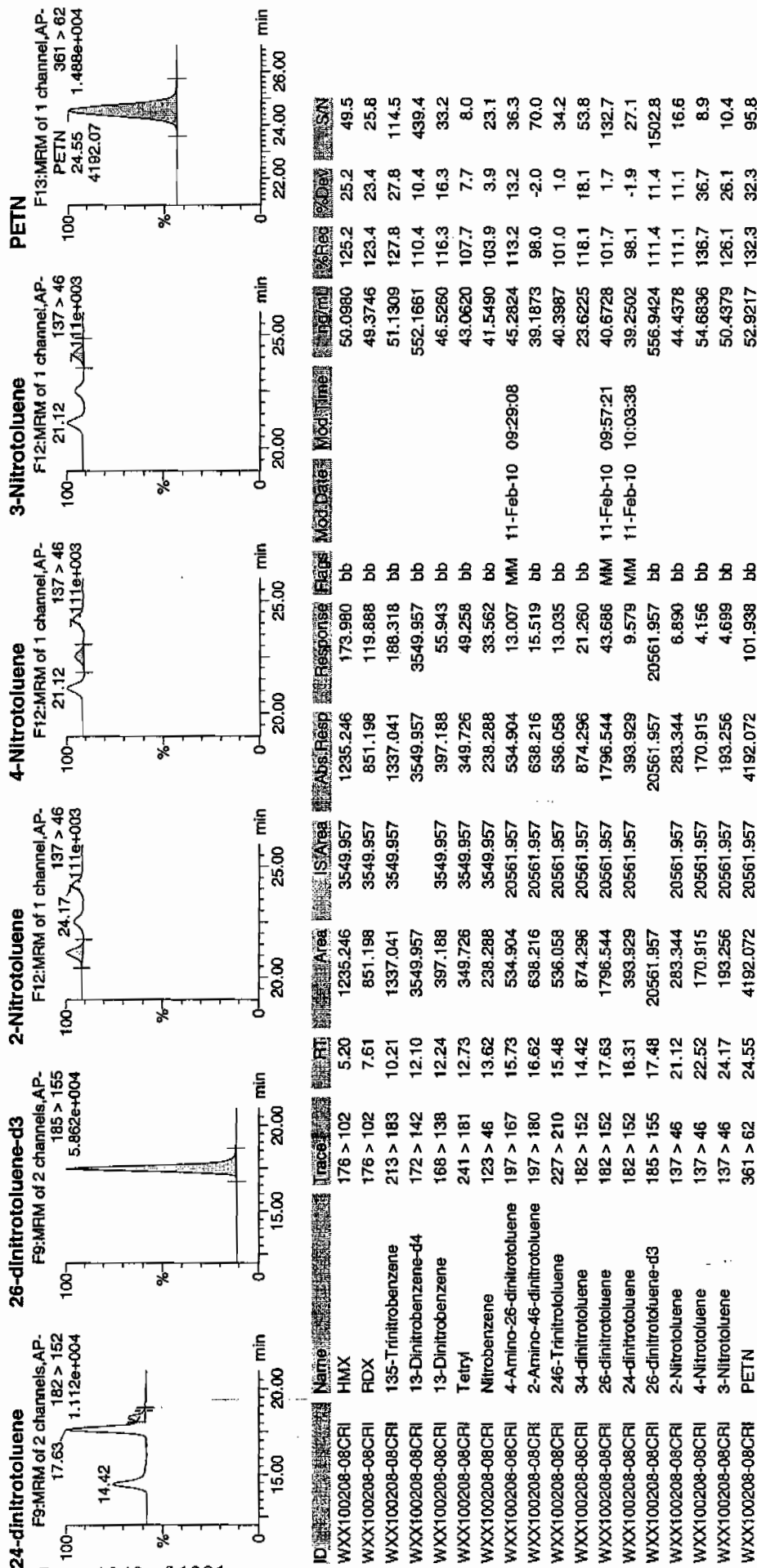
ID: WXX100208-08CRI

Vial: 1:1,C

17
2/11/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 1625
 Standard Number WXX100208-08CRI
 Data File EXP0208102a

HMX	125.2
RDX	123.4
135-TNB	127.8
13-DNB	116.3
Tetryl	107.7
Nitrobenzene	103.9
4A-26-DNT	113.2
2A-46-DNT	98.0
246-TNT	101.0
34-DNT(surr)	118.1
26-DNT	101.7
24-DNT	98.1
2-NT	111.1
4-NT	136.7
3-NT	126.1
PETN	132.3

Handwritten: 1477
2/10/10

Total 1840.6

Average 115.0

Handwritten: 1477 m on 2/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208113a

Analysis Date: 10-FEB-10 21:49

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	600	710.721	118	
p-Nitrotoluene	600	645.626	108	
1,3,5-Trinitrobenzene	600	530.336	88	
1,3-Dinitrobenzene-d4	500	544.446	109	
2,4,6-Trinitrotoluene	600	662.584	110	
2,4-Dinitrotoluene	600	622.26	104	
2,6-Dinitrotoluene	600	605.94	101	
2,6-Dinitrotoluene-d3	500	509.3	102	
2-Amino-4,6-dinitrotoluene	600	677.413	113	
3,4-Dinitrotoluene	300	360.847	120	*
4-Amino-2,6-dinitrotoluene	600	606.515	101	
HMX	600	457.053	76	*
Nitrobenzene	600	682.529	114	
PETN	600	766.444	128	*
RDX	600	531.11	89	
Tetryl	600	667.741	111	
m-Dinitrobenzene	600	605.726	101	
m-Nitrotoluene	600	571.845	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 71 of 117

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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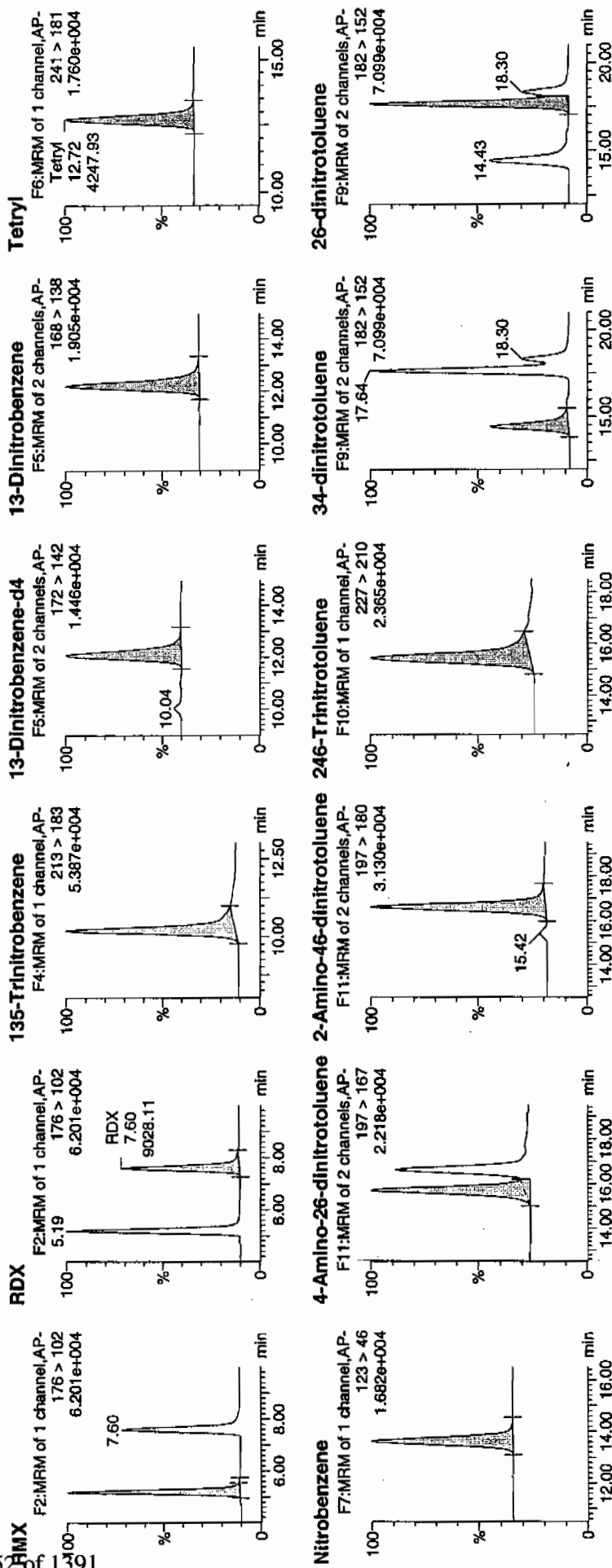
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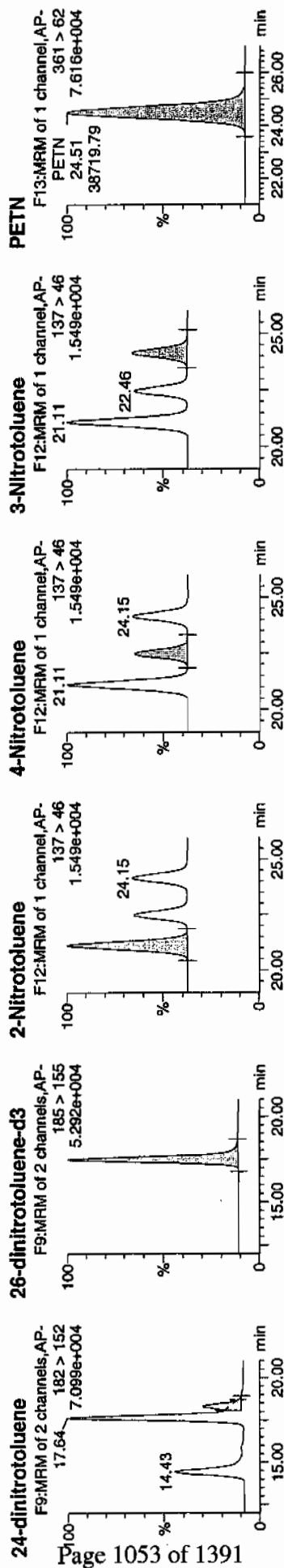
Vial: 1:1,B

WXX
2/11/10



HW
2/11/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int	% Rec	% Dev	SN
WXX100208-07CCV	HMX	176 > 102	5.19	11111.813	3500.323	11111.813	1587.255	MM	11-Feb-10	09:22:41	457.0530	76.2	-23.8	909.8
WXX100208-07CCV	RDX	176 > 102	7.60	9028.113	3500.323	9028.113	1289.611	bb			531.1101	88.5	-11.5	624.4
WXX100208-07CCV	135-Trinitrobenzene	213 > 183	10.19	13674.052	3500.323	13674.052	1953.256	bb			530.3356	88.4	-11.6	1522.7
WXX100208-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	3500.323	3500.323	3500.323	3500.323	bb			544.4459	108.9	8.9	256.5
WXX100208-07CCV	13-Dinitrobenzene	168 > 138	12.20	5098.727	3500.323	5098.727	728.322	bb			605.7261	101.0	1.0	348.3
WXX100208-07CCV	Tetryl	241 > 181	12.72	4247.931	3500.323	4247.931	606.791	bb			667.7411	111.3	11.3	340.8
WXX100208-07CCV	Nitrobenzene	123 > 46	13.63	3859.643	3500.323	3859.643	551.327	bb			682.5286	113.8	13.8	424.7
WXX100208-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	6551.677	18803.047	6551.677	174.218	MM	11-Feb-10	09:28:18	606.5155	101.1	1.1	227.0
WXX100208-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.63	10088.809	18803.047	10088.809	268.276	bb			677.4125	112.9	12.9	1285.0
WXX100208-07CCV	246-Trinitrotoluene	227 > 210	15.45	8039.858	18803.047	8039.858	213.791	bb			662.5836	110.4	10.4	1020.2
WXX100208-07CCV	34-dinitrotoluene	182 > 152	14.43	12212.950	18803.047	12212.950	324.760	bb			360.8475	120.3	20.3	403.2
WXX100208-07CCV	26-dinitrotoluene	182 > 152	17.64	24475.283	18803.047	24475.283	650.833	MM	11-Feb-10	09:58:14	605.9401	101.0	1.0	1031.4
WXX100208-07CCV	26-dinitrotoluene	182 > 152	18.30	5710.992	18803.047	5710.992	151.863	MM	11-Feb-10	10:02:38	622.2599	103.7	3.7	227.7
WXX100208-07CCV	26-dinitrotoluene-d3	185 > 155	17.47	18803.047	18803.047	18803.047	18803.047	bb			509.3004	101.9	1.9	2065.5
WXX100208-07CCV	2-Nitrotoluene	137 > 46	21.11	4144.045	18803.047	4144.045	110.196	bb			710.7215	118.5	18.5	1154.1
WXX100208-07CCV	4-Nitrotoluene	137 > 46	22.46	1845.305	18803.047	1845.305	49.069	bb			645.6263	107.6	7.6	501.6
WXX100208-07CCV	3-Nitrotoluene	137 > 46	24.15	2003.635	18803.047	2003.635	53.280	bb			571.8451	95.3	-4.7	521.6
WXX100208-07CCV	PETN	361 > 62	24.51	38719.785	18803.047	38719.785	1029.615	bb			766.4443	127.7	27.7	6959.9

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 2149
 Standard Number: WXX100208-07CCV
 Data File: EXP0208113a

HMX	76.2
RDX	88.5
135-TNB	88.4
13-DNB	101.0
Tetryl	111.3
Nitrobenzene	113.8
4A-26-DNT	101.1
2A-46-DNT	112.9
246-TNT	110.4
34-DNT(surr)	120.3
26-DNT	101.0
24-DNT	103.7
2-NT	118.5
4-NT	107.6
3-NT	95.3
PETN	127.7

Handwritten:
 11/11/10
 2/11/10

Total 1677.7

Average 104.9

Handwritten: 11/11/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208115a

Analysis Date: 10-FEB-10 22:48

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.258	133	*
1,3-Dinitrobenzene-d4	500	607.853	122	
2,4,6-Trinitrotoluene	40	34.757	87	
2,4-Dinitrotoluene	40	40.974	102	
2,6-Dinitrotoluene	40	39.436	99	
2,6-Dinitrotoluene-d3	500	647.378	129	
2-Amino-4,6-dinitrotoluene	40	50.465	126	
3,4-Dinitrotoluene	20	21.441	107	
4-Amino-2,6-dinitrotoluene	40	44.161	110	
HMX	40	41.129	103	
Nitrobenzene	40	45.384	113	
PETN	40	35.443	89	
RDX	40	28.151	70	
Tetryl	40	44.571	111	
m-Dinitrobenzene	40	32.285	81	
m-Nitrotoluene	40	41.138	103	
o-Nitrotoluene	40	42.41	106	
p-Nitrotoluene	40	44.813	112	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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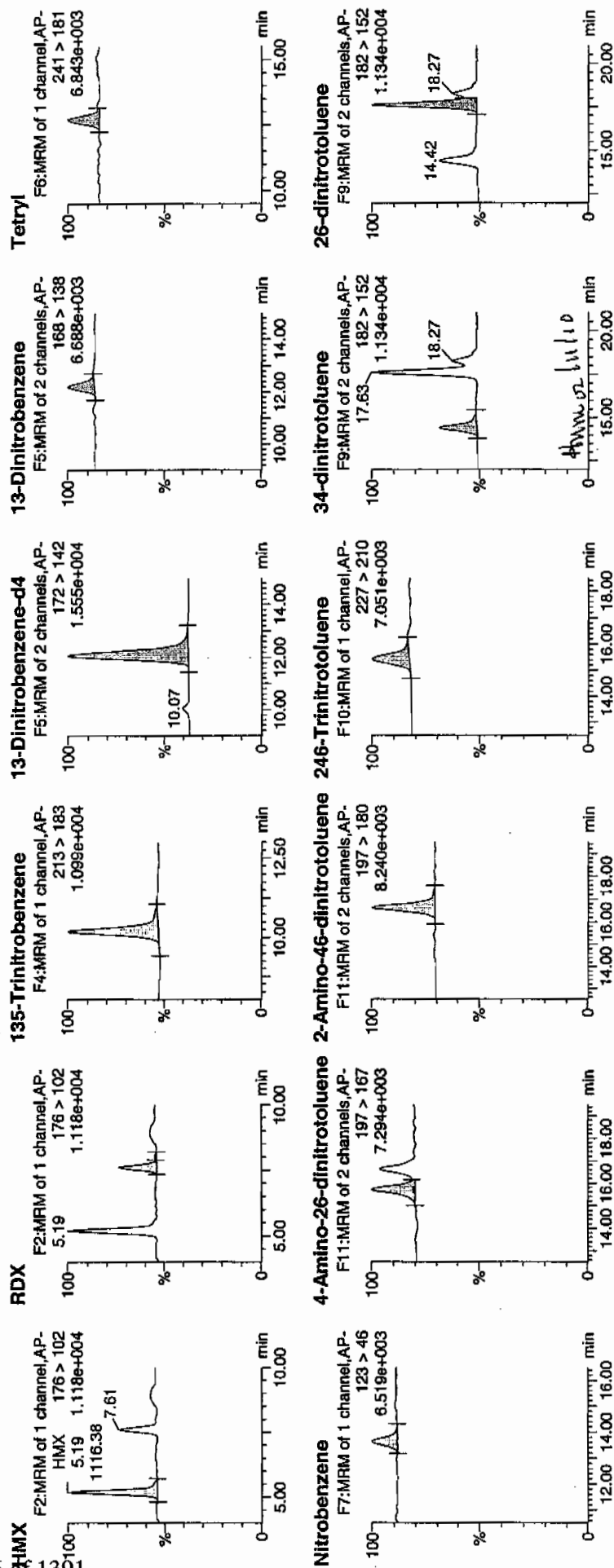
Date: 10-Feb-2010

Time: 22:48:43

ID: WXX100208-08CRI

Vial: 1:1,C

2/11/10

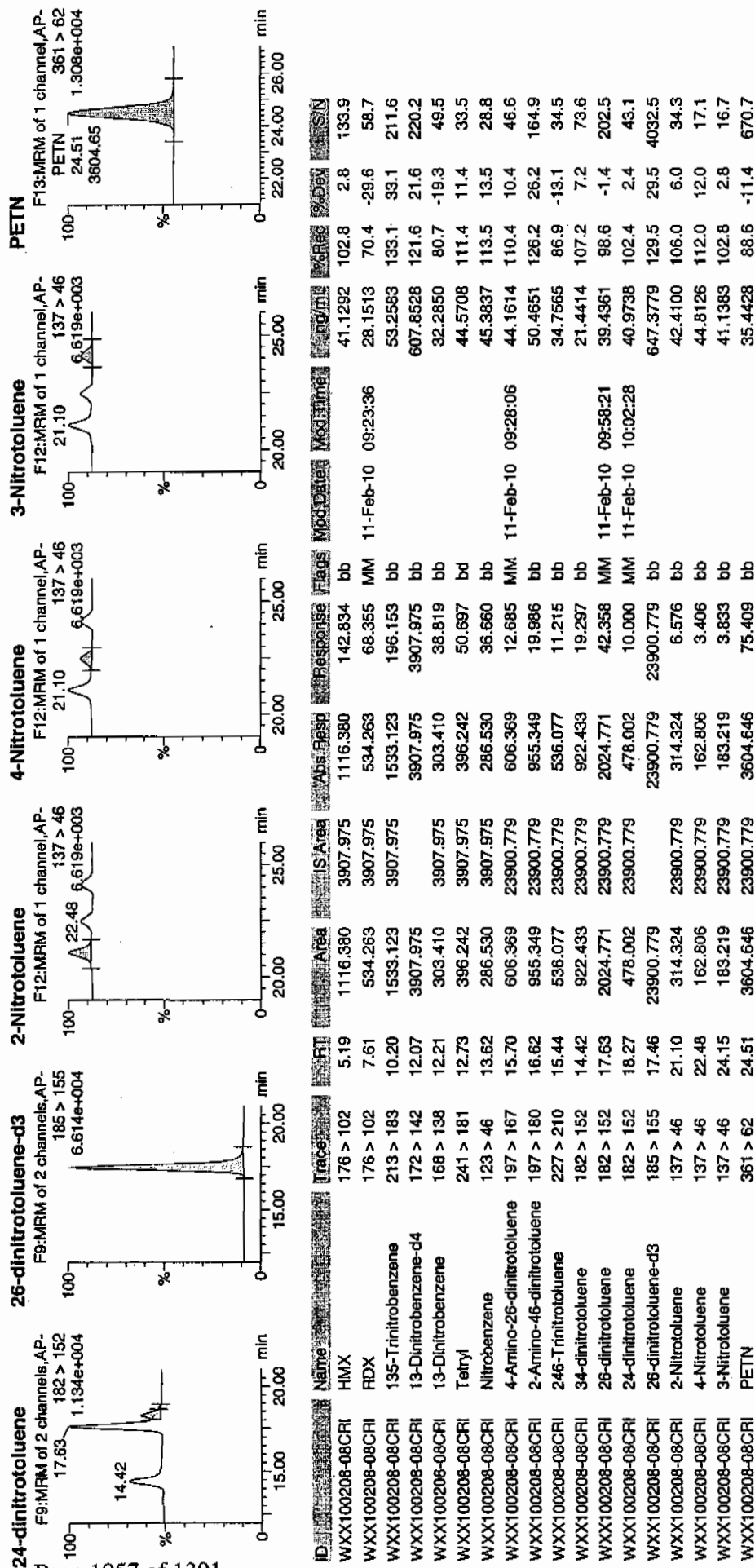


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 76 of 117

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 2248
 Standard Number WXX100208-08CRI
 Data File EXP0208115a

HMX	102.8
RDX	70.4
135-TNB	133.1
13-DNB	80.7
Tetryl	111.4
Nitrobenzene	113.5
4A-26-DNT	110.4
2A-46-DNT	126.2
246-TNT	86.9
34-DNT(surr)	107.2
26-DNT	98.6
24-DNT	102.4
2-NT	106.0
4-NT	112.0
3-NT	102.8
PETN	88.6

*MTT
2/10/10*

Total 1653.0

Average 103.3

MTT on 2/10/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208120a

Analysis Date: 11-FEB-10 01:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	597.957	100	
1,3-Dinitrobenzene-d4	500	521.607	104	
2,4,6-Trinitrotoluene	600	672.377	112	
2,4-Dinitrotoluene	600	600.43	100	
2,6-Dinitrotoluene	600	601.181	100	
2,6-Dinitrotoluene-d3	500	584.444	117	
2-Amino-4,6-dinitrotoluene	600	681.8	114	
3,4-Dinitrotoluene	300	325.104	108	
4-Amino-2,6-dinitrotoluene	600	602.251	100	
HMX	600	566.092	94	
Nitrobenzene	600	695.908	116	
PETN	600	664	111	
RDX	600	639.449	107	
Tetryl	600	673.554	112	
m-Dinitrobenzene	600	598.675	100	
m-Nitrotoluene	600	443.701	74	*
o-Nitrotoluene	600	445.632	74	*
p-Nitrotoluene	600	466.419	78	*

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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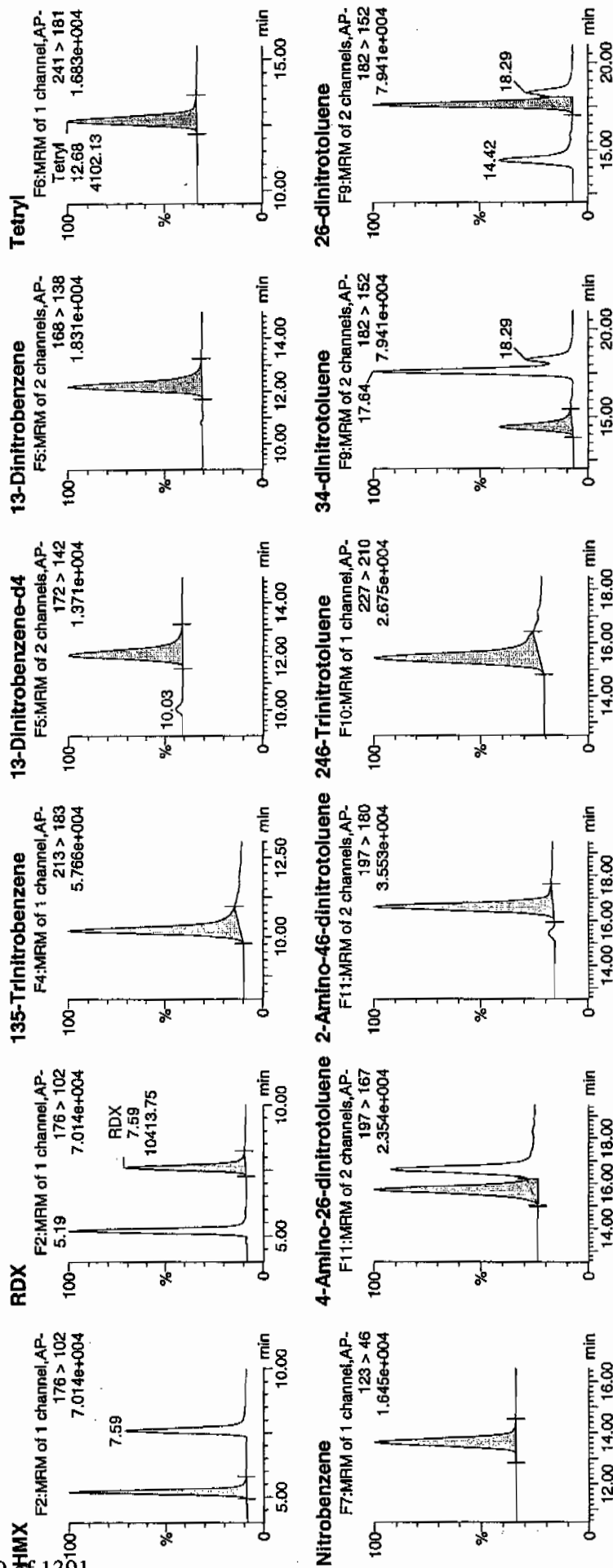
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Time: 01:16:10

ID: WXX100208-07CCV

Vial: 1:1,B

WXX
1/11/10



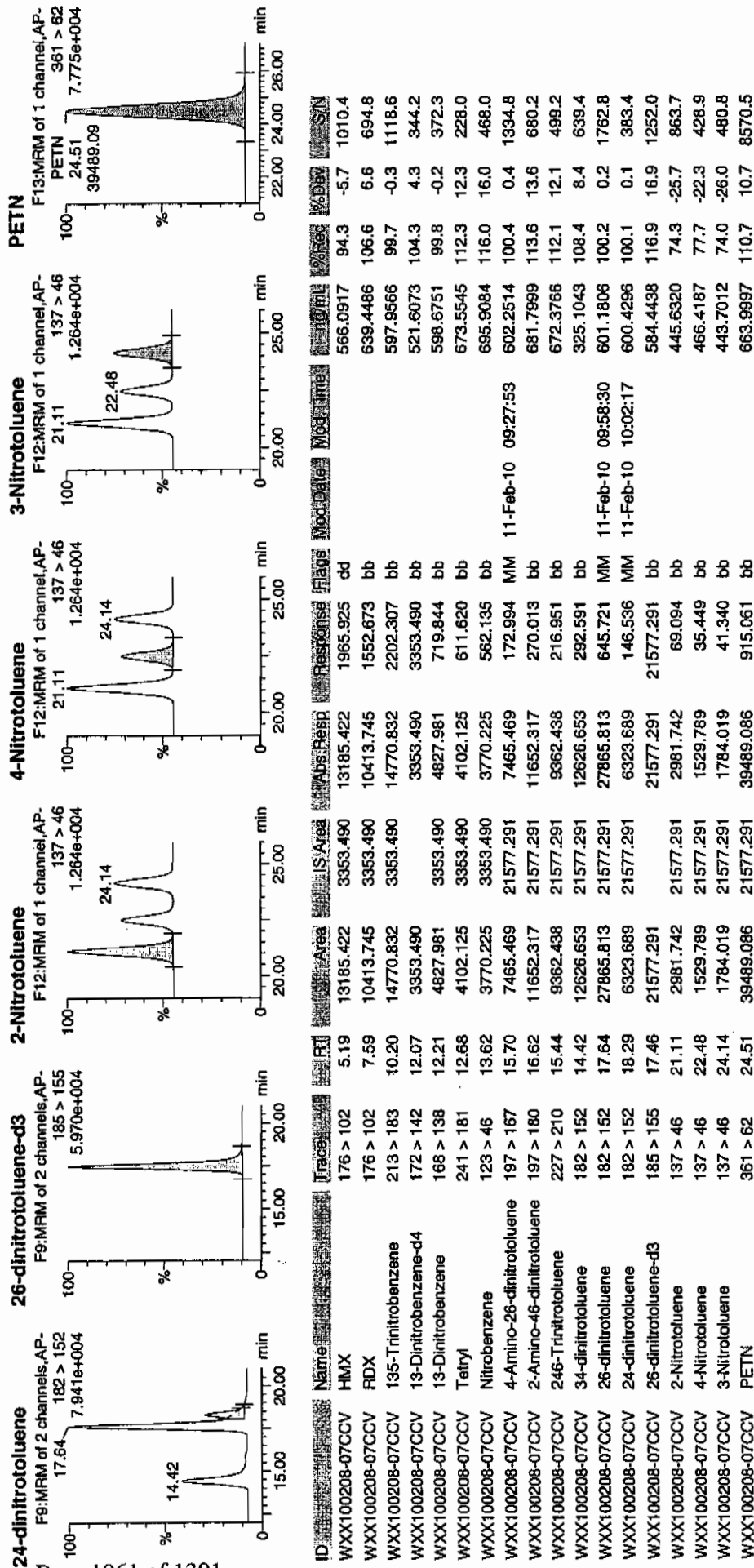
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Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Printed: Thu Feb 11 10:09:12 2010, Page 86 of 117



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 0116
 Standard Number: WXX100208-07CCV
 Data File: EXP0208120a

HMX	94.3
RDX	106.6
135-TNB	99.7
13-DNB	99.8
Tetryl	112.3
Nitrobenzene	116.0
4A-26-DNT	100.4
2A-46-DNT	113.6
246-TNT	112.1
34-DNT(surr)	108.4
26-DNT	100.2
24-DNT	100.1
2-NT	74.3
4-NT	77.7
3-NT	74.0
PETN	110.7
Total	1600.2

Average

100.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

WTP
2/11/10

HPM 02/11/10

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208122a

Analysis Date: 11-FEB-10 02:15

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	40.238	101	
3,4-Dinitrotoluene	20	23.425	117	
4-Amino-2,6-dinitrotoluene	40	39.856	100	
HMX	40	45.073	113	
Nitrobenzene	40	45.235	113	
PETN	40	55.232	138	*
RDX	40	38.842	97	
Tetryl	40	46.548	116	
m-Dinitrobenzene	40	42.593	106	
m-Nitrotoluene	40	29.791	74	
o-Nitrotoluene	40	36.689	92	
p-Nitrotoluene	40	37.057	93	
1,3,5-Trinitrobenzene	40	54.242	136	*
1,3-Dinitrobenzene-d4	500	481.604	96	
2,4,6-Trinitrotoluene	40	39.518	99	
2,4-Dinitrotoluene	40	34.151	85	
2,6-Dinitrotoluene	40	39.253	98	
2,6-Dinitrotoluene-d3	500	559.761	112	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208122a

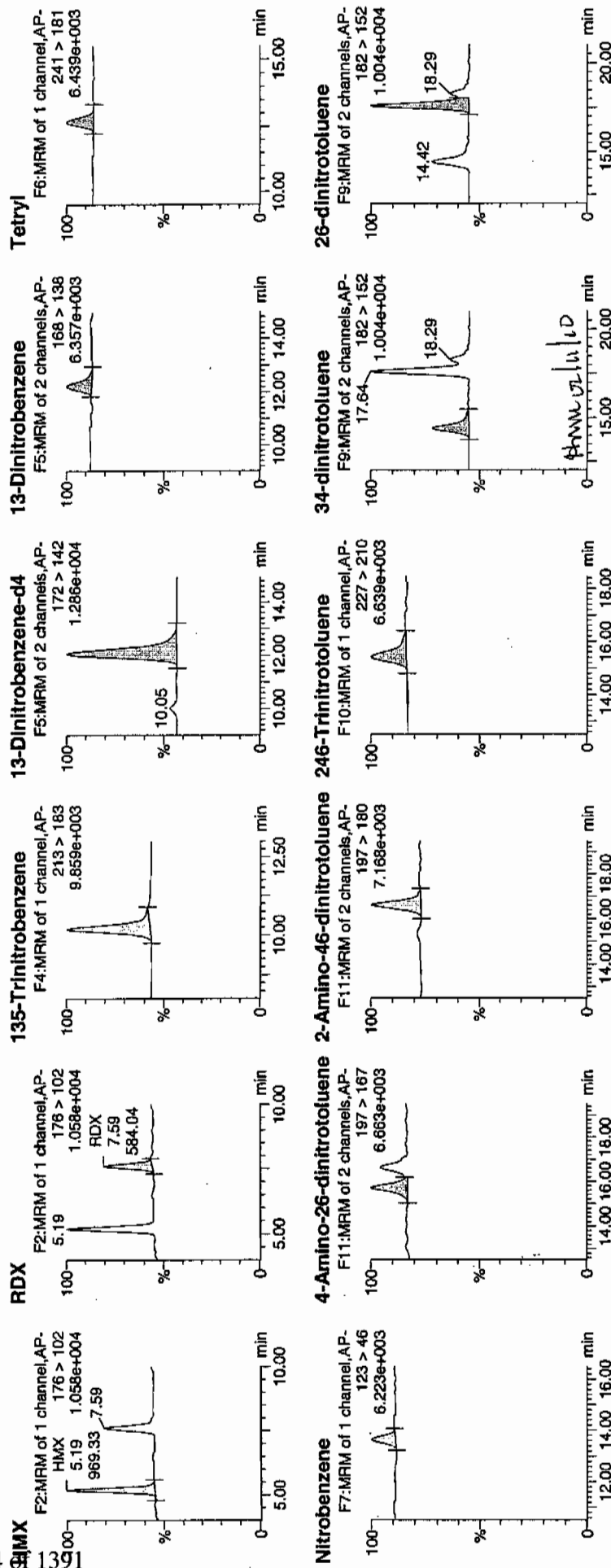
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Time: 02:15:12

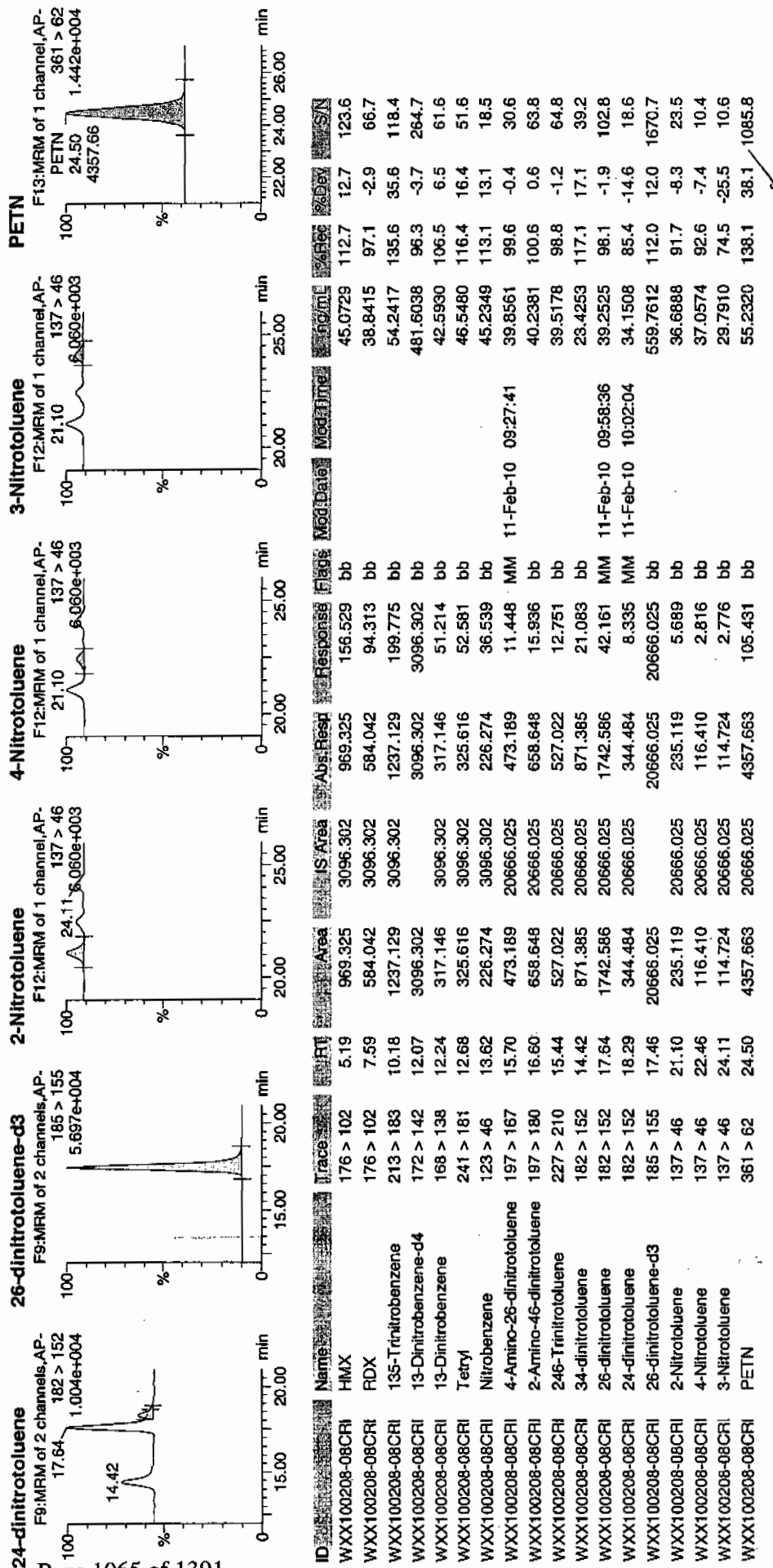
ID: WXX100208-08CRI

Ratio: 1:1,C

WXX
2/11/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 0215
 Standard Number WXX100208-08CRI
 Data File EXP0208122a

HMX	112.7
RDX	97.1
135-TNB	135.6
13-DNB	106.5
Tetryl	116.4
Nitrobenzene	113.1
4A-26-DNT	99.6
2A-46-DNT	100.6
246-TNT	98.8
34-DNT(surr)	117.1
26-DNT	98.1
24-DNT	85.4
2-NT	91.7
4-NT	92.6
3-NT	74.5
PETN	138.1

*WXX
2/11/10*

Total 1677.9

Average 104.9

Handwritten: 1677.9 / 16
 ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208133a

Analysis Date: 11-FEB-10 07:39

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	600	605.241	101	
HMX	600	599.884	100	
Nitrobenzene	600	602.444	100	
PETN	600	821.24	137	*
RDX	600	656.741	109	
Tetryl	600	623.813	104	
m-Dinitrobenzene	600	590.781	98	
m-Nitrotoluene	600	582.434	97	
o-Nitrotoluene	600	639.153	107	
p-Nitrotoluene	600	652.124	109	
1,3,5-Trinitrobenzene	600	561.952	94	
1,3-Dinitrobenzene-d4	500	523.69	105	
2,4,6-Trinitrotoluene	600	625.562	104	
2,4-Dinitrotoluene	600	646.957	108	
2,6-Dinitrotoluene	600	613.147	102	
2,6-Dinitrotoluene-d3	500	492.682	99	
2-Amino-4,6-dinitrotoluene	600	615.832	103	
3,4-Dinitrotoluene	300	315.478	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

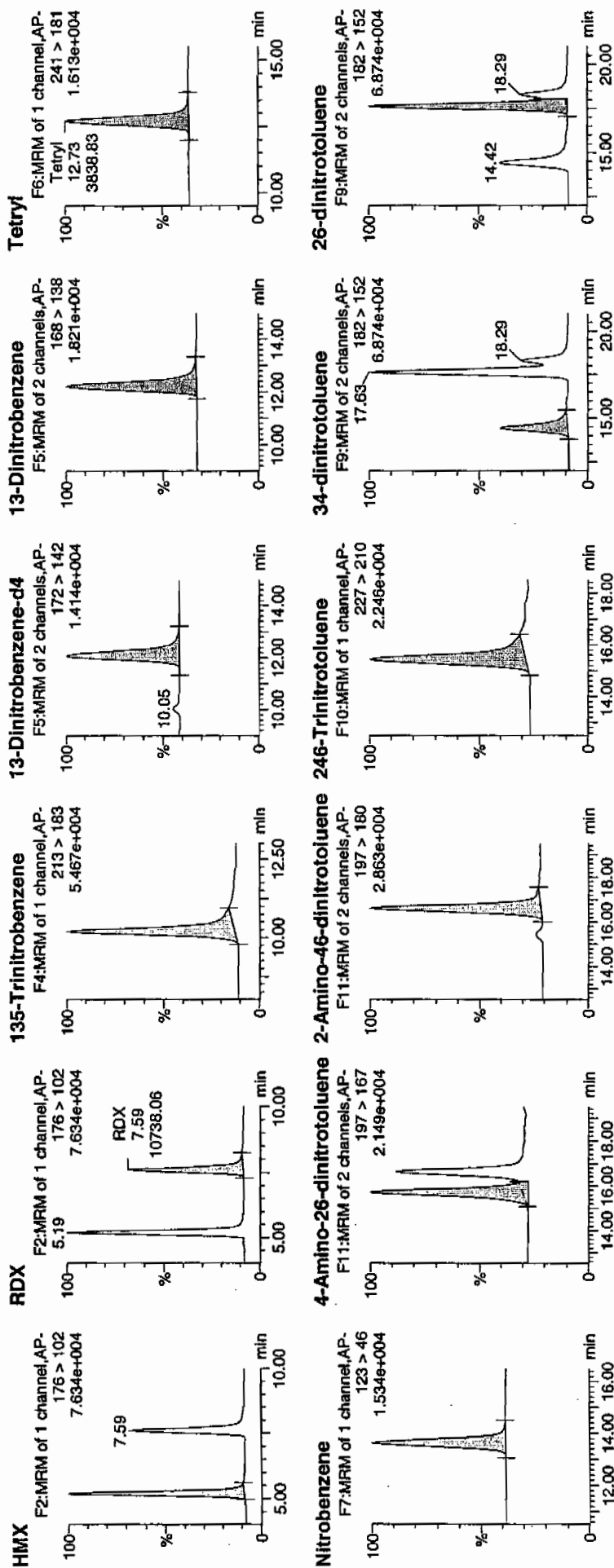
Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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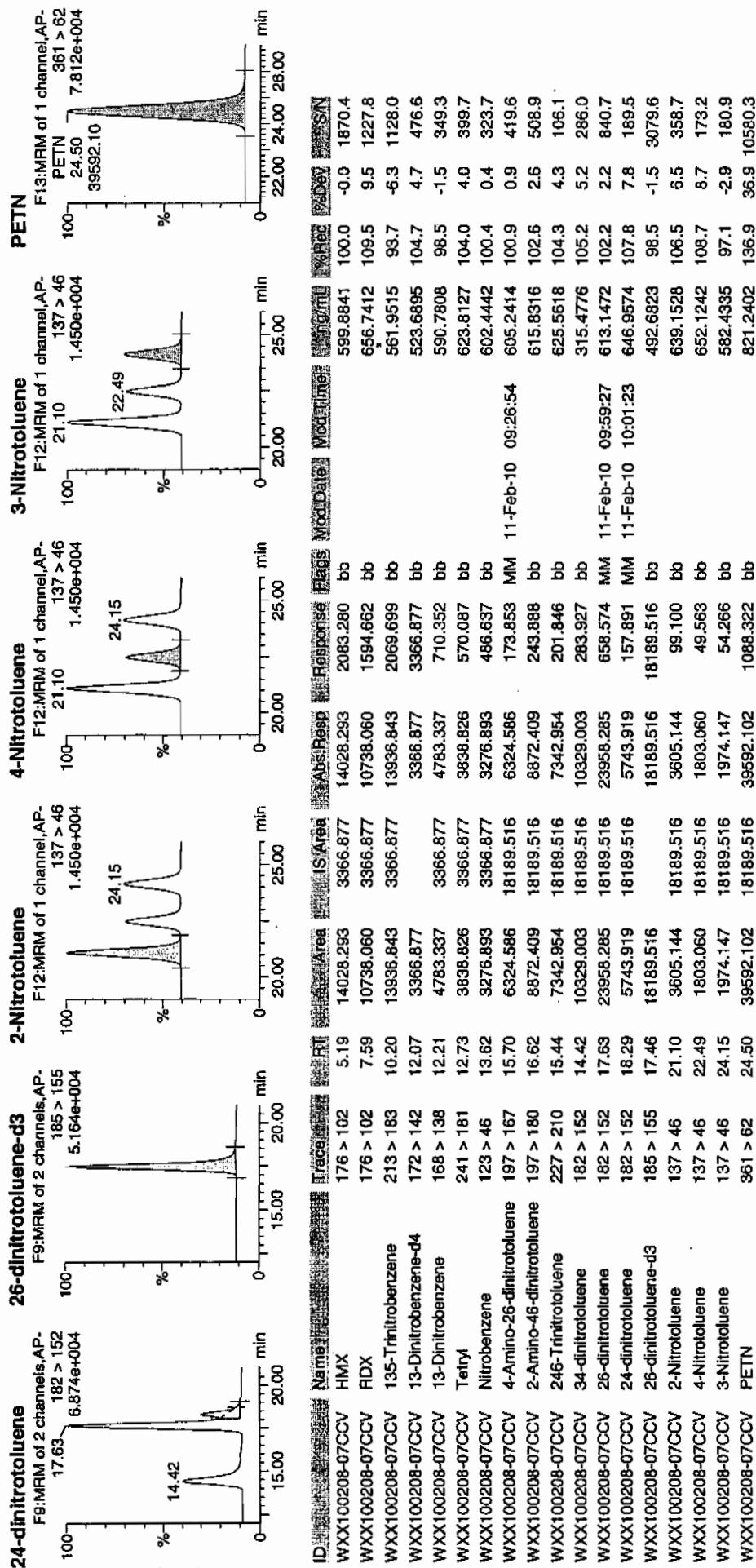
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Time: 07:39:41
ID: WXX100208-07CCV
Vial: 1:1,B

10/10



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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 0739
 Standard Number: WXX100208-07CCV
 Data File: EXP0208133a

HMX	100.0
RDX	109.5
135-TNB	93.7
13-DNB	98.5
Tetryl	104.0
Nitrobenzene	100.4
4A-26-DNT	100.9
2A-46-DNT	102.6
246-TNT	104.3
34-DNT(surr)	105.2
26-DNT	102.2
24-DNT	107.8
2-NT	106.5
4-NT	108.7
3-NT	97.1
PETN	136.9

*WXX
2/11/10*

Total 1678.3

Average 104.9

Hom. of 1/1/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208135a

Analysis Date: 11-FEB-10 08:38

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	40	39.414	99	
1,3,5-Trinitrobenzene	40	53.251	133	*
1,3-Dinitrobenzene-d4	500	496.238	99	
2,4,6-Trinitrotoluene	40	32.077	80	
2,4-Dinitrotoluene	40	41.206	103	
2,6-Dinitrotoluene	40	39.051	98	
2,6-Dinitrotoluene-d3	500	591.836	118	
2-Amino-4,6-dinitrotoluene	40	38.537	96	
3,4-Dinitrotoluene	20	20.304	102	
4-Amino-2,6-dinitrotoluene	40	41.968	105	
HMX	40	48.07	120	
Nitrobenzene	40	41.966	105	
PETN	40	55.176	138	*
RDX	40	47.02	118	
Tetryl	40	49.996	125	
m-Dinitrobenzene	40	42.077	105	
m-Nitrotoluene	40	34.831	87	
o-Nitrotoluene	40	41.028	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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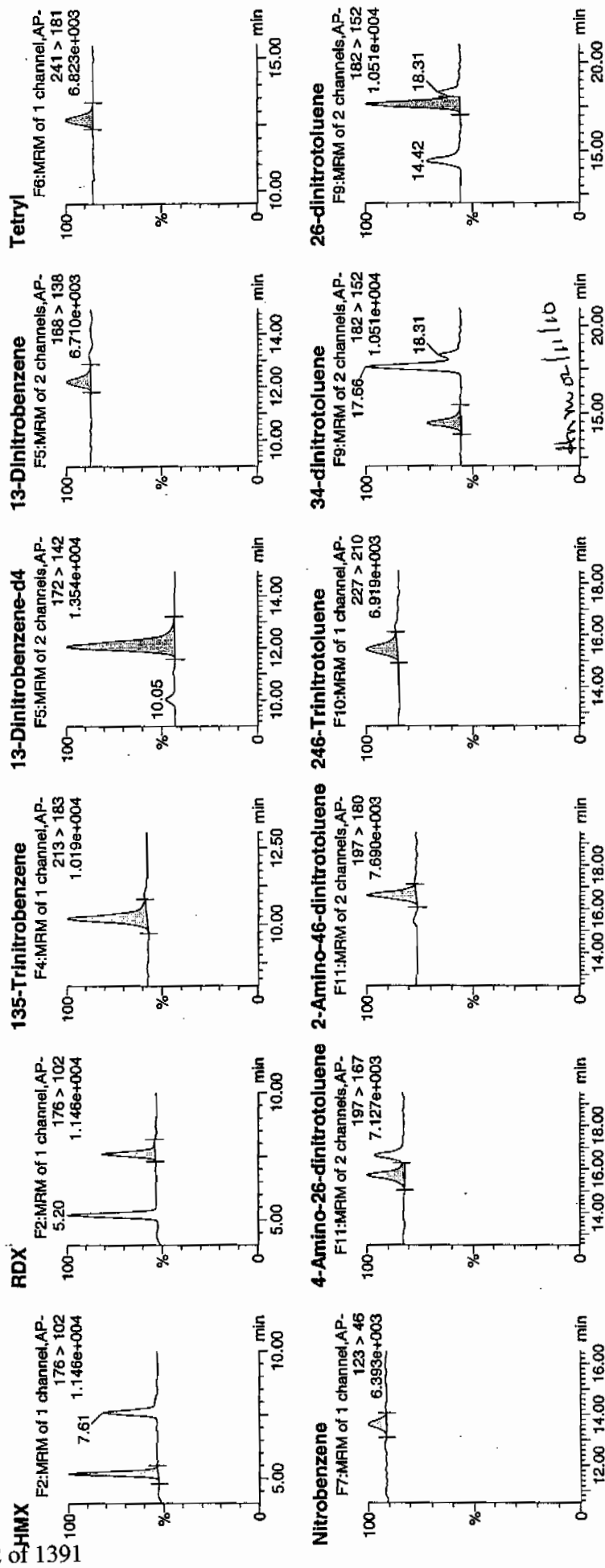
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Time: 08:38:44

ID: WXX100208-08CRI

Vial: 1:1,C

2/11/10

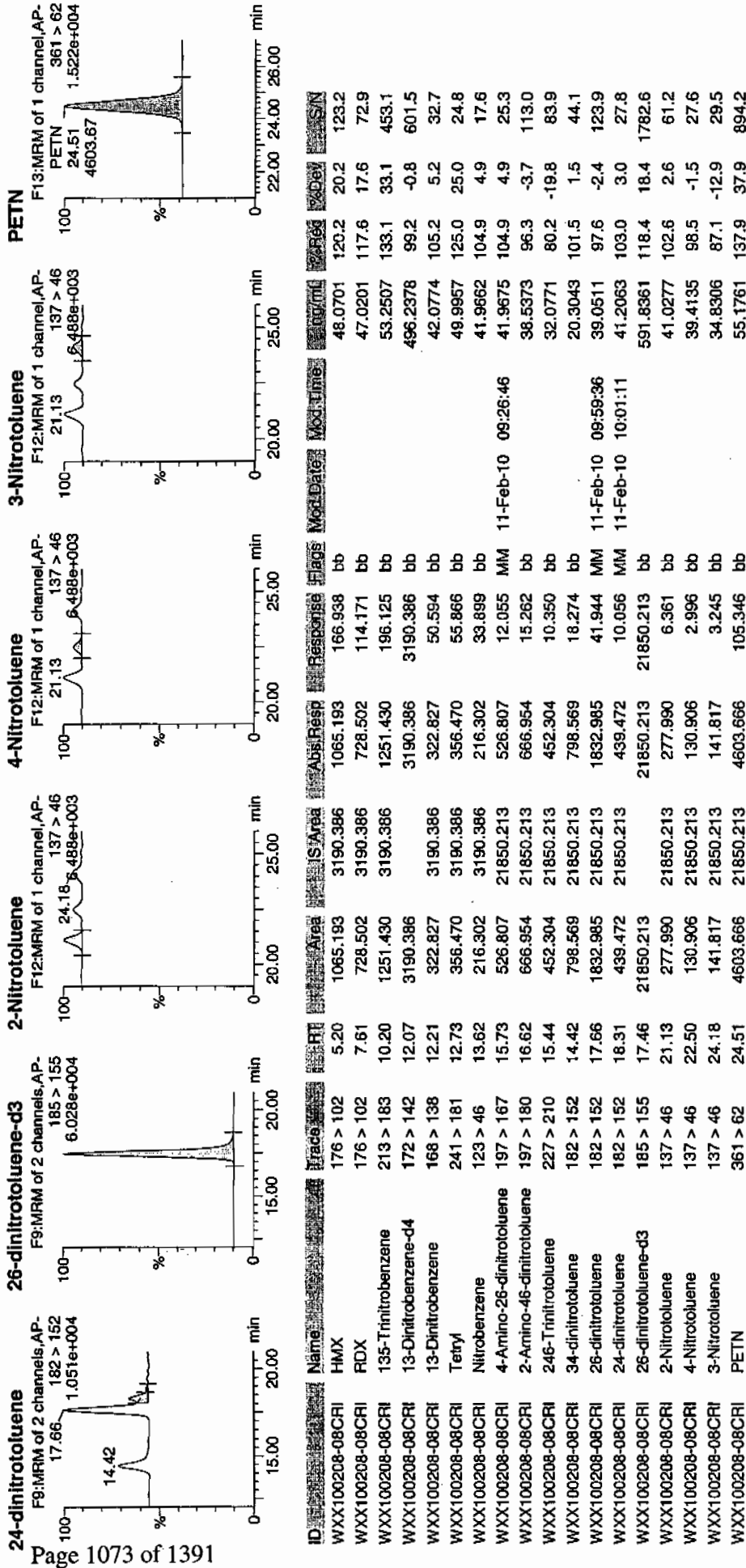


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 116 of 117

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 0838
 Standard Number WXX100208-08CRI
 Data File EXP0208135a

HMX	120.2
RDX	117.6
135-TNB	133.1
13-DNB	105.2
Tetryl	125.0
Nitrobenzene	104.9
4A-26-DNT	104.9
2A-46-DNT	96.3
246-TNT	80.2
34-DNT(surr)	101.5
26-DNT	97.6
24-DNT	103.0
2-NT	102.6
4-NT	98.5
3-NT	87.1
PETN	137.9

*HP
2/11/10*

Total 1715.6

Average 107.2

HP 2/11/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208145a

Analysis Date: 11-FEB-10 13:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	559.95	93	
1,3-Dinitrobenzene-d4	500	507.071	101	
2,4,6-Trinitrotoluene	600	636.938	106	
2,4-Dinitrotoluene	600	643.853	107	
2,6-Dinitrotoluene	600	629.897	105	
2,6-Dinitrotoluene-d3	500	498.486	100	
2-Amino-4,6-dinitrotoluene	600	648.791	108	
3,4-Dinitrotoluene	300	324.255	108	
4-Amino-2,6-dinitrotoluene	600	603.46	101	
HMX	600	583.237	97	
Nitrobenzene	600	623.611	104	
PETN	600	723.874	121	*
RDX	600	637.14	106	
Tetryl	600	617.261	103	
m-Dinitrobenzene	600	611.284	102	
m-Nitrotoluene	600	566.246	94	
o-Nitrotoluene	600	608.792	101	
p-Nitrotoluene	600	612.602	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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qtd, Time: Fri Feb 12 08:08:48 2010

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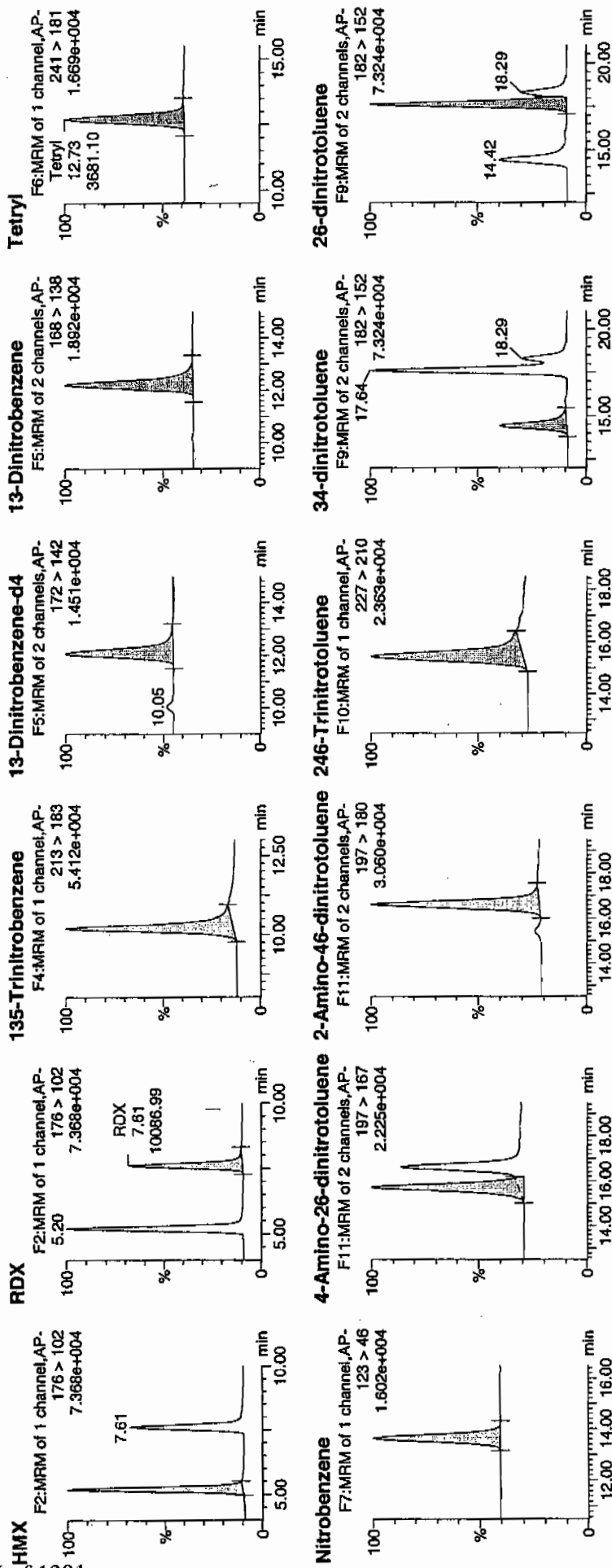
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Time: 13:34:04

ID: WXX100211-07CCV

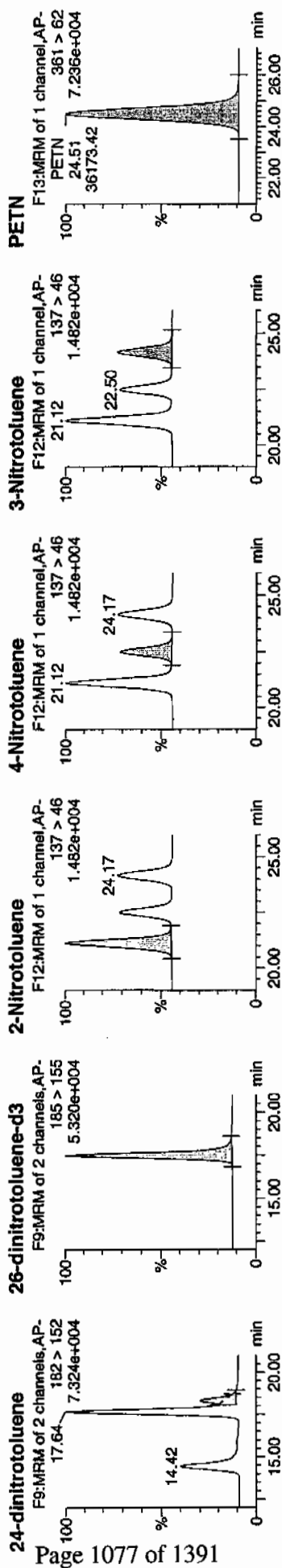
Vial: 1:1,B

WAT
2/12/10



Have
2/12/10

Dataset: C:\MASSLYNX\New_Exp\PROV020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



Page 1077 of 1391

ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Integ:Min	Integ:Sec	SN
WXX100211-07CCV	HMX	176 > 102	5.20	13206.193	3260.034	13206.193	2025.469	bb			583.2373	97.2	-2.8
WXX100211-07CCV	RDX	176 > 102	7.61	10086.988	3260.034	10086.988	1547.068	bb			637.1403	106.2	6.2
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.20	13446.518	3260.034	13446.518	2082.328	bb			559.9502	93.3	-6.7
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	3260.034		3260.034	3260.034	bb			507.0710	101.4	1.4
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	4792.287	3260.034	4792.287	735.006	bb			611.2844	101.9	1.9
WXX100211-07CCV	Tetryl	241 > 181	12.73	3681.104	3260.034	3681.104	564.581	bb			617.2613	102.9	2.9
WXX100211-07CCV	Nitrobenzene	123 > 46	13.62	3284.383	3260.034	3284.383	503.734	bb			623.6106	103.9	3.9
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.70	6380.259	18403.783	6380.259	173.341	MM	12-Feb-10	07:58:23	603.4805	100.6	0.6
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.62	9457.366	18403.783	9457.366	256.941	bb			648.7908	108.1	8.1
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.44	7564.563	18403.783	7564.563	205.517	bb			636.9382	106.2	6.2
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.42	10741.435	18403.783	10741.435	291.827	bb			324.2549	108.1	8.1
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	24902.684	18403.783	24902.684	676.564	MM	12-Feb-10	08:04:29	629.8966	105.0	5.0
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.29	5783.696	18403.783	5783.696	157.133	MM	12-Feb-10	08:08:48	643.8532	107.3	7.3
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	18403.783		18403.783	18403.783	bb			498.4859	99.7	-0.3
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	3474.344	18403.783	3474.344	94.392	bb			608.7920	101.5	1.5
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1713.738	18403.783	1713.738	46.559	bb			612.6023	102.1	2.1
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.17	1941.887	18403.783	1941.887	52.758	bb			566.2457	94.4	-5.6
WXX100211-07CCV	PETN	361 > 62	24.51	36173.418	18403.783	36173.418	982.771	bb			723.8738	120.6	20.6

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 1334
 Standard Number: WXX100211-07CCV
 Data File: EXP0208145a

HMX	97.2
RDX	106.2
135-TNB	93.3
13-DNB	101.9
Tetryl	102.9
Nitrobenzene	103.9
4A-26-DNT	100.6
2A-46-DNT	108.1
246-TNT	106.2
34-DNT(surr)	108.1
26-DNT	105.0
24-DNT	107.3
2-NT	101.5
4-NT	102.1
3-NT	94.4
PETN	120.6

WTT
4/2/10

Total 1659.3

Average 103.7

Handwritten: 103.7 or 102.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208147a

Analysis Date: 11-FEB-10 14:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.729	124	
1,3-Dinitrobenzene-d4	500	516.222	103	
2,4,6-Trinitrotoluene	40	38.92	97	
2,4-Dinitrotoluene	40	33.223	83	
2,6-Dinitrotoluene	40	40.948	102	
2,6-Dinitrotoluene-d3	500	573.135	115	
2-Amino-4,6-dinitrotoluene	40	40.905	102	
3,4-Dinitrotoluene	20	16.725	84	
4-Amino-2,6-dinitrotoluene	40	42.799	107	
HMX	40	40.54	101	
Nitrobenzene	40	39.412	99	
PETN	40	46.221	116	
RDX	40	36.181	90	
Tetryl	40	36.32	91	
m-Dinitrobenzene	40	41.498	104	
m-Nitrotoluene	40	36.824	92	
o-Nitrotoluene	40	43.119	108	
p-Nitrotoluene	40	43.135	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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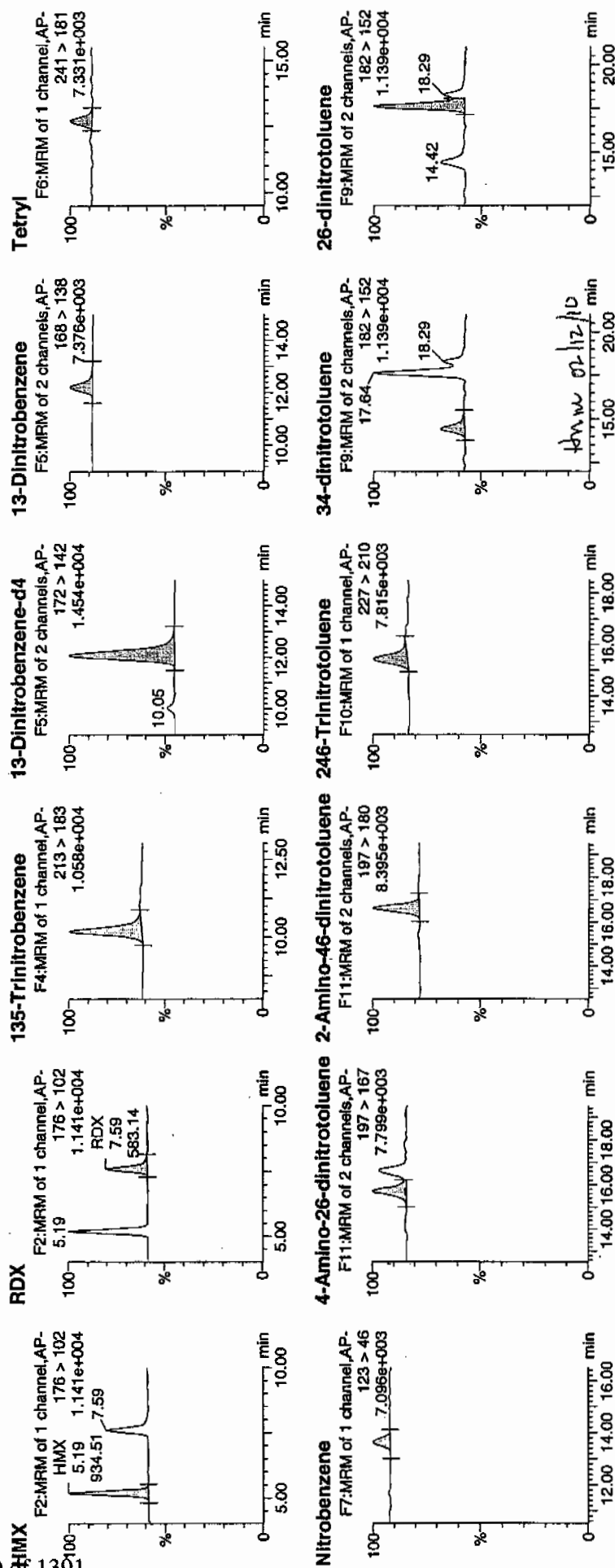
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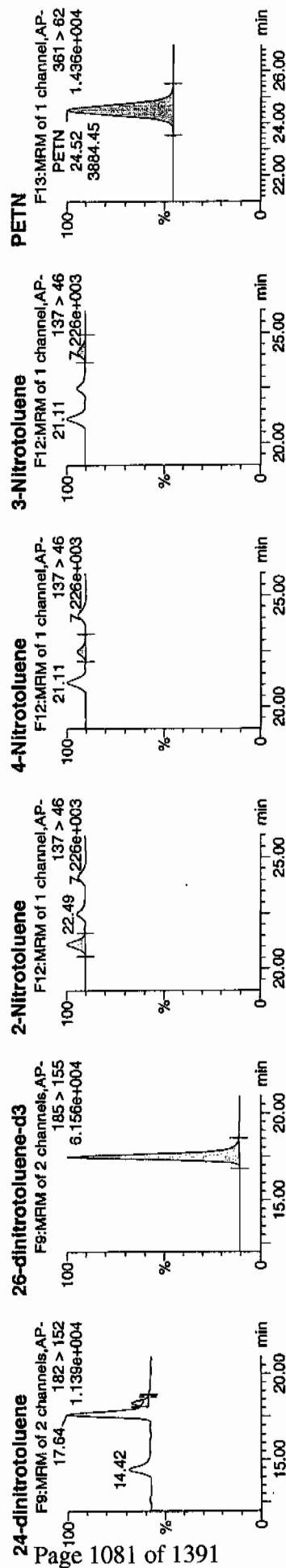
ID: WXX100211-08CRI

Vial: 1:1,C

2/12/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



ID	Name	Trace	RT	Area	IS Area	Abundance	Response	Flags	Mod Date	Mod Time	Area	%Area	SN
WXX100211-08CRI	HMX	176 > 102	5.19	934,513	3318,865	934,513	140,788	bb			40,5402	101.4	1.4
WXX100211-08CRI	RDX	176 > 102	7.59	583,138	3318,865	583,138	87,852	bb			36,1807	90.5	-9.5
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1215,719	3318,865	1215,719	183,153	bb			49,7285	124.3	24.3
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3318,865	3318,865	3318,865	3318,865	bb			516,2216	103.2	3.2
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.21	331,204	3318,865	331,204	49,897	bb			41,4981	103.7	3.7
WXX100211-08CRI	Tetryl	241 > 181	12.73	284,245	3318,865	284,245	42,823	bb			36,3198	90.8	-9.2
WXX100211-08CRI	Nitrobenzene	123 > 46	13.62	211,320	3318,865	211,320	31,836	bb			39,4124	98.5	-1.5
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	520,271	21159,785	520,271	12,294	MM	12-Feb-10	07:58:28	42,7992	107.0	7.0
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	685,557	21159,785	685,557	16,200	bb			40,9048	102.3	2.3
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.44	531,456	21159,785	531,456	12,558	bb			38,9203	97.3	-2.7
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.42	636,993	21159,785	636,993	15,052	bb			16,7246	83.6	-16.4
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1861,279	21159,785	1861,279	43,982	MM	12-Feb-10	08:04:42	40,9478	102.4	2.4
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.29	343,129	21159,785	343,129	8,108	MM	12-Feb-10	08:08:34	33,2227	83.1	-16.9
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.48	21159,785	21159,785	21159,785	21159,785	bb			573,1352	114.6	14.6
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.11	282,928	21159,785	282,928	6,686	bb			43,1189	107.8	7.8
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.49	138,739	21159,785	138,739	3,278	bb			43,1349	107.8	7.8
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.13	145,196	21159,785	145,196	3,431	bb			36,8240	92.1	-7.9
WXX100211-08CRI	PETN	361 > 82	24.52	3884,447	21159,785	3884,447	91,788	bb			46,2207	115.6	15.6
													728.4

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 1433
 Standard Number WXX100211-08CRI
 Data File EXP0208147a

HMX	101.4
RDX	90.5
135-TNB	124.3
13-DNB	103.7
Tetryl	90.8
Nitrobenzene	98.5
4A-26-DNT	107.0
2A-46-DNT	102.3
246-TNT	97.3
34-DNT(surr)	83.6
26-DNT	102.4
24-DNT	83.1
2-NT	107.8
4-NT	107.8
3-NT	92.1
PETN	115.6

*not
4/11/10*

Total 1608.2

Average 100.5

from 02/11/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208155a

Analysis Date: 11-FEB-10 18:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	584.955	97	
1,3-Dinitrobenzene-d4	500	537.834	108	
2,4,6-Trinitrotoluene	600	672.091	112	
2,4-Dinitrotoluene	600	651.546	109	
2,6-Dinitrotoluene	600	630.785	105	
2,6-Dinitrotoluene-d3	500	539.361	108	
2-Amino-4,6-dinitrotoluene	600	714.872	119	
3,4-Dinitrotoluene	300	341.269	114	
4-Amino-2,6-dinitrotoluene	600	641.093	107	
HMX	600	758.397	126	*
Nitrobenzene	600	633.981	106	
PETN	600	627.004	105	
RDX	600	775.743	129	*
Tetryl	600	659.589	110	
m-Dinitrobenzene	600	643.098	107	
m-Nitrotoluene	600	479.616	80	*
o-Nitrotoluene	600	649.003	108	
p-Nitrotoluene	600	642.036	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208155a

Date: 11-Feb-2010

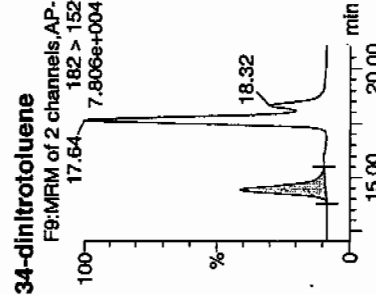
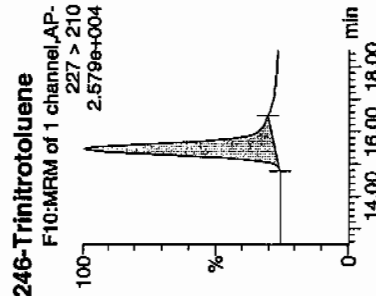
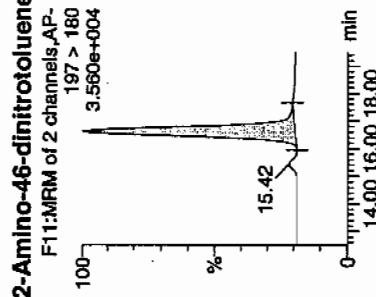
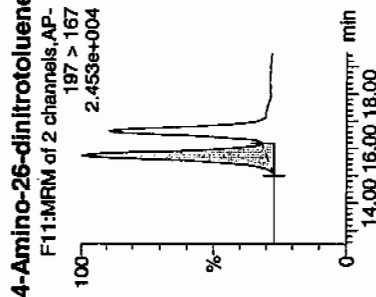
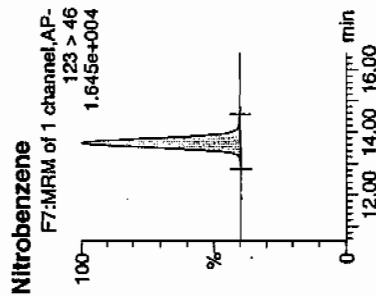
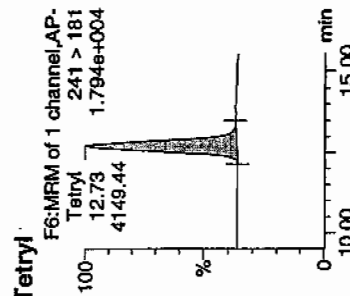
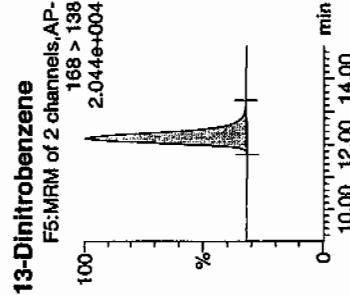
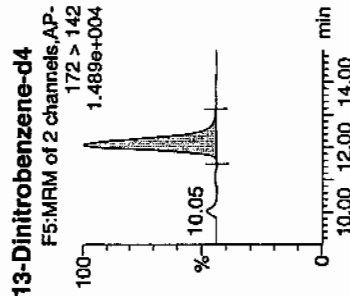
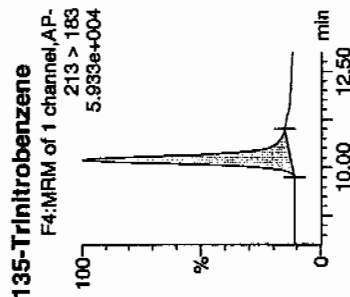
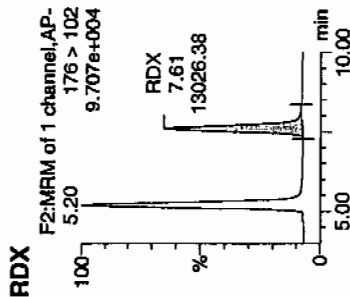
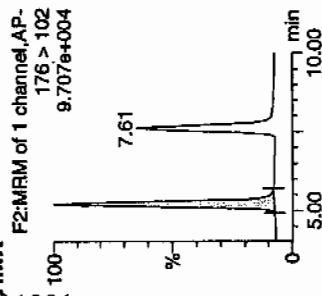
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ID: WXX100211-07CCV

Vial: 1:1,B

1084

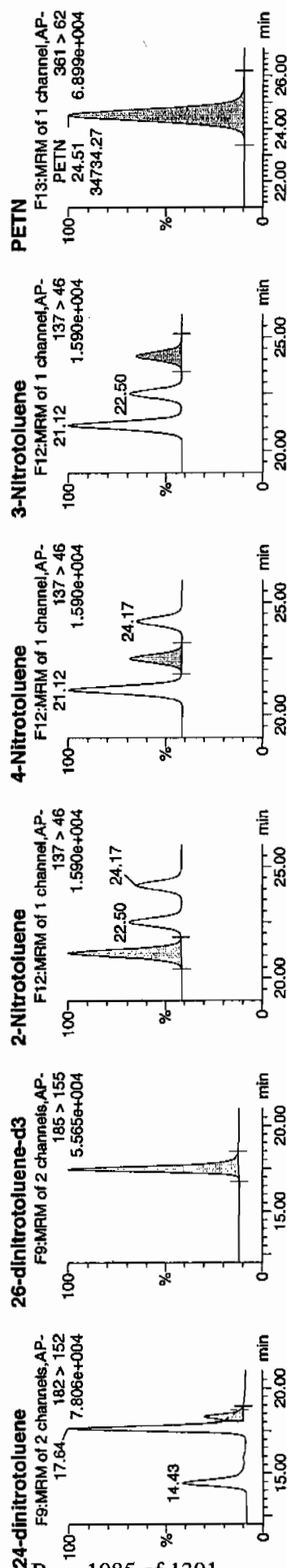
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Handwritten: 12/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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ID	Name	Trace	RT	Area	IS Area	AbS Resp	Response	Flags	Mod Date	Mod Time	Int	Area	Peak	Dev	SN
WXX100211-07CCV	HMX	176 > 102	5.20	18214.146	3457.815	18214.146	2633.765	db			758.3974	126.4	26.4	912.7	
WXX100211-07CCV	FOX	176 > 102	7.61	13026.384	3457.815	13026.384	1883.615	bb			775.7429	129.3	29.3	585.6	
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.20	14899.180	3457.815	14899.180	2154.421	bb			584.9548	97.5	-2.5	1756.5	
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	3457.815		3457.815	3457.815	bb			537.8342	107.6	7.6	307.1	
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	5347.566	3457.815	5347.566	773.258	bb			643.0978	107.2	7.2	382.2	
WXX100211-07CCV	Tetryl	241 > 181	12.73	4149.437	3457.815	4149.437	600.009	bb			659.5891	109.9	9.9	617.4	
WXX100211-07CCV	Nitrobenzene	123 > 46	13.63	3541.570	3457.815	3541.570	512.111	bb			633.9805	105.7	5.7	393.8	
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	7333.929	19912.854	7333.929	184.151	MM	12-Feb-10	07:59:47	641.0927	106.8	6.8	220.1	
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.63	11275.101	19912.854	11275.101	283.111	bb			714.8724	119.1	19.1	493.5	
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.45	8636.564	19912.854	8636.564	216.859	bb			672.0909	112.0	12.0	224.4	
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.43	12323.050	19912.854	12323.050	307.140	bb			341.2892	113.8	13.8	375.9	
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	26982.646	19912.854	26982.646	677.518	MM	12-Feb-10	08:05:15	630.7948	105.1	5.1	1049.0	
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.32	6332.720	19912.854	6332.720	159.011	MM	12-Feb-10	08:07:53	651.5463	108.6	8.6	232.0	
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	19912.854		19912.854	19912.854	bb			539.3607	107.9	7.9	3140.5	
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	4007.529	19912.854	4007.529	100.627	bb			649.0025	108.2	8.2	957.4	
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1943.352	19912.854	1943.352	48.796	bb			642.0358	107.0	7.0	444.9	
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.17	1779.667	19912.854	1779.667	44.686	bb			479.6156	79.9	-20.1	392.5	
WXX100211-07CCV	PETN	361 > 62	24.51	34734.266	19912.854	34734.266	872.157	bb			627.0040	104.5	4.5	10028.7	

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 1829
 Standard Number: WXX100211-07CCV
 Data File: EXP0208155a

HMX	126.4
RDX	129.3
135-TNB	97.5
13-DNB	107.2
Tetryl	109.9
Nitrobenzene	105.7
4A-26-DNT	106.8
2A-46-DNT	119.1
246-TNT	112.0
34-DNT(surr)	113.8
26-DNT	105.1
24-DNT	108.6
2-NT	108.2
4-NT	107.0
3-NT	79.9
PETN	104.5

*not
2/11/10*

Total 1741.0

Average 108.8

from 02/12/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208157a

Analysis Date: 11-FEB-10 19:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	44.282	111	
PETN	40	48.308	121	
RDX	40	38.585	96	
Tetryl	40	36.534	91	
m-Dinitrobenzene	40	35.416	89	
m-Nitrotoluene	40	47.307	118	
o-Nitrotoluene	40	45.523	114	
p-Nitrotoluene	40	40.92	102	
HMX	40	40.09	100	
1,3,5-Trinitrobenzene	40	47.938	120	
1,3-Dinitrobenzene-d4	500	474.289	95	
2,4,6-Trinitrotoluene	40	45.464	114	
2,4-Dinitrotoluene	40	32.491	81	
2,6-Dinitrotoluene	40	37.857	95	
2,6-Dinitrotoluene-d3	500	465.184	93	
2-Amino-4,6-dinitrotoluene	40	40.427	101	
3,4-Dinitrotoluene	20	22.689	113	
4-Amino-2,6-dinitrotoluene	40	32.487	81	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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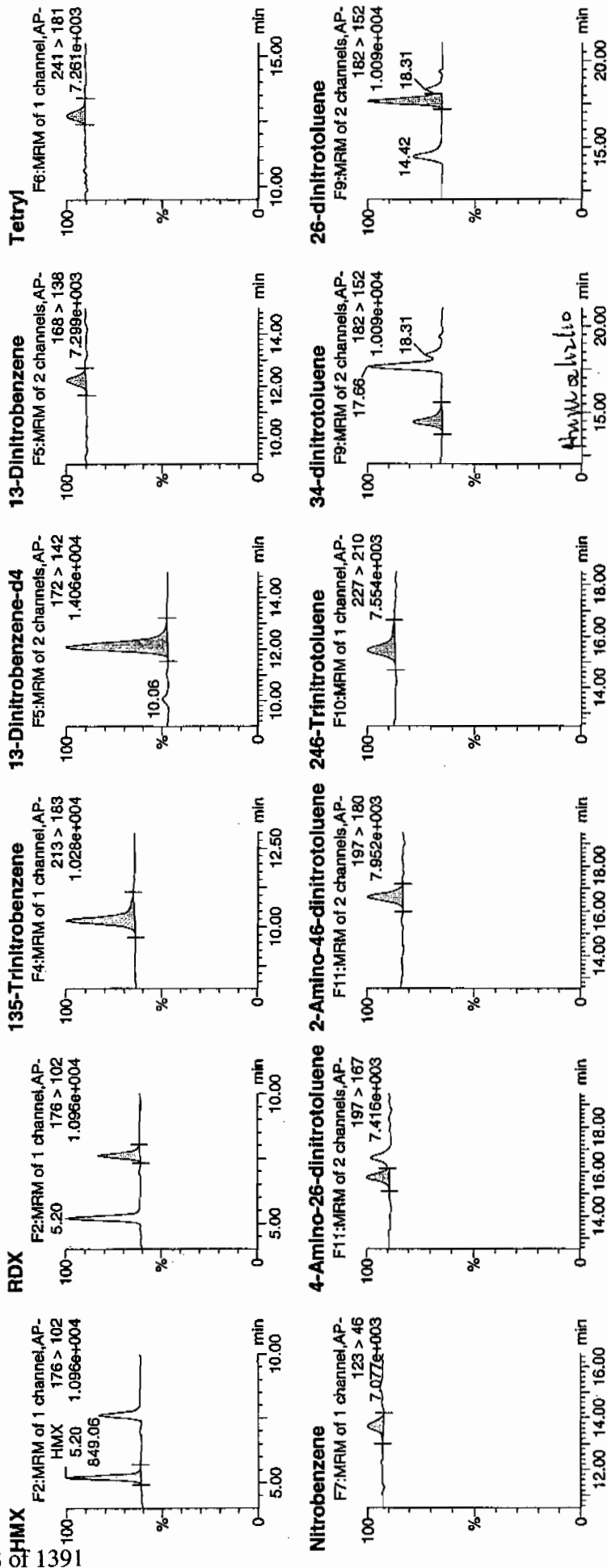
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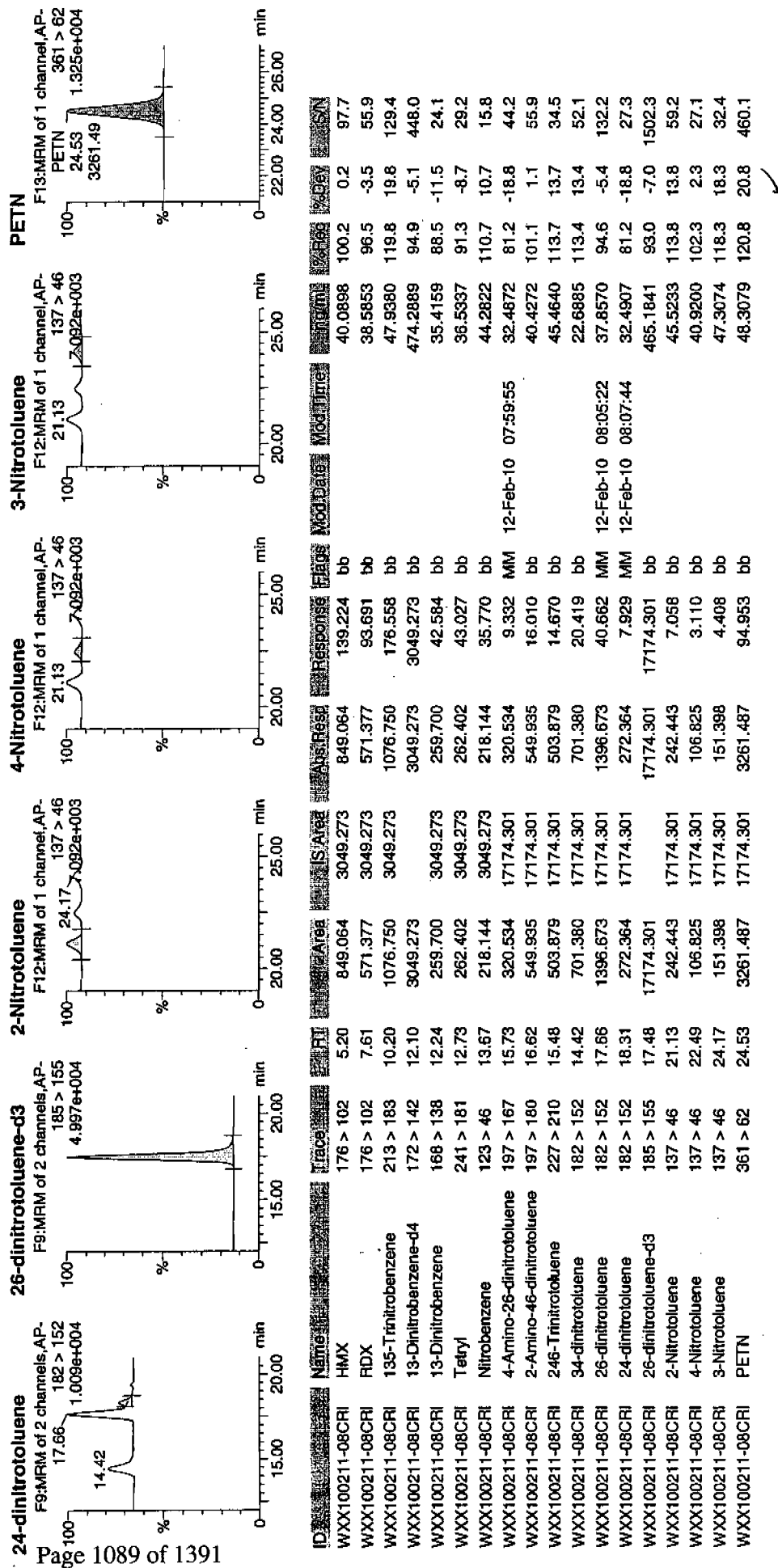
Vial: 1:1,C

088



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 1928
 Standard Number WXX100211-08CRI
 Data File EXP0208157a

HMX	100.2
RDX	96.5
135-TNB	119.8
13-DNB	88.5
Tetryl	91.3
Nitrobenzene	110.7
4A-26-DNT	81.2
2A-46-DNT	101.1
246-TNT	113.7
34-DNT(surr)	113.4
26-DNT	94.6
24-DNT	81.2
2-NT	113.8
4-NT	102.3
3-NT	118.3
PETN	120.8

Handwritten: 4/12/10

Total 1647.4

Average 103.0

Handwritten: 4/11/10

JCV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208168a

Analysis Date: 12-FEB-10 00:52

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	600	690.95	115	
PETN	600	937.241	156	*
RDX	600	667.229	111	
Tetryl	600	719.32	120	
m-Dinitrobenzene	600	637.964	106	
m-Nitrotoluene	600	612.02	102	
o-Nitrotoluene	600	573.693	96	
p-Nitrotoluene	600	575.749	96	
1,3,5-Trinitrobenzene	600	649.814	108	
1,3-Dinitrobenzene-d4	500	363.136	73	*
2,4,6-Trinitrotoluene	600	704.394	117	
2,4-Dinitrotoluene	600	605.971	101	
2,6-Dinitrotoluene	600	613.961	102	
2,6-Dinitrotoluene-d3	500	365.062	73	*
2-Amino-4,6-dinitrotoluene	600	635.413	106	
3,4-Dinitrotoluene	300	319.507	107	
4-Amino-2,6-dinitrotoluene	600	605.937	101	
HMX	600	616.353	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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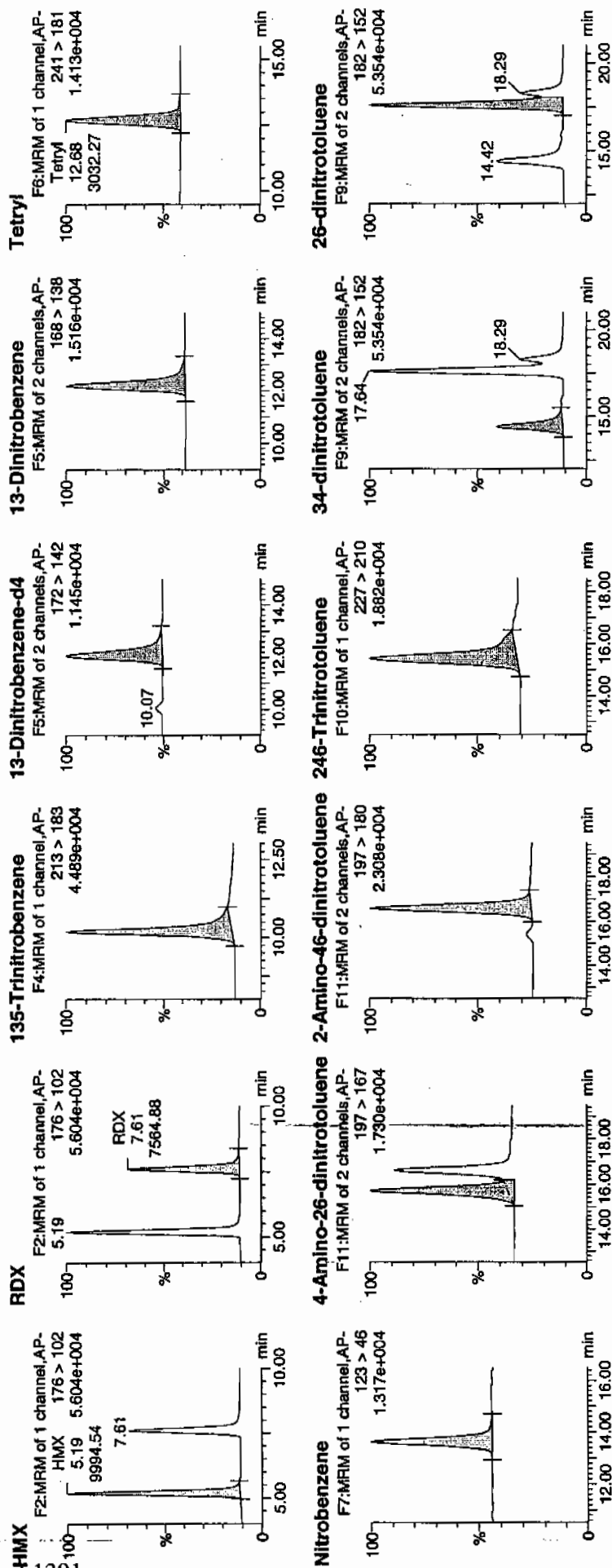
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ID: WXX100211-07CCV

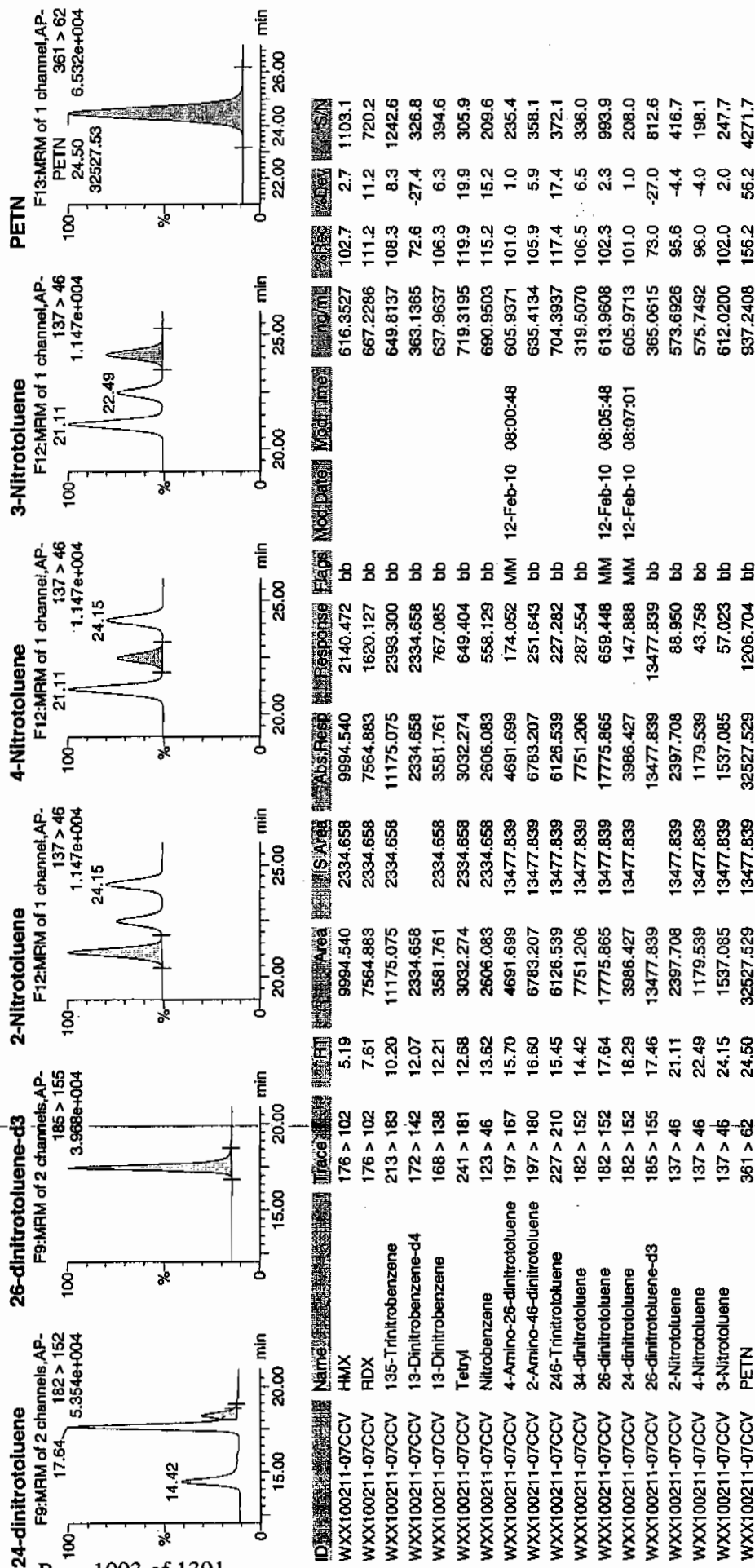
Vial: 1:1,B

2/12/10



2/12/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 0052
 Standard Number: WXX100211-07CCV
 Data File: EXP0208168a

HMX	102.7
RDX	111.2
135-TNB	108.3
13-DNB	106.3
Tetryl	119.9
Nitrobenzene	115.2
4A-26-DNT	101.0
2A-46-DNT	105.9
246-TNT	117.4
34-DNT(surr)	106.5
26-DNT	102.3
24-DNT	101.0
2-NT	95.6
4-NT	96.0
3-NT	102.0
PETN	156.2

