

Friday, February 26, 2010

Page 2 of 2
REQUEST NUMBER: 10-2134

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7542	S	2/24/2010	
		1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
SW-846:8270C		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
SW-846:8321A_MOD		1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	

Friday, February 26, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2134

REQUEST NUMBER: 10-2134

LOS ALAMOS**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/28/2010

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
RE36-10-7458	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7458	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7453	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7453	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7454	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7454	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7460	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7460	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7456	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7456	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7455	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7455	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7459	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7459	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7457	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7457	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7542	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7453

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		0854		SUB-MEDIA: TUFF 1		NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	36-610599	↓		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		H3	500 ML POLY	Ice	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, leaves, tuff fragments
 FD: RE36-10-7520

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-9

FIELD SCREENING/MEASUREMENT RESULTS:

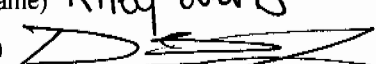

Alpha = 36 dpm
 Beta/Gamma = 2050 dpm

PID $\frac{\text{Ambient Reading}}{73m \ 2/24/10} = \text{ppm}$

COLLECTED BY (PRINT)

L McFarlane

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7454

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		3R2/24/10
TIME COLLECTED (HH:MM)		0945		SUB-MEDIA:	TUFF 1		OK QBT2
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	36-610599	↓		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		
TOP DEPTH:	0	0.5		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

Pinkish gray, tuff

FTB: RE36-10-7542

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-9

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 15 dpm
Beta/Gamma \leq 2100 dpm

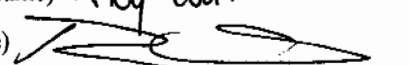

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

73m 2/24/10

COLLECTED BY (PRINT)

Th McFarlang

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7455

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1015		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610600			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

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

SAMPLE COMMENTS: NA

LOCATION DESC: 8-24

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 30 dpm
 Beta/Gamma \leq 1760 dpm

PID $\frac{\text{Ambient Reading}}{73m \ 2/24/10} = \text{ppm}$

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Riley Wiers	2/24/10	(Printed Name)	2/24/10
(Signature)	1634	(Signature)	4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7456

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3	JR2/24/10	
TIME COLLECTED (HH:MM)		1025		SUB-MEDIA:	TUFF 1	OK QBT2	
PRS ID:	36-008	ok		SAMPLE TECH CODE:	HA	ok	
LOCATION ID:	36-610600			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	73m 2/24/10	1.0	SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

Pinkish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-24

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 36 dpmBeta/Gamma \leq 1865 dpmPID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

73m 2/24/10

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) Ritey Gward (Signature)	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7457

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		1030		SUB-MEDIA: TUFF 1		NA	
PRS ID: 36-008		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: 36-610601		↓		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		H3	500 ML POLY	Ice	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:

Brownish black moist sandy silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-10

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 10 dpm
Beta/Gamma \leq 1720 dpm


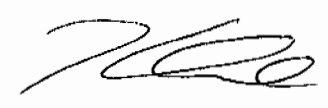
PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

73m 2/24/10

COLLECTED BY (PRINT)

Th McFarlane

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1034	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7458

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		9th
TIME COLLECTED (HH:MM)		1041		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610601	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
							NA

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

FR: RE36-10-7530

SAMPLE COMMENTS:

LOCATION DESC:

8-10

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 56 dpm
Beta/Gamma \leq 1930 dpm

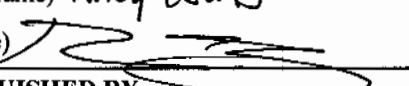

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

73m 2/24/10

COLLECTED BY (PRINT)

T.M. McFarland

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7459

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		11:15		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610602	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/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	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Brown and black sandy silt, Tuff fragments, roots

FD: RE 36-10-7519

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-23

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 20 dpm
Beta/Gamma \pm 2010 dpm

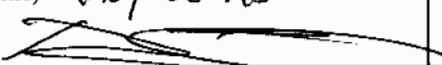

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

73m 2/24/10

COLLECTED BY (PRINT)

Th McFarlane

REVIEWED BY (PRINT) Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/24/10 4134
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7460

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		522/24/10 OK QBT2
TIME COLLECTED (HH:MM)		1128		SUB-MEDIA:	TUFF 1		OK
PRS ID:	36-008			SAMPLE TECH CODE:	HA		
LOCATION ID:	36-610602			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	R			EXCAVATED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
BOREHOLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

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

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-23

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 41 dpm
Beta/Gamma \pm 1963 dpm

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

73m 2/24/10

COLLECTED BY (PRINT)

ThMcFarlane

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature)	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/24/10 4334
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7519

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1115		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK		36-610602	FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC		ok	FIELD PREP:	NA		
TOP DEPTH:	0		0.0	SAMPLE USAGE:	QC		
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	73m 2/24/10 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		H3	500 ML POLY	Ice	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 36-10-75 73m 2/24/10
7459

SAMPLE COMMENTS: Brown and black sandy silt, tuff fragments, roots
NA

LOCATION DESC: 8-23

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 20 dpm
Beta/Gamma \leq 2016 dpm

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


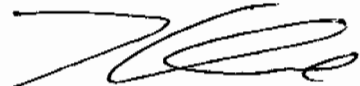

73m 2/24/10

COLLECTED BY (PRINT)

T MCFarland

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7520

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		Alln
TIME COLLECTED(HH:MM)		0854 - 0945 - 12m 2/24/10		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		01	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK		36-610599	FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC		ok	FIELD PREP:	NA		
TOP DEPTH:	0	0.0	0.5 12m 2/24/10	SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	0.5	1.0 12m 2/24/10	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		S	EXCAVATED: YES / <input checked="" type="checkbox"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES / <input checked="" type="checkbox"/> NA
BOREHOLE: YES / <input checked="" type="checkbox"/> NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		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 RE36-10-7453

Brown sandy silt, leaves, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-9

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq _____ dpm
Beta/Gamma \leq _____ dpmPID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

12m 2/24/10

COLLECTED BY (PRINT)

J. McFarland

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) R. Key E. M. S. (Signature)	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/24/10 4:34
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7530

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	02/24/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	11 11	SUB-MEDIA:	OTHER
PRS ID: 36-008	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	36-610601	FIELD QC TYPE:	FR
LOCATION TYPE: GENERIC	OK	FIELD PREP:	UF
TOP DEPTH: 0		SAMPLE USAGE:	QC
BOTTOM DEPTH: 0		SCREEN/PORT DESC:	NA
FIELD MATRIX: W		EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1	Normal	SW-846:6850	250 ML POLY	Ice	Y	
1	Normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE 36-10-7458

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:



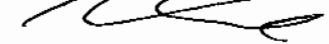
NA

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 2/24/10 4:34
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7542

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	02/24/2010	MEDIA:	NA
TIME COLLECTED(HH:MM)	1014	SUB-MEDIA:	OTHER
PRS ID: 36-008	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	36-610599	FIELD QC TYPE:	FTB
LOCATION TYPE: GENERIC	OK	FIELD PREP:	NA
TOP DEPTH: 0		SAMPLE USAGE:	QC
BOTTOM DEPTH: 0		SCREEN/PORT DESC:	NA
FIELD MATRIX: S		EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
12m 2/24/10						
1	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE36-10-7454

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

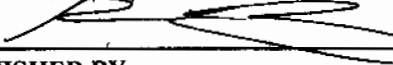


NA

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Jon Roberson

RELINQUISHED BY (Printed Name) Riley Evans (Signature) 	Date/Time 2/24/10 1634	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 2/24/10 4134
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

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

RF 36-10-7453	RF 36-10-8283
7454	8284
7455	8285
7456	8286
7457	8464
7458	8475
7459	8477
7460	8471
7519	8479
7520	8481
	8484
	8485

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):

RF 36-10-7530	Rinsate
7542	FTB
8296	FTB
8493	Rinsate

Reason:

.....

Print Last Name McFarland

Signature 

Date 2/24/10

Rad Screening Data Release Form

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

RF 36-10-7453	RF 36-10-8283
7454	8284
7455	8285
7456	8286
7457	8464
7458	8475
7459	8477
7460	8471
7519	8479
7520	8481
	8484
	8485

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):

RF 36-10-7530	Rinsate
7542	FTB
8296	FTB
8493	Rinsate

Reason:

.....

Print Last Name McFarland

Signature 

Date 2/24/10



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RS36-10-7453
Sample Collection Date: 02/24/10 08:54
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-001
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	28.11	25.70	33.91	25.93		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	35.74	14.88	17.73	15.55		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	40.48	0.13	40.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	19.50	8.13	1.39	8.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.05	56.28	0.13	56.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.38	0.27	0.08	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.55	168.24	0.38	168.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.22	0.49	0.14	0.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.92	0.86	0.34	0.87		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	0.99	0.76	0.42	0.76		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.01	2.41	1.06	2.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.43	0.35	0.12	0.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.81										

Matthew L. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073

Request or PO Number:

Client Sample ID: RE36-10-7454

ARS Sample ID: ARS2-10-00073-002

Sample Collection Date: 02/24/10 09:45

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.66	22.07	37.46	22.14		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	33.66	14.49	18.42	15.07		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-6.01	-0.12	0.13	-0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	2.26	8.56	3.98	8.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.07	0.10	0.13	0.10		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.02	0.13	0.18	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.21	0.45	0.33	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.66	0.54	0.15	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.74	1.16	0.32	1.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.85	0.73	0.40	0.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.79	4.35	1.76	4.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.35	0.44	0.18	0.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 0.83

Matthew L. Edger
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87844
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7455
Sample Collection Date: 02/24/10 10:15
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-003
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analyte Description	Analyte Results	Analyte Error +/- 2 s	MDC	TPU	Qual	Analyte Units	Analyte Test Method	Analyte Date/Time	Analyte Technician	Tracer/Chem Recovery
GROSS ALPHA	14.38	20.52	34.06	20.60		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	40.71	15.12	17.92	15.92		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.12	0.22	0.13	0.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	15.88	7.29	1.37	7.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.12	0.12	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.05	0.19	0.11	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.01	0.03	0.35	0.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.11	0.47	0.14	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.39	0.80	0.33	0.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.26	0.33	0.44	0.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.13	3.53	1.48	3.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.82	0.32	0.05	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.40

Matthew J. Eden
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073

Client Sample ID: RE36-10-7456

Sample Collection Date: 02/24/10 10:25

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00073-004

Date Received: 02/25/10 00:00

Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	7.60	16.69	32.78	16.71		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	46.04	16.17	18.31	17.16		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	38.79	0.12	38.79		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	31.69	10.13	1.34	10.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.16	0.16	0.11	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.05	0.09	0.07	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
SU-152	0.06	0.08	0.35	0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.38	0.55	0.19	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.19	0.61	0.32	0.62		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.37	0.68	0.49	0.68		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.80	2.26	0.95	2.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.02	-0.15	0.08	-0.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 0.75										

Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00073
 Client Sample ID: RE36-10-7457
 Sample Collection Date: 02/24/10 10:30
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: AR52-10-00073-005
 Date Received: 02/25/10 00:00
 Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.55	13.19	39.91	13.19		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	33.06	13.92	17.73	14.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	46.33	0.15	46.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	16.50	8.00	1.60	8.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.08	0.14	0.15	0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.32	0.26	0.09	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.62	179.33	0.40	179.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PS-212	0.89	0.49	0.16	0.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.35	1.49	0.39	1.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.01	0.96	0.48	0.96		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.81	3.74	1.40	3.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.19	0.22	0.09	0.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.14										

Matthew A. Baker
 Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7458
Sample Collection Date: 02/24/10 10:41
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-008
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	24.57	25.99	37.46	26.16		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	30.34	14.29	18.42	14.76		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.08	52.13	0.17	52.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	0.90	1134.80	2.54	1134.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.04	0.66	0.17	0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.32	0.61	0.22	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.36	0.30	0.10	0.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.52	0.68	0.45	0.68		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.12	0.60	0.25	0.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.42	0.71	0.44	0.71		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.95	1.22	0.54	1.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.05	4.47	1.79	4.62		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.03	0.24	0.14	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.43										

Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7459
Sample Collection Date: 02/24/10 11:15
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-007
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Treeer/Chem Recovery
GROSS ALPHA	0.55	15.25	34.06	13.25		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	27.23	13.29	17.92	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	42.26	0.13	42.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	24.79	9.37	1.46	9.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.30	0.24	0.12	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.35	0.26	0.08	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.57	163.57	0.37	163.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.36	0.52	0.14	0.52		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.75	0.50	0.58	0.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.36	1.01	0.60	1.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.86	2.74	1.39	2.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.01	-0.24	0.11	-0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.22

M. J. Edin
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7460
Sample Collection Date: 02/24/10 11:28
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-008
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	46.24	31.98	32.75	32.08		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	48.06	18.78	18.31	17.66		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	35.44	0.11	35.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	23.01	8.27	1.22	8.29		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.90	0.12	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.19	0.14	0.12	0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.08	0.12	0.07	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-182	0.19	0.33	0.31	0.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.49	0.56	0.20	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.10	0.51	0.51	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.70	0.84	0.43	0.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.37	3.08	1.32	3.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.03	27.55	0.06	27.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.06

Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7519
Sample Collection Date: 02/24/10 11:15
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-009
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	23.52	24.07	33.91	24.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	30.24	14.05	17.73	14.53		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	39.67	0.13	39.67		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	26.26	9.69	1.37	9.72		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.32	0.25	0.13	0.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.56	0.32	0.06	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.53	153.57	0.34	153.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.57	0.56	0.16	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.65	1.17	0.33	1.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.51	1.02	0.55	1.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.22	3.31	1.17	3.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.26	0.34	0.13	0.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.56										

Matthew L. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00073
Client Sample ID: RE36-10-7520
Sample Collection Date: 02/24/10 08:54
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-010
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	24.55	25.99	37.46	26.17		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	37.19	15.05	18.41	15.73		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	37.04	0.12	37.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	0.00	2549.70	4.04	2549.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.24	0.17	0.08	0.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.39	0.26	0.07	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.12	-0.18	0.32	-0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.13	0.42	0.09	0.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.37	0.83	0.31	0.83		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.52	0.46	0.41	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.67	3.82	1.52	4.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.14	0.27	0.13	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 6.34

Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00073
Client Sample ID: RE36-10-8283
Sample Collection Date: 02/24/10 09:20
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00073-011
Date Received: 02/25/10 00:00
Report Date: 02/26/10 13:09

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.39	20.52	34.06	20.60		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	36.41	14.64	17.92	15.30		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.04	0.16	0.13	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	25.25	9.36	1.43	9.40		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.35	0.24	0.14	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.10	0.14	0.08	0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-152	0.23	0.29	0.36	0.29		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.45	0.53	0.14	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.29	0.98	0.35	0.98		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.61	192.47	0.43	192.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.93	5.00	1.83	5.29		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.43	0.43	0.17	0.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.73

[Signature]
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2134 VALIDATION DATE: 4/13/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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


Section II. Completeness Check


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

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


- The ICAL and ICV RRFs were <0.05 for trichlorotrifluoroethane. All the associated sample results were NDs and, thus, were qualified R,V7b.
- In the FTB, sample RE36-10-7542, associated with samples -7453, -7454 and -7520, acetone was detected. The acetone result for sample -7520 was a detect $\leq 5X$ the blank concentration and, thus, was qualified U,V4d. All the other associated sample results were NDs and, thus, were not qualified.
- The ICV and/or CCVs associated with all the samples, the %Ds were $>20\%$ for acetone and trichlorotrifluoroethane. The acetone results for samples -7458 and -7542 were detects and, thus, were qualified J,V7c. All the other associated sample results were either NDs or qualified ND and, thus, were qualified UJ,V7c.
- The bromofluorobenzene surrogate %Rs were $>$ the laboratory's UAL for samples -7459, -7455, -7457 and -7519. The 4-isopropyltoluene result for sample -7459 was a detect and, thus, was qualified J+,V3b. All other associated sample results were NDs and, thus, were not qualified.
- In both LCSs, the %Rs were $>$ the laboratory's UAL for trichlorotrifluoroethane. The associated sample results were NDs and, thus, were not qualified.
- It should be noted that the MS/MSD analyses were performed on a LANL sample from a different RN. MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: Allison Felix Level: 1 Date: 4/16/10

DATA VALIDATION COVER SHEET	
5114-1	Records Use only
Data Validation Cover Sheet	 Los Alamos NATIONAL LABORATORY EST. 1943
VALIDATOR'S SIGNATURE: <u>Eli T. Mikh</u> DATE: <u>4/13/10</u>	
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
<input 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ (10X for common laboratory contaminants).	N/A	J, V4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19. The quantitating IS are count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The IS area count for the quantitating IS is $<50\%$ but $>10\%$ for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST


5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only



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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134

Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00

Date Received: 02/27/2010 09:10

Matrix: R

%Moisture: 14.2

Client ID: RE36-10-7458

Batch ID: 961880

Run Date: 03/05/2010 18:37

Prep Date: 03/05/2010 10:26

Data File: 030510V5\SA509.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: CDS1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	J	2.18	ug/kg	1.93	5.83 J.V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.384	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.384	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7458	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/05/2010 18:37	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:26	Allquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\5A509.D	Column: DB-624	

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trinethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene		2.64	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.83	ug/kg	1.86	5.83 R,V7b
<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

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: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	%Moisture: 44.7
Client ID: RE36-10-7453	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/05/2010 19:02	Inst: VOA5.I	Dilution: 1
Prep Date: 03/05/2010 10:32	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030510V5\5A510.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	1.81	ug/kg	0.615	1.81
74-87-3	Chloromethane	U	1.81	ug/kg	0.543	1.81
75-01-4	Vinyl chloride	U	1.81	ug/kg	0.543	1.81
74-83-9	Bromomethane	U	1.81	ug/kg	0.543	1.81
75-00-3	Chloroethane	U	1.81	ug/kg	0.543	1.81
75-69-4	Trichlorofluoromethane	U	1.81	ug/kg	0.543	1.81
67-64-1	Acetone	U	9.05	ug/kg	3.00	9.05 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
74-88-4	Iodomethane	U	9.05	ug/kg	2.89	9.05
75-09-2	Methylene chloride	U	9.05	ug/kg	3.62	9.05
75-15-0	Carbon disulfide	U	9.05	ug/kg	2.26	9.05
156-60-5	trans-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
75-34-3	1,1-Dichloroethane	U	1.81	ug/kg	0.543	1.81
78-93-3	2-Butanone	U	9.05	ug/kg	2.71	9.05
156-59-2	cis-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
594-20-7	2,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
67-66-3	Chloroform	U	1.81	ug/kg	0.543	1.81
74-97-5	Bromochloromethane	U	1.81	ug/kg	0.597	1.81
71-55-6	1,1,1-Trichloroethane	U	1.81	ug/kg	0.543	1.81
563-58-6	1,1-Dichloropropene	U	1.81	ug/kg	0.543	1.81
56-23-5	Carbon tetrachloride	U	1.81	ug/kg	0.543	1.81
107-06-2	1,2-Dichloroethane	U	1.81	ug/kg	0.543	1.81
71-43-2	Benzene	U	1.81	ug/kg	0.543	1.81
79-01-6	Trichloroethylene	U	1.81	ug/kg	0.597	1.81
78-87-5	1,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
75-27-4	Bromodichloromethane	U	1.81	ug/kg	0.543	1.81
74-95-3	Dibromomethane	U	1.81	ug/kg	0.543	1.81
108-10-1	4-Methyl-2-pentanone	U	9.05	ug/kg	2.26	9.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
108-88-3	Toluene	U	1.81	ug/kg	0.543	1.81
10061-02-6	trans-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
79-00-5	1,1,2-Trichloroethane	U	1.81	ug/kg	0.543	1.81
591-78-6	2-Hexanone	U	9.05	ug/kg	2.71	9.05
142-28-9	1,3-Dichloropropane	U	1.81	ug/kg	0.543	1.81
127-18-4	Tetrachloroethylene	U	1.81	ug/kg	0.543	1.81
124-48-1	Dibromochloromethane	U	1.81	ug/kg	0.543	1.81
106-93-4	1,2-Dibromoethane	U	1.81	ug/kg	0.543	1.81
108-90-7	Chlorobenzene	U	1.81	ug/kg	0.543	1.81

ETM
4/13/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240002

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 44.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7453
Batch ID: 961880
Run Date: 03/05/2010 19:02
Prep Date: 03/05/2010 10:32
Data File: 030510V55A510.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.81	ug/kg	0.543	1.81
179601-23-1	m,p-Xylenes	U	3.62	ug/kg	0.543	3.62
95-47-6	o-Xylene	U	1.81	ug/kg	0.543	1.81
100-42-5	Styrene	U	1.81	ug/kg	0.543	1.81
75-25-2	Bromoform	U	1.81	ug/kg	0.543	1.81
79-34-5	1,1,2,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
96-18-4	1,2,3-Trichloropropane	U	1.81	ug/kg	0.543	1.81
108-86-1	Bromobenzene	U	1.81	ug/kg	0.543	1.81
103-65-1	n-Propylbenzene	U	1.81	ug/kg	0.543	1.81
95-49-8	2-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-82-8	Isopropylbenzene	U	1.81	ug/kg	0.543	1.81
108-67-8	1,3,5-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
106-43-4	4-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-06-6	tert-Butylbenzene	U	1.81	ug/kg	0.543	1.81
95-63-6	1,2,4-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
135-98-8	sec-Butylbenzene	U	1.81	ug/kg	0.543	1.81
99-87-6	4-Isopropyltoluene		1.85	ug/kg	0.543	1.81
541-73-1	1,3-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
106-46-7	1,4-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
104-51-8	n-Butylbenzene	U	1.81	ug/kg	0.543	1.81
96-12-8	1,2-Dibromo-3-chloropropane	U	1.81	ug/kg	0.543	1.81
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	9.05	ug/kg	2.89	9.05 R.V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
95-50-1	1,2-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81