*WAT
2/12/10*

Total 1747.5

Average 109.2

HMM 02/12/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208170a

Analysis Date: 12-FEB-10 01:51

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	54.58	136	*
1,3-Dinitrobenzene-d4	500	414.79	83	
2,4,6-Trinitrotoluene	40	31.941	80	
2,4-Dinitrotoluene	40	36.526	91	
2,6-Dinitrotoluene	40	39.901	100	
2,6-Dinitrotoluene-d3	500	419.808	84	
2-Amino-4,6-dinitrotoluene	40	41.208	103	
3,4-Dinitrotoluene	20	18.972	95	
4-Amino-2,6-dinitrotoluene	40	36.002	90	
HMX	40	41.297	103	
Nitrobenzene	40	42.737	107	
PETN	40	58.979	147	*
RDX	40	33.84	85	
Tetryl	40	41.479	104	
m-Dinitrobenzene	40	37.812	95	
m-Nitrotoluene	40	36.746	92	
o-Nitrotoluene	40	42.552	106	
p-Nitrotoluene	40	43.248	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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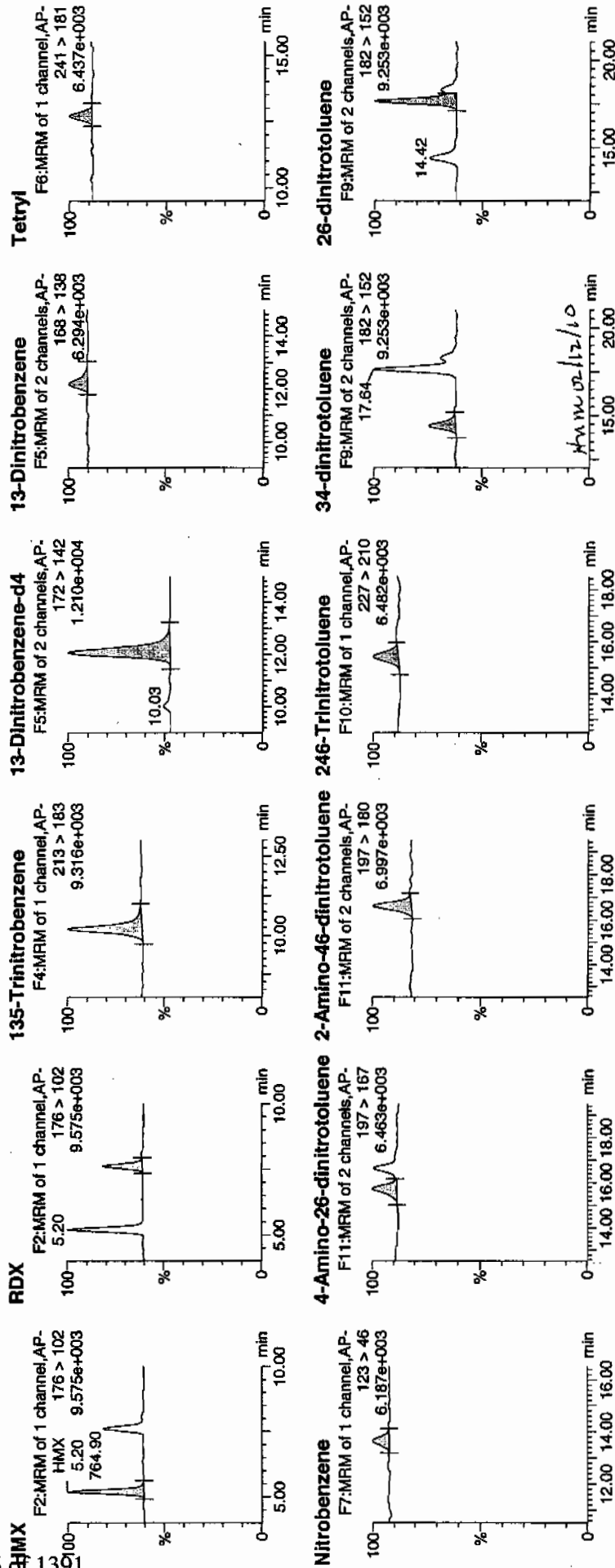
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ID: WXX100211-08CRI

Vial: 1:1,C

2/12/10

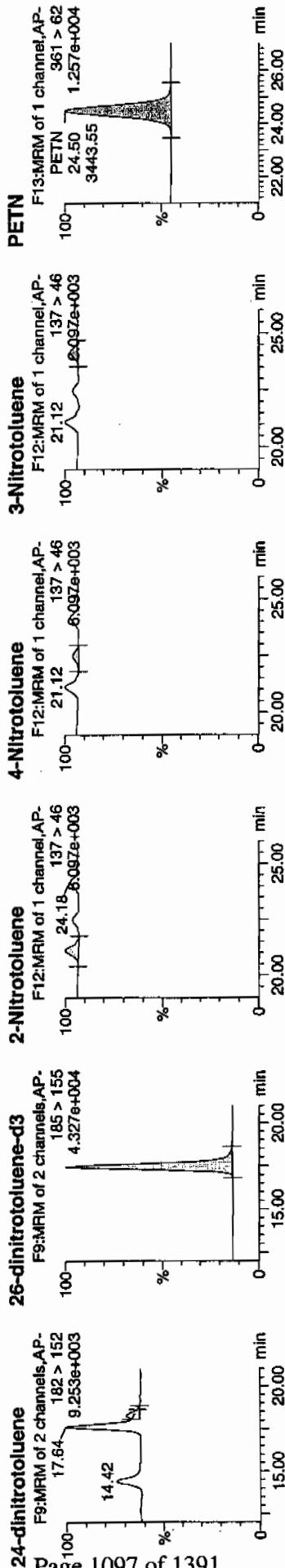


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 70 of 93

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



ID	Name	Trace	RT	Area	SArea	AbsResp	Response	Flags	Mod Date	Mod Time	Area/nl	%Rec	%Dev	S/N
WXX100211-08CRI	HMX	176 > 102	5.20	764.902	2666.746	764.902	143.415	bb			41.2966	103.2	3.2	84.1
WXX100211-08CRI	RDX	176 > 102	7.61	438.238	2666.746	438.238	82.167	bb			33.8395	84.6	-15.4	44.7
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1072.145	2666.746	1072.145	201.021	bb			54.5800	136.5	36.5	119.3
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	2666.746	2666.746	2666.746	2666.746	bb			414.7900	83.0	-17.0	202.1
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.21	242.490	2666.746	242.490	45.466	bb			37.8124	94.5	-5.5	27.0
WXX100211-08CRI	Tetryl	241 > 181	12.68	254.659	2666.746	254.659	47.747	bb			41.4785	103.7	3.7	19.1
WXX100211-08CRI	Nitrobenzene	123 > 46	13.62	184.121	2666.746	184.121	34.522	bb			42.7369	106.8	6.8	21.3
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	320.565	15499.035	320.565	10.341	MM	12-Feb-10	08:00:59	36.0022	90.0	-10.0	38.6
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	505.872	15499.035	505.872	16.319	bb			41.2076	103.0	3.0	42.8
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.41	319.476	15499.035	319.476	10.306	bb			31.9414	79.9	-20.1	38.8
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.42	529.277	15499.035	529.277	17.075	bb			18.9719	94.9	-5.1	42.0
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1328.482	15499.035	1328.482	42.857	MM	12-Feb-10	08:05:54	39.9008	99.8	-0.2	130.8
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.29	276.327	15499.035	276.327	8.914	MM	12-Feb-10	08:06:52	36.5264	91.3	-8.7	23.6
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.46	15499.035	15499.035	15499.035	15499.035	bb			419.8078	84.0	-16.0	2320.2
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.12	204.514	15499.035	204.514	6.598	bb			42.5522	106.4	6.4	28.1
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.50	101.890	15499.035	101.890	3.287	bb			43.2482	108.1	8.1	13.0
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.18	106.126	15499.035	106.126	3.424	bb			36.7456	91.9	-8.1	15.4
WXX100211-08CRI	PETN	361 > 62	24.50	3443.553	15499.035	3443.553	111.089	bb			58.9793	147.4	47.4	2261.0

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 0151
 Standard Number WXX100211-08CRI
 Data File EXP0208170a

HMX	103.2
RDX	84.6
135-TNB	136.5
13-DNB	94.5
Tetryl	103.7
Nitrobenzene	106.8
4A-26-DNT	90.0
2A-46-DNT	103.0
246-TNT	79.9
34-DNT(surr)	94.9
26-DNT	99.8
24-DNT	91.3
2-NT	106.4
4-NT	108.1
3-NT	91.9
PETN	147.4

*WHT
2/12/10*

Total 1642.0

Sum of 12 110

Average

102.6

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208179a

Analysis Date: 12-FEB-10 06:17

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	587.089	98	
1,3-Dinitrobenzene-d4	500	399.529	80	*
2,4,6-Trinitrotoluene	600	750.342	125	*
2,4-Dinitrotoluene	600	599.438	100	
2,6-Dinitrotoluene	600	606.259	101	
2,6-Dinitrotoluene-d3	500	413.212	83	
2-Amino-4,6-dinitrotoluene	600	595.295	99	
3,4-Dinitrotoluene	300	330.75	110	
4-Amino-2,6-dinitrotoluene	600	578.418	96	
HMX	600	534.328	89	
Nitrobenzene	600	626.915	104	
PETN	600	774.197	129	*
RDX	600	606.847	101	
Tetryl	600	700.204	117	
m-Dinitrobenzene	600	629.509	105	
m-Nitrotoluene	600	504.3	84	
o-Nitrotoluene	600	541.966	90	
p-Nitrotoluene	600	543.447	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208179a

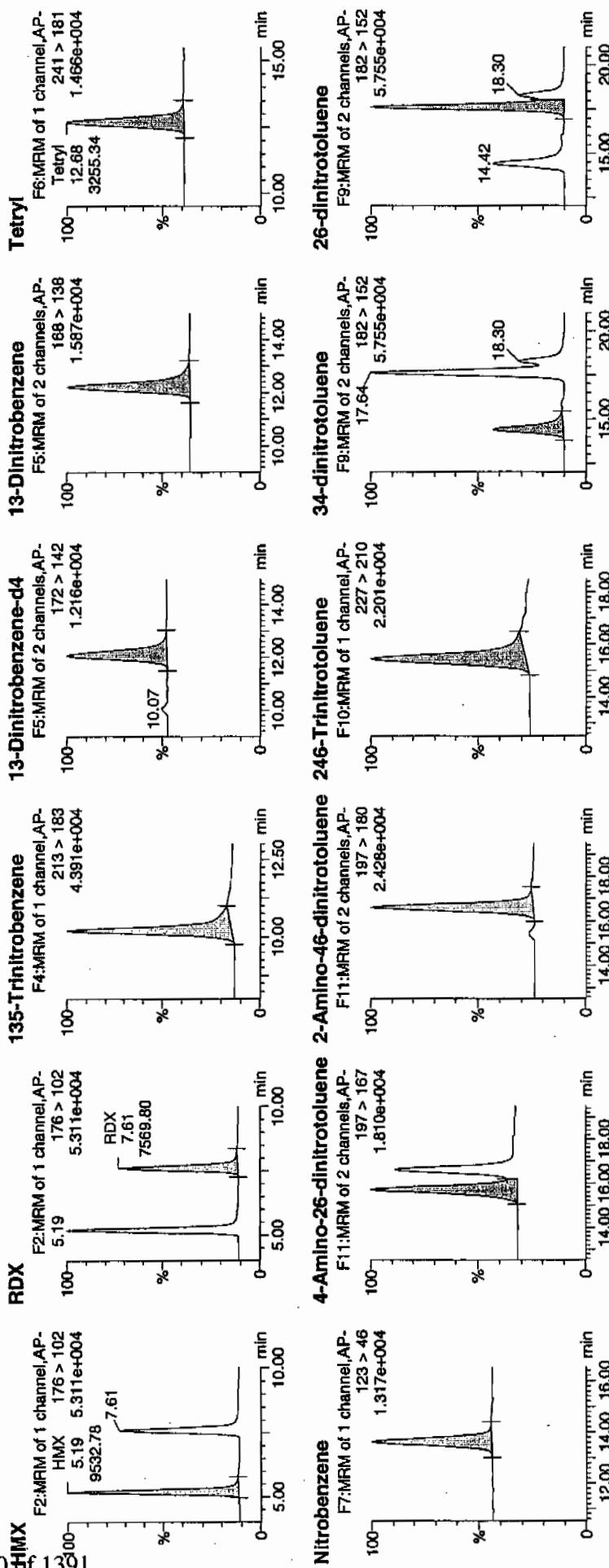
Date: 12-Feb-2010

Time: 06:17:31

ID: WXX100211-07CCV

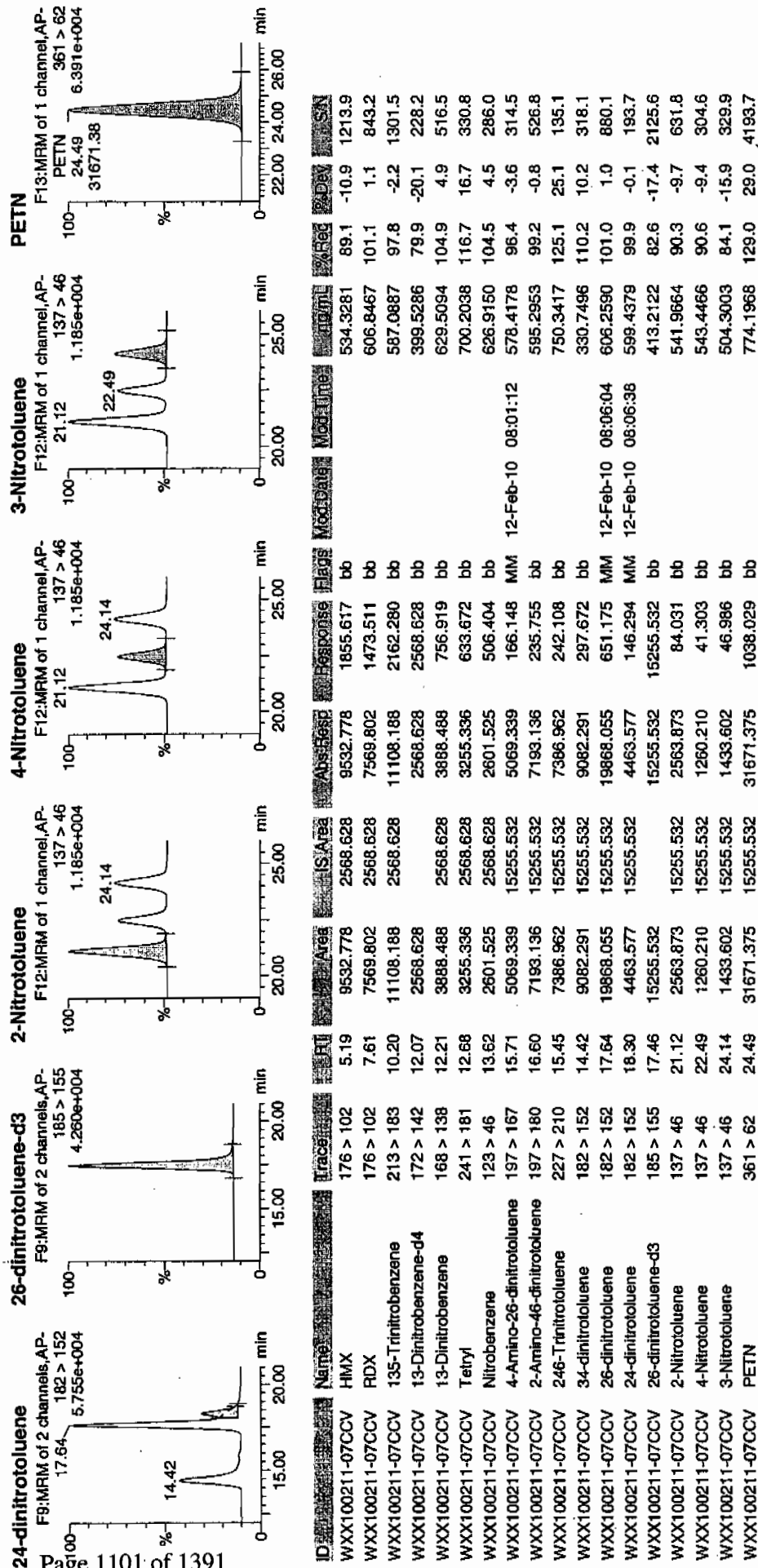
Vial: 1:1,B

100
2/11/10



Handwritten note: 100 2/11/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 0617
 Standard Number: WXX100211-07CCV
 Data File: EXP0208179a

HMX	89.1
RDX	101.1
135-TNB	97.8
13-DNB	104.9
Tetryl	116.7
Nitrobenzene	104.5
4A-26-DNT	96.4
2A-46-DNT	99.2
246-TNT	125.1
34-DNT(surr)	110.2
26-DNT	101.0
24-DNT	99.9
2-NT	90.3
4-NT	90.6
3-NT	84.1
PETN	129.0

*100%
2/12/10*

Total 1639.9

Average 102.5

100% 02/12/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208181a

Analysis Date: 12-FEB-10 07:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	42.728	107	
2,4-Dinitrotoluene	40	42.259	106	
2,6-Dinitrotoluene	40	37.113	93	
2,6-Dinitrotoluene-d3	500	442.662	89	
2-Amino-4,6-dinitrotoluene	40	36.972	92	
3,4-Dinitrotoluene	20	20.284	101	
4-Amino-2,6-dinitrotoluene	40	36.006	90	
HMX	40	39.857	100	
Nitrobenzene	40	38.793	97	
PETN	40	48.869	122	
RDX	40	40.155	100	
Tetryl	40	38.51	96	
m-Dinitrobenzene	40	38.974	97	
m-Nitrotoluene	40	31.524	79	
o-Nitrotoluene	40	36.982	92	
p-Nitrotoluene	40	35.364	88	
1,3,5-Trinitrobenzene	40	44.012	110	
1,3-Dinitrobenzene-d4	500	438.92	88	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208181a

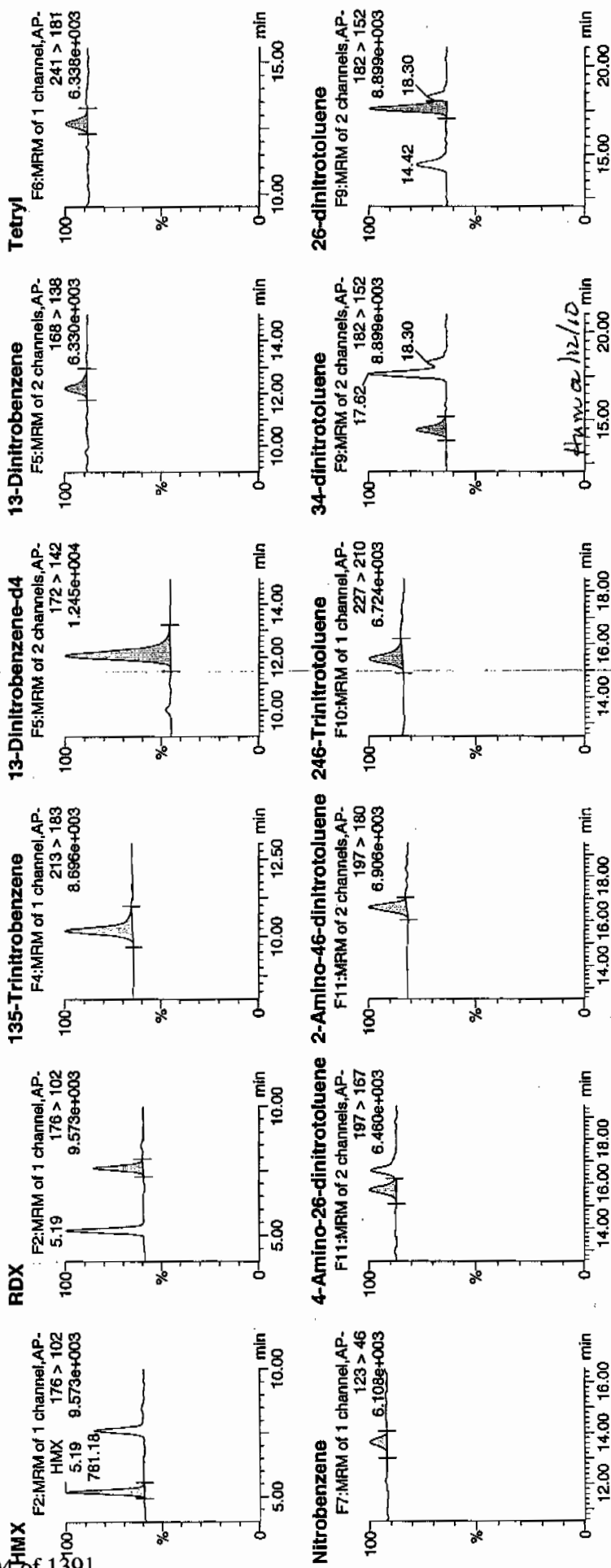
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Time: 07:16:32

ID: WXX100211-08CRI

Vial: 1:1,C

2/12/10

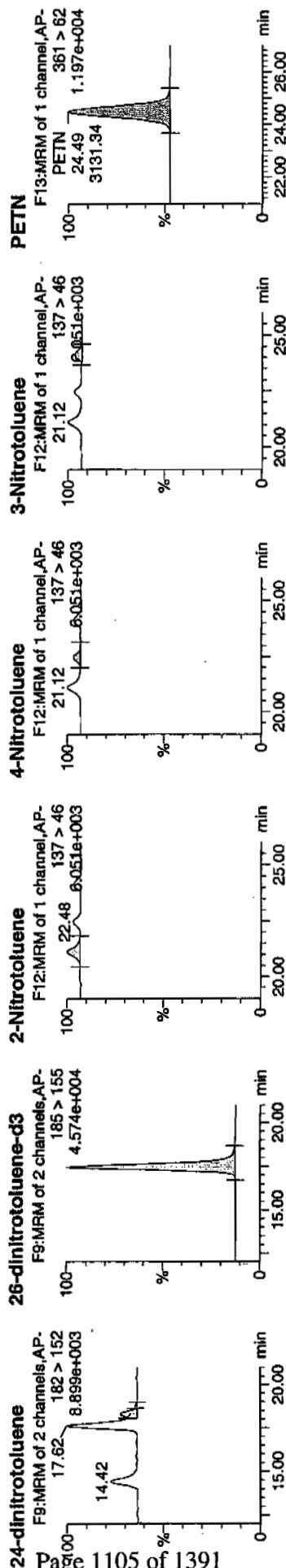


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 92 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



ID	Name	Trace	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Ratio	SN		
WXX100211-08CRI	HMX	176 > 102	5.19	781.177	2821.884	781.177	138.414	bb		39.8566	99.6	-0.4	330.6
WXX100211-08CRI	RDX	176 > 102	7.61	550.278	2821.884	550.278	97.502	bb		40.1549	100.4	0.4	210.1
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	914.840	2821.884	914.840	162.097	bb		44.0117	110.0	10.0	114.8
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	2821.884	2821.884	2821.884	2821.884	bb		438.9204	87.8	-12.2	126.3
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.21	264.481	2821.884	264.481	46.862	bb		38.9743	97.4	-2.6	18.2
WXX100211-08CRI	Tetryl	241 > 181	12.68	253.485	2821.884	253.485	44.914	bb		38.5101	96.3	-3.7	23.7
WXX100211-08CRI	Nitrobenzene	123 > 46	13.62	176.851	2821.884	176.851	31.396	bb		38.7927	97.0	-3.0	19.1
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	338.056	16342.797	338.056	10.343	MM	12-Feb-10 08:01:18	36.0064	90.0	-10.0	17.2
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	478.583	16342.797	478.583	14.642	bb		36.9720	92.4	-7.6	39.1
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.45	450.624	16342.797	450.624	13.787	bb		42.7276	106.8	6.8	19.3
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.42	596.692	16342.797	596.692	18.256	bb		20.2841	101.4	1.4	43.6
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.62	1302.923	16342.797	1302.923	39.862	MM	12-Feb-10 08:06:11	37.1127	92.8	-7.2	114.1
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.30	337.100	16342.797	337.100	10.313	MM	12-Feb-10 08:06:28	42.2592	105.6	5.6	28.0
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.47	16342.797	16342.797	16342.797	16342.797	bb		442.6619	88.5	-11.5	1289.8
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.12	187.421	16342.797	187.421	5.734	bb		36.9824	92.5	-7.5	44.6
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.48	87.852	16342.797	87.852	2.688	bb		35.3644	88.4	-11.6	23.0
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.12	96.001	16342.797	96.001	2.937	bb		31.5237	78.8	-21.2	24.1
WXX100211-08CRI	PETN	361 > 62	24.49	3131.342	16342.797	3131.342	95.802	bb		48.8685	122.2	22.2	1383.8

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10 ~
 Time of Injection 0716
 Standard Number WXX100211-08CRI
 Data File EXP0208181a

HMX	99.6
RDX	100.4
135-TNB	110.0
13-DNB	97.4
Tetryl	96.3
Nitrobenzene	97.0
4A-26-DNT	90.0
2A-46-DNT	92.4
246-TNT	106.8
34-DNT(surr)	101.4
26-DNT	92.8
24-DNT	105.6
2-NT	92.5
4-NT	88.4
3-NT	78.8
PETN	122.2

*not
2/12/10*

Total 1571.6

Average 98.2

from 02/12/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208192a

Analysis Date: 12-FEB-10 12:41

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	600	762.635	127	*
2,4-Dinitrotoluene	600	680.358	113	
2,6-Dinitrotoluene	600	624.359	104	
2,6-Dinitrotoluene-d3	500	419.676	84	
2-Amino-4,6-dinitrotoluene	600	687.213	115	
3,4-Dinitrotoluene	300	326.396	109	
4-Amino-2,6-dinitrotoluene	600	642.053	107	
HMX	600	564.023	94	
Nitrobenzene	600	588.695	98	
PETN	600	747.991	125	*
RDX	600	606.121	101	
Tetryl	600	602.12	100	
m-Dinitrobenzene	600	601.495	100	
m-Nitrotoluene	600	572.783	95	
o-Nitrotoluene	600	603.62	101	
p-Nitrotoluene	600	632.671	105	
1,3,5-Trinitrobenzene	600	579.335	97	
1,3-Dinitrobenzene-d4	500	455.62	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

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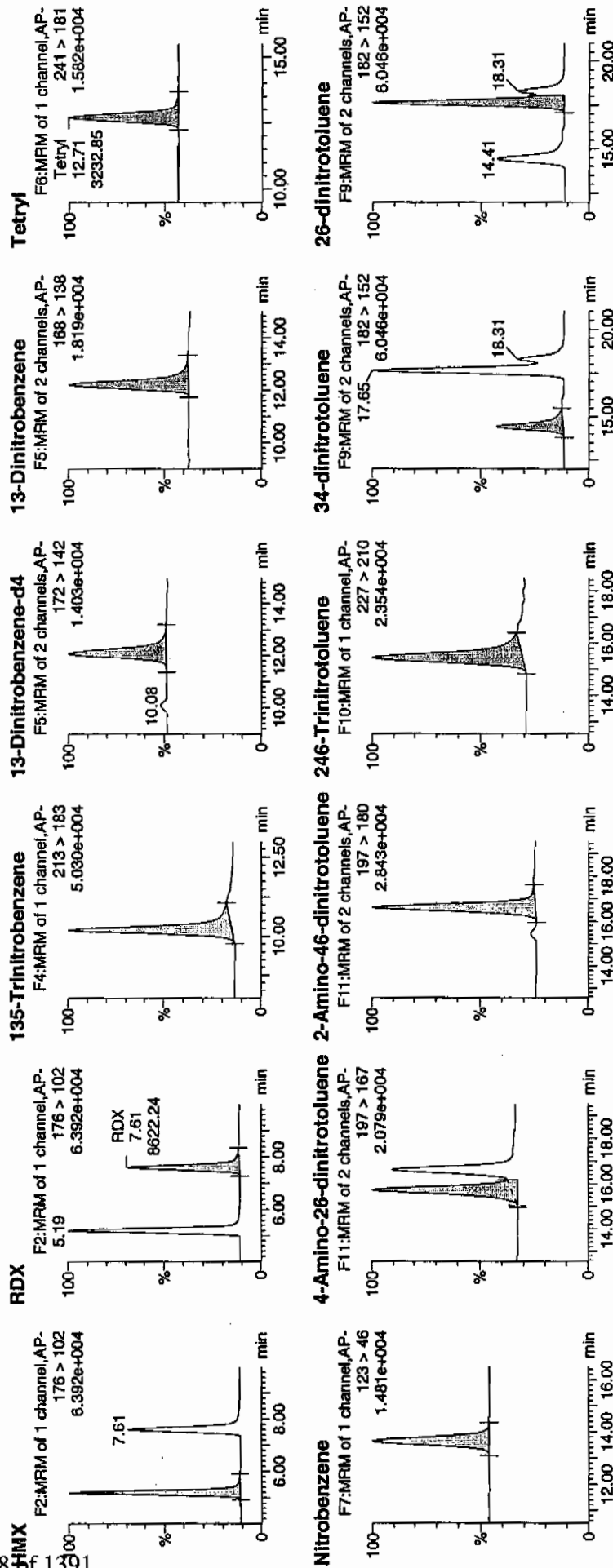
Date: 12-Feb-2010

Time: 12:41:56

ID: WXX100211-07CCV

Vial: 1:1,B

MR
2/13/10



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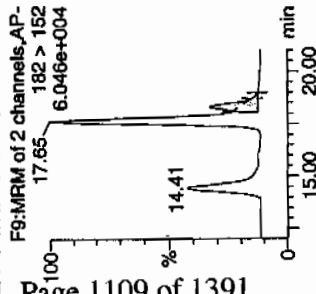
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

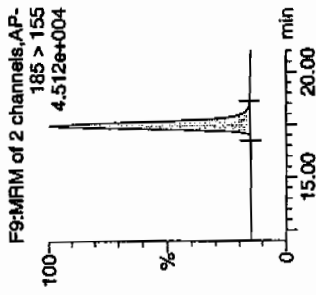
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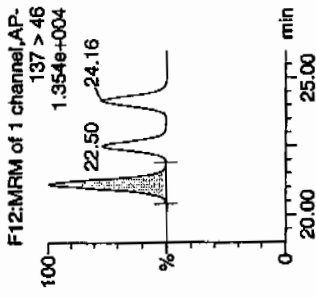
24-dinitrotoluene



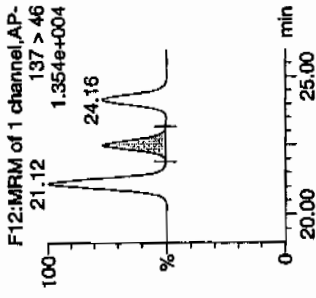
26-dinitrotoluene-d3



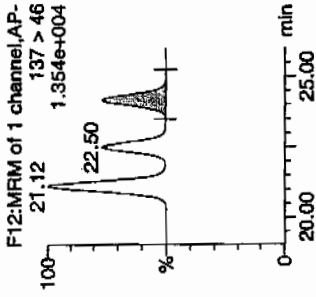
2-Nitrotoluene



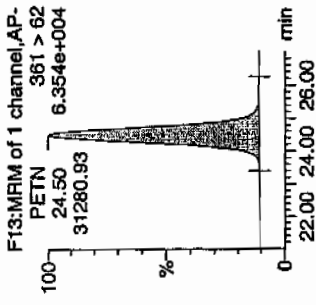
4-Nitrotoluene



3-Nitrotoluene



PETN



ID#	Name	Trace	RT	Area	ISArea	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	SD	SN	
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WXX100211-07CCV	RDX	176 > 102	7.61	8622.236	2929.250	8622.236	1471.748	bb			606.1208	101.0	1.0	721.7
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.21	12500.419	2929.250	12500.419	2133.723	bb			579.3351	96.6	-3.4	2459.6
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.10	2929.250	2929.250	2929.250	2929.250	bb			455.6203	91.1	-8.9	197.3
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.20	4237.073	2929.250	4237.073	723.235	bb			601.4952	100.2	0.2	417.8
WXX100211-07CCV	Tetryl	241 > 181	12.71	3232.850	2929.250	3232.850	551.822	bb			602.1200	100.4	0.4	271.2
WXX100211-07CCV	Nitrobenzene	123 > 46	13.66	2785.898	2929.250	2785.898	475.531	bb			588.6954	98.1	-1.9	223.5
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.73	5715.073	15494.170	5715.073	184.427	MM	13-Feb-10	09:20:30	642.0533	107.0	7.0	270.2
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.62	8433.699	15494.170	8433.699	272.157	bb			687.2130	114.5	14.5	421.0
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.44	7625.437	15494.170	7625.437	246.074	bb			762.6354	127.1	27.1	224.2
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.41	9102.950	15494.170	9102.950	293.754	bb			326.3963	108.8	8.8	411.4
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.65	20781.283	15494.170	20781.283	670.616	MM	13-Feb-10	09:24:45	624.3588	104.1	4.1	1180.1
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.31	5145.382	15494.170	5145.382	166.043	MM	13-Feb-10	09:27:53	680.3585	113.4	13.4	273.9
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.48	15494.170	15494.170	15494.170	15494.170	bb			419.6760	83.9	-16.1	1197.5
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	2900.203	15494.170	2900.203	93.590	bb			603.6196	100.6	0.6	508.3
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1490.065	15494.170	1490.065	48.085	bb			632.6714	105.4	5.4	267.4
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.16	1653.753	15494.170	1653.753	53.367	bb			572.7833	95.5	-4.5	270.1
WXX100211-07CCV	PETN	361 > 62	24.50	31280.934	15494.170	31280.934	1009.442	bb			747.9914	124.7	24.7	6999.1

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 1241
 Standard Number: WXX100211-07CCV
 Data File: EXP0208192a

HMX	94.0
RDX	101.0
135-TNB	96.6
13-DNB	100.2
Tetryl	100.4
Nitrobenzene	98.1
4A-26-DNT	107.0
2A-46-DNT	114.5
246-TNT	127.1
34-DNT(surr)	108.8
26-DNT	104.1
24-DNT	113.4
2-NT	100.6
4-NT	105.4
3-NT	95.5
PETN	124.7

Total 1691.4

Average 105.7

Handwritten: 105.7
2/12/10

Handwritten: Done 02/12/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208194a

Analysis Date: 12-FEB-10 13:40

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	40	28.746	72	
m-Dinitrobenzene	40	44.616	112	
m-Nitrotoluene	40	34.967	87	
o-Nitrotoluene	40	35.126	88	
p-Nitrotoluene	40	40.053	100	
1,3,5-Trinitrobenzene	40	45.517	114	
1,3-Dinitrobenzene-d4	500	469.519	94	
2,4,6-Trinitrotoluene	40	55.709	139	*
2,4-Dinitrotoluene	40	40.988	102	
2,6-Dinitrotoluene	40	42.306	106	
2,6-Dinitrotoluene-d3	500	448.123	90	
2-Amino-4,6-dinitrotoluene	40	35.812	90	
3,4-Dinitrotoluene	20	22.544	113	
4-Amino-2,6-dinitrotoluene	40	35.549	89	
HMX	40	41.613	104	
Nitrobenzene	40	42.541	106	
PETN	40	46.553	116	
RDX	40	36.544	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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

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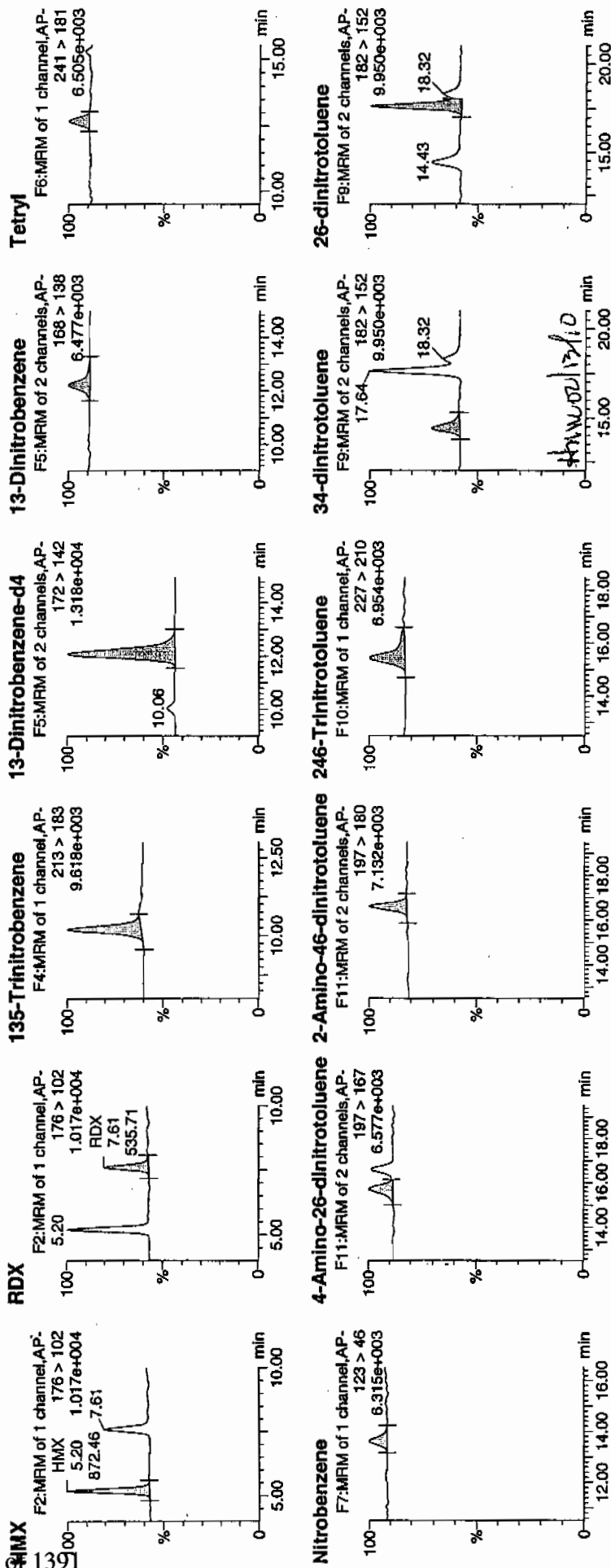
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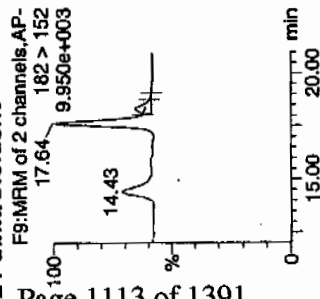
Vial: 1:1,C

2/13/10
APV

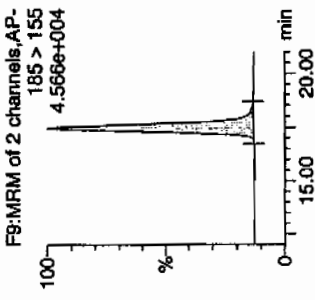


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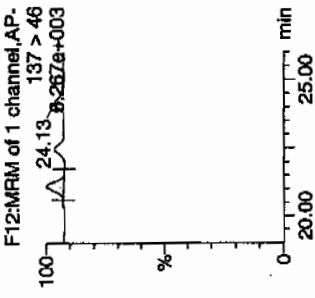
2,4-dinitrotoluene



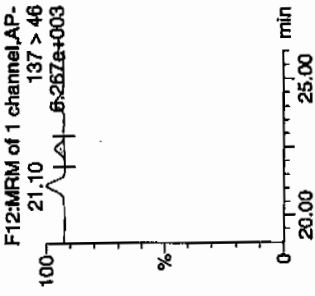
26-dinitrotoluene-d3



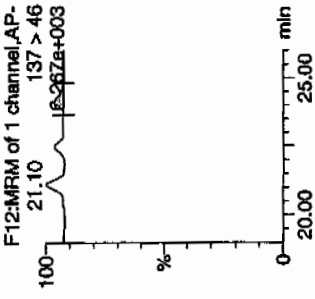
2-Nitrotoluene



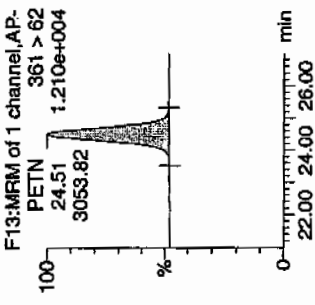
4-Nitrotoluene



3-Nitrotoluene



NLEd



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Mod User	Rec	Dev	SN
WXX100211-08CRI	HMX	176 > 102	5.20	872.460	3018.608	872.460	144.514	bb	41.6130	104.0	4.0	136.9		
WXX100211-08CRI	RDX	176 > 102	7.61	535.712	3018.608	535.712	88.735	bb	36.5444	91.4	-8.6	73.0		
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1012.093	3018.608	1012.093	167.842	bb	45.5172	113.8	13.8	222.1		
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3018.608		3018.608	3018.608	bb	469.5192	93.9	-6.1	271.9		
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.24	323.873	3018.608	323.873	53.646	bb	44.6160	111.5	11.5	48.0		
WXX100211-08CRI	Tetryl	241 > 181	12.68	214.825	3018.608	214.825	35.583	bb	26.7462	71.9	-28.1	38.1		
WXX100211-08CRI	Nitrobenzene	123 > 46	13.63	207.461	3018.608	207.461	34.364	bb	42.5414	106.4	6.4	18.2		
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	337.881	16544.398	337.881	10.211	MM	13-Feb-10	09:20:36		15.9		
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	469.280	16544.398	469.280	14.192	bb	35.5492	88.9	-11.1	49.9		
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.45	594.783	16544.398	594.783	17.975	bb	35.8115	89.5	-10.5	43.7		
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.43	671.349	16544.398	671.349	20.289	bb	55.7094	139.3	39.3	59.4		
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1503.567	16544.398	1503.567	45.440	MM	22.5439	112.7	12.7	58.4		
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.32	330.995	16544.398	330.995	10.003	MM	42.3060	105.8	5.8	191.5		
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.49	16544.398		16544.398	16544.398	bb	40.9882	102.5	2.5	32.9		
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.10	180.211	16544.398	180.211	5.446	bb	448.1225	89.6	-10.4	1121.6		
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.48	100.726	16544.398	100.726	3.044	bb	35.1264	87.8	-12.2	70.7		
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.13	107.801	16544.398	107.801	3.258	bb	40.0527	100.1	0.1	37.4		
WXX100211-08CRI	PETN	361 > 62	24.51	3053.823	16544.398	3053.823	92.292	bb	34.9571	87.4	-12.6	36.3		
WXX100211-08CRI									46.5526	116.4	16.4	569.5		

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 1340
 Standard Number WXX100211-08CRI
 Data File EXP0208194a

HMX	104.0
RDX	91.4
135-TNB	113.8
13-DNB	111.5
Tetryl	71.9
Nitrobenzene	106.4
4A-26-DNT	88.9
2A-46-DNT	89.5
246-TNT	139.3
34-DNT(surr)	112.7
26-DNT	105.8
24-DNT	102.5
2-NT	87.8
4-NT	100.1
3-NT	87.4
PETN	116.4

Total 1629.4

Average 101.8

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

MTT
2/13/10

Handwritten signature/initials

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208204a

Analysis Date: 12-FEB-10 18:36

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	600	650.563	108	
Tetryl	600	631.091	105	
m-Dinitrobenzene	600	614.184	102	
m-Nitrotoluene	600	625.894	104	
o-Nitrotoluene	600	613.904	102	
p-Nitrotoluene	600	627.116	105	
1,3,5-Trinitrobenzene	600	573.104	96	
1,3-Dinitrobenzene-d4	500	406.534	81	
2,4,6-Trinitrotoluene	600	676.945	113	
2,4-Dinitrotoluene	600	732.781	122	*
2,6-Dinitrotoluene	600	616.675	103	
2,6-Dinitrotoluene-d3	500	391.437	78	*
2-Amino-4,6-dinitrotoluene	600	635.563	106	
3,4-Dinitrotoluene	300	328.615	110	
4-Amino-2,6-dinitrotoluene	600	609.488	102	
HMX	600	608.517	101	
Nitrobenzene	600	610.084	102	
PETN	600	833.891	139	*

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208204a

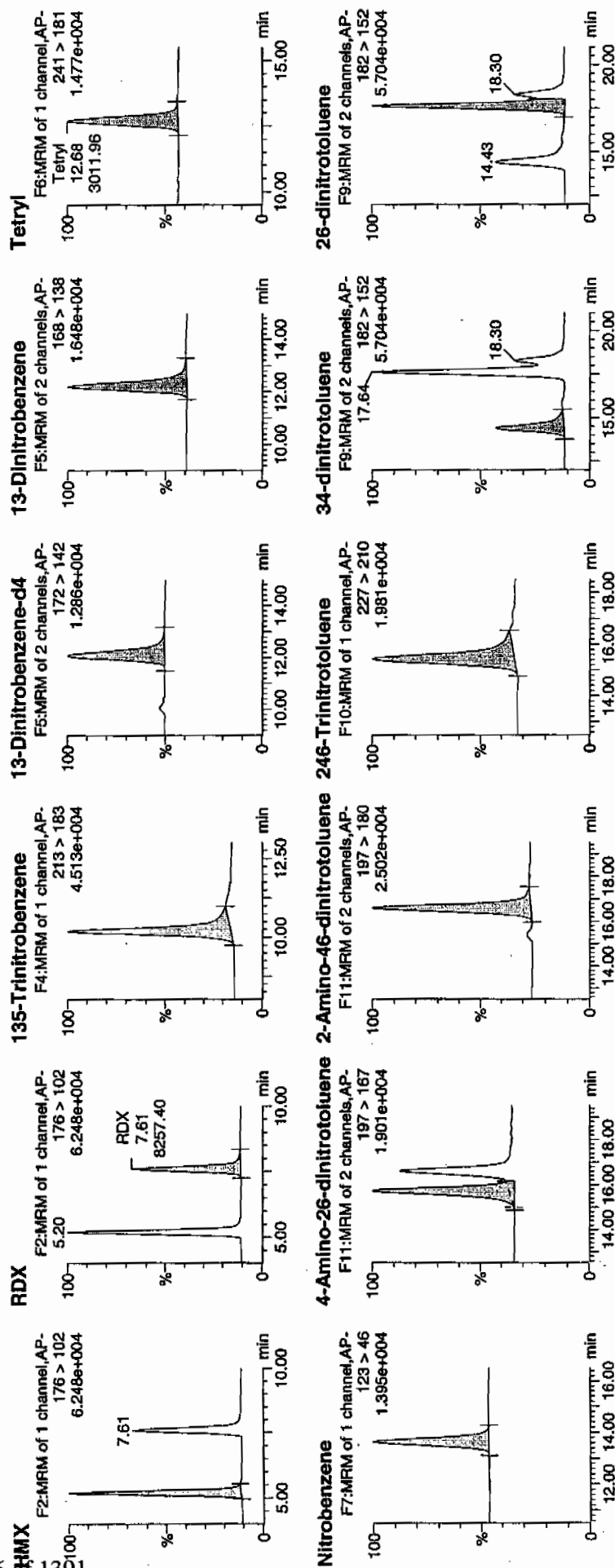
Date: 12-Feb-2010

Time: 18:36:13

ID: WXX100211-07CCV

Vial: 1:1,B

1.13.10



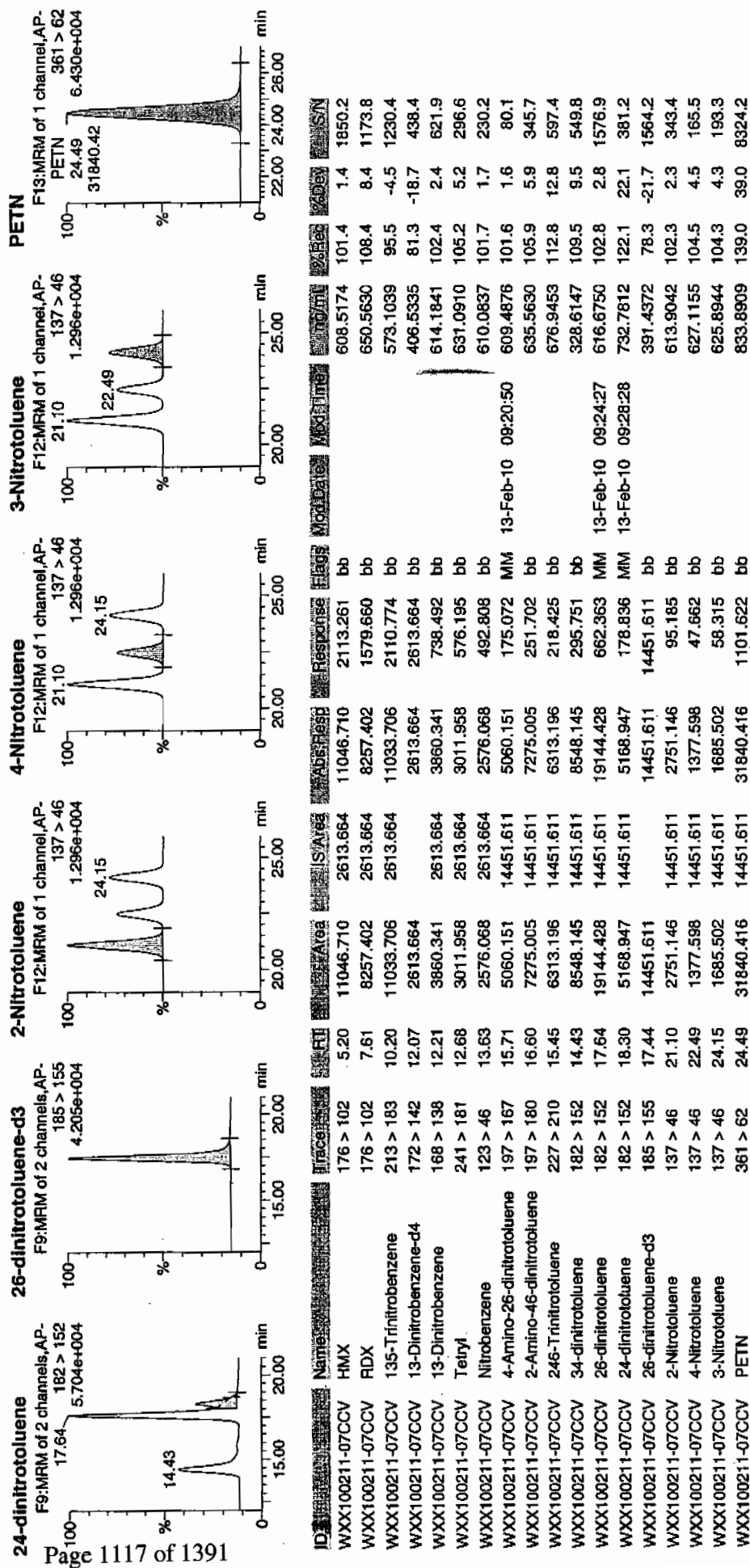
Amended 2/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Feb 13 09:33:08 2010, Page 46 of 93

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 1836
 Standard Number: WXX100211-07CCV
 Data File: EXP0208204a

HMX	101.4
RDX	108.4
135-TNB	95.5
13-DNB	102.4
Tetryl	105.2
Nitrobenzene	101.7
4A-26-DNT	101.6
2A-46-DNT	105.9
246-TNT	112.8
34-DNT(surr)	109.5
26-DNT	102.8
24-DNT	122.1
2-NT	102.3
4-NT	104.5
3-NT	104.3
PETN	139.0

Total 1719.4

Average 107.5

Handwritten: 2/13/10
 JCV 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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208206a

Analysis Date: 12-FEB-10 19:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.365	128	
1,3-Dinitrobenzene-d4	500	423.168	85	
2,4,6-Trinitrotoluene	40	44.639	112	
2,4-Dinitrotoluene	40	35.699	89	
2,6-Dinitrotoluene	40	39.836	100	
2,6-Dinitrotoluene-d3	500	422.416	84	
2-Amino-4,6-dinitrotoluene	40	41.793	104	
3,4-Dinitrotoluene	20	20.845	104	
4-Amino-2,6-dinitrotoluene	40	37.746	94	
HMX	40	44.962	112	
Nitrobenzene	40	30.167	75	
PETN	40	59.642	149	*
RDX	40	40.853	102	
Tetryl	40	43.184	108	
m-Dinitrobenzene	40	41.433	104	
m-Nitrotoluene	40	55.505	139	*
o-Nitrotoluene	40	44.859	112	
p-Nitrotoluene	40	50.729	127	

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

Quantity Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208206a

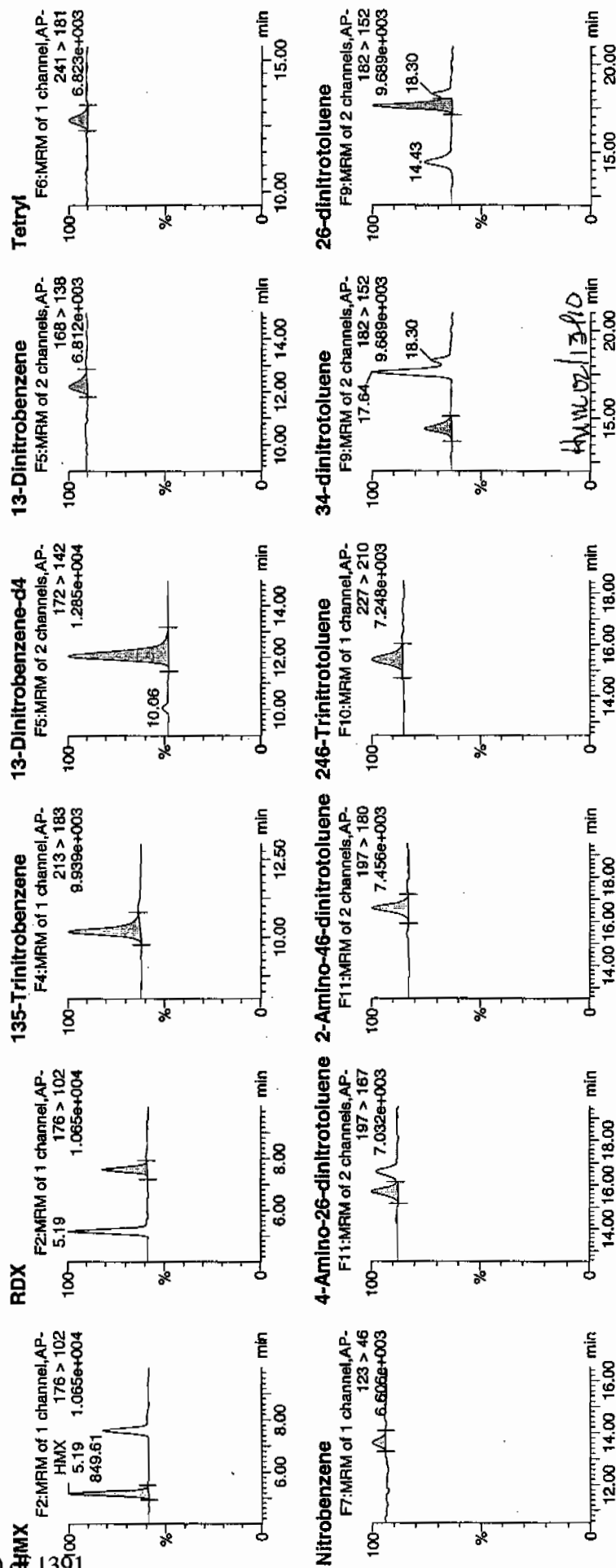
Date: 12-Feb-2010

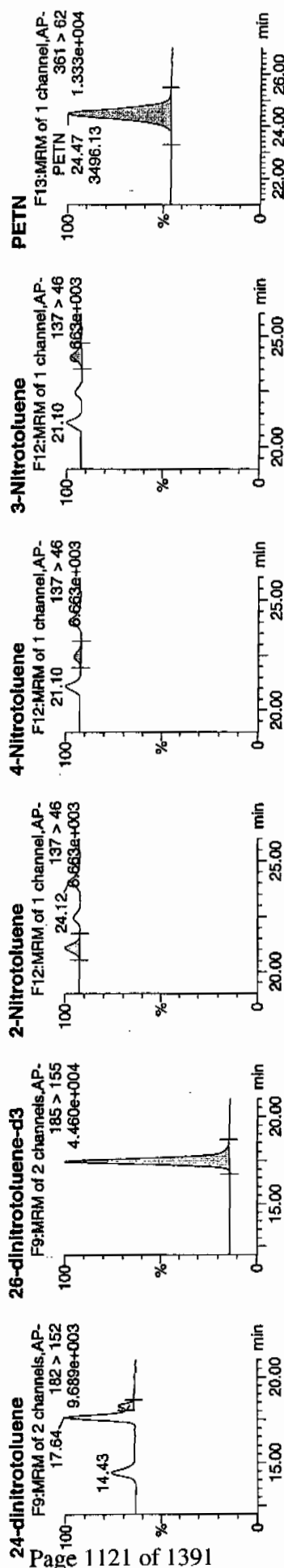
Time: 19:35:13

ID: WXX100211-08CRI

Vial: 1:1,C

MR
2/13/10





Name	Trace	Hit	Area	Area	Abs.Resp	Response	Flags	ModDate	ModTime	ExpTime	%Rec	%Dev	MSIN	
HMX	176 > 102	5.19	849.611	2720.612	849.611	156.143	bb		44.9618	112.4	12.4	237.7		
RDX	176 > 102	7.60	539.750	2720.612	539.750	99.196	bb		40.8528	102.1	2.1	132.6		
135-Trinitrobenzene	213 > 183	10.19	1029.363	2720.612	1029.363	189.179	bb		51.3646	128.4	28.4	156.9		
13-Dinitrobenzene-d4	172 > 142	12.07	2720.612		2720.612	2720.612	bb		423.1684	84.6	-15.4	204.8		
13-Dinitrobenzene	168 > 138	12.21	271.075	2720.612	271.075	49.819	bb		41.4329	103.5	3.6	18.9		
Tetryl	241 > 181	12.73	268.655	2720.612	268.655	49.374	bb		43.1839	108.0	8.0	18.6		
Nitrobenzene	123 > 46	13.63	132.592	2720.612	132.592	24.368	bb		30.1670	75.4	-24.6	14.0		
4-Amino-2,6-dinitrotoluene	197 > 167	15.71	338.182	15595.316	338.182	10.842	MM	13-Feb-10	09:20:57	37.7463	94.4	-5.6	16.1	
2-Amino-4,6-dinitrotoluene	197 > 180	16.60	516.244	15595.316	516.244	16.551	bb		41.7929	104.5	4.5	52.9		
246-Trinitrotoluene	227 > 210	15.42	449.253	15595.316	449.253	14.403	bb		44.6393	111.6	11.6	40.0		
34-dinitrotoluene	182 > 152	14.43	585.154	15595.316	585.154	18.761	bb		20.8453	104.2	4.2	33.1		
26-dinitrotoluene	182 > 152	17.64	1334.560	15595.316	1334.560	42.787	MM	13-Feb-10	09:24:20	39.8359	99.6	-0.4	98.4	
24-dinitrotoluene	182 > 152	18.30	271.745	15595.316	271.745	8.712	MM	13-Feb-10	09:28:39	35.6990	89.2	-10.8	22.4	
26-dinitrotoluene-d3	185 > 155	17.44	15595.316		15595.316	15595.316	bb		422.4156	84.5	-15.5	1228.0		
2-Nitrotoluene	137 > 46	21.10	216.941	15595.316	216.941	6.955	bb		44.6591	112.1	12.1	79.5		
4-Nitrotoluene	137 > 46	22.45	120.257	15595.316	120.257	3.856	bb		50.7291	126.8	26.8	37.4		
3-Nitrotoluene	137 > 46	24.12	161.301	15595.316	161.301	5.171	bb		55.5048	138.8	38.8	52.5		
PETN	361 > 62	24.47	3496.129	15595.316	3496.129	112.089	bb		59.6419	149.1	49.1	1430.4		

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 1935
 Standard Number WXX100211-08CRI
 Data File EXP0208206a

HMX	112.4
RDX	102.1
135-TNB	128.4
13-DNB	103.6
Tetryl	108.0
Nitrobenzene	75.4
4A-26-DNT	94.4
2A-46-DNT	104.5
246-TNT	111.6
34-DNT(surr)	104.2
26-DNT	99.6
24-DNT	89.2
2-NT	112.1
4-NT	126.8
3-NT	138.8
PETN	149.1

Total 1760.2

Average 110.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

1487
2/13/10

Handwritten signature

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208217a

Analysis Date: 13-FEB-10 00:59

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	618.925	103	
1,3-Dinitrobenzene-d4	500	423.463	85	
2,4,6-Trinitrotoluene	600	662.843	110	
2,4-Dinitrotoluene	600	585.754	98	
2,6-Dinitrotoluene	600	607.888	101	
2,6-Dinitrotoluene-d3	500	434.474	87	
2-Amino-4,6-dinitrotoluene	600	653.817	109	
3,4-Dinitrotoluene	300	316.681	106	
4-Amino-2,6-dinitrotoluene	600	609.256	102	
HMX	600	660.612	110	
Nitrobenzene	600	632.389	105	
PETN	600	789.773	132	*
RDX	600	721.953	120	*
Tetryl	600	644.366	107	
m-Dinitrobenzene	600	637.879	106	
m-Nitrotoluene	600	544.687	91	
o-Nitrotoluene	600	588.727	98	
p-Nitrotoluene	600	578.177	96	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208217a

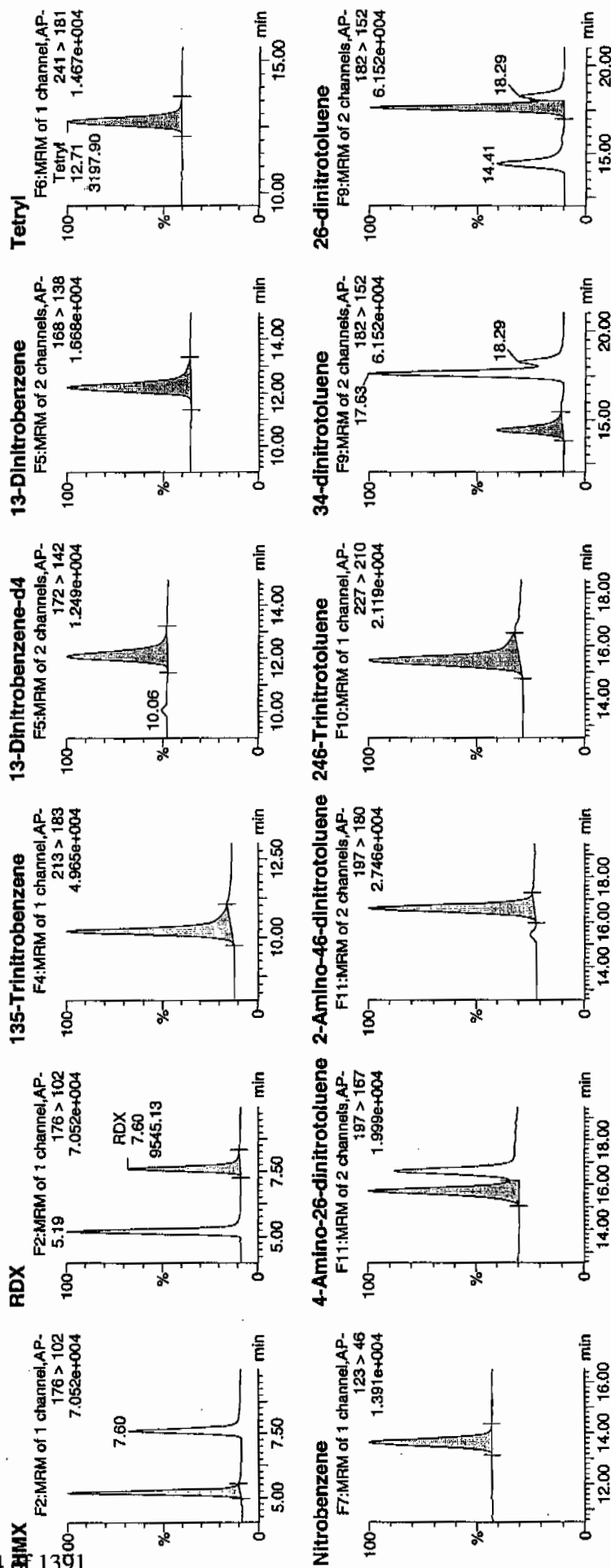
Date: 13-Feb-2010

Time: 00:59:51

ID: WXX100211-07CCV

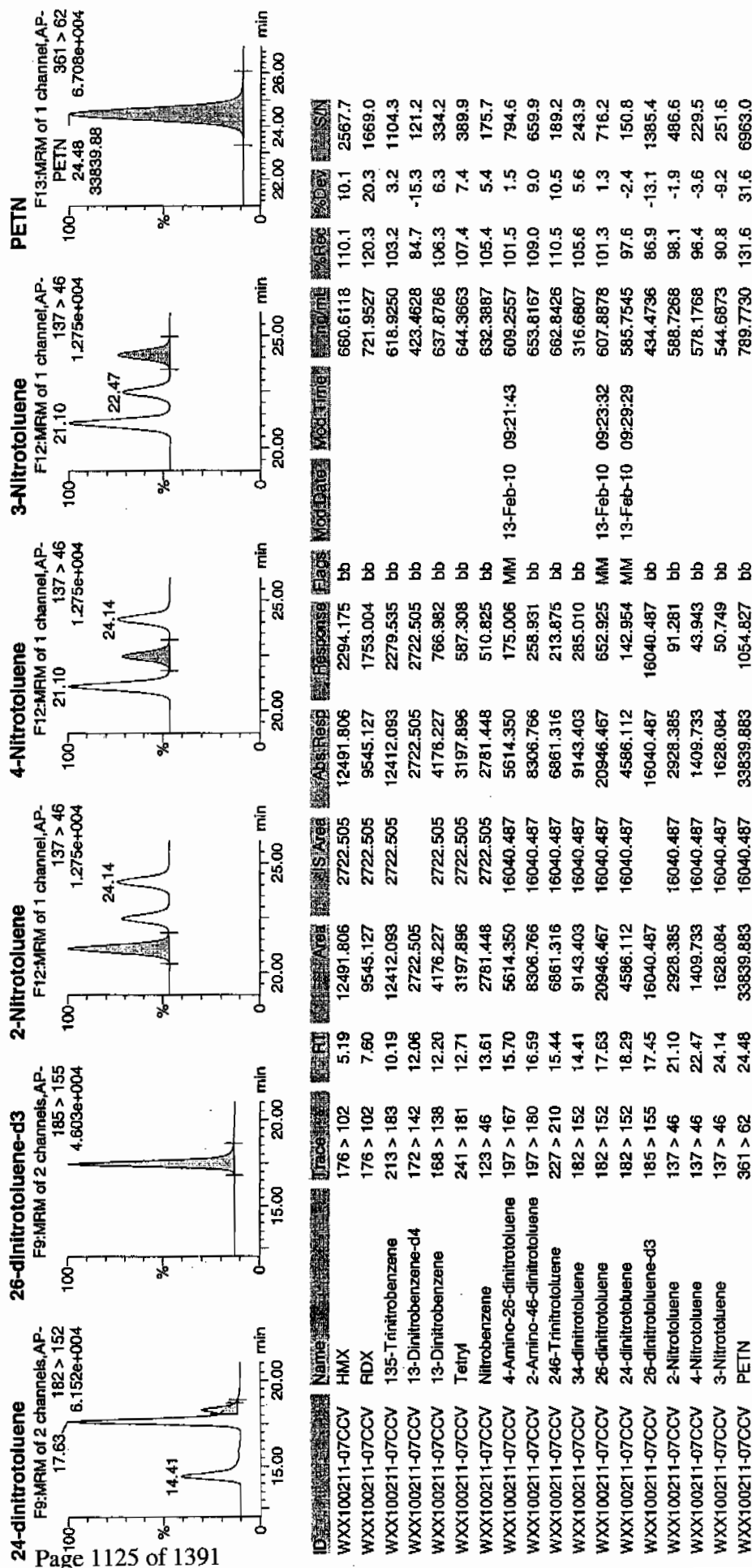
Vial: 1:1,B

WXX
2/13/10



WXX
2/13/10

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 0059
 Standard Number: WXX100211-07CCV
 Data File: EXP0208217a

HMX	110.1
RDX	120.3
135-TNB	103.2
13-DNB	106.3
Tetryl	107.4
Nitrobenzene	105.4
4A-26-DNT	101.5
2A-46-DNT	109.0
246-TNT	110.5
34-DNT(surr)	105.6
26-DNT	101.3
24-DNT	97.6
2-NT	98.1
4-NT	96.4
3-NT	90.8
PETN	131.6

*not
2/13/10*

Total 1695.1

Average 105.9

Handwritten: 105.9

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208219a

Analysis Date: 13-FEB-10 01:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	474.038	95	
2-Amino-4,6-dinitrotoluene	40	40.798	102	
3,4-Dinitrotoluene	20	21.137	106	
4-Amino-2,6-dinitrotoluene	40	35.394	88	
HMX	40	45.505	114	
Nitrobenzene	40	38.618	97	
PETN	40	55.392	138	*
RDX	40	40.435	101	
Tetryl	40	38.337	96	
m-Dinitrobenzene	40	43.096	108	
m-Nitrotoluene	40	37.415	94	
o-Nitrotoluene	40	46.269	116	
p-Nitrotoluene	40	37.938	95	
1,3,5-Trinitrobenzene	40	49.783	124	
1,3-Dinitrobenzene-d4	500	497.469	99	
2,4,6-Trinitrotoluene	40	36.557	91	
2,4-Dinitrotoluene	40	38.285	96	
2,6-Dinitrotoluene	40	39.341	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

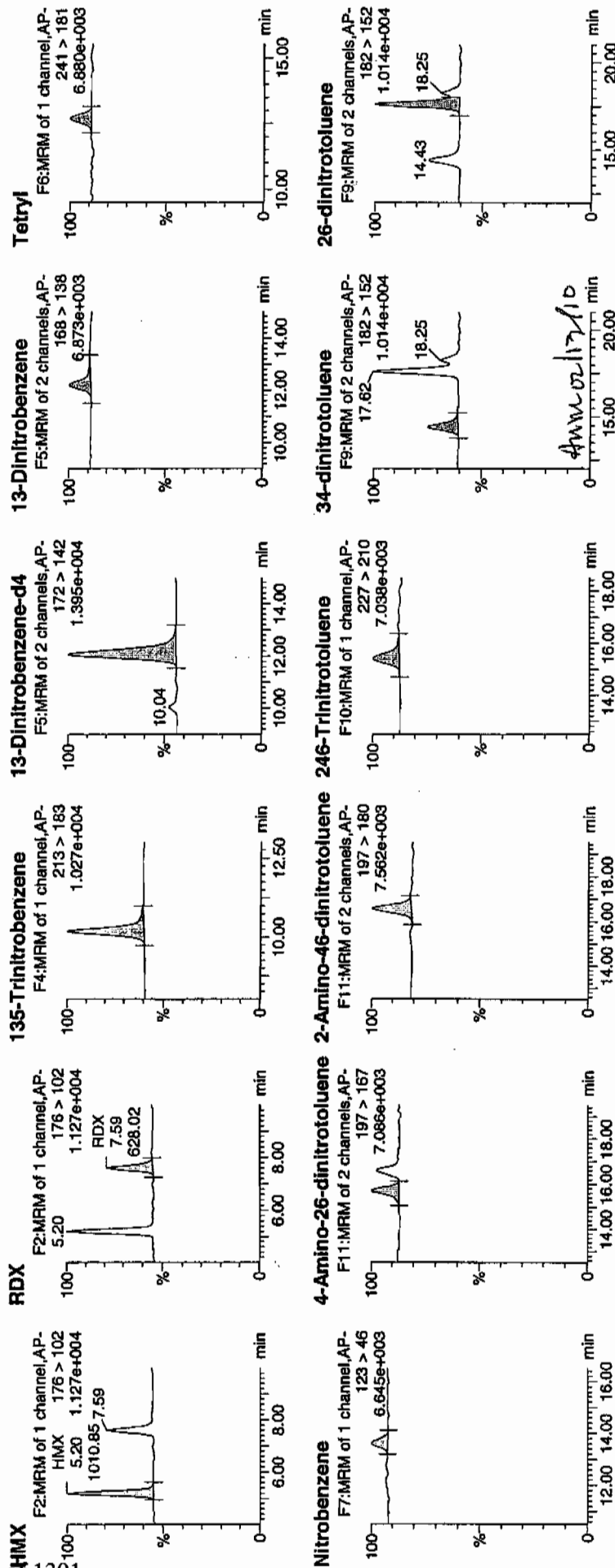
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Date: 13-Feb-2010

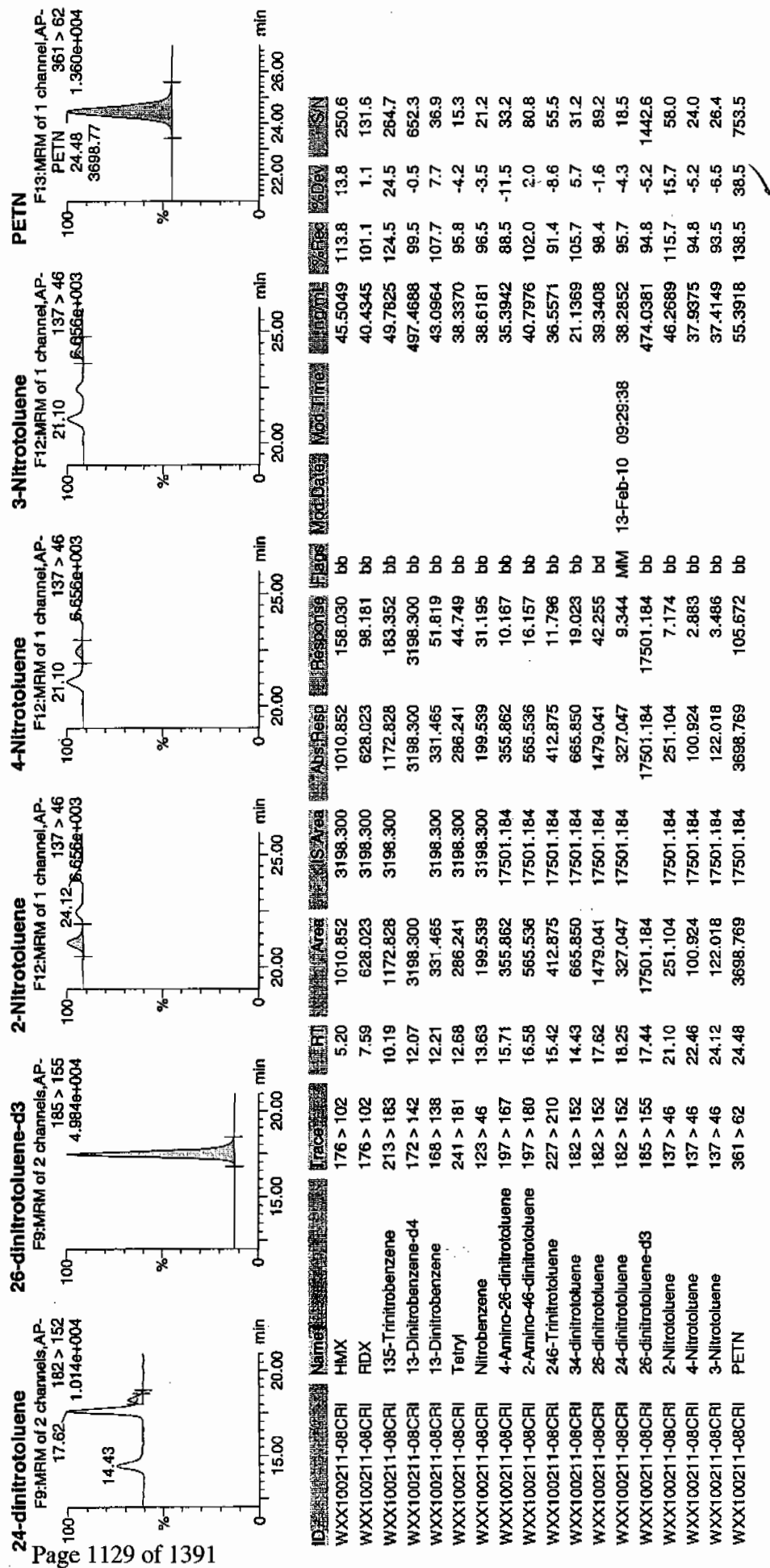
Time: 01:58:49

ID: WXX100211-08CRI

Vial: 1:1,C



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 0158
 Standard Number WXX100211-08CRI
 Data File EXP0208219a

HMX	113.8
RDX	101.1
135-TNB	124.5
13-DNB	107.7
Tetryl	95.8
Nitrobenzene	96.5
4A-26-DNT	88.5
2A-46-DNT	102.0
246-TNT	91.4
34-DNT(surr)	105.7
26-DNT	98.4
24-DNT	95.7
2-NT	115.7
4-NT	94.8
3-NT	93.5
PETN	138.5

*WXX
2/13/10*

Total 1663.6

Average 104.0

Hyd M0213/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208225a

Analysis Date: 13-FEB-10 04:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	600	619.377	103	
2,6-Dinitrotoluene-d3	500	401.252	80	
2-Amino-4,6-dinitrotoluene	600	636.493	106	
3,4-Dinitrotoluene	300	320.33	107	
4-Amino-2,6-dinitrotoluene	600	624.504	104	
HMX	600	676.316	113	
Nitrobenzene	600	626.935	104	
PETN	600	868.676	145	*
RDX	600	735.716	123	*
Tetryl	600	652.102	109	
m-Dinitrobenzene	600	601.342	100	
m-Nitrotoluene	600	595.488	99	
o-Nitrotoluene	600	642.065	107	
p-Nitrotoluene	600	641.012	107	
1,3,5-Trinitrobenzene	600	585.841	98	
1,3-Dinitrobenzene-d4	500	406.849	81	
2,4,6-Trinitrotoluene	600	647.736	108	
2,4-Dinitrotoluene	600	567.711	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208225a

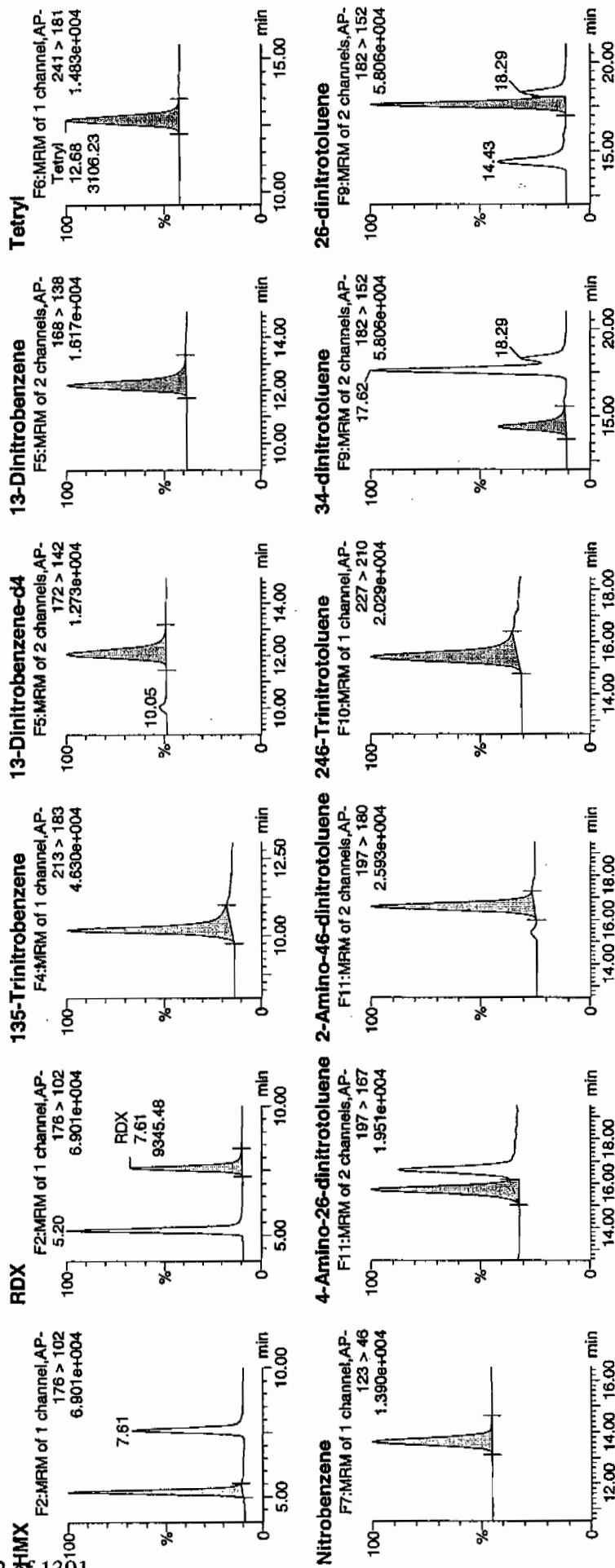
Date: 13-Feb-2010

Time: 04:56:12

ID: WXX100211-07CCV

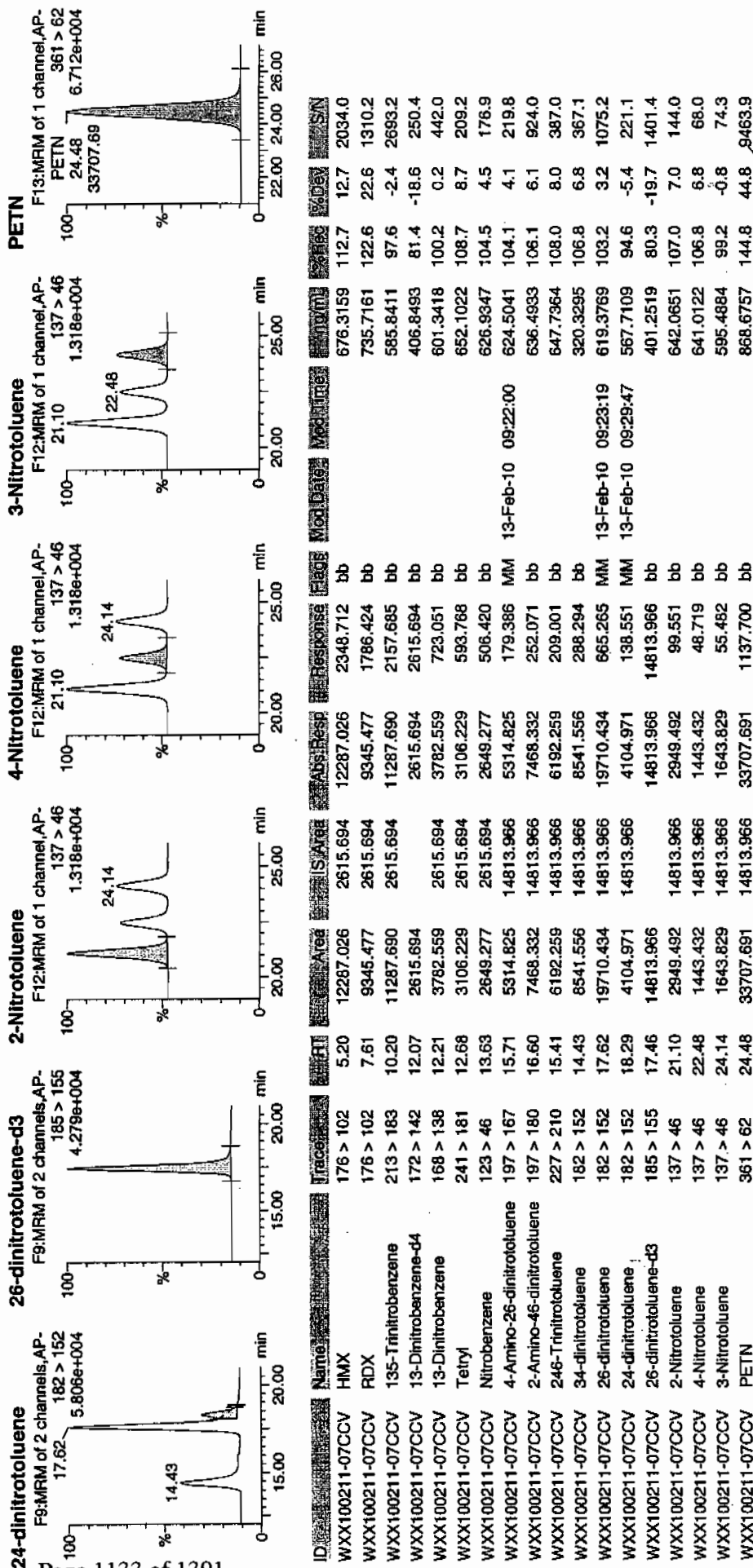
Vial: 1:1,B

WXX
2/13/10



WXX
2/13/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 0456
 Standard Number: WXX100211-07CCV
 Data File: EXP0208225a

HMX		112.7
RDX		122.6
135-TNB		97.6
13-DNB		100.2
Tetryl		108.7
Nitrobenzene		104.5
4A-26-DNT		104.1
2A-46-DNT		106.1
246-TNT		108.0
34-DNT(surr)		106.8
26-DNT		103.2
24-DNT		94.6
2-NT		107.0
4-NT		106.8
3-NT		99.2
PETN		144.8

Total 1726.9

Average 107.9

Handwritten: 107.9
2/13/10

Handwritten: 107.9

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208227a

Analysis Date: 13-FEB-10 05:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	40	44.157	110	
p-Nitrotoluene	40	48.417	121	
1,3,5-Trinitrobenzene	40	50.736	127	
1,3-Dinitrobenzene-d4	500	393.764	79	
2,4,6-Trinitrotoluene	40	38.512	96	
2,4-Dinitrotoluene	40	37.289	93	
2,6-Dinitrotoluene	40	39.073	98	
2,6-Dinitrotoluene-d3	500	428.875	86	
2-Amino-4,6-dinitrotoluene	40	34.456	86	
3,4-Dinitrotoluene	20	19.355	97	
4-Amino-2,6-dinitrotoluene	40	37.83	95	
HMX	40	53.487	134	*
Nitrobenzene	40	42.448	106	
PETN	40	59.515	149	*
RDX	40	46.066	115	
Tetryl	40	45.434	114	
m-Dinitrobenzene	40	37.331	93	
m-Nitrotoluene	40	37.322	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208227a

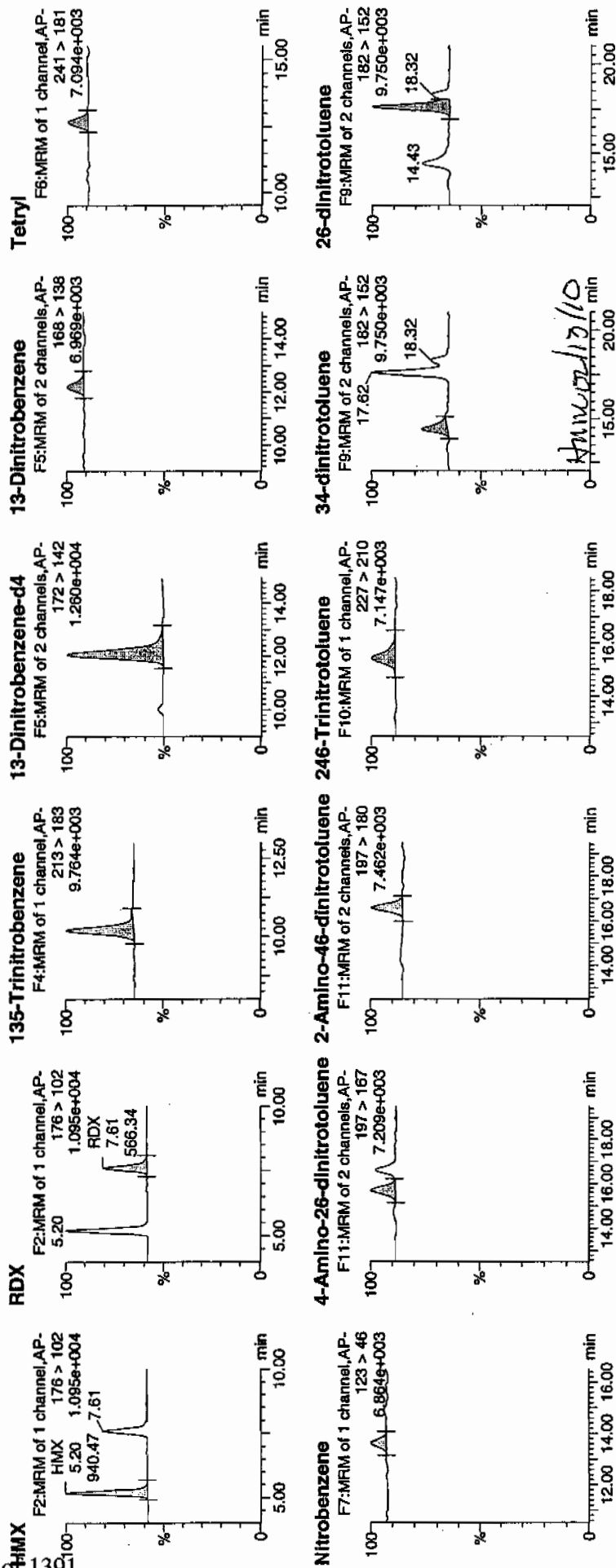
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Time: 05:55:10

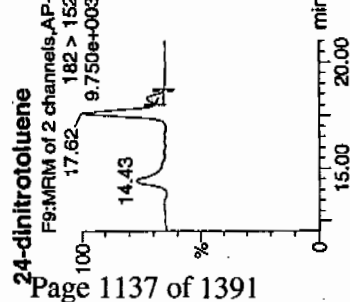
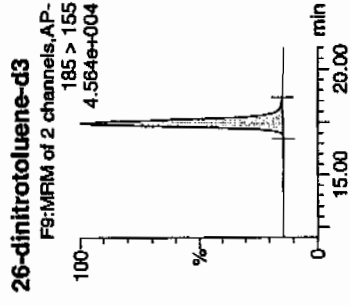
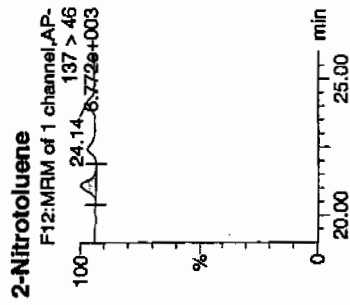
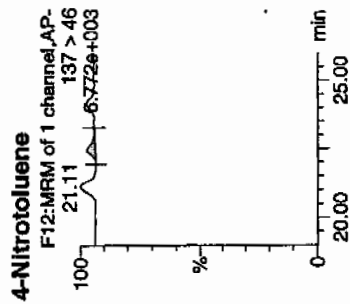
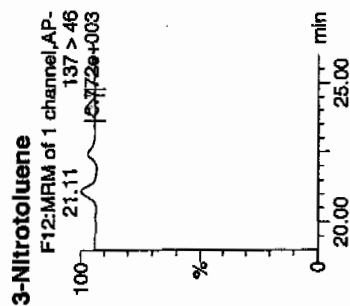
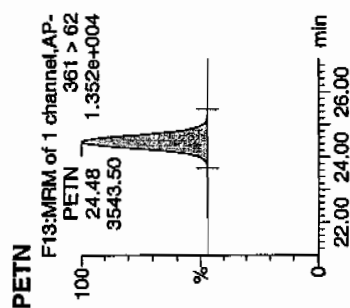
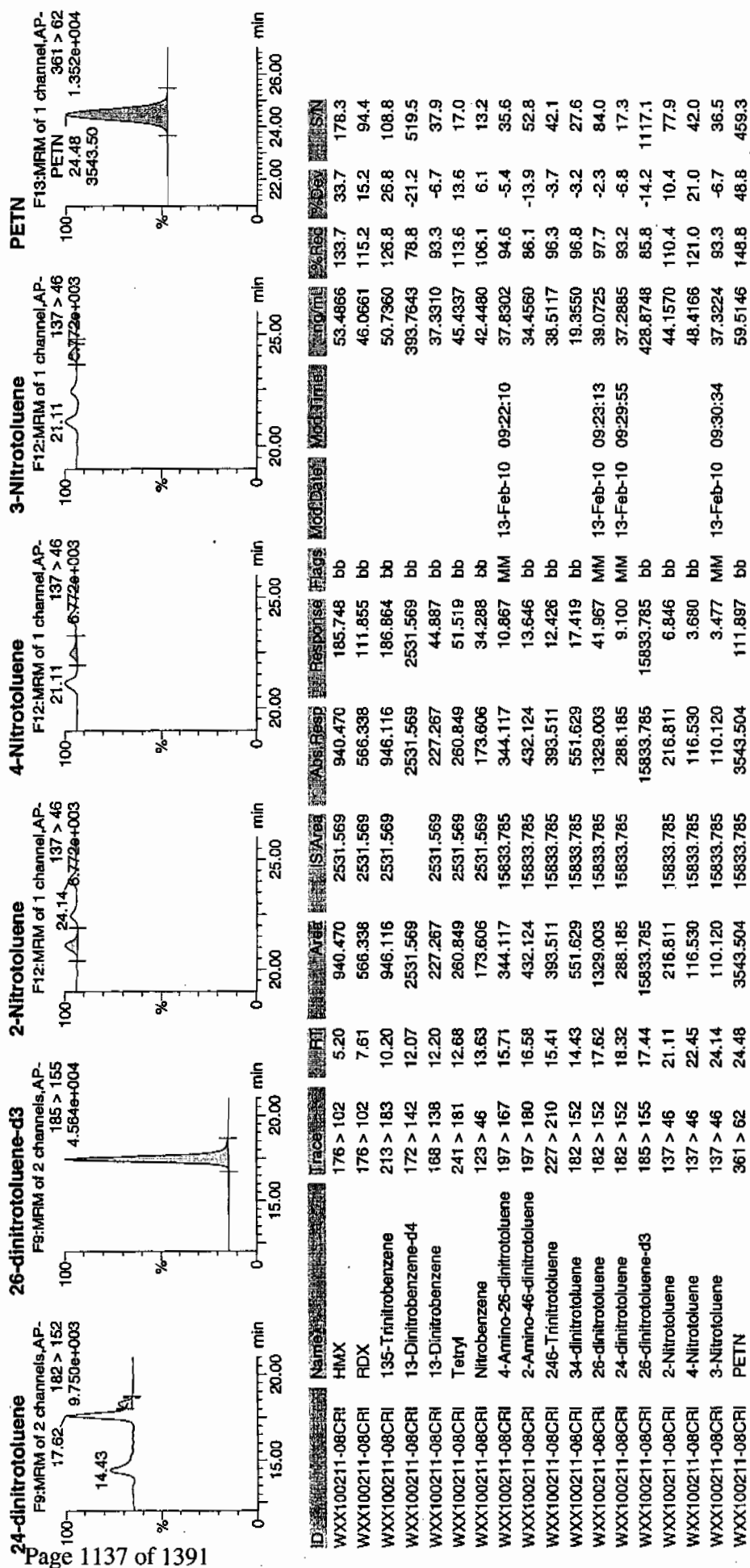
ID: WXX100211-08CRI

Vial: 1:1,C

WXX
2/13/10



Dataset: C:\MASSLYNX\New_Exp\PRO1020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 0555
 Standard Number WXX100211-08CRI
 Data File EXP0208227a

HMX	133.7
RDX	115.2
135-TNB	126.8
13-DNB	93.3
Tetryl	113.6
Nitrobenzene	106.1
4A-26-DNT	94.6
2A-46-DNT	86.1
246-TNT	96.3
34-DNT(surr)	96.8
26-DNT	97.7
24-DNT	93.2
2-NT	110.4
4-NT	121.0
3-NT	93.3
PETN	148.8

Total 1726.9

Average 107.9

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

*not
2/13/10*

HMC-02/12/10

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208238a

Analysis Date: 13-FEB-10 11:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	600	616.453	103	
m-Nitrotoluene	600	565.355	94	
o-Nitrotoluene	600	618.023	103	
p-Nitrotoluene	600	620.544	103	
1,3,5-Trinitrobenzene	600	568.559	95	
1,3-Dinitrobenzene-d4	500	448.251	90	
2,4,6-Trinitrotoluene	600	712.244	119	
2,4-Dinitrotoluene	600	644.511	107	
2,6-Dinitrotoluene	600	629.603	105	
2,6-Dinitrotoluene-d3	500	427.199	85	
2-Amino-4,6-dinitrotoluene	600	674.639	112	
3,4-Dinitrotoluene	300	334.925	112	
4-Amino-2,6-dinitrotoluene	600	627.214	105	
HMX	600	632.113	105	
Nitrobenzene	600	594.836	99	
PETN	600	710.083	118	
RDX	600	680.101	113	
Tetryl	600	597.235	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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208238a

Date: 13-Feb-2010

Time: 11:20:41

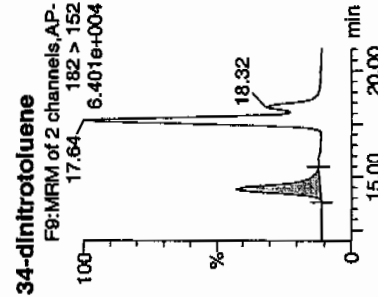
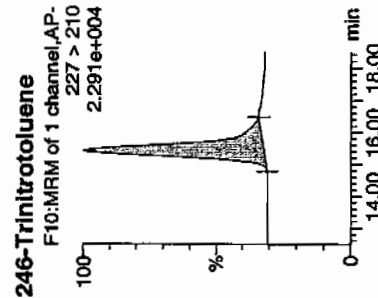
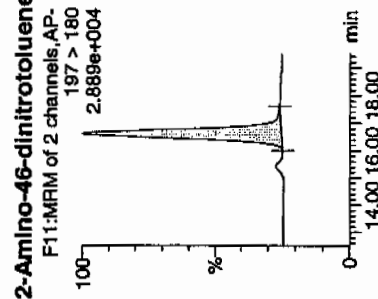
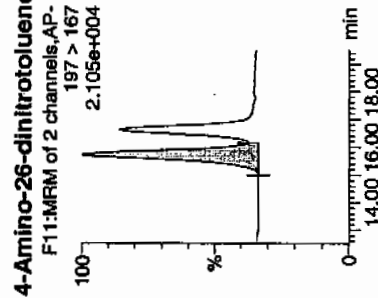
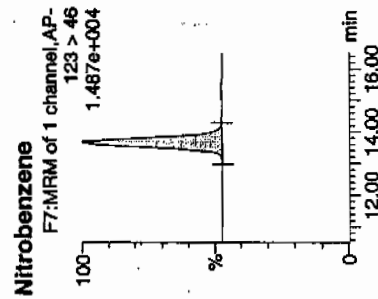
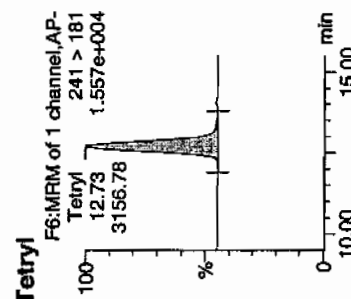
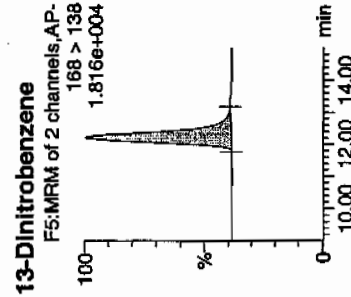
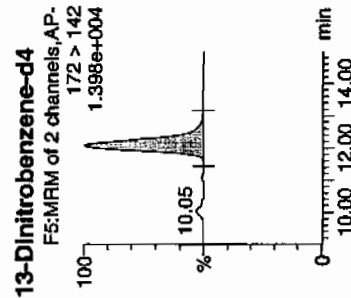
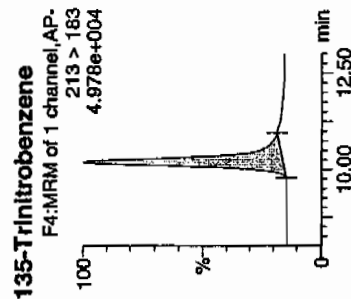
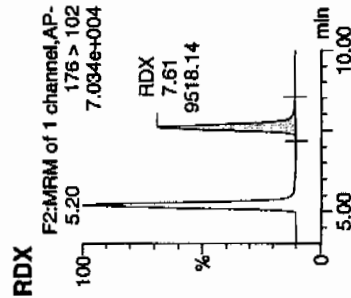
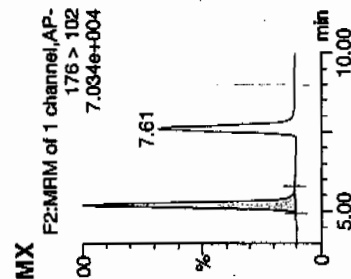
ID: WXX100211-07CCV

Vial: 1:1,B

WRT
2/14/10

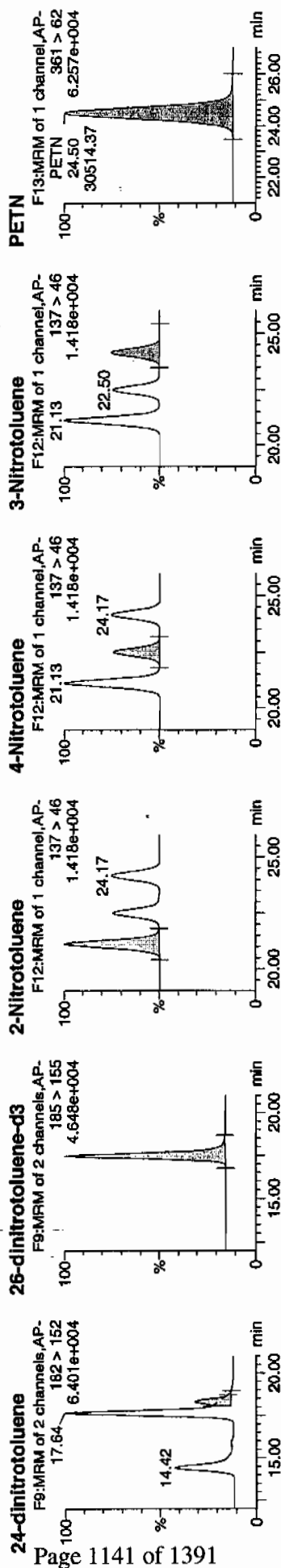
CHMX

1391



Hand
02/15/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	RT	Area	IS Area	Response	Ratio	Area	Ratio	Area	Ratio	Area	Ratio
WXX100211-07CCV	HMX	176 > 102	5.20	12652.599	2881.872	2195.205	db	632.1132	105.4	5.4	1484.0	5.4
WXX100211-07CCV	RDX	176 > 102	7.61	9518.144	2881.872	1651.382	bb	680.1008	113.4	13.4	985.9	13.4
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.20	12069.475	2881.872	2094.034	bb	568.5588	94.8	-5.2	958.1	-5.2
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	2881.872	2881.872	2881.872	bb	448.2510	89.7	-10.3	420.9	-10.3
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	4272.207	2881.872	741.221	bb	616.4534	102.7	2.7	736.6	2.7
WXX100211-07CCV	Tetryl	241 > 181	12.73	3156.782	2881.872	547.696	bb	597.2352	99.5	-0.5	444.8	-0.5
WXX100211-07CCV	Nitrobenzene	123 > 46	13.67	2769.427	2881.872	480.491	bb	594.8358	99.1	-0.9	164.3	-0.9
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	5683.060	15771.898	180.164	MM	627.2143	104.5	4.5	734.4	4.5
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.63	8427.798	15771.898	267.178	bb	674.6394	112.4	12.4	507.3	12.4
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.45	7249.234	15771.898	229.815	bb	712.2439	118.7	18.7	368.2	18.7
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.42	9508.254	15771.898	301.430	bb	334.9254	111.6	11.6	360.7	11.6
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	21331.445	15771.898	676.249	MM	629.6026	104.9	4.9	1032.3	4.9
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.32	4961.647	15771.898	157.294	MM	644.5111	107.4	7.4	221.2	7.4
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	15771.898	15771.898	15771.898	bb	427.1985	85.4	-14.6	1052.7	-14.6
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.13	3022.632	15771.898	95.823	bb	618.0229	103.0	3.0	794.6	3.0
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1487.700	15771.898	47.163	bb	620.5442	103.4	3.4	383.8	3.4
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.17	1661.564	15771.898	52.675	bb	565.3549	94.2	-5.8	401.7	-5.8
WXX100211-07CCV	PETN	361 > 62	24.50	30514.367	15771.898	967.365	bb	710.0832	118.3	18.3	6589.2	18.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 1120
 Standard Number: WXX100211-07CCV
 Data File: EXP0208238a

HMX	105.4
RDX	113.4
135-TNB	94.8
13-DNB	102.7
Tetryl	99.5
Nitrobenzene	99.1
4A-26-DNT	104.5
2A-46-DNT	112.4
246-TNT	118.7
34-DNT(surr)	111.6
26-DNT	104.9
24-DNT	107.4
2-NT	103.0
4-NT	103.4
3-NT	94.2
PETN	118.3

WAT
2/14/10

Total 1693.3

-HMM 02/15/10

Average 105.8

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208240a

Analysis Date: 13-FEB-10 12:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	42.839	107	
1,3-Dinitrobenzene-d4	500	571.598	114	
2,4,6-Trinitrotoluene	40	42.66	107	
2,4-Dinitrotoluene	40	32.758	82	
2,6-Dinitrotoluene	40	40.254	101	
2,6-Dinitrotoluene-d3	500	550.38	110	
2-Amino-4,6-dinitrotoluene	40	41.952	105	
3,4-Dinitrotoluene	20	22.355	112	
4-Amino-2,6-dinitrotoluene	40	36.401	91	
HMX	40	40.768	102	
Nitrobenzene	40	40.374	101	
PETN	40	40.933	102	
RDX	40	38.778	97	
Tetryl	40	38.035	95	
m-Dinitrobenzene	40	37.092	93	
m-Nitrotoluene	40	32.836	82	
o-Nitrotoluene	40	37.907	95	
p-Nitrotoluene	40	42.318	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208240a

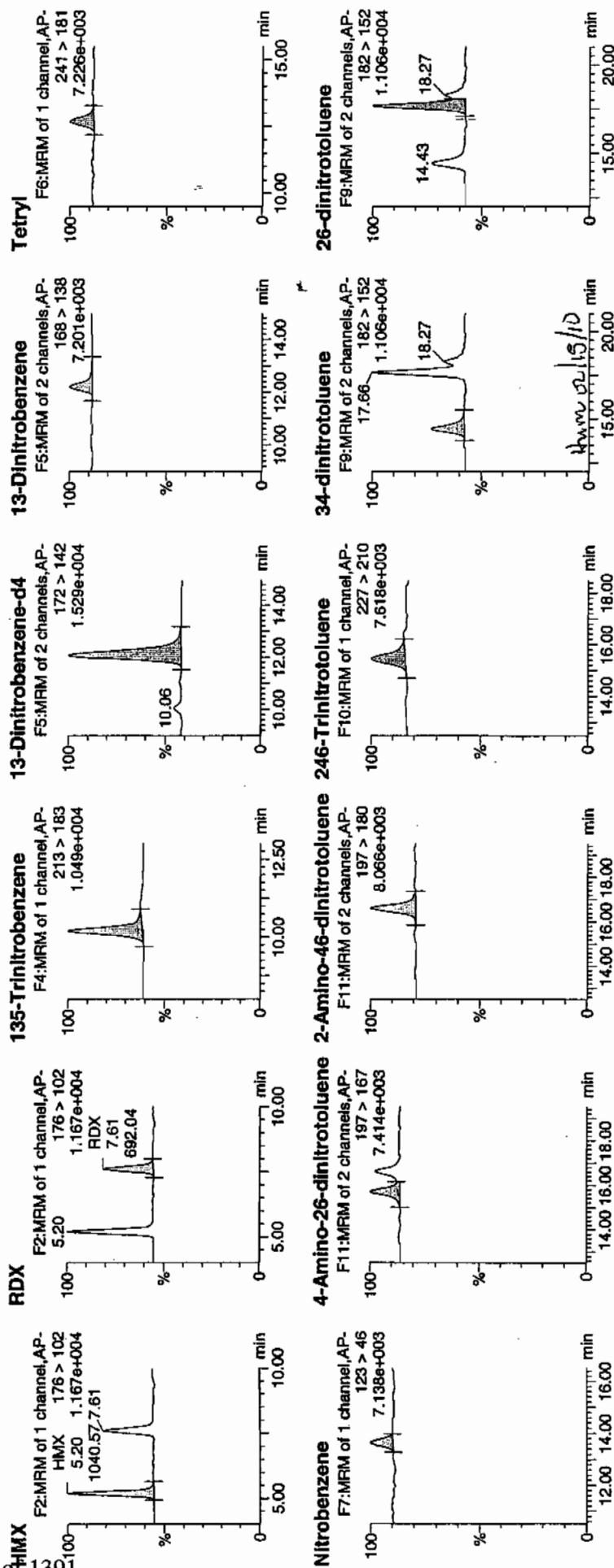
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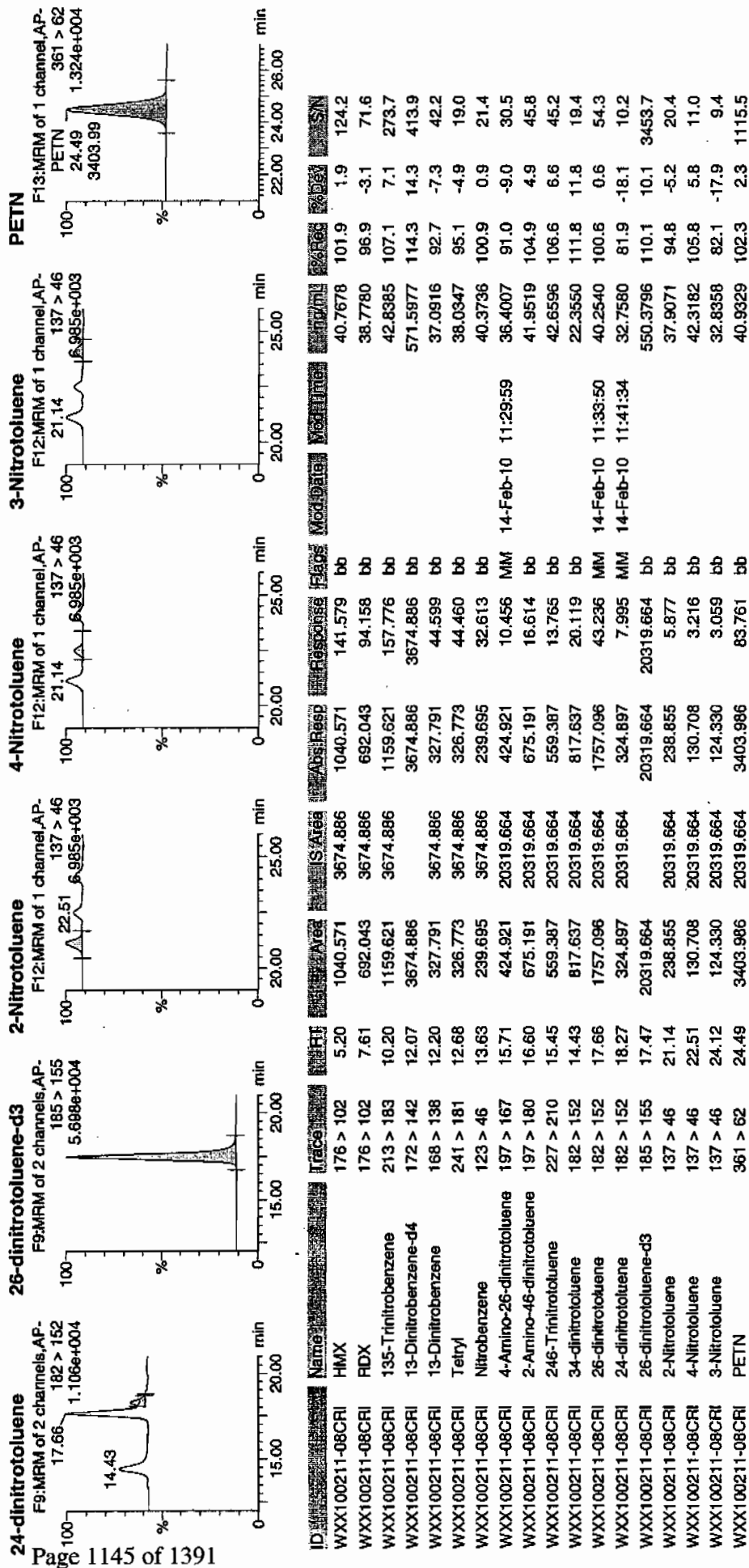
ID: WXX100211-08CRI

Vial: 1:1,C

14/10
2/14/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 1219
 Standard Number WXX100211-08CRI
 Data File EXP0208240a

HMX	101.9
RDX	96.9
135-TNB	107.1
13-DNB	92.7
Tetryl	95.1
Nitrobenzene	100.9
4A-26-DNT	91.0
2A-46-DNT	104.9
246-TNT	106.6
34-DNT(surr)	111.8
26-DNT	100.6
24-DNT	81.9
2-NT	94.8
4-NT	105.8
3-NT	82.1
PETN	102.3

Handwritten:
 2/14/10

Total 1576.4

Average 98.5

Handwritten: 02/13/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208251a

Analysis Date: 13-FEB-10 17:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	575.381	96	
1,3-Dinitrobenzene-d4	500	450.991	90	
2,4,6-Trinitrotoluene	600	677.663	113	
2,4-Dinitrotoluene	600	624.58	104	
2,6-Dinitrotoluene	600	643.343	107	
2,6-Dinitrotoluene-d3	500	440.81	88	
2-Amino-4,6-dinitrotoluene	600	655.3	109	
3,4-Dinitrotoluene	300	328.38	109	
4-Amino-2,6-dinitrotoluene	600	588.882	98	
HMX	600	641.405	107	
Nitrobenzene	600	622.212	104	
PETN	600	713.245	119	
RDX	600	688.19	115	
Tetryl	600	620.587	103	
m-Dinitrobenzene	600	616.754	103	
m-Nitrotoluene	600	551.441	92	
o-Nitrotoluene	600	587.066	98	
p-Nitrotoluene	600	599.481	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208251a

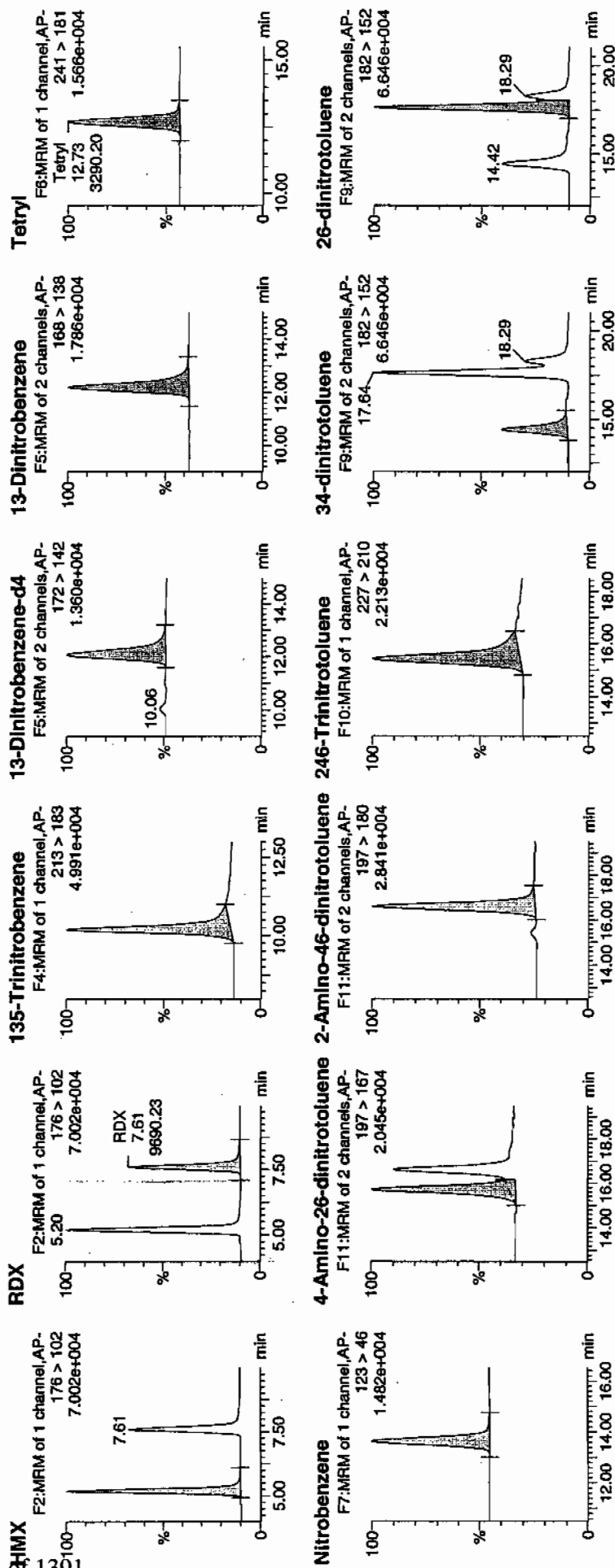
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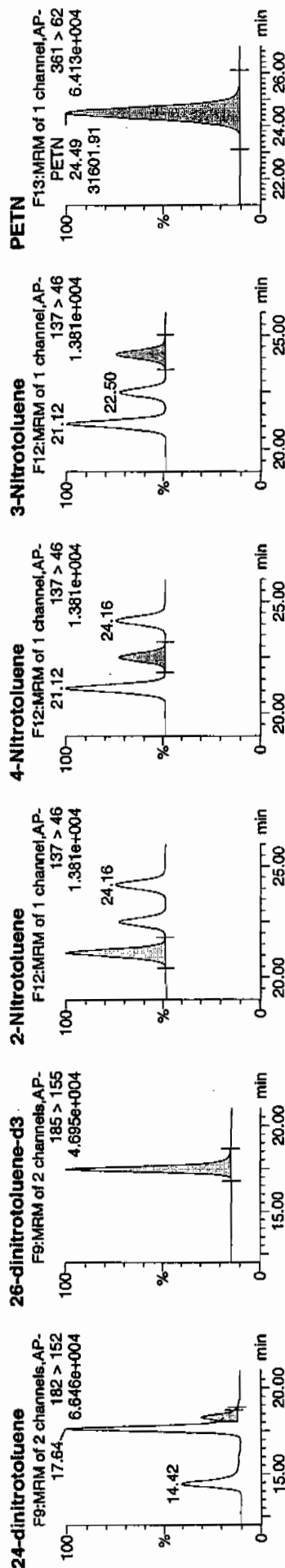
ID: WXX100211-07CCV

Vial: 1:1,B

10/15/10



10/15/10



ID	Name	Trace	RT	Area	S'Area	Abs.Resp	Response	Flags	Mod.Date	Mod.time	Inj.time	2%Sec	2%Dev	ISN
WXX100211-07CCV	HMX	176 > 102	5.20	12917.079	2899.489	12917.079	2227.475	db			641.4054	106.9	6.9	1703.5
WXX100211-07CCV	RDX	176 > 102	7.61	9690.228	2899.489	9690.228	1671.023	bb			688.1998	114.7	14.7	1100.2
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.19	12288.965	2899.489	12288.965	2119.160	bb			575.3810	95.9	-4.1	849.5
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	2899.489		2899.489	2899.489	bb			450.9912	90.2	-9.8	476.0
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	4300.418	2899.489	4300.418	741.582	bb			616.7538	102.8	2.8	417.2
WXX100211-07CCV	Tetryl	241 > 181	12.73	3290.205	2899.489	3290.205	567.377	bb			620.5868	103.4	3.4	357.2
WXX100211-07CCV	Nitrobenzene	123 > 46	13.62	2914.595	2899.489	2914.595	502.605	bb			622.2123	103.7	3.7	461.8
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.70	5505.746	16274.425	5505.746	169.153	MM	14-Feb-10	11:30:55	588.8818	98.1	-1.9	287.3
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.60	8447.031	16274.425	8447.031	259.519	bb			655.2998	109.2	9.2	602.4
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.44	7117.034	16274.425	7117.034	218.657	bb			677.6633	112.9	12.9	150.8
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.42	9619.463	16274.425	9619.463	295.539	bb			328.3799	109.5	9.5	282.3
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	22491.467	16274.425	22491.467	691.007	MM	14-Feb-10	11:34:45	643.3426	107.2	7.2	845.3
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.29	4961.411	16274.425	4961.411	152.430	MM	14-Feb-10	11:40:34	624.5800	104.1	4.1	174.3
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	16274.425		16274.425	16274.425	bb			440.8100	88.2	-11.8	2345.8
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	2962.713	16274.425	2962.713	91.024	bb			587.0663	97.8	-2.2	838.8
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1482.995	16274.425	1482.995	45.562	bb			599.4809	99.9	-0.1	396.1
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.16	1672.311	16274.425	1672.311	51.378	bb			551.4415	91.9	-8.1	421.3
WXX100211-07CCV	PETN	361 > 62	24.49	31601.914	16274.425	31601.914	970.907	bb			713.2449	118.9	18.9	6922.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 1744
 Standard Number: WXX100211-07CCV
 Data File: EXP0208251a

HMX	106.9
RDX	114.7
135-TNB	95.9
13-DNB	102.8
Tetryl	103.4
Nitrobenzene	103.7
4A-26-DNT	98.1
2A-46-DNT	109.2
246-TNT	112.9
34-DNT(surr)	109.5
26-DNT	107.2
24-DNT	104.1
2-NT	97.8
4-NT	99.9
3-NT	91.9
PETN	118.9

*WXX
2/14/10*

Total 1676.9

Average 104.8

Final 02/15/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208253a

Analysis Date: 13-FEB-10 18:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	40	41.727	104	
HMX	40	42.961	107	
Nitrobenzene	40	41.468	104	
PETN	40	46.097	115	
RDX	40	39.837	100	
Tetryl	40	32.346	81	
m-Dinitrobenzene	40	41.811	105	
m-Nitrotoluene	40	41.673	104	
o-Nitrotoluene	40	37.339	93	
p-Nitrotoluene	40	43.597	109	
1,3,5-Trinitrobenzene	40	41.844	105	
1,3-Dinitrobenzene-d4	500	515.203	103	
2,4,6-Trinitrotoluene	40	40.247	101	
2,4-Dinitrotoluene	40	40.422	101	
2,6-Dinitrotoluene	40	40.611	102	
2,6-Dinitrotoluene-d3	500	478.455	96	
2-Amino-4,6-dinitrotoluene	40	43.82	110	
3,4-Dinitrotoluene	20	21.899	109	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208253a

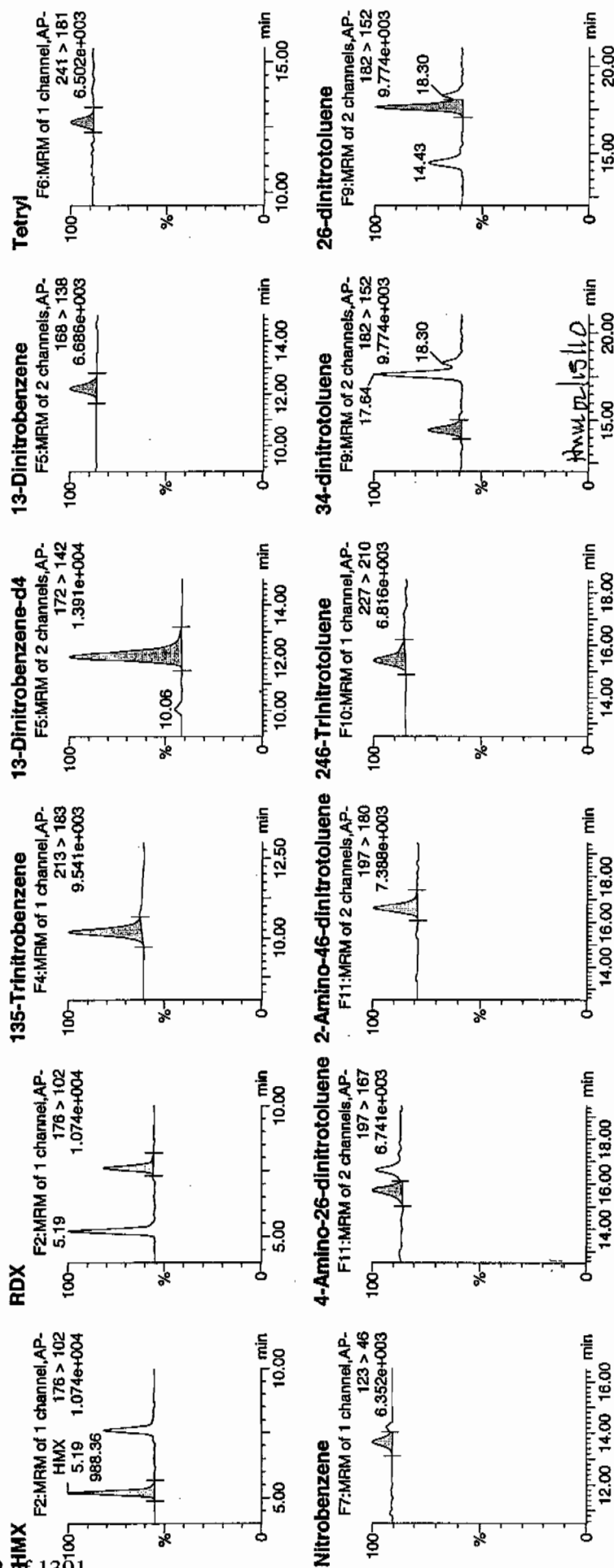
Date: 13-Feb-2010

Time: 18:43:13

ID: WXX100211-08CRI

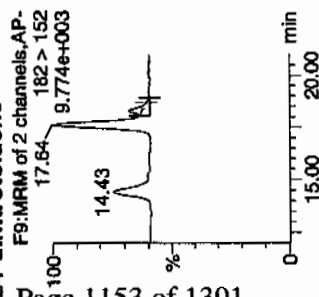
Vial: 1:1,C

WAT
2/14/10

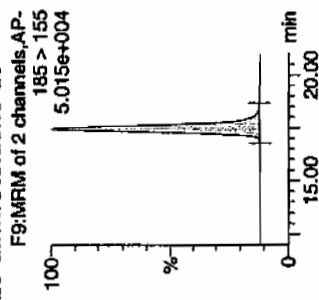


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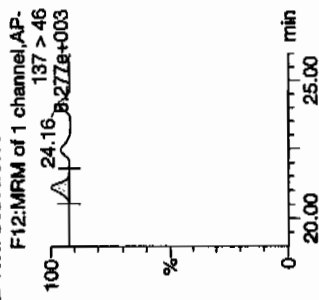
24-dinitrotoluene



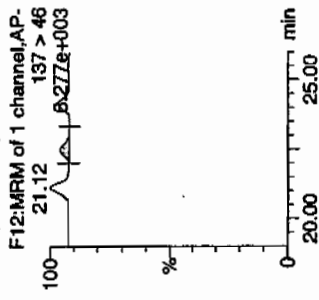
26-dinitrotoluene-d3



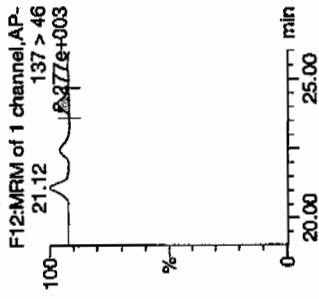
2-Nitrotoluene



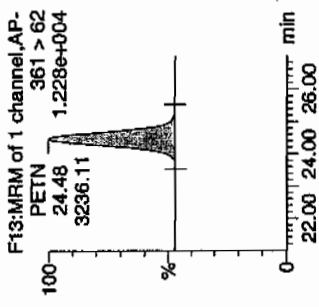
4-Nitrotoluene



3-Nitrotoluene



PETN



Page 1153 of 1391

ID	Name	Trace	RT	Area	IS Area	Abundance	Response	Flag	Mod Date	Mod Time	Amount	Mass	Ratio	SN
WXX100211-08CRI	HMZ	176 > 102	5.19	988.362	3312.315	988.362	149.195	bb			42.9610	107.4	7.4	111.6
WXX100211-08CRI	RDX	176 > 102	7.61	640.799	3312.315	640.799	96.730	bb			39.9369	99.6	-0.4	64.9
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1020.954	3312.315	1020.954	154.115	bb			41.8443	104.6	4.6	141.8
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3312.315	3312.315	3312.315	3312.315	bb			515.2028	103.0	3.0	152.1
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.20	333.045	3312.315	333.045	50.274	bb			41.8113	104.5	4.5	41.6
WXX100211-08CRI	Tetryl	241 > 181	12.72	258.530	3312.315	258.530	39.026	bb			32.3459	80.9	-19.1	16.5
WXX100211-08CRI	Nitrobenzene	123 > 46	13.63	221.905	3312.315	221.905	33.497	bd			41.4684	103.7	3.7	23.7
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	423.446	17664.254	423.446	11.986	MM	14-Feb-10	11:31:01	41.7273	104.3	4.3	11.1
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	613.098	17664.254	613.098	17.354	bb			43.8204	109.6	9.6	59.2
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.42	458.778	17664.254	458.778	12.986	bb			40.2465	100.6	0.6	51.9
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.43	696.273	17664.254	696.273	19.709	bd			21.8986	109.5	9.5	42.2
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1541.032	17664.254	1541.032	43.620	MM	14-Feb-10	11:34:51	40.6113	101.5	1.5	113.1
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.30	348.521	17664.254	348.521	9.865	MM	14-Feb-10	11:40:22	40.4224	101.1	1.1	24.9
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.47	17664.254	17664.254	17664.254	17664.254	bb			478.4550	95.7	-4.3	1351.3
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.12	204.531	17664.254	204.531	5.789	bb			37.3394	93.3	-6.7	52.5
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.48	117.060	17664.254	117.060	3.313	bb			43.5968	109.0	9.0	25.7
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.16	137.170	17664.254	137.170	3.883	bb			41.6727	104.2	4.2	31.7
WXX100211-08CRI	PETN	361 > 62	24.48	3236.109	17664.254	3236.109	91.601	bb			46.0968	115.2	15.2	207.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 1843
 Standard Number WXX100211-08CRI
 Data File EXP0208253a

HMX	107.4
RDX	99.6
135-TNB	104.6
13-DNB	104.5
Tetryl	80.9
Nitrobenzene	103.7
4A-26-DNT	104.3
2A-46-DNT	109.6
246-TNT	100.6
34-DNT(surr)	109.5
26-DNT	101.5
24-DNT	101.1
2-NT	93.3
4-NT	109.0
3-NT	104.2
PETN	115.2

Handwritten:
 2/14/10

Total 1649.0

Average 103.1

Handwritten: 471111 02/15/10

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): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130013.wiff

Analysis Date: 13-FEB-10 13:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	114	114	
2,6-Diamino-4-nitrotoluene	100	111	111	
3,4-Dinitrotoluene	50	54.6	109	
3,5-Dinitroaniline	100	118	118	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

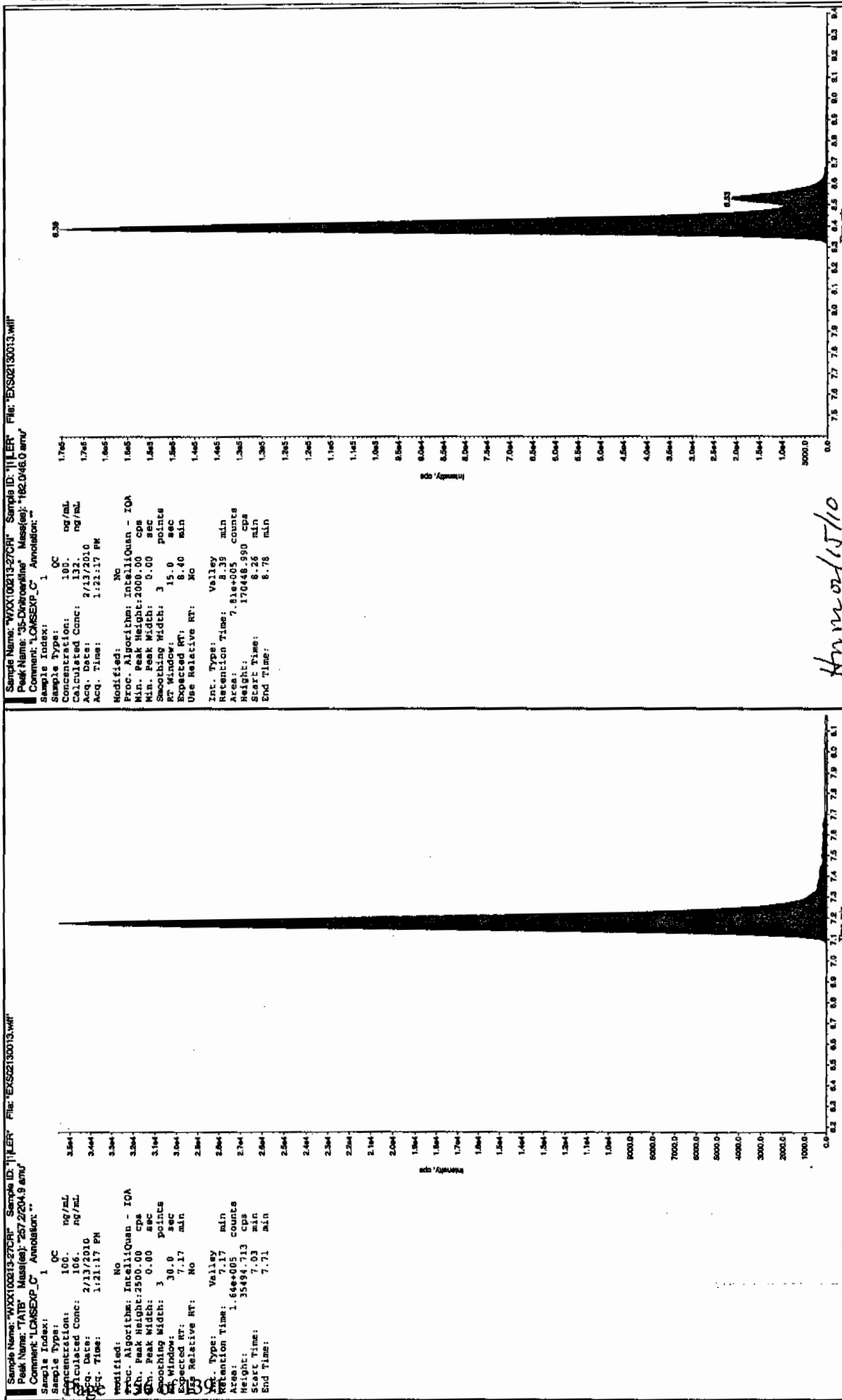
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

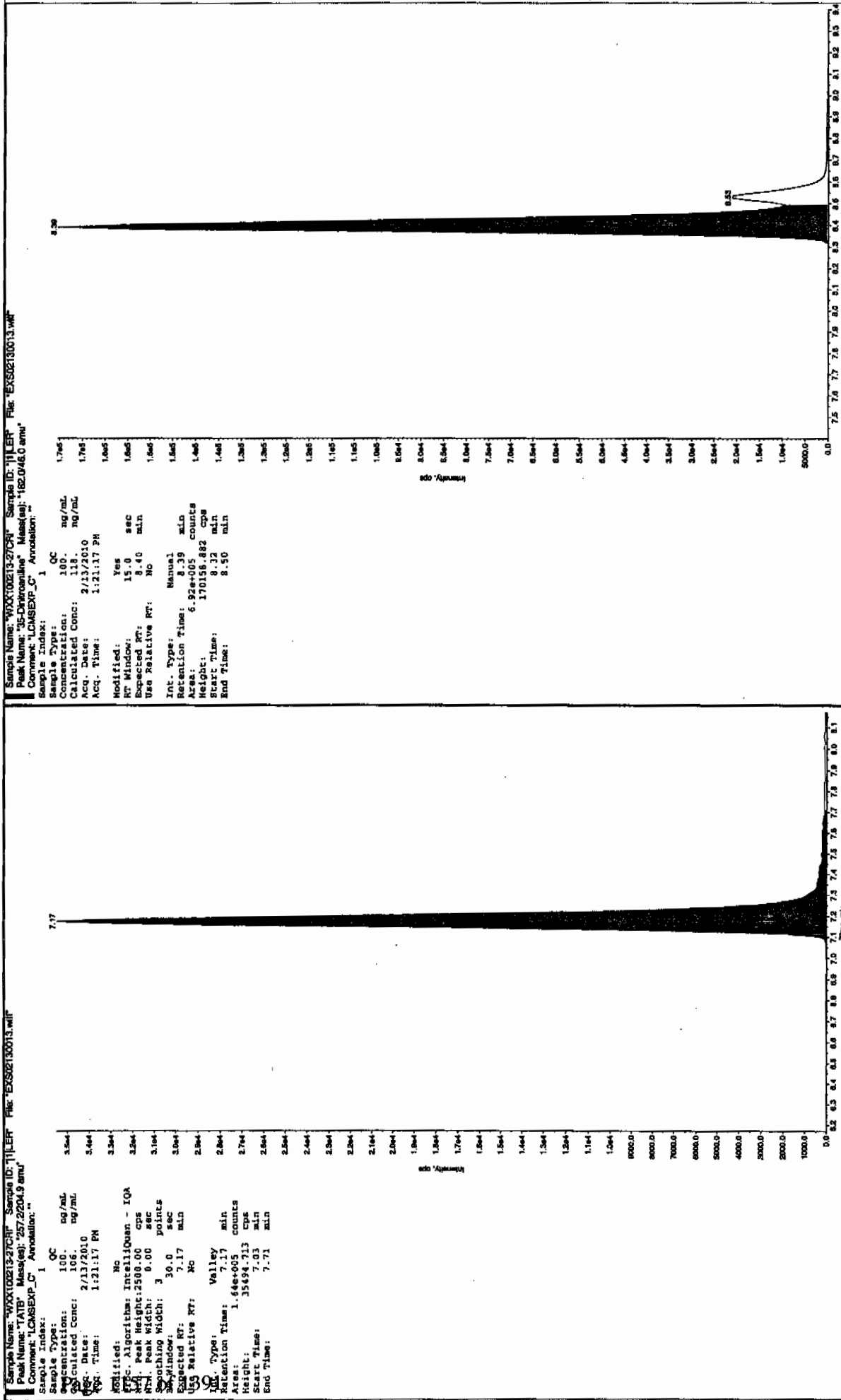
* Value outside of Recovery Limits

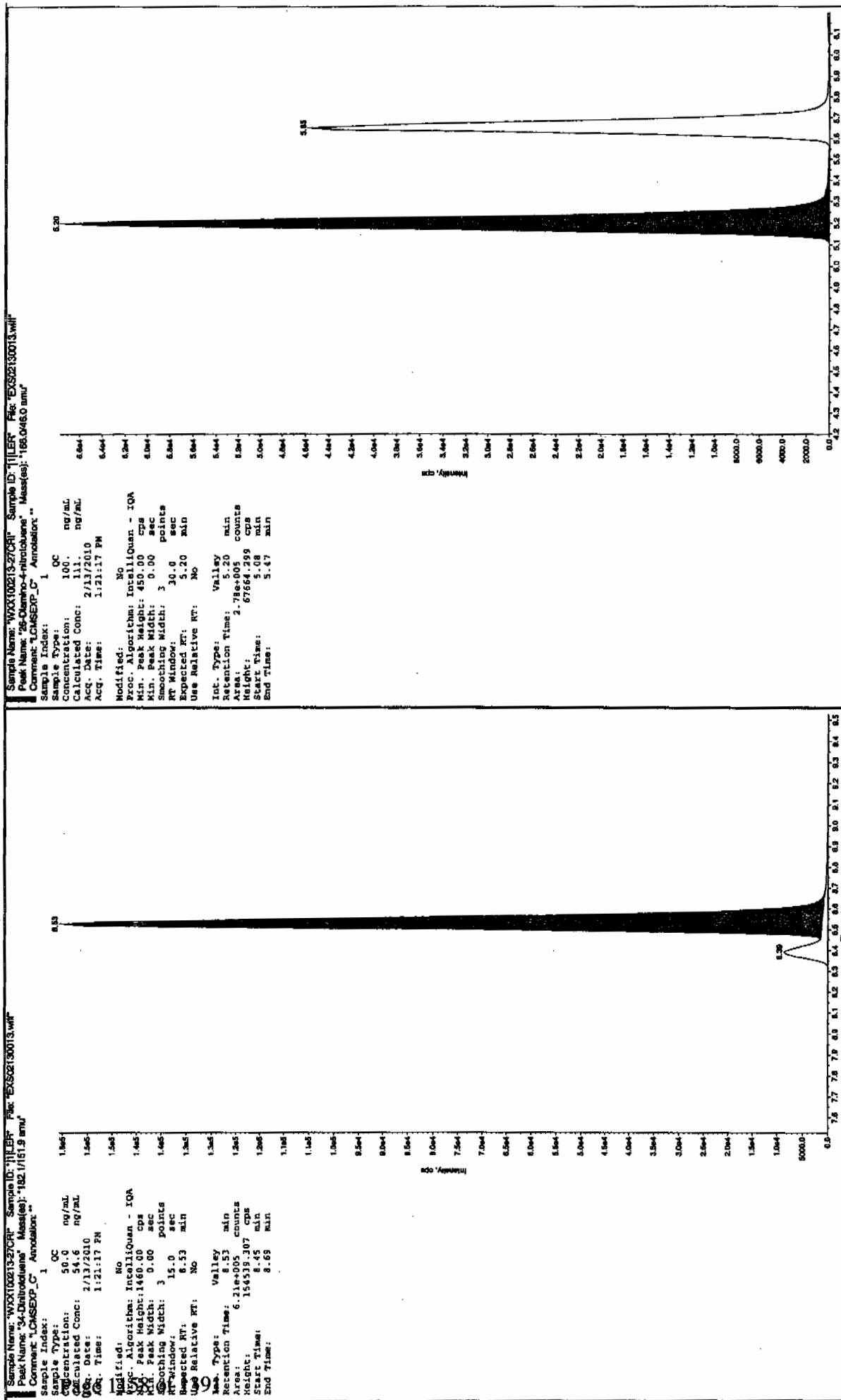
Before Jan 21/15/10

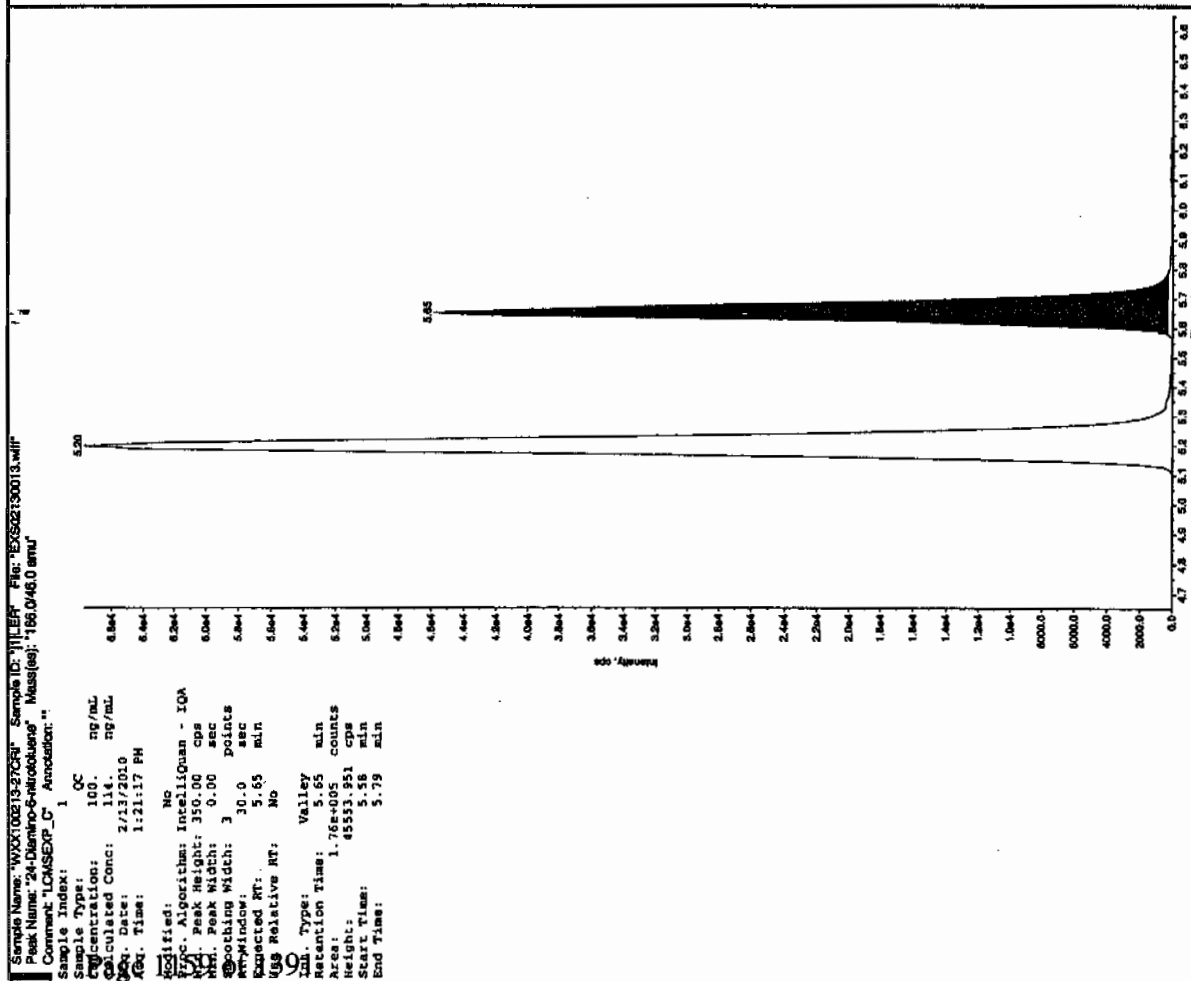


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 2/15/10







7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEI

GEL Sample ID: WXXCCV

GEL Data File EXS02130024.wiff

Analysis Date: 13-FEB-10 16:14

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	505	101	
2,6-Diamino-4-nitrotoluene	500	517	103	
3,4-Dinitrotoluene	250	268	107	
3,5-Dinitroaniline	500	576	115	
TATB	500	506	101	
tris(o-cresyl) phosphate	500	513	103	

Recovery Limits:

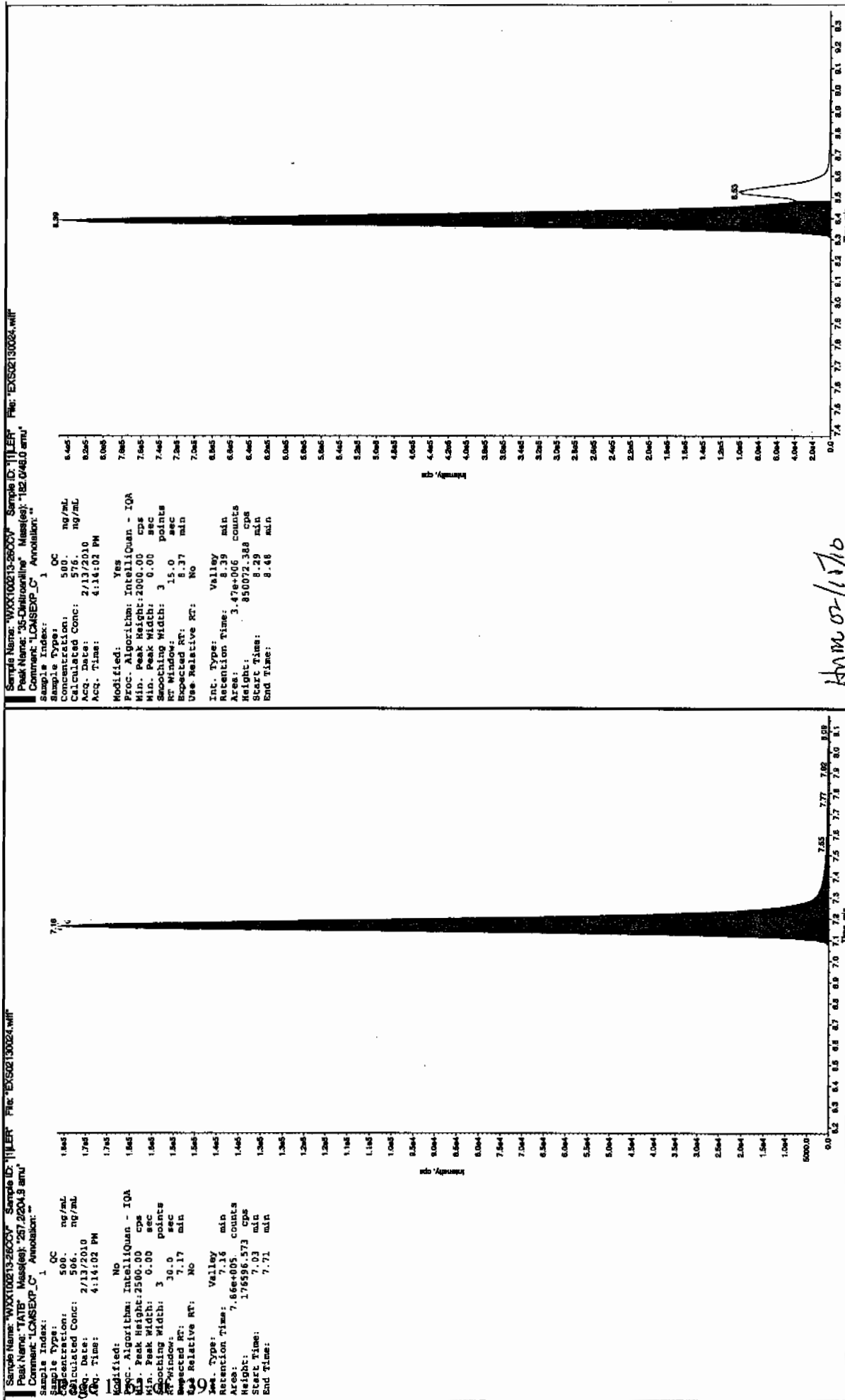
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

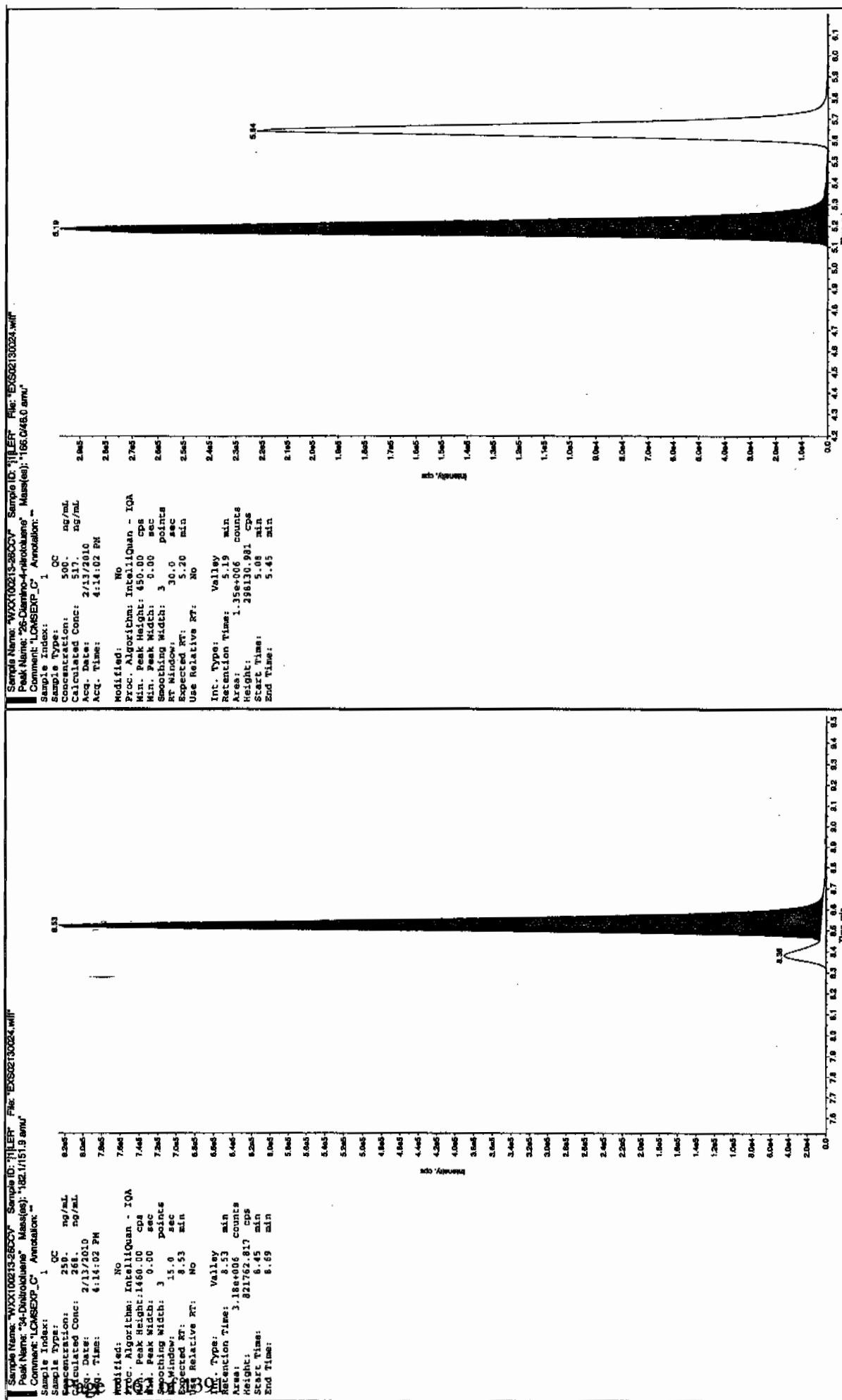
Column used to flag Recovery outside of Limits

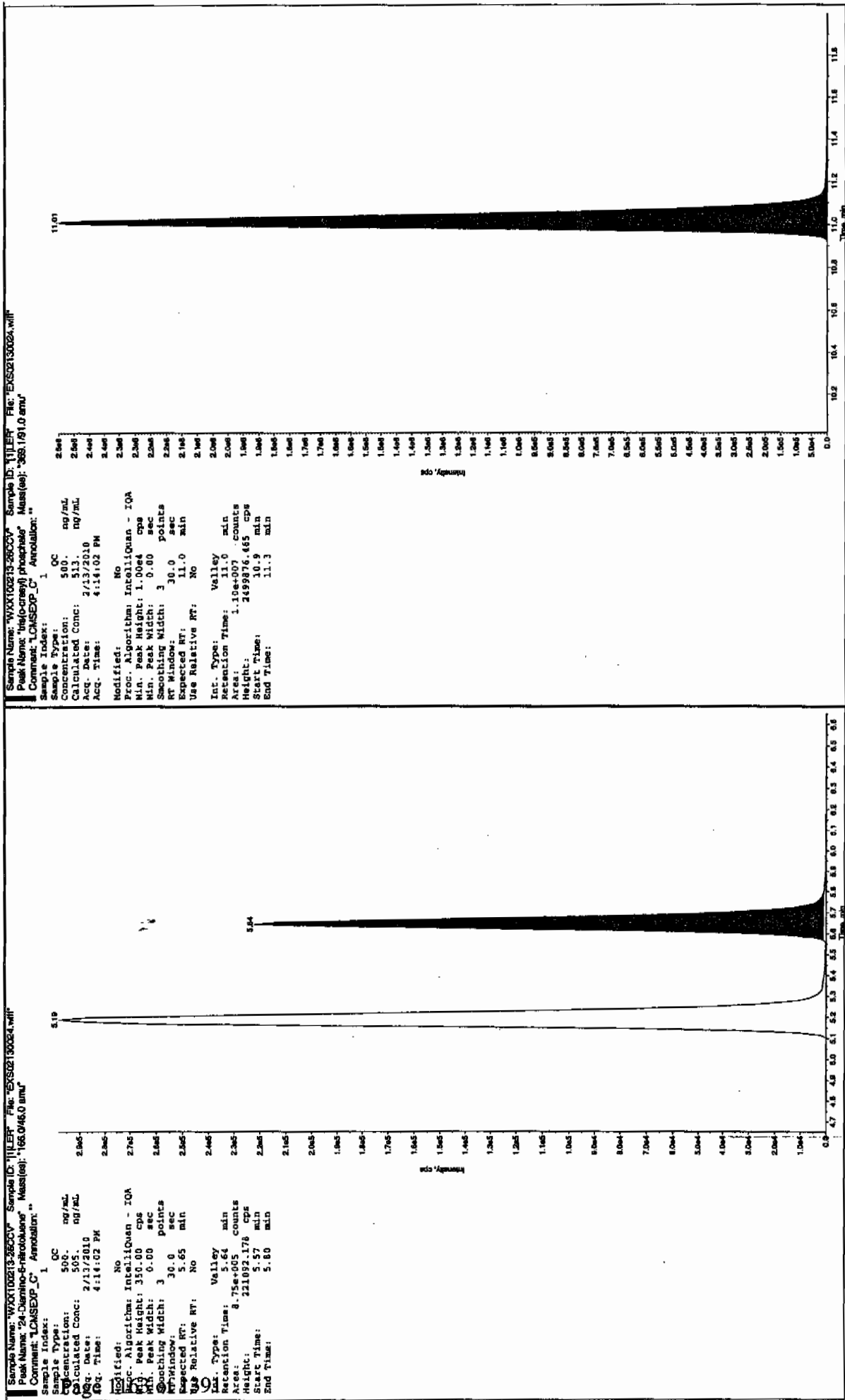
* Value outside of Recovery Limits

Jan 21/10



Jan 21/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130026.wiff

Analysis Date: 13-FEB-10 16:45

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	109	109	
3,4-Dinitrotoluene	50	56.6	113	
3,5-Dinitroaniline	100	115	115	
TATB	100	105	105	
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 ,

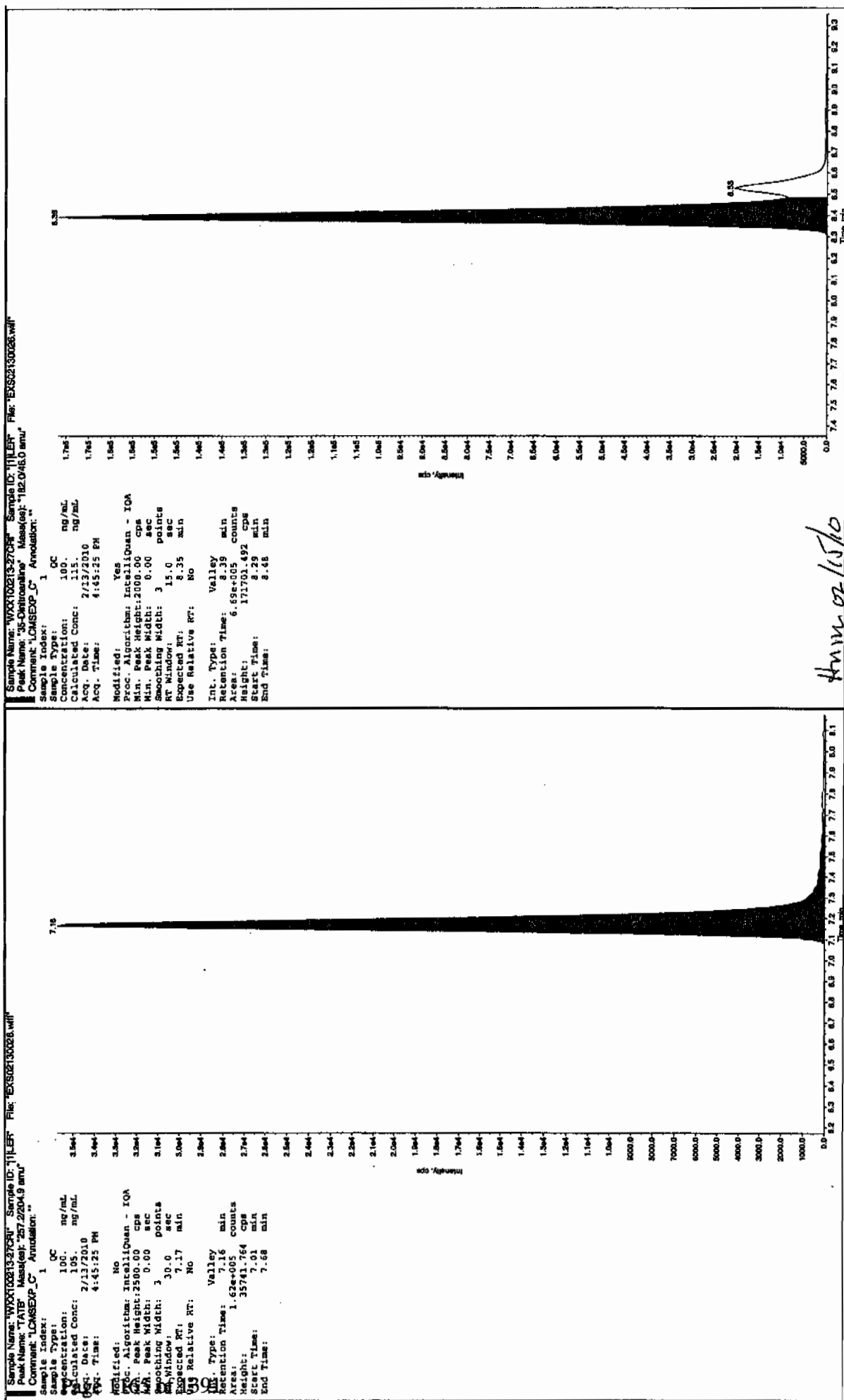
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

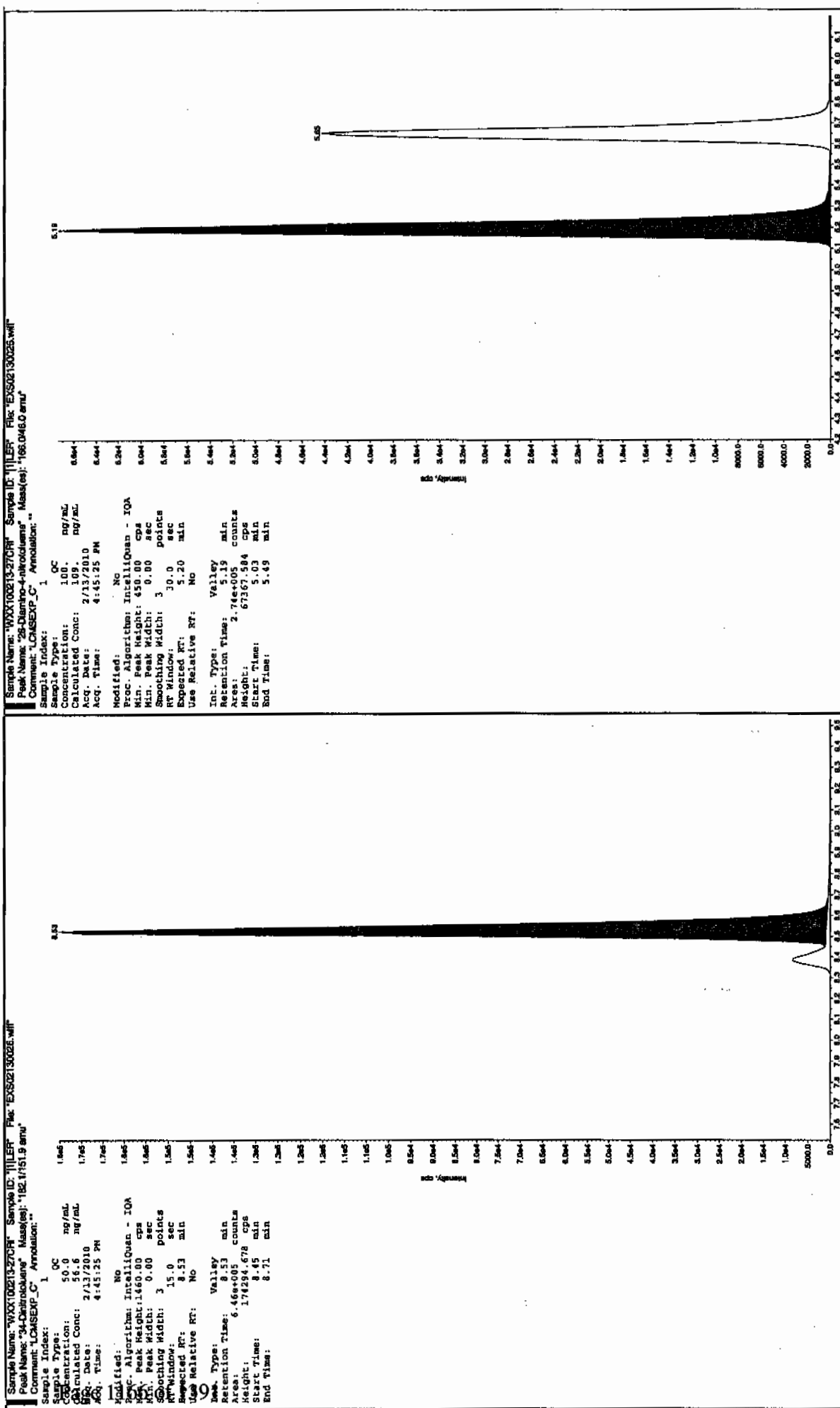
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

San 2/15/10

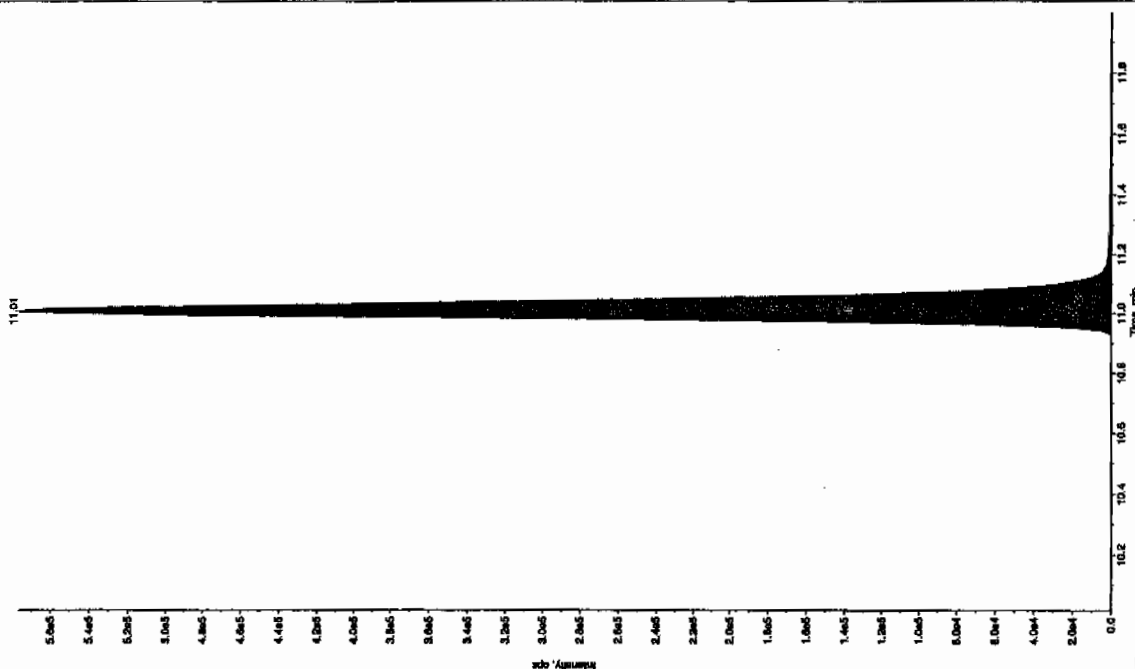


San 02/15/10



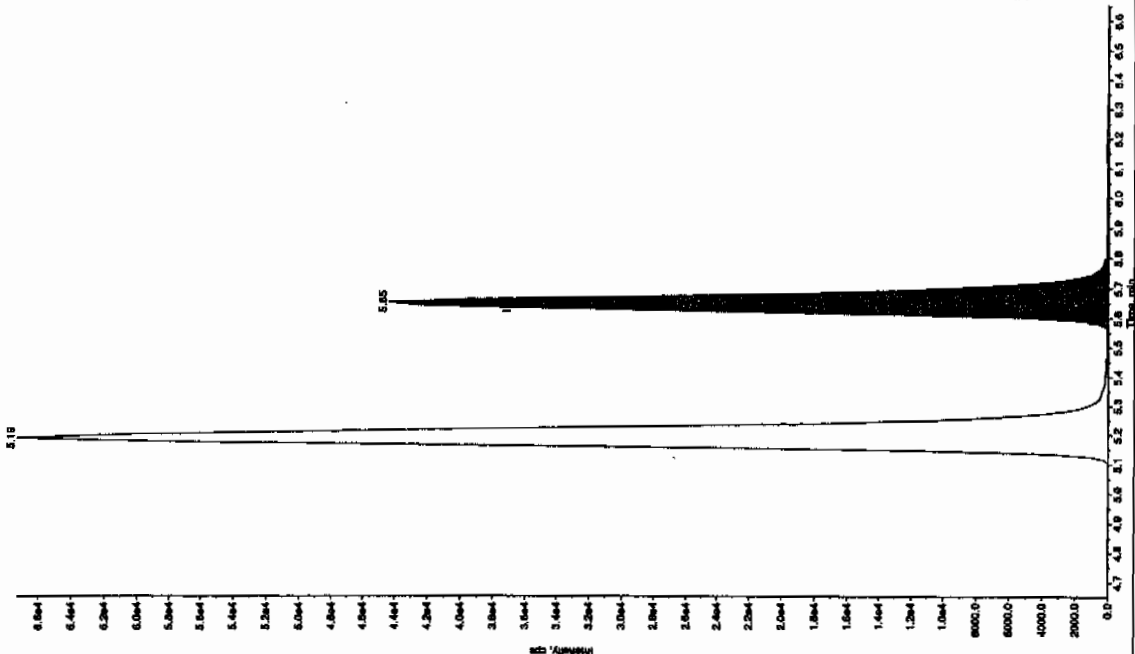
Sample Name: "WXX100213-27C01" Sample ID: "J11ER" File: "EXS02130028.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "366.1/91.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 105. ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 4:45:25 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 11.0 min
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 2.44e+006 counts
 Height: 576848.450 cps
 Start Time: 10.9 min
 End Time: 11.4 min



Sample Name: "WXX100213-27C01" Sample ID: "J11ER" File: "EXS02130028.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 116. ng/mL
 Acq. Date: 2/13/2010
 Acq. Time: 4:45:25 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 5.55 min
 Expected RT: 5.55 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.65 min
 Area: 1.80e+005 counts
 Height: 44292.934 cps
 Start Time: 5.56 min
 End Time: 5.93 min



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130036.wiff

Analysis Date: 13-FEB-10 19:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	500	606	121	
3,4-Dinitrotoluene	250	251	101	
3,5-Dinitroaniline	500	609	122	
TATB	500	511	102	
tris(o-cresyl) phosphate	500	517	103	
2,4-Diamino-6-nitrotoluene	500	579	116	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

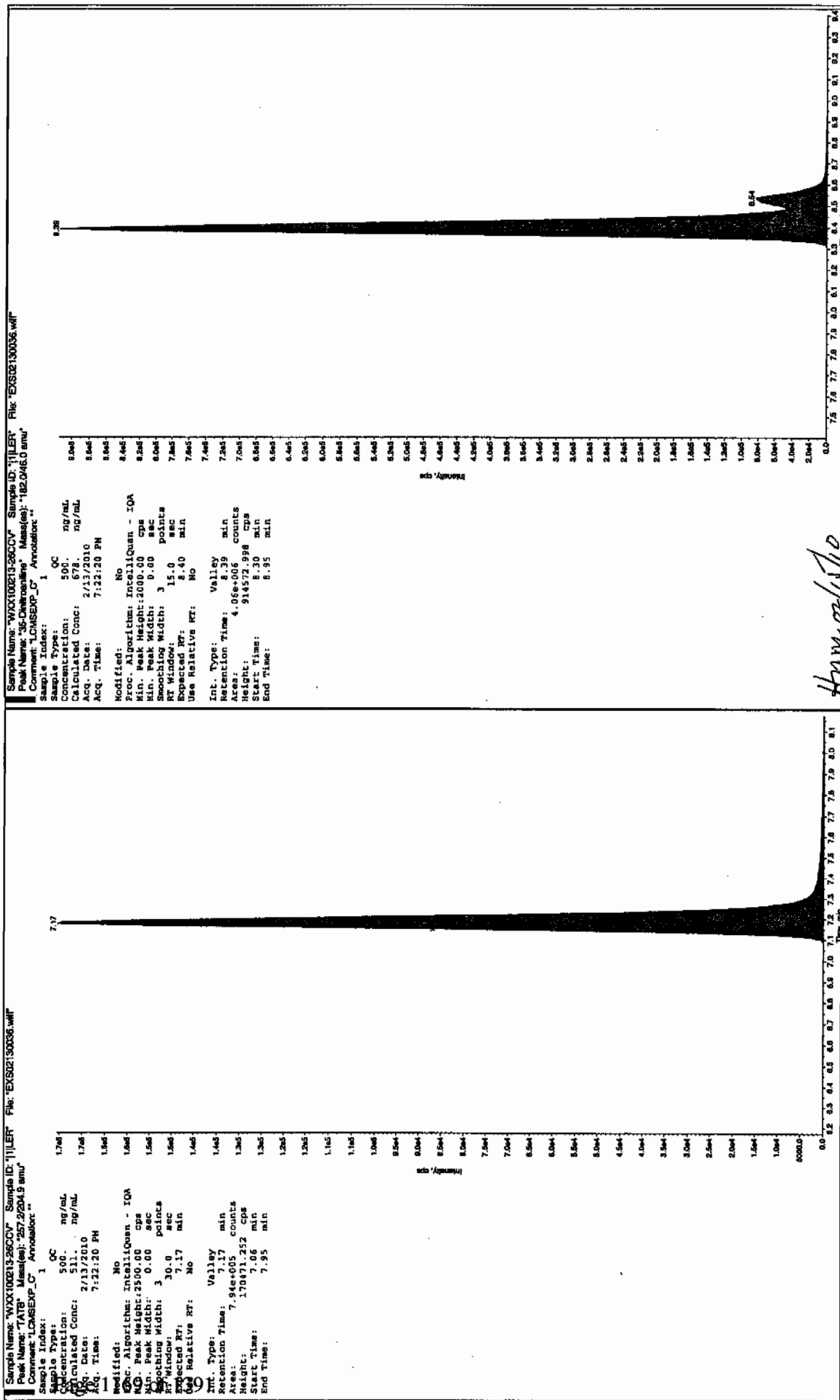
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

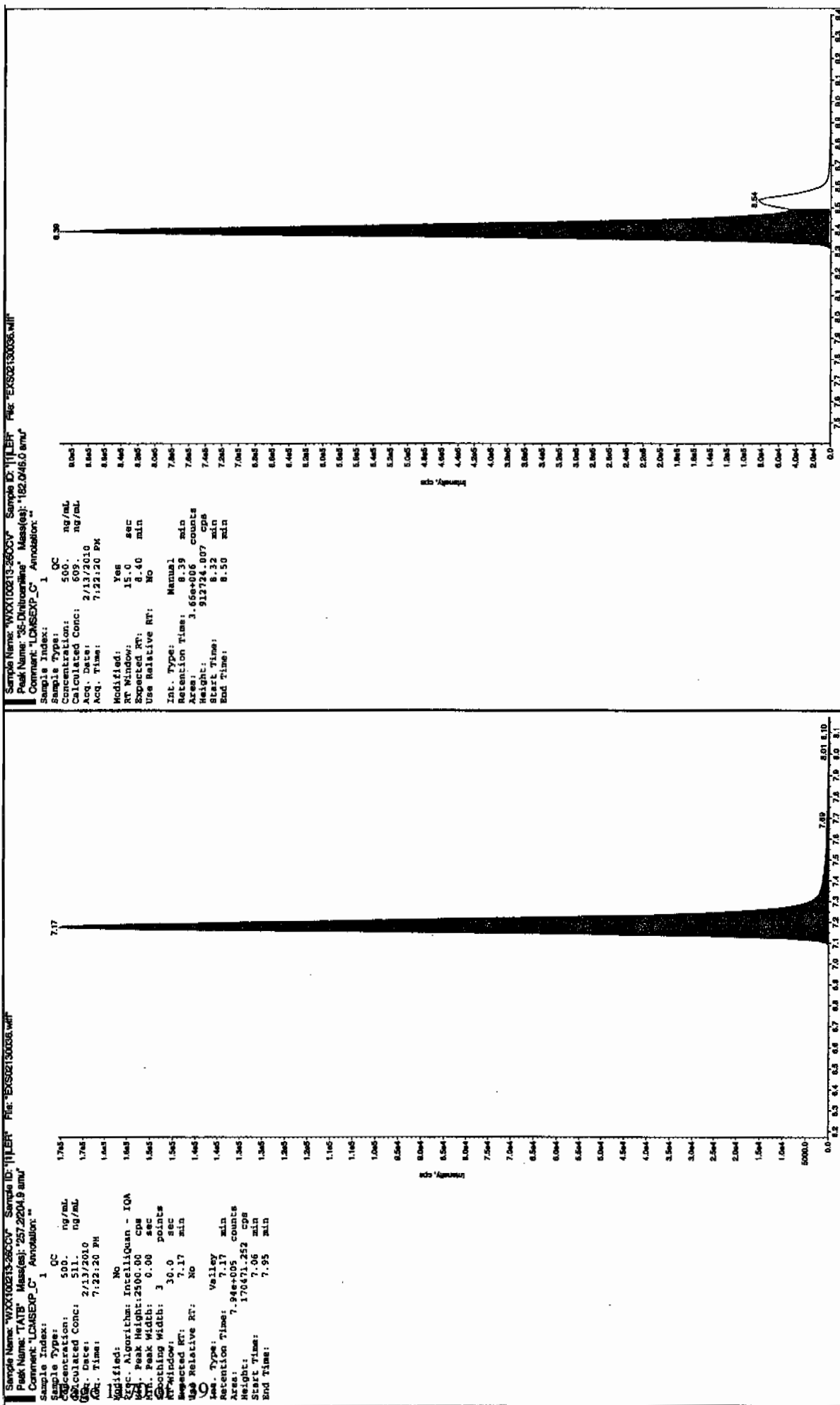
* Value outside of Recovery Limits

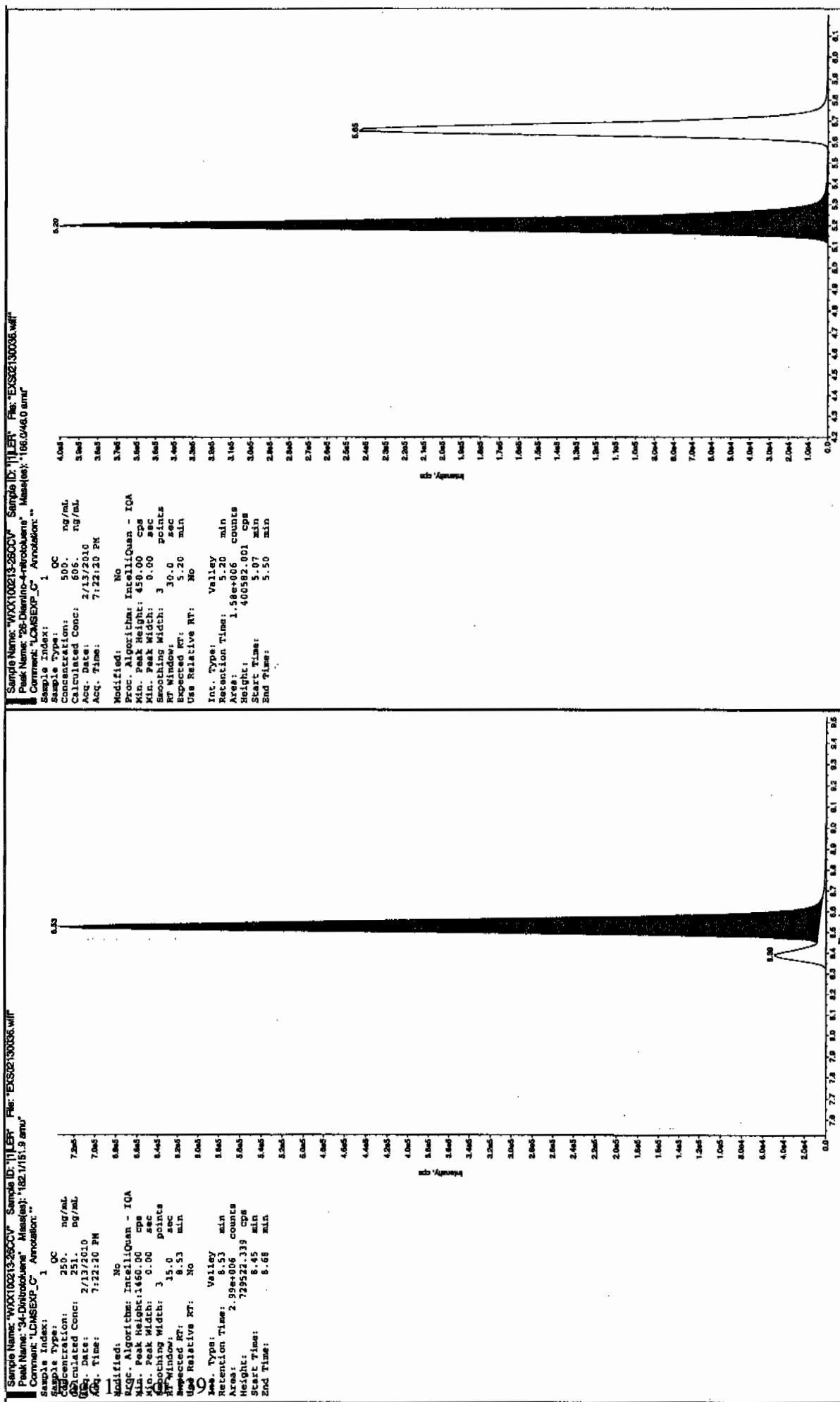
Before Jan 2/15/10

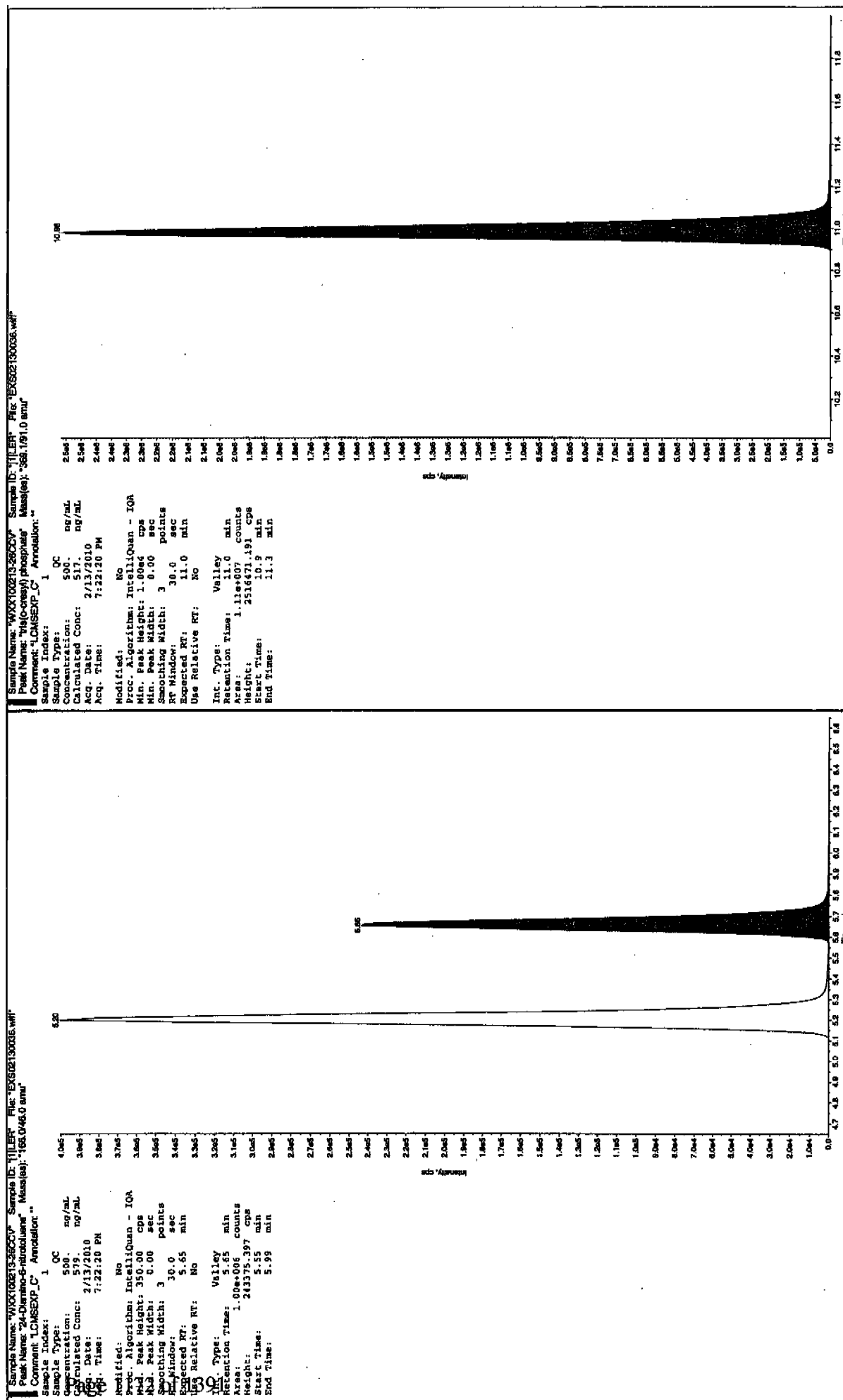


After Jan 2/15/10

after Jan 21/5/10







*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130038.wiff

Analysis Date: 13-FEB-10 19:53

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	130	130	
2,6-Diamino-4-nitrotoluene	100	123	123	
3,4-Dinitrotoluene	50	59.6	119	
3,5-Dinitroaniline	100	133	133	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	107	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

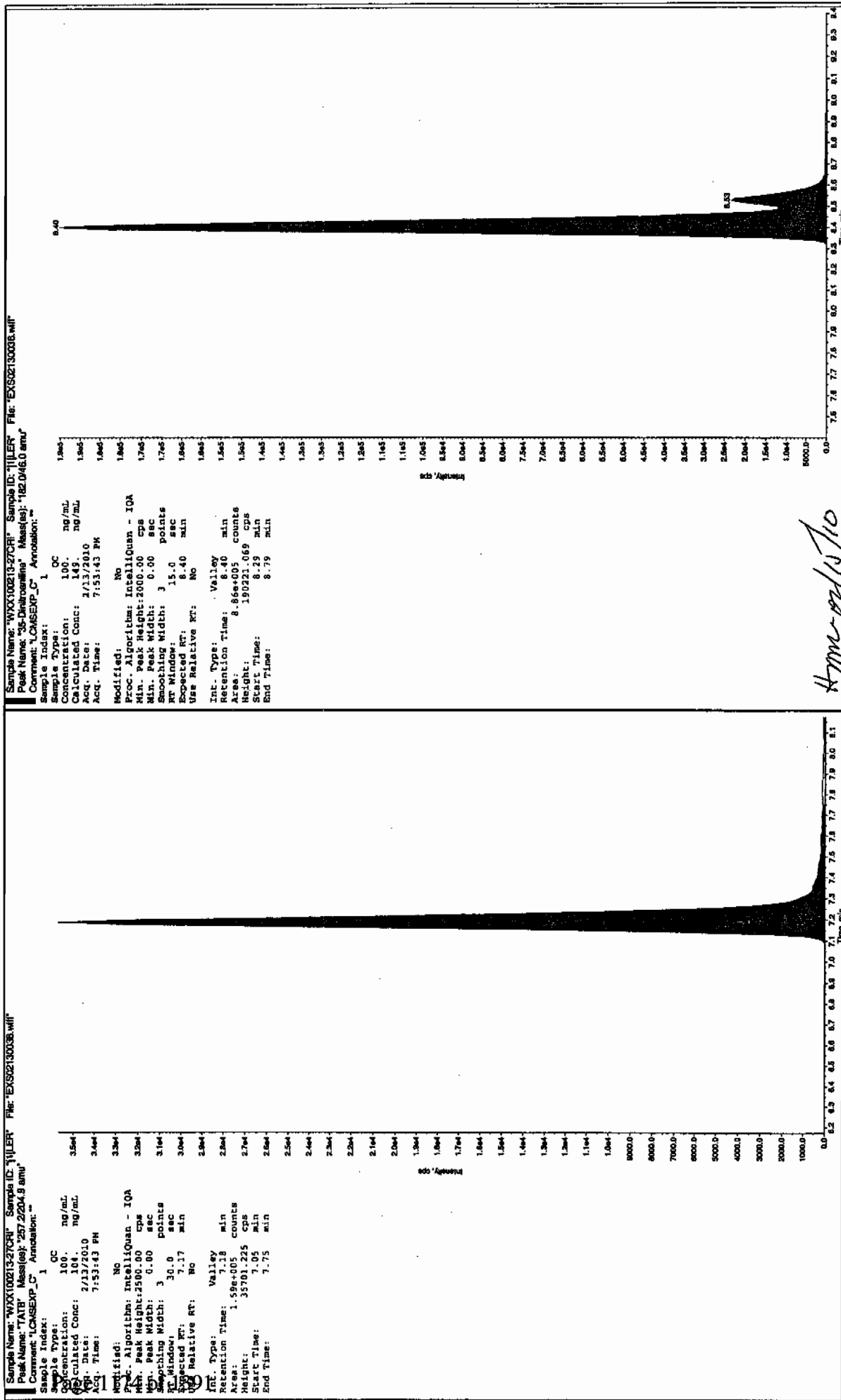
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

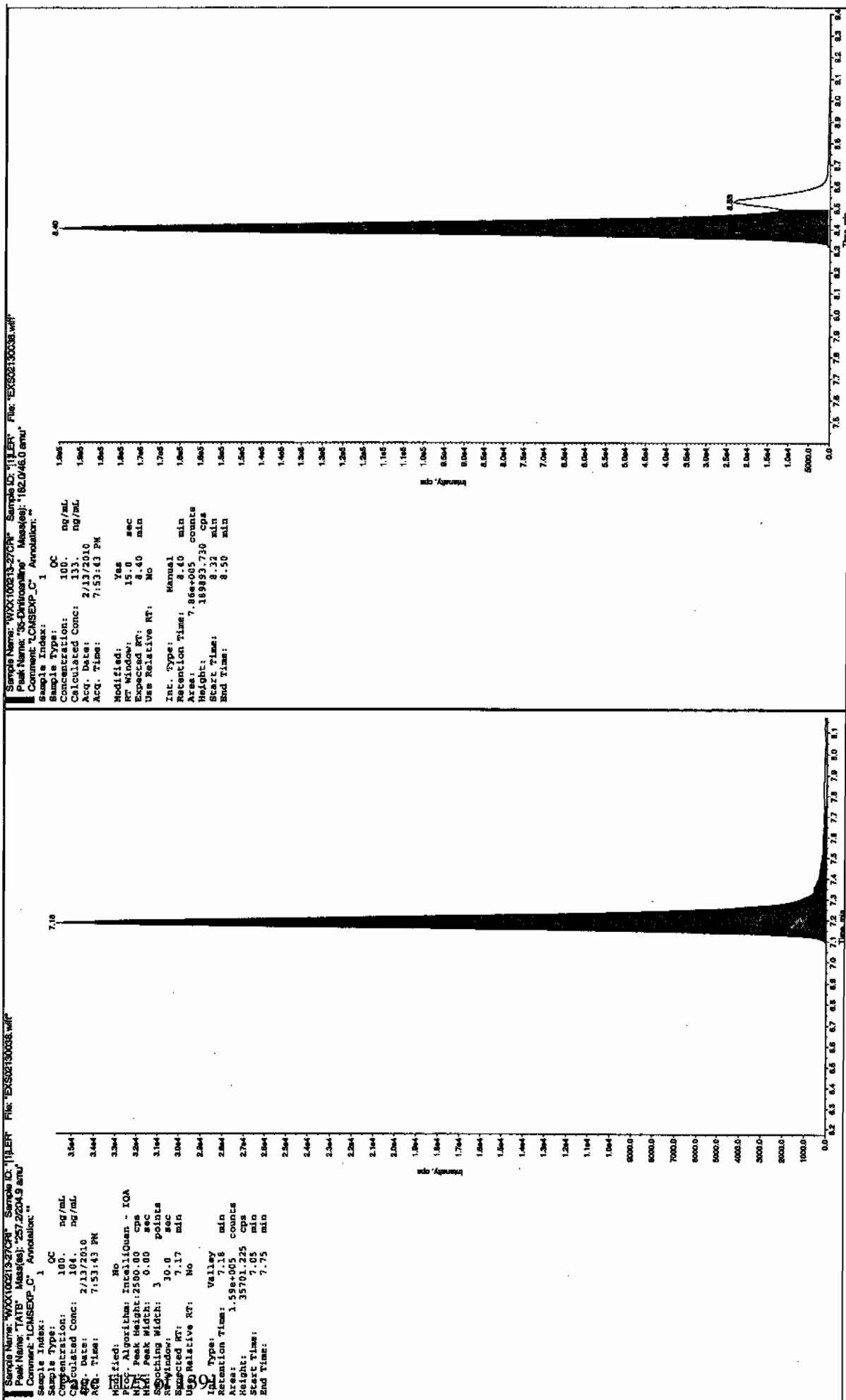
* Value outside of Recovery Limits

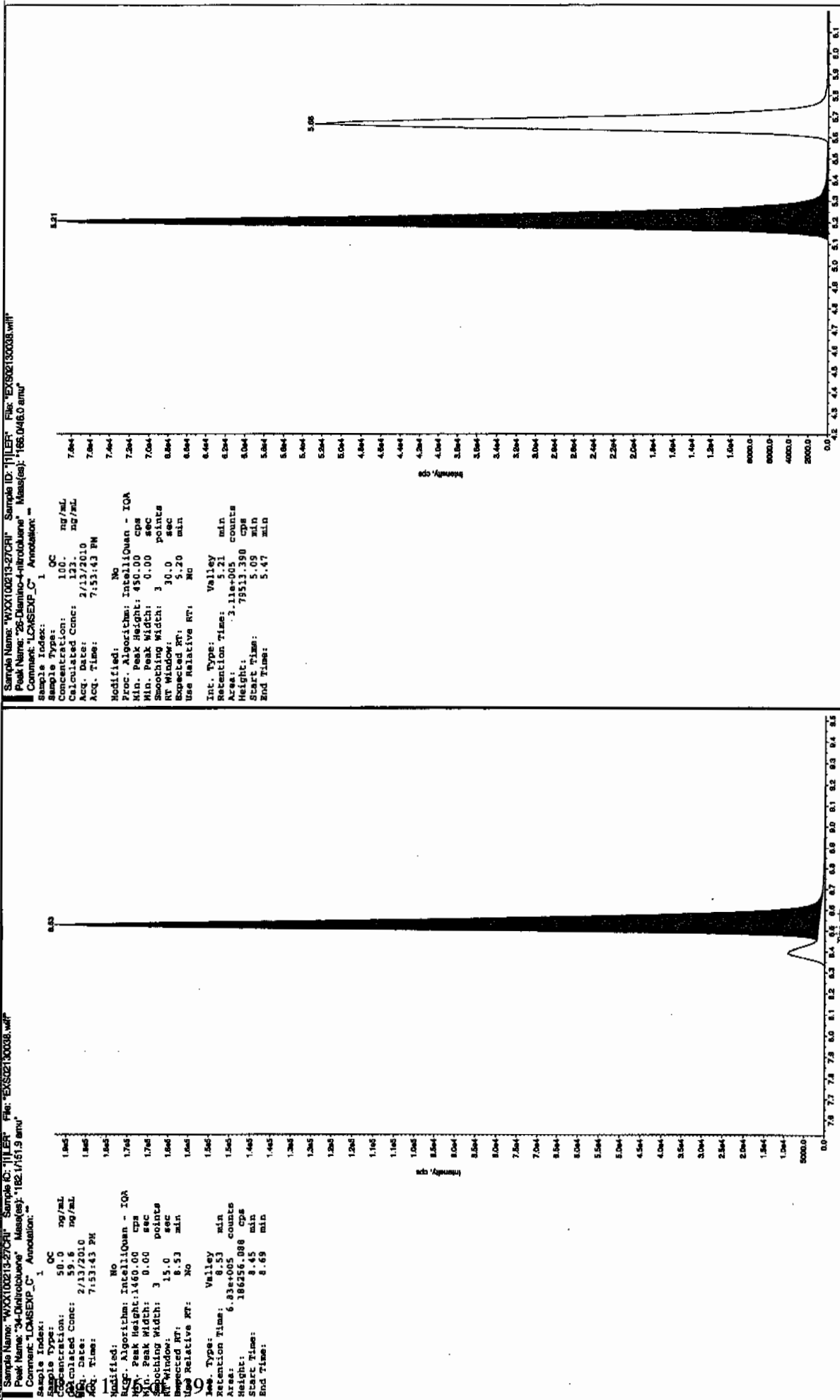
Before Jan 24/5/10

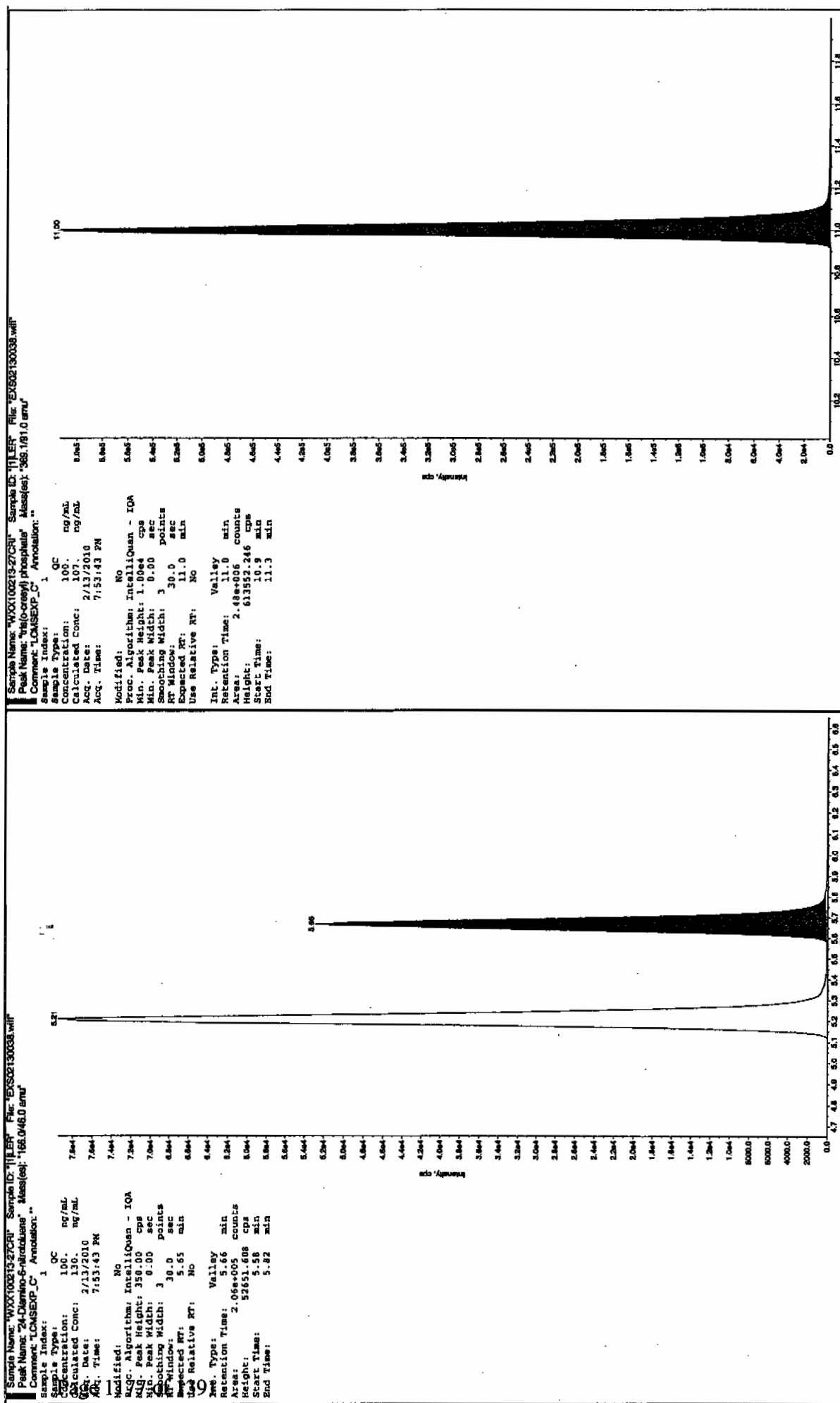


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 21/5/10







7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130049.wiff

Analysis Date: 13-FEB-10 22:46

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	527	105	
2,6-Diamino-4-nitrotoluene	500	575	115	
3,4-Dinitrotoluene	250	261	104	
3,5-Dinitroaniline	500	559	112	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	525	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