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: 10-2134

Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00

Date Received: 02/27/2010 09:10

Matrix: R

%Moisture: 8.2

Client ID: RE36-10-7454

Batch ID: 961880

Run Date: 03/05/2010 19:28

Prep Date: 03/05/2010 10:34

Data File: 030510V5\5A511.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: CDS1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

ETM
4/13/10

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7454
Batch ID: 961880
Run Date: 03/05/2010 19:28
Prep Date: 03/05/2010 10:34
Data File: 030510V5\SA511.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.44	ug/kg	1.74	5.44 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

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

ETM
4/13/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240004	Date Received: 02/27/2010 09:10	%Moisture: 9.5
Client ID: RE36-10-7460	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/05/2010 19:52	Inst: VOA5.I	Dilution: 1
Prep Date: 03/05/2010 10:36	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030510V5\5A512.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	J	0.442	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240004	Date Received: 02/27/2010 09:10	%Moisture: 9.5
Client ID: RE36-10-7460	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/05/2010 19:52	Inst: VOA5.I	Dilution: 1
Prep Date: 03/05/2010 10:36	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030510V5\SA512.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.343	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	J	0.575	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

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

ETM
4/13/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134

Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00

Date Received: 02/27/2010 09:10

Matrix: R

%Moisture: 7.5

Client ID: RE36-10-7456

Batch ID: 961880

Run Date: 03/05/2010 20:17

Prep Date: 03/05/2010 10:38

Data File: 030510V5\5A513.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: CDS1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.368	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.324	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.324	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.324	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.324	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.324	1.08
67-64-1	Acetone	U	5.40	ug/kg	1.79	5.40 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
74-88-4	Iodomethane	U	5.40	ug/kg	1.73	5.40
75-09-2	Methylene chloride	U	5.40	ug/kg	2.16	5.40
75-15-0	Carbon disulfide	U	5.40	ug/kg	1.35	5.40
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.324	1.08
78-93-3	2-Butanone	U	5.40	ug/kg	1.62	5.40
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.324	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.324	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.324	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.324	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.324	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.324	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.324	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.324	1.08
108-10-1	4-Methyl-2-pentanone	U	5.40	ug/kg	1.35	5.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
108-88-3	Toluene	J	0.800	ug/kg	0.324	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.324	1.08
591-78-6	2-Hexanone	U	5.40	ug/kg	1.62	5.40
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.324	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.324	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.324	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.324	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.324	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7456	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/05/2010 20:17	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:38	Allquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\SA513.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.324	1.08
179601-23-1	m,p-Xylenes	J	0.530	ug/kg	0.324	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.324	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.324	1.08
75-25-2	Bromoforn	U	1.08	ug/kg	0.324	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.324	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.324	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.324	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.324	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.324	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.324	1.08
95-63-6	1,2,4-Trimethylbenzene	J	0.454	ug/kg	0.324	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.324	1.08
99-87-6	4-Isopropyltoluene	J	0.670	ug/kg	0.324	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.324	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.324	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.40	ug/kg	1.73	5.40 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08

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: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7455
Batch ID: 961880
Run Date: 03/09/2010 15:22
Prep Date: 03/09/2010 13:21
Data File: 030910V55B218.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.450	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.397	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.397	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.397	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.397	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.397	1.32
67-64-1	Acetone	U	6.62	ug/kg	2.20	6.62 UJ.V7c
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
74-88-4	Iodomethane	U	6.62	ug/kg	2.12	6.62
75-09-2	Methylene chloride	U	6.62	ug/kg	2.65	6.62
75-15-0	Carbon disulfide	U	6.62	ug/kg	1.65	6.62
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.397	1.32
78-93-3	2-Butanone	U	6.62	ug/kg	1.98	6.62
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.397	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.437	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.397	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.397	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.397	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.397	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.397	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.437	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.397	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.397	1.32
108-10-1	4-Methyl-2-pentanone	U	6.62	ug/kg	1.65	6.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
108-88-3	Toluene	U	1.32	ug/kg	0.397	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.397	1.32
591-78-6	2-Hexanone	U	6.62	ug/kg	1.98	6.62
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.397	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.397	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.397	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.397	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.397	1.32

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-2134
 Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7455
 Batch ID: 961880
 Run Date: 03/09/2010 15:22
 Prep Date: 03/09/2010 13:21
 Data File: 030910V55B218.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.397	1.32
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.397	2.65
95-47-6	o-Xylene	U	1.32	ug/kg	0.397	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.397	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.397	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.397	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.397	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.397	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.397	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.397	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.397	1.32
99-87-6	4-Isopropyltoluene	U	1.32	ug/kg	0.397	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.397	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.397	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.62	ug/kg	2.12	6.62 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32

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: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7459
Batch ID: 961880
Run Date: 03/05/2010 21:07
Prep Date: 03/05/2010 10:42
Data File: 030510V5\5A515.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7459
Batch ID: 961880
Run Date: 03/05/2010 21:07
Prep Date: 03/05/2010 10:42
Data File: 030510V5\5A515.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromofonn	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene	J	1.01	ug/kg	0.369	1.23 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha Trichlorotrifluoroethane	U	6.15	ug/kg	1.97	6.15 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

Tentatively Identified Compound Summary

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

ETM
4/13/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240008

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 18.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7457
 Batch ID: 961880
 Run Date: 03/09/2010 16:17
 Prep Date: 03/09/2010 13:23
 Data File: 030910V55B220.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.419	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.16	ug/kg	2.04	6.16 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.16	ug/kg	1.97	6.16
75-09-2	Methylene chloride	U	6.16	ug/kg	2.46	6.16
75-15-0	Carbon disulfide	U	6.16	ug/kg	1.54	6.16
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.16	ug/kg	1.85	6.16
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.16	ug/kg	1.54	6.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.16	ug/kg	1.85	6.16
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240008

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7457
Batch ID: 961880
Run Date: 03/09/2010 16:17
Prep Date: 03/09/2010 13:23
Data File: 030910V5/5B220.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.370	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoforn	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.16	ug/kg	1.97	6.16 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 42.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7520
 Batch ID: 961880
 Run Date: 03/05/2010 21:58
 Prep Date: 03/05/2010 10:46
 Data File: 030510V5\5A517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.73	ug/kg	0.589	1.73
74-87-3	Chloromethane	U	1.73	ug/kg	0.519	1.73
75-01-4	Vinyl chloride	U	1.73	ug/kg	0.519	1.73
74-83-9	Bromomethane	U	1.73	ug/kg	0.519	1.73
75-00-3	Chloroethane	U	1.73	ug/kg	0.519	1.73
75-69-4	Trichlorofluoromethane	U	1.73	ug/kg	0.519	1.73
67-64-1	Acetone	J	3.90	ug/kg	2.87	8.66 U,V4d
75-35-4	1,1-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
74-88-4	Iodomethane	U	8.66	ug/kg	2.77	8.66
75-09-2	Methylene chloride	U	8.66	ug/kg	3.46	8.66
75-15-0	Carbon disulfide	U	8.66	ug/kg	2.16	8.66
156-60-5	trans-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
75-34-3	1,1-Dichloroethane	U	1.73	ug/kg	0.519	1.73
78-93-3	2-Butanone	U	8.66	ug/kg	2.60	8.66
156-59-2	cis-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
594-20-7	2,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
67-66-3	Chloroform	U	1.73	ug/kg	0.519	1.73
74-97-5	Bromochloromethane	U	1.73	ug/kg	0.571	1.73
71-55-6	1,1,1-Trichloroethane	U	1.73	ug/kg	0.519	1.73
563-58-6	1,1-Dichloropropene	U	1.73	ug/kg	0.519	1.73
56-23-5	Carbon tetrachloride	U	1.73	ug/kg	0.519	1.73
107-06-2	1,2-Dichloroethane	U	1.73	ug/kg	0.519	1.73
71-43-2	Benzene	U	1.73	ug/kg	0.519	1.73
79-01-6	Trichloroethylene	U	1.73	ug/kg	0.571	1.73
78-87-5	1,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
75-27-4	Bromodichloromethane	U	1.73	ug/kg	0.519	1.73
74-95-3	Dibromomethane	U	1.73	ug/kg	0.519	1.73
108-10-1	4-Methyl-2-pentanone	U	8.66	ug/kg	2.16	8.66
10061-01-5	cis-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
108-88-3	Toluene	U	1.73	ug/kg	0.519	1.73
10061-02-6	trans-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
79-00-5	1,1,2-Trichloroethane	U	1.73	ug/kg	0.519	1.73
591-78-6	2-Hexanone	U	8.66	ug/kg	2.60	8.66
142-28-9	1,3-Dichloropropane	U	1.73	ug/kg	0.519	1.73
127-18-4	Tetrachloroethylene	U	1.73	ug/kg	0.519	1.73
124-48-1	Dibromochloromethane	U	1.73	ug/kg	0.519	1.73
106-93-4	1,2-Dibromoethane	U	1.73	ug/kg	0.519	1.73
108-90-7	Chlorobenzene	U	1.73	ug/kg	0.519	1.73

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7520
Batch ID: 961880
Run Date: 03/05/2010 21:58
Prep Date: 03/05/2010 10:46
Data File: 030510V5\SA517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.73	ug/kg	0.519	1.73
179601-23-1	m,p-Xylenes	U	3.46	ug/kg	0.519	3.46
95-47-6	o-Xylene	U	1.73	ug/kg	0.519	1.73
100-42-5	Styrene	U	1.73	ug/kg	0.519	1.73
75-25-2	Bromoform	U	1.73	ug/kg	0.519	1.73
79-34-5	1,1,2,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
96-18-4	1,2,3-Trichloropropane	U	1.73	ug/kg	0.519	1.73
108-86-1	Bromobenzene	U	1.73	ug/kg	0.519	1.73
103-65-1	n-Propylbenzene	U	1.73	ug/kg	0.519	1.73
95-49-8	2-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-82-8	Isopropylbenzene	U	1.73	ug/kg	0.519	1.73
108-67-8	1,3,5-Trimethylbenzene	U	1.73	ug/kg	0.519	1.73
106-43-4	4-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-06-6	tert-Butylbenzene	U	1.73	ug/kg	0.519	1.73
95-63-6	1,2,4-Trimethylbenzene	J	0.623	ug/kg	0.519	1.73
135-98-8	sec-Butylbenzene	U	1.73	ug/kg	0.519	1.73
99-87-6	4-Isopropyltoluene	U	1.73	ug/kg	0.519	1.73
541-73-1	1,3-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
106-46-7	1,4-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
104-51-8	n-Butylbenzene	U	1.73	ug/kg	0.519	1.73
96-12-8	1,2-Dibromo-3-chloropropane	U	1.73	ug/kg	0.519	1.73
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.66	ug/kg	2.77	8.66 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
95-50-1	1,2-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73

Tentatively Identified Compound Summary

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

ETM
4/13/10

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-2134
 Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7519
 Batch ID: 961880
 Run Date: 03/09/2010 16:45
 Prep Date: 03/09/2010 13:24
 Data File: 030910V55B221.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.430	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	6.33	ug/kg	2.10	6.33 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	U	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	U	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
Client ID: RE36-10-7519	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/09/2010 16:45	Inst: VOA5.I	Dilution: 1
Prep Date: 03/09/2010 13:24	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V55B221.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	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	Bromoforn	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	6.33	ug/kg	2.03	6.33 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
No Tentatively Identified Compounds Found				ug/kg		

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240011

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10

Matrix: S

Client ID: RE36-10-7542
Batch ID: 961880
Run Date: 03/09/2010 14:26
Prep Date: 03/09/2010 13:25
Data File: 030910V5\5B216.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.07	ug/kg	1.66	5.00 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
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

ETM
4/13/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240011

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Allquot: 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: RE36-10-7542
 Batch ID: 961880
 Run Date: 03/09/2010 14:26
 Prep Date: 03/09/2010 13:25
 Data File: 030910V5\SB216.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
	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	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

ETM
4/13/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2134 VALIDATION DATE: 4/13/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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


Section II. Completeness Check


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

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


- The ICV %D was >20% for pyridine. In the CCV associated with samples RE36-10-7457 and -7520, the %Ds were >20% for n-nitrosodipropylamine; benzoic acid; m-nitroaniline; 2,4-dinitrophenol; 4-nitrophenol; indeno(1,2,3-cd)pyrene; dibenzo(a,h)anthracene and benzo(g,h,i)perylene. In the CCV associated with samples -7459 and -7519, the %Ds were >20% for benzoic acid; m-nitroaniline; 2,4-dinitrophenol; 4-nitrophenol; indeno(1,2,3-cd)pyrene; dibenzo(a,h)anthracene and benzo(g,h,i)perylene. In the CCV associated with all the other samples, the %Ds were >20% for 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; p-nitroaniline; indeno(1,2,3-cd)pyrene; dibenzo(a,h)anthracene and benzo(g,h,i)perylene. The associated sample results that were detects were qualified J,SV7c and those that were NDs were qualified UJ,SV7c.
- The LCS %R was > the laboratory's UAL for 2,4-dinitrophenol. The associated sample results were NDs and, thus, were not qualified.
- It should be noted that the MS/MSD %Rs were not within the laboratory's QC limits for 3,3'-dichlorobenzidine. It should also be noted that the MS/MSD analyses were performed on a LANL sample from a different RN and the parent sample raw data were not included in the data package. However, MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: Allison Felix Level: 1 Date: 4/16/10


DATA VALIDATION COVER SHEET	
5115-1 Data Validation Cover Sheet	Records Use only  LOS ALAMOS NATIONAL LABORATORY EST. 1945
VALIDATOR'S SIGNATURE: <u>Eric T. Muth</u> DATE: <u>4/13/10</u>	
Form 5115-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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


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

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

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

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

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

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

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

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

SDG Number: 10-2134
Lab Sample ID: 248240002

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 44.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7453
Batch ID: 960659
Run Date: 03/10/2010 21:34
Prep Date: 03/04/2010 10:53
Data File: s5c1032.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	601	ug/kg	120	601
108-95-2	Phenol	U	601	ug/kg	120	601
95-57-8	2-Chlorophenol	U	601	ug/kg	120	601
106-46-7	1,4-Dichlorobenzene	U	601	ug/kg	120	601
621-64-7	N-Nitrosodipropylamine	U	601	ug/kg	120	601
59-50-7	4-Chloro-3-methylphenol	U	601	ug/kg	120	601
83-32-9	Acenaphthene	U	60.1	ug/kg	19.8	60.1
121-14-2	2,4-Dinitrotoluene	U	601	ug/kg	60.1	601
100-02-7	4-Nitrophenol	U	601	ug/kg	198	601
87-86-5	Pentachlorophenol	U	601	ug/kg	150	601
129-00-0	Pyrene		107	ug/kg	18.0	60.1
110-86-1	Pyridine	U	601	ug/kg	120	601 UJ,SV7c
62-53-3	Aniline	U	601	ug/kg	180	601
111-44-4	bis(2-Chloroethyl) ether	U	601	ug/kg	120	601
541-73-1	1,3-Dichlorobenzene	U	601	ug/kg	120	601
100-51-6	Benzyl alcohol	U	601	ug/kg	180	601
95-50-1	1,2-Dichlorobenzene	U	601	ug/kg	120	601
108-60-1	bis(2-Chloroisopropyl)ether	U	601	ug/kg	120	601
95-48-7	o-Cresol	U	601	ug/kg	120	601
65794-96-9	m,p-Cresols	U	601	ug/kg	180	601
67-72-1	Hexachloroethane	U	601	ug/kg	120	601
98-95-3	Nitrobenzene	U	601	ug/kg	120	601
78-59-1	Isophorone	U	601	ug/kg	120	601
88-75-5	2-Nitrophenol	U	601	ug/kg	120	601
105-67-9	2,4-Dimethylphenol	U	601	ug/kg	210	601
111-91-1	bis(2-Chloroethoxy)methane	U	601	ug/kg	120	601
120-83-2	2,4-Dichlorophenol	U	601	ug/kg	120	601
65-85-0	Benzoic acid	U	1200	ug/kg	301	1200
91-20-3	Naphthalene	U	60.1	ug/kg	18.0	60.1
106-47-8	4-Chloroaniline	U	601	ug/kg	120	601
87-68-3	Hexachlorobutadiene	U	601	ug/kg	120	601
91-57-6	2-Methylnaphthalene	U	60.1	ug/kg	12.0	60.1
77-47-4	Hexachlorocyclopentadiene	U	601	ug/kg	120	601
88-06-2	2,4,6-Trichlorophenol	U	601	ug/kg	120	601
95-95-4	2,4,5-Trichlorophenol	U	601	ug/kg	120	601
91-58-7	2-Chloronaphthalene	U	60.1	ug/kg	19.8	60.1
88-74-4	2-Nitroaniline	U	601	ug/kg	120	601
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	601	ug/kg	120	601

ETM
4/13/10

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-2134
Lab Sample ID: 248240002

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 44.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7453
Batch ID: 969659
Run Date: 03/10/2010 21:34
Prep Date: 03/04/2010 10:53
Data File: s5c1032.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	601	ug/kg	120	601
606-20-2	2,6-Dinitrotoluene	U	601	ug/kg	60.1	601
208-96-8	Acenaphthylene	U	60.1	ug/kg	18.0	60.1
51-28-5	2,4-Dinitrophenol	U	1200	ug/kg	228	1200 UJ,SV7c
132-64-9	Dibenzofuran	U	601	ug/kg	120	601
84-66-2	Diethylphthalate	U	601	ug/kg	120	601
86-73-7	Fluorene	U	60.1	ug/kg	18.0	60.1
7005-72-3	4-Chlorophenylphenylether	U	601	ug/kg	120	601
534-52-1	2-Methyl-4,6-dinitrophenol	U	601	ug/kg	120	601 UJ,SV7c
100-01-6	4-Nitroaniline	U	601	ug/kg	180	601 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	601	ug/kg	120	601
122-66-7	Azobenzene	U	601	ug/kg	120	601
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	601	ug/kg	120	601
118-74-1	Hexachlorobenzene	U	601	ug/kg	120	601
85-01-8	Phenanthrene		89.0	ug/kg	18.0	60.1
120-12-7	Anthracene	U	60.1	ug/kg	12.0	60.1
84-74-2	Di-n-butylphthalate	U	601	ug/kg	120	601
206-44-0	Fluoranthene		146	ug/kg	18.0	60.1
85-68-7	Butylbenzylphthalate	U	601	ug/kg	120	601
56-55-3	Benzo(a)anthracene	J	52.1	ug/kg	18.0	60.1
91-94-1	3,3'-Dichlorobenzidine	U	601	ug/kg	180	601
218-01-9	Chrysene		63.6	ug/kg	18.0	60.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	601	ug/kg	120	601
117-84-0	Di-n-octylphthalate	U	601	ug/kg	120	601
205-99-2	Benzo(b)fluoranthene		75.2	ug/kg	18.0	60.1
207-08-9	Benzo(k)fluoranthene	J	32.4	ug/kg	18.0	60.1
50-32-8	Benzo(a)pyrene	J	55.4	ug/kg	18.0	60.1
193-39-5	Indeno(1,2,3-cd)pyrene	J	31.3	ug/kg	18.0	60.1 J,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	60.1	ug/kg	18.0	60.1 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	60.1	ug/kg	18.0	60.1 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	601	ug/kg	120	601

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.81	352	ug/kg		JA
	Unknown	3.05	2200	ug/kg		J

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240002

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 44.7
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
112-95-8	Eicosane	9.87	327	ug/kg	91	NJ
1599-67-3	1-Docosene	9.89	500	ug/kg	99	NJ
	Unknown	10.32	504	ug/kg		J
	Unknown	10.42	796	ug/kg		J
	Unknown	11.18	5380	ug/kg		J
	Unknown	11.45	3540	ug/kg		J
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.56	385	ug/kg	86	NJ
	Unknown	11.93	12600	ug/kg		J
	Unknown	12.01	850	ug/kg		J
	Unknown	12.32	270	ug/kg		J
	Unknown	12.58	869	ug/kg		J
	Unknown	12.6	895	ug/kg		J
	Unknown	13.33	406	ug/kg		J
	Unknown	13.84	249	ug/kg		J
	Unknown	13.87	287	ug/kg		J
	Unknown	13.95	321	ug/kg		J
	Unknown	14.25	257	ug/kg		J
	Unknown	14.47	359	ug/kg		J

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363
108-95-2	Phenol	U	363	ug/kg	72.6	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.6	363 UJ,SV7c
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363
95-48-7	o-Cresol	U	363	ug/kg	72.6	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363
78-59-1	Isophorone	U	363	ug/kg	72.6	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363
65-85-0	Benzoic acid	U	726	ug/kg	181	726
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.6	363
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	363	ug/kg	72.6	363

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	363	ug/kg	72.6	363
208-96-8	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
51-28-5	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
132-64-9	2,4-Dinitrophenol	U	726	ug/kg	138	726 UJ,SV7c
84-66-2	Dibenzofuran	U	363	ug/kg	72.6	363
86-73-7	Diethylphthalate	U	363	ug/kg	72.6	363
7005-72-3	Fluorene	U	36.3	ug/kg	10.9	36.3
534-52-1	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363
100-01-6	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363 UJ,SV7c
122-39-4	4-Nitroaniline	U	363	ug/kg	109	363 UJ,SV7c
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	363	ug/kg	72.6	363
118-74-1	Azobenzene	U	363	ug/kg	72.6	363
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	363	ug/kg	72.6	363
84-74-2	Hexachlorobenzene	U	363	ug/kg	72.6	363
206-44-0	Phenanthrene	U	36.3	ug/kg	10.9	36.3
85-68-7	Anthracene	U	36.3	ug/kg	7.26	36.3
56-55-3	Di-n-butylphthalate	U	363	ug/kg	72.6	363
91-94-1	Fluoranthene	U	36.3	ug/kg	10.9	36.3
218-01-9	Butylbenzylphthalate	U	363	ug/kg	72.6	363
117-81-7	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
117-84-0	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
205-99-2	Chrysene	U	36.3	ug/kg	10.9	36.3
207-08-9	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363
50-32-8	Di-n-octylphthalate	U	363	ug/kg	72.6	363
193-39-5	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
53-70-3	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
120-82-1	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3 UJ,SV7c
	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.81	221	ug/kg		JA
559-74-0	Friedelan-3-one	9.28	782	ug/kg	97	NJ