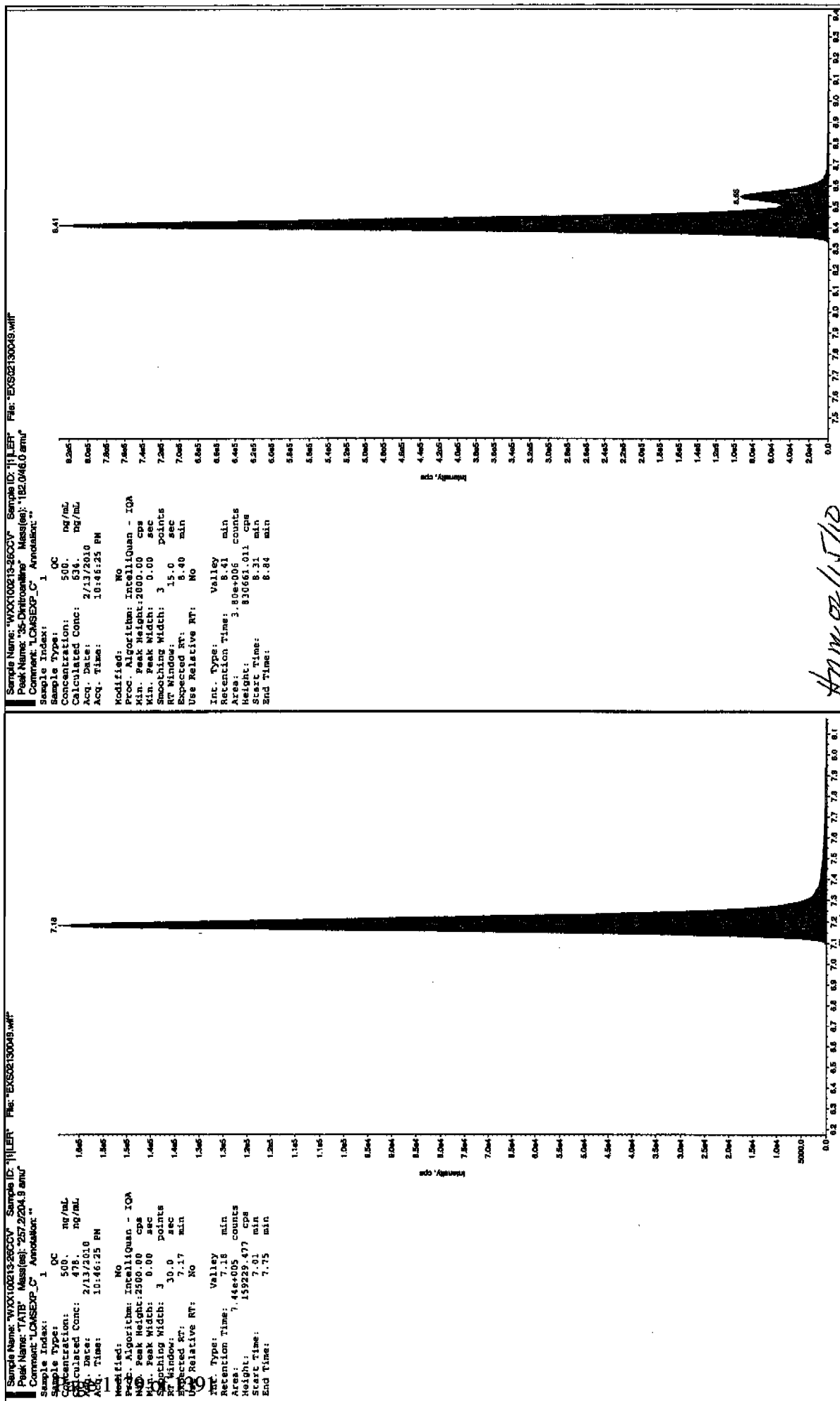
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

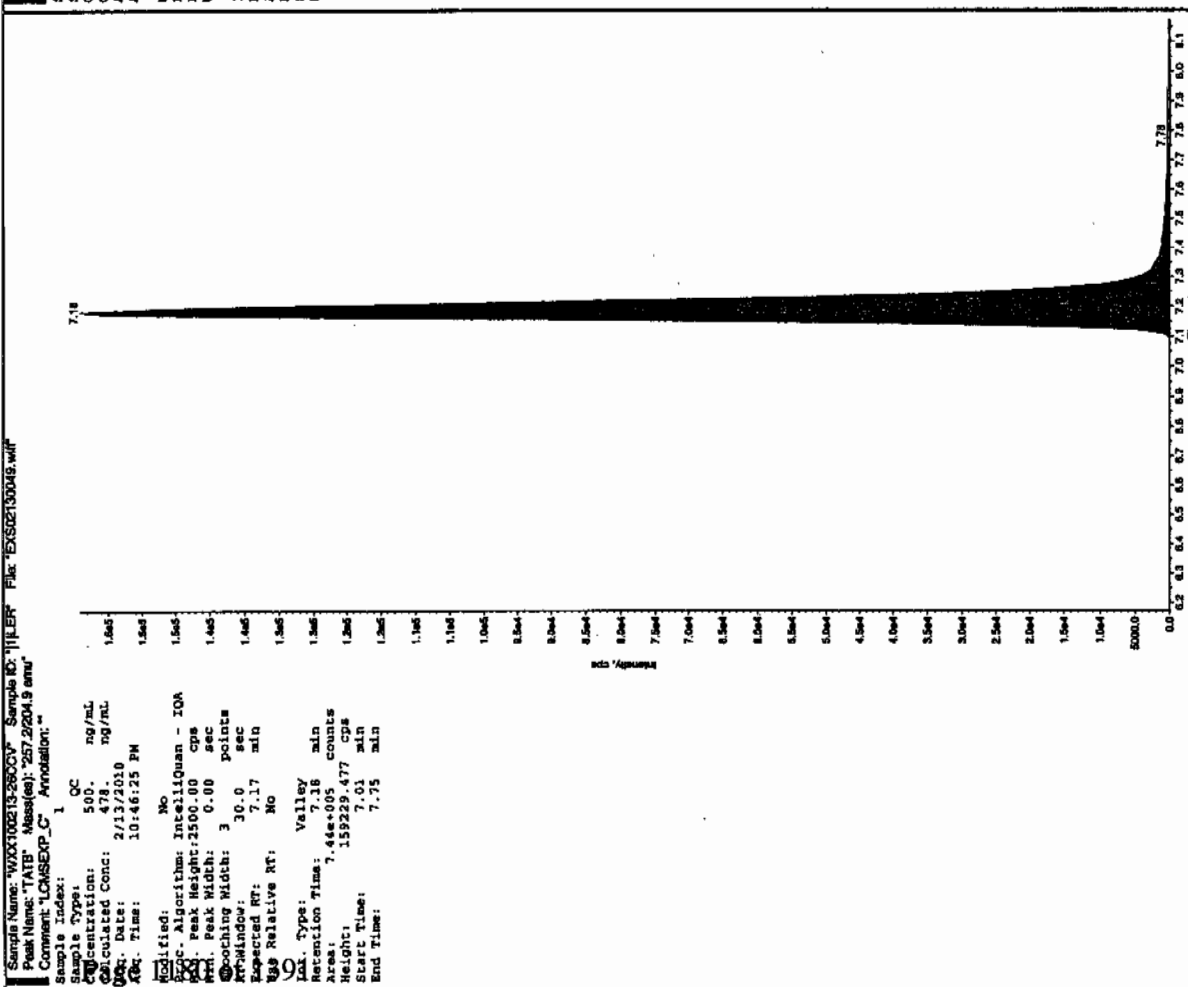
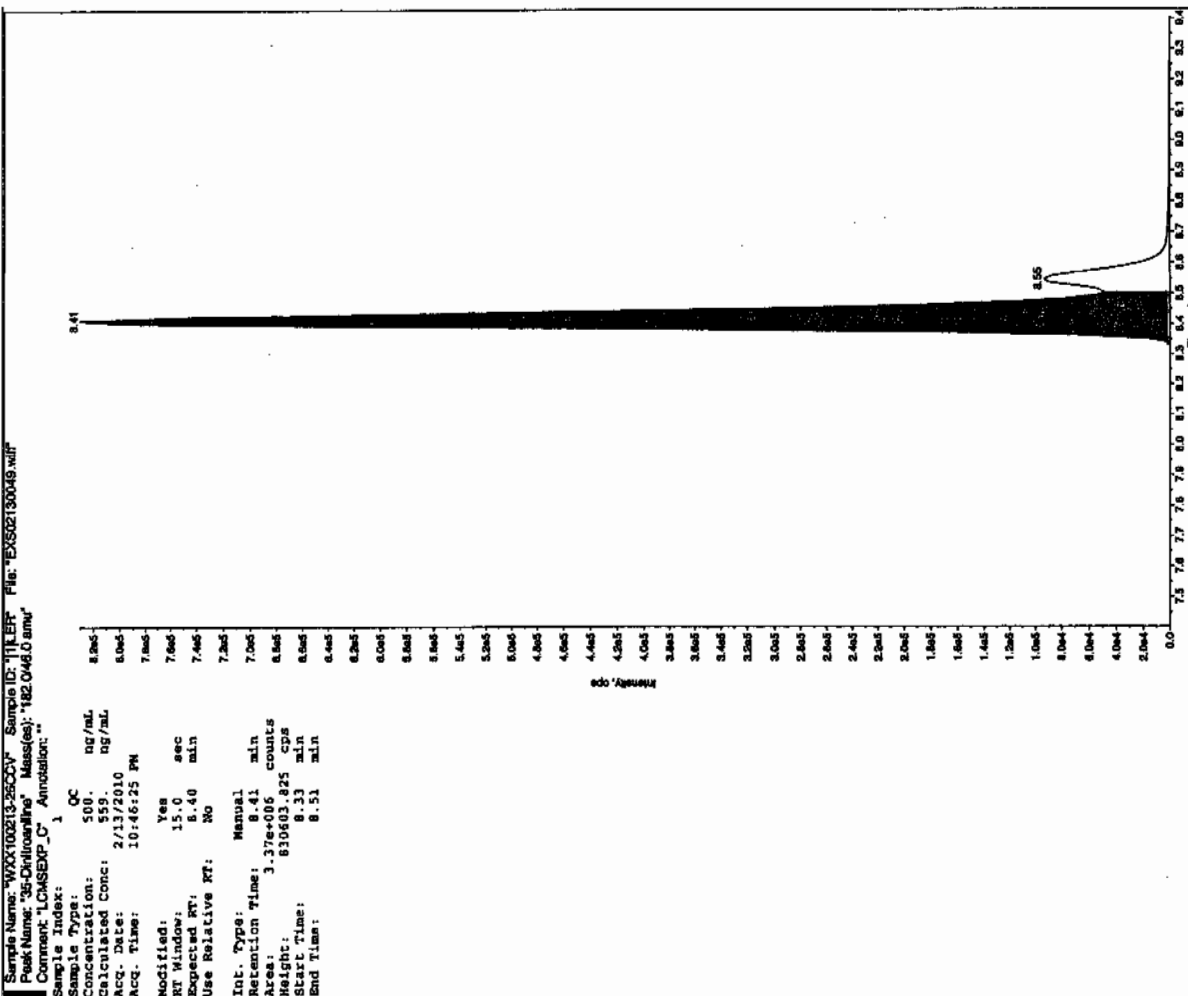
* Value outside of Recovery Limits

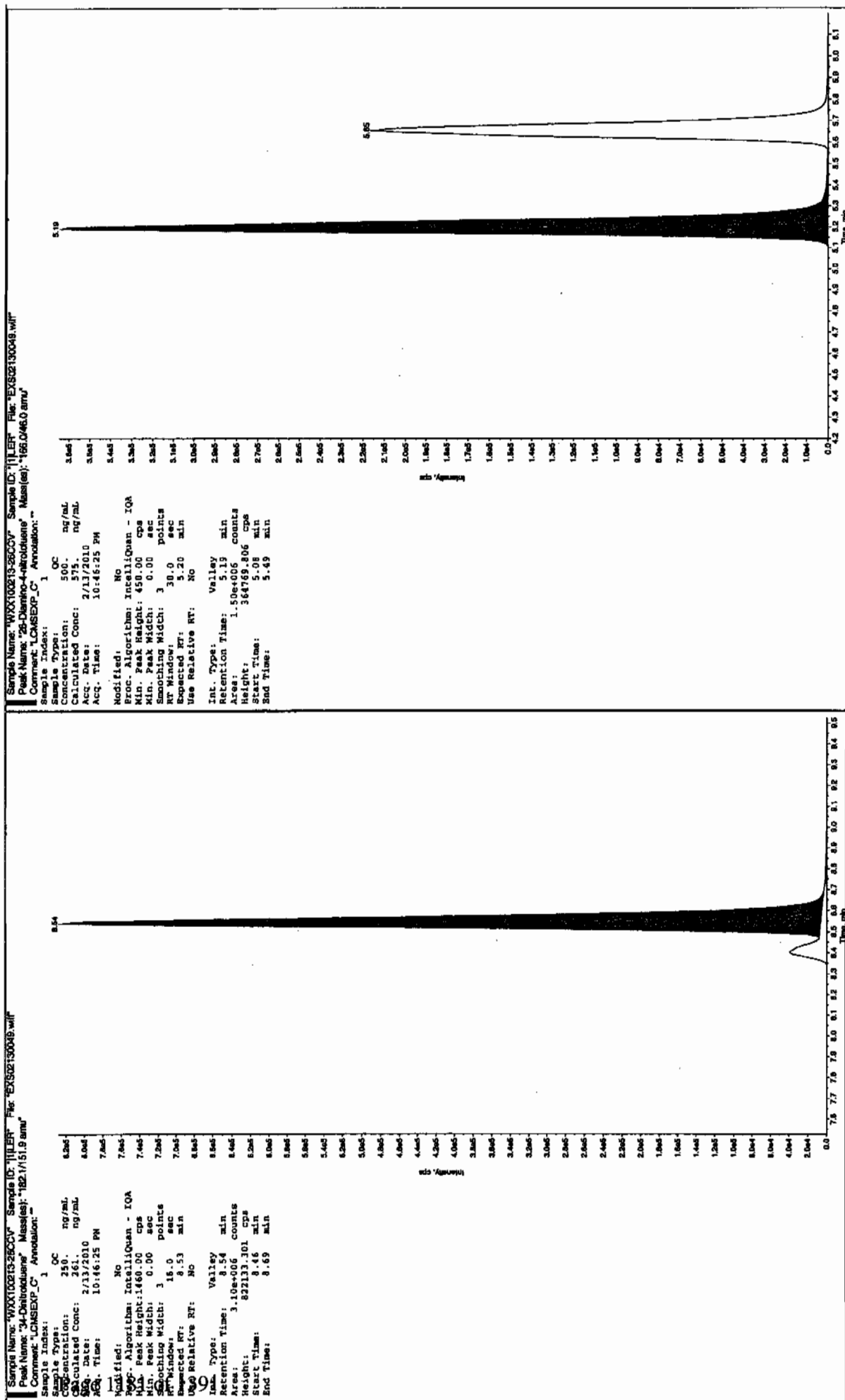
Before Jan 2/15/10

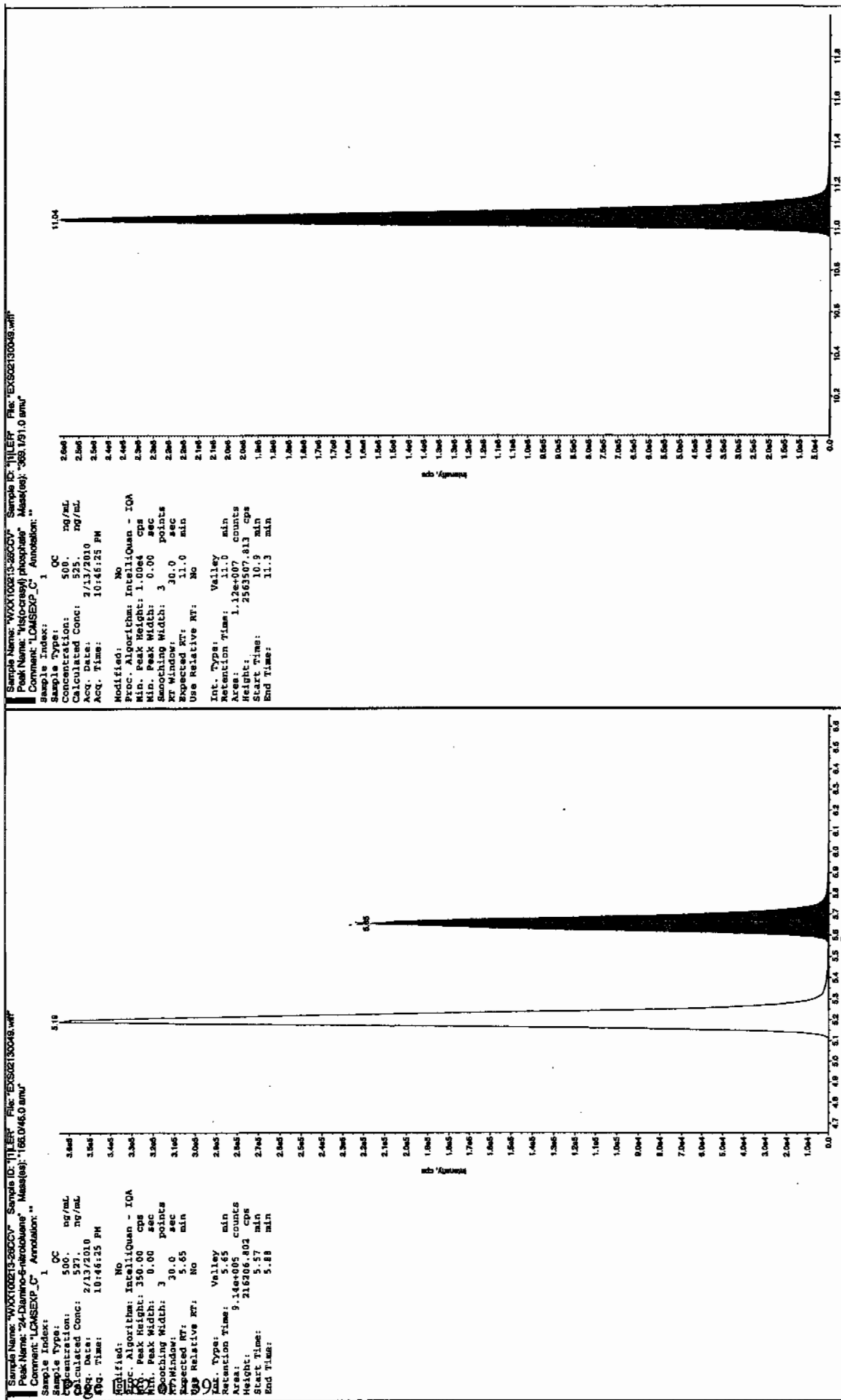


After Jan 2/15/10

after Jan 21/5/10







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130051.wiff

Analysis Date: 13-FEB-10 23:17

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	120	120	
TATB	100	98.8	99	
tris(o-cresyl) phosphate	100	109	109	
3,4-Dinitrotoluene	50	56.7	113	
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	121	121	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

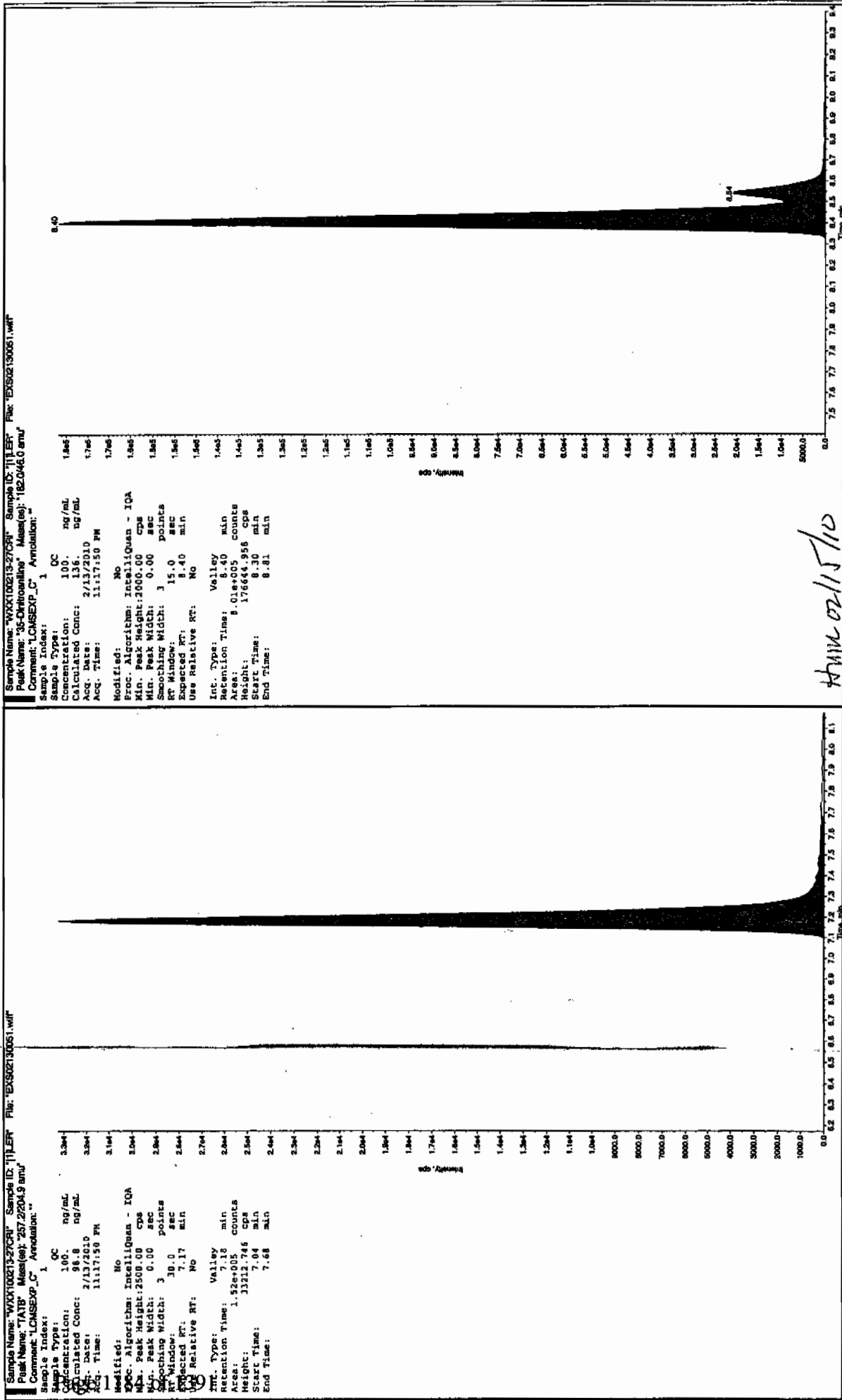
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

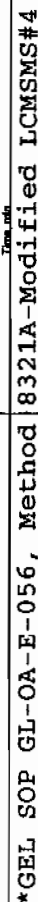
Column used to flag Recovery outside of Limits

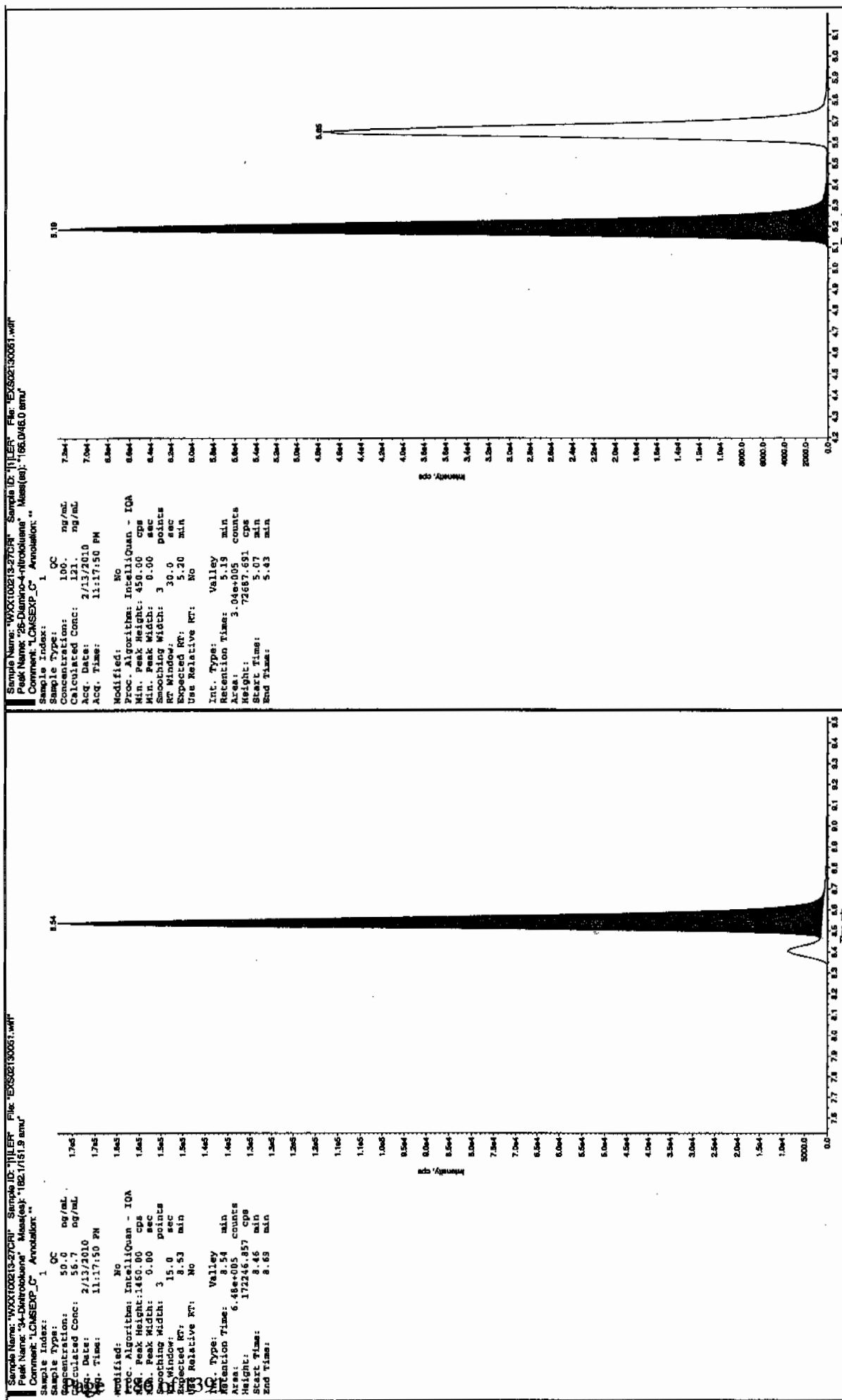
* Value outside of Recovery Limits

Before Jan 21/11

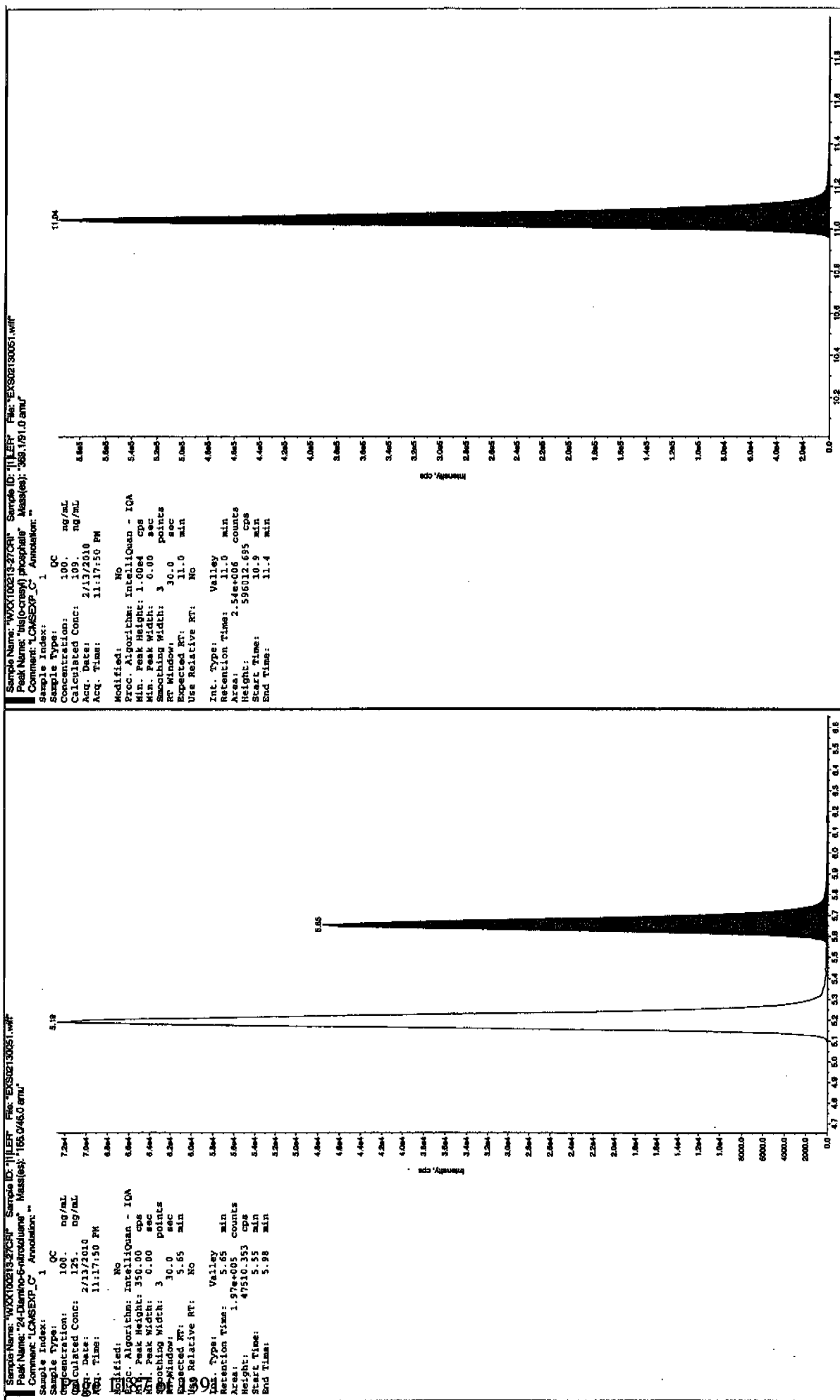


After 02/15/10





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130061.wiff

Analysis Date: 14-FEB-10 01:54

LCMSMS ID: 1358

Column ID JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	557	111	
2,6-Diamino-4-nitrotoluene	500	598	120	
3,4-Dinitrotoluene	250	260	104	
3,5-Dinitroaniline	500	524	105	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	520	104	

Recovery Limits:

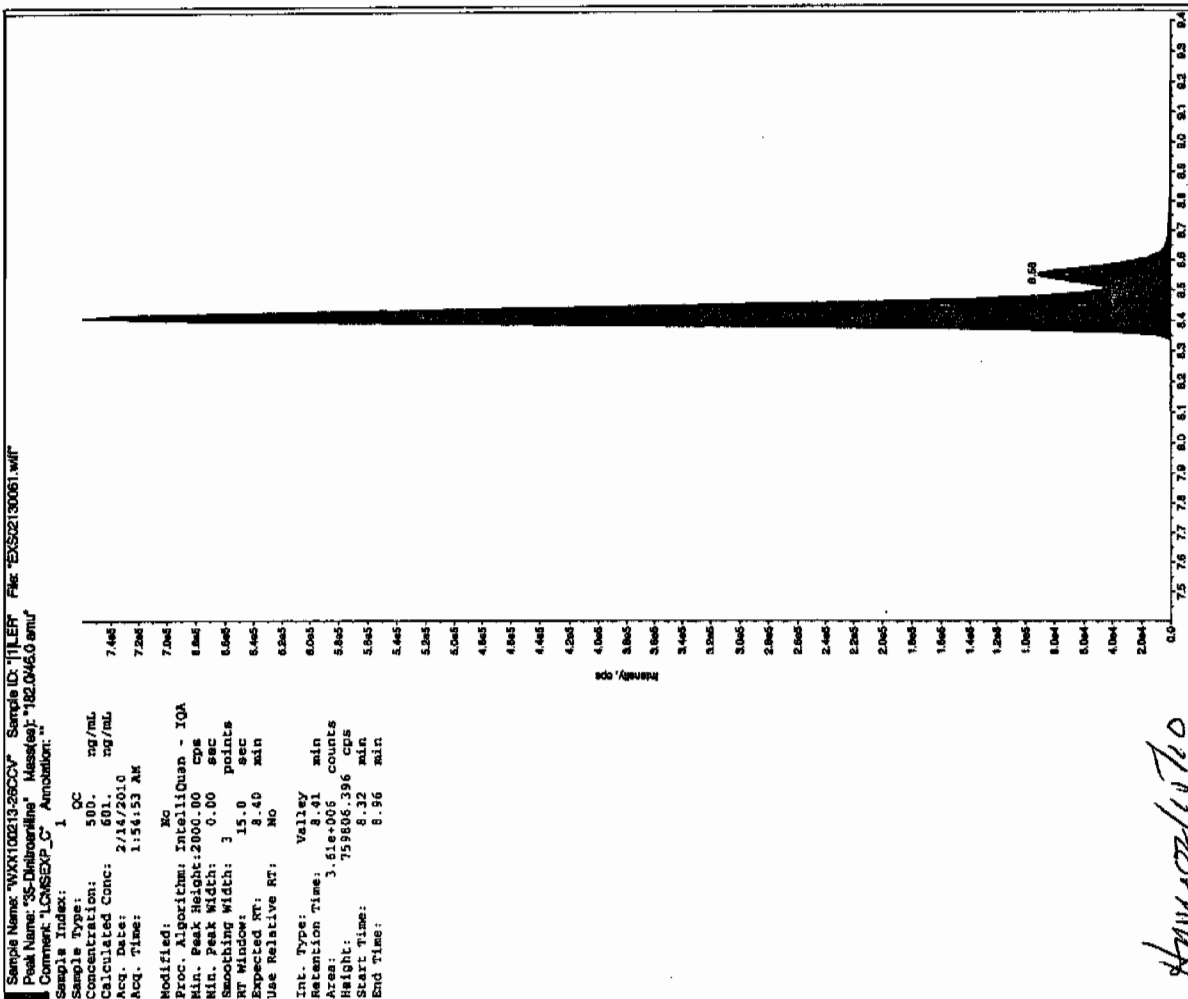
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

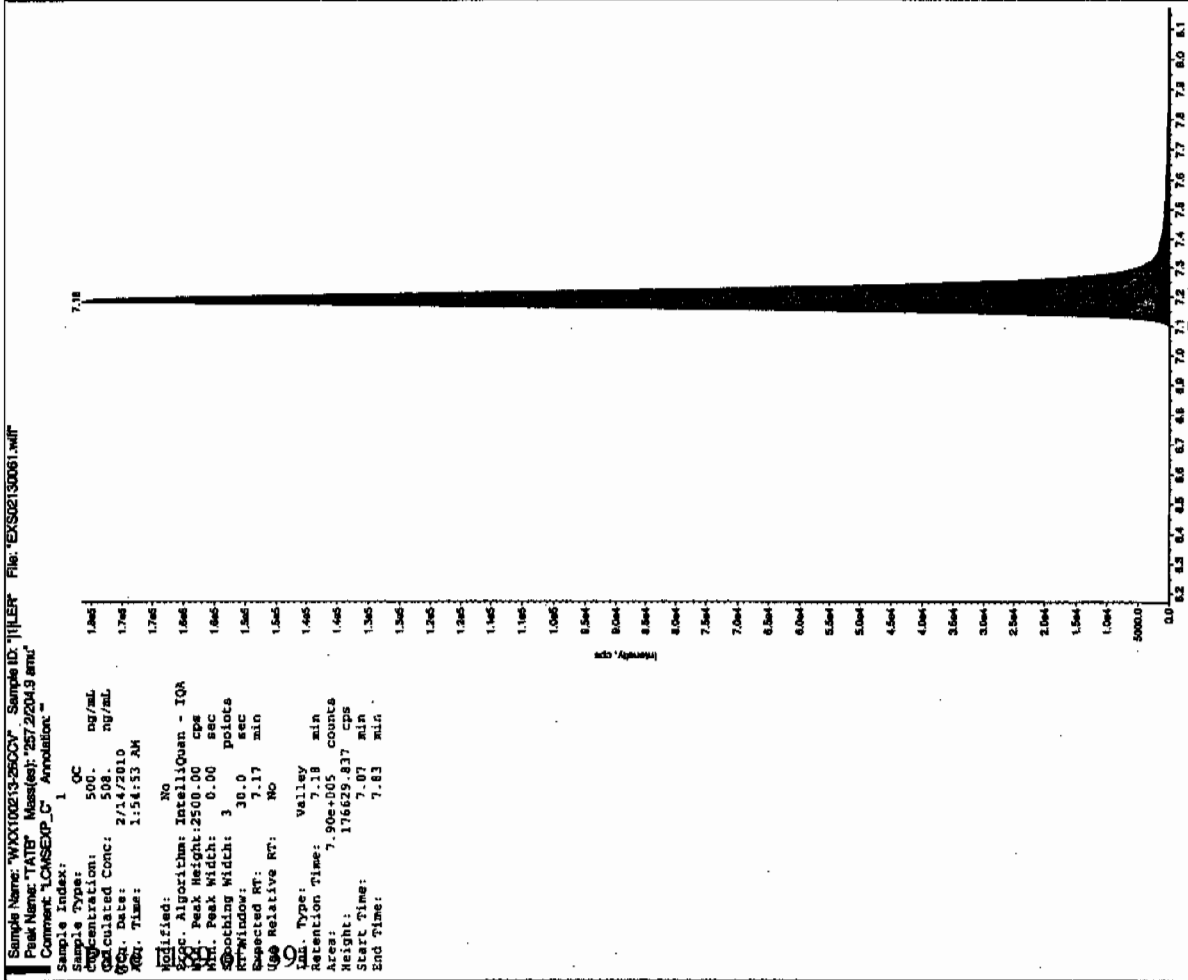
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

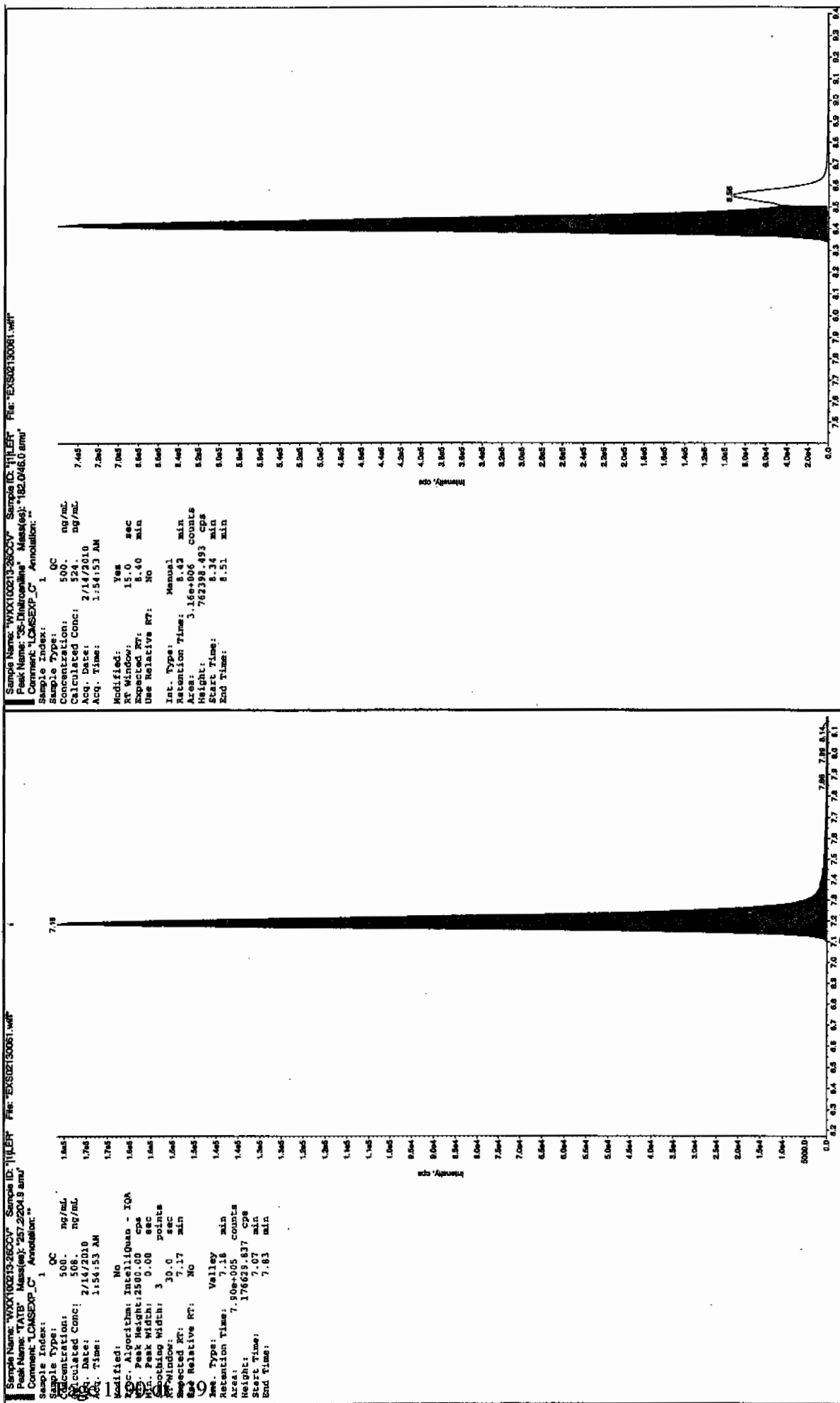
Before Jan 2/15/10

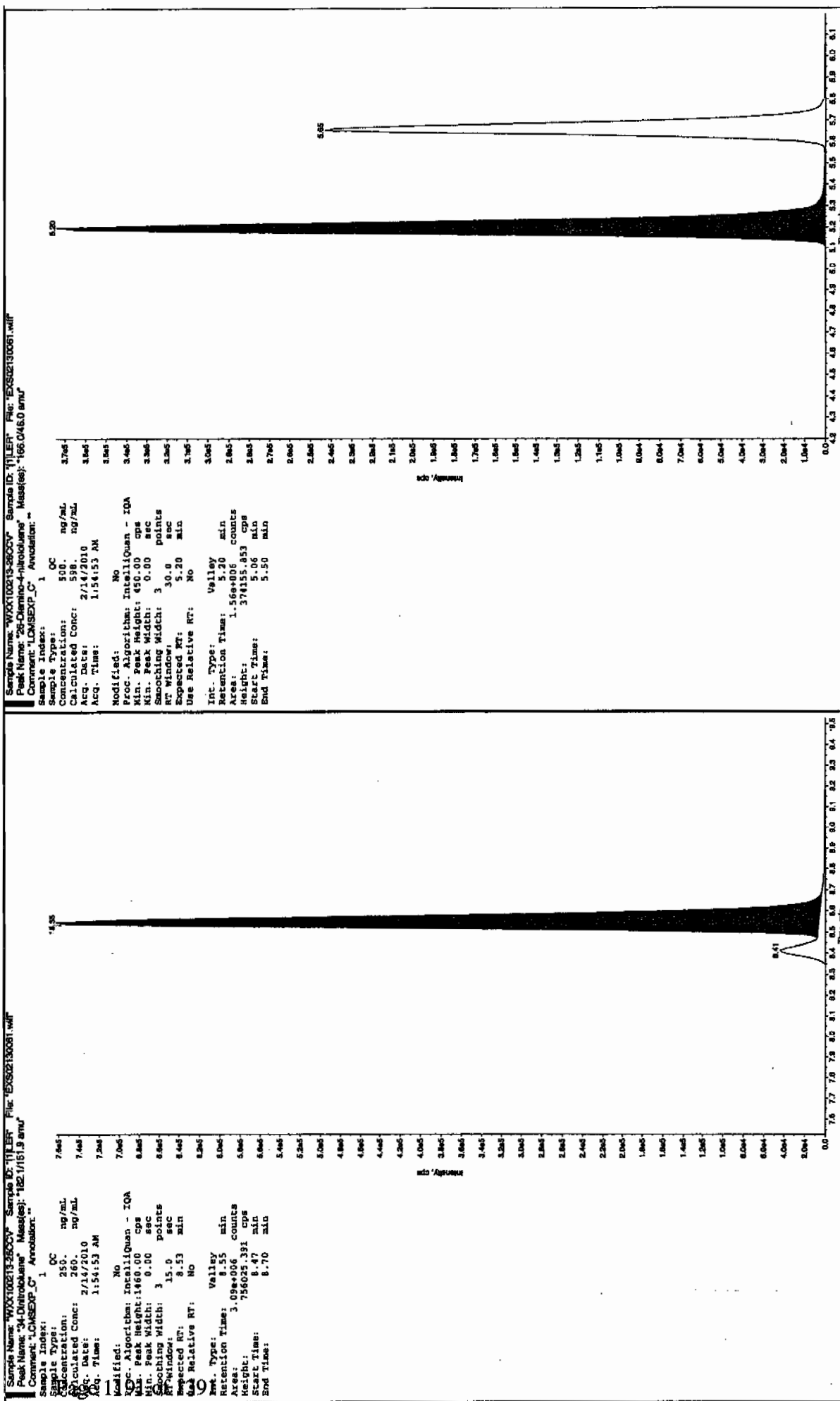


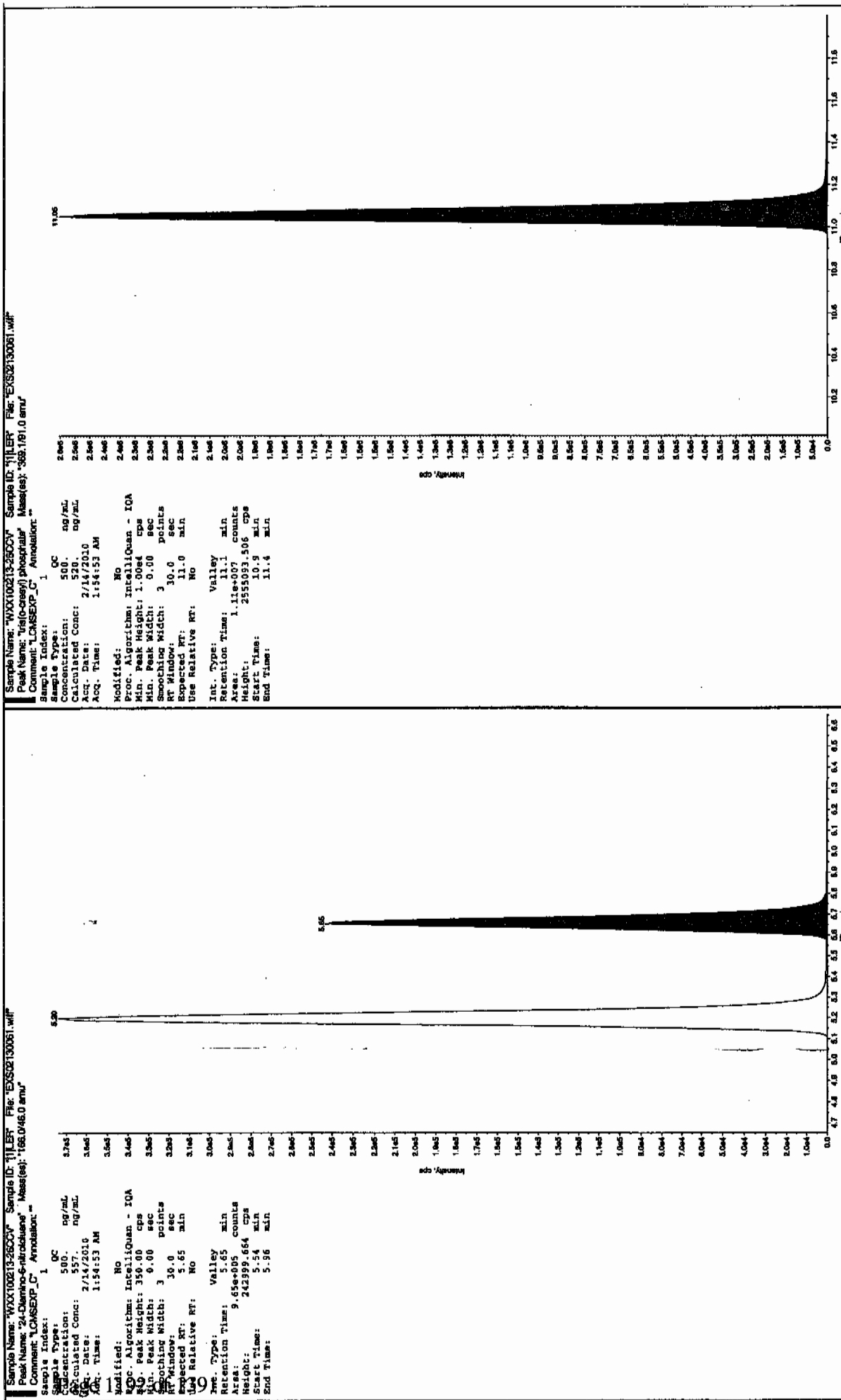
Amended 1/15/10



after Jan 21/11







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130063.wiff

Analysis Date: 14-FEB-10 02:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	122	122	
3,4-Dinitrotoluene	50	55.2	110	
3,5-Dinitroaniline	100	117	117	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	108	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

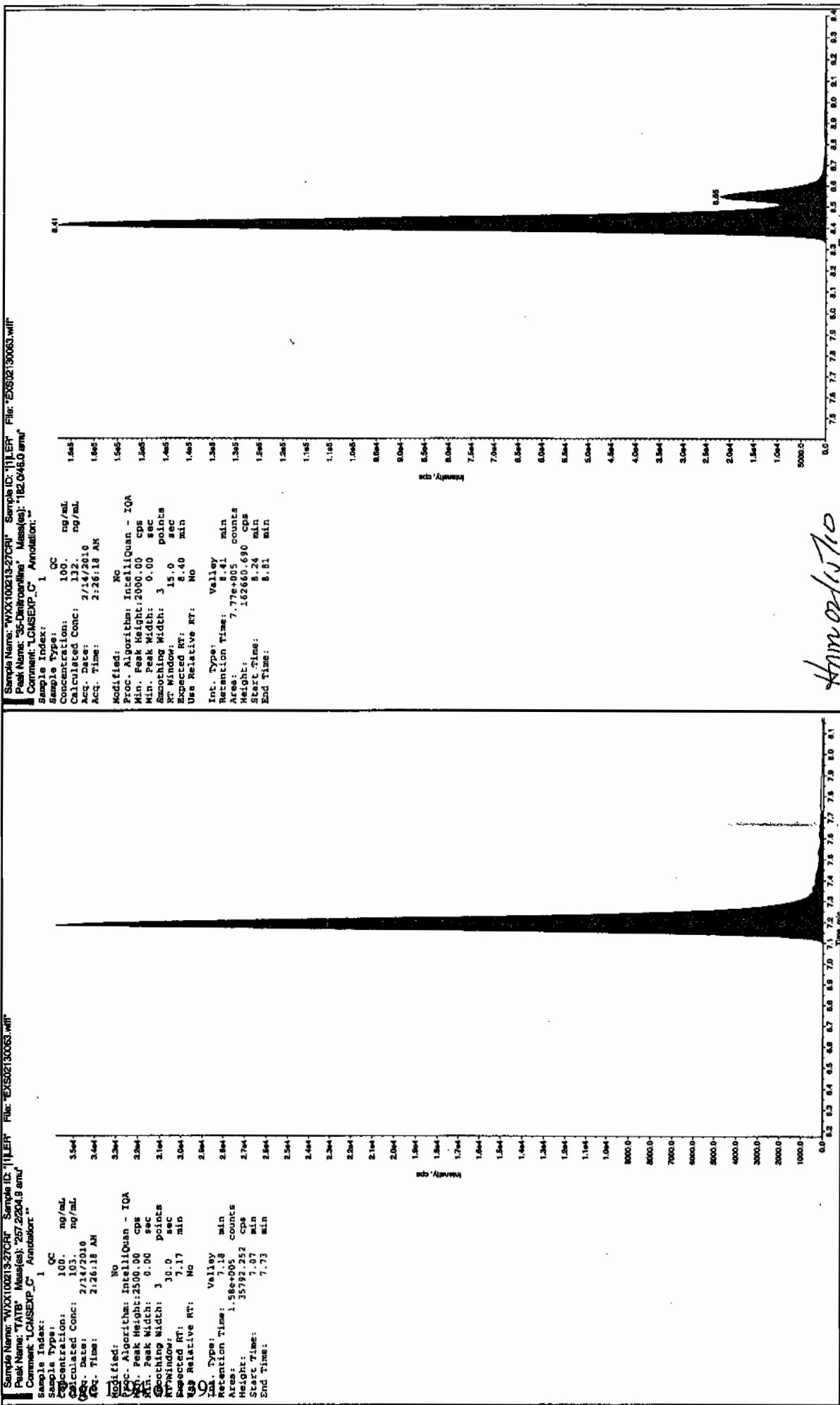
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

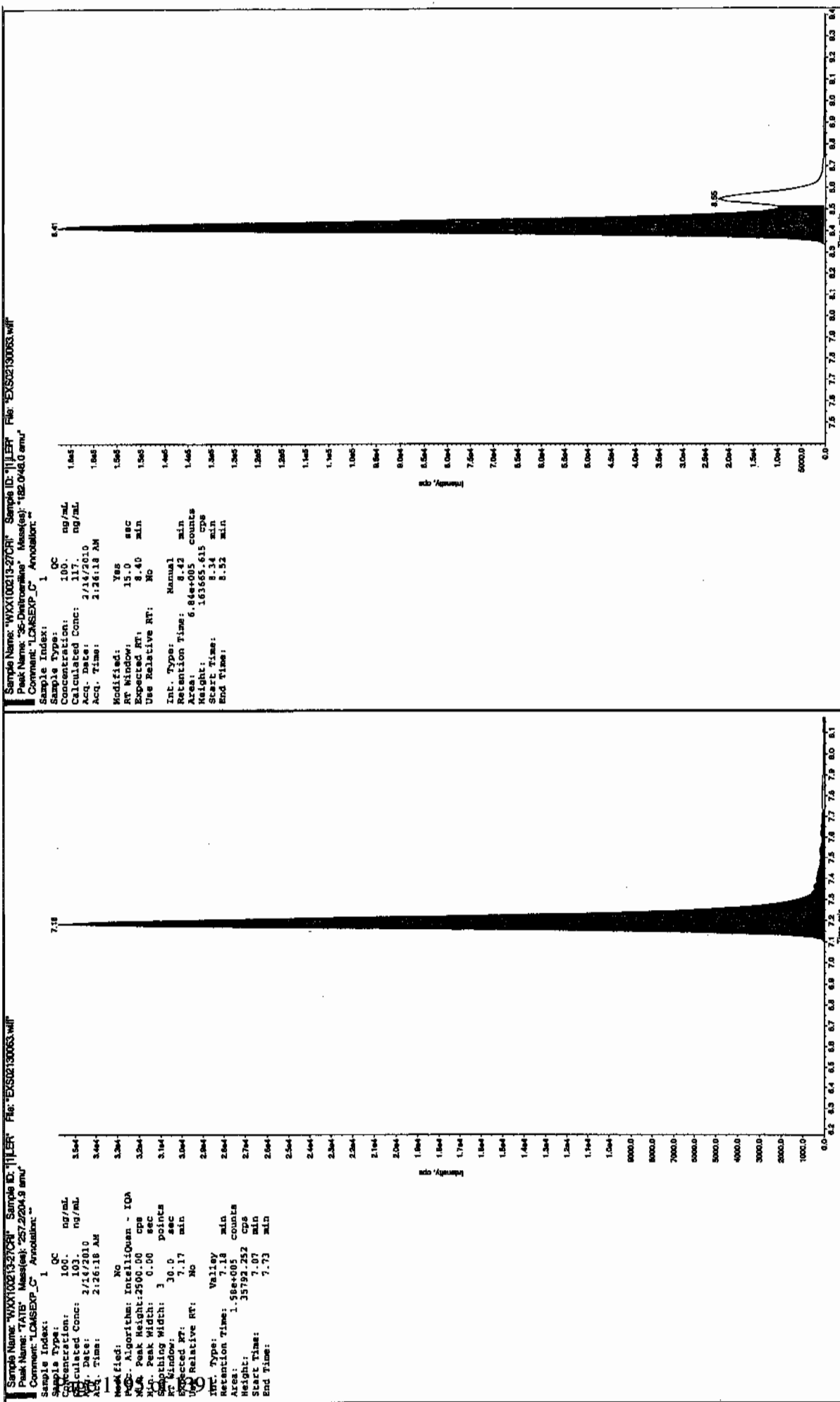
* Value outside of Recovery Limits

Before Jan 2/15/10

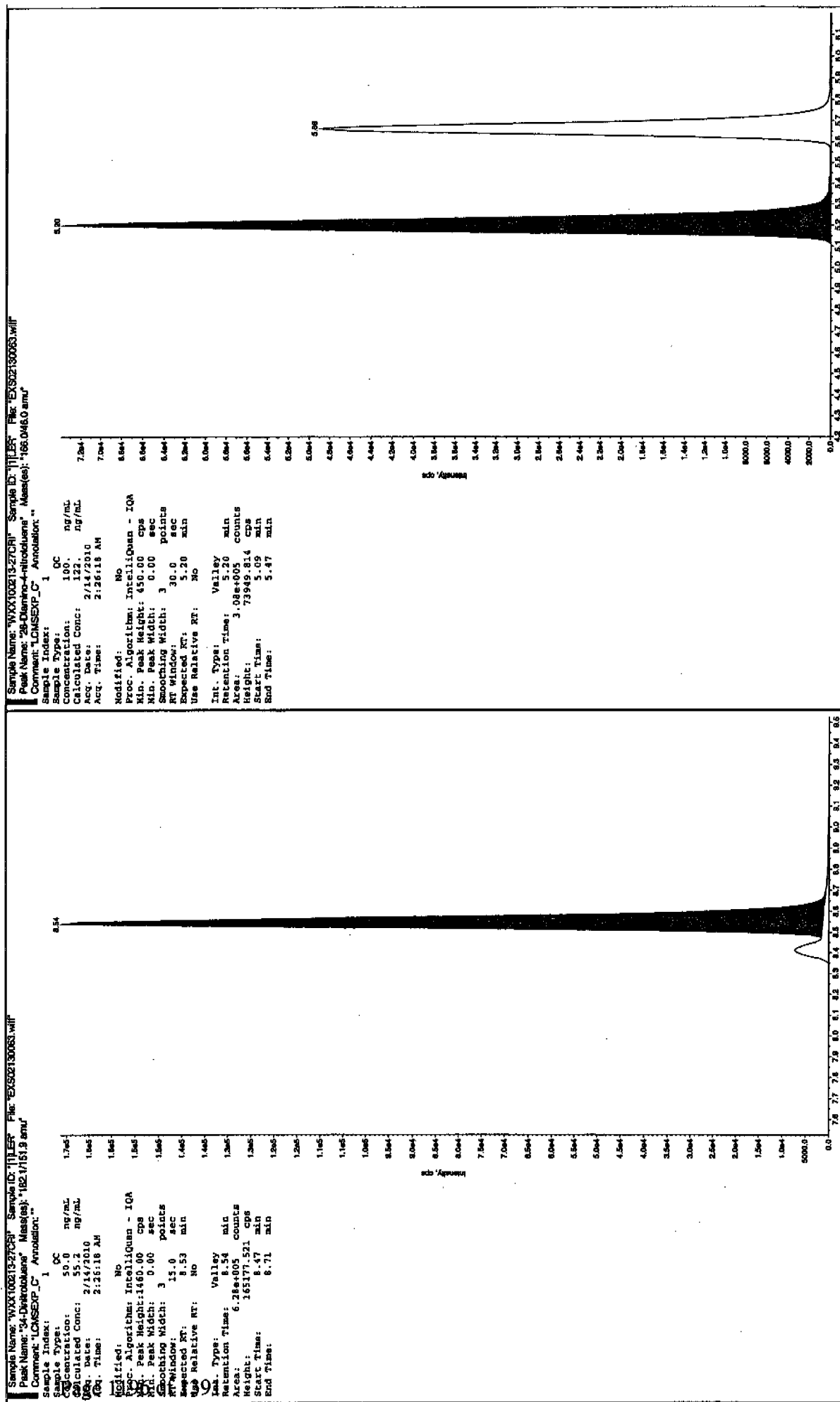


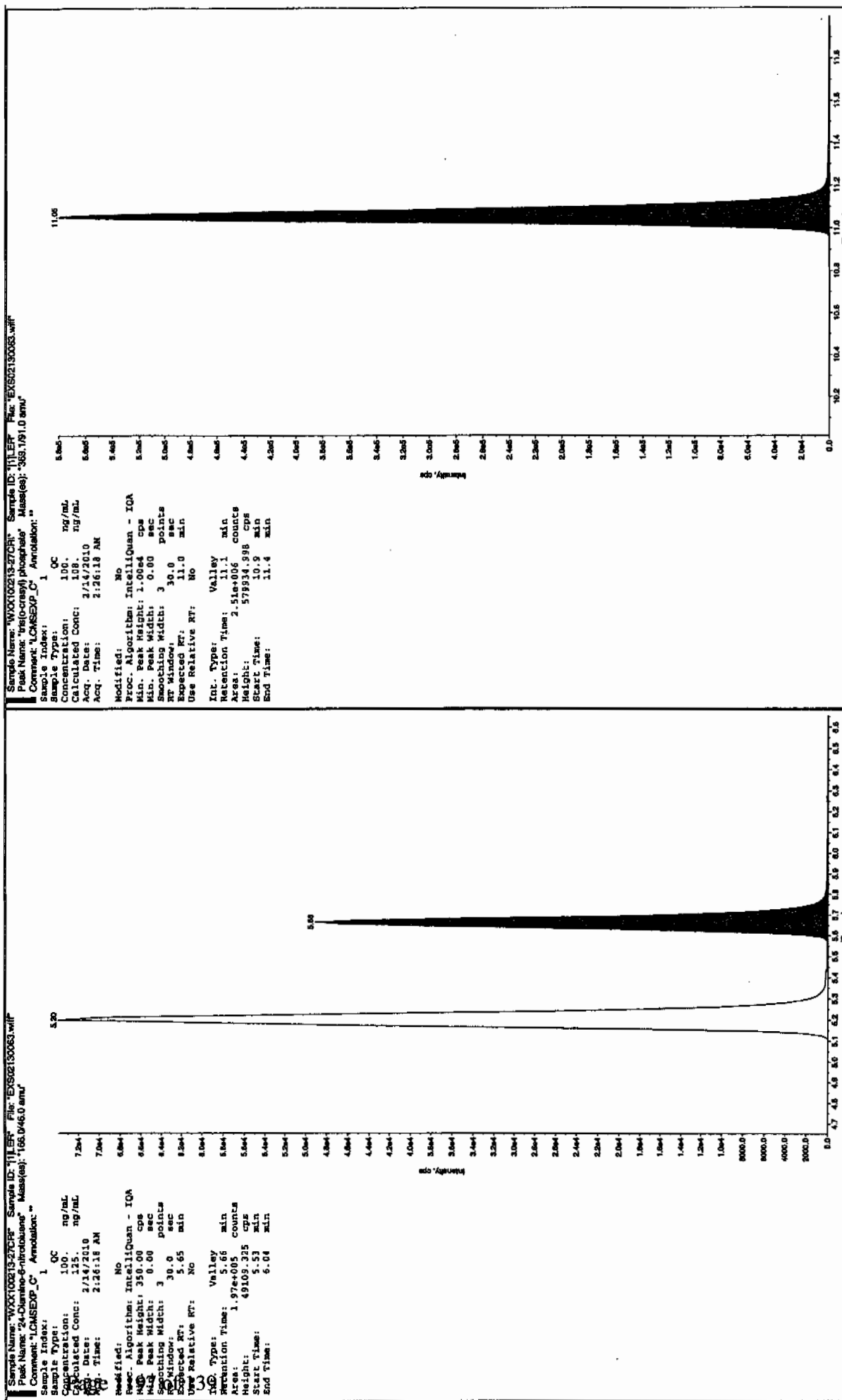
After Jan 2/15/10

after Jan 21/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130074.wiff

Analysis Date: 14-FEB-10 05:19

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	585	117	
2,6-Diamino-4-nitrotoluene	500	592	118	
3,4-Dinitrotoluene	250	268	107	
3,5-Dinitroaniline	500	576	115	
TATB	500	505	101	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

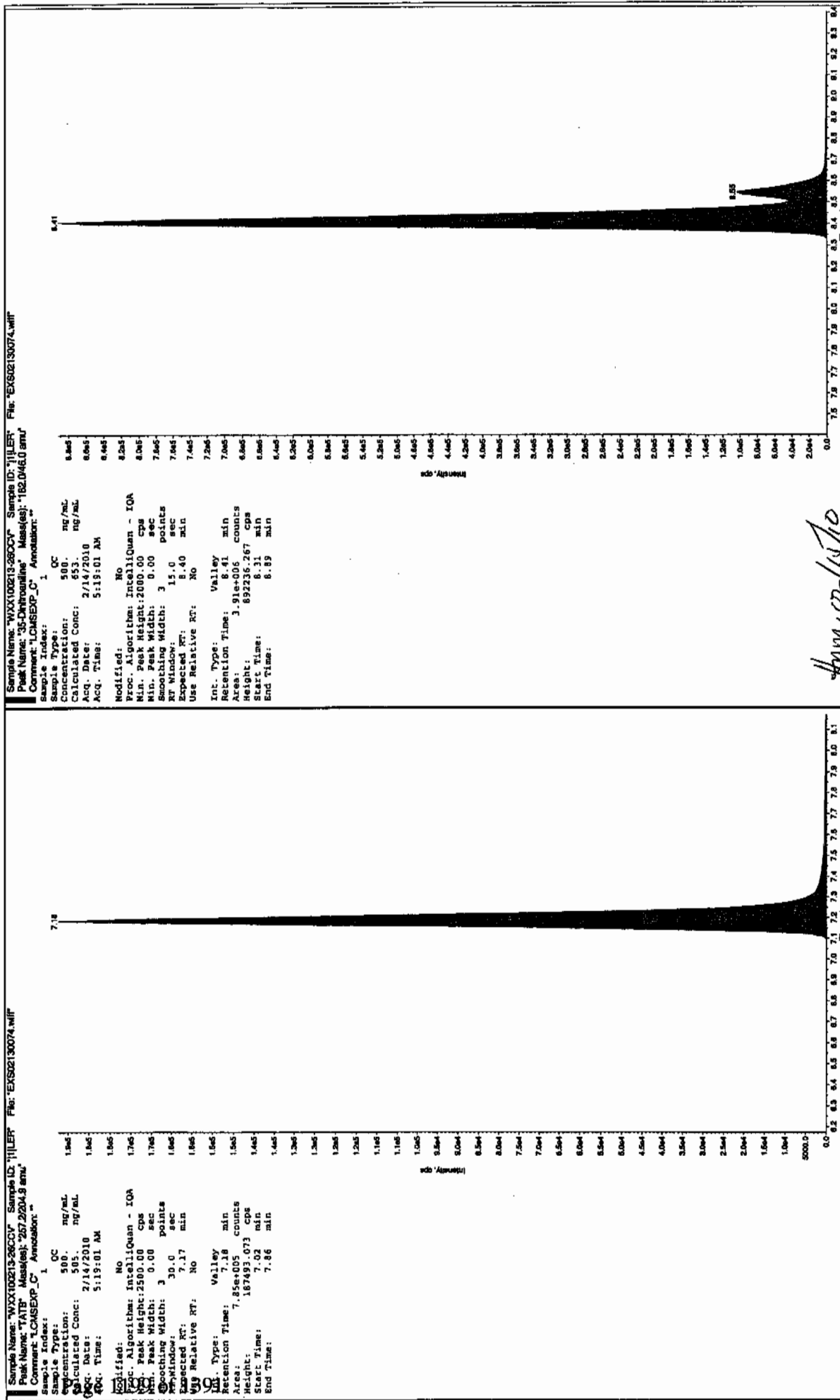
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

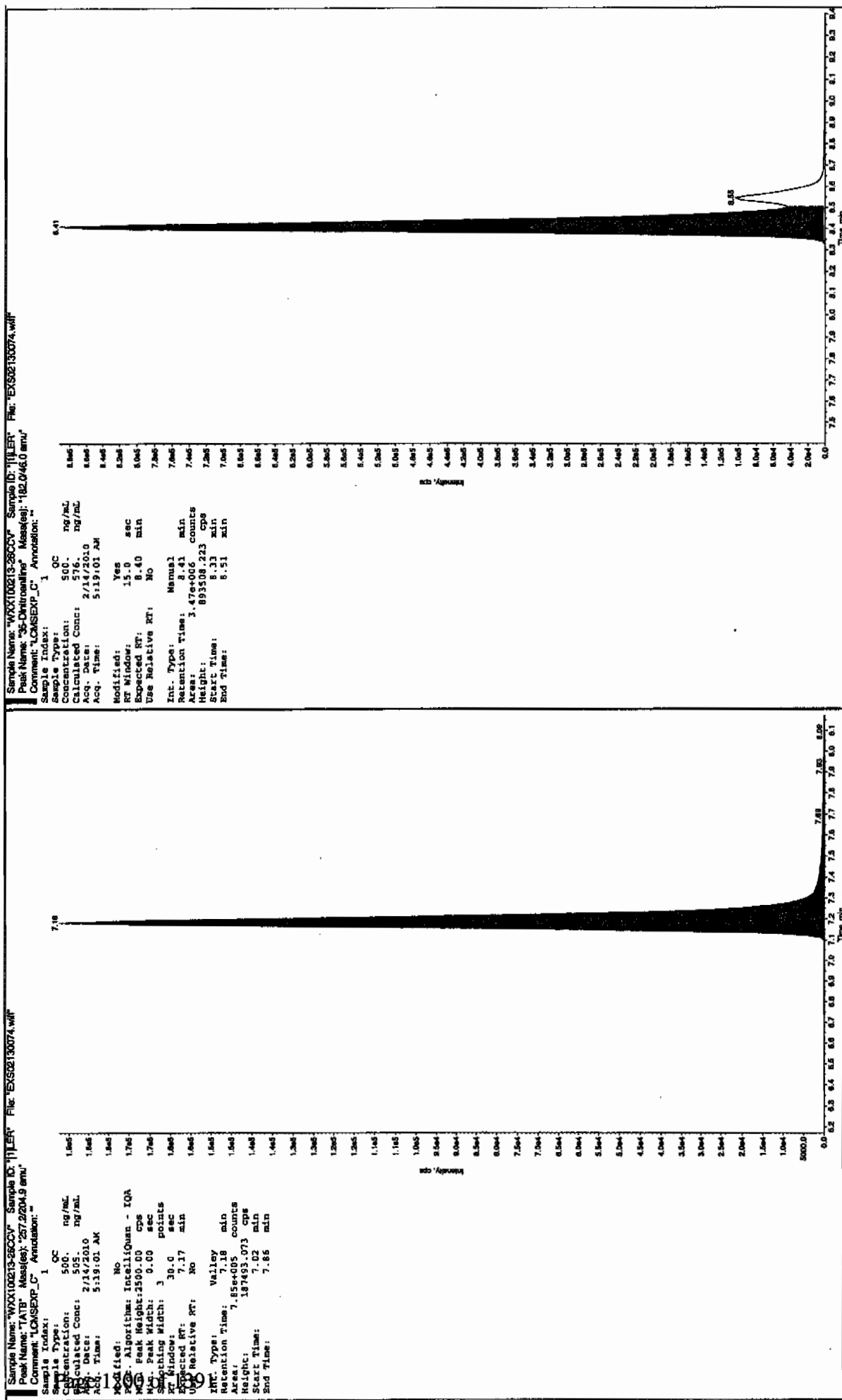
* Value outside of Recovery Limits

Before Scan 2/15/10

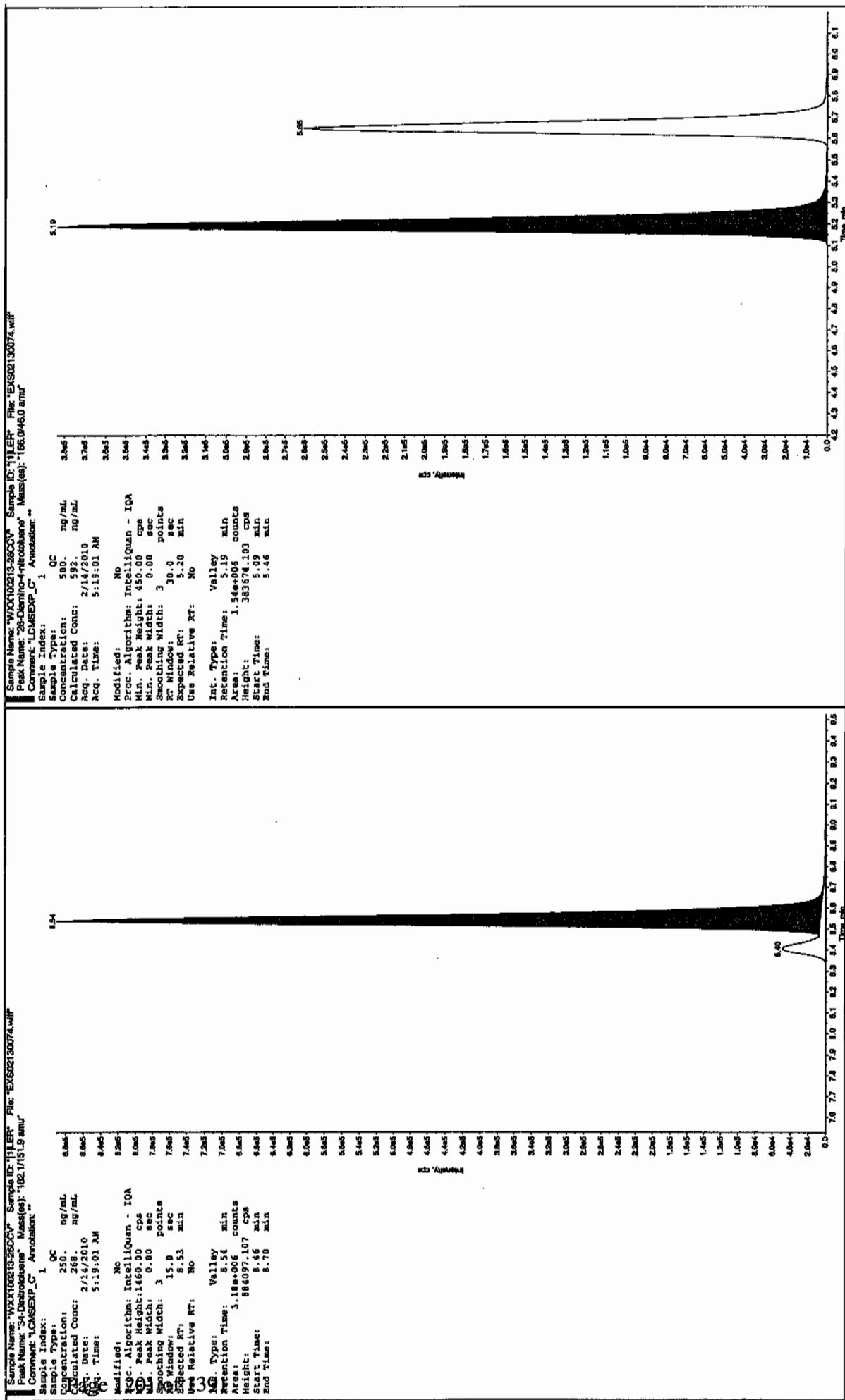


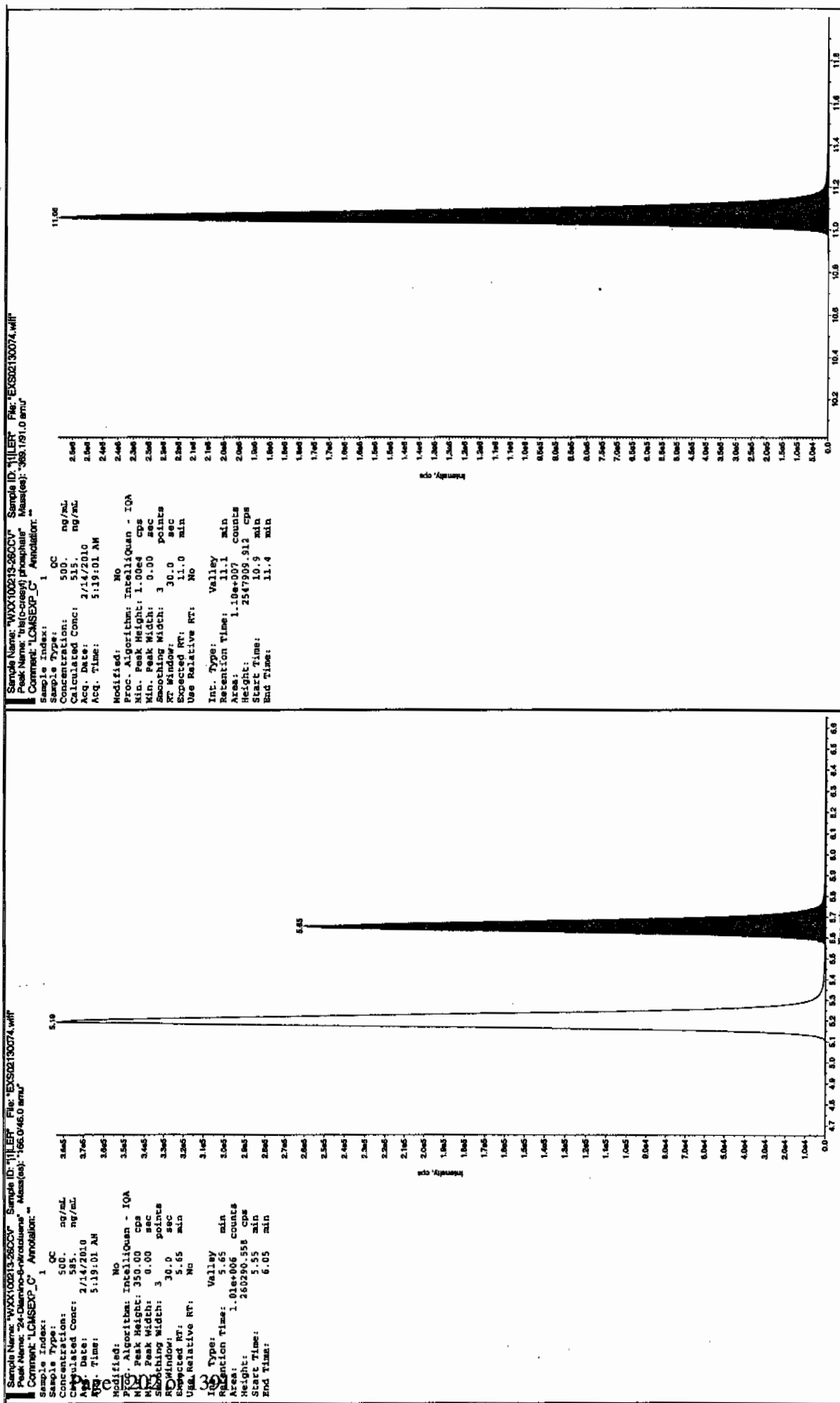
After Scan 2/15/10

after Jan 2/15/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130076.wiff

Analysis Date: 14-FEB-10 05:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	120	120	
2,6-Diamino-4-nitrotoluene	100	121	121	
3,4-Dinitrotoluene	50	55.7	111	
3,5-Dinitroaniline	100	127	127	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	108	108	

Recovery Limits:

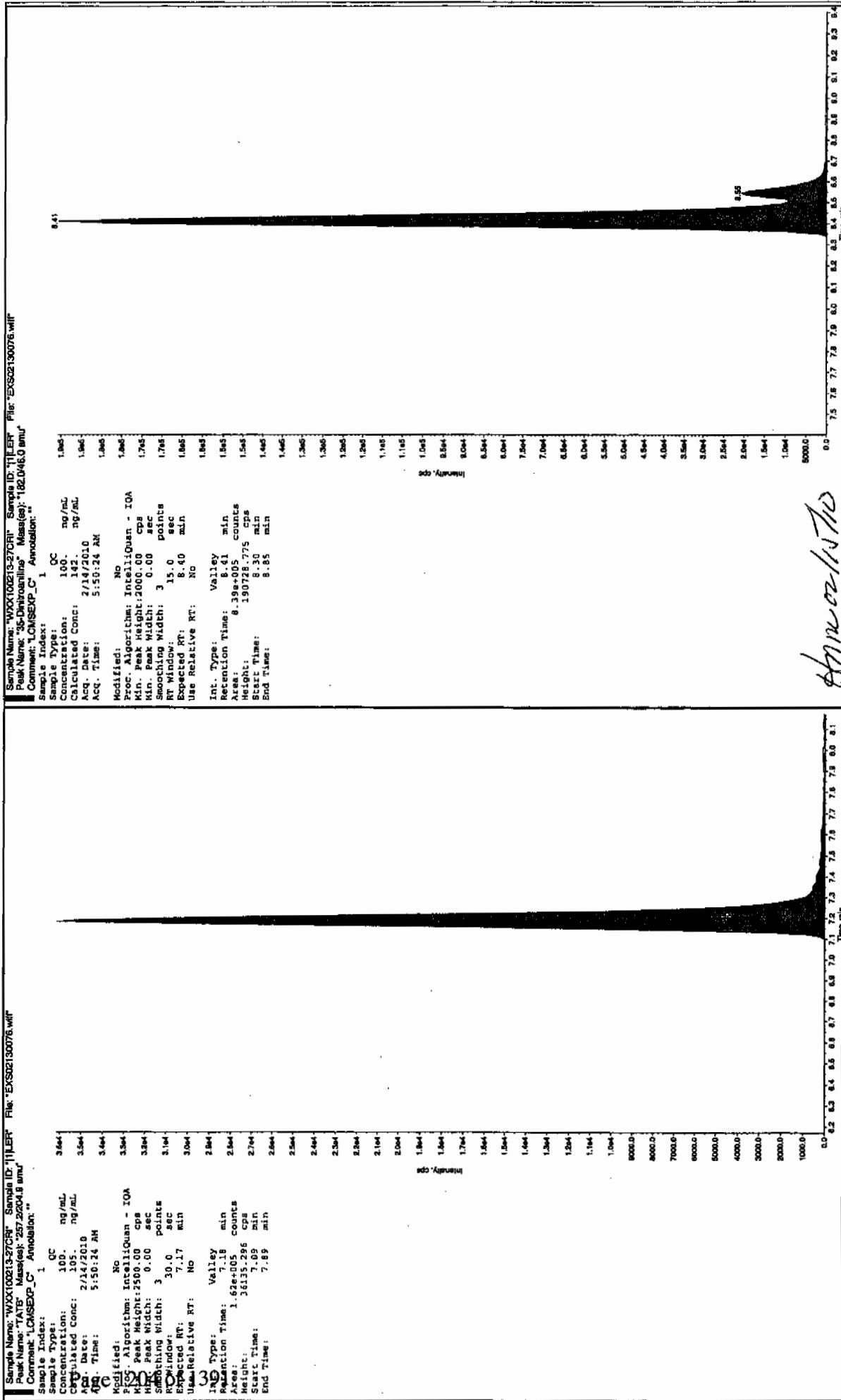
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

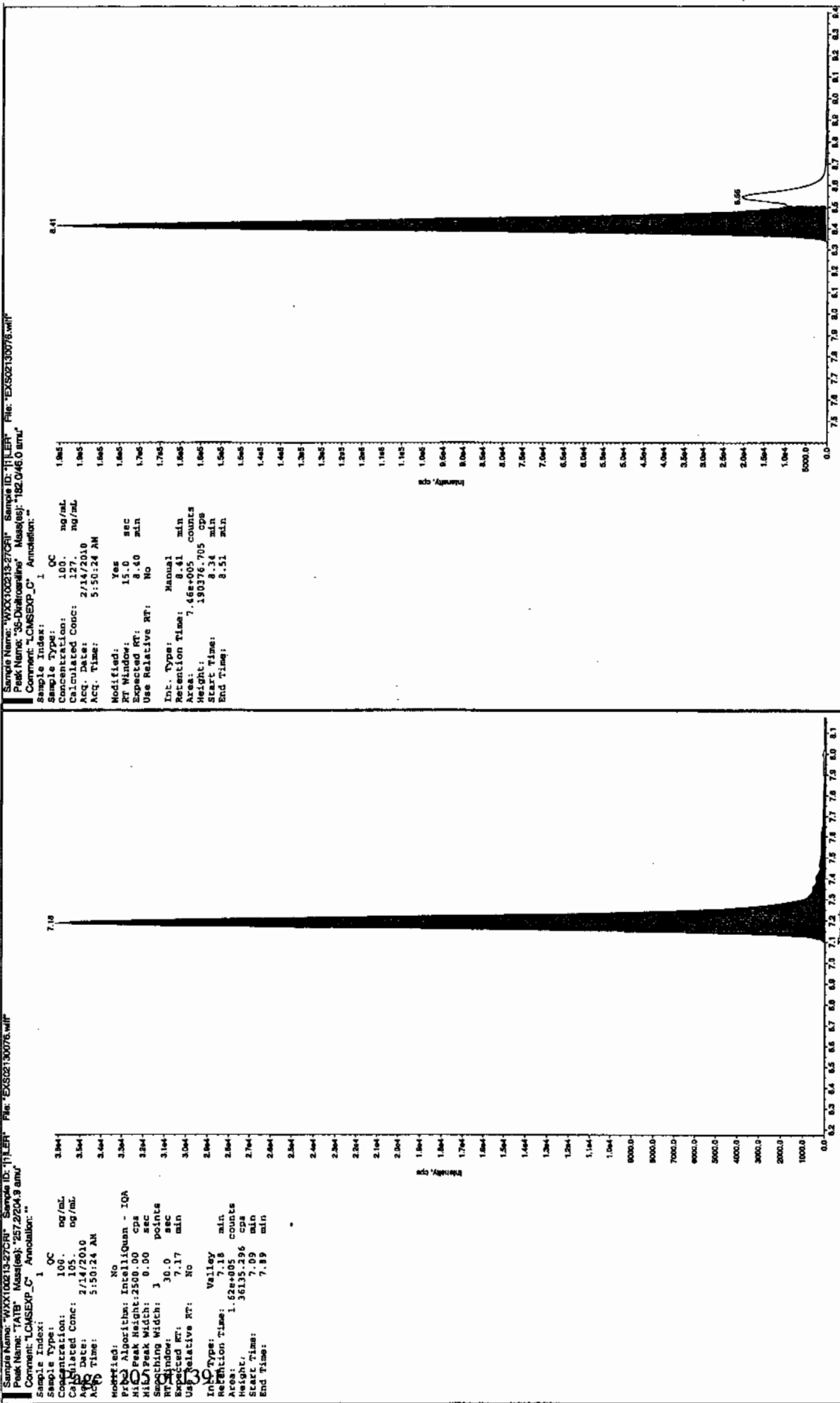
* Value outside of Recovery Limits

Before Jan 2/15/10

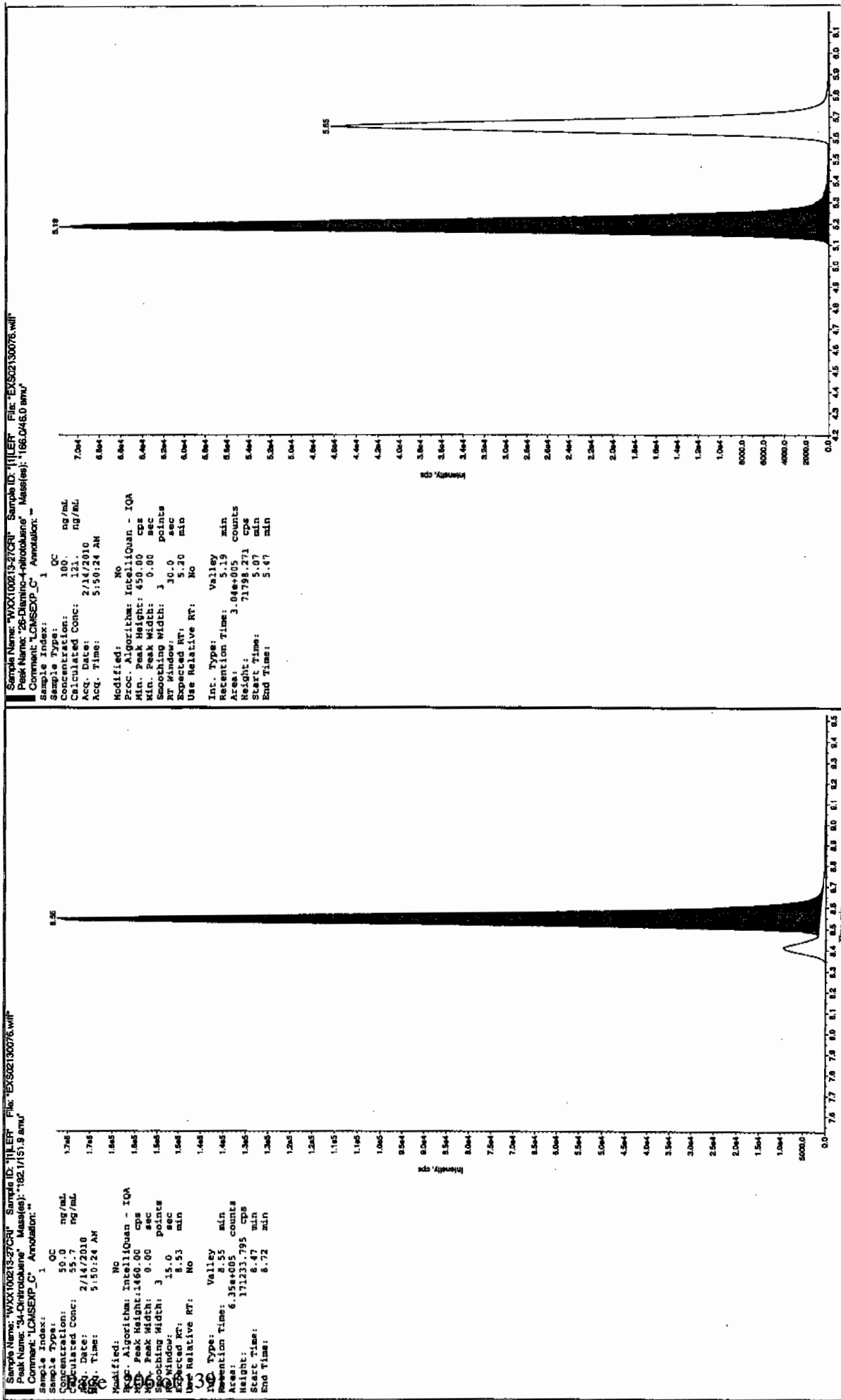


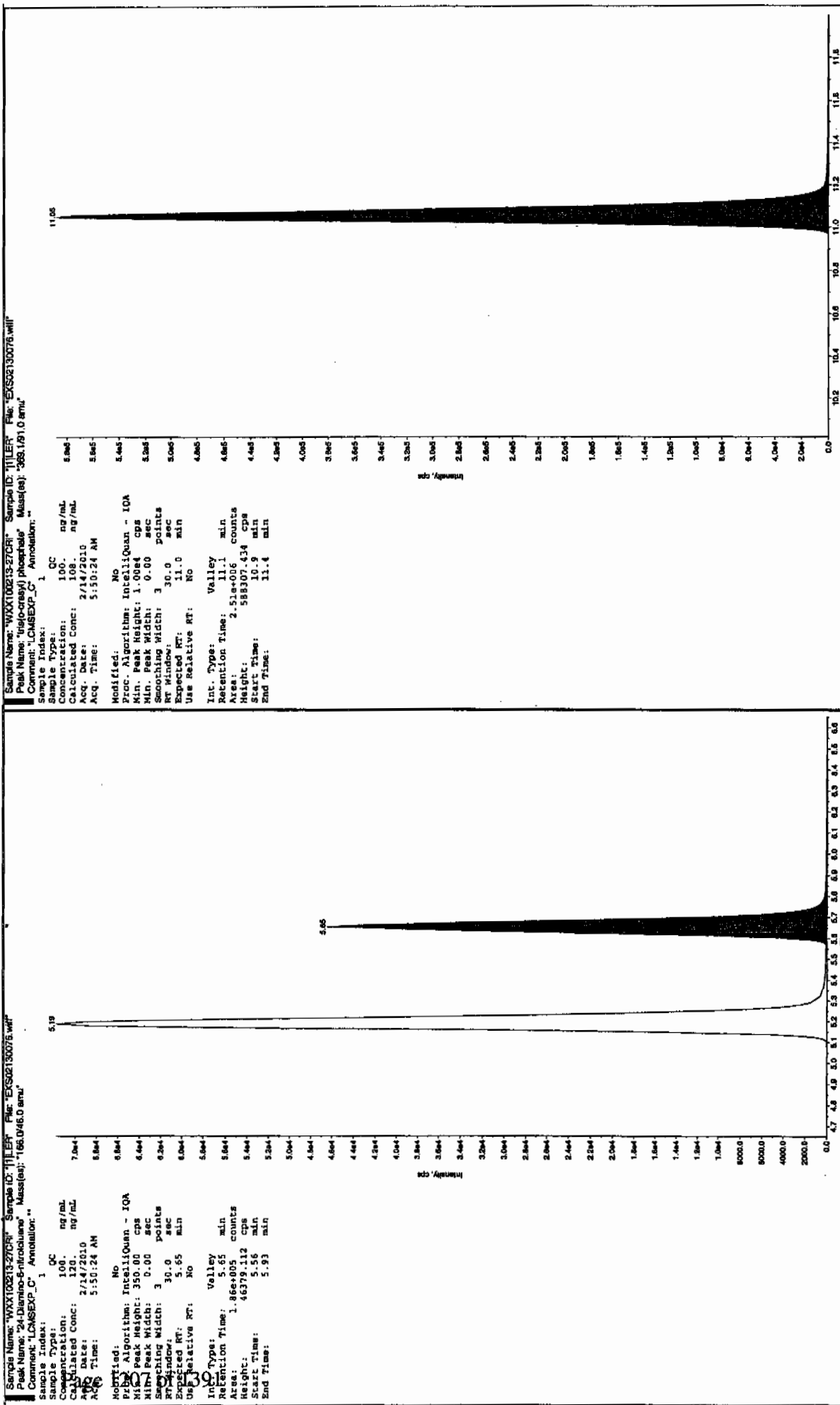
After 2/15/10

after Jan 21/5/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

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 ,

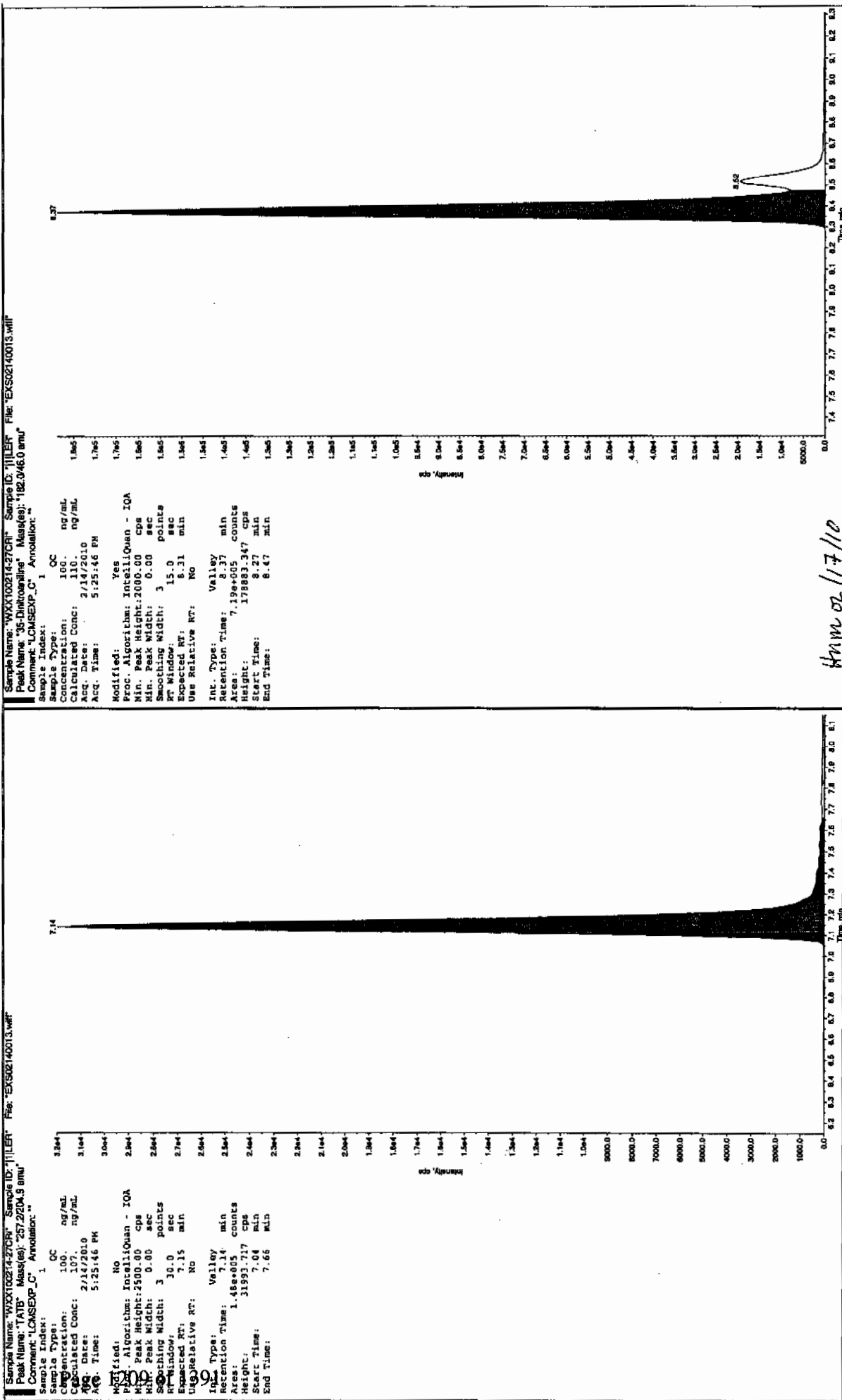
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

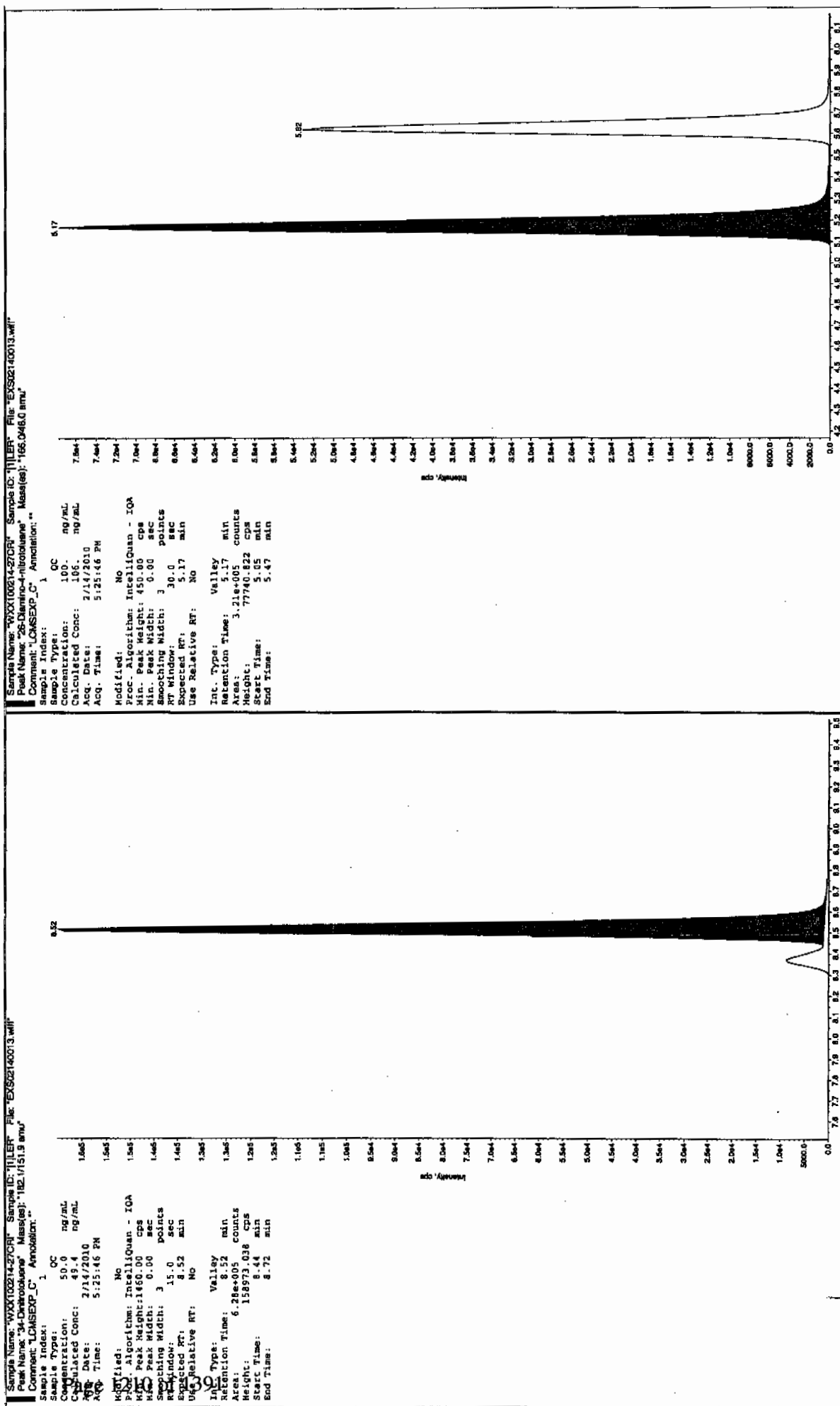
Column used to flag Recovery outside of Limits

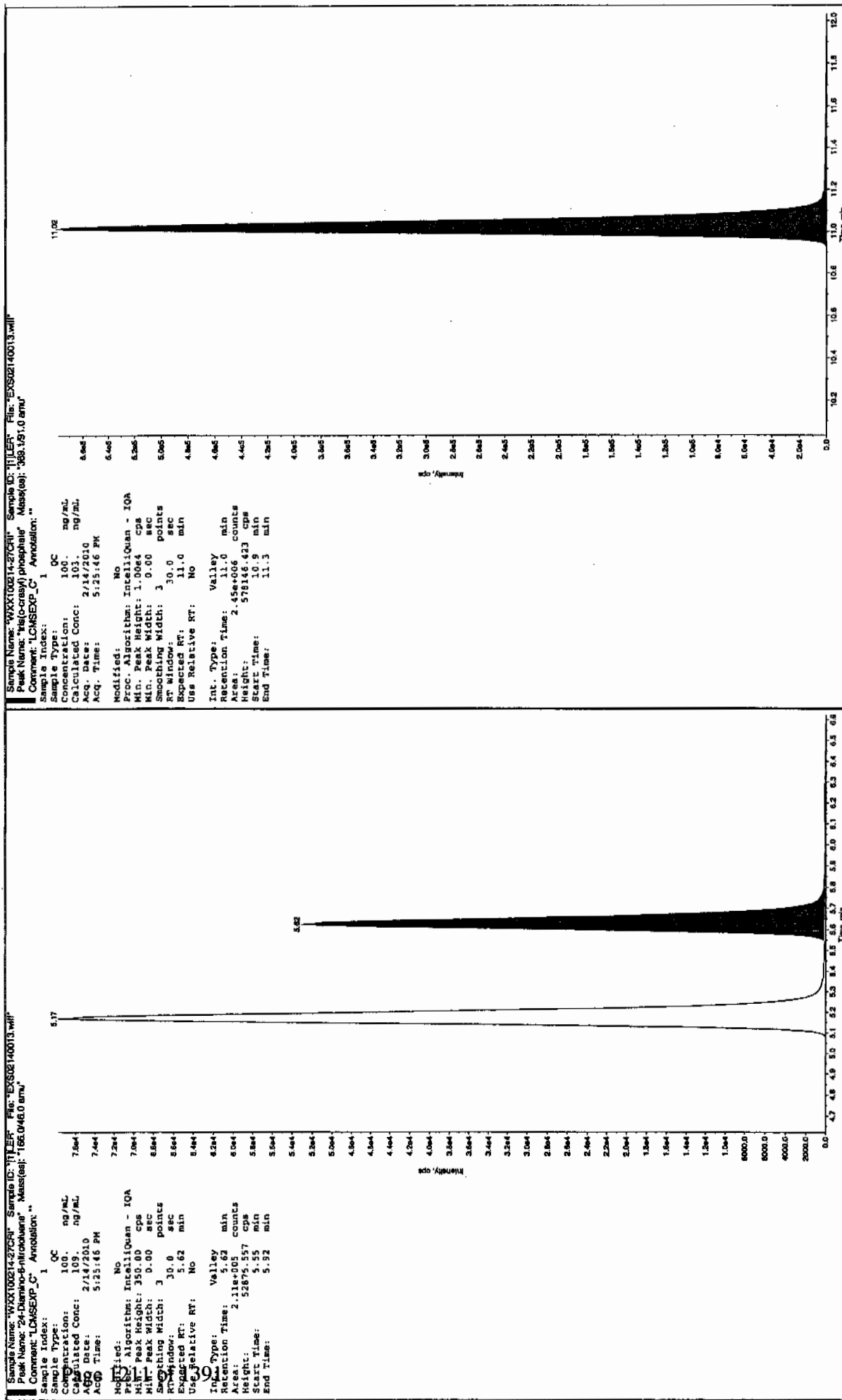
* Value outside of Recovery Limits

San 2/16/10



HW 02/17/10





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

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
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	494	99	
TATB	500	494	99	
tris(o-cresyl) phosphate	500	492	99	
2,4-Diamino-6-nitrotoluene	500	529	106	
2,6-Diamino-4-nitrotoluene	500	502	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

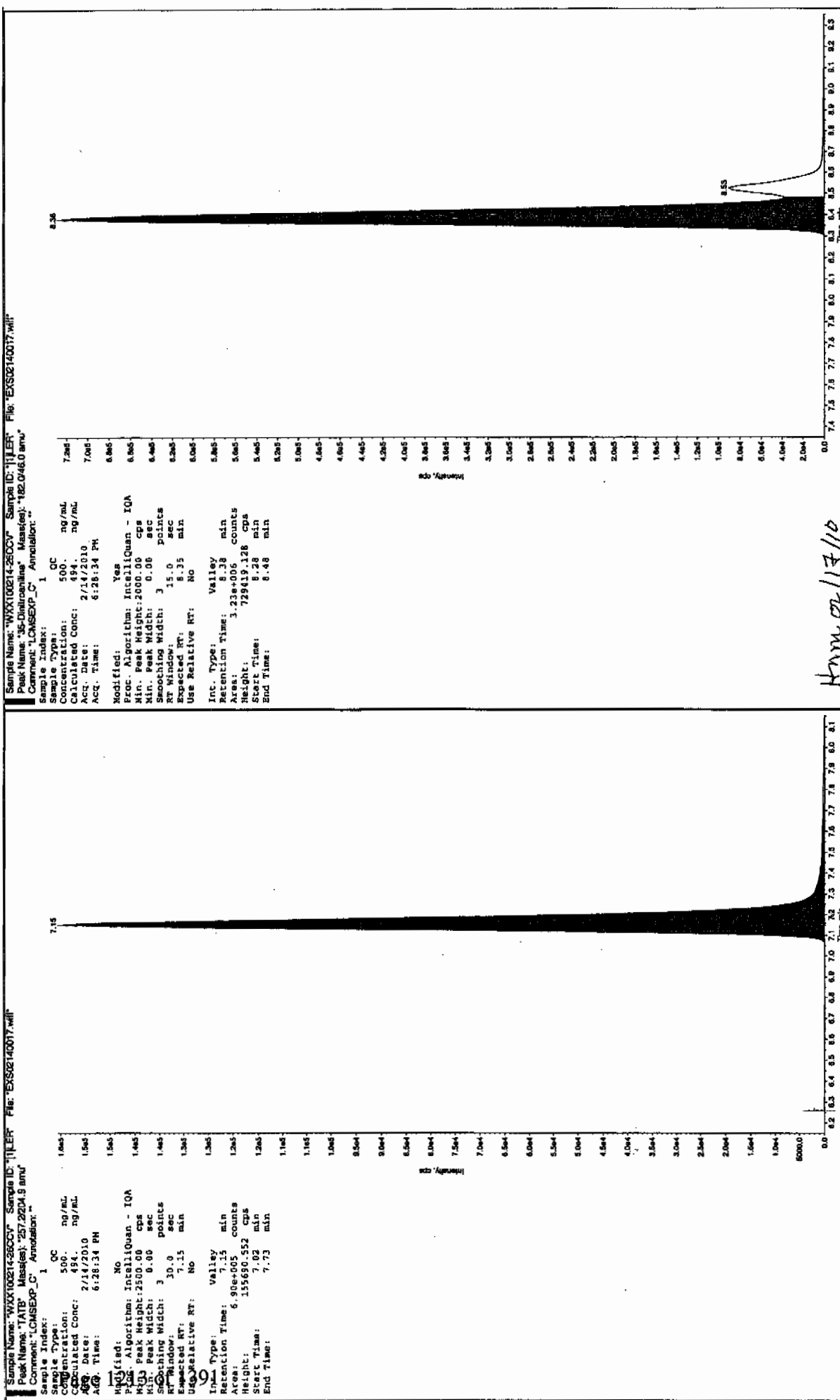
2,4-Diamino-6-nitrotoluene 70-130%

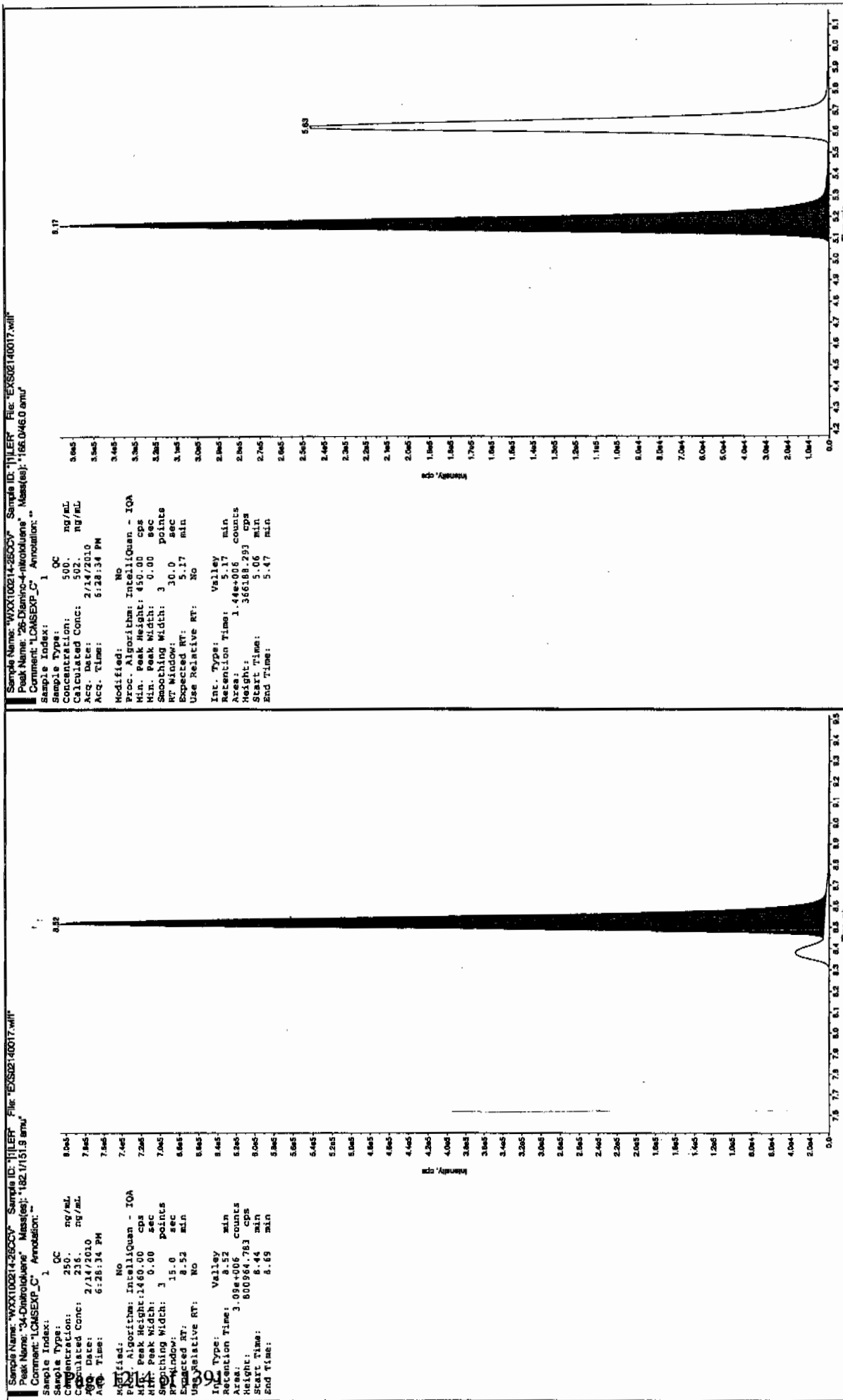
Other Target Analytes 80-120%

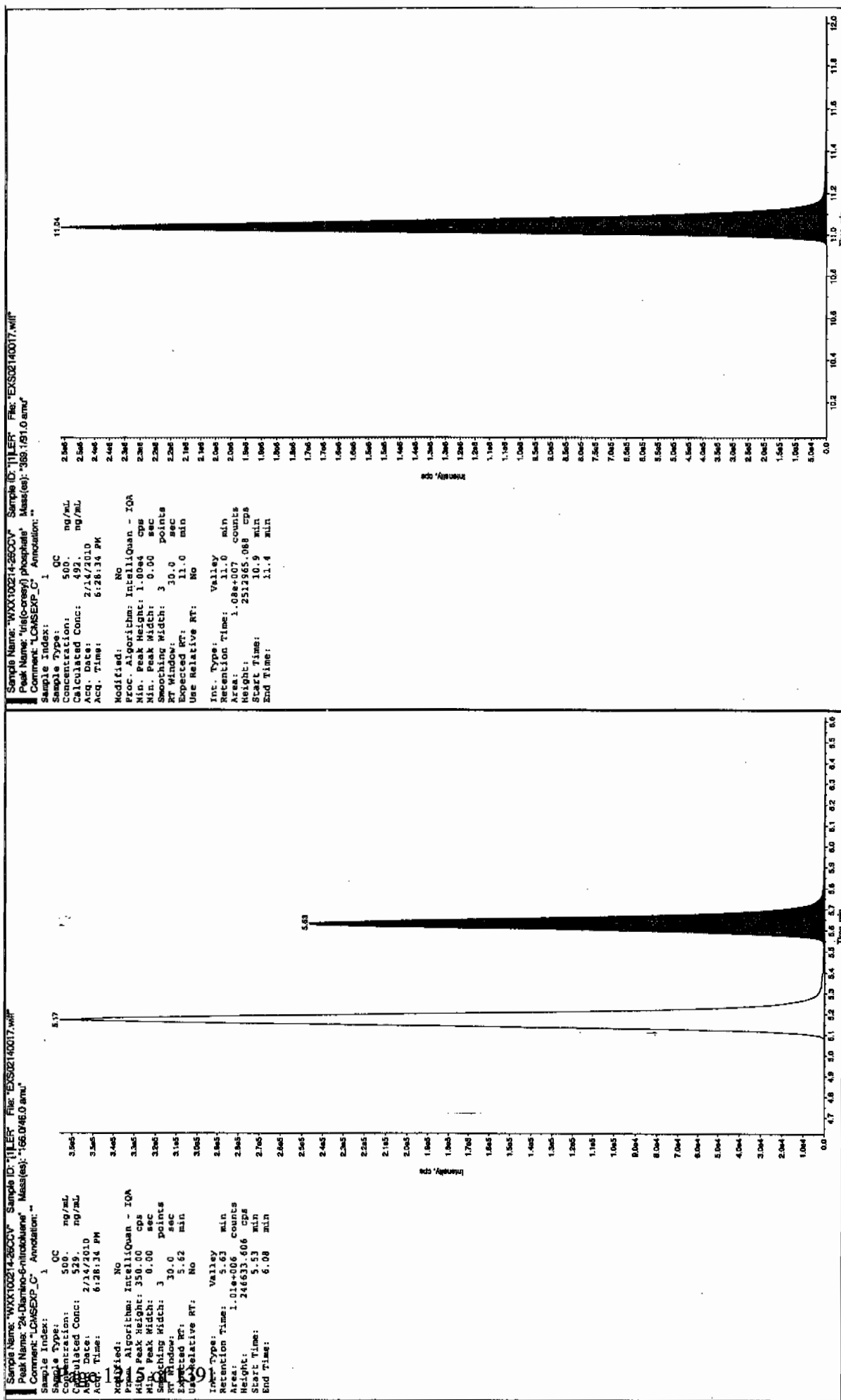
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Sen 2/17/10







*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1384

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
3,5-Dinitroaniline	100	100	100	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	103	103	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

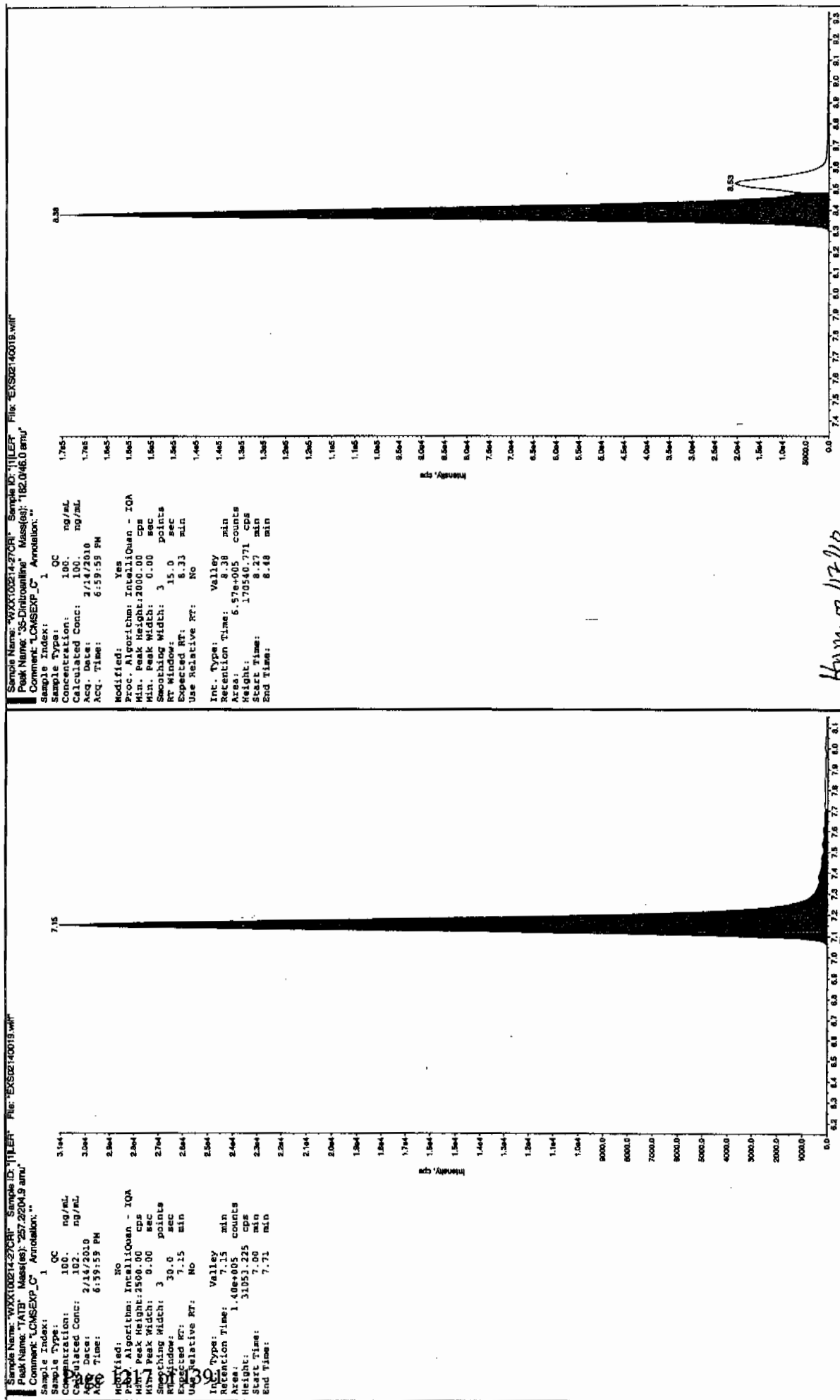
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

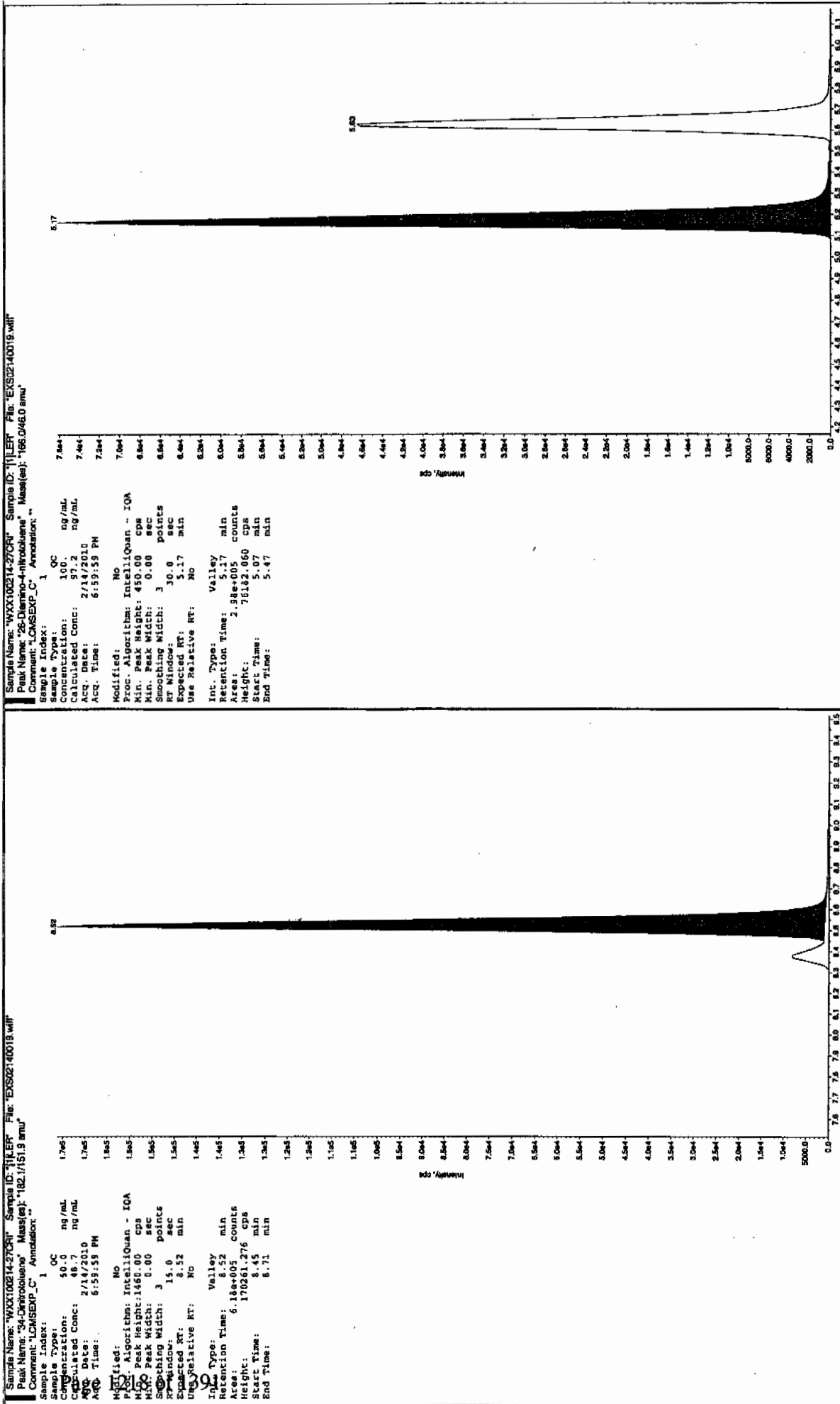
Column used to flag Recovery outside of Limits

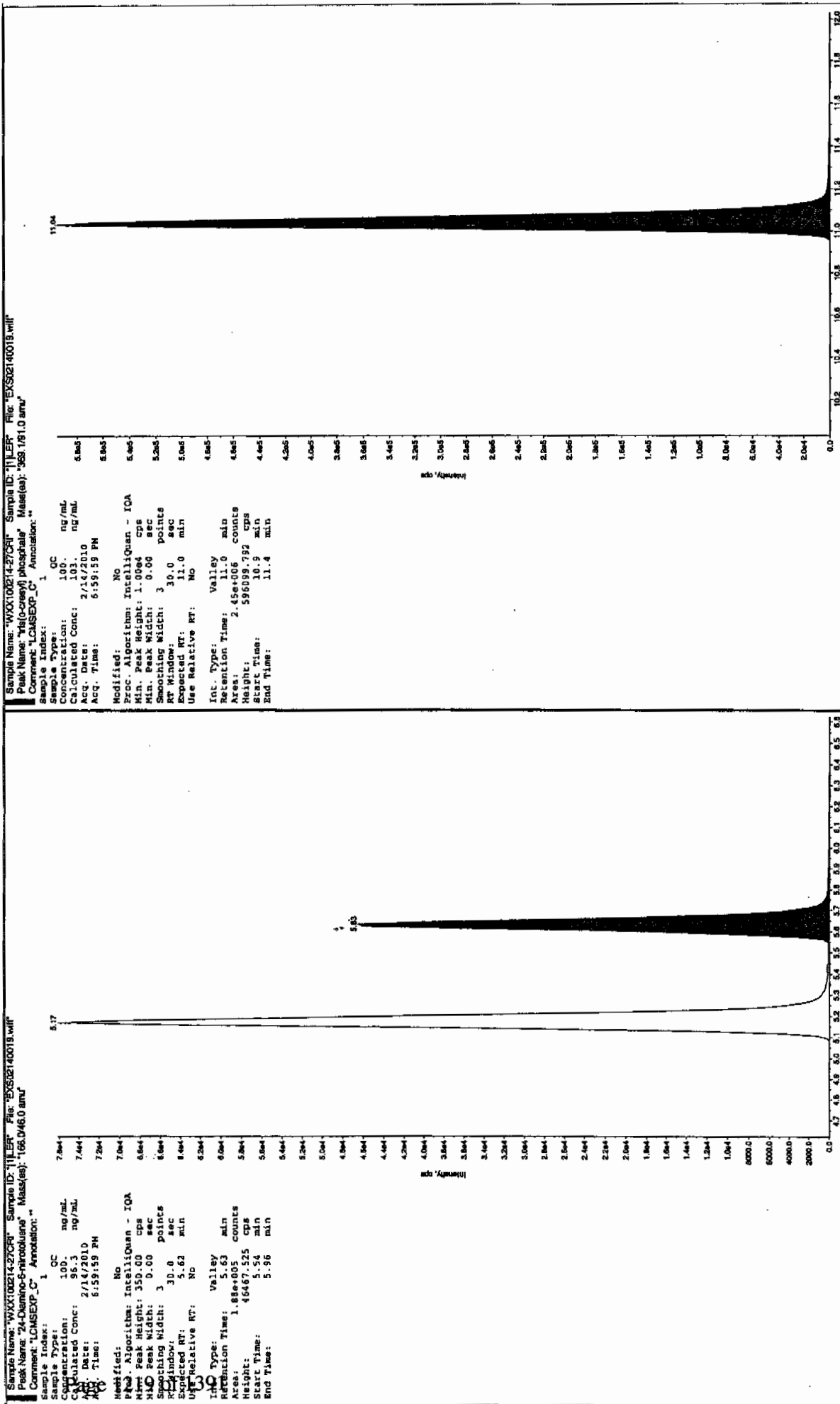
* Value outside of Recovery Limits

See 2/17/10



See 2/17/10





QUALITY CONTROL DATA

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944905

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023571

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208228a

Date Analyzed: 13-FEB-10 06:24

Units: ug/kg

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

*Concentration =

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

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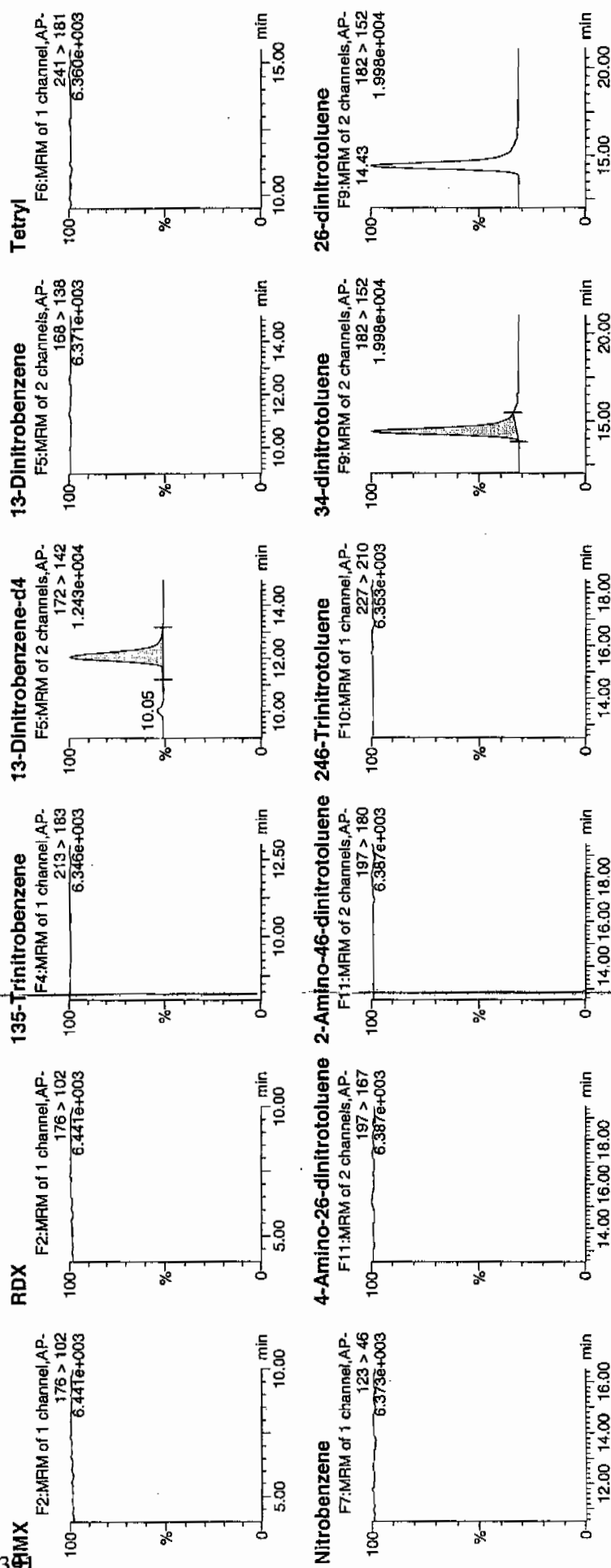
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Date: 13-Feb-2010

Time: 06:24:40

ID: 1202023571

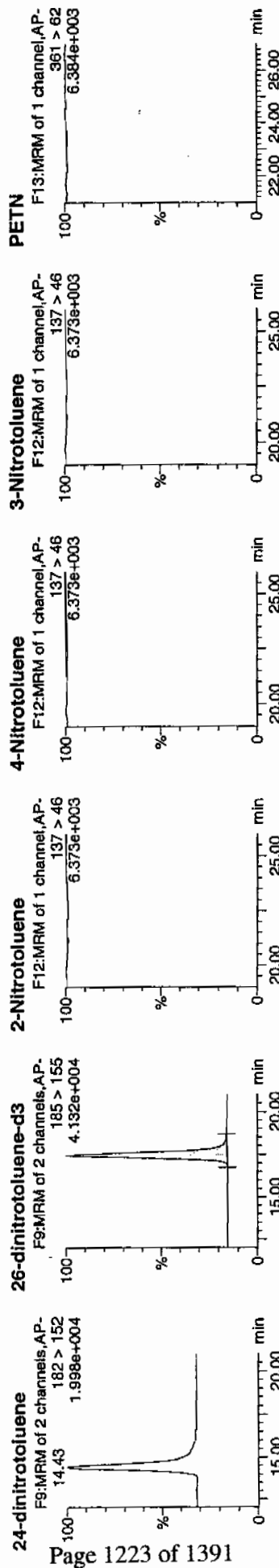
Vial: 2:1.A



01/17/20
JRM

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

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ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	%Req	%Dev	SN
1202023571	HMX	176 > 102			2471.177								
1202023571	RDX	176 > 102			2471.177								
1202023571	135-Trinitrobenzene	213 > 183			2471.177								
1202023571	13-Dinitrobenzene-d4	172 > 142	12.07	2471.177		2471.177	2471.177	bb			384.3709	76.9	-23.1
1202023571	13-Dinitrobenzene	168 > 138			2471.177								711.4
1202023571	Tetryl	241 > 181			2471.177								
1202023571	Nitrobenzene	123 > 46			2471.177								
1202023571	4-Amino-26-dinitrotoluene	197 > 167			14096.808								
1202023571	2-Amino-46-dinitrotoluene	197 > 180			14096.808								
1202023571	246-Trinitrotoluene	227 > 210			14096.808								
1202023571	34-dinitrotoluene	182 > 152	14.43	6467.043	14096.808	6467.043	229.380	bb			254.8686	101.9	1.9
1202023571	26-dinitrotoluene	182 > 152			14096.808								325.8
1202023571	24-dinitrotoluene	182 > 152			14096.808								
1202023571	26-dinitrotoluene-d3	185 > 155	17.47	14096.808		14096.808	14096.808	bb			381.8270	76.4	-23.6
1202023571	2-Nitrotoluene	137 > 46			14096.808								814.0
1202023571	4-Nitrotoluene	137 > 46			14096.808								
1202023571	3-Nitrotoluene	137 > 46			14096.808								
1202023571	PETN	361 > 62			14096.808								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944905

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023571

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130064.wiff

Date Analyzed: 14-FEB-10 02:42

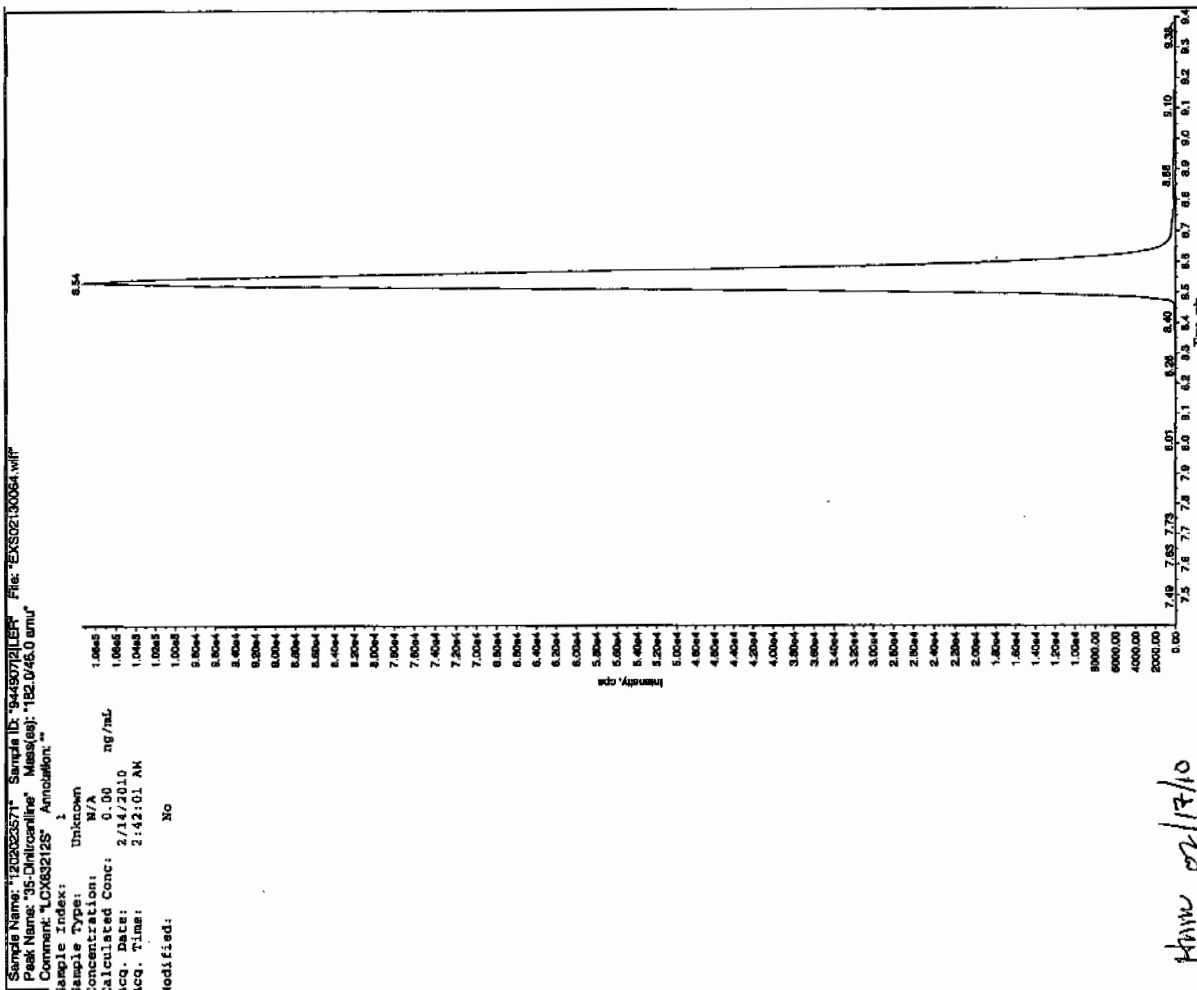
Units: ug/kg

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

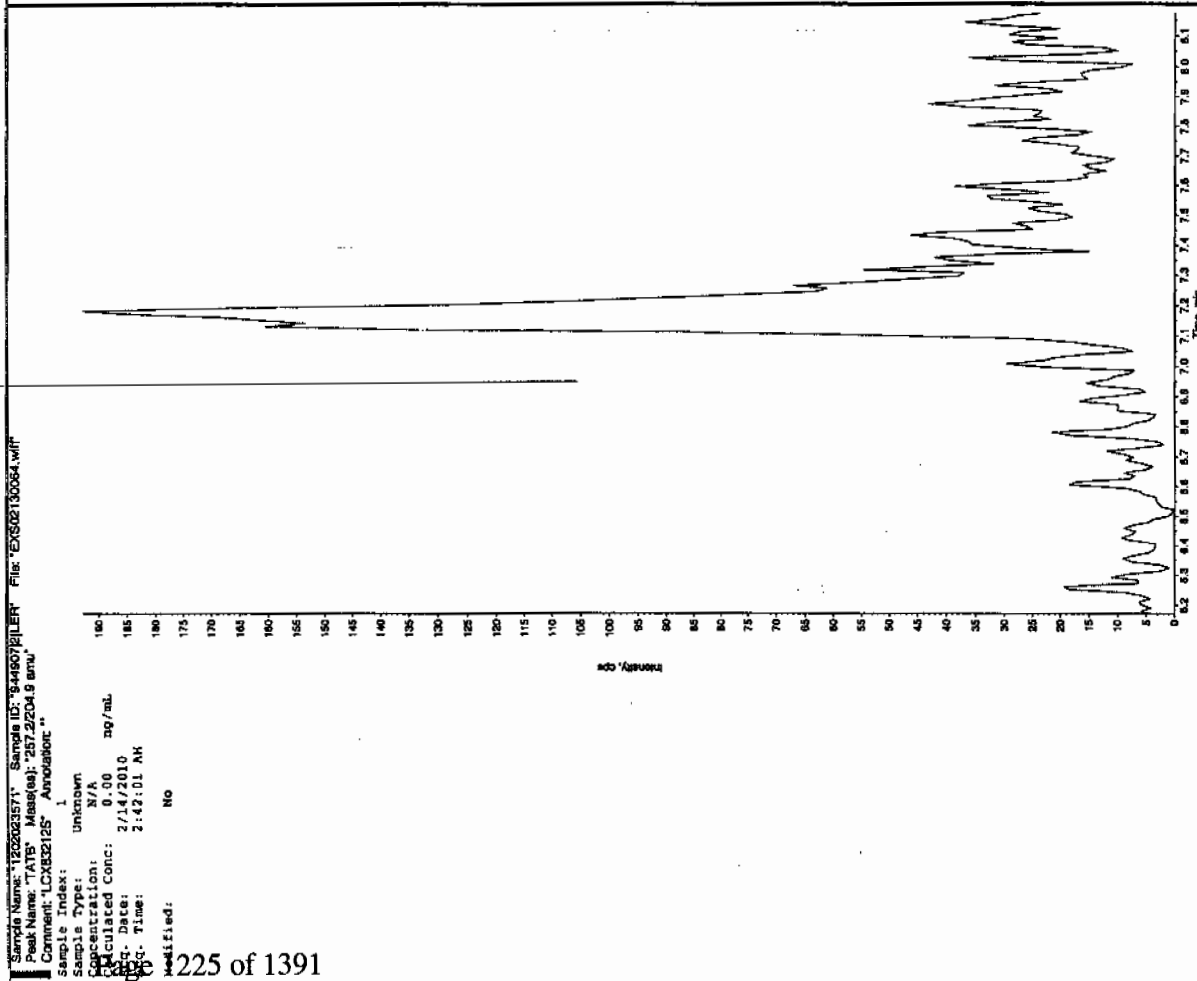
*Concentration =

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

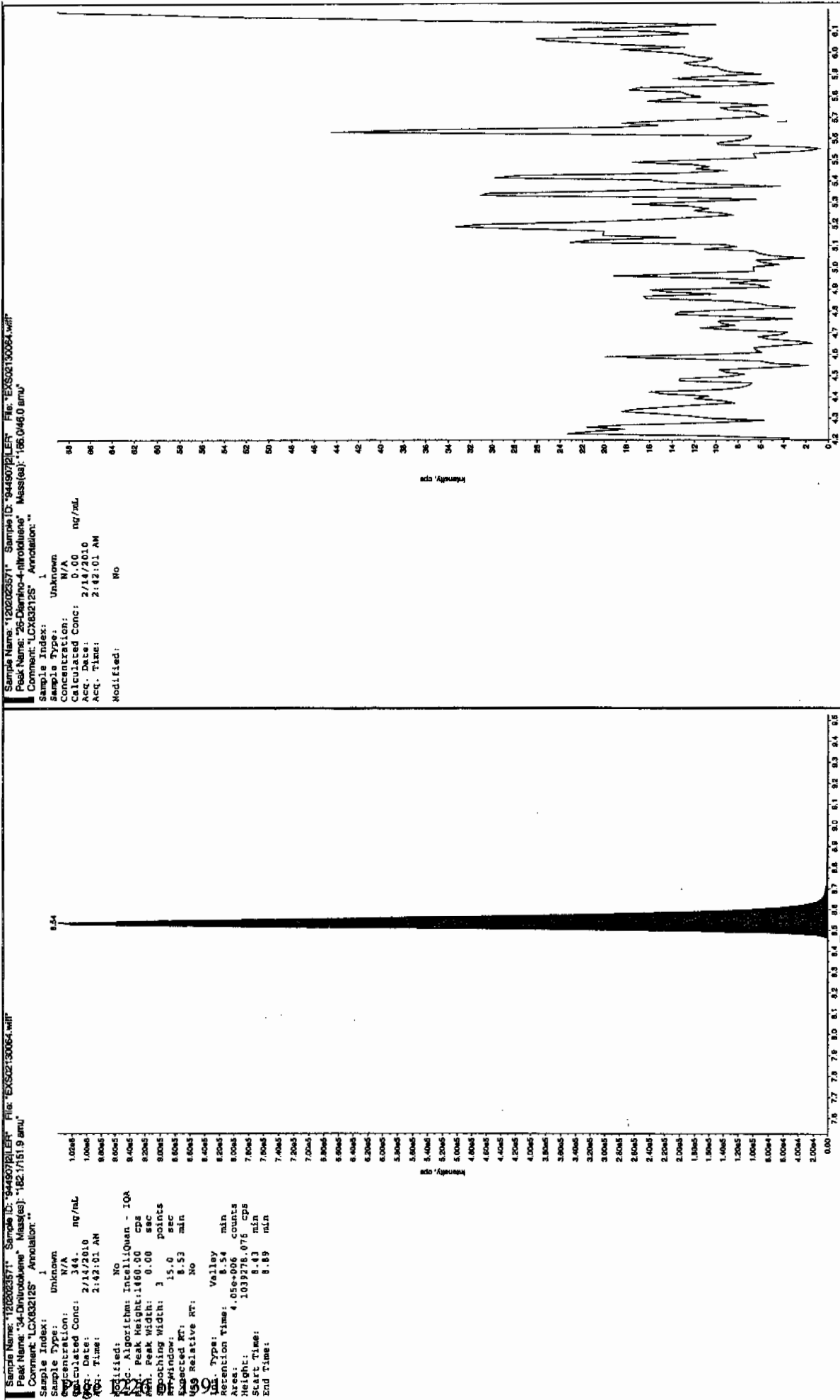
John 2/15/10

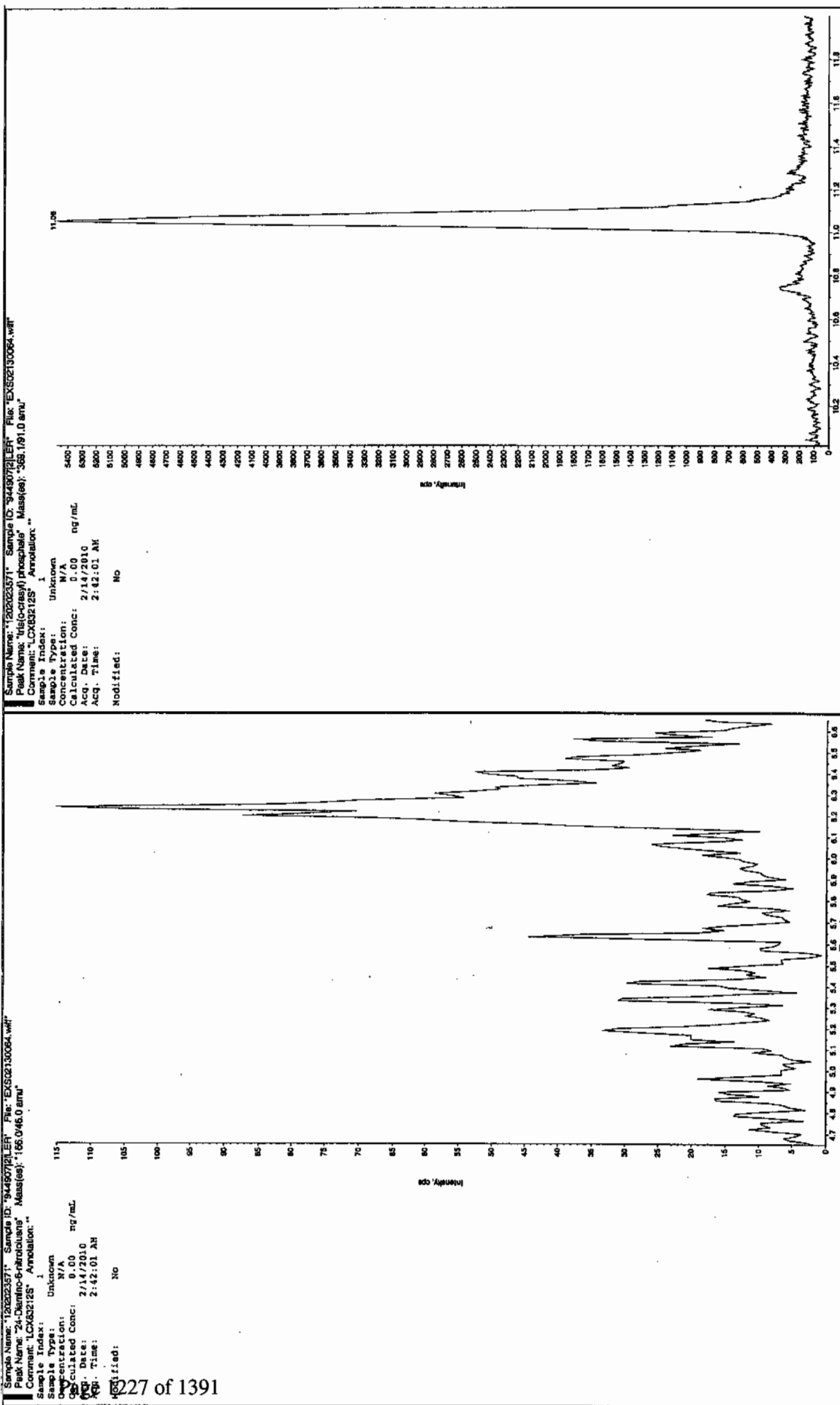


John 02/17/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944905

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023572

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208229a

Date Analyzed: 13-FEB-10 06:54

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5020	
121-14-2	2,4-Dinitrotoluene	5100	
121-82-4	RDX	5580	
19406-51-0	4-Amino-2,6-dinitrotoluene	5040	
2691-41-0	HMX	5160	
35572-78-2	2-Amino-4,6-dinitrotoluene	5360	
479-45-8	Tetryl	2120	
606-20-2	2,6-Dinitrotoluene	4920	
78-11-5	PETN	7590	
88-72-2	o-Nitrotoluene	5200	
98-95-3	Nitrobenzene	5040	
99-08-1	m-Nitrotoluene	4710	
99-35-4	1,3,5-Trinitrobenzene	4280	
99-65-0	m-Dinitrobenzene	5260	
99-99-0	p-Nitrotoluene	5300	

*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: Sun Feb 14 11:45:22 2010, Page 3 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208229a

Date: 13-Feb-2010

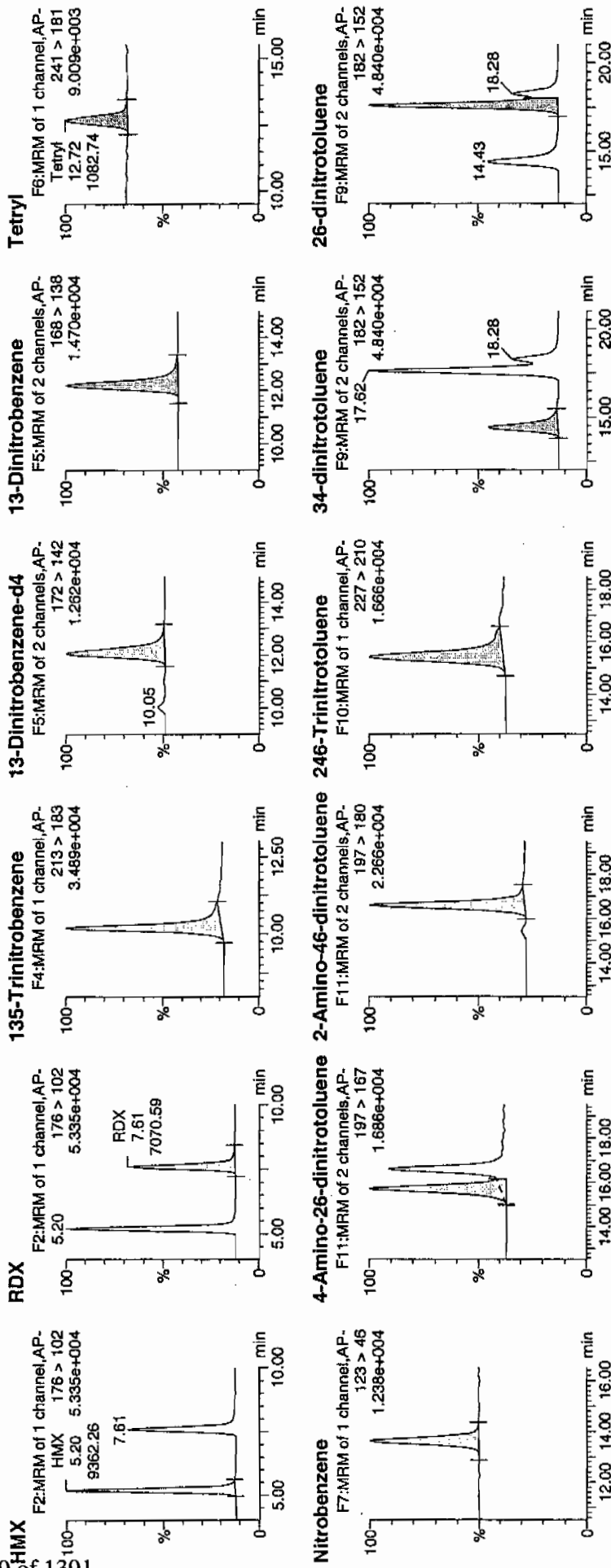
Time: 06:54:12

ID: 1202023572

Vial: 2:1,B

μg
2/14/10

↓ Tetra



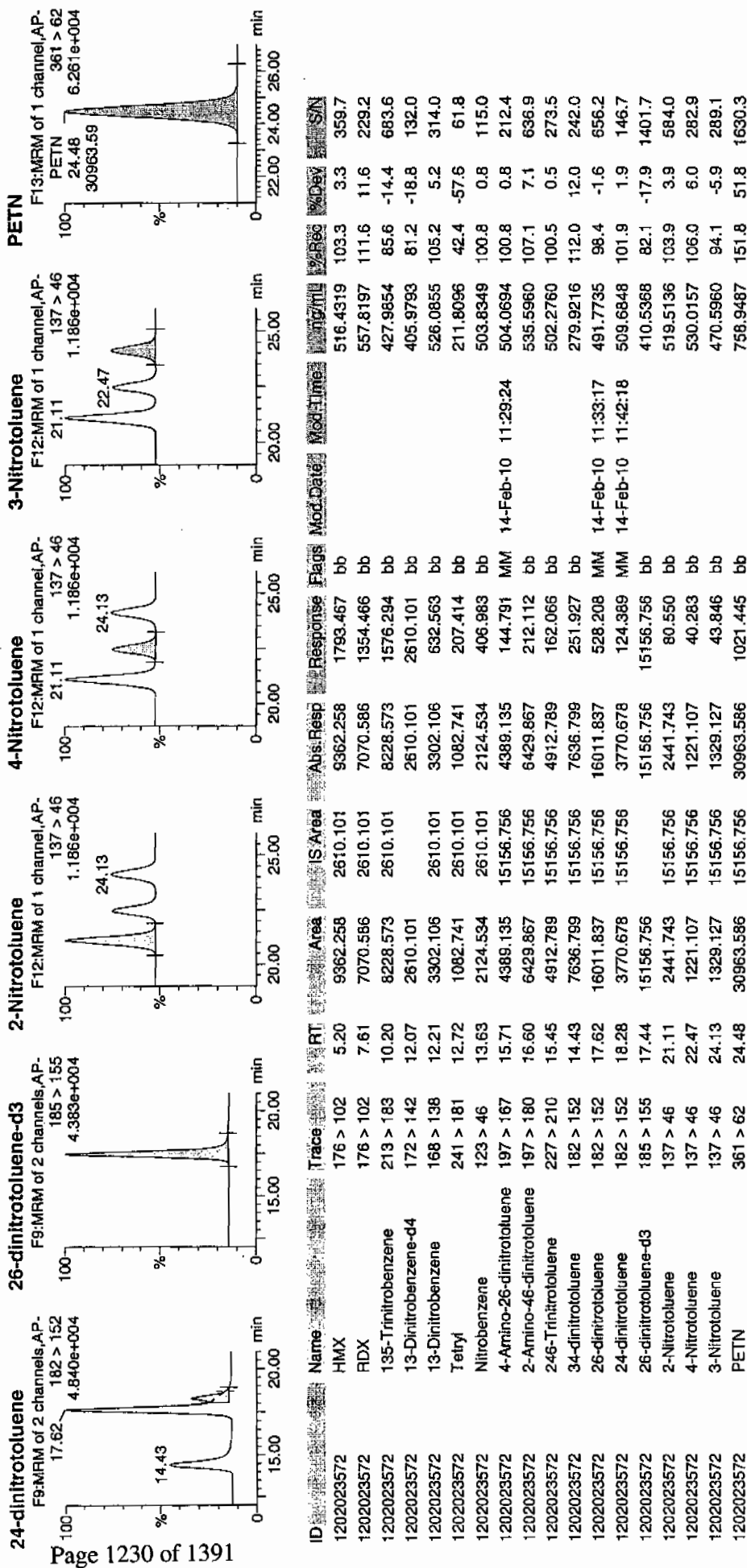
4/11/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 4 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\20810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944905

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023572

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130065.wiff

Date Analyzed: 14-FEB-10 02:57

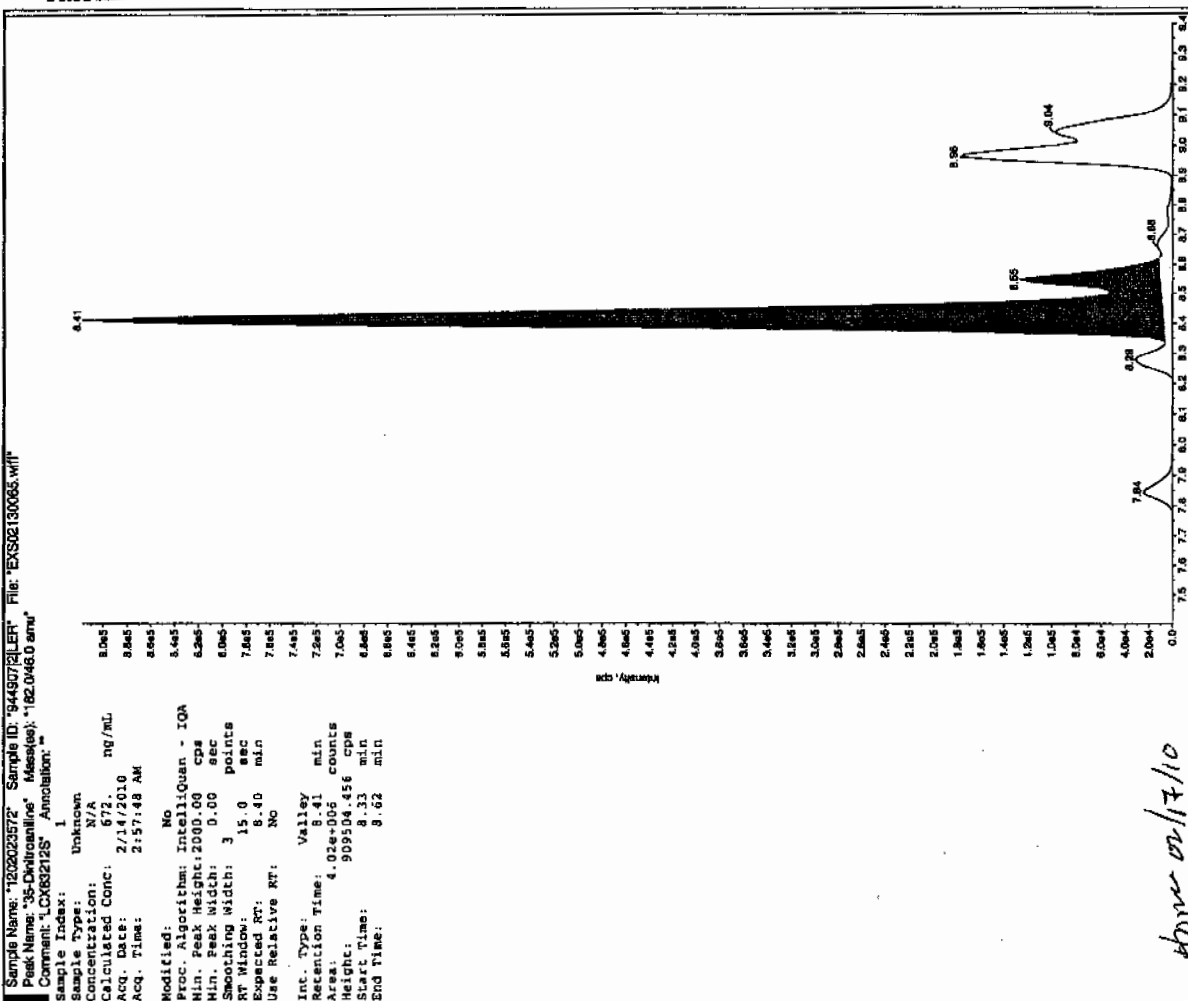
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6500	
59229-75-3	2,6-Diamino-4-nitrotoluene	6080	
618-87-1	3,5-Dinitroaniline	6130	
6629-29-4	2,4-Diamino-6-nitrotoluene	5480	
78-30-8	tris(o-cresyl) phosphate	5400	

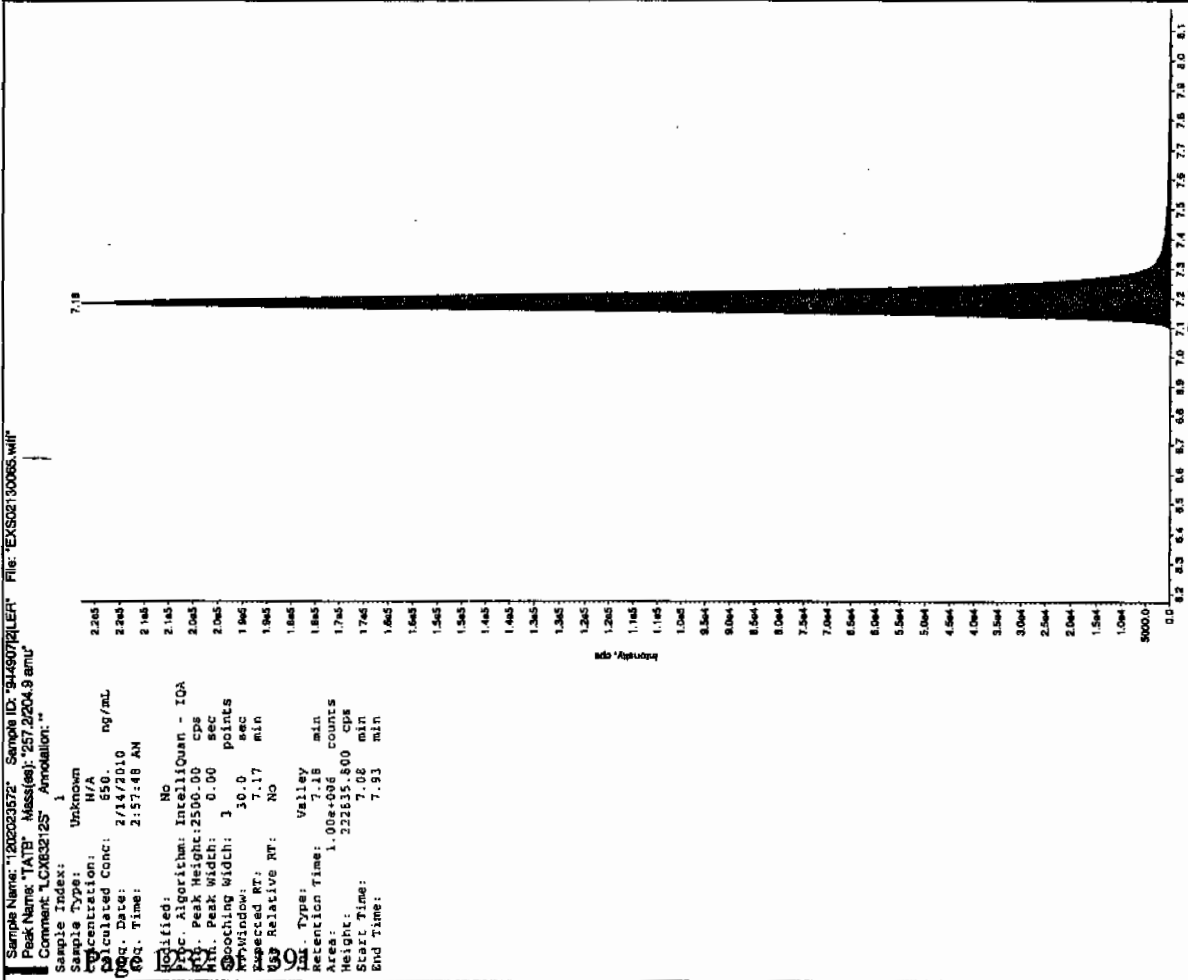
*Concentration =

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

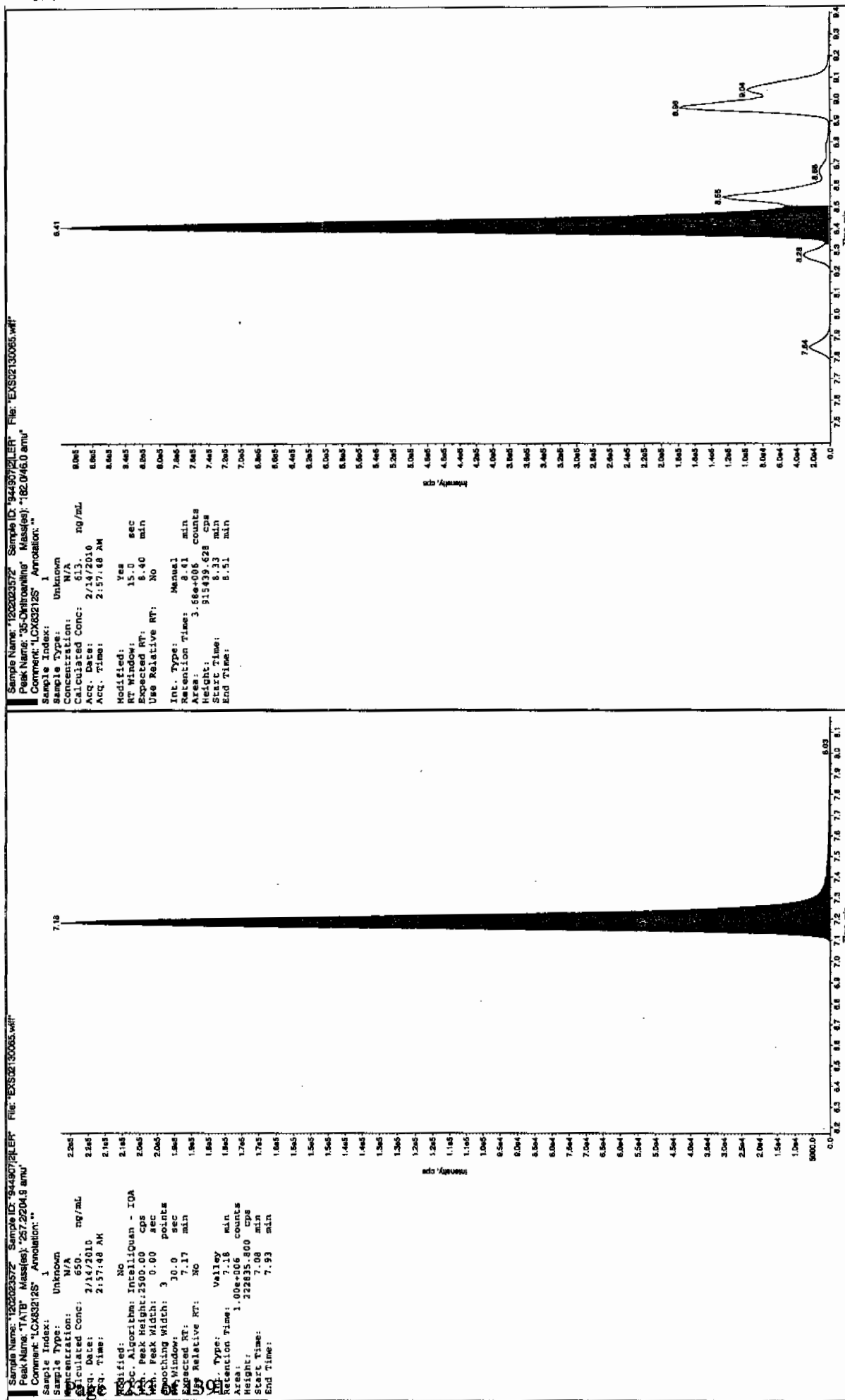
Before Jan 21/5/10

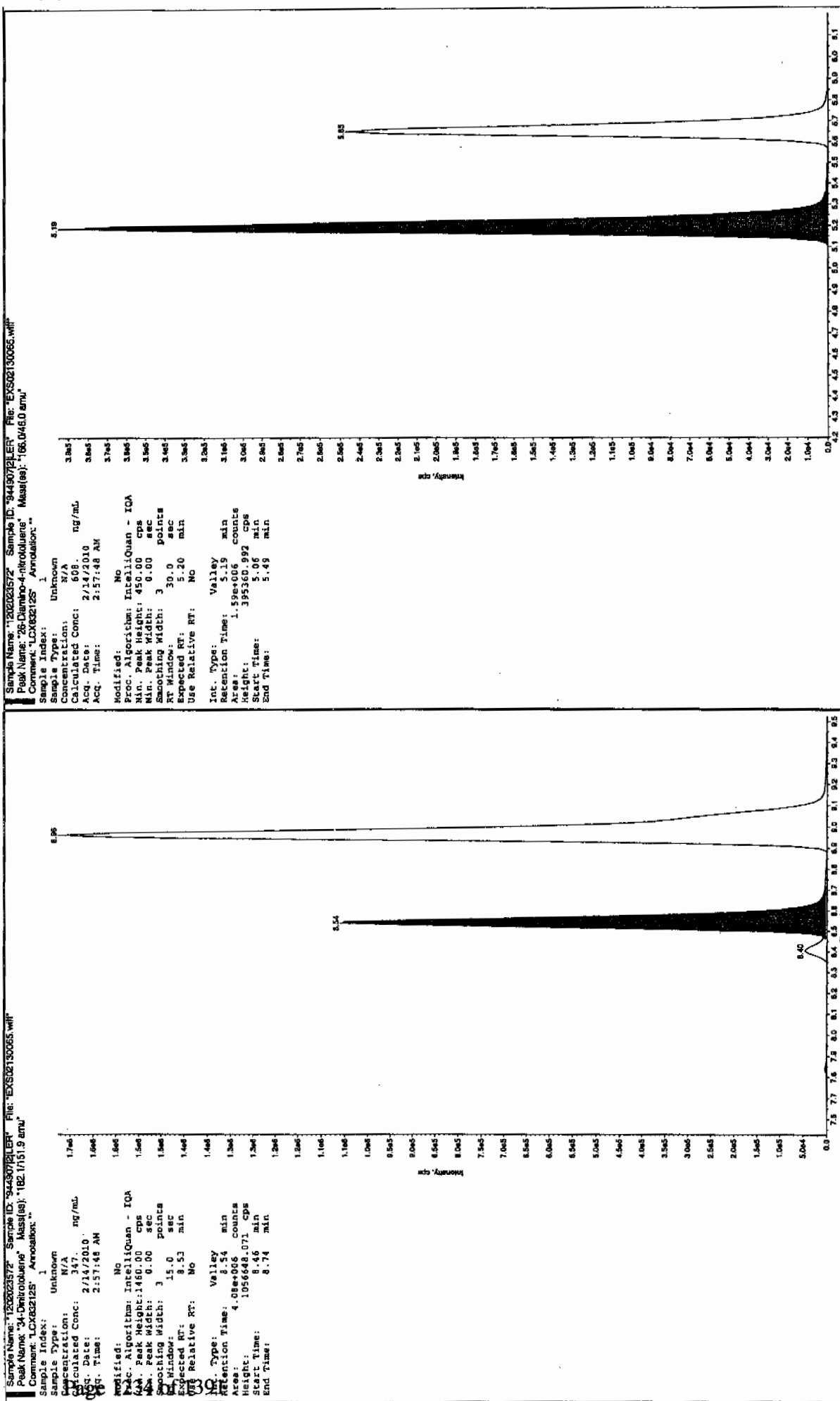


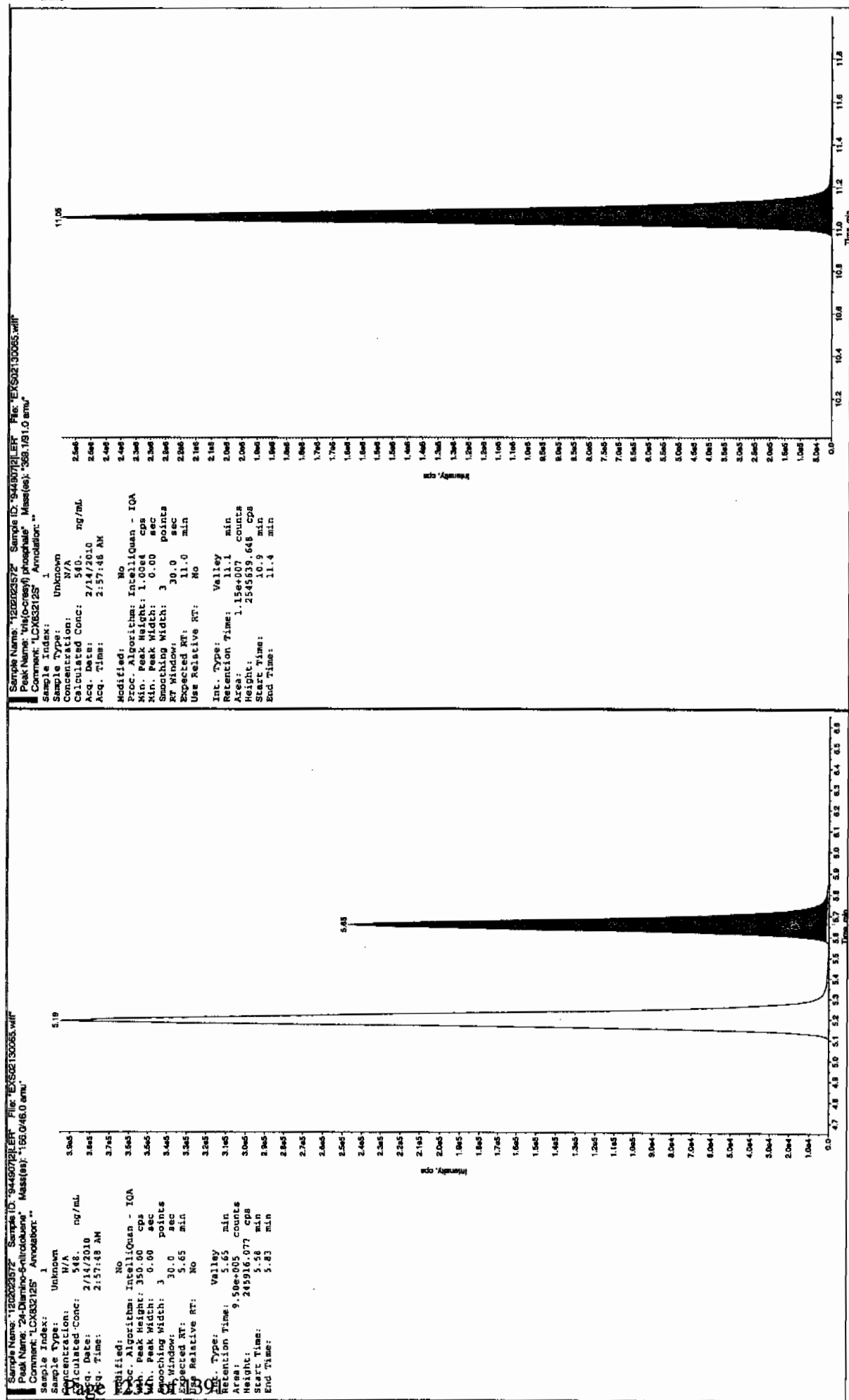
After 01/17/10



after Jan 21/15/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689(245387001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023573

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208231a

Date Analyzed: 13-FEB-10 07:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4090	
121-14-2	2,4-Dinitrotoluene	4910	
121-82-4	RDX	4820	
19406-51-0	4-Amino-2,6-dinitrotoluene	4700	
2691-41-0	HMX	5030	
35572-78-2	2-Amino-4,6-dinitrotoluene	5160	
479-45-8	Tetryl	1140	
606-20-2	2,6-Dinitrotoluene	5260	
78-11-5	PETN	5930	
88-72-2	o-Nitrotoluene	5600	
98-95-3	Nitrobenzene	4780	
99-08-1	m-Nitrotoluene	5010	
99-35-4	1,3,5-Trinitrobenzene	3860	
99-65-0	m-Dinitrobenzene	4930	
99-99-0	p-Nitrotoluene	5510	

*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: Sun Feb 14 11:45:22 2010, Page 7 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208231a

Date: 13-Feb-2010

Time: 07:53:09

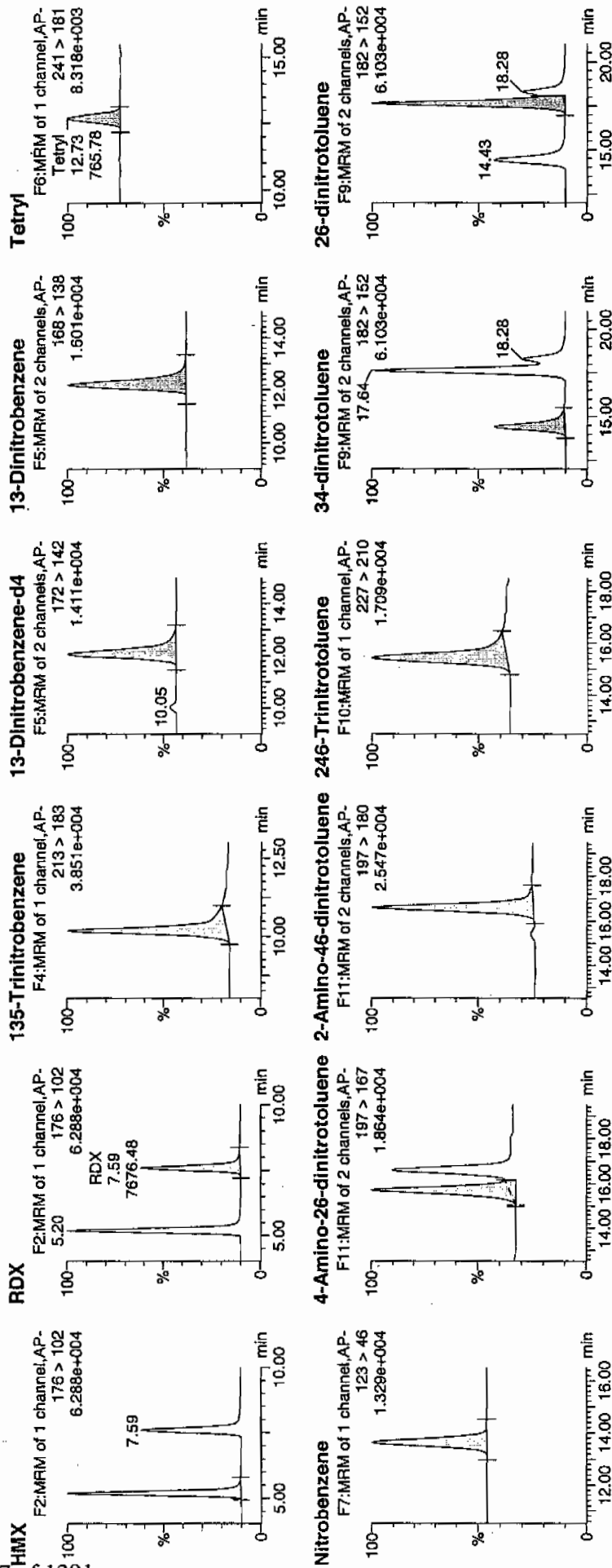
ID: 1202023573

Vial: 2:1,D

4477
2/14/10

245387001MS / 2 /

↓ TetraYL



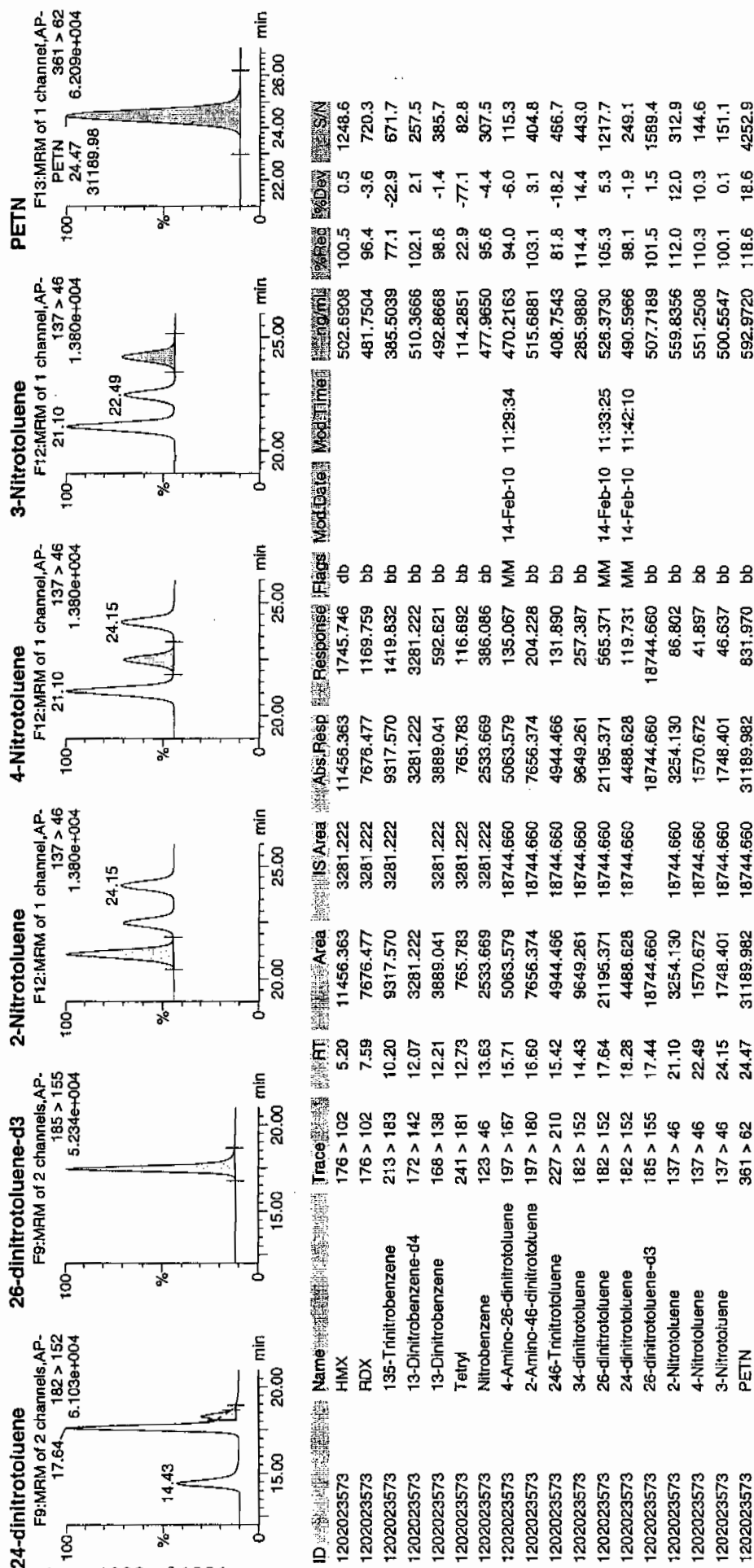
4477
2/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 8 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689(245387001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023573

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130067.wiff

Date Analyzed: 14-FEB-10 03:29

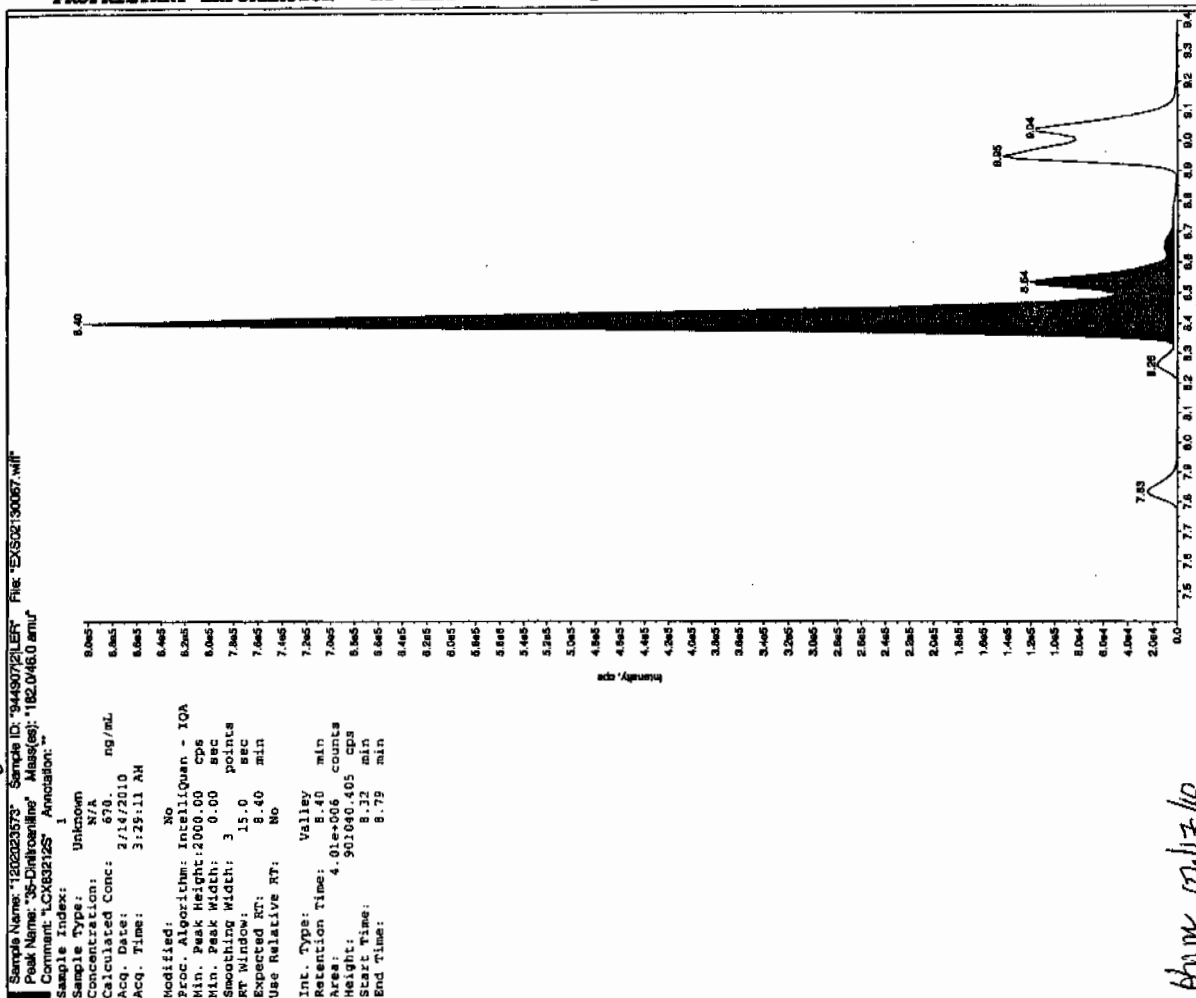
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6750	
59229-75-3	2,6-Diamino-4-nitrotoluene	5430	
618-87-1	3,5-Dinitroaniline	5890	
6629-29-4	2,4-Diamino-6-nitrotoluene	5200	
78-30-8	tris(o-cresyl) phosphate	5230	