ETM
4/13/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240003	Date Received: 02/27/2010 09:10	%Moisture: 8.2
Client ID: RE36-10-7454	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 21:58	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1033.d	Allquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Flt
	Unknown		10.76	151	ug/kg	J
	Unknown		11.32	254	ug/kg	J
	Unknown		11.35	155	ug/kg	J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.4
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	441	ug/kg	88.2	441
108-95-2	Phenol	U	441	ug/kg	88.2	441
95-57-8	2-Chlorophenol	U	441	ug/kg	88.2	441
106-46-7	1,4-Dichlorobenzene	U	441	ug/kg	88.2	441
621-64-7	N-Nitrosodipropylamine	U	441	ug/kg	88.2	441
59-50-7	4-Chloro-3-methylphenol	U	441	ug/kg	88.2	441
83-32-9	Acenaphthene	U	44.1	ug/kg	14.5	44.1
121-14-2	2,4-Dinitrotoluene	U	441	ug/kg	44.1	441
100-02-7	4-Nitrophenol	U	441	ug/kg	145	441
87-86-5	Pentachlorophenol	U	441	ug/kg	110	441
129-00-0	Pyrene		75.4	ug/kg	13.2	44.1
110-86-1	Pyridine	U	441	ug/kg	88.2	441 UJ,SV7c
62-53-3	Aniline	U	441	ug/kg	132	441
111-44-4	bis(2-Chloroethyl) ether	U	441	ug/kg	88.2	441
541-73-1	1,3-Dichlorobenzene	U	441	ug/kg	88.2	441
100-51-6	Benzyl alcohol	U	441	ug/kg	132	441
95-50-1	1,2-Dichlorobenzene	U	441	ug/kg	88.2	441
108-60-1	bis(2-Chloroisopropyl)ether	U	441	ug/kg	88.2	441
95-48-7	o-Cresol	U	441	ug/kg	88.2	441
65794-96-9	m,p-Cresols	U	441	ug/kg	132	441
67-72-1	Hexachloroethane	U	441	ug/kg	88.2	441
98-95-3	Nitrobenzene	U	441	ug/kg	88.2	441
78-59-1	Isophorone	U	441	ug/kg	88.2	441
88-75-5	2-Nitrophenol	U	441	ug/kg	88.2	441
105-67-9	2,4-Dimethylphenol	U	441	ug/kg	154	441
111-91-1	bis(2-Chloroethoxy)methane	U	441	ug/kg	88.2	441
120-83-2	2,4-Dichlorophenol	U	441	ug/kg	88.2	441
65-85-0	Benzoic acid	J	627	ug/kg	220	882
91-20-3	Naphthalene	U	44.1	ug/kg	13.2	44.1
106-47-8	4-Chloroaniline	U	441	ug/kg	88.2	441
87-68-3	Hexachlorobutadiene	U	441	ug/kg	88.2	441
91-57-6	2-Methylnaphthalene	U	44.1	ug/kg	8.82	44.1
77-47-4	Hexachlorocyclopentadiene	U	441	ug/kg	88.2	441
88-06-2	2,4,6-Trichlorophenol	U	441	ug/kg	88.2	441
95-95-4	2,4,5-Trichlorophenol	U	441	ug/kg	88.2	441
91-58-7	2-Chloronaphthalene	U	44.1	ug/kg	14.5	44.1
88-74-4	2-Nitroaniline	U	441	ug/kg	88.2	441
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	441	ug/kg	88.2	441

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240006	Date Received: 02/27/2010 09:10	%Moisture: 24.4
Client ID: RE36-10-7455	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 23:06	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1036.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	441	ug/kg	88.2	441
606-20-2	2,6-Dinitrotoluene	U	441	ug/kg	44.1	441
208-96-8	Acenaphthylene	U	44.1	ug/kg	13.2	44.1
51-28-5	2,4-Dinitrophenol	U	882	ug/kg	168	882 UJ,SV7c
132-64-9	Dibenzofuran	U	441	ug/kg	88.2	441
84-66-2	Diethylphthalate	U	441	ug/kg	88.2	441
86-73-7	Fluorene	U	44.1	ug/kg	13.2	44.1
7005-72-3	4-Chlorophenylphenylether	U	441	ug/kg	88.2	441
534-52-1	2-Methyl-4,6-dinitrophenol	U	441	ug/kg	88.2	441 UJ,SV7c
100-01-6	4-Nitroaniline	U	441	ug/kg	132	441 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	441	ug/kg	88.2	441
122-66-7	Azobenzene	U	441	ug/kg	88.2	441
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	441	ug/kg	88.2	441
118-74-1	Hexachlorobenzene	U	441	ug/kg	88.2	441
85-01-8	Phenanthrene		53.7	ug/kg	13.2	44.1
120-12-7	Anthracene	U	44.1	ug/kg	8.82	44.1
84-74-2	Di-n-butylphthalate	U	441	ug/kg	88.2	441
206-44-0	Fluoranthene		90.3	ug/kg	13.2	44.1
85-68-7	Butylbenzylphthalate	U	441	ug/kg	88.2	441
56-55-3	Benzo(a)anthracene	J	36.0	ug/kg	13.2	44.1
91-94-1	3,3'-Dichlorobenzidine	U	441	ug/kg	132	441
218-01-9	Chrysene		47.7	ug/kg	13.2	44.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	441	ug/kg	88.2	441
117-84-0	Di-n-octylphthalate	U	441	ug/kg	88.2	441
205-99-2	Benzo(b)fluoranthene		50.7	ug/kg	13.2	44.1
207-08-9	Benzo(k)fluoranthene	U	44.1	ug/kg	13.2	44.1
50-32-8	Benzo(a)pyrene	J	36.5	ug/kg	13.2	44.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.1	ug/kg	13.2	44.1 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	44.1	ug/kg	13.2	44.1
191-24-2	Benzo(ghi)perylene	U	44.1	ug/kg	13.2	44.1
120-82-1	1,2,4-Trichlorobenzene	U	441	ug/kg	88.2	441

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.74	636	ug/kg	96	NJ
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.56	541	ug/kg	99	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.4
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
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.8	560	ug/kg	97	NJ
	Unknown	8.87	345	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	641	ug/kg	98	NJ
	Unknown	8.94	539	ug/kg		J
	Unknown	9.08	447	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1760	ug/kg	97	NJ
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.67	908	ug/kg	95	NJ
629-78-7	Heptadecane	9.87	557	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1570	ug/kg	99	NJ
	Unknown	10.2	461	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.29	668	ug/kg	95	NJ
	Unknown	10.32	579	ug/kg		J
	Unknown	10.63	573	ug/kg		J
	Unknown	11.11	2080	ug/kg		J
112-95-8	Eicosane	11.49	572	ug/kg	98	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.57	1300	ug/kg	91	NJ
	Unknown	11.81	2330	ug/kg		J
57-87-4	Ergosterol	12.52	625	ug/kg	91	NJ
83-47-6	.gamma.-Sitosterol	13.34	1350	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	14.48	652	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7456	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 22:44	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1035.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	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360 UJ,SV7c
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	o-Nitroaniline	U	360	ug/kg	72.1	360
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	360	ug/kg	72.1	360
208-96-8	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
51-28-5	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
132-64-9	2,4-Dinitrophenol	U	721	ug/kg	137	721 UJ,SV7c
84-66-2	Dibenzofuran	U	360	ug/kg	72.1	360
86-73-7	Diethylphthalate	U	360	ug/kg	72.1	360
7005-72-3	Fluorene	U	36.0	ug/kg	10.8	36.0
534-52-1	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360
100-01-6	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360 UJ,SV7c
	4-Nitroaniline	U	360	ug/kg	108	360 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360
122-66-7	Azobenzene	U	360	ug/kg	72.1	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360
206-44-0	Fluoranthene	U	36.0	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	U	36.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.51	387	ug/kg		J
	Unknown	8.81	454	ug/kg		J

ETM
4/13/10

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7456	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 22:44	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1035.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
65899-10-7	trans-1,2-Bis(methyldichlorosilyl)ethyle	8.9	1230	ug/kg	95	NJ
	Unknown	8.94	243	ug/kg		J
	Unknown	9.08	449	ug/kg		J
	Unknown	9.18	543	ug/kg		J
1000130-93-3	2-Methyl-cis-7,8-epoxynonadecane	9.27	1090	ug/kg	89	NJ
	Unknown	9.67	863	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.72	311	ug/kg	96	NJ
1599-67-3	1-Docosene	9.9	484	ug/kg	99	NJ
55591-17-8	s-Indacene-1,7-dione, 2,3,5,6-tetrahydro	10.01	231	ug/kg	80	NJ
	Unknown	10.2	285	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.3	465	ug/kg	95	NJ
	Unknown	10.32	628	ug/kg		J
	Unknown	10.58	340	ug/kg		J
	Unknown	11.78	590	ug/kg		J
83-46-5	.beta.-Sitosterol	13.34	859	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-2134
Lab Sample ID: 248240008

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7457
Batch ID: 960659
Run Date: 03/12/2010 20:57
Prep Date: 03/04/2010 10:53
Data File: s5c1228.d

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410 UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410 UJ,SV7c
87-86-5	Pentachlorophenol	U	410	ug/kg	103	410
129-00-0	Pyrene		161	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410 UJ,SV7c
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	144	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	615	ug/kg	205	820 J,SV7c
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	410	ug/kg	82.0	410 UJ,SV7c

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240008

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10

Matrix: R
%Moisture: 18.8

Client ID: RE36-10-7457
Batch ID: 960659
Run Date: 03/12/2010 20:57
Prep Date: 03/04/2010 10:53
Data File: s5c1228.d

Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820 UJ,SV7c
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	J	13.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene		126	ug/kg	12.3	41.0
120-12-7	Anthracene	J	20.4	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		181	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene		72.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene		89.9	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		148	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene		74.1	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene		42.0	ug/kg	12.3	41.0 J,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0 UJ,SV7c
191-24-2	Benzo(ghi)perylene	J	39.0	ug/kg	12.3	41.0 J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.79	208	ug/kg		J
	Unknown	8.95	716	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7457	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/12/2010 20:57	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5c1228.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	298	ug/kg	95	NJ
	Unknown	9.44	1400	ug/kg		J
	Unknown	9.7	442	ug/kg		J
	Unknown	9.72	283	ug/kg		J
31559-86-1	3Beta-acetoxy-6-nitroandrost-5-en-17-one	9.83	524	ug/kg	90	NJ
118625-56-2	1-Hexadecene, 16-bromo-	10.08	772	ug/kg	89	NJ
	Unknown	10.18	415	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	2670	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene		42.7	ug/kg	11.7	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388 UJ,SV7c
62-53-3	Aniline	U	388	ug/kg	117	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	117	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	117	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	J	568	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.7	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	388	ug/kg	77.7	388

ETM
4/13/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
Client ID: RE36-10-7458	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 21:11	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1031.d	Allquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dinethylphthalate	U	388	ug/kg	77.7	388
208-96-8	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
51-28-5	Acenaphthylene	U	38.8	ug/kg	11.7	38.8
132-64-9	2,4-Dinitrophenol	U	777	ug/kg	148	777 UJ,SV7c
84-66-2	Dibenzofuran	U	388	ug/kg	77.7	388
86-73-7	Diethylphthalate	U	388	ug/kg	77.7	388
7005-72-3	Fluorene	U	38.8	ug/kg	11.7	38.8
534-52-1	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
100-01-6	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388 UJ,SV7c
	4-Nitroaniline	U	388	ug/kg	117	388 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.7	388
122-66-7	Azobenzene	U	388	ug/kg	77.7	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.7	388
85-01-8	Phenanthrene	J	34.4	ug/kg	11.7	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.77	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.7	388
206-44-0	Fluoranthene		52.7	ug/kg	11.7	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.7	388
56-55-3	Benzo(a)anthracene	J	26.7	ug/kg	11.7	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	117	388
218-01-9	Chrysene	J	26.4	ug/kg	11.7	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.7	388
205-99-2	Benzo(b)fluoranthene	J	30.1	ug/kg	11.7	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.7	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.7	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.7	38.8 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.7	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.7	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1940	ug/kg	99	NJ
	Unknown	8.81	376	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7458	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 21:11	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Allquot: 30 g	Final Volume: 1 mL
Data File: s5c1031.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	463	ug/kg	98	NJ
	Unknown	8.94	738	ug/kg		J
	Unknown	9.08	496	ug/kg		J
	Unknown	9.18	408	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1530	ug/kg	97	NJ
	Unknown	9.3	449	ug/kg		J
	Unknown	9.37	412	ug/kg		J
	Unknown	9.51	581	ug/kg		J
	Unknown	9.54	569	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	9.58	746	ug/kg	91	NJ
	Unknown	9.67	847	ug/kg		J
	Unknown	9.73	555	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.87	526	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1160	ug/kg	99	NJ
	Unknown	10.01	497	ug/kg		J
	Unknown	10.08	631	ug/kg		J
	Unknown	10.21	519	ug/kg		J
106-28-5	2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	10.3	670	ug/kg	90	NJ
	Unknown	11.09	849	ug/kg		J
	Unknown	11.79	670	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.52	966	ug/kg	92	NJ
83-47-6	.gamma.-Sitosterol	13.35	2810	ug/kg	99	NJ
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	13.68	747	ug/kg	91	NJ
	Unknown	13.87	1040	ug/kg		J
	Unknown	14.26	609	ug/kg		J

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7459
Batch ID: 960659
Run Date: 03/11/2010 19:25
Prep Date: 03/04/2010 10:53
Data File: s5c1124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410 UJ,SV7c
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene		51.7	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410 UJ,SV7c
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	552	ug/kg	205	820 J,SV7c
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	410	ug/kg	82.0	410 UJ,SV7c

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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820 UJ,SV7c
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	J	36.9	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		63.4	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	J	27.8	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	J	36.8	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		43.9	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	J	24.7	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	230	ug/kg		JA
13466-78-9	3-Carene	3.87	349	ug/kg	97	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7459	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/11/2010 19:25	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s5c1124.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualfler	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Flt	Qual
103-82-2	Benzeneacetic acid	4.9	249	ug/kg	91	NJ
3386-33-2	Octadecane, 1-chloro-	8.74	182	ug/kg	96	NJ
	Unknown	8.96	199	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	237	ug/kg	93	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	243	ug/kg	98	NJ
	Unknown	9.08	332	ug/kg		J
1599-67-3	1-Docosene	9.4	561	ug/kg	99	NJ
	Unknown	9.83	166	ug/kg		J
	Unknown	9.9	208	ug/kg		J
	Unknown	10.05	553	ug/kg		J
	Unknown	10.16	190	ug/kg		J
	Unknown	10.38	241	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	10.48	319	ug/kg	89	NJ
	Unknown	10.82	268	ug/kg		J
112-95-8	Eicosane	11.75	197	ug/kg	95	NJ
55030-21-2	Cyclohexane, 1,1'-(2-propyl-1,3-propaned	11.82	774	ug/kg	91	NJ
	Unknown	11.99	215	ug/kg		J
	Unknown	12.09	274	ug/kg		J
	Unknown	12.58	435	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.86	405	ug/kg	93	NJ
	Unknown	13.22	246	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.73	1390	ug/kg	96	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7460
Batch ID: 960659
Run Date: 03/10/2010 22:21
Prep Date: 03/04/2010 10:53
Data File: s5c1034.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367 UJ,SV7c
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	184	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	367	ug/kg	73.4	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240004	Date Received: 02/27/2010 09:10	%Moisture: 9.5
Client ID: RE36-10-7460	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 22:21	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1034.d	Aliquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	367	ug/kg	73.4	367
208-96-8	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	140	734 UJ,SV7c
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367 UJ,SV7c
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	232	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240004	Date Received: 02/27/2010 09:10	%Moisture: 9.5
Client ID: RE36-10-7460	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 22:21	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1034.d	Allquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
1599-67-3	1-Docosene	9.27	346	ug/kg	93	NJ
112-95-8	Eicosane	9.87	181	ug/kg	98	NJ
629-96-9	1-Eicosanol	9.89	1310	ug/kg	94	NJ
	Unknown	10.2	212	ug/kg		J
	Unknown	10.29	161	ug/kg		J
638-66-4	Octadecanal	10.37	209	ug/kg	91	NJ
	Unknown	10.58	374	ug/kg		J
7320-37-8	Oxirane, tetradecyl-	11.23	318	ug/kg	89	NJ
	Unknown	11.49	151	ug/kg		J
	Unknown	11.57	279	ug/kg		J
83-46-5	.beta.-Sitosterol	13.34	608	ug/kg	97	NJ
	Unknown	14.27	195	ug/kg		J
	Unknown	14.47	164	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7519
Batch ID: 960659
Run Date: 03/11/2010 20:33
Prep Date: 03/04/2010 10:53
Data File: s5c1127.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	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 UJ,SV7c
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene		45.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422 UJ,SV7c
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid		854	ug/kg	211	844 J,SV7c
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	422	ug/kg	84.4	422 UJ,SV7c

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

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
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	J	295	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene		892	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	844	ug/kg	160	844 UJ,SV7c
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	J	34.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene		54.5	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	J	26.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	J	32.8	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	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 UJ,SV7c
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	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	430	ug/kg		JA
103-82-2	Benzeneacetic acid	4.91	467	ug/kg	90	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
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
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.71	187	ug/kg	93	NJ
295-48-7	Cyclopentadecane	8.73	274	ug/kg	96	NJ
	Unknown	8.96	296	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	280	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	239	ug/kg	97	NJ
	Unknown	9.08	393	ug/kg		J
1599-67-3	1-Docosene	9.4	587	ug/kg	99	NJ
	Unknown	9.7	786	ug/kg		J
	Unknown	9.94	2270	ug/kg		J
	Unknown	10.05	964	ug/kg		J
	Unknown	10.38	295	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	10.48	447	ug/kg	95	NJ
930-02-9	Octadecane, 1-(ethenyloxy)-	10.82	332	ug/kg	93	NJ
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.82	866	ug/kg	89	NJ
	Unknown	12	282	ug/kg		J
	Unknown	12.11	283	ug/kg		J
	Unknown	12.58	500	ug/kg		J
	Unknown	12.86	314	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.74	1230	ug/kg	93	NJ

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7520
Batch ID: 960659
Run Date: 03/12/2010 21:20
Prep Date: 03/04/2010 10:53
Data File: s5c1229.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	575	ug/kg	115	575
108-95-2	Phenol	U	575	ug/kg	115	575
95-57-8	2-Chlorophenol	U	575	ug/kg	115	575
106-46-7	1,4-Dichlorobenzene	U	575	ug/kg	115	575
621-64-7	N-Nitrosodipropylamine	U	575	ug/kg	115	575 UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	575	ug/kg	115	575
83-32-9	Acenaphthene	U	57.5	ug/kg	19.0	57.5
121-14-2	2,4-Dinitrotoluene	U	575	ug/kg	57.5	575
100-02-7	4-Nitrophenol	U	575	ug/kg	190	575 UJ,SV7c
87-86-5	Pentachlorophenol	U	575	ug/kg	144	575
129-00-0	Pyrene		101	ug/kg	17.3	57.5
110-86-1	Pyridine	U	575	ug/kg	115	575 UJ,SV7c
62-53-3	Aniline	U	575	ug/kg	173	575
111-44-4	bis(2-Chloroethyl) ether	U	575	ug/kg	115	575
541-73-1	1,3-Dichlorobenzene	U	575	ug/kg	115	575
100-51-6	Benzyl alcohol	U	575	ug/kg	173	575
95-50-1	1,2-Dichlorobenzene	U	575	ug/kg	115	575
108-60-1	bis(2-Chloroisopropyl)ether	U	575	ug/kg	115	575
95-48-7	o-Cresol	U	575	ug/kg	115	575
65794-96-9	m,p-Cresols	U	575	ug/kg	173	575
67-72-1	Hexachloroethane	U	575	ug/kg	115	575
98-95-3	Nitrobenzene	U	575	ug/kg	115	575
78-59-1	Isophorone	U	575	ug/kg	115	575
88-75-5	2-Nitrophenol	U	575	ug/kg	115	575
105-67-9	2,4-Dimethylphenol	U	575	ug/kg	201	575
111-91-1	bis(2-Chloroethoxy)methane	U	575	ug/kg	115	575
120-83-2	2,4-Dichlorophenol	U	575	ug/kg	115	575
65-85-0	Benzoic acid	U	1150	ug/kg	288	1150 UJ,SV7c
91-20-3	Naphthalene	U	57.5	ug/kg	17.3	57.5
106-47-8	4-Chloroaniline	U	575	ug/kg	115	575
87-68-3	Hexachlorobutadiene	U	575	ug/kg	115	575
91-57-6	2-Methylnaphthalene	U	57.5	ug/kg	11.5	57.5
77-47-4	Hexachlorocyclopentadiene	U	575	ug/kg	115	575
88-06-2	2,4,6-Trichlorophenol	U	575	ug/kg	115	575
95-95-4	2,4,5-Trichlorophenol	U	575	ug/kg	115	575
91-58-7	2-Chloronaphthalene	U	57.5	ug/kg	19.0	57.5
88-74-4	2-Nitroaniline	U	575	ug/kg	115	575
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	575	ug/kg	115	575 UJ,SV7c