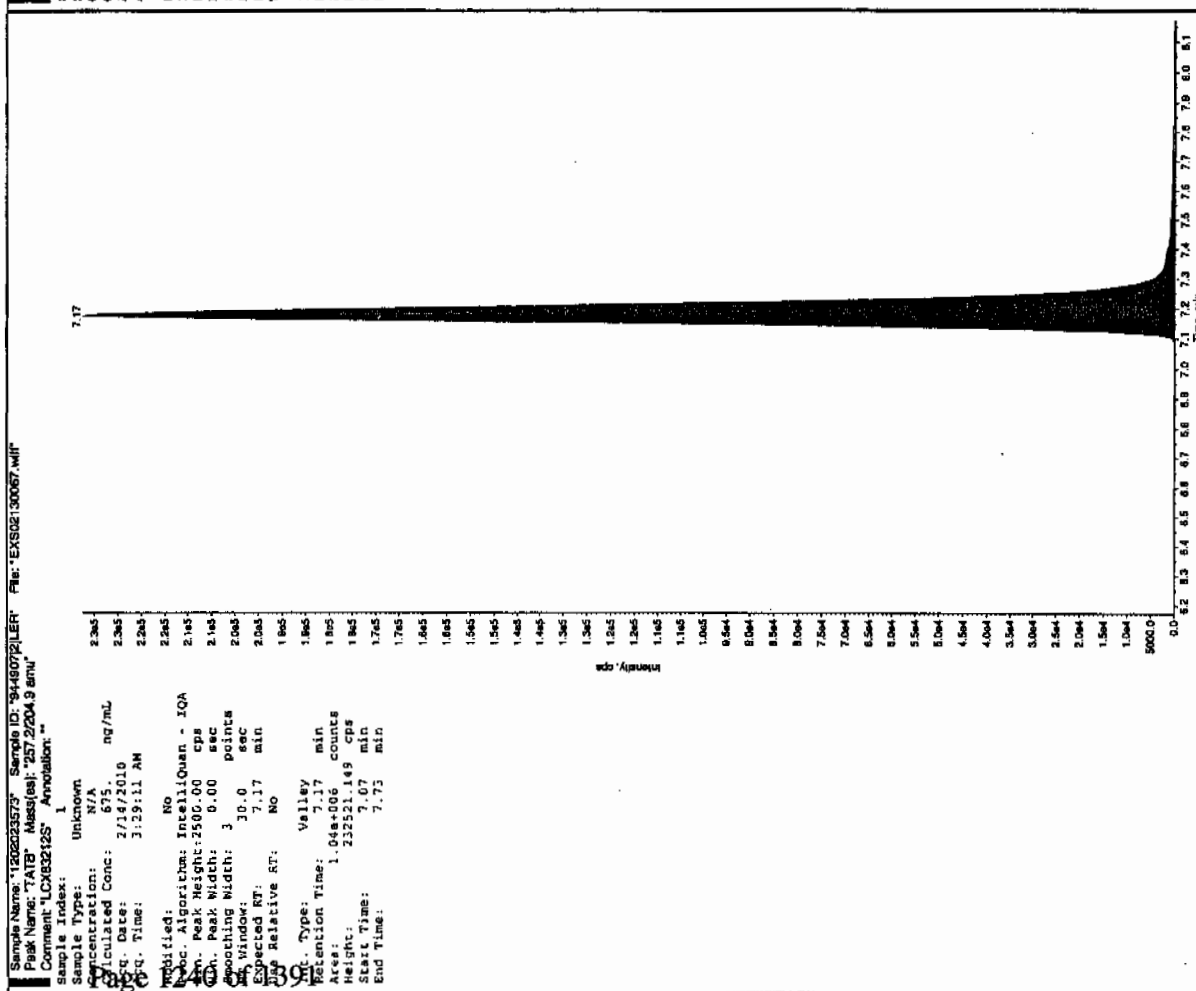
*Concentration =

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

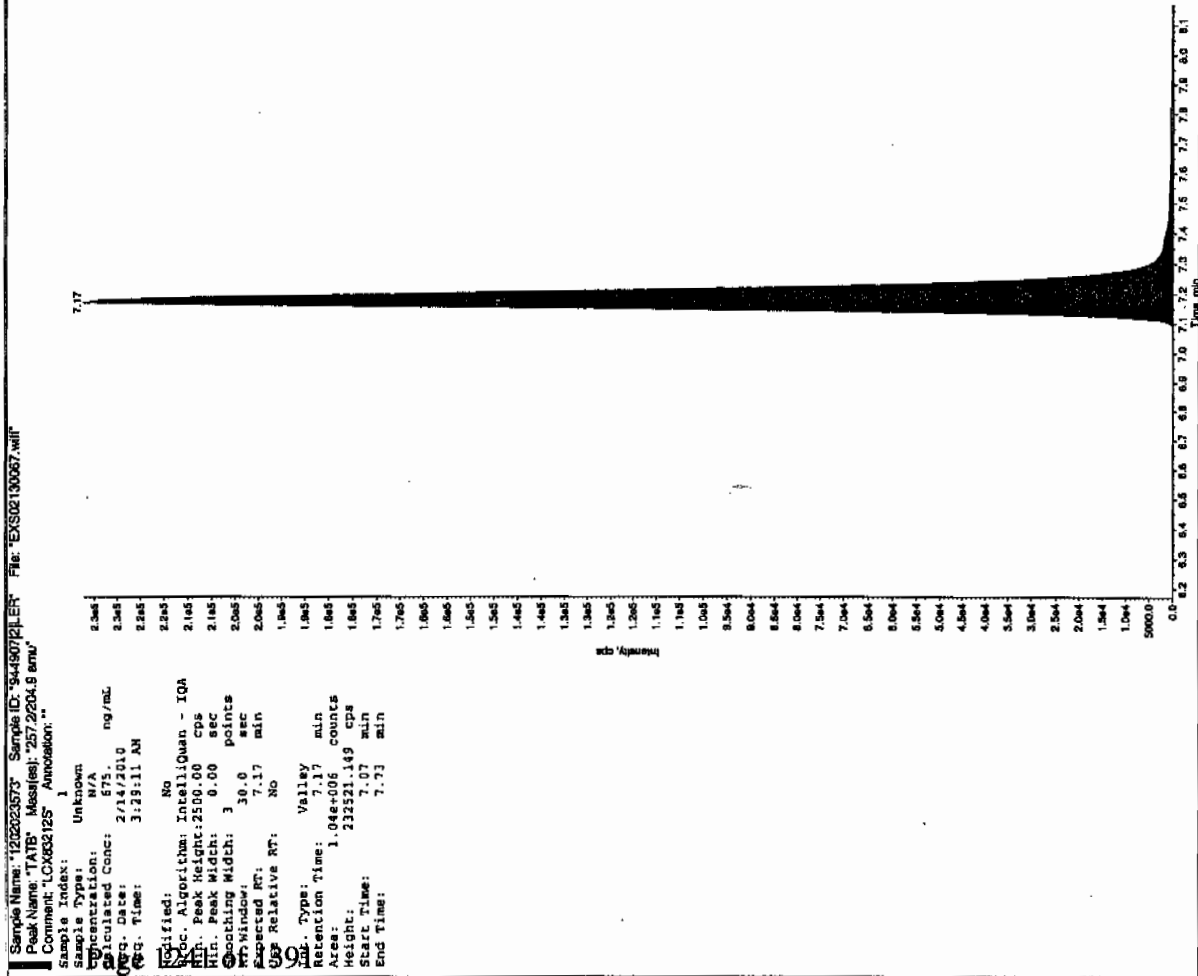
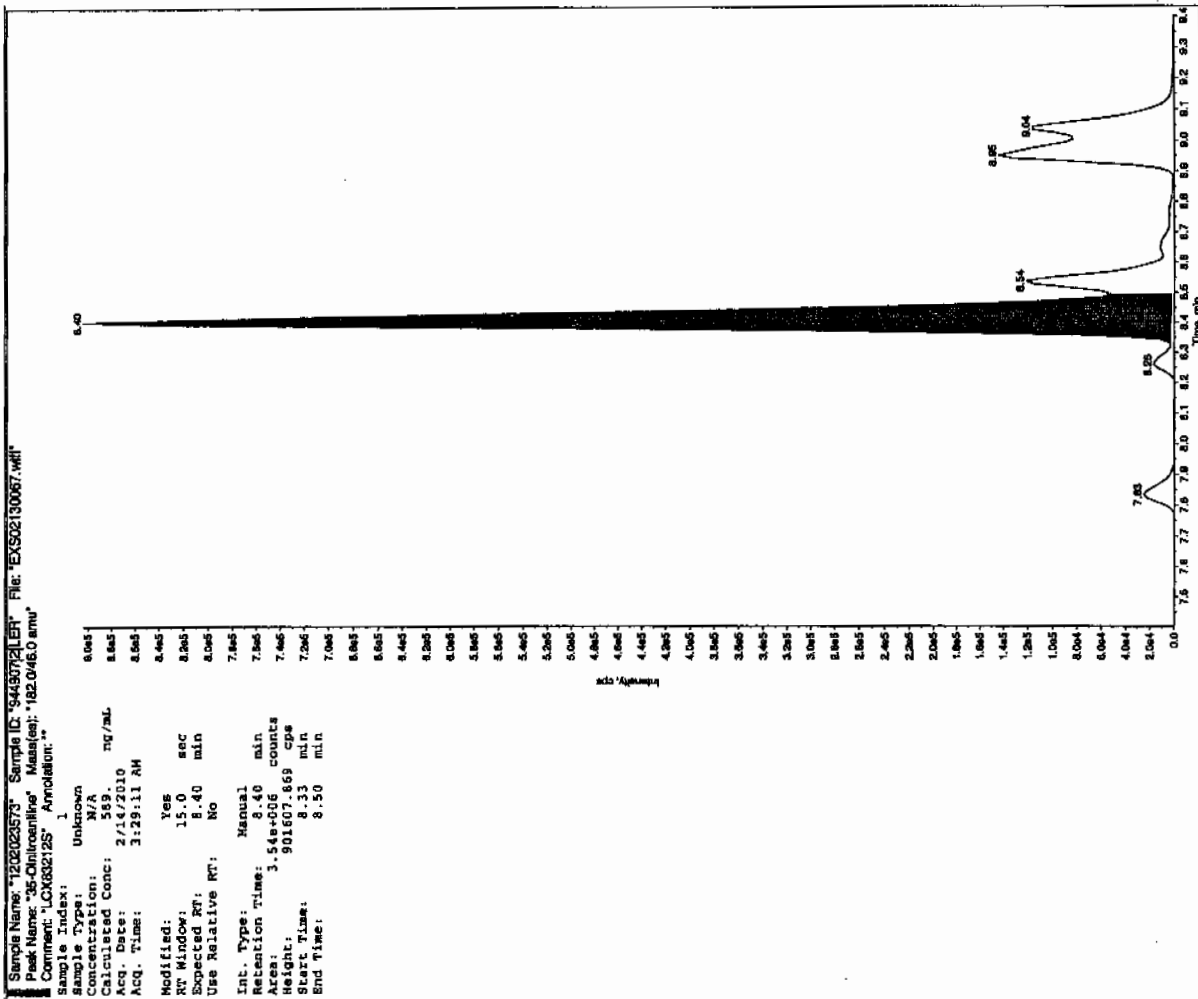
Before Scan 245710

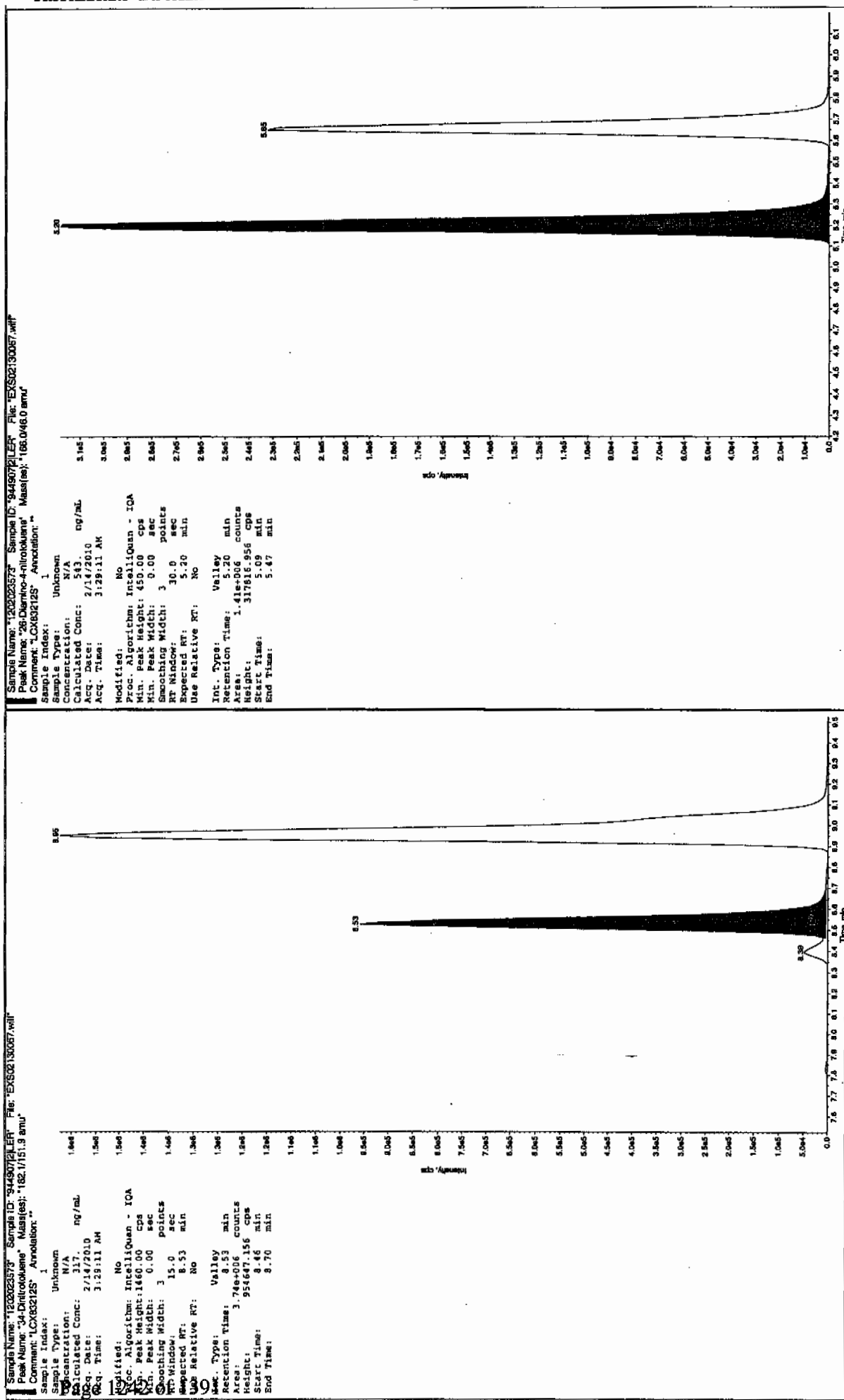


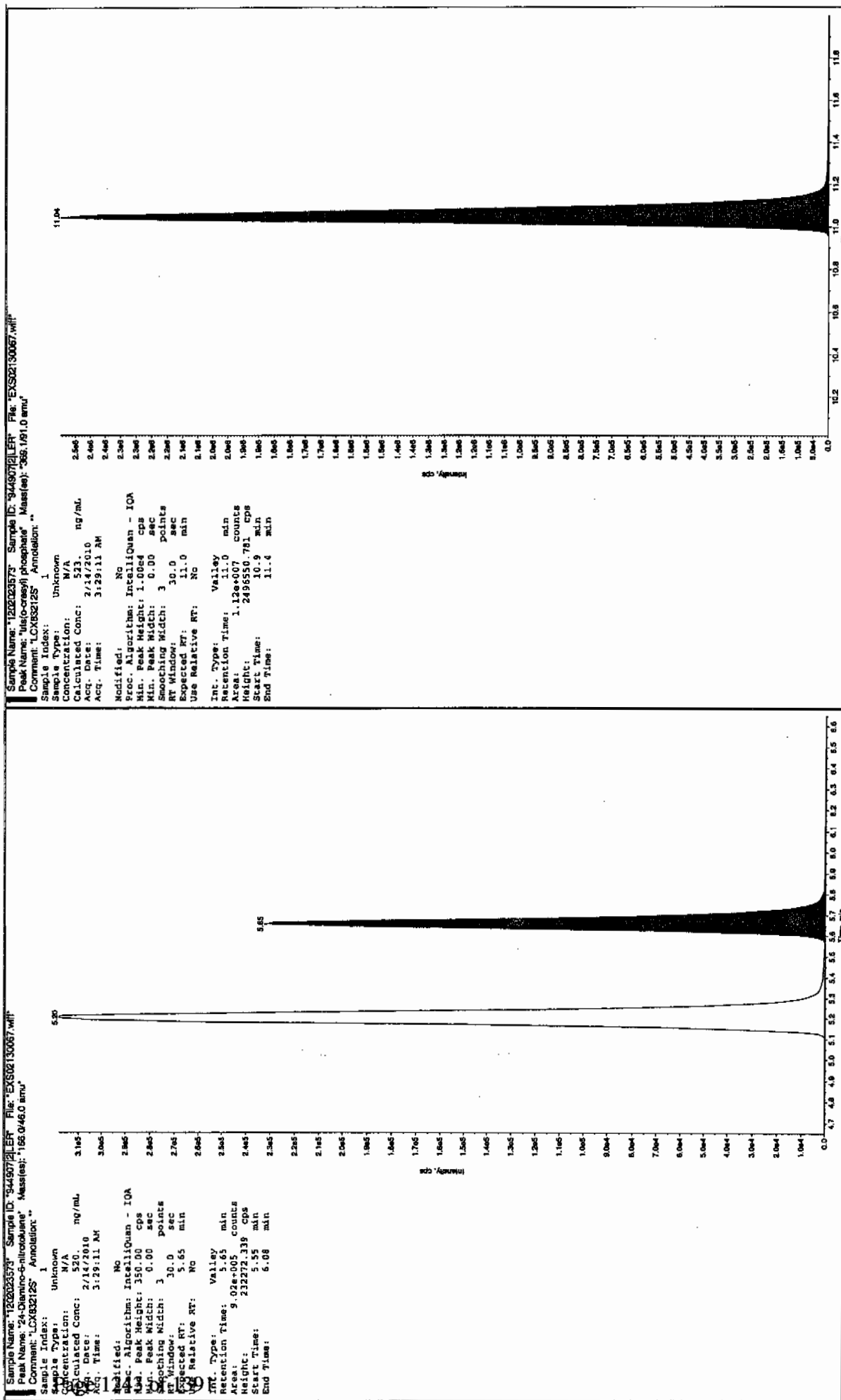
After Scan 021710



after Jan 21/17/10







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689(245387001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023574

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208232a

Date Analyzed: 13-FEB-10 08:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4810	
121-14-2	2,4-Dinitrotoluene	5160	
121-82-4	RDX	5340	
19406-51-0	4-Amino-2,6-dinitrotoluene	5190	
2691-41-0	HMX	5220	
35572-78-2	2-Amino-4,6-dinitrotoluene	5530	
479-45-8	Tetryl	1790	
606-20-2	2,6-Dinitrotoluene	5000	
78-11-5	PETN	6600	
88-72-2	o-Nitrotoluene	5160	
98-95-3	Nitrobenzene	4890	
99-08-1	m-Nitrotoluene	4800	
99-35-4	1,3,5-Trinitrobenzene	4120	
99-65-0	m-Dinitrobenzene	5030	
99-99-0	p-Nitrotoluene	5320	

*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: Sun Feb 14 11:45:22 2010, Page 9 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208232a

Date: 13-Feb-2010

Time: 08:22:51

ID: 1202023574

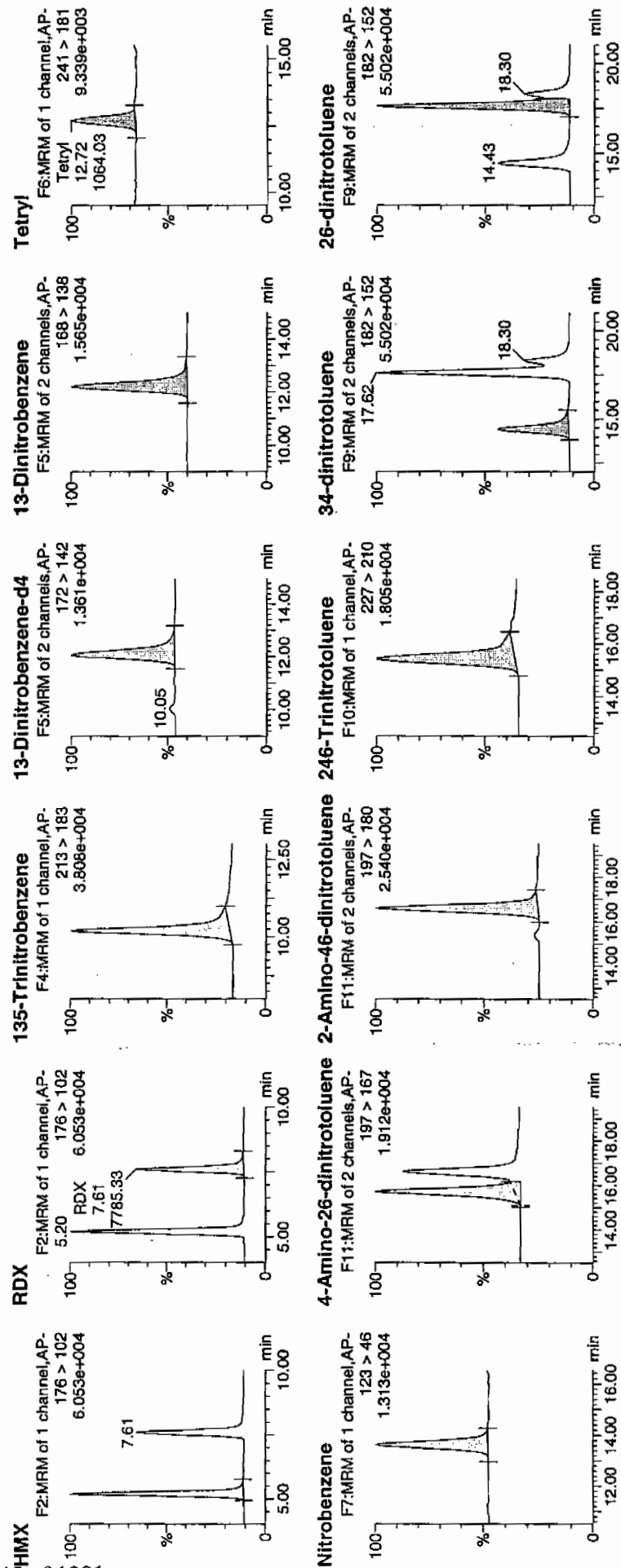
Vial: 2:1,E

245387001 MSB / 21

LAZ (944907 / 802)

↓ Tetra

Page 1245 of 1391



Handwritten signature/initials

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 10 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

24-dinitrotoluene

F9:MRM of 2 channels,AP-

182 > 152

5.502e+004

17.62

14.43

100

%

min

20.00

0

min

20.00

0

min

20.00

0

min

20.00

0

min

20.00

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min

20.00

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min

20.00

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min

20.00

0

min

20.00

0

26-dinitrotoluene-d3

F9:MRM of 2 channels,AP-

185 > 155

4.811e+004

17.62

14.43

100

%

min

20.00

0

min

20.00

0

min

20.00

0

min

20.00

0

min

20.00

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20.00

0

2-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

1.269e+004

24.15

24.15

100

%

min

25.00

0

min

25.00

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4-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

1.269e+004

24.15

24.15

100

%

min

25.00

0

min

25.00

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min

25.00

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min

25.00

0

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25.00

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25.00

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25.00

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25.00

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min

25.00

0

3-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

1.269e+004

24.15

24.15

100

%

min

25.00

0

min

25.00

0

min

25.00

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min

25.00

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25.00

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min

25.00

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PETN

F13:MRM of 1 channel,AP-

361 > 62

6.232e+004

24.48

31043.77

100

%

min

26.00

0

min

26.00

0

min

26.00

0

min

26.00

0

min

26.00

0

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26.00

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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE14-10-7689(245387001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1384

Matrix: SOIL

GEL Sample ID: 1202023574

Sample Amount 2

Moisture: 13.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944905

Concentrated Extract Volume (mL) 10

Date Extracted: 27-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130068.wiff

Date Analyzed: 14-FEB-10 03:44

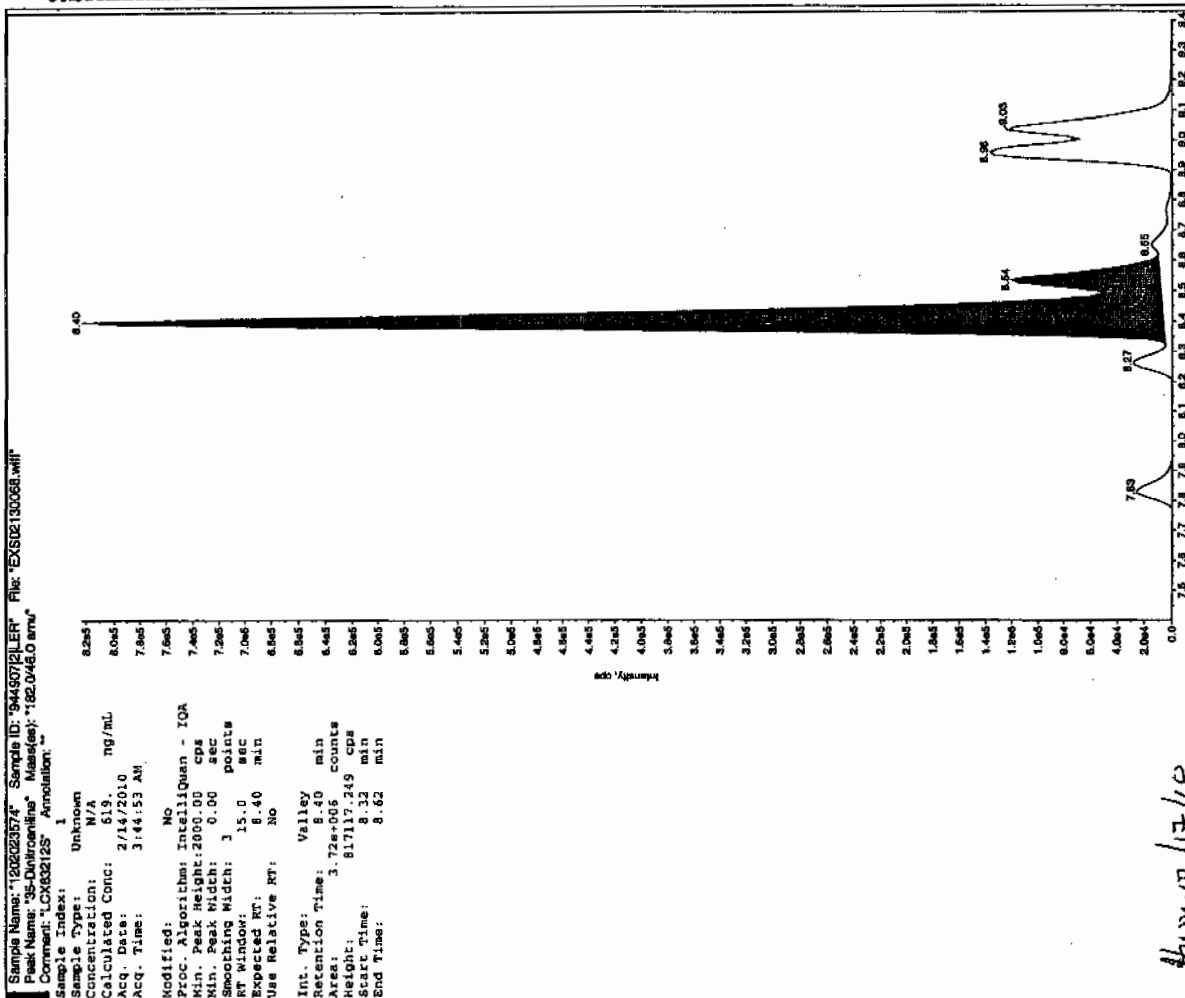
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6040	
59229-75-3	2,6-Diamino-4-nitrotoluene	6140	
618-87-1	3,5-Dinitroaniline	5560	
6629-29-4	2,4-Diamino-6-nitrotoluene	5000	
78-30-8	tris(o-cresyl) phosphate	5210	

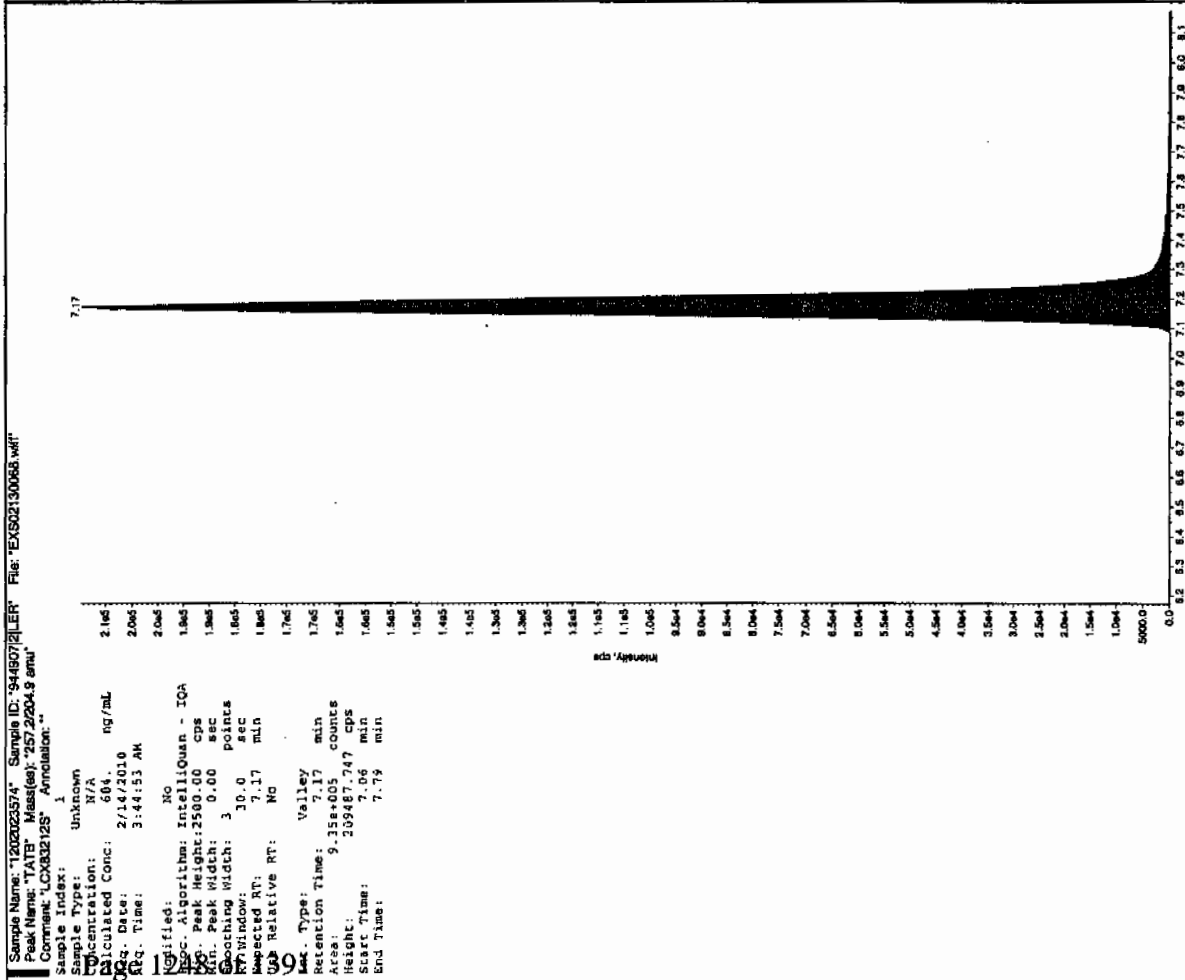
*Concentration =

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

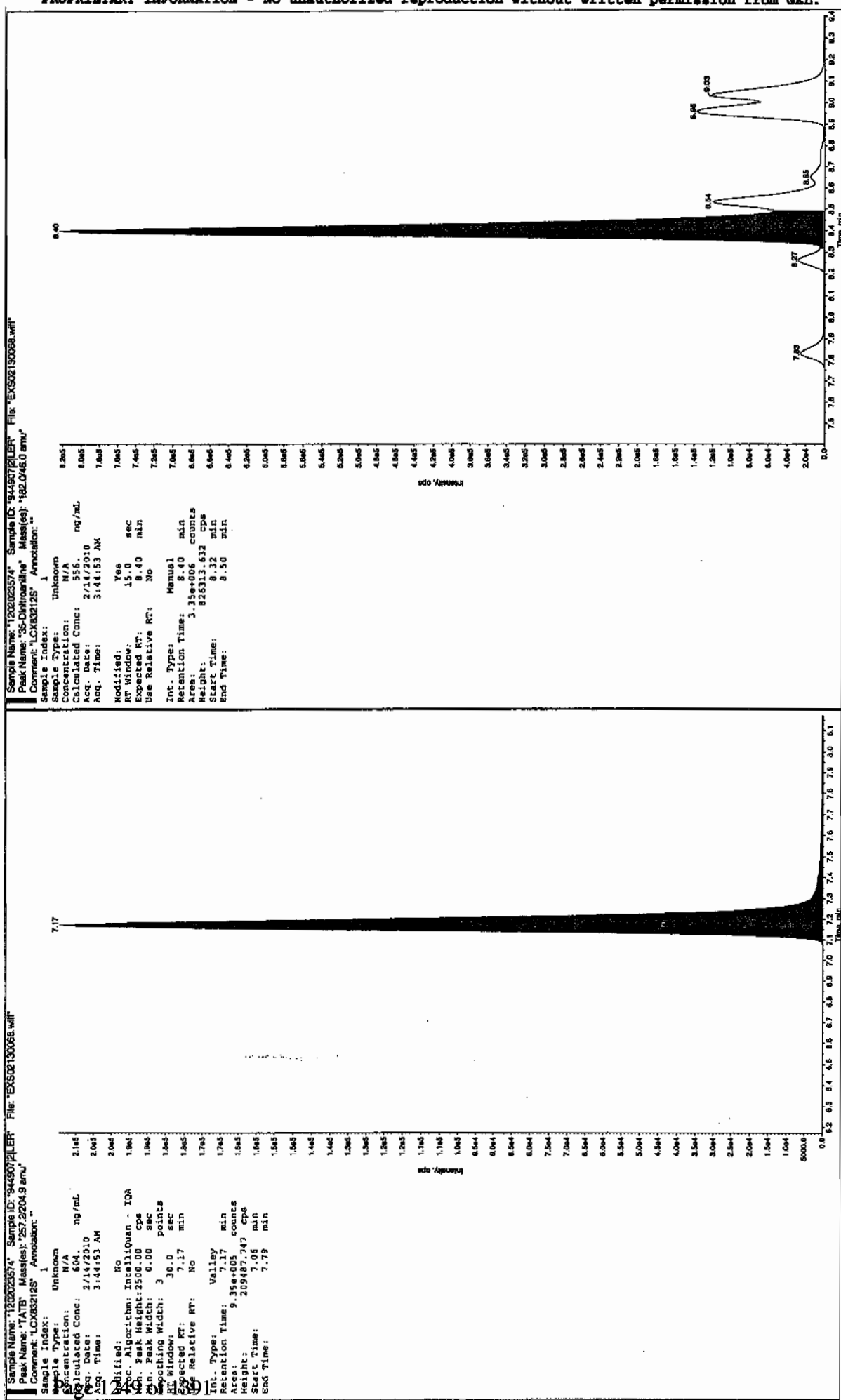
Before Jan 24/10



Hum 02/17/10

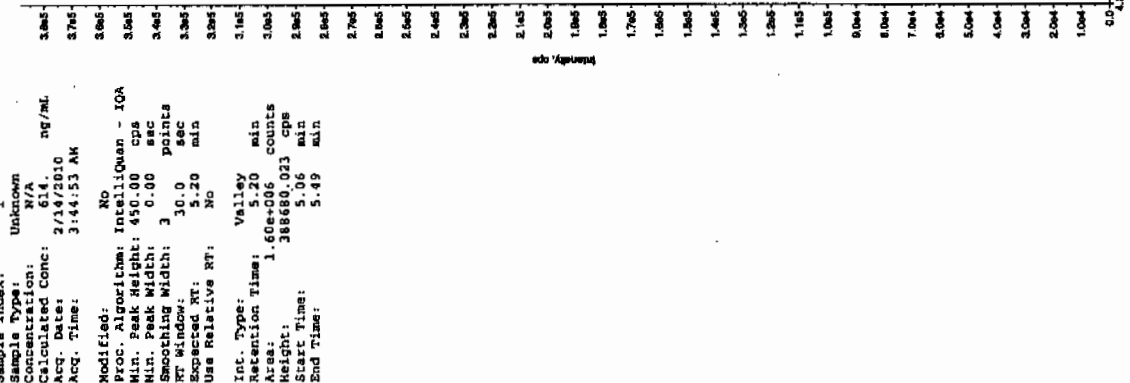


after Jan 21, 2010



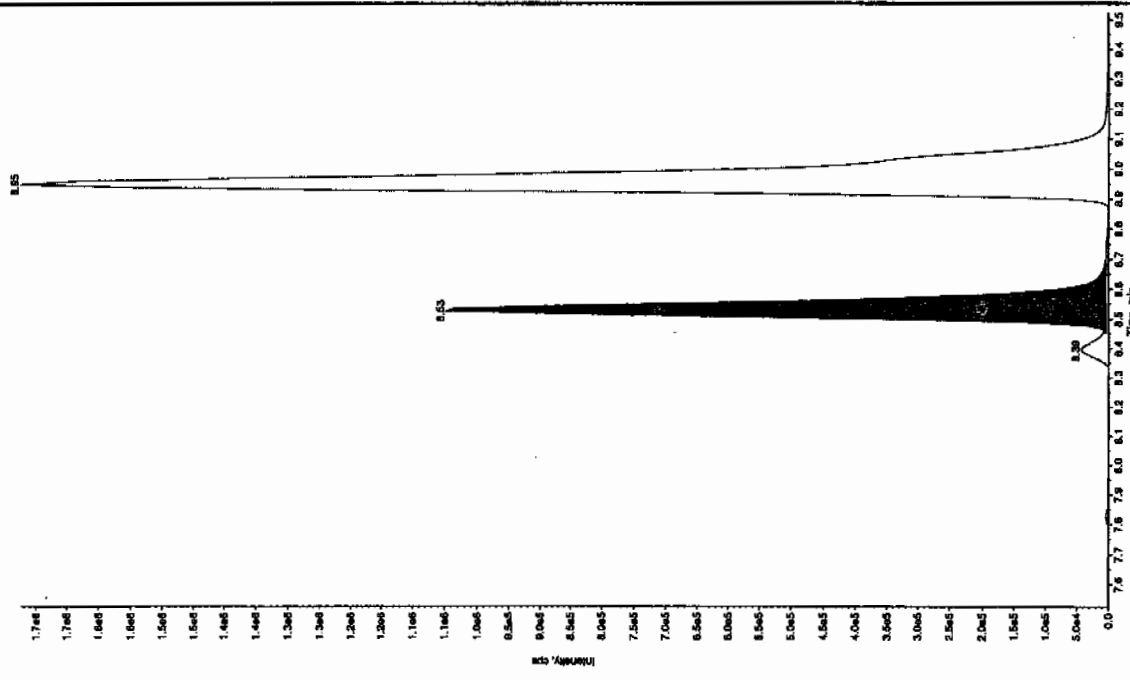
Sample Name: "120223574" Sample ID: "94490721LRF" File: "EX502130068.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

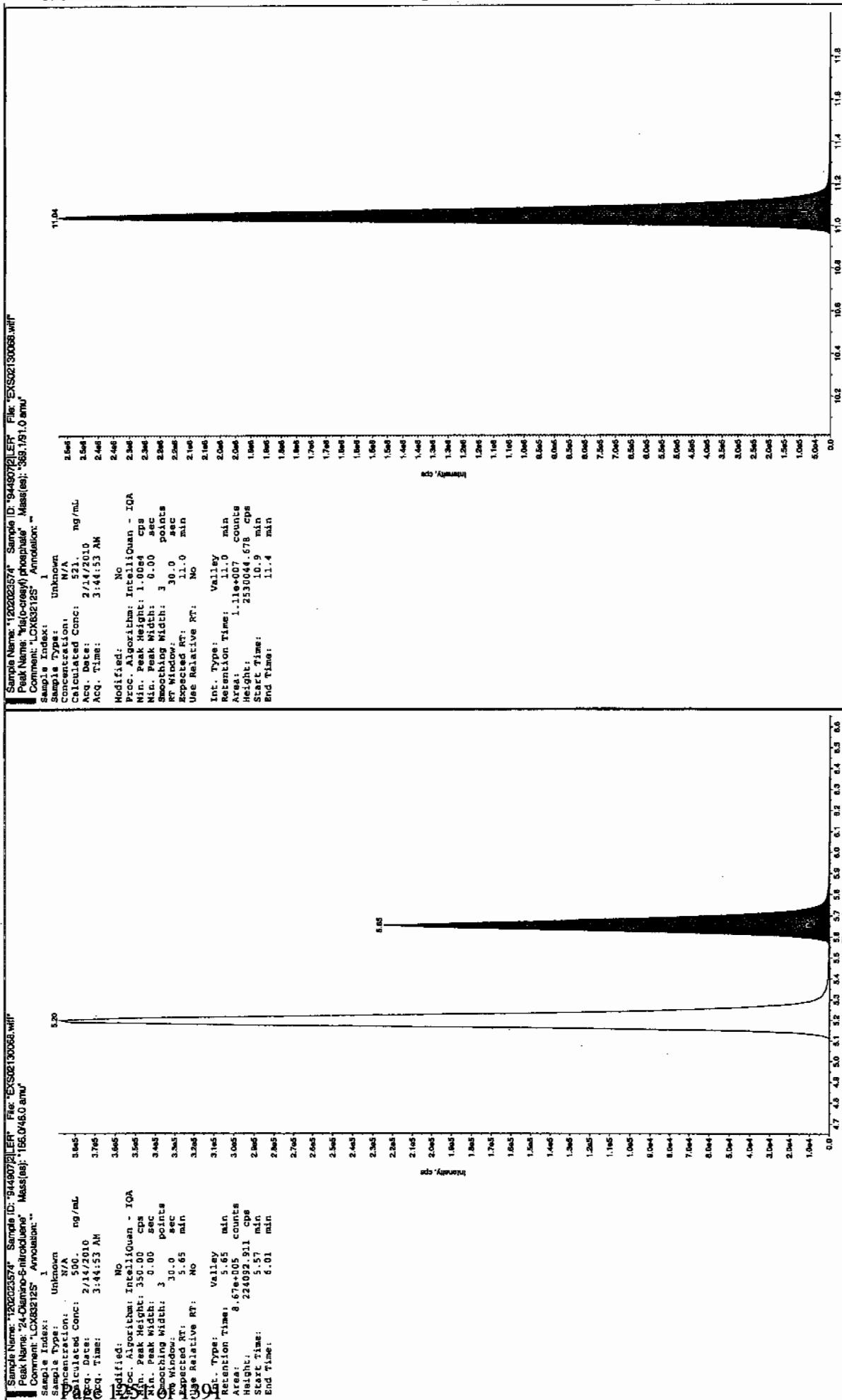
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 614. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 3:44:53 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.20 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.20 min
 Area: 1.60e+006 counts
 Height: 388680.023 cps
 Start Time: 5.06 min
 End Time: 5.49 min



Sample Name: "120223574" Sample ID: "94490721LRF" File: "EX502130068.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 337. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 3:44:53 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 15.0 sec
 Expected RT: 8.53 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.53 min
 Area: 3.97e+006 counts
 Height: 104312.202 cps
 Start Time: 8.45 min
 End Time: 8.71 min





MISCELLANEOUS DATA

Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 944905 Verified by: _____ Lab SOP: GL-OA-E-033 REV# 17
 Analyst: Sirena White Instrument: Semi-Volatiles Manual
 Method: SW846 8330 PREP

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)	Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
1202023571 MB	27-JAN-2010 14:20:00	2	10	5	LCS	1202023572	8321 Explosives LCS	DXX100125-03	.1	mL	Final Solvent: ACN
1202023572 LCS	27-JAN-2010 14:20:00	2	10	5	LCS	1202023572	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
245387001	27-JAN-2010 14:20:00	2	10	5	MS	1202023573	8321 Explosives LCS	DXX100125-03	.1	mL	
1202023573 MS (245387001)	27-JAN-2010 14:20:00	2	10	5	MS	1202023573	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
1202023574 MSD (245387001)	27-JAN-2010 14:20:00	2	10	5	MSD	1202023574	8321 Explosives LCS	DXX100125-03	.1	mL	
245387002	27-JAN-2010 14:20:00	2	10	5	MSD	1202023574	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
245387003	27-JAN-2010 14:20:00	2	10	5	SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	EXP100125-02	.05	mL	
245387004	27-JAN-2010 14:20:00	2	10	5							
245387005	27-JAN-2010 14:20:00	2	10	5							
245387006	27-JAN-2010 14:20:00	2	10	5							
245387007	27-JAN-2010 14:20:00	2	10	5							
245387008	27-JAN-2010 14:20:00	2	10	5							
245387009	27-JAN-2010 14:20:00	2	10	5							
245387010	27-JAN-2010 14:20:00	2	10	5							
245387011	27-JAN-2010 14:20:00	2	10	5							

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 02/08/10
 Extr. Injection Volume: 50uL
 Sequence Number: 020810expA
 Initial Calibration Date: 02/08/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100128-01.2
 Mobile Phase Lot#: 1265885, 1250738
 Standard-Samp Reagent Lot#: 1260901, 1246195
 Reviewed BY: *thyme*
 Date: *02/15/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100208-07 & WXX100211-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0208001a	XIBLK01	MAP	2/8/10 14:44			1		USE	B
EXP0208002a	XIBLK01	MAP	2/8/10 15:13			1		USE	B
EXP0208003a	WXXICAL-01	MAP	2/8/10 15:43			1		USE	I
EXP0208004a	WXXICAL-02	MAP	2/8/10 16:12			1		USE	I
EXP0208005a	WXXICAL-03	MAP	2/8/10 16:42			1		USE	I
EXP0208006a	WXXICAL-04	MAP	2/8/10 17:11			1		USE	I
EXP0208007a	WXXICAL-05	MAP	2/8/10 17:41			1		USE	I
EXP0208008a	WXXICAL-06	MAP	2/8/10 18:11			1		USE	I
EXP0208009a	XIBLK02	MAP	2/8/10 18:40			1		USE	B
EXP0208010a	WXXICV	MAP	2/8/10 19:10			1		USE	C
EXP0208011a	XIBLK03	MAP	2/8/10 19:39			1		USE	B
EXP0208012a	WXXCRI	MAP	2/8/10 20:09			1		USE	C
EXP0208013a	1202021906	MAP	2/8/10 20:38	944246	10-1304	2	LANL	DUSE-RA	S
EXP0208014a	1202021907	MAP	2/8/10 21:08	944246	10-1304	2	LANL	DUSE-RA	S
EXP0208015a	245106001	MAP	2/8/10 21:37	944246	10-1304	2	LANL	USE	S
EXP0208016a	1202021908	MAP	2/8/10 22:07	944246	10-1304	2	LANL	USE	S
EXP0208017a	1202021909	MAP	2/8/10 22:36	944246	10-1304	2	LANL	USE	S
EXP0208018a	245106002	MAP	2/8/10 23:05	944246	10-1304	2	LANL	USE	S
EXP0208019a	245106003	MAP	2/8/10 23:35	944246	10-1304	2	LANL	USE	S
EXP0208020a	245106004	MAP	2/9/10 0:04	944246	10-1304	2	LANL	USE	S
EXP0208021a	245106005	MAP	2/9/10 0:34	944246	10-1304	2	LANL	USE	S
EXP0208022a	245106006	MAP	2/9/10 1:03	944246	10-1304	2	LANL	USE	S
EXP0208023a	WXXCCV	MAP	2/9/10 1:33			1		USE	C
EXP0208024a	XIBLK04	MAP	2/9/10 2:02			1		USE	B
EXP0208025a	WXXCRI	MAP	2/9/10 2:32			1		USE	C
EXP0208026a	245106007	MAP	2/9/10 3:01	944246	10-1304	2	LANL	USE	S
EXP0208027a	245106008	MAP	2/9/10 3:31	944246	10-1304	2	LANL	USE	S
EXP0208028a	245106009	MAP	2/9/10 4:00	944246	10-1304	2	LANL	USE	S
EXP0208029a	245106010	MAP	2/9/10 4:30	944246	10-1304	2	LANL	USE	S

EXP0208030a	245106011	MAP	2/9/10 4:59	944246	10-1304	2	LANL	USE	S
EXP0208031a	245106012	MAP	2/9/10 5:29	944246	10-1304	2	LANL	USE	S
EXP0208032a	245106013	MAP	2/9/10 5:58	944246	10-1304	2	LANL	USE	S
EXP0208033a	245106014	MAP	2/9/10 6:28	944246	10-1304	2	LANL	USE	S
EXP0208034a	245106015	MAP	2/9/10 6:58	944246	10-1304	2	LANL	USE	S
EXP0208035a	245106016	MAP	2/9/10 7:27	944246	10-1304	2	LANL	USE	S
EXP0208036a	WXCCV	MAP	2/9/10 7:57			1		USE	C
EXP0208037a	XIBLK05	MAP	2/9/10 8:26			1		USE	B
EXP0208038a	WXXCRI	MAP	2/9/10 8:56			1		USE	C
EXP0208039a	1202021914	MAP	2/9/10 9:25	944250	10-1324	2	LANL	USE	S
EXP0208040a	1202021915	MAP	2/9/10 9:55	944250	10-1324	2	LANL	USE	S
EXP0208041a	245114002	MAP	2/9/10 10:24	944250	10-1324	2	LANL	USE	S
EXP0208042a	1202021916	MAP	2/9/10 10:54	944250	10-1324	2	LANL	USE	S
EXP0208043a	1202021917	MAP	2/9/10 11:23	944250	10-1324	2	LANL	USE	S
EXP0208044a	245114003	MAP	2/9/10 11:53	944250	10-1324	2	LANL	USE	S
EXP0208045a	245114004	MAP	2/9/10 12:22	944250	10-1324	2	LANL	USE	S
EXP0208046a	245114005	MAP	2/9/10 12:52	944250	10-1324	2	LANL	USE	S
EXP0208047a	245114006	MAP	2/9/10 13:21	944250	10-1324	2	LANL	USE	S
EXP0208048a	245114007	MAP	2/9/10 13:51	944250	10-1324	2	LANL	USE	S
EXP0208049a	WXCCV	MAP	2/9/10 14:20			1		USE	C
EXP0208050a	XIBLK06	MAP	2/9/10 14:50			1		USE	B
EXP0208051a	WXXCRI	MAP	2/9/10 15:19			1		USE	C
EXP0208052a	245114008	MAP	2/9/10 15:49	944250	10-1324	2	LANL	USE	S
EXP0208053a	245114009	MAP	2/9/10 16:18	944250	10-1324	2	LANL	USE	S
EXP0208054a	245114010	MAP	2/9/10 16:48	944250	10-1324	2	LANL	USE	S
EXP0208055a	245114011	MAP	2/9/10 17:17	944250	10-1324	2	LANL	USE	S
EXP0208056a	245114012	MAP	2/9/10 17:47	944250	10-1324	2	LANL	USE	S
EXP0208057a	245114013	MAP	2/9/10 18:16	944250	10-1324	2	LANL	USE	S
EXP0208058a	245114014	MAP	2/9/10 18:46	944250	10-1324	2	LANL	USE	S
EXP0208059a	245114015	MAP	2/9/10 19:15	944250	10-1324	2	LANL	USE	S
EXP0208060a	1202021906	MAP	2/9/10 19:45	944246	10-1304	2	LANL	USE	S
EXP0208061a	1202021907	MAP	2/9/10 20:14	944246	10-1304	2	LANL	USE	S
EXP0208062a	WXCCV	MAP	2/9/10 20:44			1		USE	C
EXP0208063a	XIBLK07	MAP	2/9/10 21:13			1		USE	B
EXP0208064a	WXXCRI	MAP	2/9/10 21:43			1		USE	C
EXP0208065a	1202023096	MAP	2/9/10 22:12	944718	Various	2	LANL	USE	S
EXP0208066a	1202023097	MAP	2/9/10 22:42	944718	Various	2	LANL	USE	S

EXP0208067a	245116001	MAP	2/9/10 23:12	944718	10-1327	2	LANL	USE	S
EXP0208068a	1202023098	MAP	2/9/10 23:41	944718	10-1327	2	LANL	USE	S
EXP0208069a	1202023099	MAP	2/10/10 0:10	944718	10-1327	2	LANL	USE	S
EXP0208070a	245116002	MAP	2/10/10 0:40	944718	10-1327	2	LANL	DUSE-RA	S
EXP0208071a	245116003	MAP	2/10/10 1:09	944718	10-1327	2	LANL	USE	S
EXP0208072a	245116004	MAP	2/10/10 1:39	944718	10-1327	2	LANL	USE	S
EXP0208073a	245116005	MAP	2/10/10 2:08	944718	10-1327	2	LANL	DUSE-RA	S
EXP0208074a	245116006	MAP	2/10/10 2:38	944718	10-1327	2	LANL	USE	S
EXP0208075a	WXXCCV	MAP	2/10/10 3:07			1		USE	C
EXP0208076a	XIBLK08	MAP	2/10/10 3:37			1		USE	B
EXP0208077a	WXXCRI	MAP	2/10/10 4:06			1		USE	C
EXP0208078a	245116007	MAP	2/10/10 4:36	944718	10-1327	2	LANL	USE	S
EXP0208079a	245116008	MAP	2/10/10 5:06	944718	10-1327	2	LANL	USE	S
EXP0208080a	245116009	MAP	2/10/10 5:35	944718	10-1327	2	LANL	USE	S
EXP0208081a	245116010	MAP	2/10/10 6:04	944718	10-1327	2	LANL	USE	S
EXP0208082a	245116011	MAP	2/10/10 6:34	944718	10-1327	2	LANL	USE	S
EXP0208083a	245116012	MAP	2/10/10 7:03	944718	10-1327	2	LANL	USE	S
EXP0208084a	245116013	MAP	2/10/10 7:33	944718	10-1327	2	LANL	USE	S
EXP0208085a	245116014	MAP	2/10/10 8:02	944718	10-1327	2	LANL	USE	S
EXP0208086a	245116015	MAP	2/10/10 8:32	944718	10-1327	2	LANL	USE	S
EXP0208087a	245116016	MAP	2/10/10 9:01	944718	10-1327	2	LANL	USE	S
EXP0208088a	WXXCCV	MAP	2/10/10 9:31			1		USE	C
EXP0208089a	XIBLK09	MAP	2/10/10 10:01			1		USE	B
EXP0208090a	WXXCRI	MAP	2/10/10 10:30			1		USE	C
EXP0208091a	245226001	MAP	2/10/10 11:00	944718	10-1342	250	LANL	USE	S
EXP0208092a	245226001	MAP	2/10/10 11:29	944718	10-1342	2	LANL	USE	S
EXP0208093a	XIBLK10	MAP	2/10/10 11:59			1		USE	B
EXP0208094a	245226003	MAP	2/10/10 12:28	944718	10-1342	250	LANL	DUSE	S
EXP0208095a	245226003	MAP	2/10/10 12:58	944718	10-1342	2	LANL	USE	S
EXP0208096a	XIBLK11	MAP	2/10/10 13:28			1		USE	B
EXP0208097a	245116002	MAP	2/10/10 13:57	944718	10-1327	2	LANL	USE	S
EXP0208098a	245116005	MAP	2/10/10 14:27	944718	10-1327	2	LANL	USE	S
EXP0208099a	245226003	MAP	2/10/10 14:56	944718	10-1342	500	LANL	USE	S
EXP0208100a	WXXCCV	MAP	2/10/10 15:26			1		USE	C
EXP0208101a	XIBLK12	MAP	2/10/10 15:55			1		USE	B
EXP0208102a	WXXCRI	MAP	2/10/10 16:25			1		USE	C
EXP0208103a	1202027262	MAP	2/10/10 16:54	946483	10-1408	2	LANL	USE	S

EXP0208104a	1202027263	MAP	2/10/10 17:24	946483	10-1408	2	LANL	USE	S
EXP0208105a	245597002	MAP	2/10/10 17:53	946483	10-1408	2	LANL	USE	S
EXP0208106a	1202027264	MAP	2/10/10 18:23	946483	10-1408	2	LANL	USE	S
EXP0208107a	1202027265	MAP	2/10/10 18:52	946483	10-1408	2	LANL	USE	S
EXP0208108a	245597003	MAP	2/10/10 19:22	946483	10-1408	2	LANL	USE	S
EXP0208109a	245597004	MAP	2/10/10 19:51	946483	10-1408	2	LANL	USE	S
EXP0208110a	245597005	MAP	2/10/10 20:21	946483	10-1408	2	LANL	USE	S
EXP0208111a	245597006	MAP	2/10/10 20:50	946483	10-1408	2	LANL	USE	S
EXP0208112a	245597007	MAP	2/10/10 21:20	946483	10-1408	2	LANL	USE	S
EXP0208113a	WXXCCV	MAP	2/10/10 21:49			1		USE	C
EXP0208114a	XIBLK13	MAP	2/10/10 22:19			1		USE	B
EXP0208115a	WXXCRI	MAP	2/10/10 22:48			1		USE	C
EXP0208116a	245597008	MAP	2/10/10 23:18	946483	10-1408	2	LANL	USE	S
EXP0208117a	245597009	MAP	2/10/10 23:47	946483	10-1408	2	LANL	USE	S
EXP0208118a	245597010	MAP	2/11/10 0:17	946483	10-1408	2	LANL	USE	S
EXP0208119a	245597011	MAP	2/11/10 0:46	946483	10-1408	2	LANL	USE	S
EXP0208120a	WXXCCV	MAP	2/11/10 1:16			1		USE	C
EXP0208121a	XIBLK14	MAP	2/11/10 1:45			1		USE	B
EXP0208122a	WXXCRI	MAP	2/11/10 2:15			1		USE	C
EXP0208123a	1202027274	MAP	2/11/10 2:44	946488	Various	2	LANL	USE	S
EXP0208124a	1202027275	MAP	2/11/10 3:14	946488	Various	2	LANL	DUSE-RA	S
EXP0208125a	245621002	MAP	2/11/10 3:43	946488	10-1424	2	LANL	DUSE-RA	S
EXP0208126a	1202027276	MAP	2/11/10 4:13	946488	10-1424	2	LANL	DUSE-RA	S
EXP0208127a	1202027277	MAP	2/11/10 4:42	946488	10-1424	2	LANL	USE	S
EXP0208128a	245621003	MAP	2/11/10 5:12	946488	10-1424	2	LANL	USE	S
EXP0208129a	245621004	MAP	2/11/10 5:41	946488	10-1424	2	LANL	USE	S
EXP0208130a	245621005	MAP	2/11/10 6:11	946488	10-1424	2	LANL	USE	S
EXP0208131a	245621006	MAP	2/11/10 6:40	946488	10-1424	2	LANL	USE	S
EXP0208132a	245621007	MAP	2/11/10 7:10	946488	10-1424	2	LANL	USE	S
EXP0208133a	WXXCCV	MAP	2/11/10 7:39			1		USE	C
EXP0208134a	XIBLK15	MAP	2/11/10 8:09			1		USE	B
EXP0208135a	WXXCRI	MAP	2/11/10 8:38			1		USE	C
EXP0208136a	245621008	MAP	2/11/10 9:08	946488	10-1424	2	LANL	USE	S
EXP0208137a	245621009	MAP	2/11/10 9:37	946488	10-1424	2	LANL	USE	S
EXP0208138a	245621010	MAP	2/11/10 10:07	946488	10-1424	2	LANL	USE	S
EXP0208139a	245621011	MAP	2/11/10 10:36	946488	10-1424	2	LANL	USE	S
EXP0208140a	245628002	MAP	2/11/10 11:06	946488	10-1427	2	LANL	USE	S

EXP0208141a	245628003	MAP	2/11/10 11:36	946488	10-1427	2	LANL	USE	S
EXP0208142a	245628004	MAP	2/11/10 12:05	946488	10-1427	2	LANL	USE	S
EXP0208143a	245631002	MAP	2/11/10 12:35	946488	10-1428	2	LANL	USE	S
EXP0208144a	245631003	MAP	2/11/10 13:04	946488	10-1428	2	LANL	USE	S
EXP0208145a	WXXCCV	MAP	2/11/10 13:34			1		USE	C
EXP0208146a	XIBLK16	MAP	2/11/10 14:03			1		USE	B
EXP0208147a	WXXCRI	MAP	2/11/10 14:33			1		USE	C
EXP0208148a	245597002	MAP	2/11/10 15:02	946483	10-1408	25	LANL	DUSE	S
EXP0208149a	245597002	MAP	2/11/10 15:32	946483	10-1408	25	LANL	USE	S
EXP0208150a	1202027275	MAP	2/11/10 16:01	946488	Various	2	LANL	USE	S
EXP0208151a	245621002	MAP	2/11/10 16:31	946488	10-1424	2	LANL	USE	S
EXP0208152a	1202027276	MAP	2/11/10 17:00	946488	10-1424	2	LANL	USE	S
EXP0208153a	IXP100210-02	MAP	2/11/10 17:30	SCREEN	NA	1	GEL	USE	S
EXP0208154a	IXX100208-03	MAP	2/11/10 18:00	SCREEN	NA	1	GEL	USE	S
EXP0208155a	WXXCCV	MAP	2/11/10 18:29			1		USE	C
EXP0208156a	XIBLK17	MAP	2/11/10 18:58			1		USE	B
EXP0208157a	WXXCRI	MAP	2/11/10 19:28			1		USE	C
EXP0208158a	1202028676	MAP	2/11/10 19:57	947084	Various	2	LANL	USE	S
EXP0208159a	1202028677	MAP	2/11/10 20:27	947084	Various	2	LANL	USE	S
EXP0208160a	245663001	MAP	2/11/10 20:57	947084	10-1436	2	LANL	USE	S
EXP0208161a	1202028678	MAP	2/11/10 21:26	947084	10-1436	2	LANL	USE	S
EXP0208162a	1202028679	MAP	2/11/10 21:55	947084	10-1436	2	LANL	USE	S
EXP0208163a	245663002	MAP	2/11/10 22:25	947084	10-1436	2	LANL	USE	S
EXP0208164a	245663003	MAP	2/11/10 22:54	947084	10-1436	2	LANL	USE	S
EXP0208165a	245663004	MAP	2/11/10 23:24	947084	10-1436	2	LANL	USE	S
EXP0208166a	245663005	MAP	2/11/10 23:53	947084	10-1436	2	LANL	USE	S
EXP0208167a	245663006	MAP	2/12/10 0:23	947084	10-1436	2	LANL	USE	S
EXP0208168a	WXXCCV	MAP	2/12/10 0:52			1		USE	C
EXP0208169a	XIBLK18	MAP	2/12/10 1:22			1		USE	B
EXP0208170a	WXXCRI	MAP	2/12/10 1:51			1		USE	C
EXP0208171a	245803001	MAP	2/12/10 2:21	947084	10-1473	2	LANL	USE	S
EXP0208172a	245803002	MAP	2/12/10 2:50	947084	10-1473	2	LANL	USE	S
EXP0208173a	245803003	MAP	2/12/10 3:20	947084	10-1473	2	LANL	USE	S
EXP0208174a	245803004	MAP	2/12/10 3:50	947084	10-1473	2	LANL	USE	S
EXP0208175a	245803005	MAP	2/12/10 4:19	947084	10-1473	2	LANL	USE	S
EXP0208176a	245803006	MAP	2/12/10 4:49	947084	10-1473	2	LANL	USE	S
EXP0208177a	245803007	MAP	2/12/10 5:18	947084	10-1473	2	LANL	USE	S

EXP0208178a	245803008	MAP	2/12/10 5:48	947084	10-1473	2	LANL	USE	S
EXP0208179a	WXXCCV	MAP	2/12/10 6:17			1		USE	C
EXP0208180a	XIBLK19	MAP	2/12/10 6:47			1		USE	B
EXP0208181a	WXXCRI	MAP	2/12/10 7:16			1		USE	C
EXP0208182a	1202028672	MAP	2/12/10 7:46	947078	Various	2	LANL	USE	S
EXP0208183a	1202028673	MAP	2/12/10 8:15	947078	Various	2	LANL	USE	S
EXP0208184a	245661001	MAP	2/12/10 8:45	947078	10-1435	2	LANL	USE	S
EXP0208185a	245686001	MAP	2/12/10 9:14	947078	10-1432	2	LANL	USE	S
EXP0208186a	1202028674	MAP	2/12/10 9:44	947078	10-1432	2	LANL	USE	S
EXP0208187a	1202028675	MAP	2/12/10 10:13	947078	10-1432	2	LANL	USE	S
EXP0208188a	245686002	MAP	2/12/10 10:43	947078	10-1432	2	LANL	USE	S
EXP0208189a	245686003	MAP	2/12/10 11:13	947078	10-1432	2	LANL	USE	S
EXP0208190a	245686004	MAP	2/12/10 11:42	947078	10-1432	2	LANL	USE	S
EXP0208191a	245686005	MAP	2/12/10 12:12	947078	10-1432	2	LANL	USE	S
EXP0208192a	WXXCCV	MAP	2/12/10 12:41			1		USE	C
EXP0208193a	XIBLK20	MAP	2/12/10 13:11			1		USE	B
EXP0208194a	WXXCRI	MAP	2/12/10 13:40			1		USE	C
EXP0208195a	245686006	MAP	2/12/10 14:10	947078	10-1432	2	LANL	USE	S
EXP0208196a	245686007	MAP	2/12/10 14:40	947078	10-1432	2	LANL	USE	S
EXP0208197a	245686008	MAP	2/12/10 15:09	947078	10-1432	2	LANL	USE	S
EXP0208198a	245686009	MAP	2/12/10 15:38	947078	10-1432	2	LANL	USE	S
EXP0208199a	245686010	MAP	2/12/10 16:08	947078	10-1432	2	LANL	USE	S
EXP0208200a	245686011	MAP	2/12/10 16:38	947078	10-1432	2	LANL	USE	S
EXP0208201a	245686012	MAP	2/12/10 17:07	947078	10-1432	2	LANL	USE	S
EXP0208202a	245686013	MAP	2/12/10 17:36	947078	10-1432	2	LANL	USE	S
EXP0208203a	245686014	MAP	2/12/10 18:06	947078	10-1432	2	LANL	USE	S
EXP0208204a	WXXCCV	MAP	2/12/10 18:36			1		USE	C
EXP0208205a	XIBLK21	MAP	2/12/10 19:05			1		USE	B
EXP0208206a	WXXCRI	MAP	2/12/10 19:35			1		USE	C
EXP0208207a	1202023542	MAP	2/12/10 20:04	944900	10-1382	2	LANL	USE	S
EXP0208208a	1202023543	MAP	2/12/10 20:34	944900	10-1382	2	LANL	USE	S
EXP0208209a	245384001	MAP	2/12/10 21:03	944900	10-1382	2	LANL	USE	S
EXP0208210a	1202023544	MAP	2/12/10 21:33	944900	10-1382	2	LANL	USE	S
EXP0208211a	1202023545	MAP	2/12/10 22:02	944900	10-1382	2	LANL	USE	S
EXP0208212a	245384002	MAP	2/12/10 22:32	944900	10-1382	2	LANL	USE	S
EXP0208213a	245384003	MAP	2/12/10 23:01	944900	10-1382	2	LANL	USE	S
EXP0208214a	245384004	MAP	2/12/10 23:31	944900	10-1382	2	LANL	USE	S

EXP0208215a	245384005	MAP	2/13/10 0:00	944900	10-1382	2	LANL	USE	S
EXP0208216a	245384006	MAP	2/13/10 0:30	944900	10-1382	2	LANL	USE	S
EXP0208217a	WXXCVC	MAP	2/13/10 0:59			1		USE	C
EXP0208218a	XIBLK22	MAP	2/13/10 1:29			1		USE	B
EXP0208219a	WXXCRI	MAP	2/13/10 1:58			1		USE	C
EXP0208220a	245384007	MAP	2/13/10 2:28	944900	10-1382	2	LANL	USE	S
EXP0208221a	245384008	MAP	2/13/10 2:57	944900	10-1382	2	LANL	USE	S
EXP0208222a	245384009	MAP	2/13/10 3:27	944900	10-1382	2	LANL	USE	S
EXP0208223a	245384010	MAP	2/13/10 3:56	944900	10-1382	2	LANL	USE	S
EXP0208224a	245384012	MAP	2/13/10 4:26	944900	10-1382	2	LANL	USE	S
EXP0208225a	WXXCVC	MAP	2/13/10 4:56			1		USE	C
EXP0208226a	XIBLK23	MAP	2/13/10 5:25			1		USE	B
EXP0208227a	WXXCRI	MAP	2/13/10 5:55			1		USE	C
EXP0208228a	1202023571	MAP	2/13/10 6:24	944907	10-1384	2	LANL	USE	S
EXP0208229a	1202023572	MAP	2/13/10 6:54	944907	10-1384	2	LANL	USE	S
EXP0208230a	245387001	MAP	2/13/10 7:23	944907	10-1384	2	LANL	USE	S
EXP0208231a	1202023573	MAP	2/13/10 7:53	944907	10-1384	2	LANL	USE	S
EXP0208232a	1202023574	MAP	2/13/10 8:22	944907	10-1384	2	LANL	USE	S
EXP0208233a	245387002	MAP	2/13/10 8:52	944907	10-1384	2	LANL	USE	S
EXP0208234a	245387003	MAP	2/13/10 9:21	944907	10-1384	2	LANL	USE	S
EXP0208235a	245387004	MAP	2/13/10 9:51	944907	10-1384	2	LANL	USE	S
EXP0208236a	245387005	MAP	2/13/10 10:20	944907	10-1384	2	LANL	USE	S
EXP0208237a	245387006	MAP	2/13/10 10:50	944907	10-1384	2	LANL	USE	S
EXP0208238a	WXXCVC	MAP	2/13/10 11:20			1		USE	C
EXP0208239a	XIBLK24	MAP	2/13/10 11:50			1		USE	B
EXP0208240a	WXXCRI	MAP	2/13/10 12:19			1		USE	C
EXP0208241a	245387007	MAP	2/13/10 12:49	944907	10-1384	2	LANL	USE	S
EXP0208242a	245387008	MAP	2/13/10 13:18	944907	10-1384	2	LANL	USE	S
EXP0208243a	245387009	MAP	2/13/10 13:48	944907	10-1384	2	LANL	USE	S
EXP0208244a	245387010	MAP	2/13/10 14:17	944907	10-1384	2	LANL	USE	S
EXP0208245a	245387011	MAP	2/13/10 14:47	944907	10-1384	2	LANL	USE	S
EXP0208246a	1202023572	MAP	2/13/10 15:16	944907	10-1384	2	LANL	USE	S
EXP0208247a	1202023573	MAP	2/13/10 15:46	944907	10-1384	2	LANL	USE	S
EXP0208248a	1202023574	MAP	2/13/10 16:15	944907	10-1384	2	LANL	USE	S
EXP0208249a	1202023543	MAP	2/13/10 16:45	944900	10-1382	2	LANL	USE	S
EXP0208250a	1202023545	MAP	2/13/10 17:14	944900	10-1382	2	LANL	USE	S
EXP0208251a	WXXCVC	MAP	2/13/10 17:44			1		USE	C

EXP0208252a	XIBLK25	MAP	2/13/10 18:13			1		USE	B
EXP0208253a	WXXCRI	MAP	2/13/10 18:43			1		USE	C
EXP0208254a	1202023615	MAP	2/13/10 19:12	944929	10-1390	2	LANL	USE	S
EXP0208255a	1202023616	MAP	2/13/10 19:42	944929	10-1390	2	LANL	USE	S
EXP0208256a	245391001	MAP	2/13/10 20:11	944929	10-1390	2	LANL	USE	S
EXP0208257a	1202023617	MAP	2/13/10 20:41	944929	10-1390	2	LANL	USE	S
EXP0208258a	1202023618	MAP	2/13/10 21:10	944929	10-1390	2	LANL	USE	S
EXP0208259a	245391002	MAP	2/13/10 21:40	944929	10-1390	2	LANL	USE	S
EXP0208260a	245391003	MAP	2/13/10 22:09	944929	10-1390	2	LANL	USE	S
EXP0208261a	245391004	MAP	2/13/10 22:39	944929	10-1390	2	LANL	USE	S
EXP0208262a	245391005	MAP	2/13/10 23:09	944929	10-1390	2	LANL	USE	S
EXP0208263a	245391006	MAP	2/13/10 23:38	944929	10-1390	2	LANL	USE	S
EXP0208264a	WXXCCV	MAP	2/14/10 0:08			1		USE	C
EXP0208265a	XIBLK26	MAP	2/14/10 0:37			1		USE	B
EXP0208266a	WXXCRI	MAP	2/14/10 1:07			1		USE	C
EXP0208267a	245391007	MAP	2/14/10 1:36	944929	10-1390	2	LANL	USE	S
EXP0208268a	245391008	MAP	2/14/10 2:06	944929	10-1390	2	LANL	USE	S
EXP0208269a	245391009	MAP	2/14/10 2:35	944929	10-1390	2	LANL	USE	S
EXP0208270a	245391010	MAP	2/14/10 3:05	944929	10-1390	2	LANL	USE	S
EXP0208271a	245391011	MAP	2/14/10 3:34	944929	10-1390	2	LANL	USE	S
EXP0208272a	WXXCCV	MAP	2/14/10 4:04			1		USE	C
EXP0208273a	XIBLK27	MAP	2/14/10 4:34			1		USE	B
EXP0208274a	WXXCRI	MAP	2/14/10 5:03			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 02/13/10
 Extr. Injection Volume: 10ul
 Sequence Number: 021310exs
 Initial Calibration Date: 021310
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1263794, 1258141
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: HJW
 Date: 02/13/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100213-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02130001.wiff	XIBLK01	LER	2/13/2010 10:12			1		USE	B
EXS02130002.wiff	XIBLK01	LER	2/13/2010 10:28			1		USE	B
EXS02130003.wiff	WXXICAL-19	LER	2/13/2010 10:44			1		USE	I
EXS02130004.wiff	WXXICAL-20	LER	2/13/2010 11:00			1		USE	I
EXS02130005.wiff	WXXICAL-21	LER	2/13/2010 11:15			1		USE	I
EXS02130006.wiff	WXXICAL-22	LER	2/13/2010 11:31			1		USE	I
EXS02130007.wiff	WXXICAL-23	LER	2/13/2010 11:47			1		USE	I
EXS02130008.wiff	WXXICAL-24	LER	2/13/2010 12:02			1		USE	I
EXS02130009.wiff	WXXICAL-25	LER	2/13/2010 12:18			1		USE	I
EXS02130010.wiff	XIBLK02	LER	2/13/2010 12:34			1		USE	B
EXS02130011.wiff	WXXICV	LER	2/13/2010 12:49			1		USE	C
EXS02130012.wiff	XIBLK03	LER	2/13/2010 13:05			1		USE	B
EXS02130013.wiff	WXXCRI	LER	2/13/2010 13:21			1		USE	C
EXS02130014.wiff	1202028672	LER	2/13/2010 13:36	947078	VARIOUS	2	LANL	USE	S
EXS02130015.wiff	1202028673	LER	2/13/2010 13:52	947078	VARIOUS	2	LANL	USE	S
EXS02130016.wiff	245661001	LER	2/13/2010 14:08	947078	10-1435	2	LANL	USE	S
EXS02130017.wiff	245686001	LER	2/13/2010 14:24	947078	10-1432	2	LANL	USE	S
EXS02130018.wiff	1202028674	LER	2/13/2010 14:39	947078	10-1432	2	LANL	USE	S
EXS02130019.wiff	1202028675	LER	2/13/2010 14:55	947078	10-1432	2	LANL	USE	S
EXS02130020.wiff	245686002	LER	2/13/2010 15:11	947078	10-1432	2	LANL	USE	S
EXS02130021.wiff	245686003	LER	2/13/2010 15:26	947078	10-1432	2	LANL	USE	S
EXS02130022.wiff	245686004	LER	2/13/2010 15:42	947078	10-1432	2	LANL	USE	S
EXS02130023.wiff	245686005	LER	2/13/2010 15:58	947078	10-1432	2	LANL	USE	S
EXS02130024.wiff	WXXCCV	LER	2/13/2010 16:14			1		USE	C
EXS02130025.wiff	XIBLK04	LER	2/13/2010 16:29			1		USE	B
EXS02130026.wiff	WXXCRI	LER	2/13/2010 16:45			1		USE	C
EXS02130027.wiff	245686006	LER	2/13/2010 17:01	947078	10-1432	2	LANL	USE	S
EXS02130028.wiff	245686007	LER	2/13/2010 17:16	947078	10-1432	2	LANL	USE	S

EXS02130029.wiff	245686008	LER	2/13/2010 17:32	947078	10-1432	2	LANL	USE	S
EXS02130030.wiff	245686009	LER	2/13/2010 17:48	947078	10-1432	2	LANL	USE	S
EXS02130031.wiff	245686010	LER	2/13/2010 18:03	947078	10-1432	2	LANL	USE	S
EXS02130032.wiff	245686011	LER	2/13/2010 18:19	947078	10-1432	2	LANL	USE	S
EXS02130033.wiff	245686012	LER	2/13/2010 18:35	947078	10-1432	2	LANL	USE	S
EXS02130034.wiff	245686013	LER	2/13/2010 18:50	947078	10-1432	2	LANL	USE	S
EXS02130035.wiff	245686014	LER	2/13/2010 19:06	947078	10-1432	2	LANL	USE	S
EXS02130036.wiff	WXXCCV	LER	2/13/2010 19:22			1		USE	C
EXS02130037.wiff	XIBLK05	LER	2/13/2010 19:38			1		USE	B
EXS02130038.wiff	WXXCRI	LER	2/13/2010 19:53			1		USE	C
EXS02130039.wiff	UXX100122-01.2	LER	2/13/2010 20:09	SCREEN	LIQUID	2	O2SI	USE	S
EXS02130040.wiff	XIBLK06	LER	2/13/2010 20:25			1		USE	B
EXS02130041.wiff	1202023542	LER	2/13/2010 20:40	944900	10-1382	2	LANL	USE	S
EXS02130042.wiff	1202023543	LER	2/13/2010 20:56	944900	10-1382	2	LANL	USE	S
EXS02130043.wiff	245384001	LER	2/13/2010 21:12	944900	10-1382	2	LANL	USE	S
EXS02130044.wiff	1202023544	LER	2/13/2010 21:28	944900	10-1382	2	LANL	USE	S
EXS02130045.wiff	1202023545	LER	2/13/2010 21:43	944900	10-1382	2	LANL	USE	S
EXS02130046.wiff	245384002	LER	2/13/2010 21:59	944900	10-1382	2	LANL	USE	S
EXS02130047.wiff	245384003	LER	2/13/2010 22:15	944900	10-1382	2	LANL	USE	S
EXS02130048.wiff	245384004	LER	2/13/2010 22:30	944900	10-1382	2	LANL	USE	S
EXS02130049.wiff	WXXCCV	LER	2/13/2010 22:46			1		USE	C
EXS02130050.wiff	XIBLK07	LER	2/13/2010 23:02			1		USE	B
EXS02130051.wiff	WXXCRI	LER	2/13/2010 23:17			1		USE	C
EXS02130052.wiff	245384005	LER	2/13/2010 23:33	944900	10-1382	2	LANL	USE	S
EXS02130053.wiff	245384006	LER	2/13/2010 23:49	944900	10-1382	2	LANL	USE	S
EXS02130054.wiff	245384007	LER	2/14/2010 0:04	944900	10-1382	2	LANL	USE	S
EXS02130055.wiff	245384008	LER	2/14/2010 0:20	944900	10-1382	2	LANL	USE	S
EXS02130056.wiff	245384009	LER	2/14/2010 0:36	944900	10-1382	2	LANL	USE	S
EXS02130057.wiff	245384010	LER	2/14/2010 0:52	944900	10-1382	2	LANL	USE	S
EXS02130058.wiff	245384012	LER	2/14/2010 1:07	944900	10-1382	2	LANL	USE	S
EXS02130059.wiff	XIBLK08	LER	2/14/2010 1:23			1		USE	B
EXS02130060.wiff	245621005	LER	2/14/2010 1:39	946488	10-1424	2	LANL	USE	S
EXS02130061.wiff	WXXCCV	LER	2/14/2010 1:54			1		USE	C
EXS02130062.wiff	XIBLK09	LER	2/14/2010 2:10			1		USE	B
EXS02130063.wiff	WXXCRI	LER	2/14/2010 2:26			1		USE	C
EXS02130064.wiff	1202023571	LER	2/14/2010 2:42	944907	10-1384	2	LANL	USE	S
EXS02130065.wiff	1202023572	LER	2/14/2010 2:57	944907	10-1384	2	LANL	USE	S

EXS02130066.wiff	245387001	LER	2/14/2010 3:13	944907	10-1384	2	LANL	USE	S
EXS02130067.wiff	1202023573	LER	2/14/2010 3:29	944907	10-1384	2	LANL	USE	S
EXS02130068.wiff	1202023574	LER	2/14/2010 3:44	944907	10-1384	2	LANL	USE	S
EXS02130069.wiff	245387002	LER	2/14/2010 4:00	944907	10-1384	2	LANL	USE	S
EXS02130070.wiff	245387003	LER	2/14/2010 4:16	944907	10-1384	2	LANL	USE	S
EXS02130071.wiff	245387004	LER	2/14/2010 4:31	944907	10-1384	2	LANL	USE	S
EXS02130072.wiff	245387005	LER	2/14/2010 4:47	944907	10-1384	2	LANL	USE	S
EXS02130073.wiff	245387006	LER	2/14/2010 5:03	944907	10-1384	2	LANL	USE	S
EXS02130074.wiff	WXXCCV	LER	2/14/2010 5:19			1		USE	C
EXS02130075.wiff	XIBLK10	LER	2/14/2010 5:34			1		USE	B
EXS02130076.wiff	WXXCRI	LER	2/14/2010 5:50			1		USE	C
EXS02130077.wiff	245387007	LER	2/14/2010 6:06	944907	10-1384	2	LANL	USE	S
EXS02130078.wiff	245387008	LER	2/14/2010 6:21	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130079.wiff	245387009	LER	2/14/2010 6:37	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130080.wiff	245387010	LER	2/14/2010 6:53	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130081.wiff	245387011	LER	2/14/2010 7:08	944907	10-1384	2	LANL	USE	S
EXS02130082.wiff	WXXCCV	LER	2/14/2010 7:24			1		USE	C
EXS02130083.wiff	XIBLK11	LER	2/14/2010 7:40			1		USE	B
EXS02130084.wiff	WXXCRI	LER	2/14/2010 7:56			1		USE	C
EXS02130085.wiff	1202023615	LER	2/14/2010 8:11	944929	10-1390	2	LANL	USE	S
EXS02130086.wiff	1202023616	LER	2/14/2010 8:27	944929	10-1390	2	LANL	USE	S
EXS02130087.wiff	245391001	LER	2/14/2010 8:43	944929	10-1390	2	LANL	USE	S
EXS02130088.wiff	1202023617	LER	2/14/2010 8:58	944929	10-1390	2	LANL	USE	S
EXS02130089.wiff	1202023618	LER	2/14/2010 9:14	944929	10-1390	2	LANL	USE	S
EXS02130090.wiff	245391002	LER	2/14/2010 9:30	944929	10-1390	2	LANL	USE	S
EXS02130091.wiff	245391003	LER	2/14/2010 9:45	944929	10-1390	2	LANL	USE	S
EXS02130092.wiff	245391004	LER	2/14/2010 10:01	944929	10-1390	2	LANL	USE	S
EXS02130093.wiff	245391005	LER	2/14/2010 10:17	944929	10-1390	2	LANL	USE	S
EXS02130094.wiff	245391006	LER	2/14/2010 10:33	944929	10-1390	2	LANL	USE	S
EXS02130095.wiff	WXXCCV	LER	2/14/2010 10:48			1		USE	C
EXS02130096.wiff	XIBLK12	LER	2/14/2010 11:04			1		USE	B
EXS02130097.wiff	WXXCRI	LER	2/14/2010 11:20			1		USE	C
EXS02130098.wiff	245391007	LER	2/14/2010 11:35	944929	10-1390	2	LANL	USE	S
EXS02130099.wiff	245391008	LER	2/14/2010 11:51	944929	10-1390	2	LANL	USE	S
EXS02130100.wiff	245391009	LER	2/14/2010 12:07	944929	10-1390	2	LANL	USE	S
EXS02130101.wiff	245391010	LER	2/14/2010 12:22	944929	10-1390	2	LANL	USE	S
EXS02130102.wiff	245391011	LER	2/14/2010 12:38	944929	10-1390	2	LANL	USE	S

C B C

USE
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USE

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2/14/2010 12:54
2/14/2010 13:10
2/14/2010 13:26

LER
LER
LER

WXXCCV
XIBLK13
WXXCRI

EXS02130103.wiff
EXS02130104.wiff
EXS02130105.wiff

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
 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	947919	10-1486	1	LANL	USE	C

EXS02140031.wiff	XIBLK05	LER	2/14/2010 22:08	1	USE	B
EXS02140032.wiff	WXXCRI	LER	2/14/2010 22:24	1	USE	C
EXS02140033.wiff	245912001	LER	2/14/2010 22:39	2	LANL	S
EXS02140034.wiff	245912002	LER	2/14/2010 22:55	2	LANL	S
EXS02140035.wiff	245912003	LER	2/14/2010 23:11	2	LANL	S
EXS02140036.wiff	245912004	LER	2/14/2010 23:27	2	LANL	S
EXS02140037.wiff	245912005	LER	2/14/2010 23:42	2	LANL	S
EXS02140038.wiff	245914001	LER	2/14/2010 23:58	2	LANL	S
EXS02140039.wiff	245914002	LER	2/15/2010 0:14	2	LANL	S
EXS02140040.wiff	245914003	LER	2/15/2010 0:29	2	LANL	S
EXS02140041.wiff	245914004	LER	2/15/2010 0:45	2	LANL	S
EXS02140042.wiff	245914005	LER	2/15/2010 1:01	2	LANL	S
EXS02140043.wiff	WXXCCV	LER	2/15/2010 1:16	1	USE	C
EXS02140044.wiff	XIBLK06	LER	2/15/2010 1:32	1	USE	B
EXS02140045.wiff	WXXCRI	LER	2/15/2010 1:48	1	USE	C
EXS02140046.wiff	245914006	LER	2/15/2010 2:04	2	LANL	S
EXS02140047.wiff	UXX100122-01.4	LER	2/15/2010 2:19	2	O2SI	S
EXS02140048.wiff	XIBLK07	LER	2/15/2010 2:35	1	USE	B
EXS02140049.wiff	1202038759	LER	2/15/2010 2:51	2	LANL	S
EXS02140050.wiff	1202038760	LER	2/15/2010 3:06	2	LANL	S
EXS02140051.wiff	246569007	LER	2/15/2010 3:22	2	LANL	S
EXS02140052.wiff	1202038761	LER	2/15/2010 3:38	2	LANL	S
EXS02140053.wiff	1202038762	LER	2/15/2010 3:54	2	LANL	S
EXS02140054.wiff	246572005	LER	2/15/2010 4:09	2	LANL	S
EXS02140055.wiff	246580002	LER	2/15/2010 4:25	2	LANL	S
EXS02140056.wiff	WXXCCV	LER	2/15/2010 4:41	1	USE	C
EXS02140057.wiff	XIBLK08	LER	2/15/2010 4:56	1	USE	B
EXS02140058.wiff	WXXCRI	LER	2/15/2010 5:12	1	USE	C
EXS02140059.wiff	246580003	LER	2/15/2010 5:28	2	LANL	S
EXS02140060.wiff	246595004	LER	2/15/2010 5:43	2	LANL	S
EXS02140061.wiff	1202038763	LER	2/15/2010 5:59	2	LANL	S
EXS02140062.wiff	1202038764	LER	2/15/2010 6:15	2	LANL	S
EXS02140063.wiff	XIBLK09	LER	2/15/2010 6:31	1	USE	B
EXS02140064.wiff	1202023631	LER	2/15/2010 6:46	2	LANL	S
EXS02140065.wiff	1202023632	LER	2/15/2010 7:02	2	LANL	S
EXS02140066.wiff	245394001	LER	2/15/2010 7:18	2	LANL	S
EXS02140067.wiff	1202023633	LER	2/15/2010 7:33	2	LANL	S

EXS02140068.wiff	1202023634	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.: 791688

Revision No.:

DATA EXCEPTION REPORT

Mo. Day Yr. 16-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: 944907	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245387(10-1384) Application Issues: Failed Recovery for MSD/PSD Failed Recovery for LCS/LCSD Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. The Laboratory Control Sample (1202023572) did not meet spike recovery limits for Tetra at 42.4% with recovery limits of 51-112% and PETN at 152% with recovery limits of 64-137%. 2. The Matrix Spike (1202023573) did not meet spike recovery limits for Tetra at 22.9%. The recovery limits are 36-124%. 3. The Matrix Spike Duplicate (1202023574) did not meet spike recovery limits for Tetra at 35.8%. The recovery limits are 36-124%. 4. The MS/MSD pair (1202023573/4) did not meet RPD acceptance limits for Tetra at 35.8%. The acceptance limits are 0-30%.		1., 2. & 3. While PETN exhibited a high bias, it was not detected in the associated samples. The Tetra recoveries met the DOD QSM marginal exceedance recovery limits of 22-139%. Since the associated samples have exceeded twice the method hold time, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative. 4. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative.	

Originator's Name:

Michael Penny

17-FEB-10

Data Validator/Group Leader:

Herbert Maier

17-FEB-10

**GC
SEMIVOLATILE
PCB
ANALYSIS**

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1384**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 945979
Prep Batch Number: 945978

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
245387001	RE14-10-7689
245387002	RE14-10-7679
245387003	RE14-10-7680
1202026167	Method Blank (MB)
1202026168	Laboratory Control Sample (LCS)
1202026169	245394002(RE15-10-7874) Matrix Spike (MS)
1202026170	245394002(RE15-10-7874) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

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

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

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

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

Continuing Calibration Verification (CCV) Requirements

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

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

A LANL sample of similar matrix associated with another SDG (#10-1392) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information**Electronic Package Comment**

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

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

and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs 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
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

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: Jimmy Cao

Date: 2/19/10

Roadmap for LANL 10-1384 PCB

This roadmap was analyzed by jen01212 on 01-29-2010, 09:28.

This roadmap was reviewed by jim01140 on 02-01-2010, 16:06.

This roadmap was packaged by yml on 02-19-2010, 07:34.