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-2134

Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00

Date Received: 02/27/2010 09:10

Matrix: R

%Moisture: 42.2

Client ID: RE36-10-7520

Batch ID: 960659

Run Date: 03/12/2010 21:20

Prep Date: 03/04/2010 10:53

Data File: s5c1229.d

Client: LANL010

Method: SW846 8270C

Inst: MSD5.I

Analyst: RMB

Allquot: 30.09 g

Column: J&W DB-5MS

Project: LANL01004

SOP Ref: GL-OA-E-009

Dilution: 1

Inj. Vol: .5 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	575	ug/kg	115	575
606-20-2	2,6-Dinitrotoluene	U	575	ug/kg	57.5	575
208-96-8	Acenaphthylene	U	57.5	ug/kg	17.3	57.5
51-28-5	2,4-Dinitrophenol	U	1150	ug/kg	219	1150 UJ,SV7c
132-64-9	Dibenzofuran	U	575	ug/kg	115	575
84-66-2	Diethylphthalate	U	575	ug/kg	115	575
86-73-7	Fluorene	U	57.5	ug/kg	17.3	57.5
7005-72-3	4-Chlorophenylphenylether	U	575	ug/kg	115	575
534-52-1	2-Methyl-4,6-dinitrophenol	U	575	ug/kg	115	575
100-01-6	4-Nitroaniline	U	575	ug/kg	173	575
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	575	ug/kg	115	575
122-66-7	Azobenzene	U	575	ug/kg	115	575
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	575	ug/kg	115	575
118-74-1	Hexachlorobenzene	U	575	ug/kg	115	575
85-01-8	Phenanthrene		86.0	ug/kg	17.3	57.5
120-12-7	Anthracene	U	57.5	ug/kg	11.5	57.5
84-74-2	Di-n-butylphthalate	U	575	ug/kg	115	575
206-44-0	Fluoranthene		131	ug/kg	17.3	57.5
85-68-7	Butylbenzylphthalate	U	575	ug/kg	115	575
56-55-3	Benzo(a)anthracene	J	49.0	ug/kg	17.3	57.5
91-94-1	3,3'-Dichlorobenzidine	U	575	ug/kg	173	575
218-01-9	Chrysene	J	52.3	ug/kg	17.3	57.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	575	ug/kg	115	575
117-84-0	Di-n-octylphthalate	U	575	ug/kg	115	575
205-99-2	Benzo(b)fluoranthene		67.1	ug/kg	17.3	57.5
207-08-9	Benzo(k)fluoranthene	J	29.2	ug/kg	17.3	57.5
50-32-8	Benzo(a)pyrene	J	43.3	ug/kg	17.3	57.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	26.0	ug/kg	17.3	57.5 J,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	57.5	ug/kg	17.3	57.5 UJ,SV7c
191-24-2	Benzo(ghi)perylene	J	26.7	ug/kg	17.3	57.5 J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	575	ug/kg	115	575

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	754	ug/kg		JA
	Unknown	3.18	1460	ug/kg		J

ETM
4/13/10

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00

Matrix: R

Date Received: 02/27/2010 09:10

%Moisture: 42.2

Client: LANL010

Project: LANL01004

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Inst: MSD5.I

Dilution: 1

Client ID: RE36-10-7520

Batch ID: 960659

Run Date: 03/12/2010 21:20

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 03/04/2010 10:53

Allquot: 30.09 g

Final Volume: 1 mL

Data File: s5c1229.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	Flt	Qual
	Unknown	9.19	328	ug/kg		J
112-95-8	Eicosane	9.38	252	ug/kg	96	NJ
1599-67-3	1-Docosene	9.42	667	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	9.68	291	ug/kg	95	NJ
559-74-0	Friedelan-3-one	9.9	3840	ug/kg	99	NJ
	Unknown	10.01	479	ug/kg		J
	Unknown	10.07	1740	ug/kg		J
629-78-7	Heptadecane	10.36	394	ug/kg	91	NJ
	Unknown	11.72	690	ug/kg		J
	Unknown	11.8	2180	ug/kg		J
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.84	1500	ug/kg	83	NJ
	Unknown	11.96	558	ug/kg		J
	Unknown	12.1	891	ug/kg		J
	Unknown	12.57	5360	ug/kg		J
	Unknown	12.91	383	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1090	ug/kg	94	NJ
	Unknown	14.38	742	ug/kg		J

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2134 VALIDATION DATE: 4/13/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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


Section II. Completeness Check


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

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


1. In the ICV associated with all the samples except RE36-10-7458, the %D was >20% but ≤40% with a negative bias for 1,3,5-trinitrobenzene. The associated sample results were NDs and, thus, were qualified UJ,P7c. In the CCV associated with sample -7458, the %D was >20% with a positive bias for RDX. In the CCV associated with all the other samples, the %Ds were >20% with a positive bias for HMX and RDX. The associated sample results were NDs and, thus, were not qualified.
2. The LCS %R was > the laboratory's UAL for 2,6-diamino-4-nitrotoluene. The associated sample results were NDs and, thus, were not qualified.
3. The MS %R was > the laboratory's UAL for TATB. The associated sample results were NDs and, thus, were not qualified. The MSD %R was < the laboratory's LAL but ≥10% for tetra. The associated sample results were NDs and, thus, were qualified UJ,HE12e. The MS/MSD RPDs were > the laboratory's acceptance limit for tetra and 2,4-diamino-6-nitrotoluene. The associated sample result was an ND and, thus, was qualified UJ,HE12g.
4. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis was not reported in the data package. Thus, surrogate RT criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: Allison Felix Level: 1 Date: 4/16/10


DATA VALIDATION COVER SHEET	
5122-1	Records Use only
Data Validation Cover Sheet	 Los Alamos NATIONAL LABORATORY F11.1985
VALIDATOR'S SIGNATURE: <u>Eli T. Mith</u> DATE: <u>4/13/10</u>	
Form 5122-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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


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

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

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

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

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

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

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323097a

Date Analyzed: 25-MAR-10 08:20

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,HE12e	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160093.wiff

Date Analyzed: 17-MAR-10 08:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325014a

Date Analyzed: 25-MAR-10 23:10

Units: ug/kg

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160096.wiff

Date Analyzed: 17-MAR-10 09:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Moisture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325015a

Date Analyzed: 25-MAR-10 23:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Molsture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160097.wiff

Date Analyzed: 17-MAR-10 09:25

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325016a

Date Analyzed: 26-MAR-10 00:09

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,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160098.wiff

Date Analyzed: 17-MAR-10 09:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325017a

Date Analyzed: 26-MAR-10 00:38

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,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160099.wiff

Date Analyzed: 17-MAR-10 09:57

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 UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325018a

Date Analyzed: 26-MAR-10 01:08

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,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160100.wiff

Date Analyzed: 17-MAR-10 10:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325019a

Date Analyzed: 26-MAR-10 01:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160104.wiff

Date Analyzed: 17-MAR-10 11:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325020a

Date Analyzed: 26-MAR-10 02:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160105.wiff

Date Analyzed: 17-MAR-10 11:31

Units: ng/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325021a

Date Analyzed: 26-MAR-10 02:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160106.wiff

Date Analyzed: 17-MAR-10 11:47

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 UJ,HE12g	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

ETM
4/13/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325022a

Date Analyzed: 26-MAR-10 03:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12e	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 UJ,HE7c	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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160107.wiff


Date Analyzed: 17-MAR-10 12:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE12g	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 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.		
REQUEST NUMBER: <u>10-2134</u>	VALIDATION DATE: <u>4/15/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Eric T. Mink</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"/> OTHER (DESCRIBE): <u>PCBs</u>		<input type="checkbox"/> LCMSMS PERCHLORATES <input checked="" type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS

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

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

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from a different RN and the raw data for the parent sample was not provided in the data package. However, MS/MSD analyses are not required for these analyses and, thus, no sample data were qualified.

Reviewed by: Allison Felix Level: 1 Date: 4/16/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 4/15/10

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



Yes No N/A				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 checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only  Los Alamos NATIONAL LABORATORY EST. 1942

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

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240010

Client ID: RE36-10-7519
Batch ID: 965805
Run Date: 03/17/2010 09:48
Prep Date: 03/16/2010 21:02
Data File: 022f2201.d
022b2201.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.17 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Partname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.20	ug/kg	1.40	4.20	1
11104-28-2	Aroclor-1221	U	4.20	ug/kg	1.40	4.20	1
11141-16-5	Aroclor-1232	U	4.20	ug/kg	1.40	4.20	1
53469-21-9	Aroclor-1242	U	4.20	ug/kg	1.40	4.20	1
12672-29-6	Aroclor-1248	U	4.20	ug/kg	1.40	4.20	1
11097-69-1	Aroclor-1254	J	2.50	ug/kg	1.40	4.20	1
11096-82-5	Aroclor-1260	U	4.20	ug/kg	1.40	4.20	1

ETM
4/15/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2134
Lab Sample ID: 248240009Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOWClient ID: RE36-10-7520
Batch ID: 965805
Run Date: 03/17/2010 09:35
Prep Date: 03/16/2010 21:02
Data File: 021f2101.d
021b2101.d

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.75	ug/kg	1.91	5.75	1
11104-28-2	Aroclor-1221	U	5.75	ug/kg	1.91	5.75	1
11141-16-5	Aroclor-1232	U	5.75	ug/kg	1.91	5.75	1
53469-21-9	Aroclor-1242	U	5.75	ug/kg	1.91	5.75	1
12672-29-6	Aroclor-1248	U	5.75	ug/kg	1.91	5.75	1
11097-69-1	Aroclor-1254	U	5.75	ug/kg	1.91	5.75	1
11096-82-5	Aroclor-1260	U	5.75	ug/kg	1.91	5.75	1

ETM
4/15/10

Friday, February 26, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2134

LOS ALAMOS

REQUEST NUMBER: 10-2134

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/28/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248240

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7458	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7458	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7453	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7453	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7454	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7454	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7460	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7460	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7456	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7456	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7455	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7455	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7459	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7459	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7457	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7457	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7542	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, February 26, 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: 2/26/2010

TURNAROUND/REPORT DUE: 3/28/2010

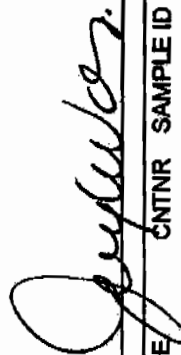
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 2

REQUEST NUMBER: 10-2134

These Samples are on:

LANL Request Number: 10-2134

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
	SW-846:82608	1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	

Friday, February 26, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7542	S	2/24/2010	
	SW-846:8270C	1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
	SW-846:8321A_MOD	1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2134



April 15, 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: 248240
SDG: 10-2134

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 27, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This report has been revised to reflect the correct data for GC Semivolatile PCB.

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: 10-2134
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248240
SDG: 10-2134

Table of Contents

Case Narrative.....	1
Chain of Custody and Supporting Documentation	5
Data Review Qualifier Flag Definition Sheet	15
GC/MS Volatile Analysis	17
Case Narrative.....	18
Sample Data Summary	24
Quality Control Summary.....	47
Sample Data	70
Standards	183
Quality Control Data	232
Miscellaneous	277
GC/MS Semivolatile Analysis	300
Sample Data Summary	307
QC Summary	338
Sample Data	361
Standard Data	716
QC Data	798
Miscellaneous Data	836
LC/MS/MS Explosives Analysis.....	857
Sample Data Summary	863
Quality Control Summary.....	884
Sample Data	995
Standards Data.....	1066
Quality Control Data	1247
Miscellaneous Data	1276
GC Semivolatile PCB Analysis	1290
Sample Data Summary	1296
Quality Control Summary.....	1299
Sample Data	1305
Standards Data.....	1318
Quality Control Data	1390
Miscellaneous Data	1405

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248240
SDG # : 10-2134**

March 06, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 27, 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 original chain of custody was received 3/2/10. 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:

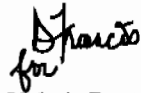
<u>Laboratory ID</u>	<u>Client ID</u>
248240001	RE36-10-7458
248240002	RE36-10-7453
248240003	RE36-10-7454
248240004	RE36-10-7460
248240005	RE36-10-7456
248240006	RE36-10-7455
248240007	RE36-10-7459
248240008	RE36-10-7457
248240009	RE36-10-7520
248240010	RE36-10-7519
248240011	RE36-10-7542

Case Narrative

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

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

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

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

Valerie Davis

Project Manager

List of current GEL Certifications as of 06 March 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, February 26, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2134

LOS ALAMOS

REQUEST NUMBER: 10-2134

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/28/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248240

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7458	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7458	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7453	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7453	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7454	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7454	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7460	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7460	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7456	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7456	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7455	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7455	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7459	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7459	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7457	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7457	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7542	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, February 26, 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: 2/26/2010

TURNAROUND/REPORT DUE: 3/28/2010

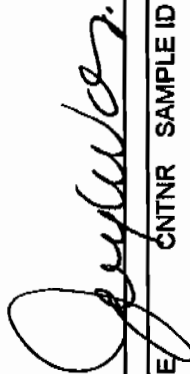
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



These Samples are on:
LANL Request Number: 10-2134
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Page 1 of 2
REQUEST NUMBER: 10-2134

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	

SW-846:8260B

Friday, February 26, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7542	S	2/24/2010	
	SW-846:8270C	1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
	SW-846:8321A_MOD	1	RE36-10-7453	R	2/24/2010	
		1	RE36-10-7454	R	2/24/2010	
		1	RE36-10-7455	R	2/24/2010	
		1	RE36-10-7456	R	2/24/2010	
		1	RE36-10-7457	R	2/24/2010	
		1	RE36-10-7458	R	2/24/2010	
		1	RE36-10-7459	R	2/24/2010	
		1	RE36-10-7460	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2134



SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-2134		
Received By: Patricia Dover-Dent			Date Received: 2/27/10		
Suspected Hazard Information		Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.	
COC/Samples marked as radioactive?			X	Maximum Counts Observed*: 60cpm	
Classified Radioactive II by RSO?			X		
COC/Samples marked containing PCBs?			X		
Shipped as a DOT Hazardous?			X	Hazard Class Shipped: UN#:	
Samples identified as Foreign Soil?			X		

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

Comments:

Fed Ex Tracking Numbers:

7209 7850 2525 1C 7209 7850 2570 5C
7209 7850 2606 1C 7209 7850 2558 6C
7209 7850 2547 1C 7209 7850 2536 6C
7209 7850 2639 2C 7209 7850 2591 6C
7209 7850 2580 2C 7209 7850 2514 10C
7209 7850 2499 2C 7209 7850 2628 11C
7209 7850 2617 3C 7209 7850 2503 11C
7209 7850 2569 4C

PM (or PMA) review: Initials

MP

Date

3/3/10

Subject: Sample Receipt for 2/27/10

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

Date: Mon, 01 Mar 2010 13:52:03 -0500

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

Keith,

The lab did not receive any original chain of custodies.

RN 10-2149: the lab did not receive the RAD poly container for sample WSTTH-10-13314.

RN 10-2148: the lab did not receive the GrossG container for sample WSTTH-10-13314

RN 10-2145: the lab did not receive the 40ml vial container for sample RE46-10-13543.

RN 10-2098: the Metals container for sample WST16-10-12239 will be preserved prior to analysis.

The following containers were rec'd without a COC:

RE36-10-7533 and 7535

250 poly Perchlorate, 500ml poly TCN, 1L poly Metals+U

RE36-10-7416 thru 7420, 7477 thru 7490, 7492 thru 7500, 7521 thru 7523

125ml poly Metals, 500ml amber glass 8270+NMED Exp, 500ml poly Perchlorate

RE36-10-7491

500ml amber glass H3, 8270+NMED Exp

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) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 26FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: MR3A0223CY10

FedEx
Express



1 of 2
TRKH 0201 7209 7850 2525
NN MASTER NN

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

294



LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: MR3A0223FCY10

FedEx
Express



1 of 2
TRKH 0201 7209 7850 2547
NN MASTER NN

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 26FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: MR2A0515BYD0

FedEx
Express



1 of 2
TRKH 0201 7209 7850 2606
NN MASTER NN

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



LOS ALAMOS, NM 87545
UNITED STATES US

LOS ALAMOS, NM 87545
UNITED STATES US

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: MR3A0223CY10

FedEx
Express



2 of 2
TRKH 0201 7209 7850 2639
NN MASTER NN

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

JOYLENE VALDEZ (505) 665-9968

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 26FEB10
ACTWGT: 67.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

ORIGIN ID: SAFA (505) 665-9968

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 26FEB10
ACTWGT: 68.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 656-8171

REF: MR2A0515BYD0

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 656-8171

REF: MR3A0223CY10

FedEx
Express



FedEx
Express



1 of 2
TRK# 7209 7850 2580
NM MASTER NM

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

1 of 3
TRK# 7209 7850 2499
NM MASTER NM

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 656-8171

REF: MR2A0515BYD0

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 69.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 656-8171

REF: MR2A0515BYD0

FedEx
Express



FedEx
Express



2 of 2
MPS# 7209 7850 2617
Metri# 7209 7850 2606 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

1 of 2
TRK# 7209 7850 2569
NM MASTER NM

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 25FEB10
ACTWGT: 63.8 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

5c
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: MR3A0223CY10

FedEx
Express



2 of 2
IPSN 7209 7850 2570
str# 7209 7850 2569 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA



LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

6c
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: MR3A0223CY10

FedEx
Express



2 of 2
IPSN 7209 7850 2536
str# 7209 7850 2525 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA



ORIGIN ID: SAFA (505) 665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 25FEB10
ACTWGT: 58.8 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

6c
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: MR3A0223FCY10

FedEx
Express



2 of 2
IPSN 7209 7850 2558
str# 7209 7850 2547 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA



LOS ALAMOS, NM 87545
UNITED STATES US

6c
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: MR2A0515BYD0

FedEx
Express



2 of 2
IPSN 7209 7850 2591
str# 7209 7850 2580 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

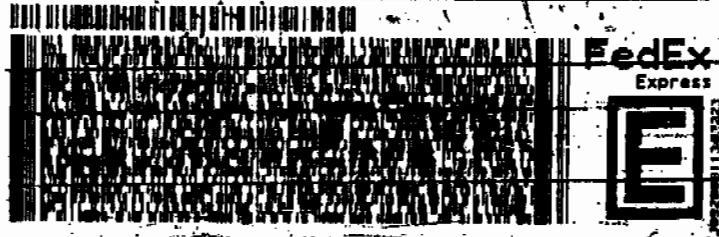


ORIGIN ID: SAFA (805) 665-8171
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DRJ 03
LOS ALAMOS NM 87545
UNITED STATES US
SHIP DATE: 26 FEB 10
ACTMGT: 39 LB MAN
CAD: 0014176/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 666-8171
REF: MR3A0223CY10

10c



3 of 3
NPS# 7209 7850 2514
Matr# 7209 7850 2499 0201
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS

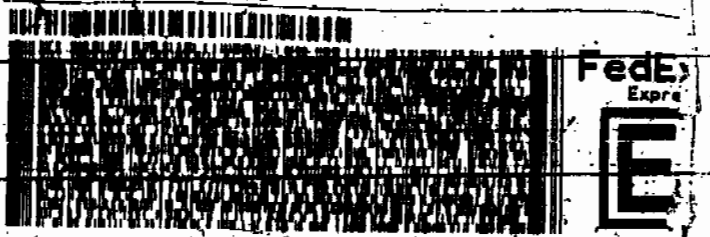


ORIGIN ID: SAFA (805) 665-8171
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DRJ 03
LOS ALAMOS NM 87545
UNITED STATES US
SHIP DATE: 26 FEB 10
ACTMGT: 39 LB MAN
CAD: 0014176/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 666-8171
REF: MR3A0223CY10

11c



1 of 2
NPS# 7209 7850 2628
Matr# 7209 7850 2499 0201
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (805) 665-8171
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DRJ 03
LOS ALAMOS NM 87545
UNITED STATES US
SHIP DATE: 26 FEB 10
ACTMGT: 39 LB MAN
CAD: 0014176/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 666-8171
REF: MR3A0223CY10

11c



2 of 3
NPS# 7209 7850 2503
Matr# 7209 7850 2499 0201
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

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

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

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

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

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

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

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

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

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

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

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

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

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

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

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

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

Y QC Samples were not spiked with this compound

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

GC/MS Volatile Analysis

Case Narrative

**ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2134**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 961880
Prep Batch Number: 961878

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
248240001	RE36-10-7458
248240002	RE36-10-7453
248240003	RE36-10-7454
248240004	RE36-10-7460
248240005	RE36-10-7456
248240006	RE36-10-7455
248240007	RE36-10-7459
248240008	RE36-10-7457
248240009	RE36-10-7520
248240010	RE36-10-7519
248240011	RE36-10-7542
1202063154	Method Blank (MB)
1202063157	Laboratory Control Sample (LCS)
1202063158	Laboratory Control Sample (LCS)
1202067797	Method Blank (MB)
1202067798	Laboratory Control Sample (LCS)
1202067799	Laboratory Control Sample (LCS)
1202063155	248244006(RE36-10-8479) Post Spike (PS)
1202063156	248244006(RE36-10-8479) 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 248240 001, 002, 003, 004, 005, 006, 007, 008, 009 and 010 in this SDG were analyzed on an "dry weight" basis. Samples 248240 011 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 14.

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

Calibration Information

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

The surrogate recoveries, in the following samples, were above the acceptance limits. Sample re-analysis confirmed matrix interference: 248240006 (RE36-10-7455), 248240007 (RE36-10-7459), 248240008 (RE36-10-7457) and 248240010 (RE36-10-7519). See DER# 805551.

Laboratory Control Sample (LCS) Recovery

The LCS recoveries were not all within the acceptance limits. The unacceptable recoveries were less than 5% of the requested analyte list. This satisfies the client criteria. The results are reported: 1202063158 (LCS) and 1202067799 (LCS). See DER# 805551.

QC Sample Designation

Sample 248244006 (RE36-10-8479) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

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

Matrix Spike Duplicate (PSD) Recovery Statement

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

Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

In the following samples, internal standard responses were outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 248240001 (RE36-10-7458), 248240005 (RE36-10-7456), 248240006 (RE36-10-7455), 248240007 (RE36-10-7459), 248240008 (RE36-10-7457) and 248240010 (RE36-10-7519). See DER# 805551.

Technical Information**Holding Time Specifications**

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

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Electronic Packaging Comment**

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

Data Exception (DER) Documentation

A Data Exception Document was not required for this SDG.

Manual Integrations

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

TIC Comment

Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Residual Chlorine

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

System Configuration

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

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
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: 10-2134 GEL Work Order: 248240

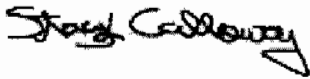
The Qualifiers in this report are defined as follows:

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

Review/Validation

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

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

Signature: 

Name: Stacy Calloway

Date: 26 MAR 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240001
 Client ID: RE36-10-7458
 Batch ID: 961880
 Run Date: 03/05/2010 18:37
 Prep Date: 03/05/2010 10:26
 Data File: 030510V55A509.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 14.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	J	2.18	ug/kg	1.93	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.384	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.384	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7458	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOAS.I	Dilution: 1
Run Date: 03/05/2010 18:37	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:26	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\5A509.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene		2.64	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.83	ug/kg	1.86	5.83
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

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: 10-2134
Lab Sample ID: 248240002

Client ID: RE36-10-7453
Batch ID: 961880
Run Date: 03/05/2010 19:02
Prep Date: 03/05/2010 10:32
Data File: 030510V55A510.D

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 44.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.81	ug/kg	0.615	1.81
74-87-3	Chloromethane	U	1.81	ug/kg	0.543	1.81
75-01-4	Vinyl chloride	U	1.81	ug/kg	0.543	1.81
74-83-9	Bromomethane	U	1.81	ug/kg	0.543	1.81
75-00-3	Chloroethane	U	1.81	ug/kg	0.543	1.81
75-69-4	Trichlorofluoromethane	U	1.81	ug/kg	0.543	1.81
67-64-1	Acetone	U	9.05	ug/kg	3.00	9.05
75-35-4	1,1-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
74-88-4	Iodomethane	U	9.05	ug/kg	2.89	9.05
75-09-2	Methylene chloride	U	9.05	ug/kg	3.62	9.05
75-15-0	Carbon disulfide	U	9.05	ug/kg	2.26	9.05
156-60-5	trans-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
75-34-3	1,1-Dichloroethane	U	1.81	ug/kg	0.543	1.81
78-93-3	2-Butanone	U	9.05	ug/kg	2.71	9.05
156-59-2	cis-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
594-20-7	2,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
67-66-3	Chloroform	U	1.81	ug/kg	0.543	1.81
74-97-5	Bromochloromethane	U	1.81	ug/kg	0.597	1.81
71-55-6	1,1,1-Trichloroethane	U	1.81	ug/kg	0.543	1.81
563-58-6	1,1-Dichloropropene	U	1.81	ug/kg	0.543	1.81
56-23-5	Carbon tetrachloride	U	1.81	ug/kg	0.543	1.81
107-06-2	1,2-Dichloroethane	U	1.81	ug/kg	0.543	1.81
71-43-2	Benzene	U	1.81	ug/kg	0.543	1.81
79-01-6	Trichloroethylene	U	1.81	ug/kg	0.597	1.81
78-87-5	1,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
75-27-4	Bromodichloromethane	U	1.81	ug/kg	0.543	1.81
74-95-3	Dibromomethane	U	1.81	ug/kg	0.543	1.81
108-10-1	4-Methyl-2-pentanone	U	9.05	ug/kg	2.26	9.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
108-88-3	Toluene	U	1.81	ug/kg	0.543	1.81
10061-02-6	trans-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
79-00-5	1,1,2-Trichloroethane	U	1.81	ug/kg	0.543	1.81
591-78-6	2-Hexanone	U	9.05	ug/kg	2.71	9.05
142-28-9	1,3-Dichloropropane	U	1.81	ug/kg	0.543	1.81
127-18-4	Tetrachloroethylene	U	1.81	ug/kg	0.543	1.81
124-48-1	Dibromochloromethane	U	1.81	ug/kg	0.543	1.81
106-93-4	1,2-Dibromoethane	U	1.81	ug/kg	0.543	1.81
108-90-7	Chlorobenzene	U	1.81	ug/kg	0.543	1.81

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240002
 Client ID: RE36-10-7453
 Batch ID: 961880
 Run Date: 03/05/2010 19:02
 Prep Date: 03/05/2010 10:32
 Data File: 030510V55A510.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 44.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.81	ug/kg	0.543	1.81
179601-23-1	m,p-Xylenes	U	3.62	ug/kg	0.543	3.62
95-47-6	o-Xylene	U	1.81	ug/kg	0.543	1.81
100-42-5	Styrene	U	1.81	ug/kg	0.543	1.81
75-25-2	Bromoform	U	1.81	ug/kg	0.543	1.81
79-34-5	1,1,2,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
96-18-4	1,2,3-Trichloropropane	U	1.81	ug/kg	0.543	1.81
108-86-1	Bromobenzene	U	1.81	ug/kg	0.543	1.81
103-65-1	n-Propylbenzene	U	1.81	ug/kg	0.543	1.81
95-49-8	2-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-82-8	Isopropylbenzene	U	1.81	ug/kg	0.543	1.81
108-67-8	1,3,5-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
106-43-4	4-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-06-6	tert-Butylbenzene	U	1.81	ug/kg	0.543	1.81
95-63-6	1,2,4-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
135-98-8	sec-Butylbenzene	U	1.81	ug/kg	0.543	1.81
99-87-6	4-Isopropyltoluene		1.85	ug/kg	0.543	1.81
541-73-1	1,3-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
106-46-7	1,4-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
104-51-8	n-Butylbenzene	U	1.81	ug/kg	0.543	1.81
96-12-8	1,2-Dibromo-3-chloropropane	U	1.81	ug/kg	0.543	1.81
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	9.05	ug/kg	2.89	9.05
630-20-6	1,1,1,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
95-50-1	1,2-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81

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: 10-2134
Lab Sample ID: 248240003

Client ID: RE36-10-7454
Batch ID: 961880
Run Date: 03/05/2010 19:28
Prep Date: 03/05/2010 10:34
Data File: 030510V5SA511.D

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240003	Date Received: 02/27/2010 09:10	%Moisture: 8.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7454	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5J	Dilution: 1
Run Date: 03/05/2010 19:28	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\5A511.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.44	ug/kg	1.74	5.44
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

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: 10-2134
 Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7460
 Batch ID: 961880
 Run Date: 03/05/2010 19:52
 Prep Date: 03/05/2010 10:36
 Data File: 030510V55A512.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	J	0.442	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240004

Client ID: RE36-10-7460
Batch ID: 961880
Run Date: 03/05/2010 19:52
Prep Date: 03/05/2010 10:36
Data File: 030510V55A512.D

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.5
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	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.343	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	J	0.575	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
Client ID: RE36-10-7456	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/05/2010 20:17	Inst: VOA5.I	Dilution: 1
Prep Date: 03/05/2010 10:38	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030510V5SA513.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	1.08	ug/kg	0.368	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.324	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.324	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.324	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.324	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.324	1.08
67-64-1	Acetone	U	5.40	ug/kg	1.79	5.40
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
74-88-4	Iodomethane	U	5.40	ug/kg	1.73	5.40
75-09-2	Methylene chloride	U	5.40	ug/kg	2.16	5.40
75-15-0	Carbon disulfide	U	5.40	ug/kg	1.35	5.40
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.324	1.08
78-93-3	2-Butanone	U	5.40	ug/kg	1.62	5.40
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.324	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.324	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.324	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.324	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.324	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.324	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.324	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.324	1.08
108-10-1	4-Methyl-2-pentanone	U	5.40	ug/kg	1.35	5.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
108-88-3	Toluene	J	0.800	ug/kg	0.324	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.324	1.08
591-78-6	2-Hexanone	U	5.40	ug/kg	1.62	5.40
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.324	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.324	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.324	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.324	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.324	1.08

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240005

Client ID: RE36-10-7456
Batch ID: 961880
Run Date: 03/05/2010 20:17
Prep Date: 03/05/2010 10:38
Data File: 030510V5SA513.D

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 7.5
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	1.08	ug/kg	0.324	1.08
179601-23-1	m,p-Xylenes	J	0.530	ug/kg	0.324	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.324	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.324	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.324	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.324	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.324	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.324	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.324	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.324	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.324	1.08
95-63-6	1,2,4-Trimethylbenzene	J	0.454	ug/kg	0.324	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.324	1.08
99-87-6	4-Isopropyltoluene	J	0.670	ug/kg	0.324	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.324	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.324	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.40	ug/kg	1.73	5.40
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08

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: 10-2134
 Lab Sample ID: 248240006
 Client ID: RE36-10-7455
 Batch ID: 961880
 Run Date: 03/09/2010 15:22
 Prep Date: 03/09/2010 13:21
 Data File: 030910V55B218.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.4
 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	1.32	ug/kg	0.450	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.397	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.397	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.397	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.397	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.397	1.32
67-64-1	Acetone	U	6.62	ug/kg	2.20	6.62
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
74-88-4	Iodomethane	U	6.62	ug/kg	2.12	6.62
75-09-2	Methylene chloride	U	6.62	ug/kg	2.65	6.62
75-15-0	Carbon disulfide	U	6.62	ug/kg	1.65	6.62
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.397	1.32
78-93-3	2-Butanone	U	6.62	ug/kg	1.98	6.62
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.397	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.437	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.397	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.397	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.397	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.397	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.397	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.437	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.397	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.397	1.32
108-10-1	4-Methyl-2-pentanone	U	6.62	ug/kg	1.65	6.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
108-88-3	Toluene	U	1.32	ug/kg	0.397	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.397	1.32
591-78-6	2-Hexanone	U	6.62	ug/kg	1.98	6.62
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.397	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.397	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.397	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.397	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.397	1.32

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240006
 Client ID: RE36-10-7455
 Batch ID: 961880
 Run Date: 03/09/2010 15:22
 Prep Date: 03/09/2010 13:21
 Data File: 030910V55B218.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.4
 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	1.32	ug/kg	0.397	1.32
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.397	2.65
95-47-6	o-Xylene	U	1.32	ug/kg	0.397	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.397	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.397	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.397	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.397	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.397	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.397	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.397	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.397	1.32
99-87-6	4-Isopropyltoluene	U	1.32	ug/kg	0.397	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.397	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.397	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.62	ug/kg	2.12	6.62
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32

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: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
Client ID: RE36-10-7459	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/05/2010 21:07	Inst: VOAS.I	Dilution: 1
Prep Date: 03/05/2010 10:42	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030510V5SA515.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	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7459	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/05/2010 21:07	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:42	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\5A515.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene	J	1.01	ug/kg	0.369	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.15	ug/kg	1.97	6.15
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

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: 10-2134
 Lab Sample ID: 248240008
 Client ID: RE36-10-7457
 Batch ID: 961880
 Run Date: 03/09/2010 16:17
 Prep Date: 03/09/2010 13:23
 Data File: 030910V5\SB220.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 18.8
 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	1.23	ug/kg	0.419	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.16	ug/kg	2.04	6.16
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.16	ug/kg	1.97	6.16
75-09-2	Methylene chloride	U	6.16	ug/kg	2.46	6.16
75-15-0	Carbon disulfide	U	6.16	ug/kg	1.54	6.16
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.16	ug/kg	1.85	6.16
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.16	ug/kg	1.54	6.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.16	ug/kg	1.85	6.16
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240008
 Client ID: RE36-10-7457
 Batch ID: 961880
 Run Date: 03/09/2010 16:17
 Prep Date: 03/09/2010 13:23
 Data File: 030910V55B220.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 18.8
 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	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.370	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.16	ug/kg	1.97	6.16
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 42.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7520
 Batch ID: 961880
 Run Date: 03/05/2010 21:58
 Prep Date: 03/05/2010 10:46
 Data File: 030510V55A517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.73	ug/kg	0.589	1.73
74-87-3	Chloromethane	U	1.73	ug/kg	0.519	1.73
75-01-4	Vinyl chloride	U	1.73	ug/kg	0.519	1.73
74-83-9	Bromomethane	U	1.73	ug/kg	0.519	1.73
75-00-3	Chloroethane	U	1.73	ug/kg	0.519	1.73
75-69-4	Trichlorofluoromethane	U	1.73	ug/kg	0.519	1.73
67-64-1	Acetone	J	3.90	ug/kg	2.87	8.66
75-35-4	1,1-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
74-88-4	Iodomethane	U	8.66	ug/kg	2.77	8.66
75-09-2	Methylene chloride	U	8.66	ug/kg	3.46	8.66
75-15-0	Carbon disulfide	U	8.66	ug/kg	2.16	8.66
156-60-5	trans-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
75-34-3	1,1-Dichloroethane	U	1.73	ug/kg	0.519	1.73
78-93-3	2-Butanone	U	8.66	ug/kg	2.60	8.66
156-59-2	cis-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
594-20-7	2,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
67-66-3	Chloroform	U	1.73	ug/kg	0.519	1.73
74-97-5	Bromochloromethane	U	1.73	ug/kg	0.571	1.73
71-55-6	1,1,1-Trichloroethane	U	1.73	ug/kg	0.519	1.73
563-58-6	1,1-Dichloropropene	U	1.73	ug/kg	0.519	1.73
56-23-5	Carbon tetrachloride	U	1.73	ug/kg	0.519	1.73
107-06-2	1,2-Dichloroethane	U	1.73	ug/kg	0.519	1.73
71-43-2	Benzene	U	1.73	ug/kg	0.519	1.73
79-01-6	Trichloroethylene	U	1.73	ug/kg	0.571	1.73
78-87-5	1,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
75-27-4	Bromodichloromethane	U	1.73	ug/kg	0.519	1.73
74-95-3	Dibromomethane	U	1.73	ug/kg	0.519	1.73
108-10-1	4-Methyl-2-pentanone	U	8.66	ug/kg	2.16	8.66
10061-01-5	cis-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
108-88-3	Toluene	U	1.73	ug/kg	0.519	1.73
10061-02-6	trans-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
79-00-5	1,1,2-Trichloroethane	U	1.73	ug/kg	0.519	1.73
591-78-6	2-Hexanone	U	8.66	ug/kg	2.60	8.66
142-28-9	1,3-Dichloropropane	U	1.73	ug/kg	0.519	1.73
127-18-4	Tetrachloroethylene	U	1.73	ug/kg	0.519	1.73
124-48-1	Dibromochloromethane	U	1.73	ug/kg	0.519	1.73
106-93-4	1,2-Dibromoethane	U	1.73	ug/kg	0.519	1.73
108-90-7	Chlorobenzene	U	1.73	ug/kg	0.519	1.73

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240009
 Client ID: RE36-10-7520
 Batch ID: 961880
 Run Date: 03/05/2010 21:58
 Prep Date: 03/05/2010 10:46
 Data File: 030510V55A517.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 42.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.73	ug/kg	0.519	1.73
179601-23-1	m,p-Xylenes	U	3.46	ug/kg	0.519	3.46
95-47-6	o-Xylene	U	1.73	ug/kg	0.519	1.73
100-42-5	Styrene	U	1.73	ug/kg	0.519	1.73
75-25-2	Bromoform	U	1.73	ug/kg	0.519	1.73
79-34-5	1,1,2,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
96-18-4	1,2,3-Trichloropropane	U	1.73	ug/kg	0.519	1.73
108-86-1	Bromobenzene	U	1.73	ug/kg	0.519	1.73
103-65-1	n-Propylbenzene	U	1.73	ug/kg	0.519	1.73
95-49-8	2-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-82-8	Isopropylbenzene	U	1.73	ug/kg	0.519	1.73
108-67-8	1,3,5-Trimethylbenzene	U	1.73	ug/kg	0.519	1.73
106-43-4	4-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-06-6	tert-Butylbenzene	U	1.73	ug/kg	0.519	1.73
95-63-6	1,2,4-Trimethylbenzene	J	0.623	ug/kg	0.519	1.73
135-98-8	sec-Butylbenzene	U	1.73	ug/kg	0.519	1.73
99-87-6	4-Isopropyltoluene	U	1.73	ug/kg	0.519	1.73
541-73-1	1,3-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
106-46-7	1,4-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
104-51-8	n-Butylbenzene	U	1.73	ug/kg	0.519	1.73
96-12-8	1,2-Dibromo-3-chloropropane	U	1.73	ug/kg	0.519	1.73
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.66	ug/kg	2.77	8.66
630-20-6	1,1,1,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
95-50-1	1,2-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73

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: 10-2134
 Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7519
 Batch ID: 961880
 Run Date: 03/09/2010 16:45
 Prep Date: 03/09/2010 13:24
 Data File: 030910V5/SB221.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.430	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	6.33	ug/kg	2.10	6.33
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	U	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	U	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7519	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.1	Dilution: 1
Run Date: 03/09/2010 16:45	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 13:24	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B221.D	Column: DB-624	

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	6.33	ug/kg	2.03	6.33
	Trichlorotrifluoroethane					
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
No Tentatively Identified Compounds Found				ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: S
Lab Sample ID: 248240011	Date Received: 02/27/2010 09:10	
Client ID: RE36-10-7542	Client: LANL010	Project: LANL01004
Batch ID: 961880	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/09/2010 14:26	Inst: VOA5.I	Dilution: 1
Prep Date: 03/09/2010 13:25	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V55B216.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.07	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: 10-2134
Lab Sample ID: 248240011

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: CDS1
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: RE36-10-7542
Batch ID: 961880
Run Date: 03/09/2010 14:26
Prep Date: 03/09/2010 13:25
Data File: 030910V55B216.D

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

Tentatively Identified Compound Summary

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

Quality Control Summary

Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2134

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202063157	LCS for batch 961878	103	98	100
1202063158	LCS for batch 961878	104	97	98
1202063154	MB for batch 961878	102	99	102
248240001	RE36-10-7458	106	112	123
248240002	RE36-10-7453	93	105	123
248240003	RE36-10-7454	97	98	103
248240004	RE36-10-7460	96	102	116
248240005	RE36-10-7456	96	110	127
248240007	RE36-10-7459	103	115	132 *
248240009	RE36-10-7520	92	106	124
1202067798	LCS for batch 961878	101	94	112
1202067799	LCS for batch 961878	93	93	111
1202067797	MB for batch 961878	86	92	110
248240011	RE36-10-7542	85	92	112
248240006	RE36-10-7455	87	117	156 *
248240008	RE36-10-7457	93	128	169 *
248240010	RE36-10-7519	91	107	142 *

Surrogate**Acceptance Limits**

DCED4 = 1,2-Dichloroethane-d4

(66%-134%)

TOL = Toluene-d8

(71%-128%)

BFB = Bromofluorobenzene

(65%-130%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Page 1 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Post Spike

Client ID: RE36-10-8479PS

Matrix: R

Lab Sample ID: 1202063155

%Moisture: 10.2

Instrument: VOA5.I

Analysis Date: 03/09/2010 17:13

Dilution: 1

Analyst: CDS1

Pren Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

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 41.6	83	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 47.3	95	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 50.3	101	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 47.0	94	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 48.8	98	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 49.0	98	55-138
67-64-1	PS Acetone	250	0.00	U 172	69	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 47.7	95	55-128
74-88-4	PS Iodomethane	250	0.00	U 216	86	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 46.1	92	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 247	99	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 48.8	98	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 48.5	97	62-125
78-93-3	PS 2-Butanone	250	0.00	U 177	71	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 47.6	95	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 50.1	100	56-129
67-66-3	PS Chloroform	50.0	0.00	U 47.0	94	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 46.3	93	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 49.1	98	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 49.7	99	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 49.5	99	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 44.7	89	54-121

Volatile

Page 2 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Post Spike

Client ID: RE36-10-8479PS

Matrix: R

Lab Sample ID: 1202063155

% Moisture: 10.2

Instrument: VOA5.I

Analysis Date: 03/09/2010 17:13

Dilution: 1

Analyst: CDS1

Prep Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS Benzene	50.0	0.00	U 46.8	94	58-120
79-01-6	PS Trichloroethylene	50.0	0.00	U 46.8	94	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U 46.5	93	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00	U 47.5	95	57-130
74-95-3	PS Dibromomethane	50.0	0.00	U 45.9	92	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U 209	84	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U 42.0	84	50-131
108-88-3	PS Toluene	50.0	0.00	U 45.7	91	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U 42.8	86	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U 43.8	88	60-130
591-78-6	PS 2-Hexanone	250	0.00	U 171	69	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U 44.3	89	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00	U 46.1	92	50-126
124-48-1	PS Dibromochloromethane	50.0	0.00	U 45.5	91	54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U 42.8	86	55-127
108-90-7	PS Chlorobenzene	50.0	0.00	U 44.6	89	50-130
100-41-4	PS Ethylbenzene	50.0	0.00	U 43.9	88	50-121
179601-23-1	PS m,p-Xylenes	100	0.00	U 90.7	91	47-125
95-47-6	PS o-Xylene	50.0	0.00	U 45.0	90	51-127
100-42-5	PS Styrene	50.0	0.00	U 44.9	90	41-136
75-25-2	PS Bromoform	50.0	0.00	U 48.9	98	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U 44.2	88	52-129