This roadmap was validated by jim01140 on 02-19-2010, 13:56.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/014f1401.d	245387001	sample	28-JAN-2010	09:24	10-1384.sub	RE14-10-7689	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/015f1501.d	245387002	sample	28-JAN-2010	09:35	10-1384.sub	RE14-10-7679	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/016f1601.d	245387003	sample	28-JAN-2010	09:46	10-1384.sub	RE14-10-7680	1.00000	945979	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/014b1401.d	245387001	sample	28-JAN-2010	09:24	10-1384.sub	RE14-10-7689	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/015b1501.d	245387002	sample	28-JAN-2010	09:35	10-1384.sub	RE14-10-7679	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/016b1601.d	245387003	sample	28-JAN-2010	09:46	10-1384.sub	RE14-10-7680	1.00000	945979	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/012f1201.d	1202026167	mb	28-JAN-2010	09:02	10-1384.sub	PBLK01	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/013f1301.d	1202026168	lcs	28-JAN-2010	09:13	10-1384.sub	PBLK01LCS	1.00000	945979	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/012b1201.d	1202026167	mb	28-JAN-2010	09:02	10-1384.sub	PBLK01	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/013b1301.d	1202026168	lcs	28-JAN-2010	09:13	10-1384.sub	PBLK01LCS	1.00000	945979	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1384
Lab Sample ID: 245387002

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 21.4
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE14-10-7679
Batch ID: 945979
Run Date: 01/28/2010 09:35
Prep Date: 01/27/2010 20:26
Data File: 015f1501.d
015b1501.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254	U	4.21	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

PCB

Page 1 of 1

Certificate of Analysis

Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20

Matrix: R
%Moisture: 12

Client ID: RE14-10-7680

Client: LANL010

Project: LANL01004

Batch ID: 945979

Method: SW846 8082

SOP Ref: GL-OA-E-040

Run Date: 01/28/2010 09:46

Inst: ECD2A.I

Dilution: 1

Prep Date: 01/27/2010 20:26

Analyst: JAOC

Inj. Vol: 1 uL

Data File: 016f1601.d

Aliquot: 30.16 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

016b1601.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.77	ug/kg	1.25	3.77	1
11104-28-2	Aroclor-1221	U	3.77	ug/kg	1.25	3.77	1
11141-16-5	Aroclor-1232	U	3.77	ug/kg	1.25	3.77	1
53469-21-9	Aroclor-1242	U	3.77	ug/kg	1.25	3.77	1
12672-29-6	Aroclor-1248	U	3.77	ug/kg	1.25	3.77	1
11097-69-1	Aroclor-1254	U	3.77	ug/kg	1.25	3.77	1
11096-82-5	Aroclor-1260	U	3.77	ug/kg	1.25	3.77	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.06 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 13
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	3.82	ug/kg	1.27	3.82	1
11104-28-2	Aroclor-1221	U	3.82	ug/kg	1.27	3.82	1
11141-16-5	Aroclor-1232	U	3.82	ug/kg	1.27	3.82	1
53469-21-9	Aroclor-1242	U	3.82	ug/kg	1.27	3.82	1
12672-29-6	Aroclor-1248	U	3.82	ug/kg	1.27	3.82	1
11097-69-1	Aroclor-1254	U	3.82	ug/kg	1.27	3.82	1
11096-82-5	Aroclor-1260	U	3.82	ug/kg	1.27	3.82	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1384**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 #
1202026167	MB for batch 945978	63	67	66	70
1202026168	LCS for batch 945978	64	67	69	73
245387001	RE14-10-7689	56	59	59	61
245387002	RE14-10-7679	57	60	48	50
245387003	RE14-10-7680	57	60	57	58

Surrogate**Acceptance Limits**

4CMX = 4cmx

(34%-105%)

DCB = Decachlorobiphenyl

(33%-115%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1384

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945978

Matrix: SOIL

Lab Sample ID: 1202026168

Instrument: ECD2A.I

Analysis Date: 01/28/2010 09:13

Dilution: 1

Analyst: JAOC

Prep Batch ID: 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	21.8	65	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	25.7	77	48-110

PCB

Page 1 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1392

Sample Type: Matrix Spike

Client ID: RE15-10-7874MS

Matrix: R

Lab Sample ID:1202026169

%Moisture: 4.1

Instrument: ECD2A.I

Analysis Date: 01/28/2010 11:04

Dilution: 1

Analyst: JAOC

Preo Batch II 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	34.7	0.00 U	24.3	70	23-117
11096-82-5	MS Aroclor-1260	34.7	3.20 J	31.9	83	27-116

PCB

Page 2 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1392

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7874MSD

Matrix: R

Lab Sample ID:1202026170

%Moisture: 4.1

Instrument: ECD2A.I

Analysis Date: 01/28/2010 11:15

Dilution: 1

Analyst: JAOC

Prep Batch ID: 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	34.6	0.00	U	23.4	68	23-117	4 0-30
11096-82-5	MSD Aroclor-1260	34.6	3.20	J	30.8	80	27-116	4 0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1384	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 945978	Instrument ID:	ECD2A.I_2	Data File:	012b1201-1.d
Lab Sample ID:	1202026167		ECD2A.I_1		012f1201-1.d
Column:	CLP2	Prep Date:	01/27/2010 20:26	Analyzed:	01/28/10 09:02
	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 945978	1202026168	013f1301-1.d 013b1301-1.d	01/28/10	0913
02 RE14-10-7689	245387001	014f1401.d 014b1401.d	01/28/10	0924
03 RE14-10-7679	245387002	015f1501.d 015b1501.d	01/28/10	0935
04 RE14-10-7680	245387003	016f1601.d 016b1601.d	01/28/10	0946

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387002

Client ID: RE14-10-7679
Batch ID: 945979
Run Date: 01/28/2010 09:35
Prep Date: 01/27/2010 20:26
Data File: 015f1501.d
015b1501.d

Date Collected: 01/15/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 21.4
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	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254	U	4.21	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

Data File: /chem/ecd2a.i/012810.b/015f1501.d
Report Date: 28-Jan-2010 11:30

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/015f1501.d

Lab Smp Id: 245387002

Client Smp ID: RE14-10-7679

Inj Date : 28-JAN-2010 09:35

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245387002|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7679|||

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 15

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1384.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	21.41370	% Moisture

Cpnd Variable

Local Compound Variable

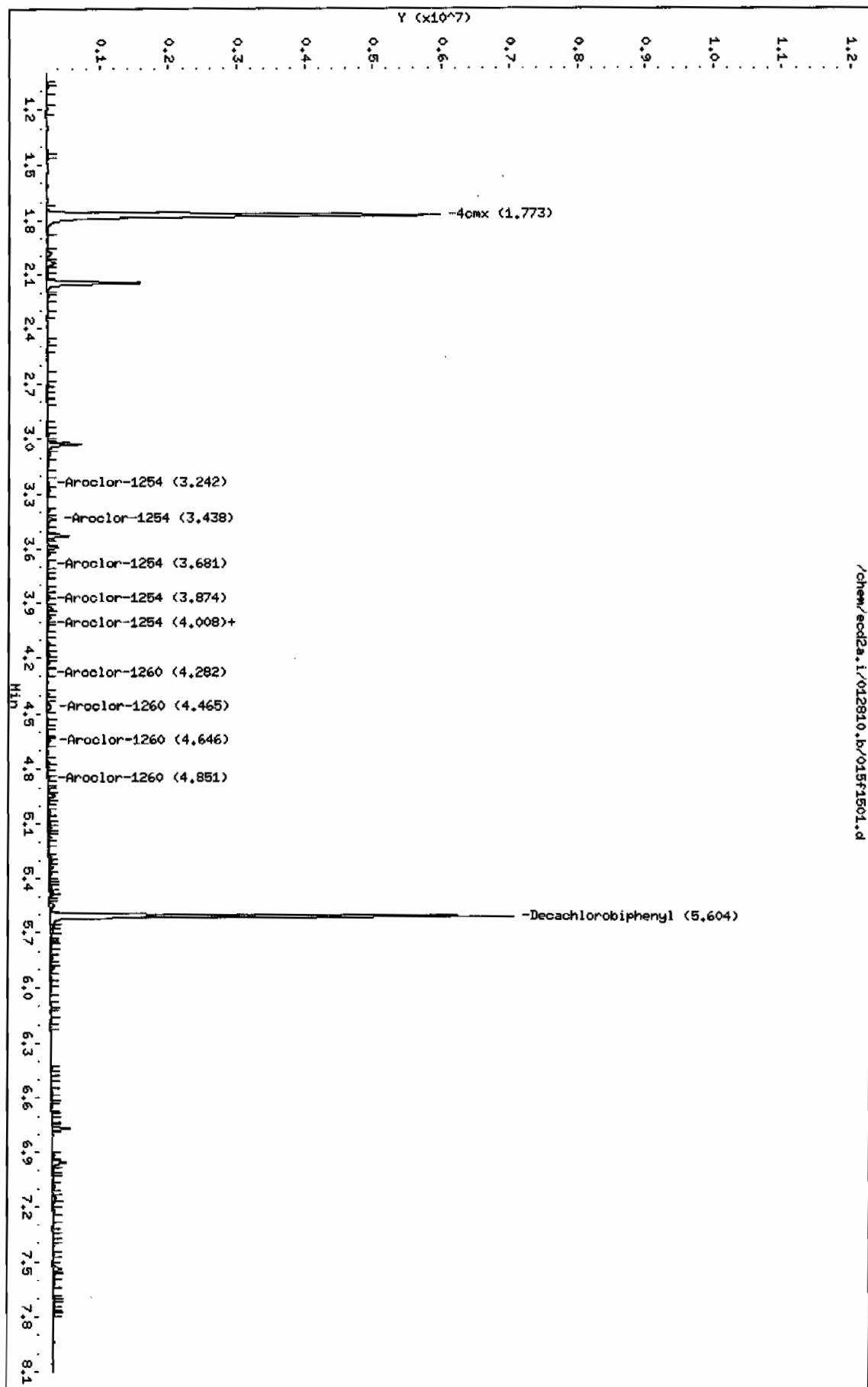
CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.773	1.770	0.003	7687847	114.688	4.8 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.604	5.604	0.000	6089016	96.0423	4.0 80.00- 120.00	100.00

Data File: /chem/ecod2a.i/012810.b/015f1501.d
Date: 28-JAN-2010 09:35
Client ID: RE14-10-7679
Sample Info: 124538700211
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecod2a.i
Operator: J90C
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/015b1501.d
Report Date: 28-Jan-2010 11:30

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/015b1501.d
Lab Smp Id: 245387002 Client Smp ID: RE14-10-7679
Inj Date : 28-JAN-2010 09:35
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245387002|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7679|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1384.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

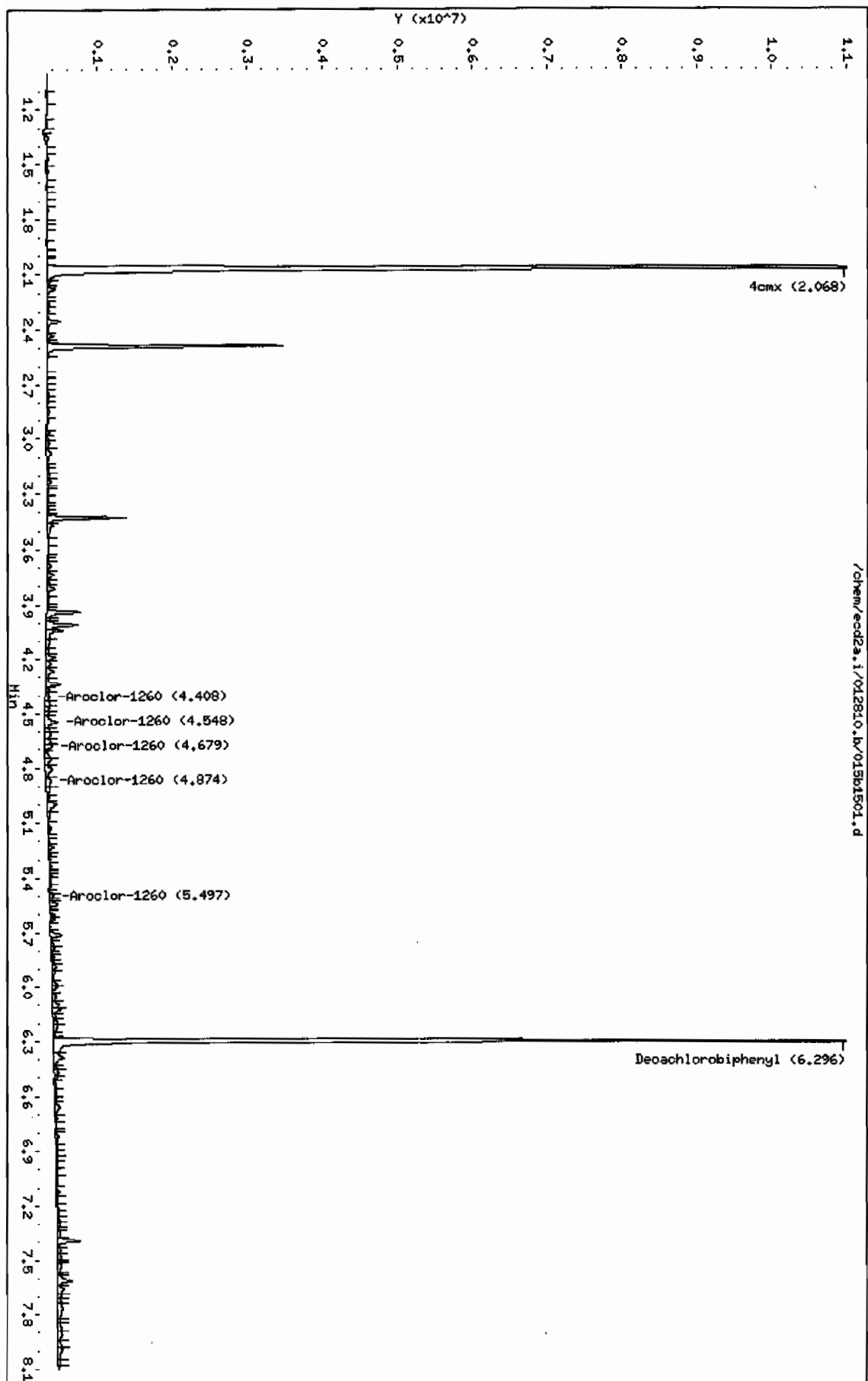
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	21.41370	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
<hr/>						
\$ 11 4cmx					CAS #: 877-09-8	
2.068	2.067	0.001	16857047	120.790	5.1 80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.296	6.297	-0.001	12458242	100.025	4.2 80.00- 120.00	100.00
<hr/>						

Data File: /chem/eod2a.i/012810.br/015b1501.d
Date : 28-JAN-2010 09:35
Client ID: RE14-10-7679
Sample Info: 124538700211
Volume Injected (uL): 1.0
Column phases: CLP2

Instrument: eod2a.i
Operator: JHOC
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387003

Date Collected: 01/15/2010 12:00

Matrix: R

Date Received: 01/23/2010 09:20

% Moisture: 12

Client: LANL010

Project: LANL01004

Method: SW846 8082

SOP Ref: GL-OA-E-040

Inst: ECD2A.I

Dilution: 1

Analyst: JAOC

Inj. Vol: 1 uL

Client ID: RE14-10-7680

Batch ID: 945979

Run Date: 01/28/2010 09:46

Prep Date: 01/27/2010 20:26

Data File: 016f1601.d

Column: 1 CLP1

Level: LOW

016b1601.d

2 CLP2

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.77	ug/kg	1.25	3.77	1
11104-28-2	Aroclor-1221	U	3.77	ug/kg	1.25	3.77	1
11141-16-5	Aroclor-1232	U	3.77	ug/kg	1.25	3.77	1
53469-21-9	Aroclor-1242	U	3.77	ug/kg	1.25	3.77	1
12672-29-6	Aroclor-1248	U	3.77	ug/kg	1.25	3.77	1
11097-69-1	Aroclor-1254	U	3.77	ug/kg	1.25	3.77	1
11096-82-5	Aroclor-1260	U	3.77	ug/kg	1.25	3.77	1

Data File: /chem/ecd2a.i/012810.b/016f1601.d
Report Date: 28-Jan-2010 11:31

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/016f1601.d

Lab Smp Id: 245387003

Client Smp ID: RE14-10-7680

Inj Date : 28-JAN-2010 09:46

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245387003|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7680|||

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 16

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1384.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	12.00540	% Moisture

Cpnd Variable

Local Compound Variable

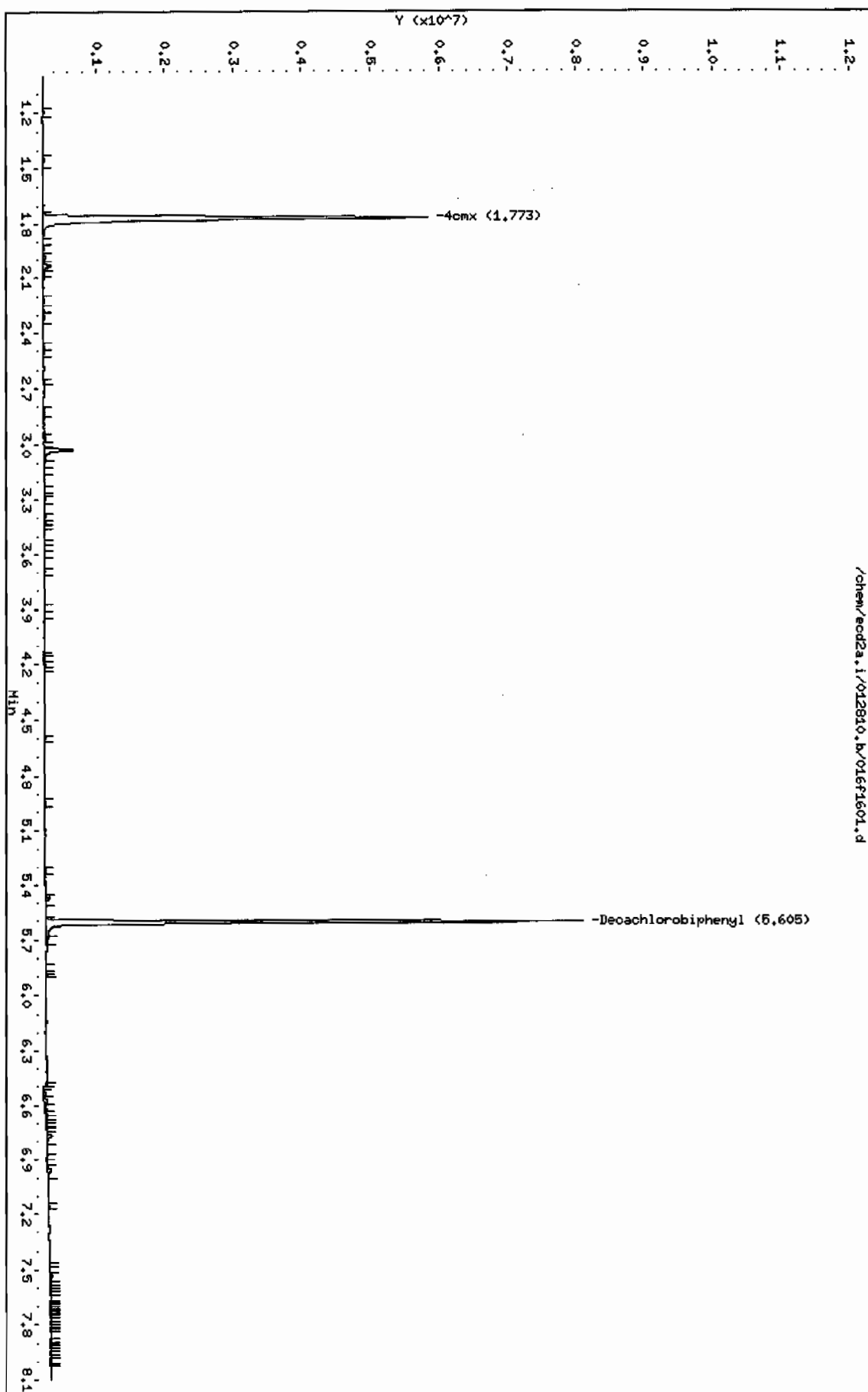
CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
1.773	1.770	0.003	7655817	114.210	4.3 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.605	5.604	0.001	7247595	114.317	4.3 80.00- 120.00	100.00

Data File: /chem/eod2a.i/012810.b/016f1601.d
Date: 28-JAN-2010 09:46
Client ID: REL4-10-7680
Sample Info: 124538700311
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod2a.i
Operator: JROC
Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/016b1601.d
Report Date: 28-Jan-2010 11:28

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/016b1601.d

Lab Smp Id: 245387003

Client Smp ID: RE14-10-7680

Inj Date : 28-JAN-2010 09:46

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245387003|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7680|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 16

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1384.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	12.00540	% Moisture

Cpnd Variable

Local Compound Variable

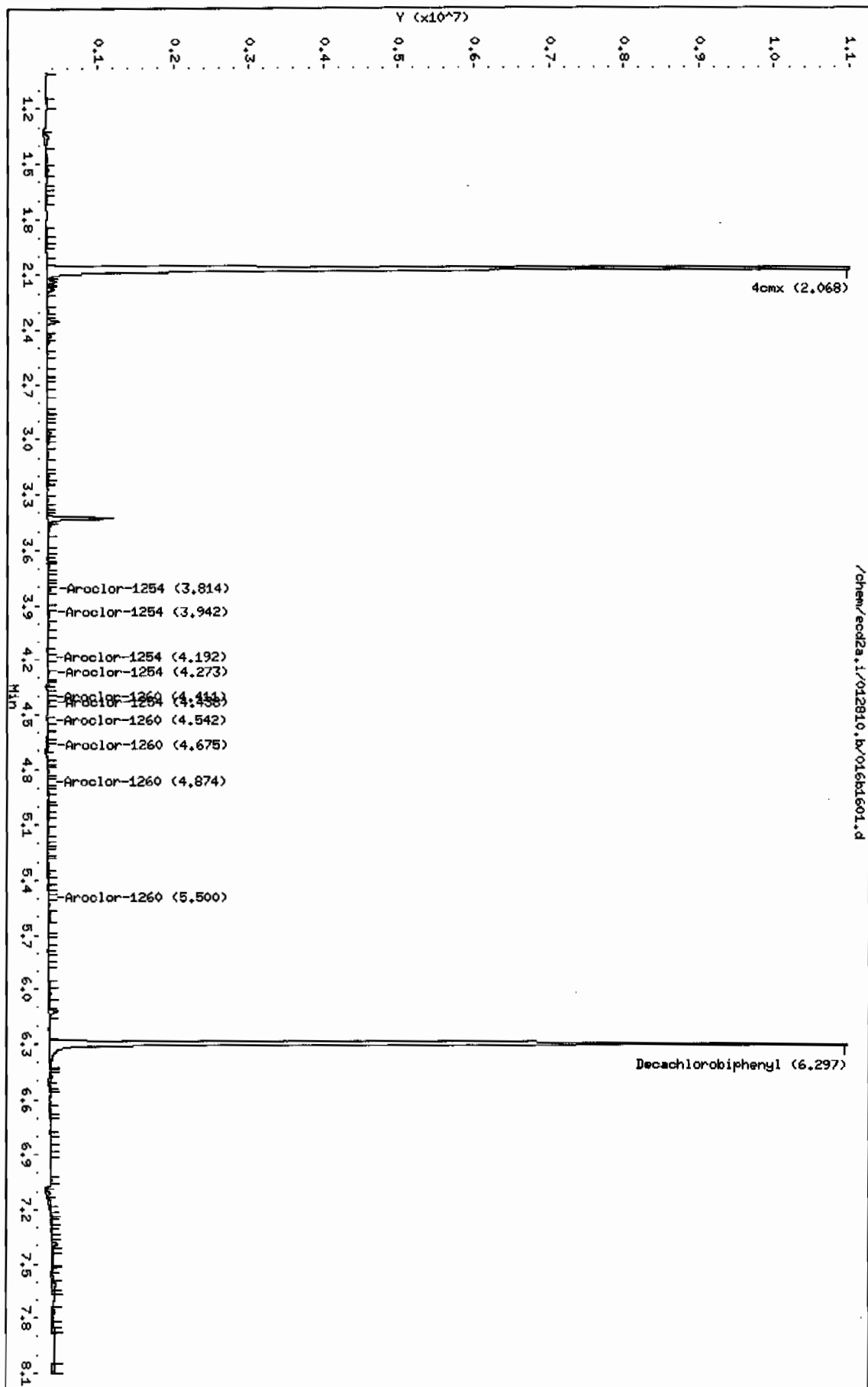
CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.068	2.067	0.001	16646775	119.283	4.5 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.297	6.297	0.000	14353357	115.240	4.3 80.00- 120.00	100.00

Data File: /chem/ecod2a.i/012810.b/016b1601.d
Date: 28-JUN-2010 09:46
Client ID: REL4-10-7680
Sample Info: 1245387003141
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecod2a.i
Operator: JNOC
Column diameter: 0.25



PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-1384
Lab Sample ID: 245387001

Date Collected: 01/15/2010 12:00

Matrix: R

Date Received: 01/23/2010 09:20

%Moisture: 13

Client: LANL010

Project: LANL01004

Method: SW846 8082

SOP Ref: GL-OA-E-040

Inst: ECD2AJ

Dilution: 1

Client ID: RE14-10-7689

Batch ID: 945979

Run Date: 01/28/2010 09:24

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 01/27/2010 20:26

Aliquot: 30.06 g

Final Volume: 1 mL

Data File: 014f1401.d

Column: 1 CLP1

Level: LOW

014b1401.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.82	ug/kg	1.27	3.82	1
11104-28-2	Aroclor-1221	U	3.82	ug/kg	1.27	3.82	1
11141-16-5	Aroclor-1232	U	3.82	ug/kg	1.27	3.82	1
53469-21-9	Aroclor-1242	U	3.82	ug/kg	1.27	3.82	1
12672-29-6	Aroclor-1248	U	3.82	ug/kg	1.27	3.82	1
11097-69-1	Aroclor-1254	U	3.82	ug/kg	1.27	3.82	1
11096-82-5	Aroclor-1260	U	3.82	ug/kg	1.27	3.82	1

Data File: /chem/ecd2a.i/012810.b/014f1401.d
Report Date: 28-Jan-2010 11:30

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/014f1401.d
Lab Smp Id: 245387001 Client Smp ID: RE14-10-7689
Inj Date : 28-JAN-2010 09:24
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245387001|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7689|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1384.sub
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	13.02790	% Moisture

Cpnd Variable Local Compound Variable

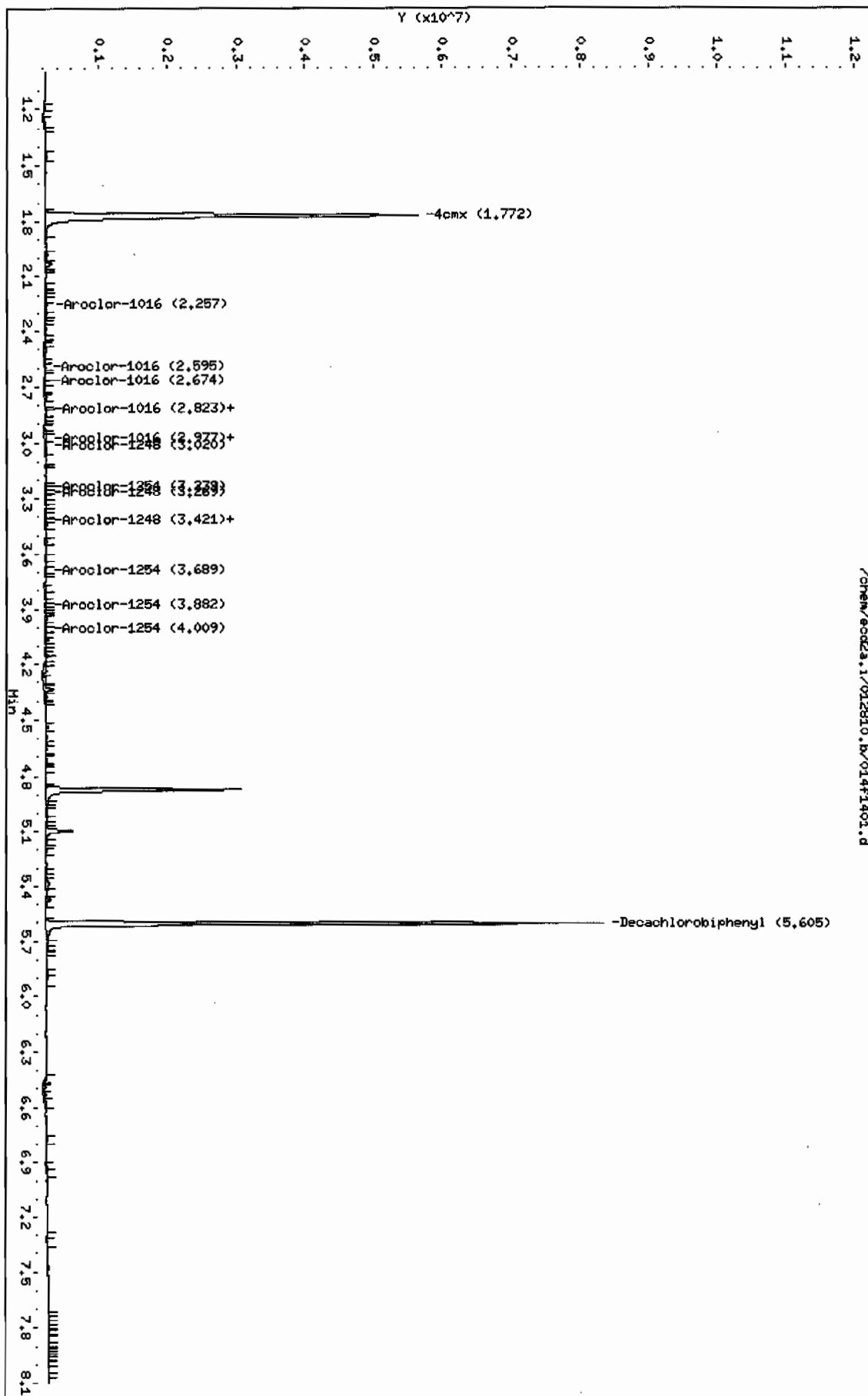
CONCENTRATIONS							
				ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.772	1.770	0.002	7528705	112.314	4.3 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.605	5.604	0.001	7467167	117.780	4.5 80.00- 120.00	100.00	

Data File: /chem/ecod2a.i/012810.b/014f1401.d
Date : 28-JAN-2010 09:24
Client ID: RE14-10-7689
Sample Info: 124538700111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecod2a.i
Operator: JMO
Column diameter: 0.25

/chem/ecod2a.i/012810.b/014f1401.d



Data File: /chem/ecd2a.i/012810.b/014b1401.d
Report Date: 28-Jan-2010 11:28

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/014b1401.d
Lab Smp Id: 245387001 Client Smp ID: RE14-10-7689
Inj Date : 28-JAN-2010 09:24
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245387001|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE14-10-7689|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1384.sub
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	13.02790	% Moisture

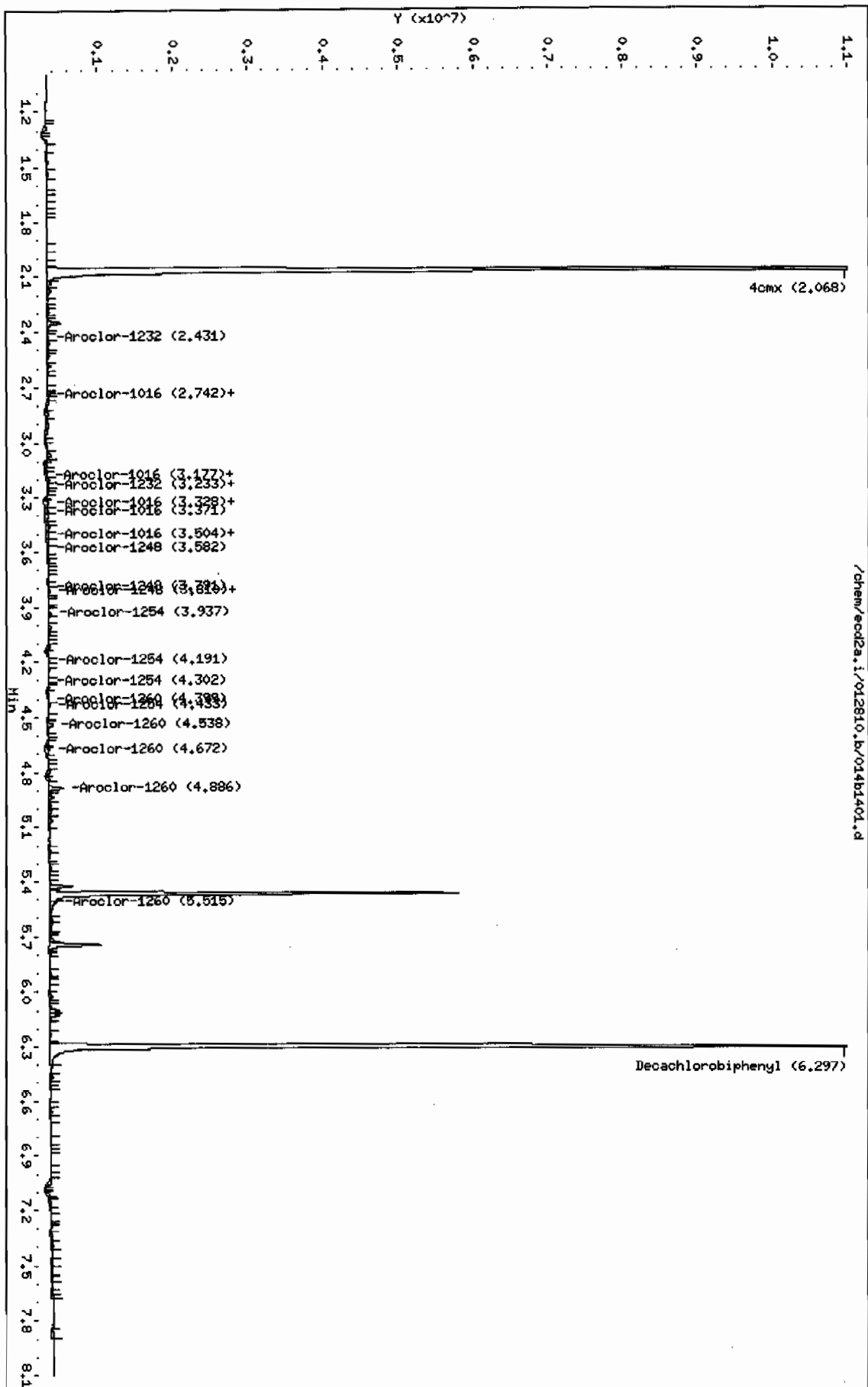
Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		
\$ 11 4cmx				CAS #: 877-09-8		
2.068	2.067	0.001	16353430 117.181	4.5	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.297	6.297	0.000	15286787 122.734	4.7	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/012810.b/014b1401.d
Date: 28-JAN-2010 09:24
Client ID: RE14-10-7689
Sample Info: 124538700111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JHOC
Column diameter: 0.25



STANDARDS DATA

Report Date: 17-Feb-2010 14:36

Calibration History

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 21-JAN-2010 08:45

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
21-JAN-2010 08:01	AR1232	/chem/ecd2a.i/012110.b/006f0601.d
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
07-JAN-2010 08:16	AR1268	/chem/ecd2a.i/010710.b/009f0901.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
20-JAN-2010 09:46	AR1660	/chem/ecd2a.i/012010.b/009f0901.d

Cal Level: 2 , Cal Amount: 250.00000		
21-JAN-2010 08:12	AR1232	/chem/ecd2a.i/012110.b/007f0701.d
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
07-JAN-2010 08:27	AR1268	/chem/ecd2a.i/010710.b/010f1001.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
20-JAN-2010 09:57	AR1660	/chem/ecd2a.i/012010.b/010f1001.d

Cal Level: 3 , Cal Amount: 500.00000		
21-JAN-2010 08:23	AR1232	/chem/ecd2a.i/012110.b/008f0801.d
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
07-JAN-2010 08:38	AR1268	/chem/ecd2a.i/010710.b/011f1101.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
20-JAN-2010 10:09	AR1660	/chem/ecd2a.i/012010.b/011f1101.d

Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
20-JAN-2010 10:20	AR1660	/chem/ecd2a.i/012010.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
07-JAN-2010 08:49	AR1268	/chem/ecd2a.i/010710.b/012f1201.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
21-JAN-2010 08:34	AR1232	/chem/ecd2a.i/012110.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
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21-JAN-2010 08:45	AR1232	/chem/ecd2a.i/012110.b/010f1001.d
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
07-JAN-2010 09:00	AR1268	/chem/ecd2a.i/010710.b/013f1301.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
20-JAN-2010 10:31	AR1660	/chem/ecd2a.i/012010.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 17:10	AR1660	/chem/ecd2a.i/012810.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:08	AR1660	/chem/ecd2a.i/012810.b/041f4101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 12:10	AR1660	/chem/ecd2a.i/012810.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1660	/chem/ecd2a.i/012810.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:29	AR1268	/chem/ecd2a.i/012810.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:18	AR1262	/chem/ecd2a.i/012810.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:07	AR1221	/chem/ecd2a.i/012810.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:55	AR1232	/chem/ecd2a.i/012810.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:44	AR1248	/chem/ecd2a.i/012810.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:33	AR1242	/chem/ecd2a.i/012810.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:22	AR1254	/chem/ecd2a.i/012810.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:11	AR1660	/chem/ecd2a.i/012810.b/002f0201.d

Report Date: 29-Jan-2010 08:42

Calibration History

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 21-JAN-2010 08:45

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
21-JAN-2010 08:01	AR1232	/chem/ecd2a.i/012110.b/006b0601.d
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
07-JAN-2010 08:16	AR1268	/chem/ecd2a.i/010710.b/009b0901.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
20-JAN-2010 09:46	AR1660	/chem/ecd2a.i/012010.b/009b0901.d

Cal Level: 2 , Cal Amount: 250.00000		
21-JAN-2010 08:12	AR1232	/chem/ecd2a.i/012110.b/007b0701.d
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
07-JAN-2010 08:27	AR1268	/chem/ecd2a.i/010710.b/010b1001.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
20-JAN-2010 09:57	AR1660	/chem/ecd2a.i/012010.b/010b1001.d

Cal Level: 3 , Cal Amount: 500.00000		
21-JAN-2010 08:23	AR1232	/chem/ecd2a.i/012110.b/008b0801.d
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
07-JAN-2010 08:38	AR1268	/chem/ecd2a.i/010710.b/011b1101.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
20-JAN-2010 10:09	AR1660	/chem/ecd2a.i/012010.b/011b1101.d

Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
20-JAN-2010 10:20	AR1660	/chem/ecd2a.i/012010.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
07-JAN-2010 08:49	AR1268	/chem/ecd2a.i/010710.b/012b1201.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
21-JAN-2010 08:34	AR1232	/chem/ecd2a.i/012110.b/009b0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
21-JAN-2010 08:45	AR1232	/chem/ecd2a.i/012110.b/010b1001.d
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
07-JAN-2010 09:00	AR1268	/chem/ecd2a.i/010710.b/013b1301.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d

30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
20-JAN-2010 10:31	AR1660	/chem/ecd2a.i/012010.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 17:10	AR1660	/chem/ecd2a.i/012810.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:08	AR1660	/chem/ecd2a.i/012810.b/041b4101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 12:10	AR1660	/chem/ecd2a.i/012810.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1660	/chem/ecd2a.i/012810.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:29	AR1268	/chem/ecd2a.i/012810.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:18	AR1262	/chem/ecd2a.i/012810.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:07	AR1221	/chem/ecd2a.i/012810.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:55	AR1232	/chem/ecd2a.i/012810.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:44	AR1248	/chem/ecd2a.i/012810.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:33	AR1242	/chem/ecd2a.i/012810.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:22	AR1254	/chem/ecd2a.i/012810.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:11	AR1660	/chem/ecd2a.i/012810.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 29-Jan-2010 07:51 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.271	2.241-2.301	2.258e+03
	2.595	2.565-2.625	4.629e+03
	2.685	2.655-2.715	1.900e+03
	2.820	2.790-2.850	9.835e+02
	2.971	2.941-3.001	1.450e+03
2 Aroclor-1221	1.438	1.408-1.468	4.641e+02
	1.897	1.867-1.927	6.570e+02
	1.996	1.966-2.026	3.467e+02
3 Aroclor-1232	2.025	1.995-2.055	1.478e+03
	2.273	2.243-2.303	1.092e+03
	2.687	2.657-2.717	8.910e+02
	2.729	2.699-2.759	5.508e+02
4 Aroclor-1242	2.973	2.943-3.003	6.246e+02
	2.273	2.243-2.303	1.733e+03
	2.687	2.657-2.717	1.484e+03
	2.730	2.700-2.760	9.058e+02
	2.822	2.792-2.852	7.269e+02
5 Aroclor-1248	2.974	2.944-3.004	1.120e+03
	2.822	2.792-2.852	1.527e+03
	2.973	2.943-3.003	2.027e+03
	3.033	3.003-3.063	1.571e+03
	3.268	3.238-3.298	2.218e+03
	3.420	3.390-3.450	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.239	3.209-3.269	2.080e+03
	3.422	3.392-3.452	2.772e+03
	3.691	3.661-3.721	3.742e+03
	3.884	3.854-3.914	2.783e+03
	4.012	3.982-4.042	2.760e+03
7 Aroclor-1260	4.011	3.981-4.041	4.303e+03
	4.282	4.252-4.312	2.791e+03
	4.449	4.419-4.479	2.867e+03
	4.661	4.631-4.691	6.579e+03
	4.850	4.820-4.880	3.193e+03
8 Aroclor-1262	3.821	3.791-3.851	2.273e+03
	4.013	3.982-4.043	3.072e+03
	4.284	4.254-4.314	4.004e+03
	4.449	4.419-4.479	3.573e+03
	4.851	4.821-4.881	2.501e+03
9 Aroclor-1268	4.880	4.850-4.910	9.782e+03
	4.907	4.877-4.937	9.839e+03
	5.040	5.010-5.070	7.469e+03
	5.279	5.249-5.309	3.239e+03
	5.475	5.445-5.505	2.294e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.770	1.740-1.800	6.703e+04
\$ 12 Decachlorobiphenyl	5.604	5.574-5.634	6.340e+04
13 4,4'-DDT	4.229	4.209-4.249	5.006e+04
14 4,4'-DDD	4.036	4.016-4.056	7.298e+04
15 4,4'-DDE	3.632	3.612-3.652	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 29-Jan-2010 07:38 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.742	2.712-2.772	4.489e+03
	3.177	3.147-3.207	3.434e+03
	3.327	3.297-3.357	2.017e+03
	3.356	3.326-3.386	2.106e+03
	3.515	3.485-3.545	2.794e+03
2 Aroclor-1221	2.290	2.260-2.320	1.263e+03
	2.395	2.365-2.425	7.739e+02
	2.440	2.410-2.470	3.051e+03
3 Aroclor-1232	2.440	2.410-2.470	2.542e+03
	2.743	2.713-2.773	2.197e+03
	3.177	3.147-3.207	1.559e+03
	3.250	3.220-3.280	9.480e+02
4 Aroclor-1242	3.516	3.486-3.546	1.167e+03
	2.743	2.713-2.773	3.445e+03
	3.178	3.148-3.208	2.681e+03
	3.250	3.220-3.280	1.637e+03
	3.328	3.298-3.358	1.508e+03
5 Aroclor-1248	3.516	3.486-3.546	2.145e+03
	3.329	3.299-3.359	3.282e+03
	3.515	3.485-3.545	4.187e+03
	3.602	3.572-3.632	4.451e+03
	3.791	3.761-3.821	4.697e+03
	3.820	3.790-3.850	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.815	3.785-3.845	4.985e+03
	3.956	3.926-3.986	5.799e+03
	4.193	4.163-4.223	4.023e+03
	4.274	4.244-4.304	7.731e+03
7 Aroclor-1260	4.437	4.407-4.467	5.608e+03
	4.411	4.381-4.441	5.785e+03
	4.562	4.532-4.592	7.263e+03
	4.674	4.644-4.704	5.004e+03
8 Aroclor-1262	4.872	4.842-4.902	5.795e+03
	5.497	5.467-5.527	9.394e+03
	4.412	4.382-4.442	4.703e+03
	4.563	4.533-4.593	5.853e+03
9 Aroclor-1268	4.872	4.842-4.902	8.946e+03
	5.072	5.042-5.102	7.772e+03
	5.250	5.220-5.280	1.672e+04
	5.496	5.466-5.526	2.078e+04
M 10 Aroclor-Total	5.527	5.497-5.557	2.083e+04
	5.699	5.669-5.729	1.556e+04
	5.900	5.870-5.930	6.423e+03
	6.123	6.093-6.153	4.919e+04
\$ 11 4cmx	1.000	0.980-1.020	
\$ 12 Decachlorobiphenyl	2.067	2.037-2.097	1.396e+05
13 4,4'-DDT	6.297	6.267-6.327	1.246e+05
14 4,4'-DDD	4.814	4.794-4.834	8.705e+04
15 4,4'-DDE	4.600	4.580-4.620	1.499e+05
	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Cal Date : 29-Jan-2010 07:51 jen01212
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecd2a.i/012110.b/006f0601.d
 Level 2: /chem/ecd2a.i/012110.b/007f0701.d
 Level 3: /chem/ecd2a.i/012110.b/008f0801.d
 Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
 Level 5: /chem/ecd2a.i/012110.b/010f1001.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)	2582	2384	2270	2158	1895	2258	11.359
(2)	4964	4712	4611	4536	4322	4629	5.094
(3)	2119	1992	1883	1834	1673	1900	8.824
(4)	1123	1028	978	934	855	983	10.212
(5)	1592	1492	1430	1418	1320	1450	6.903
2 Aroclor-1221(1)	++++	++++	++++	464	++++	464	0.000
(2)	++++	++++	++++	657	++++	657	0.000
(3)	++++	++++	++++	347	++++	347	0.000
3 Aroclor-1232(1)	1693	1584	1484	1409	1220	1478	12.117
(2)	1305	1155	1079	1032	890	1092	14.062
(3)	1013	935	891	855	761	891	10.499
(4)	596	581	554	535	488	551	7.655
(5)	770	637	618	566	533	625	14.598
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Cal Date : 29-Jan-2010 07:51 jen01212
 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
7 Aroclor-1260(1)	4564	4184	4324	4273	4168	4303	3.706
(2)	3136	2679	2808	2745	2587	2791	7.510
(3)	3148	2736	2898	2878	2673	2867	6.405
(4)	6841	6399	6600	6582	6474	6579	2.551
(5)	3315	3117	3229	3192	3115	3193	2.623
8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
(2)	3295	3066	3031	3051	2917	3072	4.482
(3)	4237	3997	3977	3997	3815	4004	3.763
(4)	3754	3532	3556	3594	3430	3573	3.295
(5)	2578	2453	2481	2538	2454	2501	2.217
9 Aroclor-1268(1)	9960	9712	9638	9856	9743	9782	1.295
(2)	10427	9736	9819	9812	9401	9839	3.768
(3)	7803	7453	7371	7450	7266	7469	2.702
(4)	3410	3296	3214	3182	3091	3239	3.727
(5)	23130	22747	22846	23230	22770	22944	0.963
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
\$ 11 4cmx	71691	67209	66904	66042	63316	67033	4.509
\$ 12 Decachlorobiphenyl	69072	64043	62394	61590	59897	63399	5.529

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Cal Date : 29-Jan-2010 07:38 jen01212
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecd2a.i/012110.b/006b0601.d
 Level 2: /chem/ecd2a.i/012110.b/007b0701.d
 Level 3: /chem/ecd2a.i/012110.b/008b0801.d
 Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
 Level 5: /chem/ecd2a.i/012110.b/010b1001.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4662	4548	4537	4546	4153	4489	4.347
(2)	3382	3406	3459	3527	3397	3434	1.731
(3)	2031	1985	2035	2051	1984	2017	1.523
(4)	2110	2098	2116	2131	2073	2106	1.046
(5)	2721	2745	2805	2886	2815	2794	2.320
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	2686	2595	2551	2554	2323	2542	5.267
(2)	2414	2215	2163	2169	2023	2197	6.413
(3)	1656	1537	1539	1521	1542	1559	3.506
(4)	997	928	922	933	961	948	3.293
(5)	1358	1132	1098	1113	1134	1167	9.225
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Cal Date : 29-Jan-2010 07:38 jen01212
 Curve Type : Average

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
7 Aroclor-1260 (1)	5608	5607	5911	6004	5797	5785	3.079
(2)	6845	7033	7506	7660	7272	7263	4.586
(3)	4810	4804	5158	5233	5016	5004	3.919
(4)	5752	5570	5927	6012	5715	5795	3.029
(5)	8958	8757	9595	9936	9726	9394	5.425
8 Aroclor-1262 (1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268 (1)	19681	20538	20944	21652	21077	20778	3.522
(2)	20049	20780	21168	21526	20631	20831	2.683
(3)	14816	15313	15674	16201	15813	15563	3.374
(4)	6082	6303	6421	6627	6683	6423	3.811
(5)	47383	48640	49735	50972	49227	49192	2.697
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
\$ 11 4cmx	134308	136410	140413	144013	142640	139557	2.945
\$ 12 Decachlorobiphenyl	121777	119955	124484	128763	127780	124552	3.031

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.: 10-1384
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0711
 Lab File ID: 002F0201 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2257.882	2165.015	0.01	-4.1	15.0
(2)	4628.914	4547.039	0.01	-1.8	15.0
(3)	1900.304	1844.960	0.01	-2.9	15.0
(4)	983.497	933.841	0.01	-5.0	15.0
(5)	1450.304	1422.773	0.01	-1.9	15.0
Aroclor-1260	4302.665	4458.287	0.01	3.6	15.0
(2)	2791.028	2841.552	0.01	1.8	15.0
(3)	2866.828	2963.380	0.01	3.4	15.0
(4)	6579.193	6827.078	0.01	3.8	15.0
(5)	3193.316	3275.889	0.01	2.6	15.0
4cmx	67032.526	68204.450	0.01	1.7	15.0
Decachlorobiphenyl	63399.298	62456.940	0.01	-1.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1384
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0711
 Lab File ID: 002B0201 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4489.288	4486.152	0.01	-0.1	15.0
(2)	3434.131	3512.523	0.01	2.3	15.0
(3)	2017.371	2045.938	0.01	1.4	15.0
(4)	2105.569	2148.450	0.01	2.0	15.0
(5)	2794.468	2882.428	0.01	3.1	15.0
Aroclor-1260	5785.200	6061.628	0.01	4.8	15.0
(2)	7263.142	7607.488	0.01	4.7	15.0
(3)	5004.167	5271.440	0.01	5.3	15.0
(4)	5795.185	5999.470	0.01	3.5	15.0
(5)	9394.449	9853.934	0.01	4.9	15.0
4cmx	139556.85	146083.54	0.01	4.7	15.0
Decachlorobiphenyl	124551.80	123071.07	0.01	-1.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1384
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1019
 Lab File ID: 019F1901 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2257.882	2164.216	0.01	-4.1	15.0
(2)	4628.914	4634.918	0.01	0.1	15.0
(3)	1900.304	1858.717	0.01	-2.2	15.0
(4)	983.497	959.884	0.01	-2.4	15.0
(5)	1450.304	1428.210	0.01	-1.5	15.0
Aroclor-1260	4302.665	4504.739	0.01	4.7	15.0
(2)	2791.028	2829.388	0.01	1.4	15.0
(3)	2866.828	2970.753	0.01	3.6	15.0
(4)	6579.193	6864.066	0.01	4.3	15.0
(5)	3193.316	3314.063	0.01	3.8	15.0
4cmx	67032.526	68277.630	0.01	1.8	15.0
Decachlorobiphenyl	63399.298	59882.750	0.01	-5.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1384
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1019
 Lab File ID: 019B1901 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4489.288	4526.496	0.01	0.8	15.0
(2)	3434.131	3578.610	0.01	4.2	15.0
(3)	2017.371	2069.036	0.01	2.6	15.0
(4)	2105.569	2178.329	0.01	3.4	15.0
(5)	2794.468	2933.668	0.01	5.0	15.0
Aroclor-1260	5785.200	6203.061	0.01	7.2	15.0
(2)	7263.142	7832.586	0.01	7.8	15.0
(3)	5004.167	5364.318	0.01	7.2	15.0
(4)	5795.185	6078.704	0.01	4.9	15.0
(5)	9394.449	9956.098	0.01	6.0	15.0
4cmx	139556.85	147358.12	0.01	5.6	15.0
Decachlorobiphenyl	124551.80	118391.93	0.01	-4.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/002f0201.d
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001
 Inj Date : 28-JAN-2010 07:11
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |WAR100104-60 01
 Misc Info : |PCB_CVS|1660| |CVS|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.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			
1.770	1.770	0.000	6820445 100.000	102	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.604	5.604	0.000	6245694 100.000	98.5	80.00- 120.00	100.00	
1 Aroclor-1016				CAS #: 12674-11-2			
2.271	2.271	0.000	2165015 1000.00	959	80.00- 120.00	100.00 (M)	
2.595	2.595	0.000	4547039 1000.00	982	194.16- 234.16	210.02	
2.685	2.685	0.000	1844960 1000.00	971	65.88- 105.88	85.22	
2.820	2.820	0.000	933841 1000.00	950	24.35- 64.35	43.13	
2.971	2.971	0.000	1422773 1000.00	981	45.99- 85.99	65.72	
Average of Peak Amounts =				969			
7 Aroclor-1260				CAS #: 11096-82-5			
4.011	4.011	0.000	4458287 1000.00	1040	80.00- 120.00	100.00	
4.282	4.282	0.000	2841552 1000.00	1020	42.81- 82.81	63.74	
4.449	4.449	0.000	2963380 1000.00	1030	45.95- 85.95	66.47	
4.661	4.661	0.000	6827078 1000.00	1040	132.37- 172.37	153.13	
4.850	4.850	0.000	3275889 1000.00	1020	53.57- 93.57	73.48	
Average of Peak Amounts =				1.03e+03			

Data File: /chem/ecd2a.i/012810.b/002f0201.d
Report Date: 28-Jan-2010 11:26

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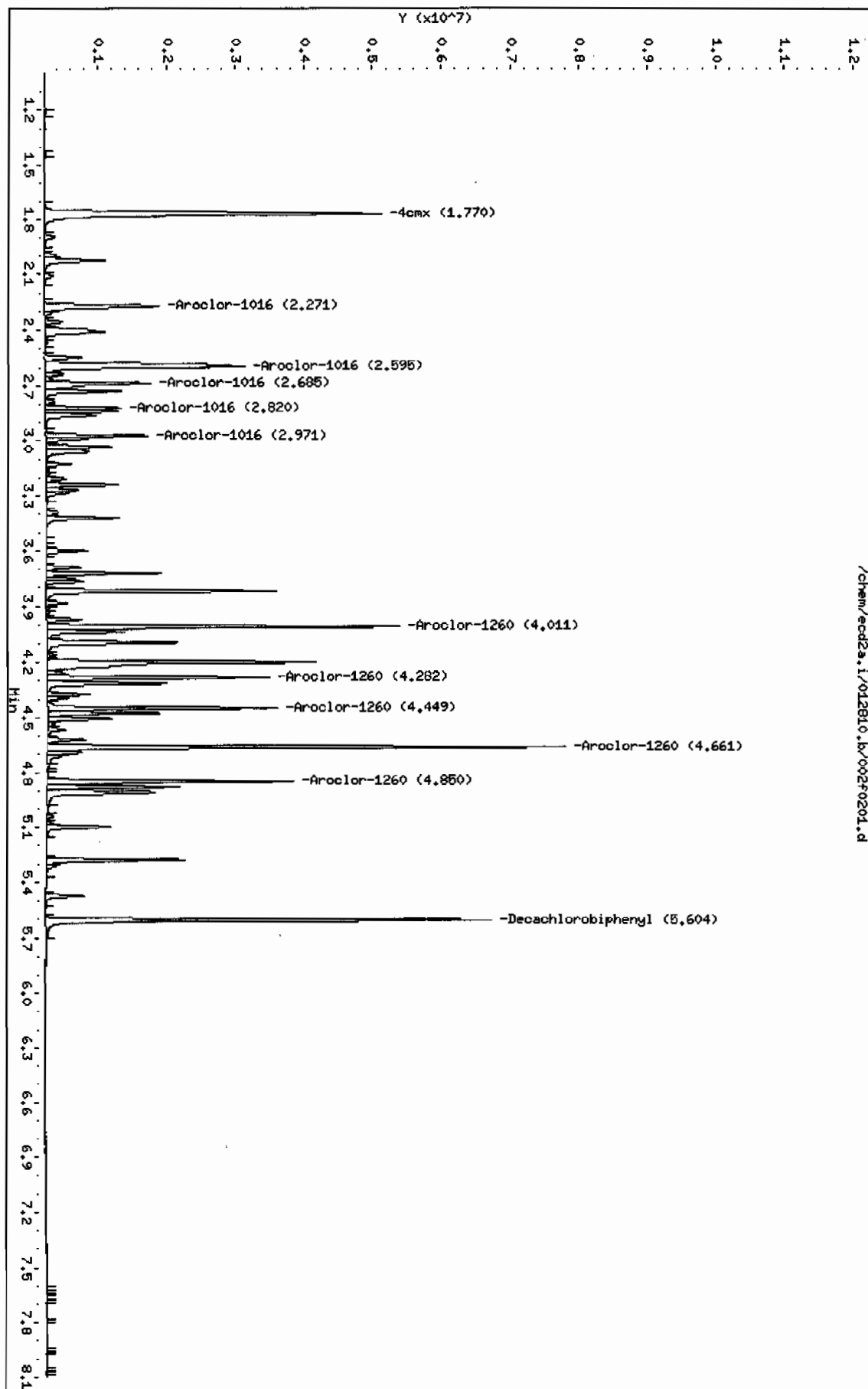
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/012810.k/002f0201.d
Date: 28-JAN-2010 07:11
Client ID: AR166001
Sample Info: IMR100104-60 01

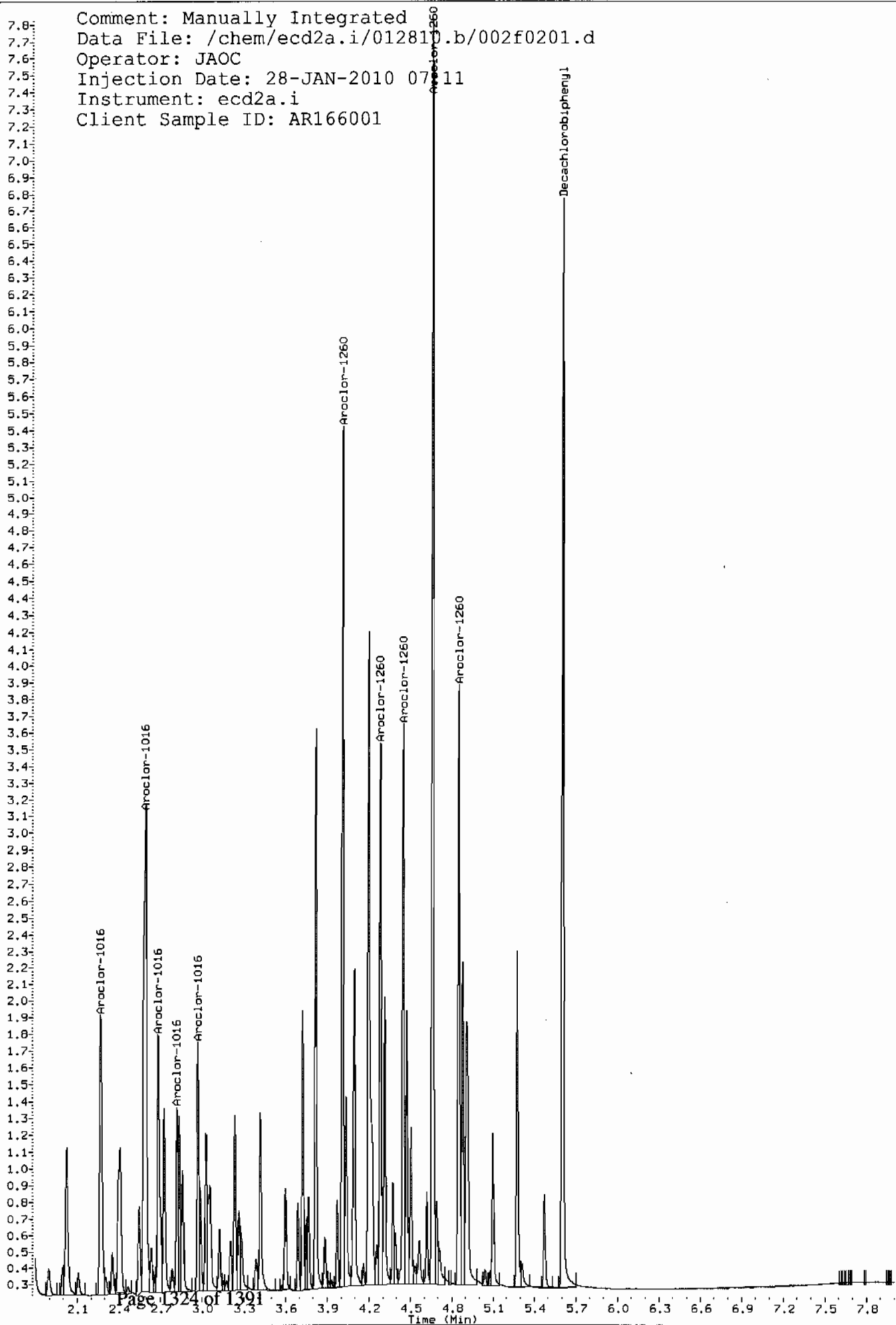
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAC
Column diameter: 0.25



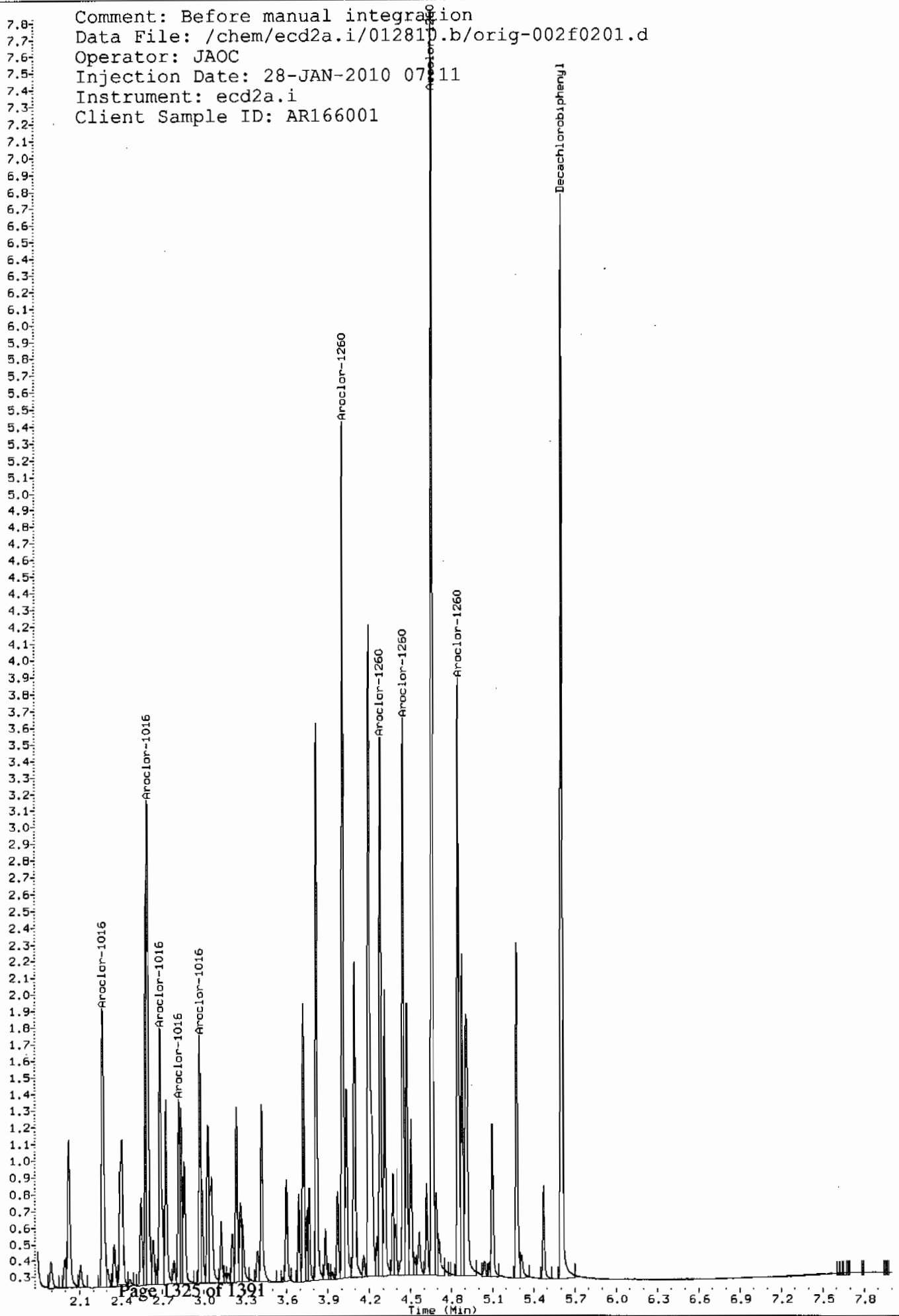
Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/002f0201.d
Operator: JAOC
Injection Date: 28-JAN-2010 07:11
Instrument: ecd2a.i
Client Sample ID: AR166001

Y (x10⁻⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-002f0201.d
Operator: JAOC
Injection Date: 28-JAN-2010 07:11
Instrument: ecd2a.i
Client Sample ID: AR166001

Y (x10⁶)



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/002b0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 28-JAN-2010 07:11

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 01

Misc Info : |PCB_CVS|1660||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.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			
2.067	2.067	0.000	14608354	100.000	105	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.297	6.297	0.000	12307107	100.000	98.8	80.00-	120.00	100.00

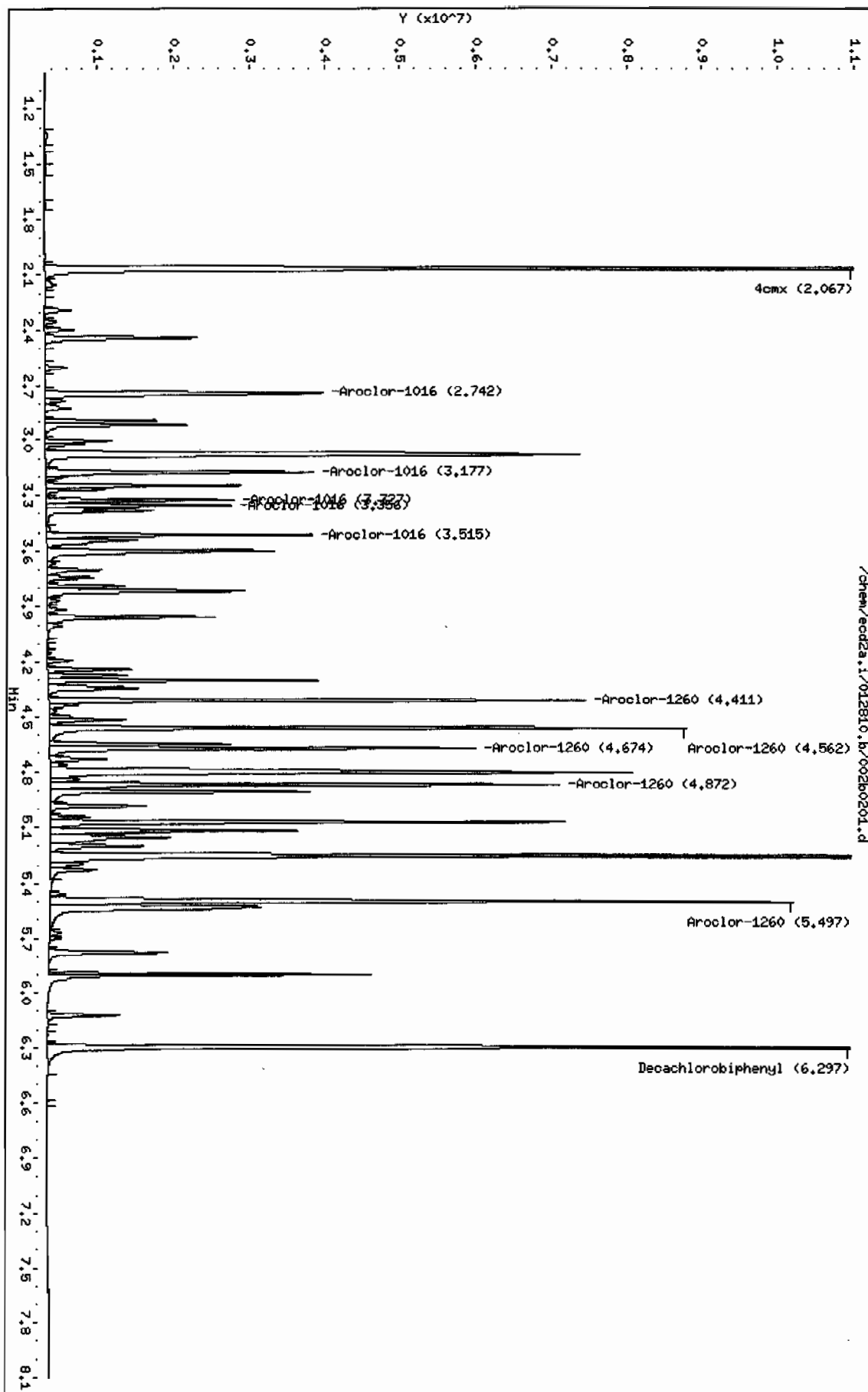
1 Aroclor-1016					CAS #: 12674-11-2			
2.742	2.742	0.000	4486151	1000.00	999	80.00-	120.00	100.00
3.177	3.177	0.000	3512523	1000.00	1020	59.06-	99.06	78.30
3.327	3.327	0.000	2045937	1000.00	1010	25.71-	65.71	45.61
3.356	3.356	0.000	2148449	1000.00	1020	28.12-	68.12	47.89
3.515	3.515	0.000	2882428	1000.00	1030	44.81-	84.81	64.25
Average of Peak Amounts =					1.02e+03			

7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	6061627	1000.00	1050	80.00-	120.00	100.00
4.562	4.562	0.000	7607487	1000.00	1050	106.27-	146.27	125.50
4.674	4.674	0.000	5271440	1000.00	1050	66.48-	106.48	86.96
4.872	4.872	0.000	5999470	1000.00	1040	78.00-	118.00	98.97
5.497	5.497	0.000	9853934	1000.00	1050	140.50-	180.50	162.56
Average of Peak Amounts =					1.05e+03			

Data File: /chem/ecd2a.i/012810.b/002b0201.d
Date : 28-JAN-2010 07:11
Client ID: AR166001
Sample Info: IHR100104-60 01

Column phase: CLP2

Instrument: ecd2a.i
Operator: JnOC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/003f0301.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 28-JAN-2010 07:22
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

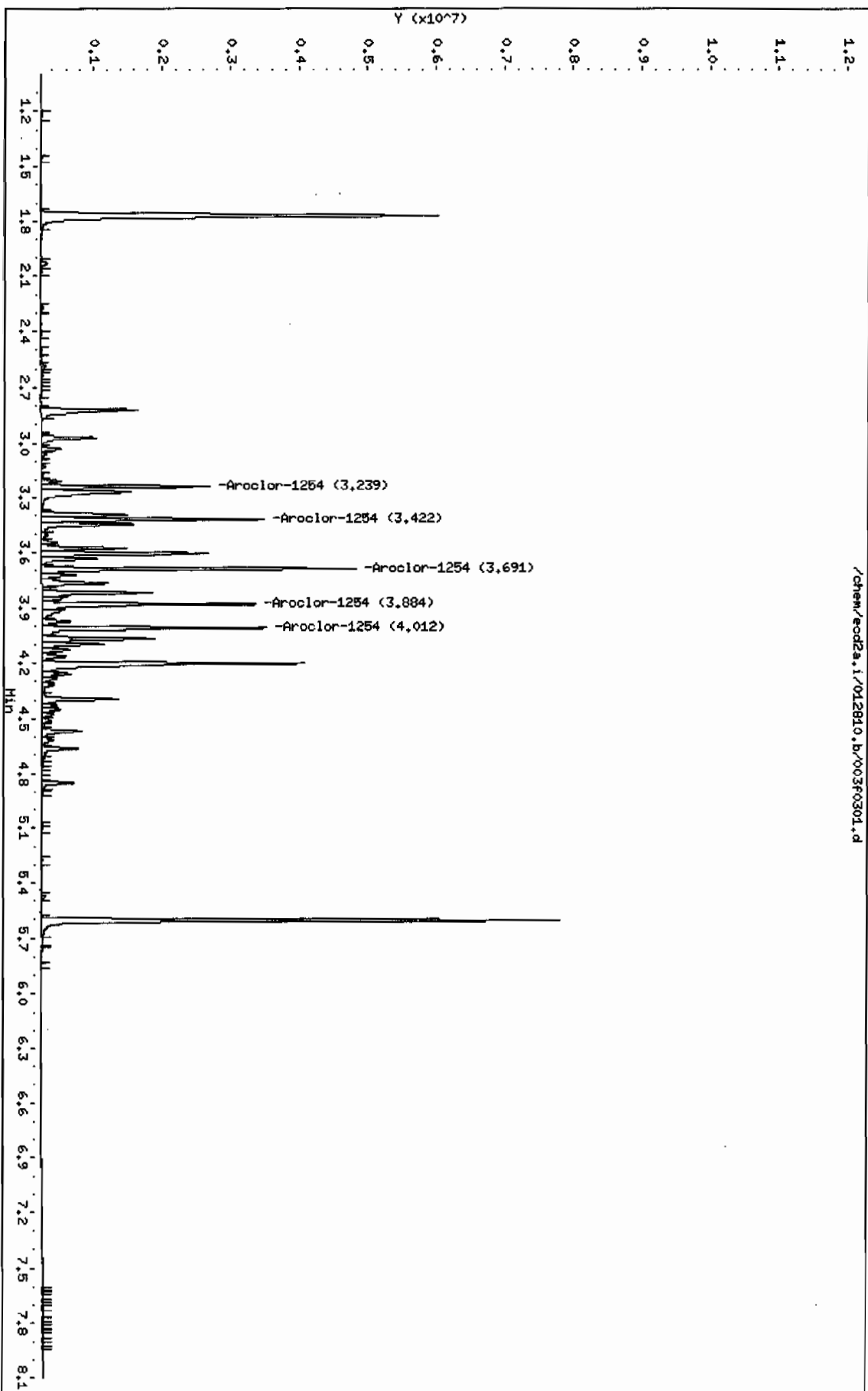
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.239	3.239	0.000	2231409 1000.00	1070	80.00- 120.00	100.00
3.422	3.422	0.000	2953627 1000.00	1060	112.37- 152.37	132.37
3.691	3.691	0.000	4104385 1000.00	1100	163.94- 203.94	183.94
3.884	3.884	0.000	3020232 1000.00	1080	115.35- 155.35	135.35
4.012	4.012	0.000	3091881 1000.00	1120	118.56- 158.56	138.56
Average of Peak Amounts =			1.09e+03			

Data File: /chem/eod2a.i/012810.b/003f0301.d
Date : 28-JAN-2010 07:22
Client ID: AR125401
Sample Info: 1MAR091102-54

Column phase: CLP1

Instrument: eod2a.i
Operator: JHOC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/003b0301.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 28-JAN-2010 07:22
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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	
3.815	3.815	0.000	5493305 1000.00	1100	80.00- 120.00	100.00
3.956	3.956	0.000	6269646 1000.00	1080	94.13- 134.13	114.13
4.193	4.193	0.000	4503313 1000.00	1120	61.98- 101.98	81.98
4.274	4.274	0.000	8599512 1000.00	1110	136.55- 176.55	156.55
4.437	4.437	0.000	6195246 1000.00	1100	92.78- 132.78	112.78
Average of Peak Amounts =			1.1e+03			

Data File: /chem/ecod2a.i/012810.b/003b0301.d
Date: 28-JAN-2010 07:22
Client ID: AR128401
Sample Info: IMA091102-54

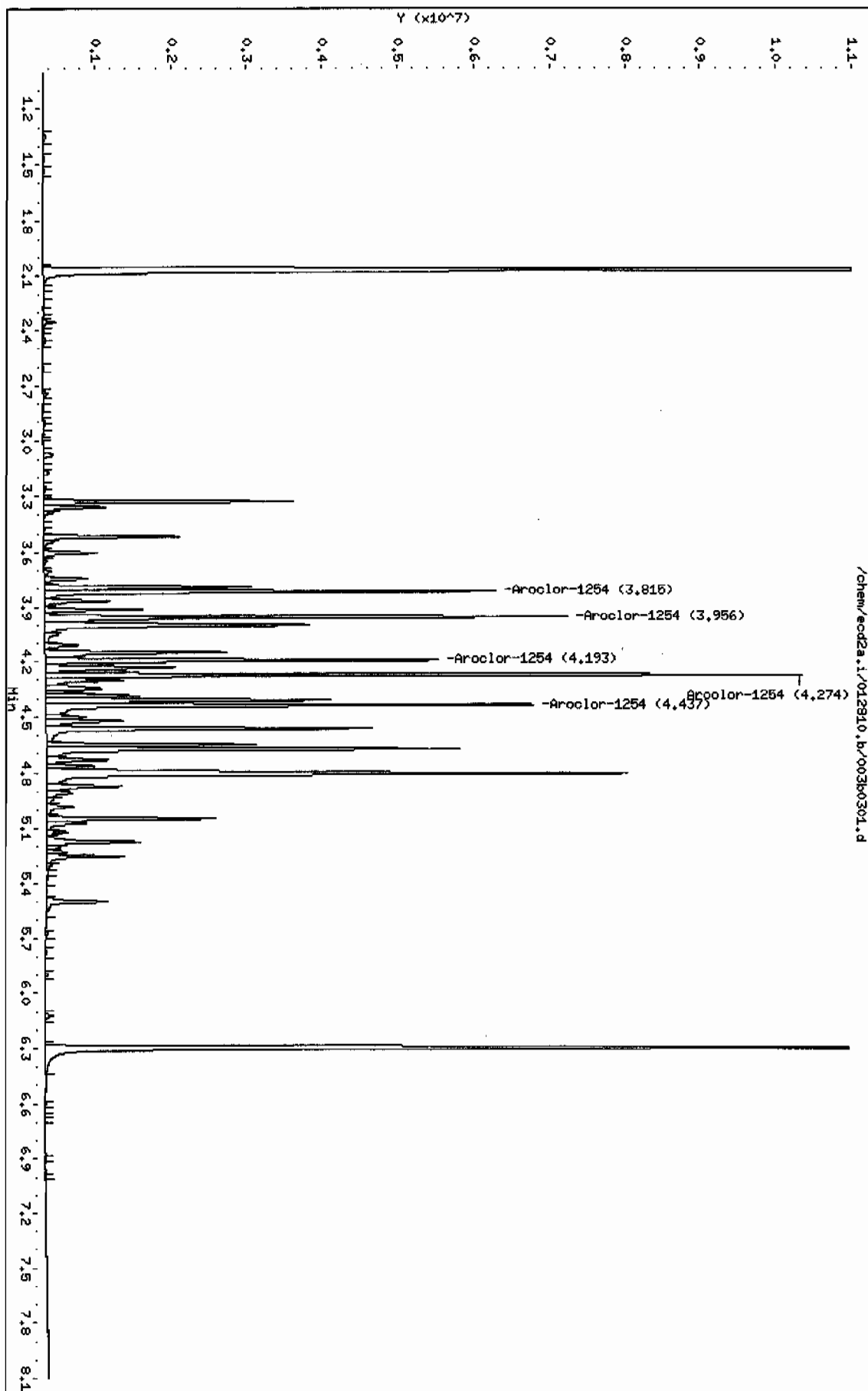
Column phase: CLP2

Instrument: ecod2a.i

Operator: JADC

Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/004f0401.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/004f0401.d

Lab Smp Id: WAR100104-42

Client Smp ID: AR124201

Inj Date : 28-JAN-2010 07:33

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-42

Misc Info : |PCB_CVS|1242||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242

CAS #: 53469-21-9

2.273	2.273	0.000	1855361	1000.00	1070 80.00- 120.00	100.00
2.687	2.687	0.000	1559676	1000.00	1050 64.06- 104.06	84.06
2.730	2.730	0.000	955434	1000.00	1050 31.50- 71.50	51.50
2.822	2.822	0.000	783755	1000.00	1080 22.24- 62.24	42.24
2.974	2.974	0.000	1195977	1000.00	1070 44.46- 84.46	64.46

Average of Peak Amounts =

1.06e+03

Data File: /chem/eod2a.i/012810.b/004f0401.d

Date : 28-JUN-2010 07:33

Client ID: AR124201

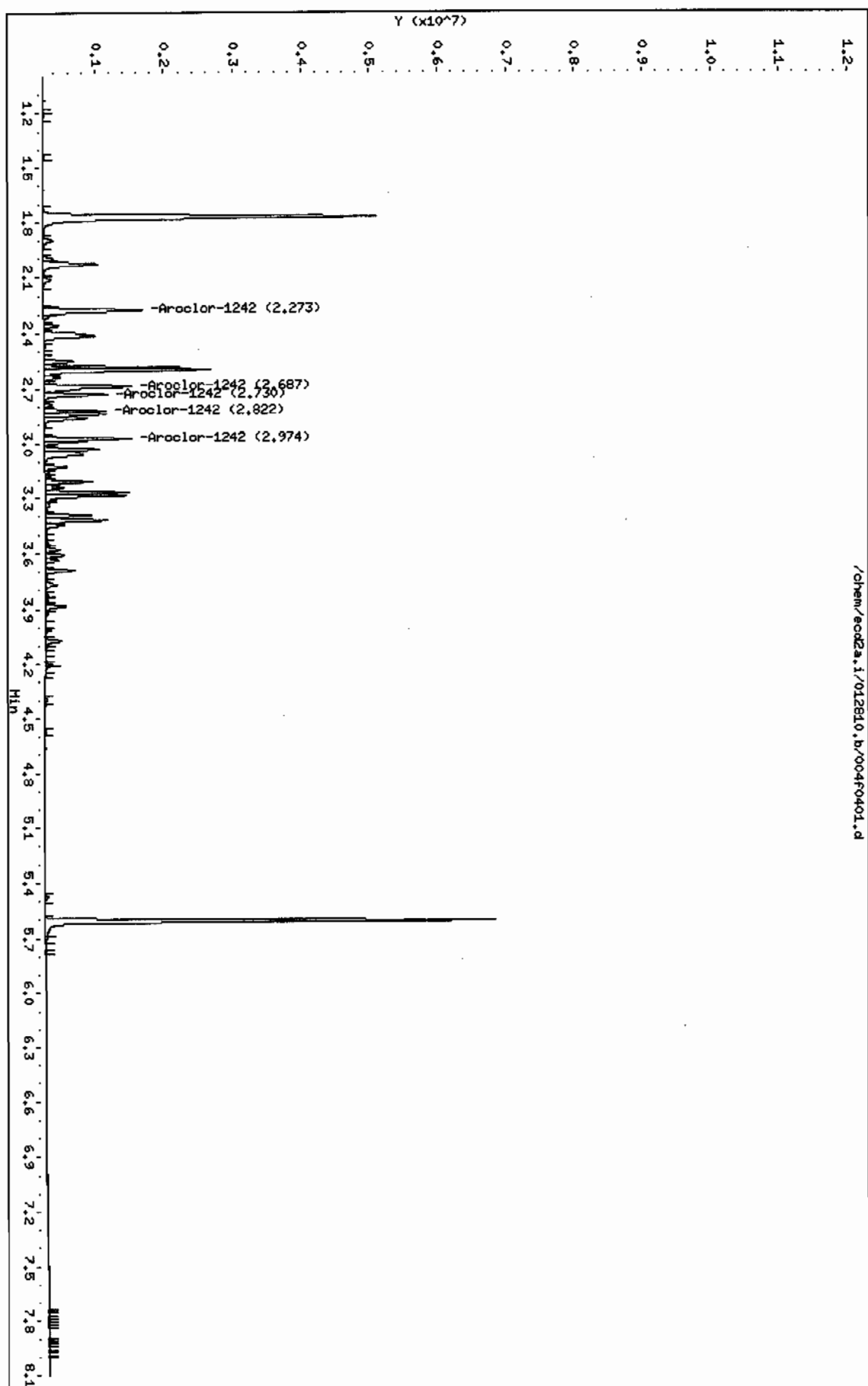
Sample Info: 1MAR091217-42

Column phase: CLP1

Instrument: eod2a.i

Operator: JROC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/004b0401.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/004b0401.d
Lab Smp Id: WAR100104-42 Client Smp ID: AR124201
Inj Date : 28-JAN-2010 07:33
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR100104-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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

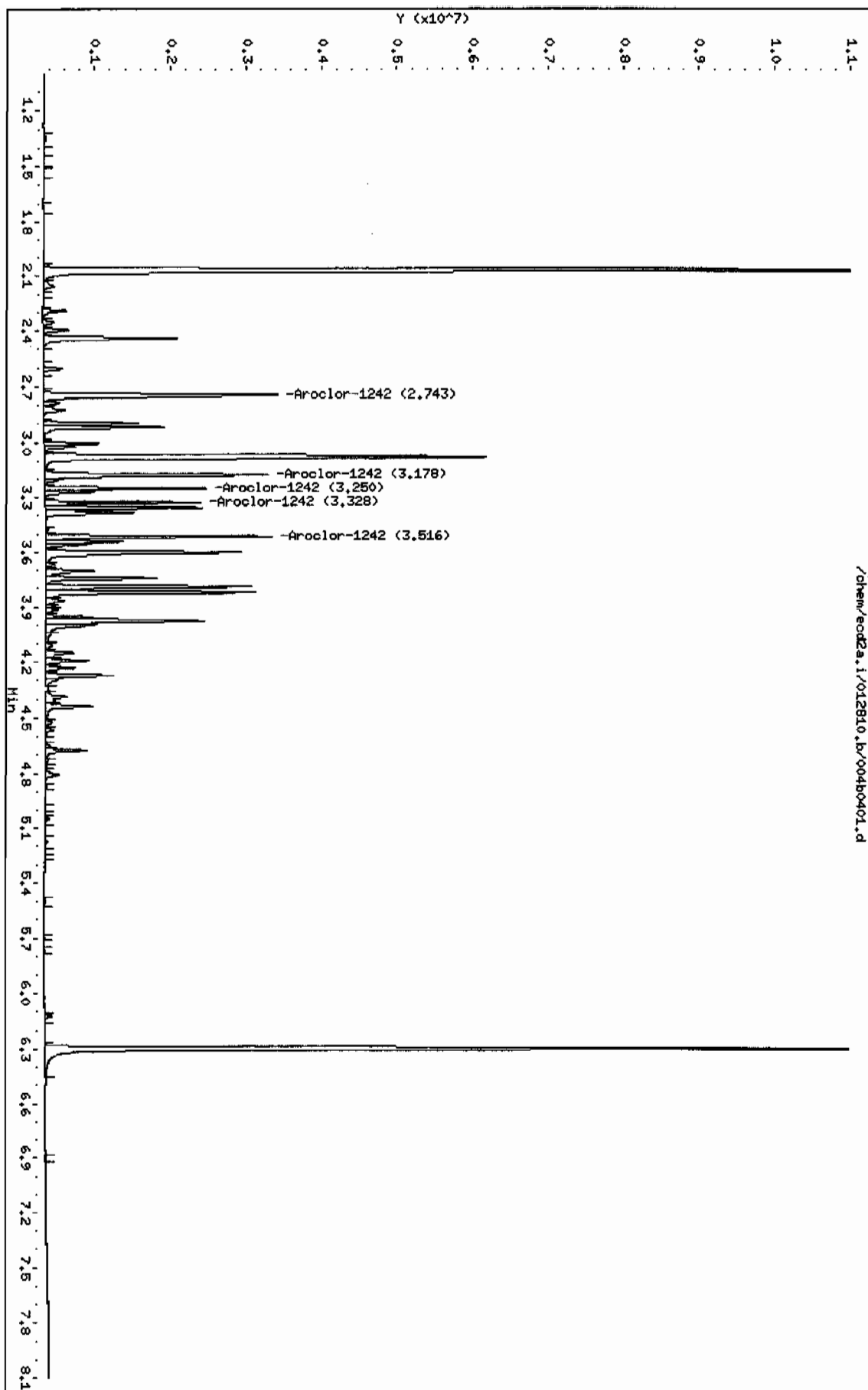
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242 CAS #: 53469-21-9						
2.743	2.743	0.000	3843908 1000.00	1120	80.00- 120.00	100.00
3.178	3.178	0.000	2922890 1000.00	1090	56.04- 96.04	76.04
3.250	3.250	0.000	1743190 1000.00	1060	25.35- 65.35	45.35
3.328	3.328	0.000	1655624 1000.00	1100	23.07- 63.07	43.07
3.516	3.516	0.000	2427737 1000.00	1130	43.16- 83.16	63.16
Average of Peak Amounts =			1.1e+03			

Data File: /chem/ecd2a.i/012810.b/004b0401.d
Date: 28-JAN-2010 07:33
Client ID: AR124201
Sample Info: 14R091217-42

Column phase: CLP2

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/005f0501.d

Lab Smp Id: WAR100104-48

Client Smp ID: AR124801

Inj Date : 28-JAN-2010 07:44

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-48

Misc Info : |PCB_CVS|1248||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248			CAS #: 12672-29-6			
2.822	2.822	0.000	1497341 1000.00	981	80.00- 120.00	100.00
2.973	2.973	0.000	2062982 1000.00	1020	117.78- 157.78	137.78
3.033	3.033	0.000	1565209 1000.00	996	84.53- 124.53	104.53
3.268	3.268	0.000	2178226 1000.00	982	125.47- 165.47	145.47
3.420	3.420	0.000	1870723 1000.00	978	104.94- 144.94	124.94

Average of Peak Amounts = 991

Data File: /chem/ecd2a.i/012810.b/005f0501.d

Date : 28-JAN-2010 07:44

Client ID: AR124801

Sample Info: JMR091217-48

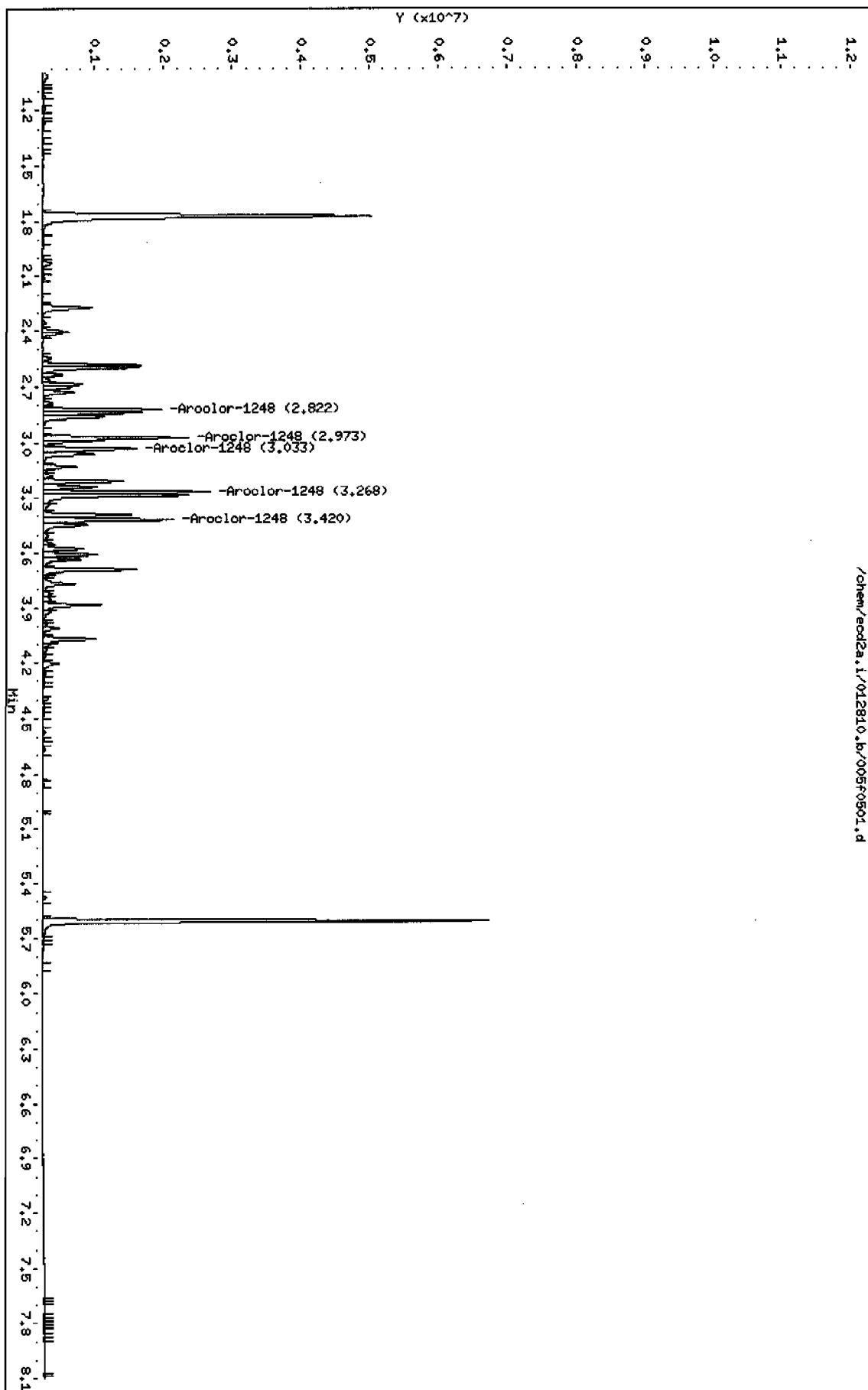
Column phase: CLP1

Instrument: ecd2a.i

Operator: JROC

Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/005b0501.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/005b0501.d

Lab Smp Id: WAR100104-48

Client Smp ID: AR124801

Inj Date : 28-JAN-2010 07:44

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-48

Misc Info : |PCB_CVS|1248||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.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	
3.329	3.329	0.000	3215095	1000.00	979 80.00- 120.00	100.00
3.515	3.515	0.000	4142321	1000.00	989 108.84- 148.84	128.84
3.602	3.602	0.000	4435829	1000.00	996 117.97- 157.97	137.97
3.791	3.791	0.000	4552663	1000.00	969 121.60- 161.60	141.60
3.820	3.820	0.000	5384914	1000.00	999 147.49- 187.49	167.49
Average of Peak Amounts =				987		

Data File: /chem/ecod2a.i/012810.b/005B0501.d

Date: 28-JAN-2010 07:44

Client ID: AR124801

Sample Info: IMR091217-48

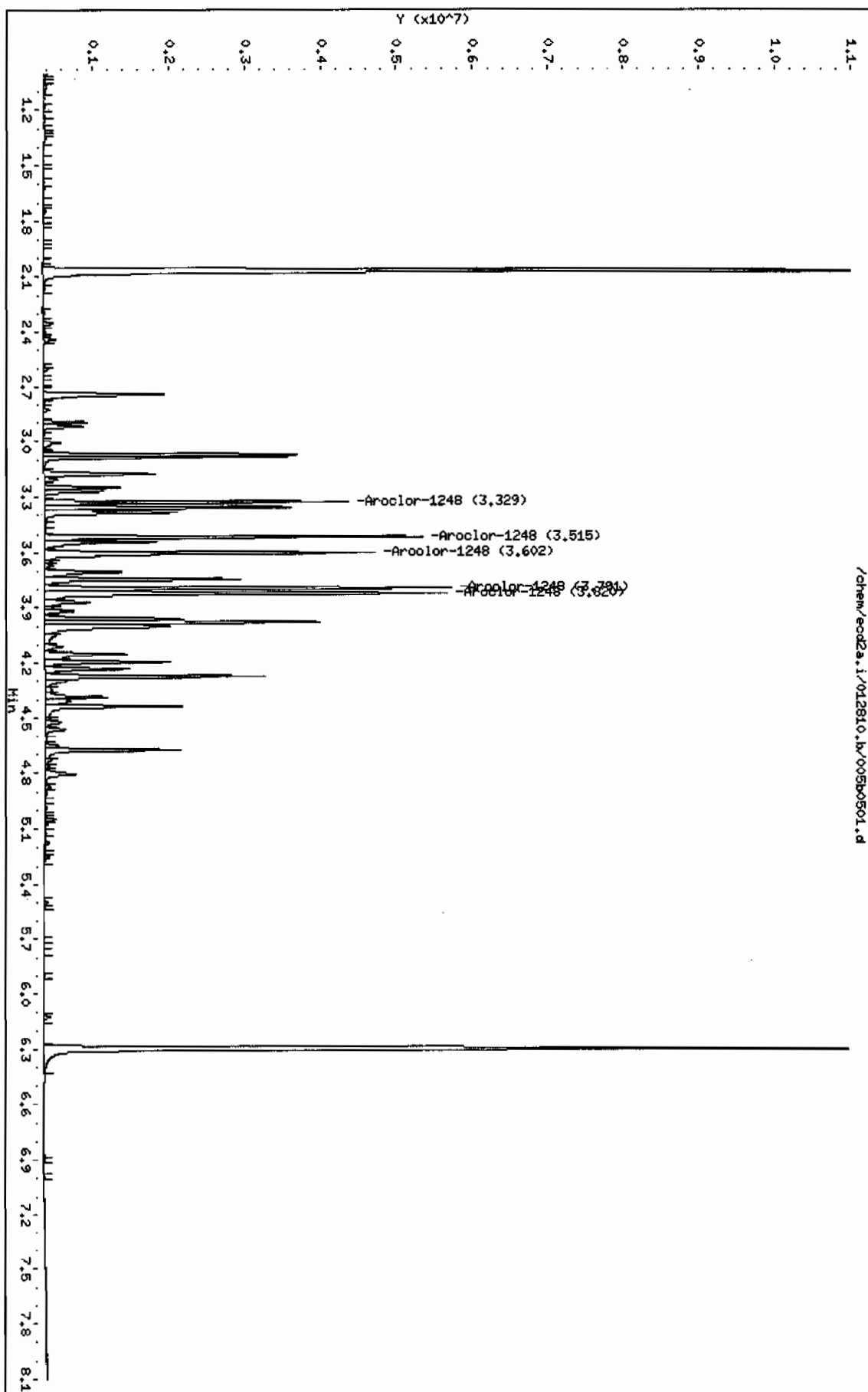
Column phase: CLP2

Instrument: ecod2a.i

Operator: JHOC

Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/006f0601.d
Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 07:55

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-32

Misc Info : |PCB_CVS|1232||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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
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3 Aroclor-1232

CAS #: 11141-16-5

2.025	2.025	0.000	1262370	1000.00	854 80.00- 120.00	100.00
2.273	2.273	0.000	1025064	1000.00	939 61.20- 101.20	81.20
2.687	2.687	0.000	867854	1000.00	974 48.75- 88.75	68.75
2.729	2.729	0.000	550974	1000.00	1000 23.65- 63.65	43.65
2.973	2.973	0.000	644223	1000.00	1030 31.03- 71.03	51.03

Average of Peak Amounts =

960

Data File: /chem/ecd2a.i/012810.b/006f0601.d

Date : 28-JAN-2010 07:55

Client ID: AR123201

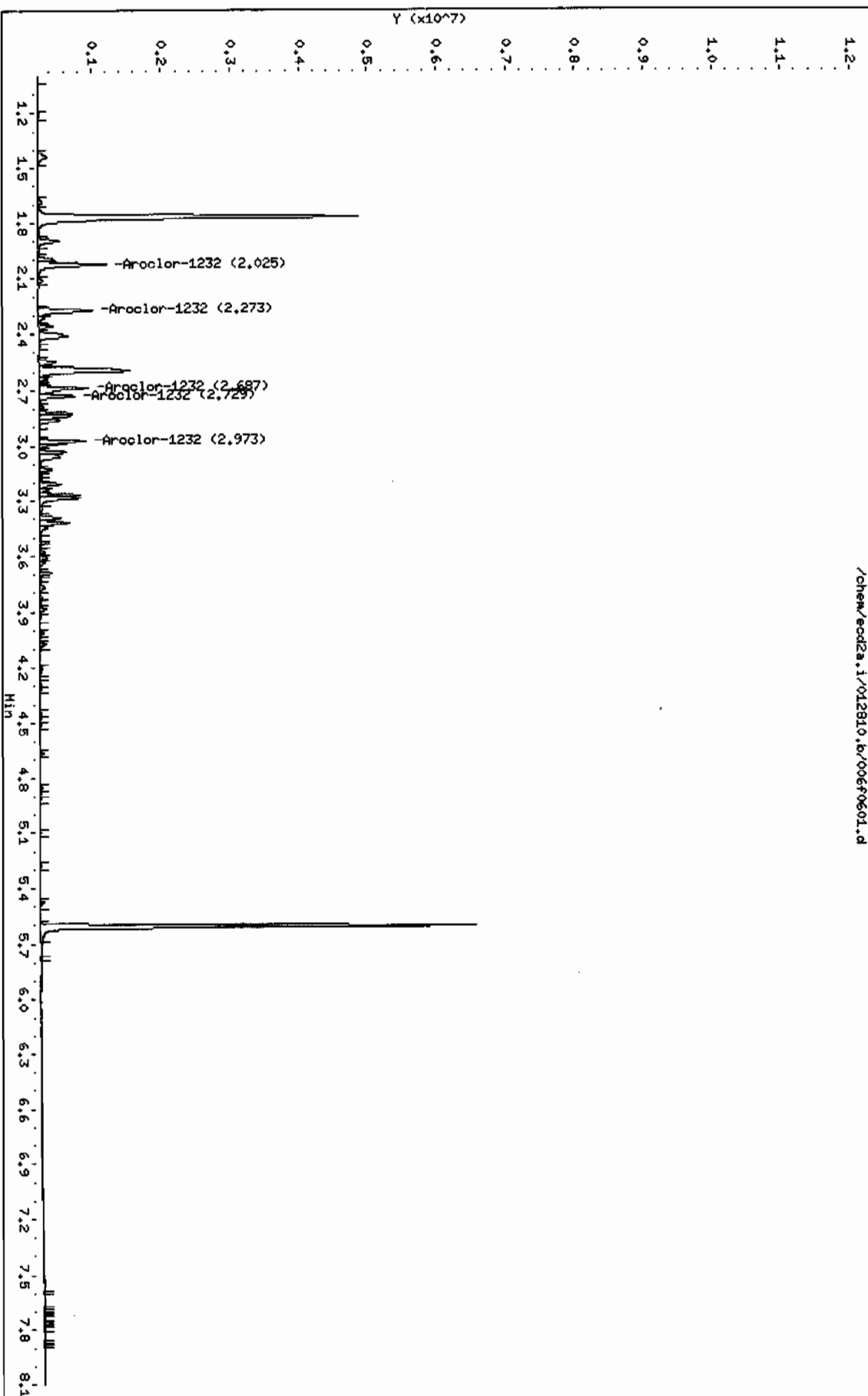
Sample Info: 1MAR100104-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JROC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 07:55

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-32

Misc Info : |PCB_CVS|1232||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

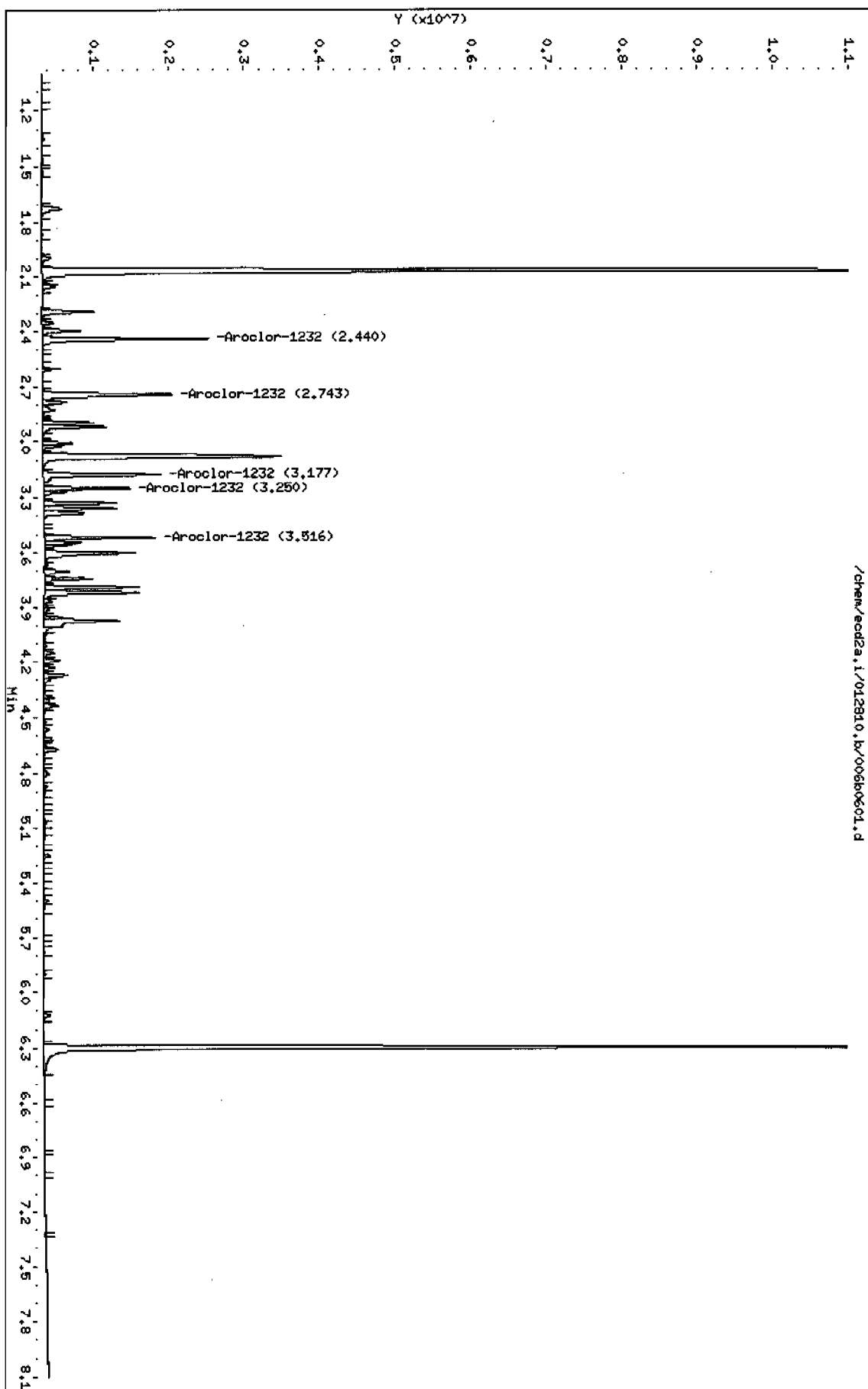
AMOUNTS

			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
			=====	=====	=====	=====
3 Aroclor-1232			CAS #: 11141-16-5			
2.440	2.440	0.000	2212125 1000.00	870	80.00- 120.00	100.00
2.743	2.743	0.000	2121886 1000.00	966	75.92- 115.92	95.92
3.177	3.177	0.000	1658555 1000.00	1060	54.98- 94.98	74.98
3.250	3.250	0.000	961205 1000.00	1010	23.45- 63.45	43.45
3.516	3.516	0.000	1197709 1000.00	1030	34.14- 74.14	54.14
Average of Peak Amounts =			988			

Data File: /chem/ecd2a.i/012810.b/006b0601.d
Date: 28-JAN-2010 07:55
Client ID: AR123201
Sample Info: HAR100104-32

Column phase: CLP2

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 28-JAN-2010 08:07

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-21

Misc Info : |PCB_CVS|1221||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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

1.438	1.438	0.000	535862	1000.00	1150 80.00- 120.00	100.00
1.897	1.897	0.000	723428	1000.00	1100 115.00- 155.00	135.00
1.996	1.996	0.000	372186	1000.00	1070 49.46- 89.46	69.46