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 6

SDG Number: 10-2134

Sample Type: Post Spike

Client ID: RE36-10-8479PS

Matrix: R

Lab Sample ID: 1202063155

%Moisture: 10.2

Instrument: VOA5.I

Analysis Date: 03/09/2010 17:13

Dilution: 1

Analyst: CDS1

Prep Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS 1,2,3-Trichloropropane	50.0	0.00	U 45.6	91	56-139
108-86-1	PS Bromobenzene	50.0	0.00	U 45.4	91	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00	U 46.4	93	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00	U 47.4	95	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00	U 48.8	98	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00	U 47.7	95	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00	U 45.4	91	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00	U 45.7	91	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00	U 46.6	93	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00	U 44.3	89	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00	U 39.4	79	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00	U 42.4	85	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00	U 42.0	84	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00	U 39.7	79	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00	U 39.2	78	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00	U 45.9	92	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00	U 41.0	82	42-128

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-2134

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8479PSD

Matrix: R

Lab Sample ID: 1202063156

%Moisture: 10.2

Instrument: VOA5.I

Analysis Date: 03/09/2010 17:40

Dilution: 1

Analyst: CDS1

Prep Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD	Acceptance Limits
75-71-8	PSD Dichlorodifluoromethane	50.0	0.00 U	42.7	85	39-148	3	0-19
74-87-3	PSD Chloromethane	50.0	0.00 U	46.5	93	42-131	2	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00 U	50.9	102	50-127	1	0-23
74-83-9	PSD Bromomethane	50.0	0.00 U	45.7	91	26-135	3	0-22
75-00-3	PSD Chloroethane	50.0	0.00 U	48.1	96	54-128	2	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00 U	50.0	100	55-138	2	0-21
67-64-1	PSD Acetone	250	0.00 U	189	76	20-144	10	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00 U	47.7	95	55-128	0	0-20
74-88-4	PSD Iodomethane	250	0.00 U	210	84	47-132	2	0-20
75-09-2	PSD Methylene chloride	50.0	0.00 U	44.6	89	56-123	3	0-20
75-15-0	PSD Carbon disulfide	250	0.00 U	246	98	53-133	1	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00 U	48.2	96	57-119	1	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00 U	47.8	96	62-125	2	0-20
78-93-3	PSD 2-Butanone	250	0.00 U	197	79	30-150	11	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00 U	47.2	94	60-124	1	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00 U	49.3	99	56-129	2	0-20
67-66-3	PSD Chloroform	50.0	0.00 U	46.6	93	62-120	1	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00 U	46.1	92	51-135	0	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00 U	49.2	98	58-129	0	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00 U	49.2	98	59-126	1	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00 U	49.8	100	55-132	1	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00 U	44.8	90	54-121	0	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-2134

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8479PSD

Matrix: R

Lab Sample ID: 1202063156

% Moisture: 10.2

Instrument: VOA5.I

Analysis Date: 03/09/2010 17:40

Dilution: 1

Analyst: CDS1

Pren Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

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 46.0	92	58-120	2	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00	U 46.6	93	54-130	0	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U 45.3	91	59-121	3	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00	U 47.0	94	57-130	1	0-20
74-95-3	PSD Dibromomethane	50.0	0.00	U 46.4	93	57-124	1	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U 226	90	40-137	8	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U 41.9	84	50-131	0	0-20
108-88-3	PSD Toluene	50.0	0.00	U 45.1	90	54-119	1	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U 43.7	87	47-133	2	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U 44.5	89	60-130	1	0-20
591-78-6	PSD 2-Hexanone	250	0.00	U 185	74	30-139	7	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U 45.2	90	59-125	2	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U 45.5	91	50-126	1	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00	U 46.7	93	54-131	3	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U 44.0	88	55-127	3	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00	U 43.8	88	50-130	2	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00	U 43.1	86	50-121	2	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00	U 89.2	89	47-125	2	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U 43.8	88	51-127	3	0-24
100-42-5	PSD Styrene	50.0	0.00	U 44.5	89	41-136	1	0-24
75-25-2	PSD Bromoform	50.0	0.00	U 50.3	101	48-143	3	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U 45.8	92	52-129	3	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 6

SDG Number: 10-2134

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8479PSD

Matrix: R

Lab Sample ID: 1202063156

%Moisture: 10.2

Instrument: VOA5.J

Analysis Date: 03/09/2010 17:40

Dilution: 1

Analyst: CDS1

Pre Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD	Acceptance Limits
96-18-4	PSD 1,2,3-Trichloropropane	50.0	0.00	U 48.4	97	56-139	6	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 44.0	88	54-125	3	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 44.4	89	46-127	4	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 46.1	92	47-130	3	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 47.0	94	42-126	4	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 45.7	91	44-132	4	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 43.7	87	46-127	4	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 44.5	89	48-136	3	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 44.7	89	42-132	4	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 42.7	85	47-130	4	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 39.5	79	36-142	0	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 41.5	83	41-130	2	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 40.8	82	41-126	3	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 39.3	79	37-136	1	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 42.4	85	42-143	8	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 45.5	91	58-127	1	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 40.3	81	42-128	2	0-24

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202063157

Instrument: VOA5.I

Analysis Date: 03/05/2010 16:13

Dilution: 1

Analyst: CDS1

Pren Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

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	47.9	96	52-151
74-87-3	LCS Chloromethane	50.0	0.0	47.8	96	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	50.5	101	66-130
74-83-9	LCS Bromomethane	50.0	0.0	49.1	98	70-126
75-00-3	LCS Chloroethane	50.0	0.0	48.4	97	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	51.2	102	73-143
67-64-1	LCS Acetone	250	0.0	207	83	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	48.2	96	71-129
74-88-4	LCS Iodomethane	250	0.0	238	95	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	48.0	96	64-121
75-15-0	LCS Carbon disulfide	250	0.0	252	101	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	49.0	98	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	49.2	98	73-120
78-93-3	LCS 2-Butanone	250	0.0	219	88	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	48.7	97	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	49.3	99	73-134
67-66-3	LCS Chloroform	50.0	0.0	48.8	98	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	49.8	100	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	50.7	101	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	49.4	99	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	50.9	102	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	47.6	95	65-120

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202063157

Instrument: VOA5.I

Analysis Date: 03/05/2010 16:13

Dilution: 1

Analyst: CDS1

Pre Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

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	47.3	95	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	48.3	97	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	48.0	96	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	51.0	102	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	50.6	101	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	243	97	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	49.3	99	78-127
108-88-3	LCS Toluene	50.0	0.0	44.8	90	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	47.9	96	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	46.1	92	75-120
591-78-6	LCS 2-Hexanone	250	0.0	218	87	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	46.4	93	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	45.9	92	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	50.3	101	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	48.2	96	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	45.4	91	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	44.3	89	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	92.3	92	76-120
95-47-6	LCS o-Xylene	50.0	0.0	46.5	93	76-122
100-42-5	LCS Styrene	50.0	0.0	49.7	99	75-125
75-25-2	LCS Bromoform	50.0	0.0	50.7	101	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	44.6	89	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202063157

Instrument: VOA5.I

Analysis Date: 03/05/2010 16:13

Dilution: 1

Analyst: CDS1

Pre Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

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	46.5	93	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	44.1	88	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	43.5	87	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	44.3	89	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	44.8	90	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	44.7	89	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	43.3	87	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	42.8	86	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	44.9	90	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	44.4	89	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	45.0	90	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	44.1	88	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	44.3	89	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	42.8	86	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	46.3	93	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	48.1	96	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	45.1	90	75-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID:1202063158

Instrument: VOA5.I

Analysis Date: 03/05/2010 16:40

Dilution: 1

Analyst: CDS1

Prep Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

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	358	143 *	67-140

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202067798

Instrument: VOA5.I

Analysis Date: 03/09/2010 08:50

Dilution: 1

Analyst: CDS1

Prep Batch ID: 961878

Purge Vol: 5 mL

Batch ID: 961880

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	42.2	84	52-151
74-87-3	LCS Chloromethane	50.0	0.0	43.3	87	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	46.5	93	66-130
74-83-9	LCS Bromomethane	50.0	0.0	42.2	84	70-126
75-00-3	LCS Chloroethane	50.0	0.0	42.9	86	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	45.5	91	73-143
67-64-1	LCS Acetone	250	0.0	189	76	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	42.9	86	71-129
74-88-4	LCS Iodomethane	250	0.0	207	83	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	41.2	82	64-121
75-15-0	LCS Carbon disulfide	250	0.0	224	90	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	42.8	86	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	42.9	86	73-120
78-93-3	LCS 2-Butanone	250	0.0	198	79	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	42.4	85	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	43.7	87	73-134
67-66-3	LCS Chloroform	50.0	0.0	42.0	84	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	42.3	85	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	43.8	88	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	44.5	89	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	45.1	90	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	41.3	83	65-120

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202067798

Instrument: VOA5.I

Analysis Date: 03/09/2010 08:50

Dilution: 1

Analyst: CDS1

Pre Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

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	41.4	83	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	42.6	85	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	41.2	82	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	43.4	87	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	43.9	88	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	219	88	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	42.7	85	78-127
108-88-3	LCS Toluene	50.0	0.0	39.3	79	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	41.7	83	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	40.7	81	75-120
591-78-6	LCS 2-Hexanone	250	0.0	197	79	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	40.1	80	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	40.8	82	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	43.0	86	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	41.4	83	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	39.4	79	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	38.9	78	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	80.5	80	76-120
95-47-6	LCS o-Xylene	50.0	0.0	39.8	80	76-122
100-42-5	LCS Styrene	50.0	0.0	42.0	84	75-125
75-25-2	LCS Bromoform	50.0	0.0	44.1	88	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	39.5	79	72-122

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID:1202067798

Instrument: VOA5.I

Analysis Date: 03/09/2010 08:50

Dilution: 1

Analyst: CDS1

Pre Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	41.1	82	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	38.1	76	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	39.0	78	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	39.1	78	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	39.8	80	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	39.7	79	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	38.1	76	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	38.0	76	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	39.4	79	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	39.9	80	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	39.9	80	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	38.3	77	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	38.2	76	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	39.0	78	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	41.2	82	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	41.2	82	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	38.7	77	75-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961878

Matrix: SOIL

Lab Sample ID: 1202067799

Instrument: VOA5.I

Analysis Date: 03/09/2010 09:18

Dilution: 1

Analyst: CDS1

Pren Batch II 961878

Purge Vol: 5 mL

Batch ID: 961880

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	373	149 *	67-140

Method Blank Summary

Page 1 of 1

SDG Number:	10-2134	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961878	Instrument ID:	VOA5.I	Data File:	030510V5\5A507LA.D
Lab Sample ID:	1202063154	Prep Date:	03/05/2010 15:26	Analyzed:	03/05/10 17:46
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 961878	1202063157	030510V5\5A504LA.D	03/05/10	1613
02 LCS for batch 961878	1202063158	030510V5\5A505LA.D	03/05/10	1640
03 RE36-10-7458	248240001	030510V5\5A509.D	03/05/10	1837
04 RE36-10-7453	248240002	030510V5\5A510.D	03/05/10	1902
05 RE36-10-7454	248240003	030510V5\5A511.D	03/05/10	1928
06 RE36-10-7460	248240004	030510V5\5A512.D	03/05/10	1952
07 RE36-10-7456	248240005	030510V5\5A513.D	03/05/10	2017
08 RE36-10-7459	248240007	030510V5\5A515.D	03/05/10	2107
09 RE36-10-7520	248240009	030510V5\5A517.D	03/05/10	2158

Method Blank Summary

Page 1 of 1

SDG Number:	10-2134	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961878	Instrument ID:	VOA5.I	Data File:	030910V5\5B207LA.D
Lab Sample ID:	1202067797	Prep Date:	03/09/2010 07:26	Analyzed:	03/09/10 10:12
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 961878	1202067798	030910V5\5B204LA.D	03/09/10	0850
02 LCS for batch 961878	1202067799	030910V5\5B205LA.D	03/09/10	0918
03 RE36-10-7542	248240011	030910V5\5B216.D	03/09/10	1426
04 RE36-10-7455	248240006	030910V5\5B218.D	03/09/10	1522
05 RE36-10-7457	248240008	030910V5\5B220.D	03/09/10	1617
06 RE36-10-7519	248240010	030910V5\5B221.D	03/09/10	1645

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: VOA5.1

Injection Date/Time: 03-MAR-10 11:00

Column Description: DB-624

Lab File ID 030310V5\5A301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	45.2
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	77.7
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	6.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W5VM100303-01	030310V5\5A303.D	03-MAR-10 11:52
ICALMIX[A]	W5VM100303-02	030310V5\5A304.D	03-MAR-10 12:18
ICALMIX[A]	W5VM100303-03	030310V5\5A305.D	03-MAR-10 12:43
ICALMIX[A]	W5VM100303-04	030310V5\5A306.D	03-MAR-10 13:09
ICALMIX[A]	W5VM100303-05	030310V5\5A307.D	03-MAR-10 13:35
ICALMIX[A]	W5VM100303-06	030310V5\5A308.D	03-MAR-10 14:01
ICALMIX[A]	W5VM100303-07	030310V5\5A309.D	03-MAR-10 14:26
ICALMIX[A]	W5VM100303-08	030310V5\5A311.D	03-MAR-10 15:18
ICVMIX[A]01	W5VM100303-10	030310V5\5A313.D	03-MAR-10 16:10
ICALMIX[B]	W5VM100303-11	030310V5\5A315.D	03-MAR-10 17:01
ICALMIX[B]	W5VM100303-12	030310V5\5A316.D	03-MAR-10 17:27
ICALMIX[B]	W5VM100303-13	030310V5\5A317.D	03-MAR-10 17:52
ICALMIX[B]	W5VM100303-14	030310V5\5A318.D	03-MAR-10 18:18
ICALMIX[B]	W5VM100303-15	030310V5\5A319.D	03-MAR-10 18:44
ICALMIX[B]	W5VM100303-16	030310V5\5A320.D	03-MAR-10 19:10
ICALMIX[B]	W5VM100303-17	030310V5\5A321.D	03-MAR-10 19:35
ICVMIX[B]02	W5VM100303-18	030310V5\5A323.D	03-MAR-10 20:27

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: VOA5.I

Injection Date/Time: 05-MAR-10 15:17

Column Description: DB-624

Lab File ID 030510V5\5A502BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	45.3
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.7
177	5.0 - 9.0% of mass 176	6.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	W5VM100305-01	030510V5\5A502.D	05-MAR-10 15:17
BLK01LCS	1202063157	030510V5\5A504LA.D	05-MAR-10 16:13
CCVMIX[B]02	W5VM100305-04	030510V5\5A505.D	05-MAR-10 16:40
BLK01SLCS	1202063158	030510V5\5A505LA.D	05-MAR-10 16:40
BLK01	1202063154	030510V5\5A507LA.D	05-MAR-10 17:46
RE36-10-7458	248240001	030510V5\5A509.D	05-MAR-10 18:37
RE36-10-7453	248240002	030510V5\5A510.D	05-MAR-10 19:02
RE36-10-7454	248240003	030510V5\5A511.D	05-MAR-10 19:28
RE36-10-7460	248240004	030510V5\5A512.D	05-MAR-10 19:52
RE36-10-7456	248240005	030510V5\5A513.D	05-MAR-10 20:17
RE36-10-7459	248240007	030510V5\5A515.D	05-MAR-10 21:07
RE36-10-7520	248240009	030510V5\5A517.D	05-MAR-10 21:58

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: VOA5.1

Injection Date/Time: 09-MAR-10 07:14

Column Description: DB-624

Lab File ID 030910V5\5B201.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.1
75	30.0 - 60.0% of mass 95	44.8
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	77
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.6

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
CCVMIX[A]04	W5VM100309-02	030910V5\5B203.D	09-MAR-10 08:09
BLK02LCS	1202067798	030910V5\5B204LA.D	09-MAR-10 08:50
CCVMIX[B]05	W5VM100309-04	030910V5\5B205.D	09-MAR-10 09:18
BLK02SLCS	1202067799	030910V5\5B205LA.D	09-MAR-10 09:18
BLK02	1202067797	030910V5\5B207LA.D	09-MAR-10 10:12
RE36-10-7542	248240011	030910V5\5B216.D	09-MAR-10 14:26
RE36-10-7455	248240006	030910V5\5B218.D	09-MAR-10 15:22
RE36-10-7457	248240008	030910V5\5B220.D	09-MAR-10 16:17
RE36-10-7519	248240010	030910V5\5B221.D	09-MAR-10 16:45

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2134

Instrument: VOA5.1

STD Analysis Time: 05-MAR-10 15:17

GC Column: DB-624

Data File: C:\msdchem\1\DATA\030510V5\5A502.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1815452		8.39	1382681		11.1	728086		13.4
Upper Limit	3630904		8.89	2765362		11.6	1456172		13.9
Lower Limit	907726		7.89	691341		10.6	364043		12.9
Sample ID									
BLK01LCS	1785361		8.39	1373211		11.1	726937		13.4
BLK01SLCS	1810003		8.39	1370083		11.1	707376		13.4
BLK01	1793806		8.39	1339902		11.1	676292		13.4
RE36-10-7458	1516620		8.39	926038		11.1	316032	*	13.4
RE36-10-7453	1817029		8.39	1211165		11.1	417477		13.4
RE36-10-7454	1820105		8.39	1334826		11.1	629204		13.4
RE36-10-7460	1808555		8.39	1233912		11.1	465535		13.4
RE36-10-7456	1748687		8.39	1091088		11.1	343026	*	13.4
RE36-10-7459	1617681		8.39	946790		11.1	273346	*	13.4
RE36-10-7520	1794111		8.39	1174800		11.1	396265		13.4

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: 10-2134

Instrument: VOA5.I

STD Analysis Time: 09-MAR-10 08:09

GC Column: DB-624

Data File: C:\msdchem\1\DATA\030910V5\5B203.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1974825		8.39	1509161		11.1	782696		13.4
Upper Limit	3949650		8.89	3018322		11.6	1565392		13.9
Lower Limit	987413		7.89	754581		10.6	391348		12.9
Sample ID									
BLK02LCS	2013309		8.39	1536970		11.1	795168		13.4
BLK02SLCS	1900502		8.39	1419216		11.1	712034		13.4
BLK02	1868406		8.39	1378477		11.1	671495		13.4
RE36-10-7542	1719973		8.39	1257259		11.1	604801		13.4
RE36-10-7455	1454007		8.39	724345 *		11.1	172498 *		13.4
RE36-10-7457	1216729		8.39	538164 *		11.1	114206 *		13.4
RE36-10-7519	1400799		8.39	796645		11.1	237258 *		13.4

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: 10-2134
 Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 14.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7458
 Batch ID: 961880
 Run Date: 03/05/2010 18:37
 Prep Date: 03/05/2010 10:26
 Data File: 030510V55A509.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	J	2.18	ug/kg	1.93	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.384	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.384	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240001
 Client ID: RE36-10-7458
 Batch ID: 961880
 Run Date: 03/05/2010 18:37
 Prep Date: 03/05/2010 10:26
 Data File: 030510V5\SA509.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 14.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene		2.64	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.83	ug/kg	1.86	5.83
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

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\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
InstName : VOA5
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 19 08:01:00 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1516620	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	926038	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	316032	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1516620	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	926038	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	316032	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	390429	53.19	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	106.38%			
43) Toluene-d8	9.721	9.721	0.872	98	1320556	55.76	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	111.52%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	389518	61.45	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	122.90%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	1104	Below Cal		96
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.177	6.174	0.736	43	8479	1.87	ug/L	99
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.449	6.464	0.769	41	504	N.D.		
13) Methyl acetate	6.372	6.365	0.760	43	374	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	1702	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	5547	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	118	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	351	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.931	7.924	0.946	56	713	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	156	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8222	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
InstName : VOA5
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 19 08:01:00 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	4867	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	252	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.163	11.174	1.002	112	123	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	2123	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	1087	N.D.	
56) o-Xylene	11.704	11.701	1.050	106	1154	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.994	12.016	0.894	105	2747	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.557	12.415	0.936	91	543	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	1557	N.D.	
67) 2-Chlorotoluene	12.599	12.596	0.939	126	114	N.D.	
68) 4-Chlorotoluene	12.709	12.698	0.948	91	2446	N.D.	
69) tert-Butylbenzene	12.822	12.900	0.956	134	112	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D.	d
71) sec-Butylbenzene	13.130	13.119	0.979	105	251	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	28919	2.27	ug/L 91
73) 1,3-Dichlorobenzene	13.345	13.349	0.995	146	112	N.D.	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002	146	440	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	1230	N.D.	
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	438	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	451	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	2613	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	452	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.163	6.163	0.735	45	124	N.D.	
88) Allyl chloride	6.414	6.425	0.765	41	107	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.447	7.383	0.888	43	351	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
InstName : VOA5
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 19 08:01:00 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

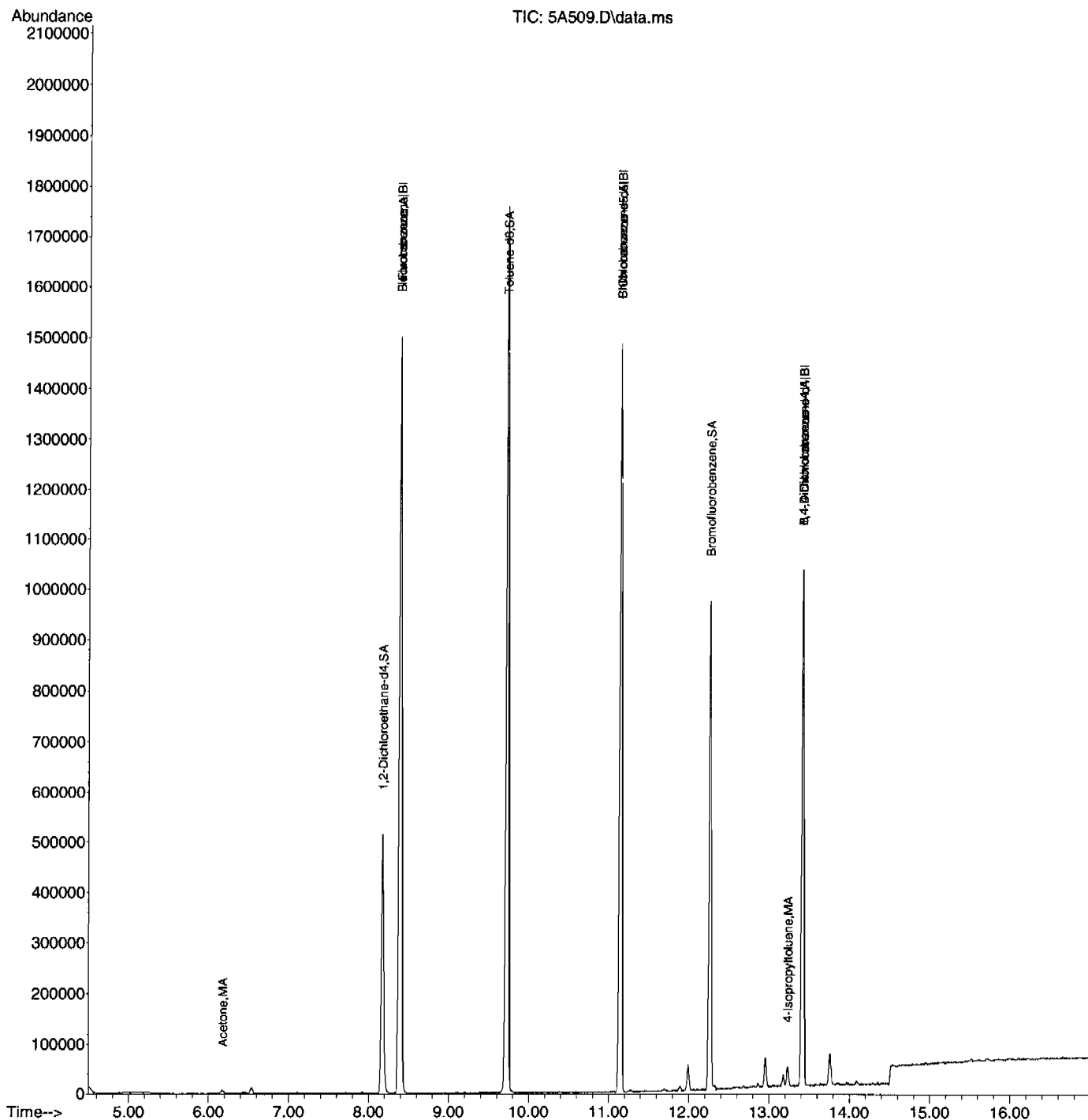
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.708	7.680	0.919	41	267	N.D.	
97) Tetrahydrofuran	7.715	7.716	0.920	42	961	N.D.	
98) Isobutyl alcohol	7.818	7.857	0.932	41	110	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.263	12.267	0.914	42	123	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.554	13.565	1.011	91	2659	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	163	N.D.	

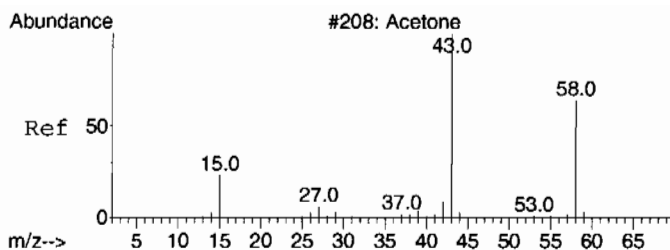
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
InstName : VOA5
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

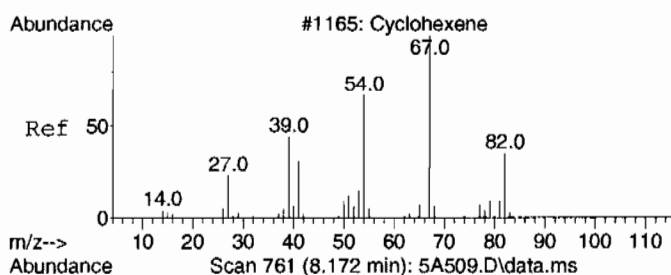
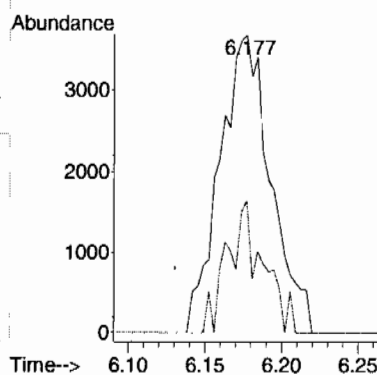
Quant Time: Mar 19 08:01:00 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





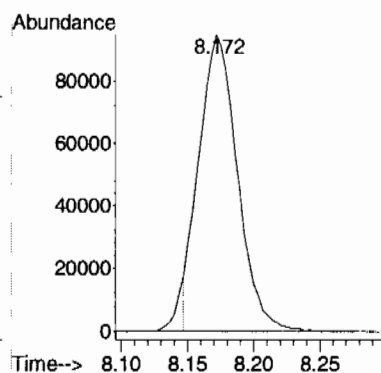
#9
Acetone
Concen: 1.87 ug/L
RT: 6.177 min Scan# 197
Delta R.T. 0.003 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

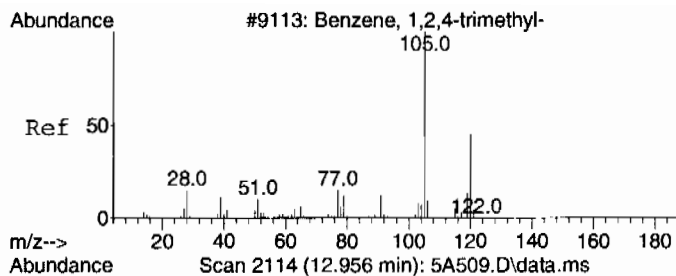
Tgt Ion: 43 Resp: 8479
Ion Ratio Lower Upper
43 100
58 31.3 1.9 61.9



#32 BEFORE analyst DELETION
Cyclohexene
Concen: 18.75 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

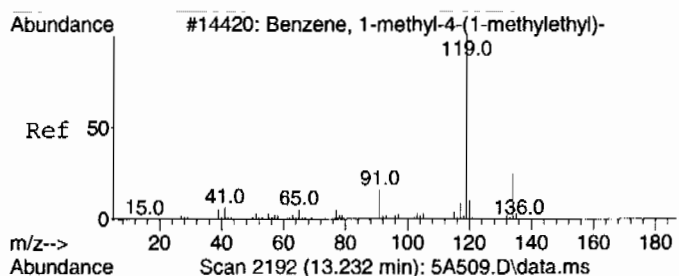
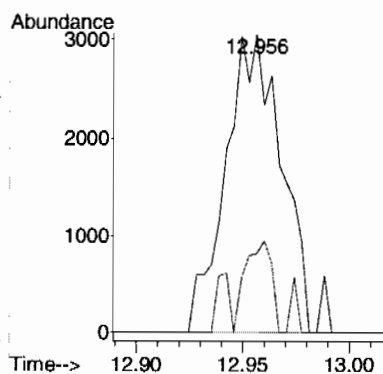
Tgt Ion: 67 Resp: 191365
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#





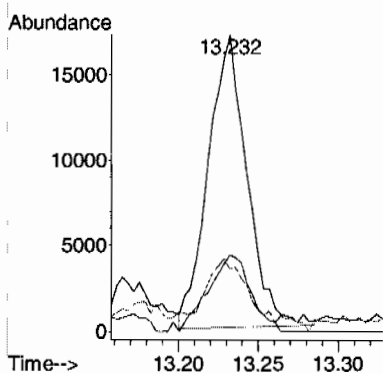
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.44 ug/L
RT: 12.956 min Scan# 2114
Delta R.T. 0.000 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

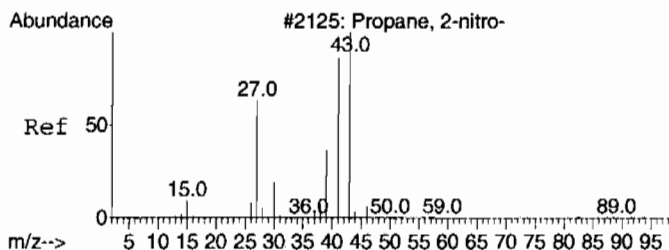
Tgt Ion:105 Resp: 5573
Ion Ratio Lower Upper
105 100
120 14.7 17.4 77.4#



#72
4-Isopropyltoluene
Concen: 2.27 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

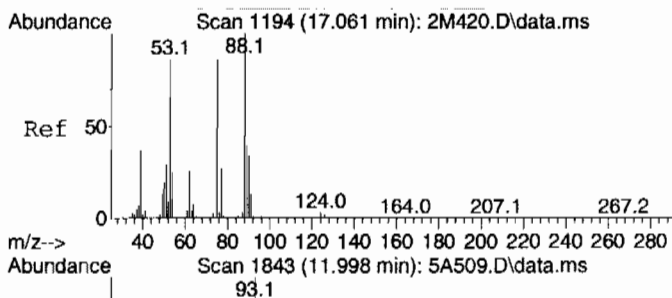
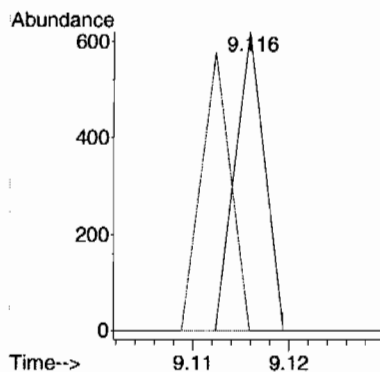
Tgt Ion:119 Resp: 28919
Ion Ratio Lower Upper
119 100
134 28.3 0.0 57.2
91 31.4 0.0 53.0





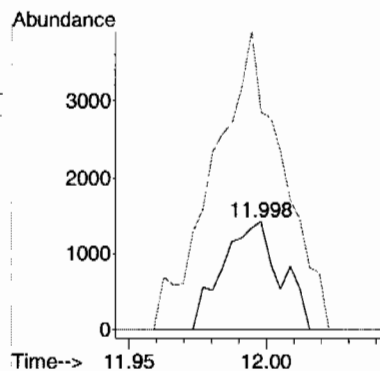
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.96 ug/L
RT: 9.116 min Scan# 1028
Delta R.T. -0.226 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

Tgt Ion: 43 Resp: 132
Ion Ratio Lower Upper
43 100
41 92.4 52.5 112.5



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 1.76 ug/L
RT: 11.998 min Scan# 1843
Delta R.T. -0.138 min
Lab File: 5A509.D
Acq: 5 Mar 2010 6:37 pm

Tgt Ion: 53 Resp: 2077
Ion Ratio Lower Upper
53 100
88 0.0 67.1 127.1#
77 328.9 1.8 61.8#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.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\030510V5\
Data File : 5A509.D
Acq On : 5 Mar 2010 6:37 pm
Operator : CDS1
Sample : |248240001|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240002
 Client ID: RE36-10-7453
 Batch ID: 961880
 Run Date: 03/05/2010 19:02
 Prep Date: 03/05/2010 10:32
 Data File: 030510V55A510.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 44.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.81	ug/kg	0.615	1.81
74-87-3	Chloromethane	U	1.81	ug/kg	0.543	1.81
75-01-4	Vinyl chloride	U	1.81	ug/kg	0.543	1.81
74-83-9	Bromomethane	U	1.81	ug/kg	0.543	1.81
75-00-3	Chloroethane	U	1.81	ug/kg	0.543	1.81
75-69-4	Trichlorofluoromethane	U	1.81	ug/kg	0.543	1.81
67-64-1	Acetone	U	9.05	ug/kg	3.00	9.05
75-35-4	1,1-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
74-88-4	Iodomethane	U	9.05	ug/kg	2.89	9.05
75-09-2	Methylene chloride	U	9.05	ug/kg	3.62	9.05
75-15-0	Carbon disulfide	U	9.05	ug/kg	2.26	9.05
156-60-5	trans-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
75-34-3	1,1-Dichloroethane	U	1.81	ug/kg	0.543	1.81
78-93-3	2-Butanone	U	9.05	ug/kg	2.71	9.05
156-59-2	cis-1,2-Dichloroethylene	U	1.81	ug/kg	0.543	1.81
594-20-7	2,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
67-66-3	Chloroform	U	1.81	ug/kg	0.543	1.81
74-97-5	Bromochloromethane	U	1.81	ug/kg	0.597	1.81
71-55-6	1,1,1-Trichloroethane	U	1.81	ug/kg	0.543	1.81
563-58-6	1,1-Dichloropropene	U	1.81	ug/kg	0.543	1.81
56-23-5	Carbon tetrachloride	U	1.81	ug/kg	0.543	1.81
107-06-2	1,2-Dichloroethane	U	1.81	ug/kg	0.543	1.81
71-43-2	Benzene	U	1.81	ug/kg	0.543	1.81
79-01-6	Trichloroethylene	U	1.81	ug/kg	0.597	1.81
78-87-5	1,2-Dichloropropane	U	1.81	ug/kg	0.543	1.81
75-27-4	Bromodichloromethane	U	1.81	ug/kg	0.543	1.81
74-95-3	Dibromomethane	U	1.81	ug/kg	0.543	1.81
108-10-1	4-Methyl-2-pentanone	U	9.05	ug/kg	2.26	9.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
108-88-3	Toluene	U	1.81	ug/kg	0.543	1.81
10061-02-6	trans-1,3-Dichloropropylene	U	1.81	ug/kg	0.543	1.81
79-00-5	1,1,2-Trichloroethane	U	1.81	ug/kg	0.543	1.81
591-78-6	2-Hexanone	U	9.05	ug/kg	2.71	9.05
142-28-9	1,3-Dichloropropane	U	1.81	ug/kg	0.543	1.81
127-18-4	Tetrachloroethylene	U	1.81	ug/kg	0.543	1.81
124-48-1	Dibromochloromethane	U	1.81	ug/kg	0.543	1.81
106-93-4	1,2-Dibromoethane	U	1.81	ug/kg	0.543	1.81
108-90-7	Chlorobenzene	U	1.81	ug/kg	0.543	1.81

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240002

 Client ID: RE36-10-7453
 Batch ID: 961880
 Run Date: 03/05/2010 19:02
 Prep Date: 03/05/2010 10:32
 Data File: 030510V55A510.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 44.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.81	ug/kg	0.543	1.81
179601-23-1	m,p-Xylenes	U	3.62	ug/kg	0.543	3.62
95-47-6	o-Xylene	U	1.81	ug/kg	0.543	1.81
100-42-5	Styrene	U	1.81	ug/kg	0.543	1.81
75-25-2	Bromoform	U	1.81	ug/kg	0.543	1.81
79-34-5	1,1,2,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
96-18-4	1,2,3-Trichloropropane	U	1.81	ug/kg	0.543	1.81
108-86-1	Bromobenzene	U	1.81	ug/kg	0.543	1.81
103-65-1	n-Propylbenzene	U	1.81	ug/kg	0.543	1.81
95-49-8	2-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-82-8	Isopropylbenzene	U	1.81	ug/kg	0.543	1.81
108-67-8	1,3,5-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
106-43-4	4-Chlorotoluene	U	1.81	ug/kg	0.543	1.81
98-06-6	tert-Butylbenzene	U	1.81	ug/kg	0.543	1.81
95-63-6	1,2,4-Trimethylbenzene	U	1.81	ug/kg	0.543	1.81
135-98-8	sec-Butylbenzene	U	1.81	ug/kg	0.543	1.81
99-87-6	4-Isopropyltoluene		1.85	ug/kg	0.543	1.81
541-73-1	1,3-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
106-46-7	1,4-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81
104-51-8	n-Butylbenzene	U	1.81	ug/kg	0.543	1.81
96-12-8	1,2-Dibromo-3-chloropropane	U	1.81	ug/kg	0.543	1.81
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	9.05	ug/kg	2.89	9.05
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.81	ug/kg	0.543	1.81
95-50-1	1,2-Dichlorobenzene	U	1.81	ug/kg	0.543	1.81

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\030510V5\
Data File : 5A510.D
Acq On : 5 Mar 2010 7:02 pm
Operator : CDS1
InstName : VOA5
Sample : |248240002|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 09 11:22:39 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1817029	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1211165	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	417477	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1817029	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1211165	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	417477	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	409070	46.51	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	93.02%			
43) Toluene-d8	9.721	9.721	0.872	98	1623566	52.42	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	104.84%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	516324	61.66	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	123.32%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1094	Below Cal	#	37
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	399	N.D.		
9) Acetone	6.174	6.174	0.736	43	7158	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.453	6.464	0.769	41	591	N.D.		
13) Methyl acetate	6.361	6.365	0.758	43	1019	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	1904	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	12860	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	143	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	616	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	278	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	9926	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A510.D
Acq On : 5 Mar 2010 7:02 pm
Operator : CDS1
InstName : VOA5
Sample : |248240002|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 09 11:22:39 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.781	9.788	0.878	91	5503	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	251	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	10.294	10.290	0.924	164	111	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	2914	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	3296	N.D.	
56) o-Xylene	11.697	11.701	1.050	106	2707	N.D.	
57) Styrene	11.715	11.715	1.051	104	247	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.005	12.016	0.895	105	566	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.430	12.415	0.927	91	1458	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1211	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.688	12.698	0.946	91	1554	N.D.	
69) tert-Butylbenzene	12.886	12.900	0.961	134	113	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D.	d
71) sec-Butylbenzene	13.123	13.119	0.978	105	669	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	17123	1.02	ug/L
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	120	N.D.	
74) 1,4-Dichlorobenzene	13.430	13.441	1.001	146	499	N.D.	
75) n-Butylbenzene	13.660	13.653	1.018	91	1352	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	889	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1970	N.D.	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	636	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.453	6.425	0.769	41	591	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.447	7.383	0.888	43	616	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A510.D
Acq On : 5 Mar 2010 7:02 pm
Operator : CDS1
InstName : VOA5
Sample : |248240002|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 09 11:22:39 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

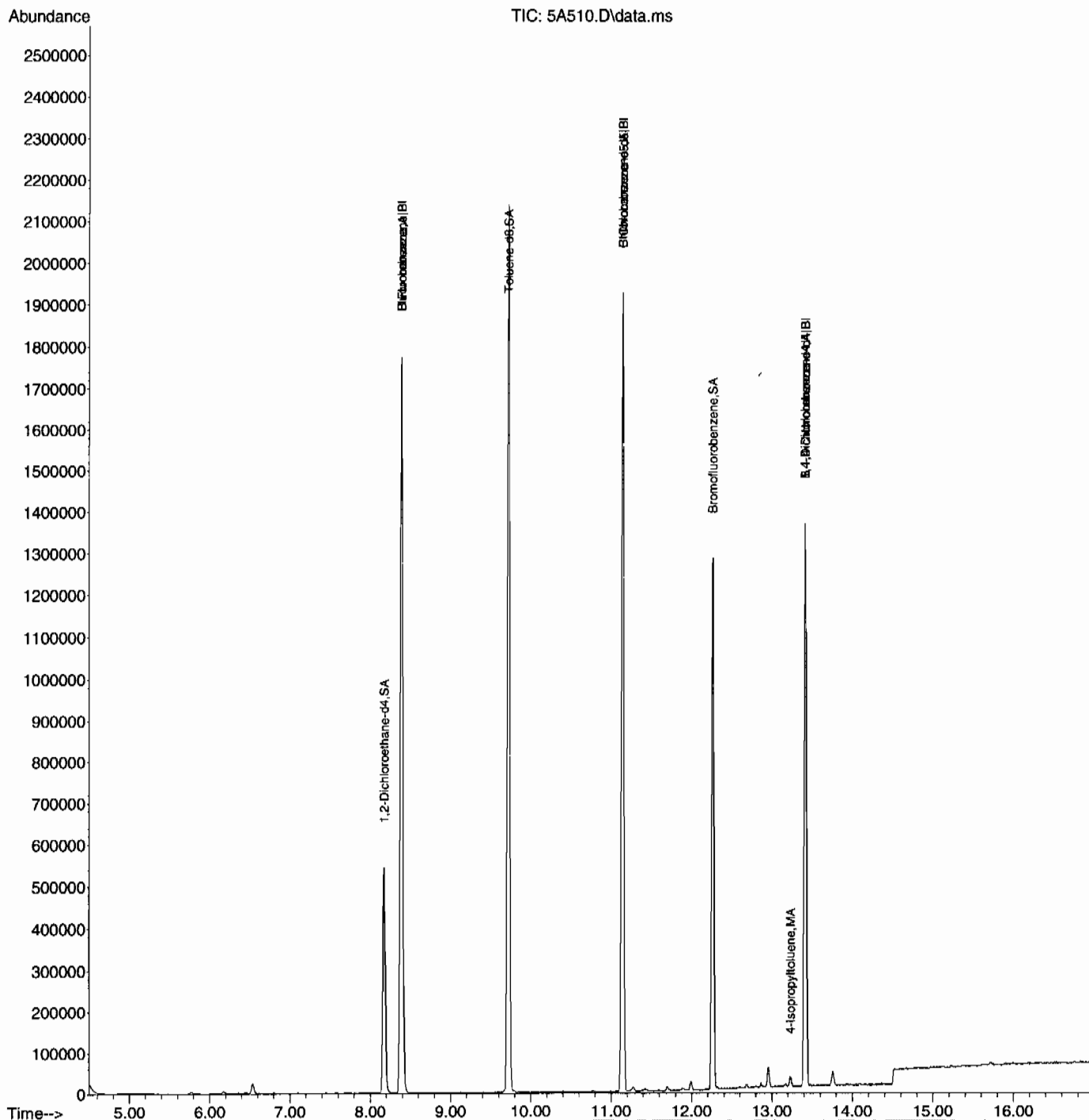
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.687	7.680	0.917	41	344	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	872	N.D.	
98) Isobutyl alcohol	7.906	7.857	0.943	41	117	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.987	12.136	0.894	53	408	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	1092	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	511	N.D.	