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecod2a.i/012810.b/0070701.d

Date: 28-JAN-2010 08:07

Client ID: AR122101

Sample Info: 1MAR100104-21

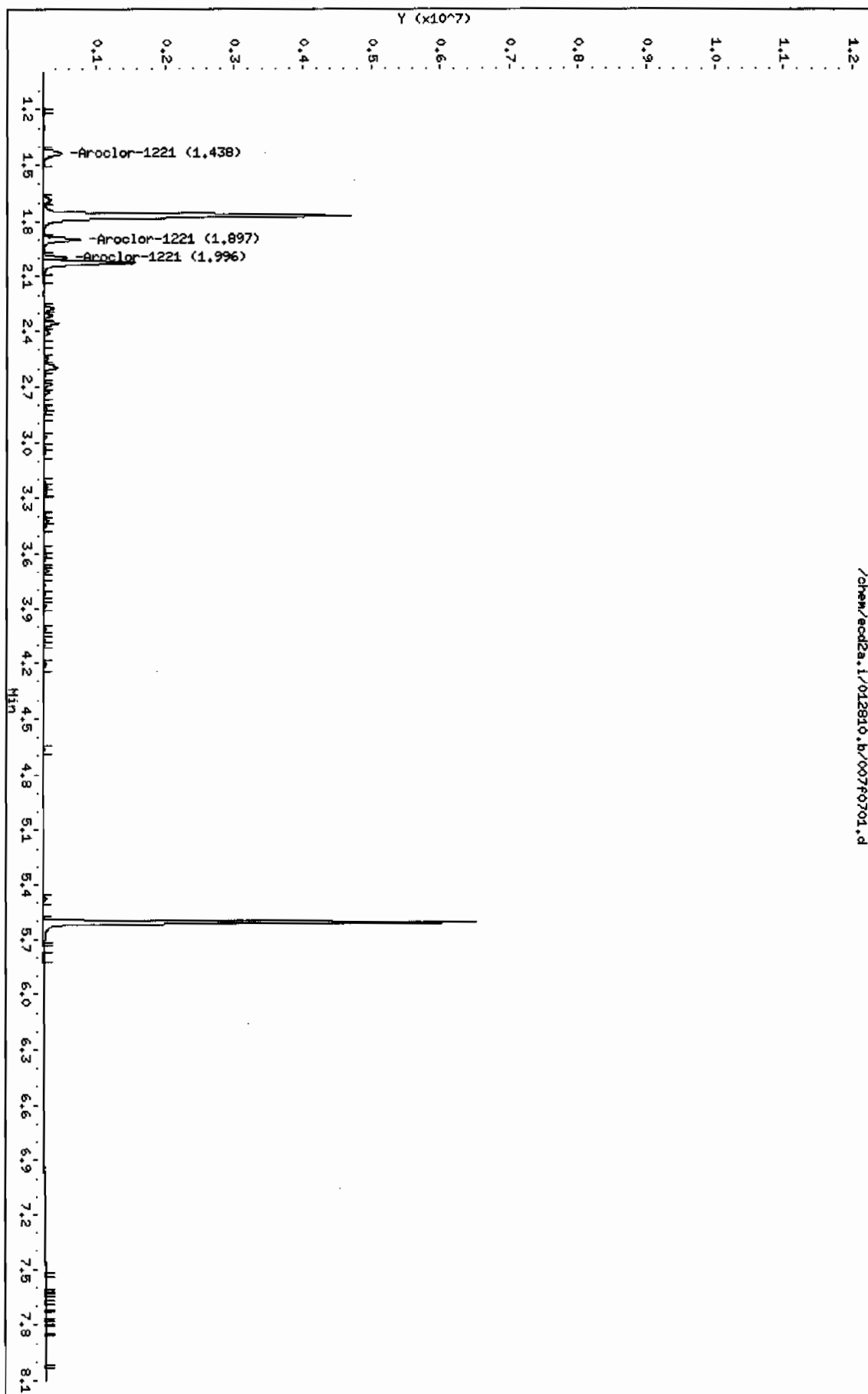
Column Phase: CLP1

Instrument: ecod2a.i

Operator: JAC

Column diameter: 0.25

/chem/ecod2a.i/012810.b/0070701.d



Data File: /chem/ecd2a.i/012810.b/007b0701.d
Report Date: 28-Jan-2010 11:27

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/007b0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 28-JAN-2010 08:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR100104-21|
Misc Info : |PCB_CVS|1221||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.290	2.290	0.000	1324627 1000.00	1050	80.00- 120.00	100.00
2.395	2.395	0.000	802230 1000.00	1040	40.56- 80.56	60.56
2.440	2.440	0.000	3180455 1000.00	1040	220.10- 260.10	240.10
Average of Peak Amounts =			1.04e+03			

Data File: /chem/ecod2a.i/012810.b/007b0701.d

Date: 28-JUN-2010 08:07

Client ID: MR122101

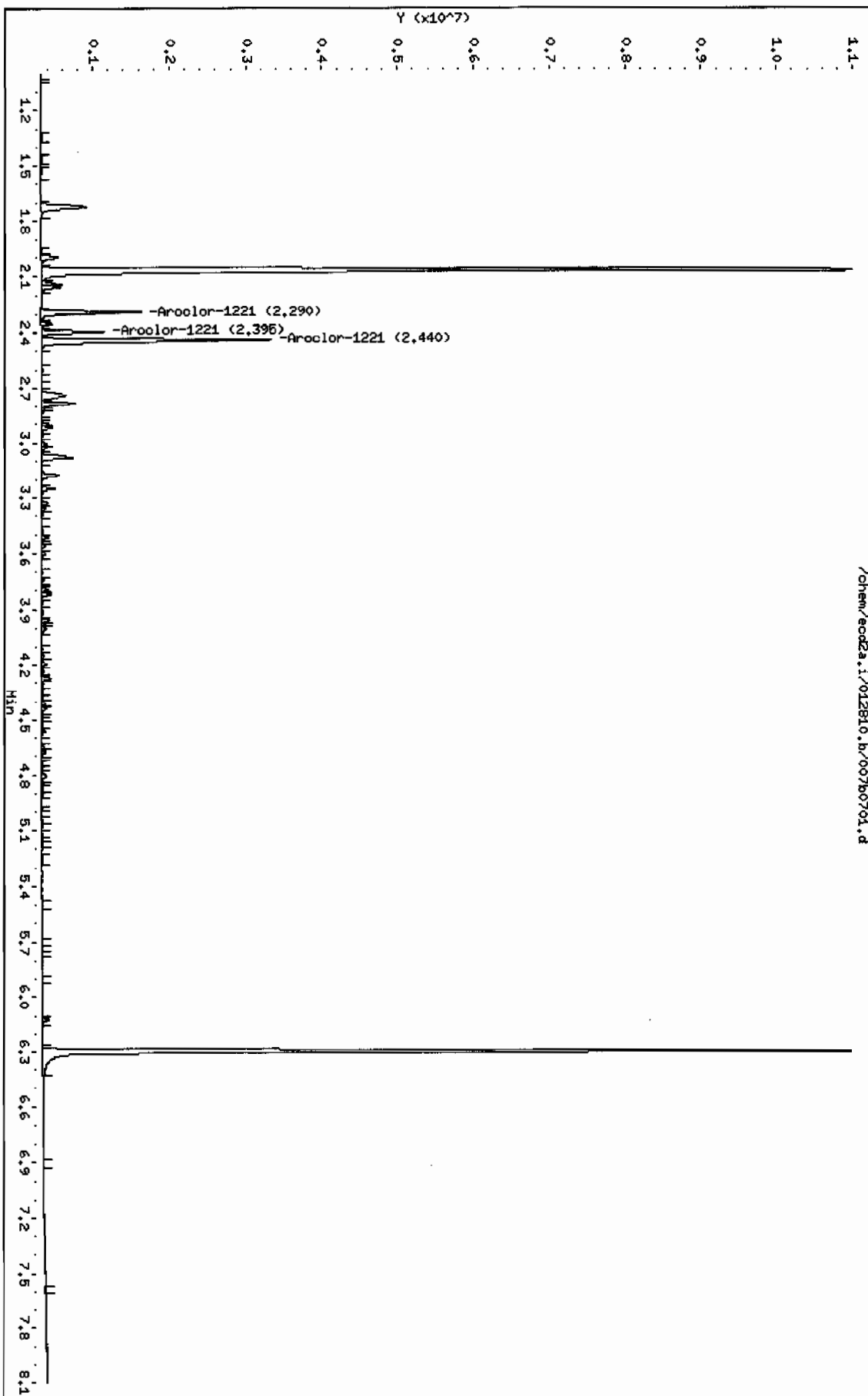
Sample Info: IMR100104-21

Column phase: CLP2

Instrument: ecod2a.i

Operator: JADC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/019f1901.d
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002
 Inj Date : 28-JAN-2010 10:19
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |WAR100104-60 02
 Misc Info : |PCB_CVS|1660|CVS|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
 Als bottle: 19 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None

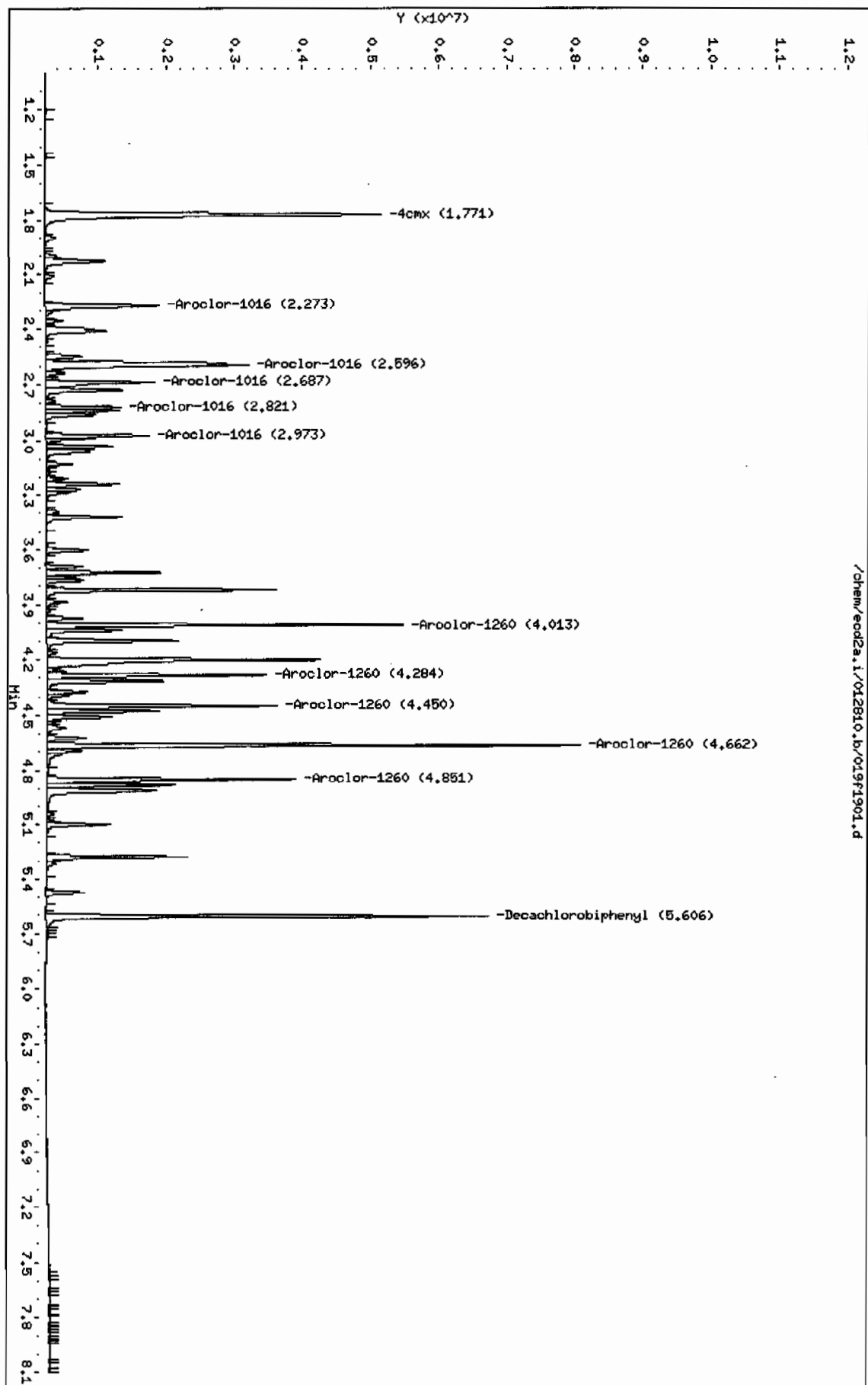
AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====		=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8				
1.771	1.770	0.001	6827763	100.000	102	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
5.606	5.604	0.002	5988275	100.000	94.4	80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2				
2.273	2.271	0.002	2164216	1000.00	958	80.00- 120.00	100.00
2.596	2.595	0.001	4634917	1000.00	1000	194.16- 234.16	214.16
2.687	2.685	0.002	1858717	1000.00	978	65.88- 105.88	85.88
2.821	2.820	0.001	959884	1000.00	976	24.35- 64.35	44.35
2.973	2.971	0.002	1428209	1000.00	985	45.99- 85.99	65.99
Average of Peak Amounts =			980				
7 Aroclor-1260			CAS #: 11096-82-5				
4.013	4.011	0.002	4504738	1000.00	1050	80.00- 120.00	100.00
4.284	4.282	0.002	2829387	1000.00	1010	42.81- 82.81	62.81
4.450	4.449	0.001	2970753	1000.00	1040	45.95- 85.95	65.95
4.662	4.661	0.001	6864066	1000.00	1040	132.37- 172.37	152.37
4.851	4.850	0.001	3314063	1000.00	1040	53.57- 93.57	73.57
Average of Peak Amounts =			1.04e+03				

Data File: /chem/eod2a.i/012810.b/019f1901.d
Date : 28-JAN-2010 10:19
Client ID: AR166002
Sample Info: IMR100104-60 02

Column phase: CLP1

Instrument: eod2a.i
Operator: JMO
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/019b1901.d
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002
 Inj Date : 28-JAN-2010 10:19
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |WAR100104-60 02
 Misc Info : |PCB_CVS|1660||CVS|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 19 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			
2.068	2.067	0.001	14735812	100.000	106	80.00~ 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.298	6.297	0.001	11839193	100.000	95.0	80.00~ 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.743	2.742	0.001	4526495	1000.00	1010	80.00~ 120.00	100.00	
3.178	3.177	0.001	3578609	1000.00	1040	59.06~ 99.06	79.06	
3.328	3.327	0.001	2069035	1000.00	1020	25.71~ 65.71	45.71	
3.358	3.356	0.002	2178329	1000.00	1030	28.12~ 68.12	48.12	
3.515	3.515	0.000	2933668	1000.00	1050	44.81~ 84.81	64.81	
Average of Peak Amounts =					1.03e+03			

7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	6203060	1000.00	1070	80.00~ 120.00	100.00	
4.563	4.562	0.001	7832586	1000.00	1080	106.27~ 146.27	126.27	
4.674	4.674	0.000	5364318	1000.00	1070	66.48~ 106.48	86.48	
4.872	4.872	0.000	6078704	1000.00	1050	78.00~ 118.00	98.00	
5.498	5.497	0.001	9956097	1000.00	1060	140.50~ 180.50	160.50	
Average of Peak Amounts =					1.07e+03			

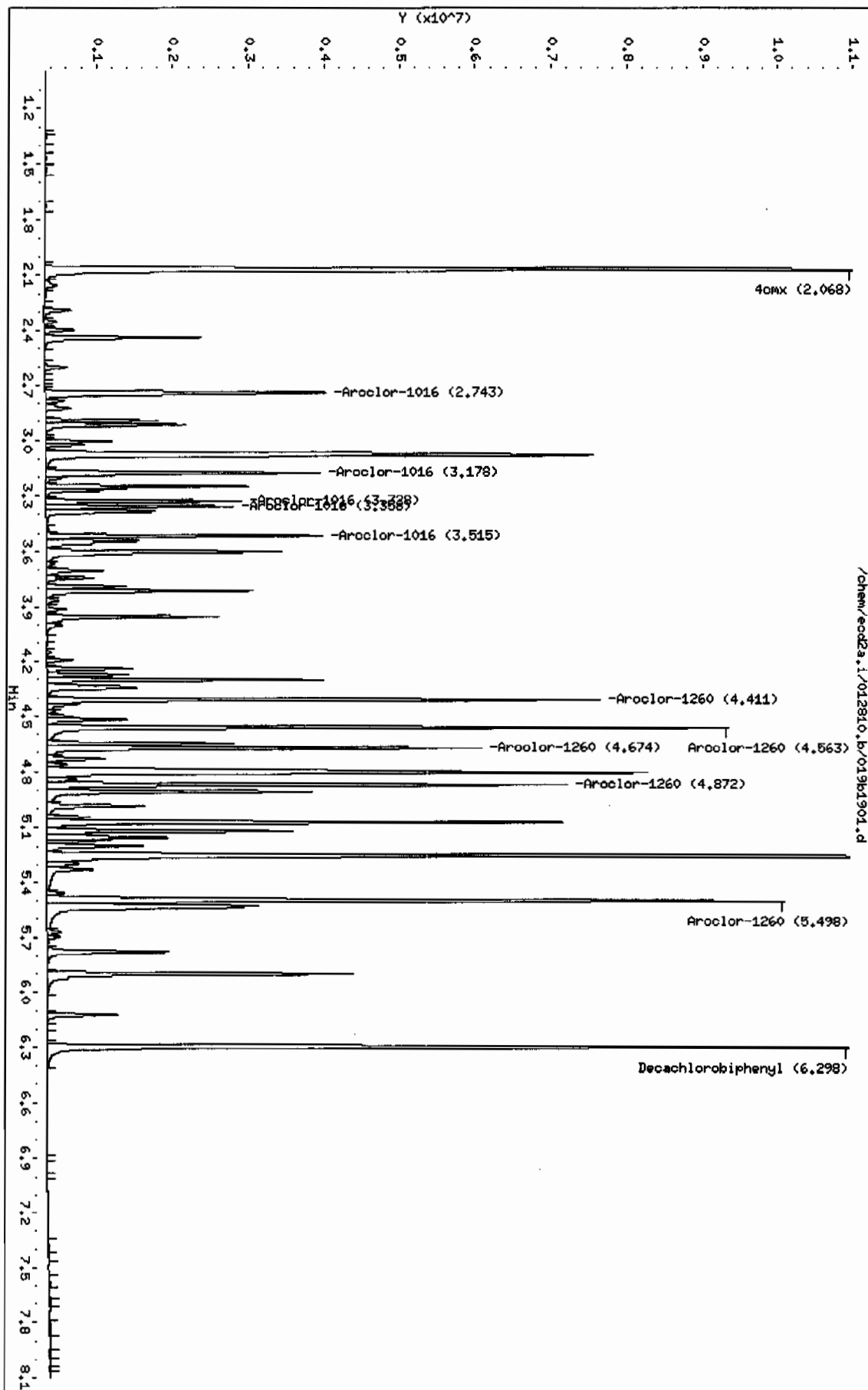
Data File: /chem/ecod2a.i/012810.b/01961901.d
Date: 28-JAN-2010 10:19
Client ID: AR166002
Sample Info: IHR100104-60 02

Column Phase: CLP2

Instrument: ecod2a.i

Operator: JnOC

Column diameter: 0.25



8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1384

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.77			DCB: 5.61			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR091130-99	01/20/10	0817	1.77	5.60
02	ZZZZZ	ZZZZZ	01/20/10	0829	1.77	5.61
03	AR125401	WAR091102-54	01/20/10	0840		
04	AR124201	WAR100104-42	01/20/10	0851		
05	AR124801	WAR100104-48	01/20/10	0902		
06	AR123201	WAR100104-32	01/20/10	0913		
07	AR122101	WAR100104-21	01/20/10	0924		
08	AR126201	WAR100104-62	01/20/10	0935		
09	AR166001	WAR100120-01	01/20/10	0946	1.77	5.61
10	AR166002	WAR100120-02	01/20/10	0957	1.77	5.61
11	AR166003	WAR100120-03	01/20/10	1009	1.77	5.61
12	AR166004	WAR100120-04	01/20/10	1020	1.77	5.61
13	AR166005	WAR100104-01	01/20/10	1031	1.77	5.61
14	AR166001	WAR100104-60	01/20/10	1042	1.77	5.61
15	AR126801	WAR091106-68	01/20/10	1053		
16	DDTANALOGSTD	WAR091219-DD	01/20/10	1104		
17	PIBLK02	WAR091130-99	01/20/10	1115	1.77	5.61
18	ZZZZZ	ZZZZZ	01/20/10	1126	1.77	5.61
19	ZZZZZ	ZZZZZ	01/20/10	1138	1.77	5.61
20	ZZZZZ	ZZZZZ	01/20/10	1149	1.77	5.61
21	ZZZZZ	ZZZZZ	01/20/10	1200	1.77	5.61
22	ZZZZZ	ZZZZZ	01/20/10	1211	1.77	5.61
23	ZZZZZ	ZZZZZ	01/20/10	1222	1.77	5.61
24	ZZZZZ	ZZZZZ	01/20/10	1233	1.77	5.61
25	ZZZZZ	ZZZZZ	01/20/10	1244	1.77	5.61
26	ZZZZZ	ZZZZZ	01/20/10	1255	1.77	5.61
27	ZZZZZ	ZZZZZ	01/20/10	1306	1.77	5.61
28	AR166002	WAR100104-60	01/20/10	1317	1.77	5.61
29	PIBLK03	WAR091130-99	01/20/10	1328	1.77	5.61
30	ZZZZZ	ZZZZZ	01/20/10	1340	1.77	5.61
31	ZZZZZ	ZZZZZ	01/20/10	1351	1.77	5.61
32	ZZZZZ	ZZZZZ	01/20/10	1402	1.77	5.61

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.: 10-1384

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.07			DCB: 6.30			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR091130-99	01/20/10	0817	2.06	6.29
02	ZZZZZ	ZZZZZ	01/20/10	0829	2.07	6.30
03	AR125401	WAR091102-54	01/20/10	0840		
04	AR124201	WAR100104-42	01/20/10	0851		
05	AR124801	WAR100104-48	01/20/10	0902		
06	AR123201	WAR100104-32	01/20/10	0913		
07	AR122101	WAR100104-21	01/20/10	0924		
08	AR126201	WAR100104-62	01/20/10	0935		
09	AR166001	WAR100120-01	01/20/10	0946	2.07	6.30
10	AR166002	WAR100120-02	01/20/10	0957	2.07	6.30
11	AR166003	WAR100120-03	01/20/10	1009	2.07	6.30
12	AR166004	WAR100120-04	01/20/10	1020	2.07	6.30
13	AR166005	IAR100104-01	01/20/10	1031	2.07	6.30
14	AR166001	WAR100104-60	01/20/10	1042	2.07	6.30
15	AR126801	WAR091106-68	01/20/10	1053		
16	DDTANALOGSTD	WAR091219-DD	01/20/10	1104		
17	PIBLK02	WAR091130-99	01/20/10	1115	2.07	6.30
18	ZZZZZ	ZZZZZ	01/20/10	1126	2.07	6.30
19	ZZZZZ	ZZZZZ	01/20/10	1138	2.07	6.30
20	ZZZZZ	ZZZZZ	01/20/10	1149	2.07	6.30
21	ZZZZZ	ZZZZZ	01/20/10	1200	2.07	6.30
22	ZZZZZ	ZZZZZ	01/20/10	1211	2.07	6.30
23	ZZZZZ	ZZZZZ	01/20/10	1222	2.07	6.30
24	ZZZZZ	ZZZZZ	01/20/10	1233	2.07	6.30
25	ZZZZZ	ZZZZZ	01/20/10	1244	2.07	6.30
26	ZZZZZ	ZZZZZ	01/20/10	1255	2.07	6.30
27	ZZZZZ	ZZZZZ	01/20/10	1306	2.07	6.30
28	AR166002	WAR100104-60	01/20/10	1317	2.07	6.30
29	PIBLK03	WAR091130-99	01/20/10	1328	2.07	6.30
30	ZZZZZ	ZZZZZ	01/20/10	1340	2.07	6.30
31	ZZZZZ	ZZZZZ	01/20/10	1351	2.07	6.30
32	ZZZZZ	ZZZZZ	01/20/10	1402	2.07	6.30

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.: 10-1384
 GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10
 Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.77				DCB: 5.60			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	#	RT	#
01	PIBLK01	WAR100105-99	01/28/10	0700			
02	AR166001	WAR100104-60	01/28/10	0711			
03	AR125401	WAR091102-54	01/28/10	0722			
04	AR124201	WAR100104-42	01/28/10	0733			
05	AR124801	WAR100104-48	01/28/10	0744			
06	AR123201	WAR100104-32	01/28/10	0755			
07	AR122101	WAR100104-21	01/28/10	0807			
08	AR126201	WAR100104-62	01/28/10	0818			
09	AR126801	WAR091106-68	01/28/10	0829			
10	DDTANALOGSTD	WAR091219-DD	01/28/10	0840			
11	PIBLK02	WAR100105-99	01/28/10	0851	1.77	5.61	
12	PBLK01	1202026167	01/28/10	0902	1.77	5.61	
13	PBLK01LCS	1202026168	01/28/10	0913	1.77	5.61	
14	RE14-10-7689	245387001	01/28/10	0924	1.77	5.60	
15	RE14-10-7679	245387002	01/28/10	0935	1.77	5.60	
16	RE14-10-7680	245387003	01/28/10	0946	1.77	5.61	
17	ZZZZZ	ZZZZZ	01/28/10	0957	1.77	5.60	
18	ZZZZZ	ZZZZZ	01/28/10	1008	1.77	5.61	
19	AR166002	WAR100104-60	01/28/10	1019	1.77	5.61	
20	PIBLK03	WAR100105-99	01/28/10	1030	1.77	5.61	
21	ZZZZZ	ZZZZZ	01/28/10	1041	1.77	5.61	
22	ZZZZZ	ZZZZZ	01/28/10	1053	1.77	5.61	
23	ZZZZZ	ZZZZZ	01/28/10	1104	1.77	5.60	
24	ZZZZZ	ZZZZZ	01/28/10	1115	1.77	5.61	
25	ZZZZZ	ZZZZZ	01/28/10	1126	1.77	5.61	
26	ZZZZZ	ZZZZZ	01/28/10	1137	1.77	5.61	
27	ZZZZZ	ZZZZZ	01/28/10	1148	1.77	5.61	
28	ZZZZZ	ZZZZZ	01/28/10	1159	1.77	5.61	
29	AR166003	WAR100104-60	01/28/10	1210	1.77	5.61	
30	PIBLK04	WAR100105-99	01/28/10	1221	1.77	5.61	
31	ZZZZZ	ZZZZZ	01/28/10	1314	1.77	5.61	
32	ZZZZZ	ZZZZZ	01/28/10	1325	1.77	5.61	

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.: 10-1384
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10
 Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.07			DCB: 6.30			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/28/10	0700		
02	AR166001	WAR100104-60	01/28/10	0711	2.06	6.29
03	AR125401	WAR091102-54	01/28/10	0722	2.07	6.30
04	AR124201	WAR100104-42	01/28/10	0733		
05	AR124801	WAR100104-48	01/28/10	0744		
06	AR123201	WAR100104-32	01/28/10	0755		
07	AR122101	WAR100104-21	01/28/10	0807		
08	AR126201	WAR100104-62	01/28/10	0818		
09	AR126801	WAR091106-68	01/28/10	0829		
10	DDTANALOGSTD	WAR091219-DD	01/28/10	0840		
11	PIBLK02	WAR100105-99	01/28/10	0851	2.07	6.30
12	PBLK01	1202026167	01/28/10	0902	2.07	6.30
13	PBLK01LCS	1202026168	01/28/10	0913	2.07	6.30
14	RE14-10-7689	245387001	01/28/10	0924	2.07	6.30
15	RE14-10-7679	245387002	01/28/10	0935	2.07	6.30
16	RE14-10-7680	245387003	01/28/10	0946	2.07	6.30
17	ZZZZZ	ZZZZZ	01/28/10	0957	2.07	6.30
18	ZZZZZ	ZZZZZ	01/28/10	1008	2.07	6.30
19	AR166002	WAR100104-60	01/28/10	1019	2.07	6.30
20	PIBLK03	WAR100105-99	01/28/10	1030	2.07	6.30
21	ZZZZZ	ZZZZZ	01/28/10	1041	2.07	6.30
22	ZZZZZ	ZZZZZ	01/28/10	1053	2.07	6.30
23	ZZZZZ	ZZZZZ	01/28/10	1104	2.07	6.30
24	ZZZZZ	ZZZZZ	01/28/10	1115	2.07	6.30
25	ZZZZZ	ZZZZZ	01/28/10	1126	2.07	6.30
26	ZZZZZ	ZZZZZ	01/28/10	1137	2.07	6.30
27	ZZZZZ	ZZZZZ	01/28/10	1148	2.07	6.30
28	ZZZZZ	ZZZZZ	01/28/10	1159	2.07	6.30
29	AR166003	WAR100104-60	01/28/10	1210	2.07	6.30
30	PIBLK04	WAR100105-99	01/28/10	1221	2.07	6.30
31	ZZZZZ	ZZZZZ	01/28/10	1314	2.07	6.30
32	ZZZZZ	ZZZZZ	01/28/10	1325	2.07	6.30

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: 10-1384

Client ID: LCS for batch 945978

Lab Sample ID: 1202026168

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 09:13

Analyzed: 28-JAN-10 09:13

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.8
Column 1	1	2.27	2.24 - 2.3	21.6		ug/kg	
	2	2.6	2.56 - 2.62	21.5		ug/kg	
	3	2.69	2.66 - 2.72	21.2		ug/kg	
	4	2.82	2.79 - 2.85	21.4		ug/kg	
	5	2.97	2.94 - 3	21.2		ug/kg	
					21.4		
Column 2	1	2.74	2.71 - 2.77	21.6		ug/kg	
	2	3.18	3.15 - 3.21	21.9		ug/kg	
	3	3.33	3.3 - 3.36	21.7		ug/kg	
	4	3.36	3.33 - 3.39	21.5		ug/kg	
	5	3.52	3.48 - 3.54	22.1		ug/kg	
					21.8		
Aroclor-1260							.803
Column 1	1	4.01	3.98 - 4.04	25.2		ug/kg	
	2	4.28	4.25 - 4.31	25.1		ug/kg	
	3	4.45	4.42 - 4.48	25.8		ug/kg	
	4	4.66	4.63 - 4.69	26.1		ug/kg	
	5	4.85	4.82 - 4.88	26.2		ug/kg	
					25.7		
Column 2	1	4.41	4.38 - 4.44	25.1		ug/kg	
	2	4.56	4.53 - 4.59	25.4		ug/kg	
	3	4.67	4.64 - 4.7	25.1		ug/kg	
	4	4.87	4.84 - 4.9	25.2		ug/kg	
	5	5.5	5.47 - 5.53	26.6		ug/kg	
					25.5		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1384

Lab Sample ID: 1202026167

Client Sample: QC for batch 945978

Client ID: MB for batch 945978

Batch ID: 945979

Run Date: 01/28/2010 09:02

Prep Date: 01/27/2010 20:26

Data File: 012f1201-1.d

012b1201-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD2AJ

Analyst: JAOC

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecd2a.i/012810.b/012f1201.d
Report Date: 28-Jan-2010 11:28

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/012f1201.d
Lab Smp Id: 1202026167 Client Smp ID: PBLK01
Inj Date : 28-JAN-2010 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026167|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MB|1|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1384.sub
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

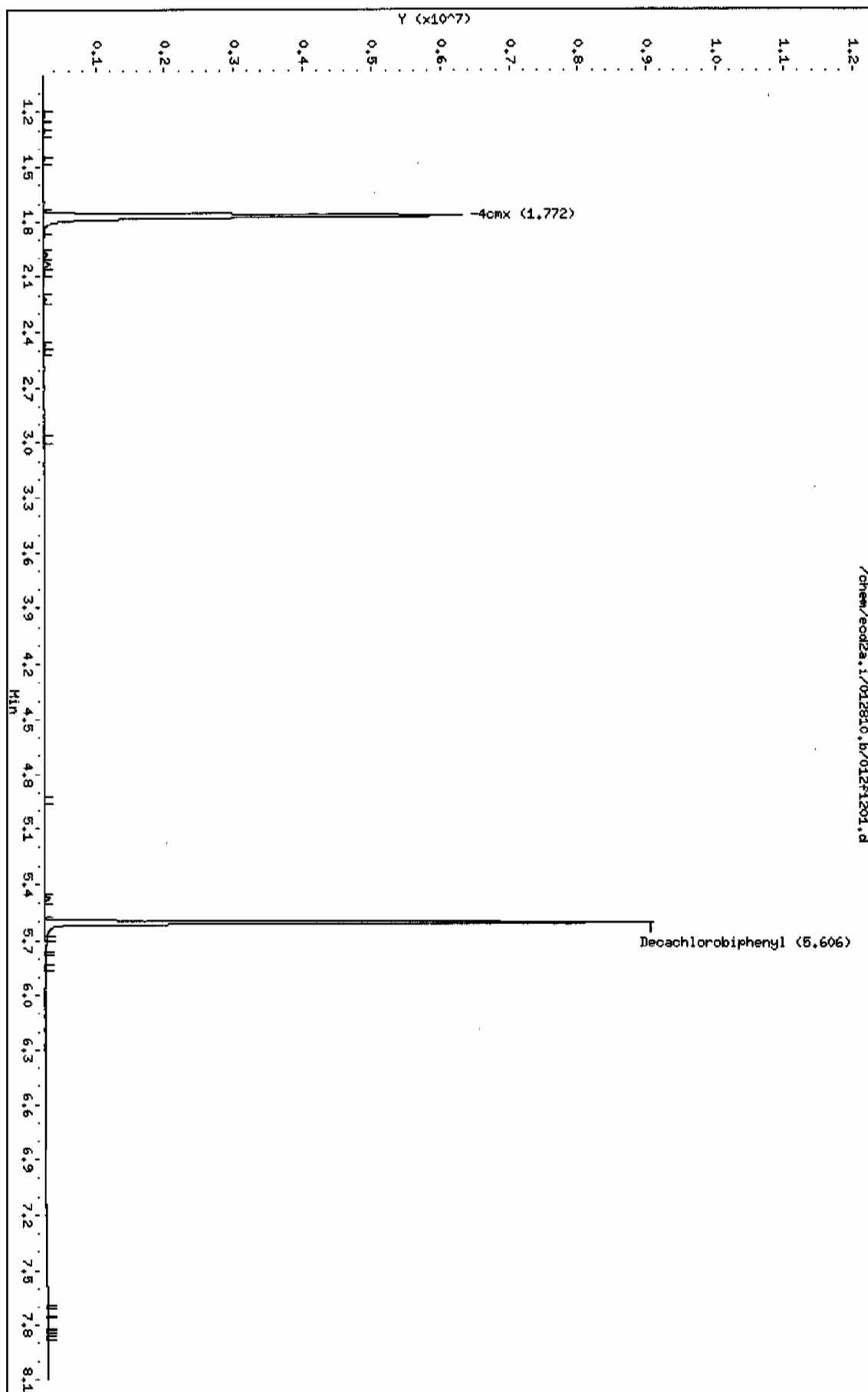
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.772	1.770	0.002	8446933	126.012	4.2 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.606	5.604	0.002	8391794	132.364	4.4 80.00- 120.00	100.00

Data File: /chem/eod2a.i/012810.b/012f1201.d
Date: 28-JAN-2010 09:02
Client ID: PBLK01
Sample Info: 1202026167111
Volume Injected (uL): 1.0
Column Phase: CLP1

Instrument: eod2a.i
Operator: JAOC
Column diameter: 0.25

Page 1



Data File: /chem/ecd2a.i/012810.b/012b1201.d
 Report Date: 28-Jan-2010 11:27

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecd2a.i/012810.b/012b1201.d
 Lab Smp Id: 1202026167 Client Smp ID: PBLK01
 Inj Date : 28-JAN-2010 09:02
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026167|1|
 Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MB|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 12 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1384.sub
 Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

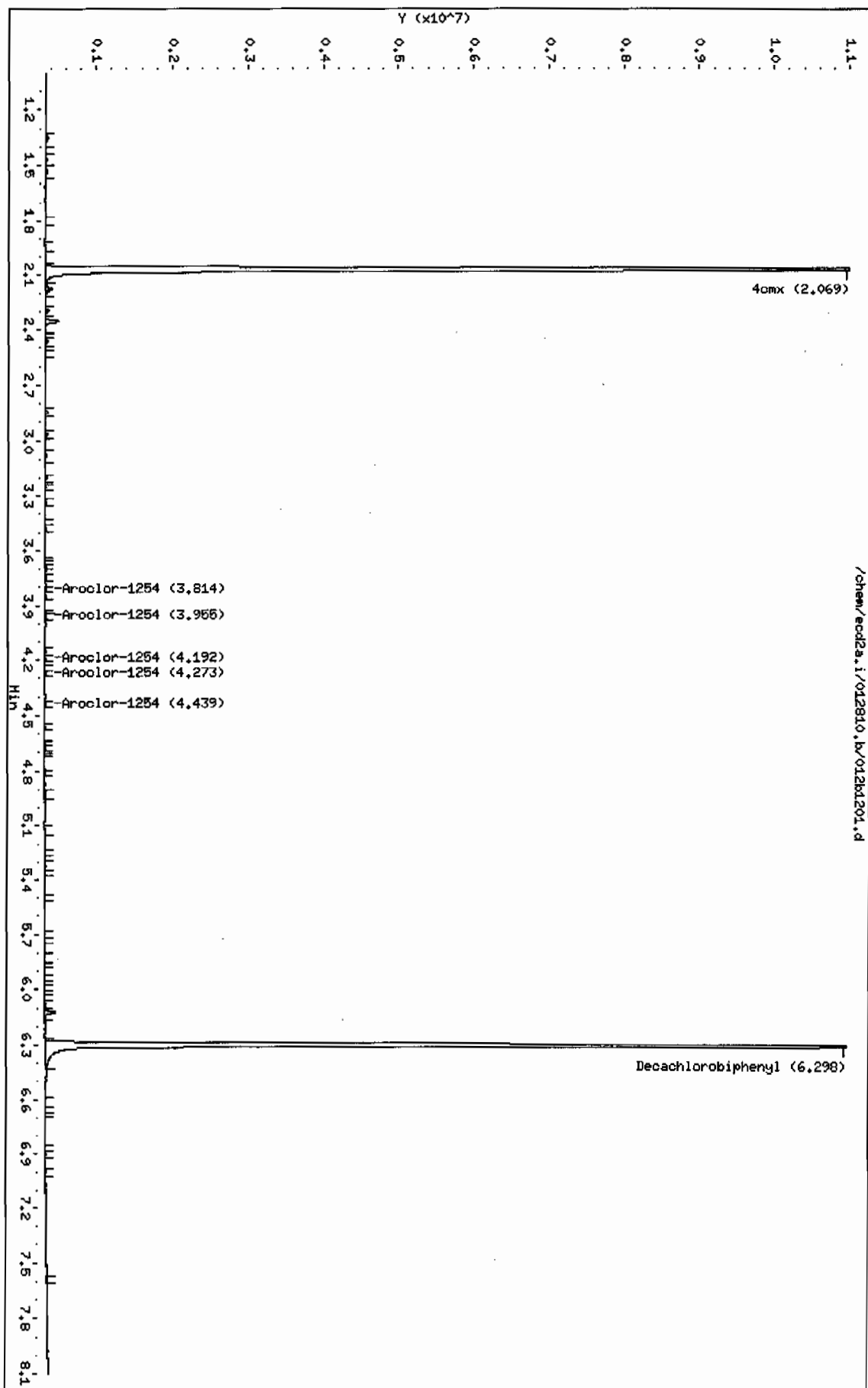
CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx				CAS #: 877-09-8		
2.069	2.067	0.002	18565342 133.031	4.4	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.298	6.297	0.001	17479977 140.343	4.7	80.00- 120.00	100.00

Data File: /chem/ecod2a.i/012810.b/012b1201.d
Date : 28-JAN-2010 09:02
Client ID: PBLK01
Sample Info: 1120202616711
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecod2a.i
Operator: J90C
Column diameter: 0.25

Page 1



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1384

Matrix: SOIL

Lab Sample ID: 1202026168

Client Sample: QC for batch 945978

Client: LANL010

Project: QC

Client ID: LCS for batch 945978

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 945979

Inst: ECD2A.I

Dilution: 1

Run Date: 01/28/2010 09:13

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 01/27/2010 20:26

Aliquot: 30 g

Final Volume: 1 mL

Data File: 013f1301-1.d

Column: 1 CLP1

Level: LOW

013b1301-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		21.8	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		25.7	ug/kg	1.11	3.33	1

Data File: /chem/ecd2a.i/012810.b/013f1301.d
Report Date: 28-Jan-2010 11:30

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/013f1301.d
Lab Smp Id: 1202026168 Client Smp ID: PBLK01LCS
Inj Date : 28-JAN-2010 09:13
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026168|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1384.sub
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		

\$ 11 4cmx				CAS #: 877-09-8		
1.771	1.770	0.001	8526056 127.193	4.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.605	5.604	0.001	8799365 138.793	4.6	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.272	2.271	0.001	1465182 648.919	21.6	80.00- 120.00	100.00(M)
2.596	2.595	0.001	2990284 646.001	21.5	194.16- 234.16	204.09
2.687	2.685	0.002	1208347 635.870	21.2	65.88- 105.88	82.47
2.822	2.820	0.002	630462 641.041	21.4	24.35- 64.35	43.03
2.973	2.971	0.002	921337 635.272	21.2	45.99- 85.99	80.19
Average of Peak Concentrations =			21.4			

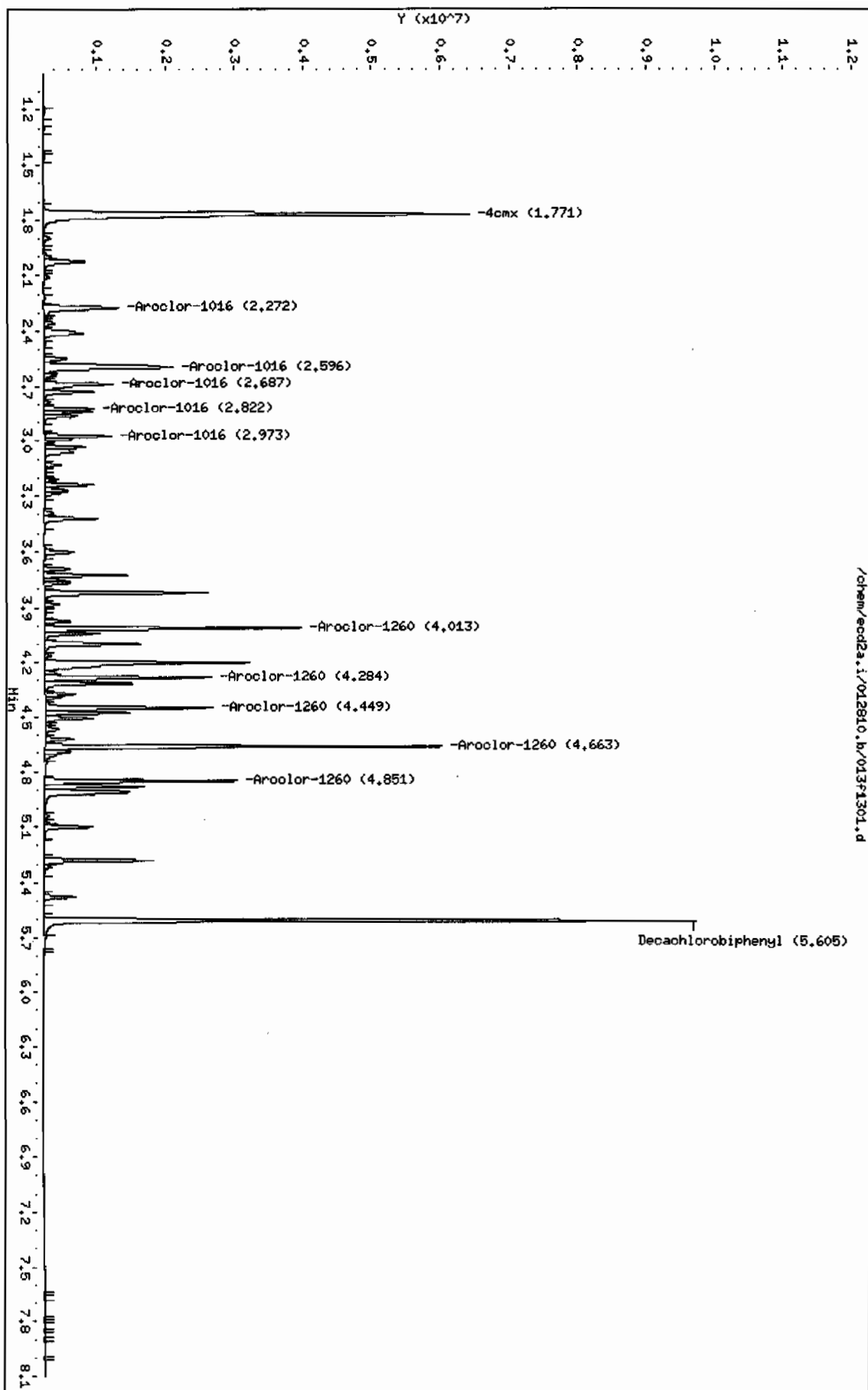
			CONCENTRATIONS					
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE (ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5			
4.013	4.011	0.002		3248607	755.022	25.2	80.00- 120.00	100.00
4.284	4.282	0.002		2098956	752.037	25.1	42.81- 82.81	64.61
4.449	4.449	0.000		2217059	773.349	25.8	45.95- 85.95	68.25
4.663	4.661	0.002		5149255	782.658	26.1	132.37- 172.37	158.51
4.851	4.850	0.001		2514477	787.419	26.2	53.57- 93.57	77.40
Average of Peak Concentrations =					25.7			

QC Flag Legend

M - Compound response manually integrated.

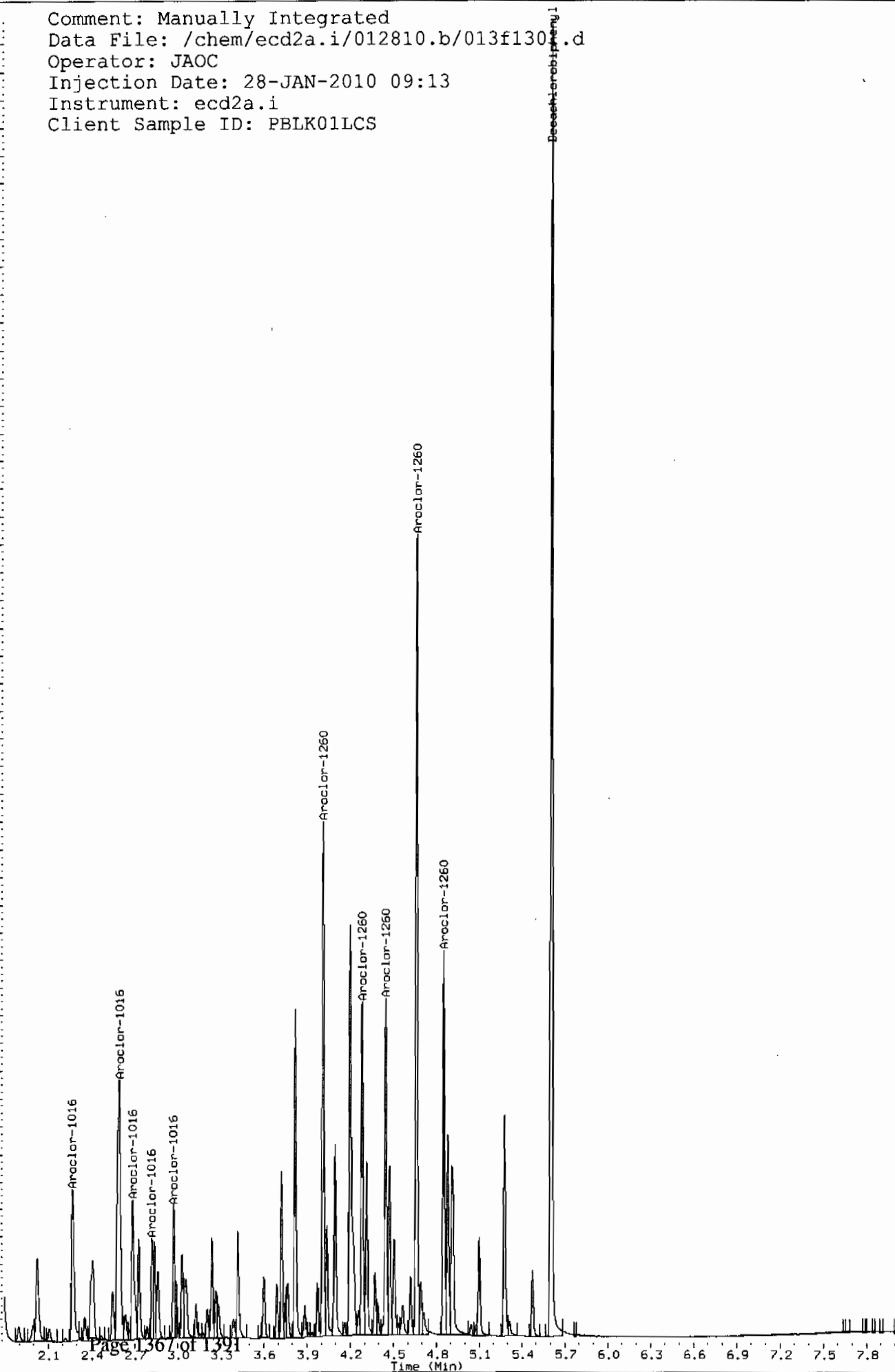
Data File: /chem/eod2a.i/012810.b/013f1301.d
Date: 28-JAN-2010 09:13
Client ID: PBLKOLCS
Sample Info: 1120202616811
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod2a.i
Operator: JADC
Column diameter: 0.25

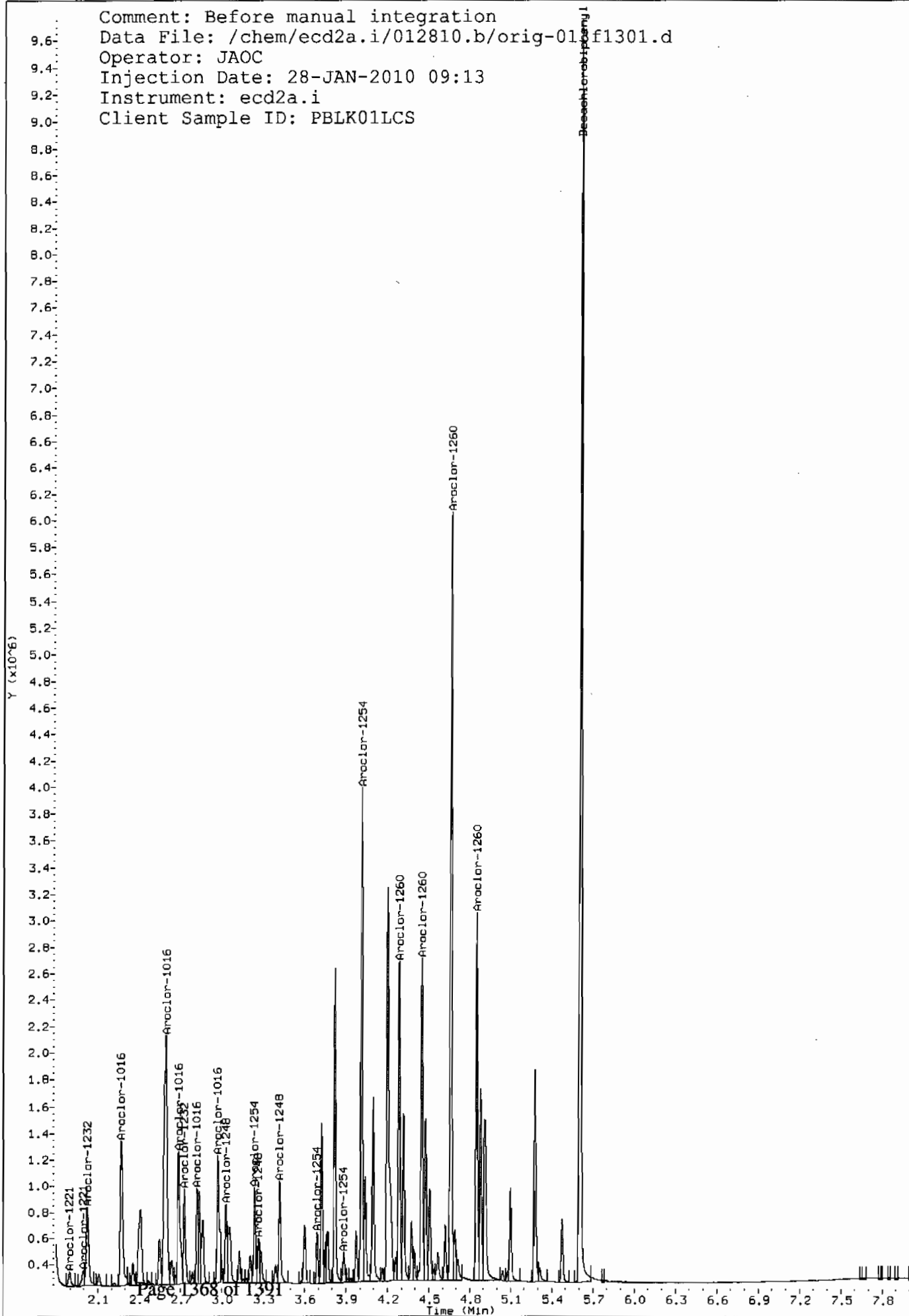


Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/013f1301.d
Operator: JAOC
Injection Date: 28-JAN-2010 09:13
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS

Y (x10⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-01f1301.d
Operator: JAOC
Injection Date: 28-JAN-2010 09:13
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecd2a.i/012810.b/013b1301.d
 Lab Smp Id: 1202026168 Client Smp ID: PBLK01LCS
 Inj Date : 28-JAN-2010 09:13
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026168|1|
 Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 13 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1384.sub
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

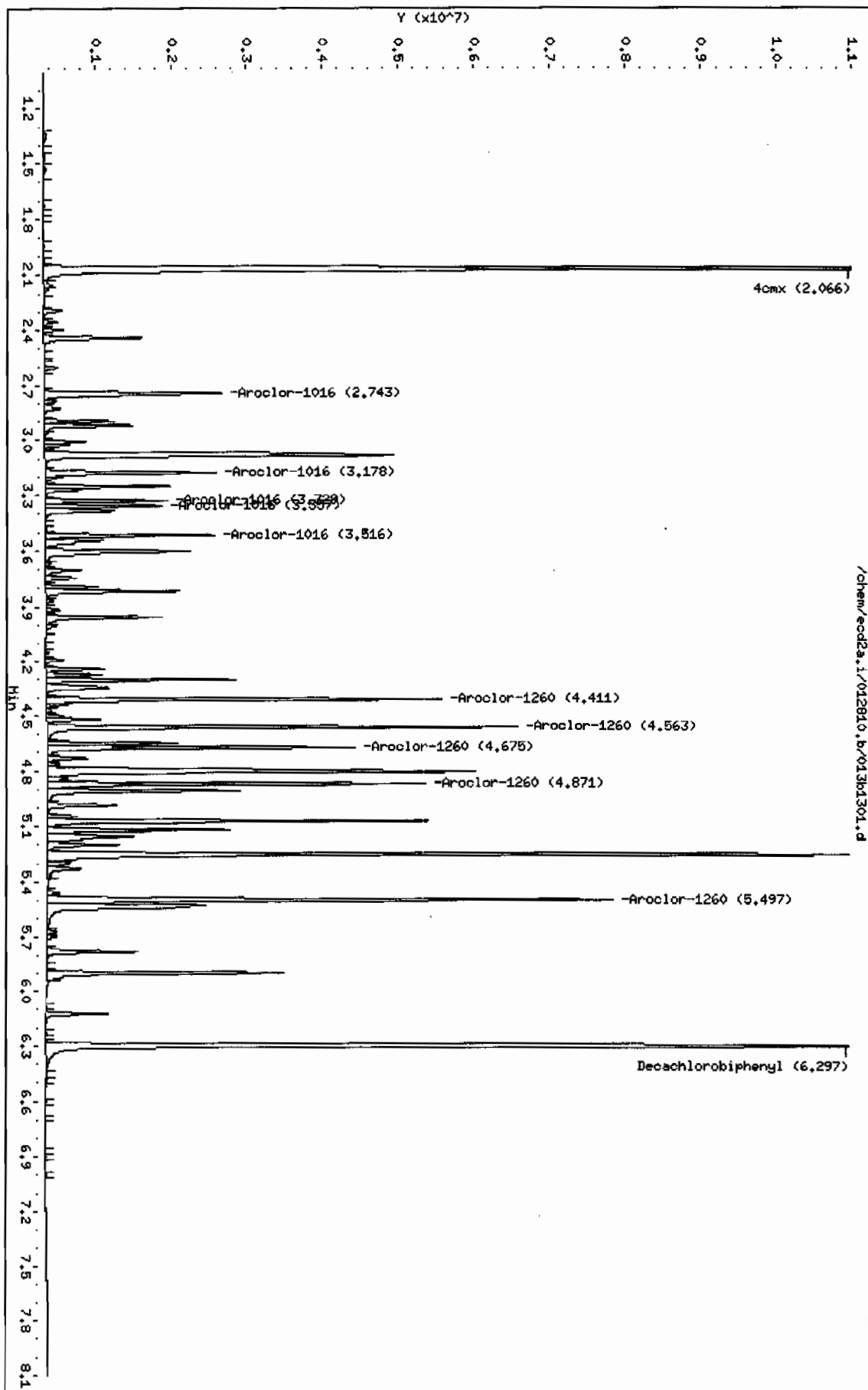
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.066	2.067	-0.001	18720257 134.141	4.5	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.297	6.297	0.000	18116994 145.457	4.8	80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.743	2.742	0.001	2914344 649.177	21.6	80.00- 120.00	100.00	
3.178	3.177	0.001	2253621 656.242	21.9	59.06- 99.06	77.33	
3.329	3.327	0.002	1313577 651.133	21.7	25.71- 65.71	45.07	
3.357	3.356	0.001	1360252 646.026	21.5	28.12- 68.12	46.67	
3.516	3.515	0.001	1851763 662.653	22.1	44.81- 84.81	63.54	
Average of Peak Concentrations =				21.8			

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE RATIO
=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.411	4.411	0.000	4350169	751.948	25.1 80.00- 120.00	100.00
4.563	4.562	0.001	5529385	761.294	25.4 106.27- 146.27	127.11
4.675	4.674	0.001	3766386	752.650	25.1 66.48- 106.48	86.58
4.871	4.872	-0.001	4376102	755.127	25.2 78.00- 118.00	100.60
5.497	5.497	0.000	7503084	798.672	26.6 140.50- 180.50	172.48
Average of Peak Concentrations =			25.5			

Data File: /chem/ecd2a.i/012810.b/013b1301.d
Date: 28-JAN-2010 09:13
Client ID: PRL01LCS
Sample Info: 1120202616811
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JADG
Column diameter: 0.25



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 01/21/2010

METHOD: ECD2-F-8082-111209A.m

OPERATOR: JAOC

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 Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: 012010.B
Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR091130-99 IB	JAOC	120-JAN-2010 08:17		012010	1.01	CLEAN	
002f0201.d	WAR100104-60 01	JAOC	120-JAN-2010 08:29		012010	1.01	DUSE	
003f0301.d	WAR091102-54	JAOC	120-JAN-2010 08:40		012010	1.01	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	120-JAN-2010 08:51		012010	1.01	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	120-JAN-2010 09:02		012010	1.01	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	120-JAN-2010 09:13		012010	1.01	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOC	120-JAN-2010 09:24		012010	1.01	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	120-JAN-2010 09:35		012010	1.01	PASSES BOTH COLUMNS	
009f0901.d	WAR100120-01 60	JAOC	120-JAN-2010 09:46		012010	1.01	1660 LEVEL 1	
010f1001.d	WAR100120-02 60	JAOC	120-JAN-2010 09:57		012010	1.01	1660 LEVEL 2	
011f1101.d	WAR100120-03 60	JAOC	120-JAN-2010 10:09		012010	1.01	1660 LEVEL 3	
012f1201.d	WAR100120-04 60	JAOC	120-JAN-2010 10:20		012010	1.01	1660 LEVEL 4	
013f1301.d	WAR100104-01 60	JAOC	120-JAN-2010 10:31		012010	1.01	1660 LEVEL 5	
014f1401.d	WAR100104-60 01	JAOC	120-JAN-2010 10:42		012010	1.01	PASSES BOTH COLUMNS	
015f1501.d	WAR091106-68	JAOC	120-JAN-2010 10:53		012010	1.01	PASSES BOTH COLUMNS	

Instrument Batch: /chem/ecd2a.i/012010.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091219-DDT	JAOC	120-JAN-2010 11:04		012010	1.01	DDT	

|017f1701.d |WAR091130-99 02	|JAOC |20-JAN-2010 11:15	|	|012010	|	1.0|	|	CLEAN	|
|018f1801.d |1202019498	|JAOC |20-JAN-2010 11:26	|943205	|10-1256	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER	|
|019f1901.d |1202019499	|JAOC |20-JAN-2010 11:38	|943205	|10-1256	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER	|
|020f2001.d |244837001	|JAOC |20-JAN-2010 11:49	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|021f2101.d |244837002	|JAOC |20-JAN-2010 12:00	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|022f2201.d |244837003	|JAOC |20-JAN-2010 12:11	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|023f2301.d |244837004	|JAOC |20-JAN-2010 12:22	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|024f2401.d |244837005	|JAOC |20-JAN-2010 12:33	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|025f2501.d |244837006	|JAOC |20-JAN-2010 12:44	|943205	|10-1256	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|026f2601.d |244847004	|JAOC |20-JAN-2010 12:55	|943205	|10-1262	|	5.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|027f2701.d |244852001	|JAOC |20-JAN-2010 13:06	|943205	|10-1263	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|028f2801.d |WAR100104-60 02	|JAOC |20-JAN-2010 13:17	|	|012010	|	1.0|CCV	|	PASSES BOTH COLUMNS	|
|029f2901.d |WAR091130-99 03	|JAOC |20-JAN-2010 13:28	|	|012010	|	1.0|IB	|	CLEAN	|
|030f3001.d |244852002	|JAOC |20-JAN-2010 13:40	|943205	|10-1263	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|031f3101.d |244881001	|JAOC |20-JAN-2010 13:51	|943205	|10-1264-1	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|032f3201.d |1202019500	|JAOC |20-JAN-2010 14:02	|943205	|10-1264-1	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER	|
|033f3301.d |1202019501	|JAOC |20-JAN-2010 14:13	|943205	|10-1264-1	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER	|
|034f3401.d |244881002	|JAOC |20-JAN-2010 14:24	|943205	|10-1264-1	|	10.0|LANL	|	UPLOAD BOTH, USE HIGHER	|
|035f3501.d |244881003	|JAOC |20-JAN-2010 14:35	|943205	|10-1264-1	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER	|

Instrument Batch: /chem/ecd2a.i/012010.b

| Data File	| GEL Lab Sample ID	| Analyst	| Injection Date/Time	| Batch	| SDG	| Dilution	| Client	| Comments
|036f3601.d |244881004	|JAOC	|20-JAN-2010 14:46	|943205	|10-1264-1	|	1.0|LANL	|	UPLOAD BOTH, USE HIGHER
|037f3701.d |WAR100104-60 03	|JAOC	|20-JAN-2010 14:57	|	|012010	|	1.0|	|	PASSES BOTH COLUMNS
|038f3801.d |WAR091130-99 04	|JAOC	|20-JAN-2010 15:09	|	|012010	|	1.0|	|	CLEAN
|039f3901.d |1202018783	|JAOC	|20-JAN-2010 15:20	|942921	|244874	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER
|040f4001.d |1202018784	|JAOC	|20-JAN-2010 15:31	|942921	|244874	|	1.0|QC A	|	UPLOAD BOTH, USE HIGHER
|041f4101.d |244937001	|JAOC	|20-JAN-2010 15:42	|942921	|244937	|	1.0|WSRB	|	UPLOAD BOTH, USE HIGHER

[042f4201.d	[1202018785	[JAO	[20-JAN-2010 15:53	[942921	[244937	[	1.0|MS	[	UPLOAD BOTH, USE HIGHER
[043f4301.d	[1202018786	[JAO	[20-JAN-2010 16:04	[942921	[244937	[	1.0|MSD	[	UPLOAD BOTH, USE HIGHER
[044f4401.d	[244937002	[JAO	[20-JAN-2010 16:15	[942921	[244937	[	1.0|WRRB	[	UPLOAD BOTH, USE HIGHER
[045f4501.d	[244874002	[JAO	[20-JAN-2010 16:26	[942921	[244874	[	1.0|GBEL	[	SENT FOR RE, LOW SURROGATES
[046f4601.d	[W1R100104-60 04	[JAO	[20-JAN-2010 16:37	[	[012010	[	1.0|	[	PASSES BOTH COLUMNS
[047f4701.d	[W1R091130-99 05	[JAO	[20-JAN-2010 16:48	[	[012010	[	1.0|	[	CLEAN
[048f4801.d	[1202017036	[JAO	[20-JAN-2010 17:00	[942243	[2010MDLVECD21254-S|	[	1.0|QC A	[	UPLOAD BOTH, USE BOTH
[049f4901.d	[1202017037	[JAO	[20-JAN-2010 17:11	[942243	[2010MDLVECD21254-S|	[	1.0|QC A	[	UPLOAD BOTH, USE BOTH
[050f5001.d	[244388001	[JAO	[20-JAN-2010 17:22	[942243	[2010MDLVECD21254-S|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[051f5101.d	[244388002	[JAO	[20-JAN-2010 17:33	[942243	[2010MDLVECD21254-S|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[052f5201.d	[244388003	[JAO	[20-JAN-2010 17:44	[942243	[2010MDLVECD21254-S|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[053f5301.d	[244388004	[JAO	[20-JAN-2010 17:55	[942243	[2010MDLVECD21254-S|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[054f5401.d	[W1R100104-60 05	[JAO	[20-JAN-2010 18:06	[	[012010	[	1.0|	[	PASSES BOTH COLUMNS
[055f5501.d	[W1R091130-99 06	[JAO	[20-JAN-2010 18:18	[	[012010	[	1.0|	[	CLEAN
Instrument Batch: /chem/ecd2a.i/012010.b									
[Data File	[GEL Lab Sample ID	[Analyst|	[Injection Date/Time	[Batch	[SDG	[Dilution|	[Client	[	[Comments
[056f5601.d	[1202016956	[JAO	[20-JAN-2010 18:29	[942219	[2010MDLVECD21254-L|	[	1.0|QC A	[	UPLOAD BOTH, USE BOTH
[057f5701.d	[1202016957	[JAO	[20-JAN-2010 18:40	[942219	[2010MDLVECD21254-L|	[	1.0|QC A	[	UPLOAD BOTH, USE BOTH
[058f5801.d	[243868001	[JAO	[20-JAN-2010 18:51	[942219	[2010MDLVECD21254-L|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[059f5901.d	[243868002	[JAO	[20-JAN-2010 19:02	[942219	[2010MDLVECD21254-L|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[060f6001.d	[243868003	[JAO	[20-JAN-2010 19:13	[942219	[2010MDLVECD21254-L|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[061f6101.d	[243868004	[JAO	[20-JAN-2010 19:24	[942219	[2010MDLVECD21254-L|	[	1.0|QCQA	[	UPLOAD BOTH, USE BOTH
[062f6201.d	[W1R100104-60 06	[JAO	[20-JAN-2010 19:35	[	[012010	[	1.0|	[	PASSES BOTH COLUMNS
[063f6301.d	[W1R091130-99 07	[JAO	[20-JAN-2010 19:47	[	[012010	[	1.0|	[	CLEAN

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 01/29/2010 METHOD: ECD2-F-8082-111209A.m OPERATOR: JAOC 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 Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: 012810 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	1WARI00105-99 IB	JAOC	128-JAN-2010 07:00		1012810	1.01	CLEAN	
1002f0201.d	1WARI00104-60 01	JAOC	128-JAN-2010 07:11		1012810	1.01	PASSES BOTH COLUMNS	
1003f0301.d	1WAR091102-54	JAOC	128-JAN-2010 07:22		1012810	1.01	PASSES BOTH COLUMNS	
1004f0401.d	1WAR091217-42	JAOC	128-JAN-2010 07:33		1012810	1.01	PASSES BOTH COLUMNS	
1005f0501.d	1WAR091217-48	JAOC	128-JAN-2010 07:44		1012810	1.01	PASSES BOTH COLUMNS	
1006f0601.d	1WARI00104-32	JAOC	128-JAN-2010 07:55		1012810	1.01	PASSES BOTH COLUMNS	
1007f0701.d	1WARI00104-21	JAOC	128-JAN-2010 08:07		1012810	1.01	PATTERN ONLY	
1008f0801.d	1WARI00104-62	JAOC	128-JAN-2010 08:18		1012810	1.01	PASSES BOTH COLUMNS	
1009f0901.d	1WAR091106-68	JAOC	128-JAN-2010 08:29		1012810	1.01	PASSES BOTH COLUMNS	
1010f1001.d	1WAR091219-DDT	JAOC	128-JAN-2010 08:40		1012810	1.01	DDT	
1011f1101.d	1WARI00105-99 02	JAOC	128-JAN-2010 08:51		1012810	1.01	CLEAN	
1012f1201.d	11202026167	JAOC	128-JAN-2010 09:02	1945979	110-1384	1.01QC A	UPLOAD BOTH, USE HIGHER	
1013f1301.d	11202026168	JAOC	128-JAN-2010 09:13	1945979	110-1384	1.01QC A	UPLOAD BOTH, USE HIGHER	
1014f1401.d	1245387001	JAOC	128-JAN-2010 09:24	1945979	110-1384	1.01LANL	UPLOAD BOTH, USE HIGHER	
1015f1501.d	1245387002	JAOC	128-JAN-2010 09:35	1945979	110-1384	1.01LANL	UPLOAD BOTH, USE HIGHER	

Instrument Batch: /chem/ecd2a.i/012810.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1016f1601.d	1245387003	JAOC	128-JAN-2010 09:46	1945979	110-1384	1.01LANL	UPLOAD BOTH, USE HIGHER	

017f1701.d	1245391010	JAC	28-JAN-2010 09:57	945979	110-1390	1.0	LANL	UPLOAD BOTH, USE HIGHER
018f1801.d	1245391011	JAC	28-JAN-2010 10:08	945979	110-1390	1.0	LANL	UPLOAD BOTH, USE HIGHER
019f1901.d	1245391004-60 02	JAC	28-JAN-2010 10:19		1012810	1.0		PASSES BOTH COLUMNS
020f2001.d	1245391005-99 03	JAC	28-JAN-2010 10:30		1012810	1.0		CLEAN
021f2101.d	1245394001	JAC	28-JAN-2010 10:41	945979	110-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	1245394002	JAC	28-JAN-2010 10:53	945979	110-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	1202026169	JAC	28-JAN-2010 11:04	945979	110-1392	1.0	QC A	UPLOAD BOTH, USE HIGHER
024f2401.d	1202026170	JAC	28-JAN-2010 11:15	945979	110-1392	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1245394003	JAC	28-JAN-2010 11:26	945979	110-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	1245394004	JAC	28-JAN-2010 11:37	945979	110-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	1245394005	JAC	28-JAN-2010 11:48	945979	110-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	1245394006	JAC	28-JAN-2010 11:59	945979	110-1392	1.0	LANL	DUSE, RERUN 5X FILE 51
029f2901.d	1245394007	JAC	28-JAN-2010 12:10		1012810	1.0		PASSES BOTH COLUMNS
030f3001.d	1245394008	JAC	28-JAN-2010 12:21		1012810	1.0		CLEAN
031f3101.d	1202025574	JAC	28-JAN-2010 13:14	945758	110-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1202025575	JAC	28-JAN-2010 13:25	945758	110-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1245312001	JAC	28-JAN-2010 13:36	945758	110-1364	1.0	LANL	UPLOAD BOTH, USE HIGHER
034f3401.d	1202025576	JAC	28-JAN-2010 13:47	945758	110-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
035f3501.d	1202025577	JAC	28-JAN-2010 13:58	945758	110-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER

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Instrument Batch: /chem/ecd2a.i/012810.b

036f3601.d	1245312002	JAC	28-JAN-2010 14:13	945758	110-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	1245312003	JAC	28-JAN-2010 14:24	945758	110-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
038f3801.d	1245312004	JAC	28-JAN-2010 14:35	945758	110-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	1245312005	JAC	28-JAN-2010 14:46	945758	110-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	1245312006	JAC	28-JAN-2010 14:57	945758	110-1364	1.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	1245312007	JAC	28-JAN-2010 15:08		1012810	1.0		PASSES BOTH COLUMNS

042f4201.d	WAR100105-99 05	JAO	28-JAN-2010 15:19		012810	1.0	CLEAN
043f4301.d	245312007	JAO	28-JAN-2010 15:31	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
044f4401.d	245312008	JAO	28-JAN-2010 15:42	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
045f4501.d	245312009	JAO	28-JAN-2010 15:53	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
046f4601.d	245312010	JAO	28-JAN-2010 16:04	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
047f4701.d	245312011	JAO	28-JAN-2010 16:15	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
048f4801.d	245312012	JAO	28-JAN-2010 16:26	945758	10-1364	5.0	UPLOAD BOTH, USE HIGHER
049f4901.d	245312013	JAO	28-JAN-2010 16:37	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
050f5001.d	245312014	JAO	28-JAN-2010 16:48	945758	10-1364	1.0	UPLOAD BOTH, USE HIGHER
051f5101.d	245394006	JAO	28-JAN-2010 16:59	945979	10-1392	5.0	UPLOAD BOTH, USE HIGHER
052f5201.d	WAR100104-60 05	JAO	28-JAN-2010 17:10		012810	1.0	PASSES BOTH COLUMNS
053f5301.d	WAR100105-99 06	JAO	28-JAN-2010 17:21		012810	1.0	CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/023b2301.d

Lab Smp Id: 1202026169

Client Smp ID: RE15-10-7874MS

Inj Date : 28-JAN-2010 11:04

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |1202026169|1|

Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 23

QC Sample: MS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1392.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable

Local Compound Variable

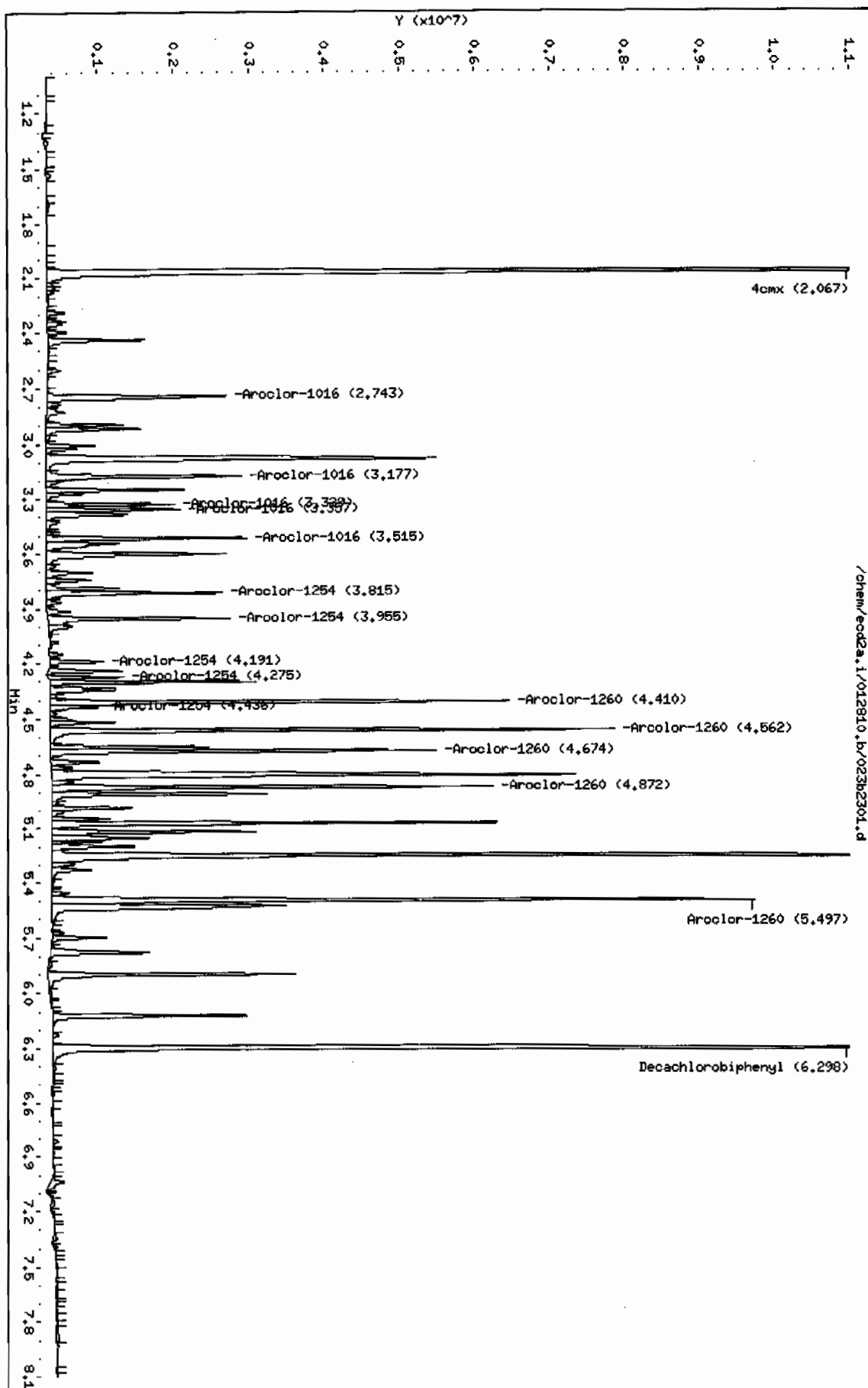
CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmX					CAS #: 877-09-8		
2.067	2.067	0.000	16906491	121.144	4.2	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.298	6.297	0.001	18129870	145.561	5.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.743	2.742	0.001	2975871	662.883	23.0	80.00- 120.00	100.00
3.177	3.177	0.000	2563795	746.563	25.9	59.06- 99.06	86.15
3.329	3.327	0.002	1466508	726.940	25.2	25.71- 65.71	49.28
3.357	3.356	0.001	1593785	756.938	26.3	28.12- 68.12	53.56
3.515	3.515	0.000	2229849	797.951	27.7	44.81- 84.81	74.93
Average of Peak Concentrations *					25.6		

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1		
3.815	3.815	0.000	2305298	462.419	16.0	80.00- 120.00	100.00
3.955	3.956	-0.001	2259834	389.697	13.5	94.13- 134.13	98.03
4.191	4.193	-0.002	654361	162.655	5.6	61.98- 101.98	28.39
4.275	4.274	0.001	740471	95.7748	3.3	136.55- 176.55	32.12
4.436	4.437	-0.001	567754	101.234	3.5	92.78- 132.78	24.63
Average of Peak Concentrations =					8.4		

7 Aroclor-1260					CAS #: 11096-82-5		
4.410	4.411	-0.001	5181249	895.604	31.1	80.00- 120.00	100.00
4.562	4.562	0.000	6606489	909.591	31.6	106.27- 146.27	127.51
4.674	4.674	0.000	4608343	920.901	32.0	66.48- 106.48	88.94
4.872	4.872	0.000	5142506	887.376	30.8	78.00- 118.00	99.25
5.497	5.497	0.000	9204106	979.739	34.0	140.50- 180.50	177.64
Average of Peak Concentrations =					31.9		

Data File: /chem/eod2a.i/012810.b/02302301.d
 Date: 28-JUN-2010 11:04
 Client ID: RE15-10-7874MS
 Sample Info: 11202026169111
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: eod2a.i
 Operator: JROC
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/023f2301.d
 Lab Smp Id: 1202026169 Client Smp ID: RE15-10-7874MS
 Inj Date : 28-JAN-2010 11:04
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026169|1|
 Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MS|1|1|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
 Als bottle: 23 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1392.sub
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO

\$ 11 4cmx					CAS #: 877-09-8		
1.772	1.770	0.002	7792486	116.249	4.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.605	5.604	0.001	8833374	139.329	4.8	80.00- 120.00	100.00

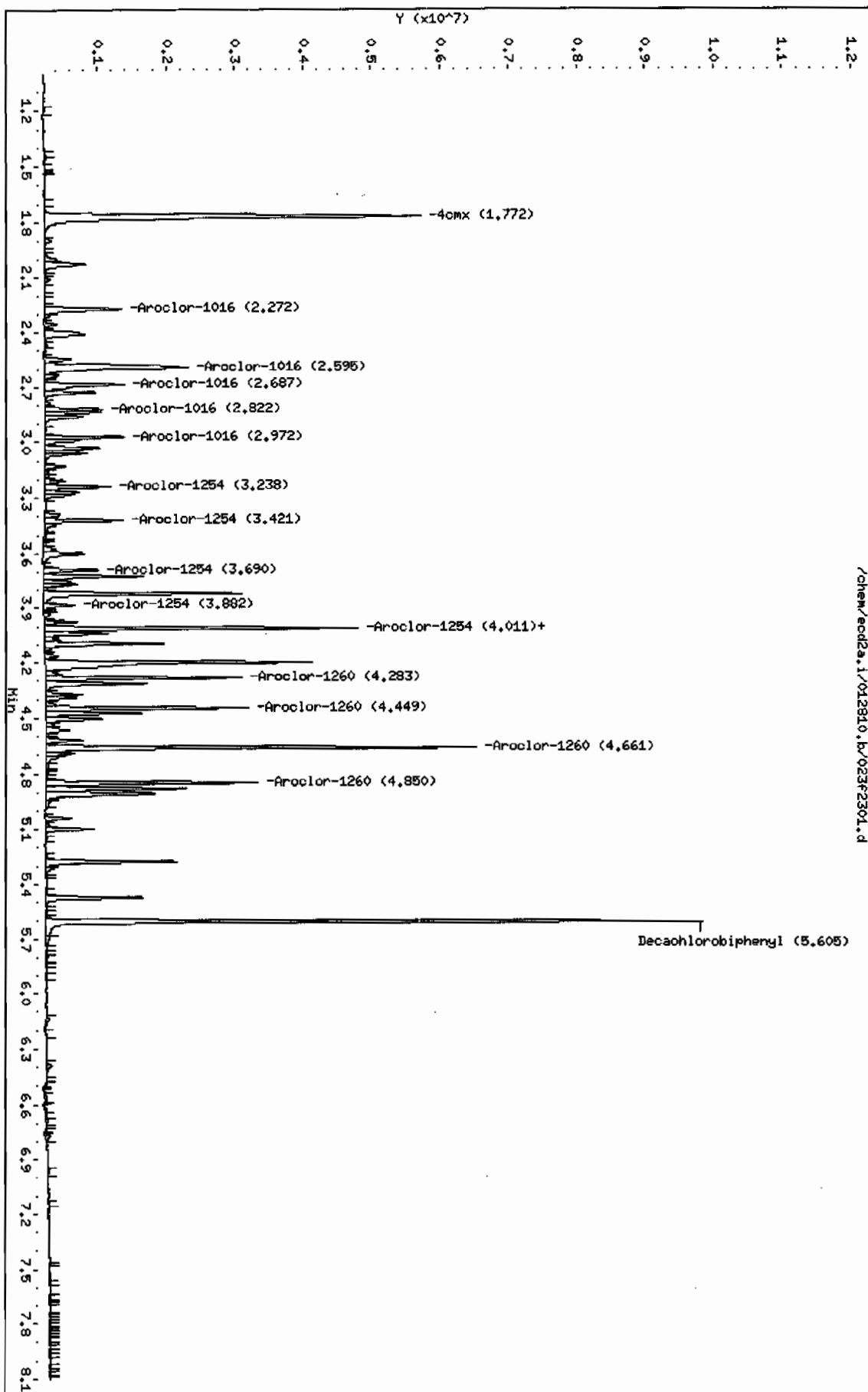
1 Aroclor-1016					CAS #: 12674-11-2		
2.272	2.271	0.001	1414142	626.313	21.7	80.00- 120.00	100.00
2.595	2.595	0.000	3255242	703.241	24.4	194.16- 234.16	230.19
2.687	2.685	0.002	1315669	692.347	24.0	65.88- 105.88	93.04
2.822	2.820	0.002	720216	732.301	25.4	24.35- 64.35	50.93
2.972	2.971	0.001	1090278	751.758	26.1	45.99- 85.99	77.10
Average of Peak Concentrations =					24.3		

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.238	3.239	-0.001	867082	416.856	14.5	80.00-	120.00	100.00
3.421	3.422	-0.001	1011788	364.985	12.7	112.37-	152.37	116.69
3.690	3.691	-0.001	711020	189.990	6.6	163.94-	203.94	82.00
3.882	3.884	-0.002	501264	180.136	6.2	115.35-	155.35	57.81
4.011	4.012	-0.001	3956570	1433.52	49.8	118.56-	158.56	456.31
Average of Peak Concentrations =					18.0			

7 Aroclor-1260					CAS #: 11096-82-5			
4.011	4.011	0.000	3956570	919.563	31.9	80.00-	120.00	100.00
4.283	4.282	0.001	2450661	878.049	30.5	42.81-	82.81	61.94
4.449	4.449	0.000	2552780	890.455	30.9	45.95-	85.95	64.52
4.661	4.661	0.000	5563056	845.553	29.4	132.37-	172.37	140.60
4.850	4.850	0.000	2690086	842.412	29.2	53.57-	93.57	67.99
Average of Peak Concentrations =					30.4			

Data File: /chem/eod2a.i/012810.b/023f2301.d
Date: 28-JAN-2010 11:04
Client ID: RELS-10-7874HS
Sample Info: 1120202616911
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod2a.i
Operator: JHQC
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecd2a.i/012810.b/024b2401.d
 Lab Smp Id: 1202026170 Client Smp ID: RE15-10-7874MSD
 Inj Date : 28-JAN-2010 11:15
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026170|1|
 Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MSD|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 24 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1392.sub
 Target Version: 3.50 Sample Matrix: Soil

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	30.13000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

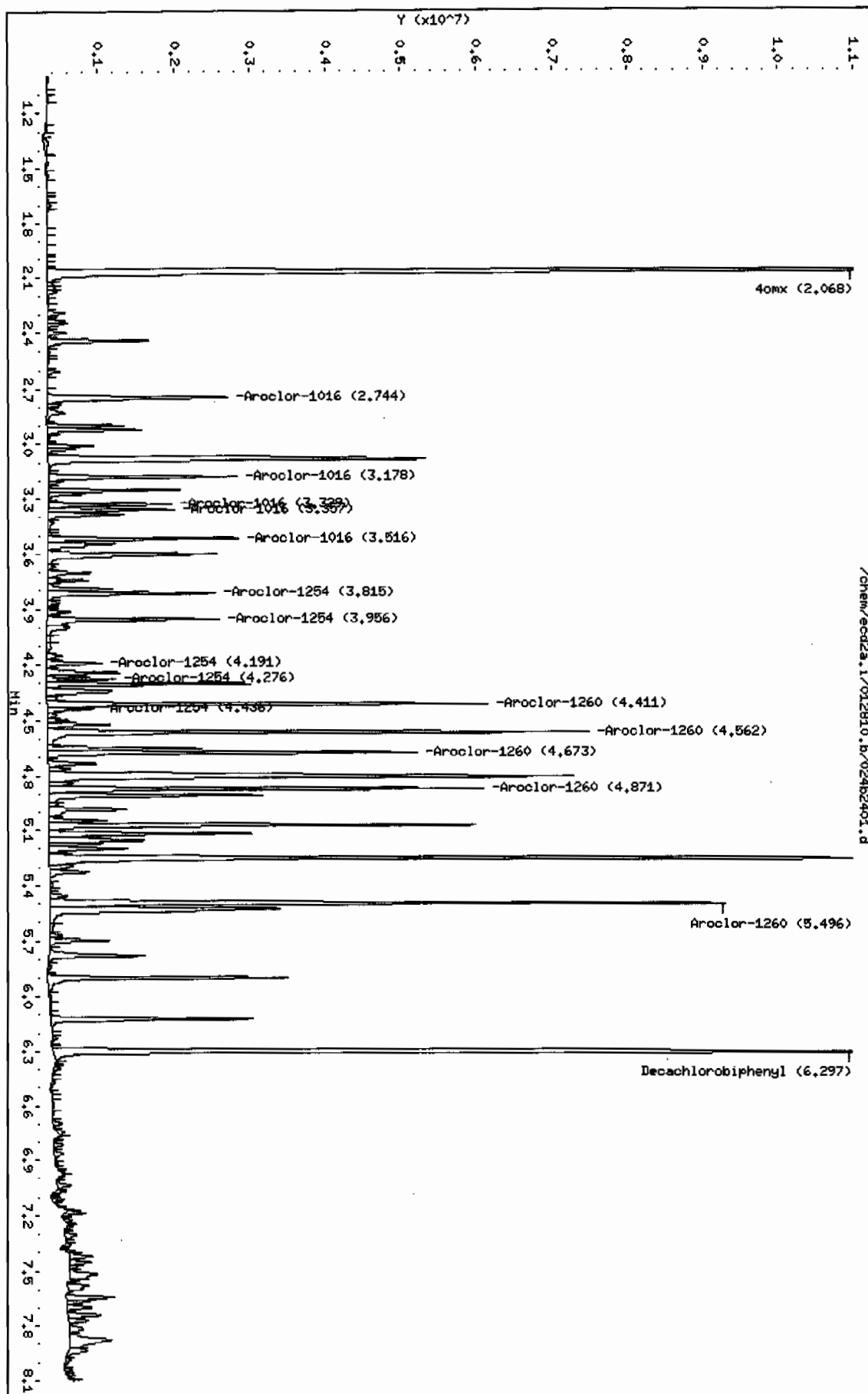
CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.068	2.067	0.001	18233519 130.653	4.5	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.297	6.297	0.000	17260834 138.584	4.8	80.00-	120.00	100.00
1 Aroclor-1016				CAS #: 12674-11-2			
2.744	2.742	0.002	2956190 658.499	22.8	80.00-	120.00	100.00
3.178	3.177	0.001	2396416 697.823	24.2	59.06-	99.06	81.06
3.329	3.327	0.002	1365410 676.827	23.4	25.71-	65.71	46.19
3.357	3.356	0.001	1478515 702.193	24.3	28.12-	68.12	50.01
3.516	3.515	0.001	2074698 742.431	25.7	44.81-	84.81	70.18
Average of Peak Concentrations =				24.1			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.815	3.815	0.000	2133733	428.005	14.8	80.00-	120.00	100.00
3.956	3.956	0.000	2171131	374.401	13.0	94.13-	134.13	101.75
4.191	4.193	-0.002	747621	185.837	6.4	61.98-	101.98	35.04
4.276	4.274	0.002	734159	94.9584	3.3	136.55-	176.55	34.41
4.436	4.437	-0.001	573795	102.312	3.5	92.78-	132.78	26.89
Average of Peak Concentrations =					8.2			

7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	5020415	867.803	30.0	80.00-	120.00	100.00
4.562	4.562	0.000	6442825	887.058	30.7	106.27-	146.27	128.33
4.673	4.674	-0.001	4459665	891.190	30.8	66.48-	106.48	88.83
4.871	4.872	-0.001	5010178	864.541	29.9	78.00-	118.00	99.80
5.496	5.497	-0.001	8891169	946.428	32.8	140.50-	180.50	177.10
Average of Peak Concentrations =					30.8			

Data File: /chem/ecd2a.i/012810.b/024b2401.d
 Date: 28-JAN-2010 11:15
 Client ID: RE15-10-7874HSD
 Sample Info: 1120202617011
 Volume Injected (uL): 1.0
 Column Phase: CLP2

Instrument: ecd2a.i
 Operator: JADC
 Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/024f2401.d
Report Date: 28-Jan-2010 11:35

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/024f2401.d
Lab Smp Id: 1202026170 Client Smp ID: RE15-10-7874MSD
Inj Date : 28-JAN-2010 11:15
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026170|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1392.sub
Target Version: 3.50 Sample Matrix: Soil

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	30.13000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	

\$ 11 4cmx					CAS #: 877-09-8		
1.772	1.770	0.002	8323518 124.171	4.3	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.605	5.604	0.001	8566767 135.124	4.7	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2		
2.273	2.271	0.002	1405803 622.620	21.6	80.00- 120.00	100.00	
2.596	2.595	0.001	3150164 680.541	23.6	194.16- 234.16	224.08	
2.687	2.685	0.002	1305014 686.740	23.8	65.88- 105.88	92.83	
2.822	2.820	0.002	659326 670.390	23.2	24.35- 64.35	46.90	
2.974	2.971	0.003	1039354 716.646	24.8	45.99- 85.99	73.93	
Average of Peak Concentrations =				23.4			

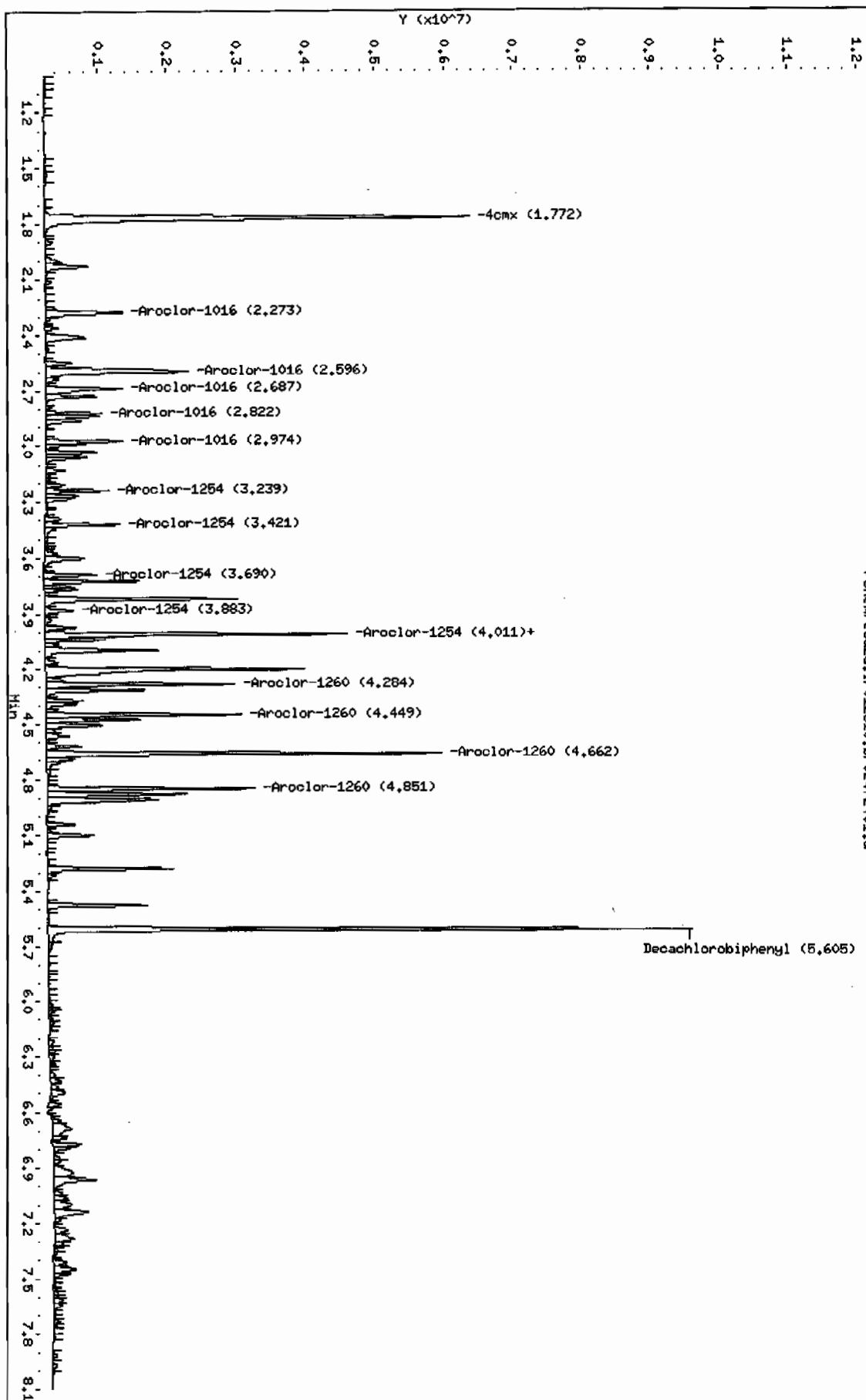
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.239	3.239	0.000	817567	393.051	13.6	80.00~	120.00	100.00
3.421	3.422	-0.001	960655	346.539	12.0	112.37~	152.37	117.50
3.690	3.691	-0.001	680478	181.829	6.3	163.94~	203.94	83.23
3.883	3.884	-0.001	491334	176.567	6.1	115.35~	155.35	60.10
4.011	4.012	-0.001	3783495	1370.81	47.4	118.56~	158.56	462.77
Average of Peak Concentrations =					17.1			

7 Aroclor-1260					CAS #: 11096-82-5			
4.011	4.011	0.000	3783495	879.338	30.4	80.00~	120.00	100.00
4.284	4.282	0.002	2407684	862.651	29.8	42.81~	82.81	63.64
4.449	4.449	0.000	2490280	868.653	30.1	45.95~	85.95	65.82
4.662	4.661	0.001	5108700	776.493	26.9	132.37~	172.37	135.03
4.851	4.850	0.001	2630949	823.893	28.5	53.57~	93.57	69.54
Average of Peak Concentrations =					29.1			

Data File: /chem/eod2a.i/012810.b/024f2401.d
Date: 28-JUN-2010 11:15
Client ID: REIS-10-7874MSD
Sample Info: 11202026170111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod2a.i
Operator: JADC
Column diameter: 0.25

/chem/eod2a.i/012810.b/024f2401.d



Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 945978 Verified by: _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202026167 MB	27-JAN-2010 20:26:22	30	H2SO4/KM2	2	9	1	0.03333	
1202026168 LCS	27-JAN-2010 20:26:22	30	H2SO4/KM2	2	9	1	0.03333	
245387001	27-JAN-2010 20:26:22	30.06	H2SO4/KM2	2	9	1	0.03327	
245387002	27-JAN-2010 20:26:22	30.19	H2SO4/KM2	2	9	1	0.03312	
245387003	27-JAN-2010 20:26:22	30.16	H2SO4/KM2	2	9	1	0.03316	
245391010	27-JAN-2010 20:26:22	30.12	H2SO4/KM2	2	9	1	0.0332	
245391011	27-JAN-2010 20:26:22	30.15	H2SO4/KM2	2	9	1	0.03317	
245394001	27-JAN-2010 20:26:22	30.01	H2SO4/KM2	2	9	1	0.03332	
245394002	27-JAN-2010 20:26:22	30.08	H2SO4/KM2	2	9	1	0.03324	
1202026169 MS (245394002)	27-JAN-2010 20:26:22	30.04	H2SO4/KM2	2	9	1	0.03329	
1202026170 MSD (245394002)	27-JAN-2010 20:26:22	30.13	H2SO4/KM2	2	9	1	0.03319	
245394003	27-JAN-2010 20:26:22	30.07	H2SO4/KM2	2	9	1	0.03326	
245394004	27-JAN-2010 20:26:22	30.05	H2SO4/KM2	2	9	1	0.03328	
245394005	27-JAN-2010 20:26:22	30.02	H2SO4/KM2	2	9	1	0.03331	
245394006	27-JAN-2010 20:26:22	30.19	H2SO4/KM2	2	9	1	0.03312	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202026168	PCB Laboratory Control	WE100126-07	1	mL	Clean up Date: 01/27/10		
MS	1202026169	PCB Laboratory Control	WE100126-07	1	mL	Clean up Initials: AIS		
MSD	1202026170	PCB Laboratory Control	WE100126-07	1	mL	Verified By: AV		
SURR	All	PEST LOW LEVEL SURROGATE 200 UGL	UE100108-15	1	mL	Final Solvent: Hexane		
REGNT	All	Acetone	1259670	150	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Hexane	1259672-B2	150	mL			
REGNT	All	1:1 sulfuric acid	1260695a	5	mL			
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL			
SOURC	All	SODIUM SULFATE	1256907	30	g			