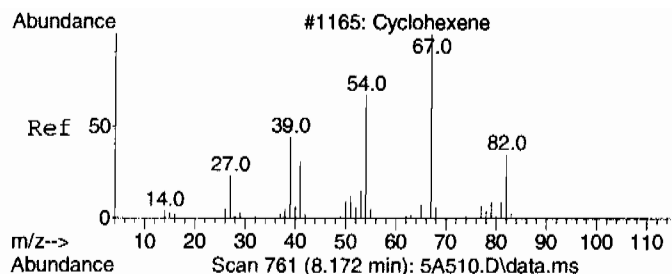
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A510.D
Acq On : 5 Mar 2010 7:02 pm
Operator : CDS1
InstName : VOA5
Sample : |248240002|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 10 Sample Multiplier: 1

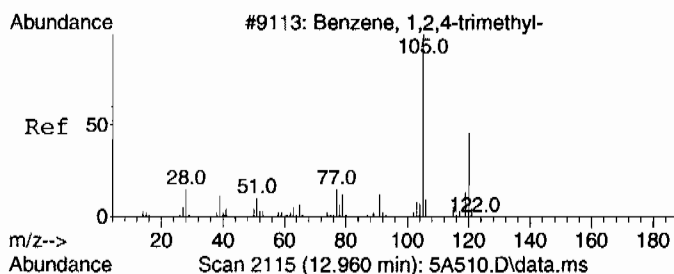
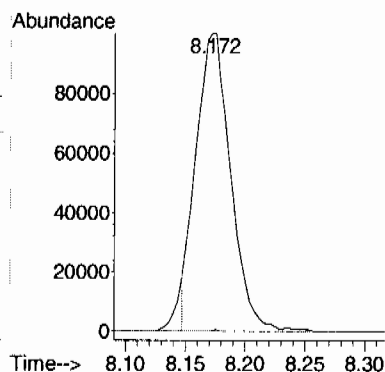
Quant Time: Mar 09 11:22:39 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





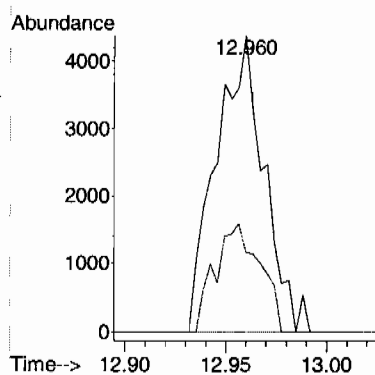
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 16.62 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A510.D
Acq: 5 Mar 2010 7:02 pm

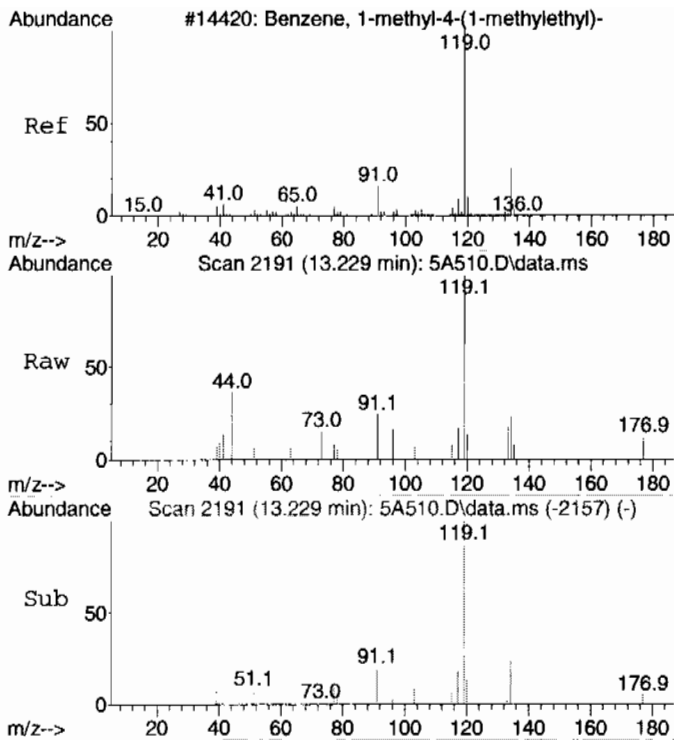
Tgt Ion: 67 Resp: 203180
Ion Ratio Lower Upper
67 100
54 0.1 46.3 106.3#



#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.43 ug/L
RT: 12.960 min Scan# 2115
Delta R.T. 0.004 min
Lab File: 5A510.D
Acq: 5 Mar 2010 7:02 pm

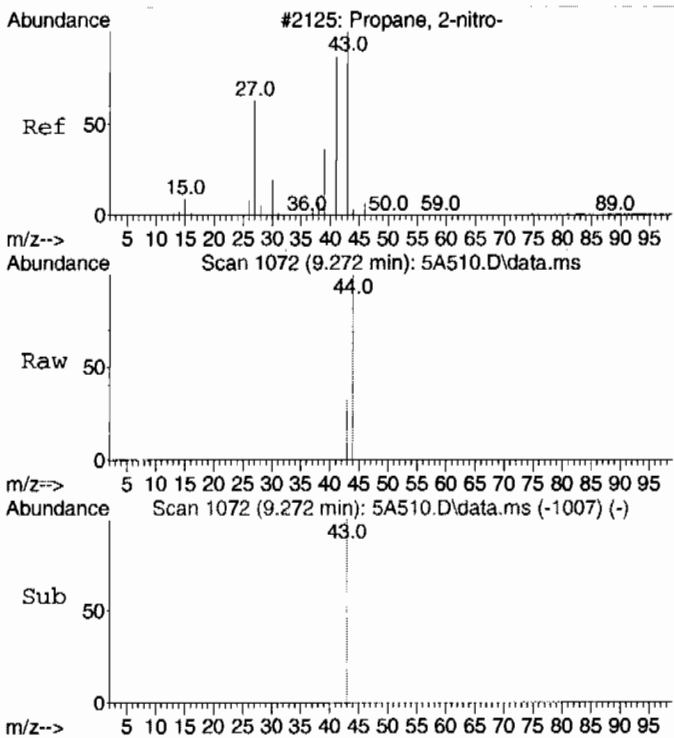
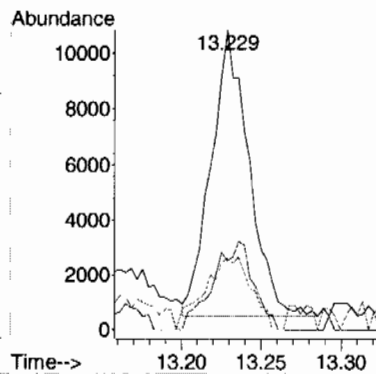
Tgt Ion: 105 Resp: 7232
Ion Ratio Lower Upper
105 100
120 33.9 17.4 77.4





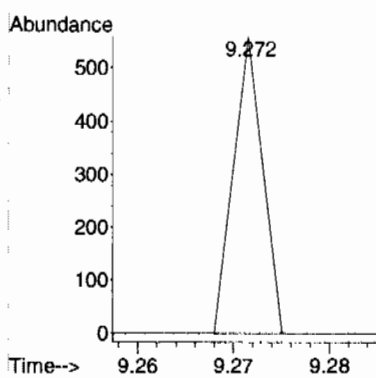
#72
4-Isopropyltoluene
Concen: 1.02 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5A510.D
Acq: 5 Mar 2010 7:02 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
134	33.4	0.0	57.2
91	31.9	0.0	53.0



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.95 ug/L
RT: 9.272 min Scan# 1072
Delta R.T. -0.070 min
Lab File: 5A510.D
Acq: 5 Mar 2010 7:02 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
41	191.5	52.5	112.5#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\

Data File : 5A510.D

Acq On : 5 Mar 2010 7:02 pm

Operator : CDS1

Sample : |248240002|961880|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A510.D
Acq On : 5 Mar 2010 7:02 pm
Operator : CDS1
Sample : |248240002|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240003
 Client ID: RE36-10-7454
 Batch ID: 961880
 Run Date: 03/05/2010 19:28
 Prep Date: 03/05/2010 10:34
 Data File: 030510V55A511.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 8.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240003	Date Received: 02/27/2010 09:10	%Moisture: 8.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7454	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.1	Dilution: 1
Run Date: 03/05/2010 19:28	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\5A511.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.44	ug/kg	1.74	5.44
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

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\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
InstName : VOA5
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 11:23:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1820105	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1334826	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	629204	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1820105	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1334826	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	629204	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	425723	48.33	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	96.66%			
43) Toluene-d8	9.721	9.721	0.872	98	1678791	49.18	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.36%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	650131	51.51	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	103.02%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.980	4.900	0.594	50	1940	Below Cal		55
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	188	N.D.		
9) Acetone	6.181	6.174	0.737	43	1514	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	1079	N.D.		
13) Methyl acetate	6.181	6.365	0.737	43	1514	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	2269	N.D.		
15) Methylene chloride	6.542	6.538	0.780	84	9789	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810	43	139	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	110	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977	78	108	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.388	8.377	1.000	56	10293	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
InstName : VOA5
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 11:23:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.777	9.788	0.877	91	1312	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.407	10.279	0.934	43	108	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	921	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.256	12.016	0.914	105	372	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.408	12.415	0.925	91	982	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	268	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.684	12.698	0.946	91	1413	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1724	N.D.	
71) sec-Butylbenzene	13.109	13.119	0.977	105	570	N.D.	
72) 4-Isopropyltoluene	13.243	13.229	0.987	119	3130	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	117	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	669	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	452	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	2128	N.D.	
81) 1,2,3-Trichlorobenzene	16.313	16.291	1.216	180	370	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.450	6.425	0.769	41	425	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	110	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
InstName : VOA5
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 11:23:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

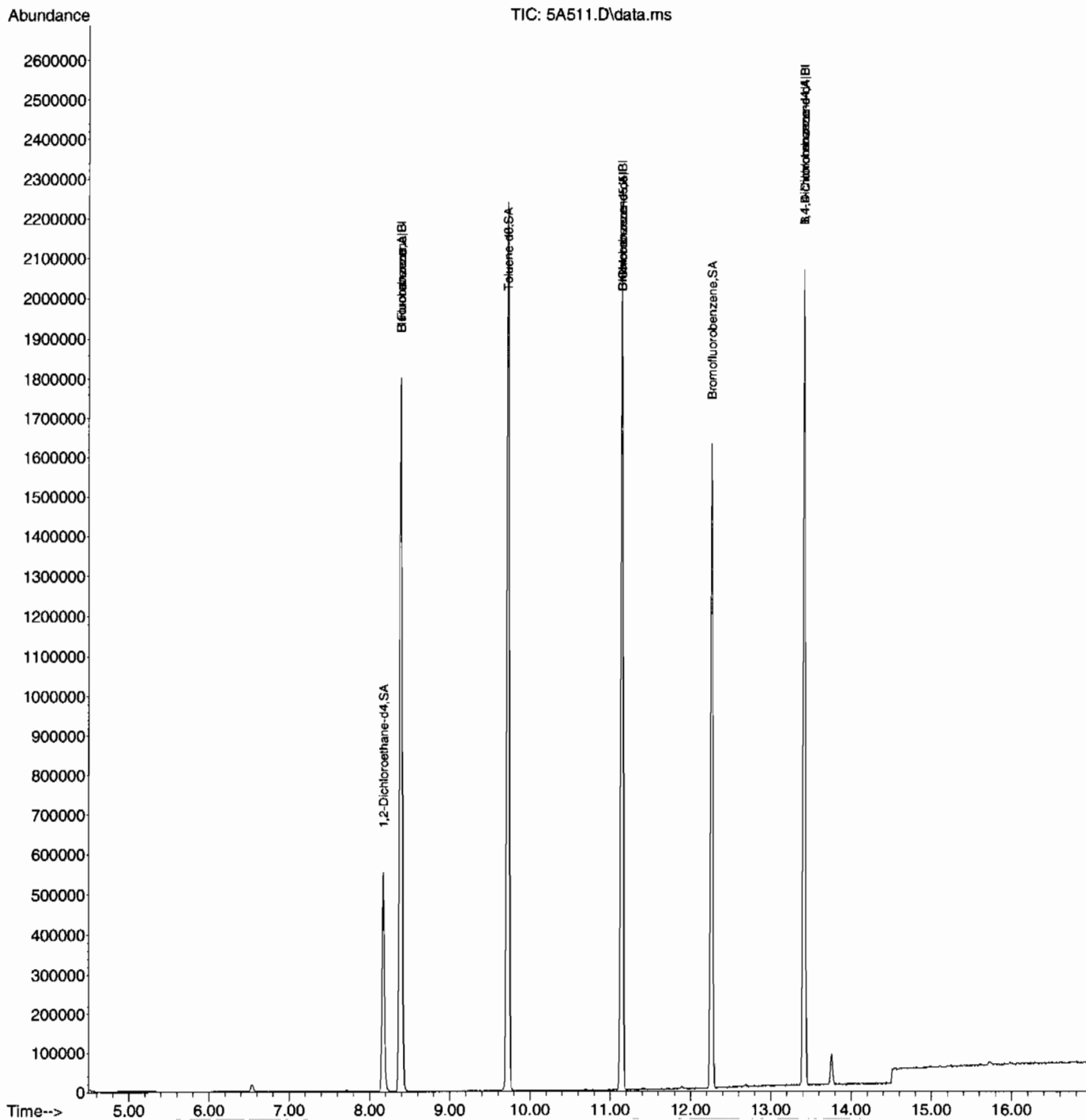
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.701	7.680	0.918	41	541	N.D.	
97) Tetrahydrofuran	7.709	7.716	0.919	42	1773	N.D.	
98) Isobutyl alcohol	7.804	7.857	0.930	41	113	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.579	13.565	1.012	91	2117	N.D.	
112) bis(2-Chloroisopropyl)...	13.933	13.929	1.039	45	132	N.D.	

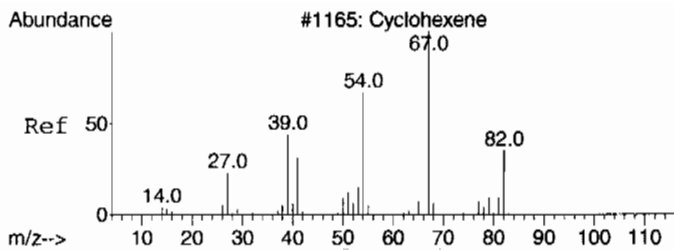
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
InstName : VOA5
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

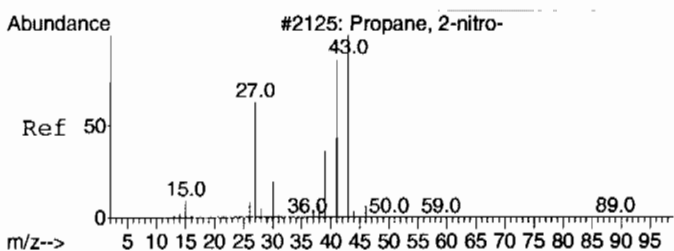
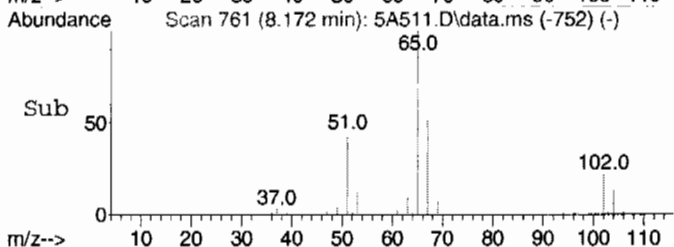
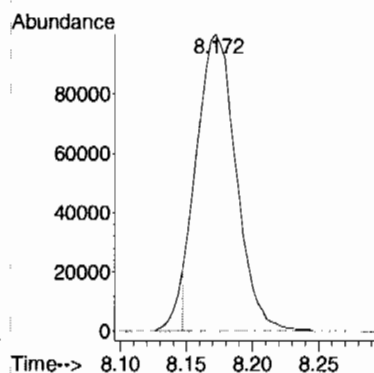
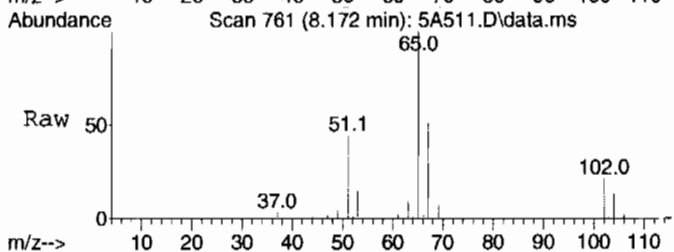
Quant Time: Mar 09 11:23:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





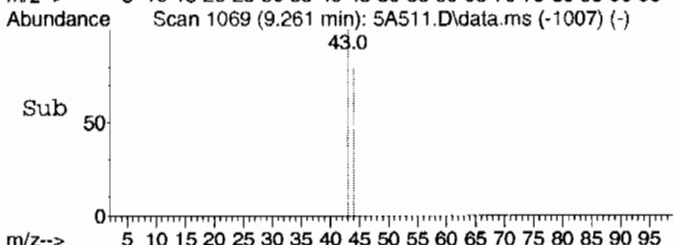
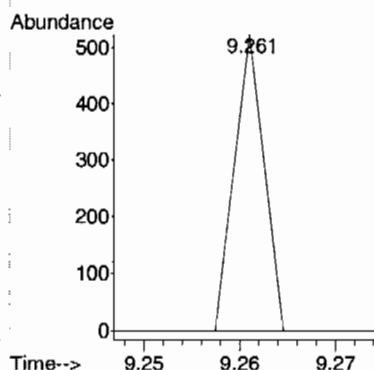
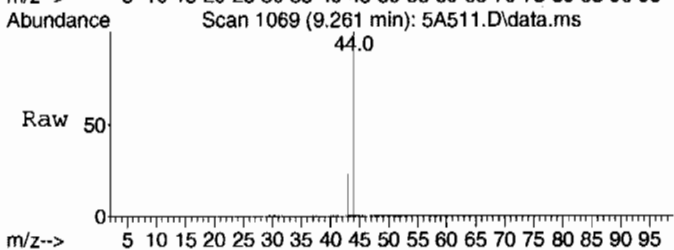
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 16.89 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A511.D
Acq: 5 Mar 2010 7:28 pm

Tgt Ion: 67 Resp: 206823
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.94 ug/L
RT: 9.261 min Scan# 1069
Delta R.T. -0.081 min
Lab File: 5A511.D
Acq: 5 Mar 2010 7:28 pm

Tgt Ion: 43 Resp: 111
Ion Ratio Lower Upper
43 100
41 101.8 52.5 112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A511.D
Acq On : 5 Mar 2010 7:28 pm
Operator : CDS1
Sample : |248240003|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240004	Date Received: 02/27/2010 09:10	% Moisture: 9.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7460	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOAS.I	Dilution: 1
Run Date: 03/05/2010 19:52	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:36	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V5\SA512.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	J	0.442	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7460
Batch ID: 961880
Run Date: 03/05/2010 19:52
Prep Date: 03/05/2010 10:36
Data File: 030510V55A512.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.343	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	J	0.575	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A512.D
Acq On : 5 Mar 2010 7:52 pm
Operator : CDS1
InstName : VOA5
Sample : |248240004|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:23:51 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1808555	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1233912	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	465535	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1808555	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1233912	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	465535	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	420402	48.03	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	96.06%		
43) Toluene-d8	9.721	9.721	0.872	98	1616811	51.24	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	102.48%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	542872	58.14	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	116.28%		
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1091	Below Cal	#	26
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.170	6.174	0.736	43	2747	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	448	N.D.		
13) Methyl acetate	6.354	6.365	0.758	43	111	N.D.		
14) Carbon disulfide	6.436	6.435	0.767	76	1415	N.D.		
15) Methylene chloride	6.545	6.538	0.780	84	7315	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	498	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	9741	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A512.D
Acq On : 5 Mar 2010 7:52 pm
Operator : CDS1
InstName : VOA5
Sample : |248240004|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:23:51 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	10670	0.40 ug/L	98
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.527	10.279	0.945	43	121	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	10.297	10.290	0.924	164	111	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	5217	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	3604	0.31 ug/L	81
56) o-Xylene	11.705	11.701	1.050	106	1976	N.D.	
57) Styrene	11.712	11.715	1.051	104	232	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.009	12.016	0.895	105	110	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.479	12.415	0.930	91	514	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1009	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.705	12.698	0.947	91	1742	N.D.	
69) tert-Butylbenzene	12.854	12.900	0.958	134	109	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.965	105	3659	N.D.	
71) sec-Butylbenzene	13.109	13.119	0.977	105	676	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	9721	0.52 ug/L	98
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.448	13.441	1.002	146	243	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	1833	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.164	180	296	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	2125	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	118	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.443	6.425	0.768	41	119	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A512.D
Acq On : 5 Mar 2010 7:52 pm
Operator : CDS1
InstName : VOA5
Sample : |248240004|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:23:51 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

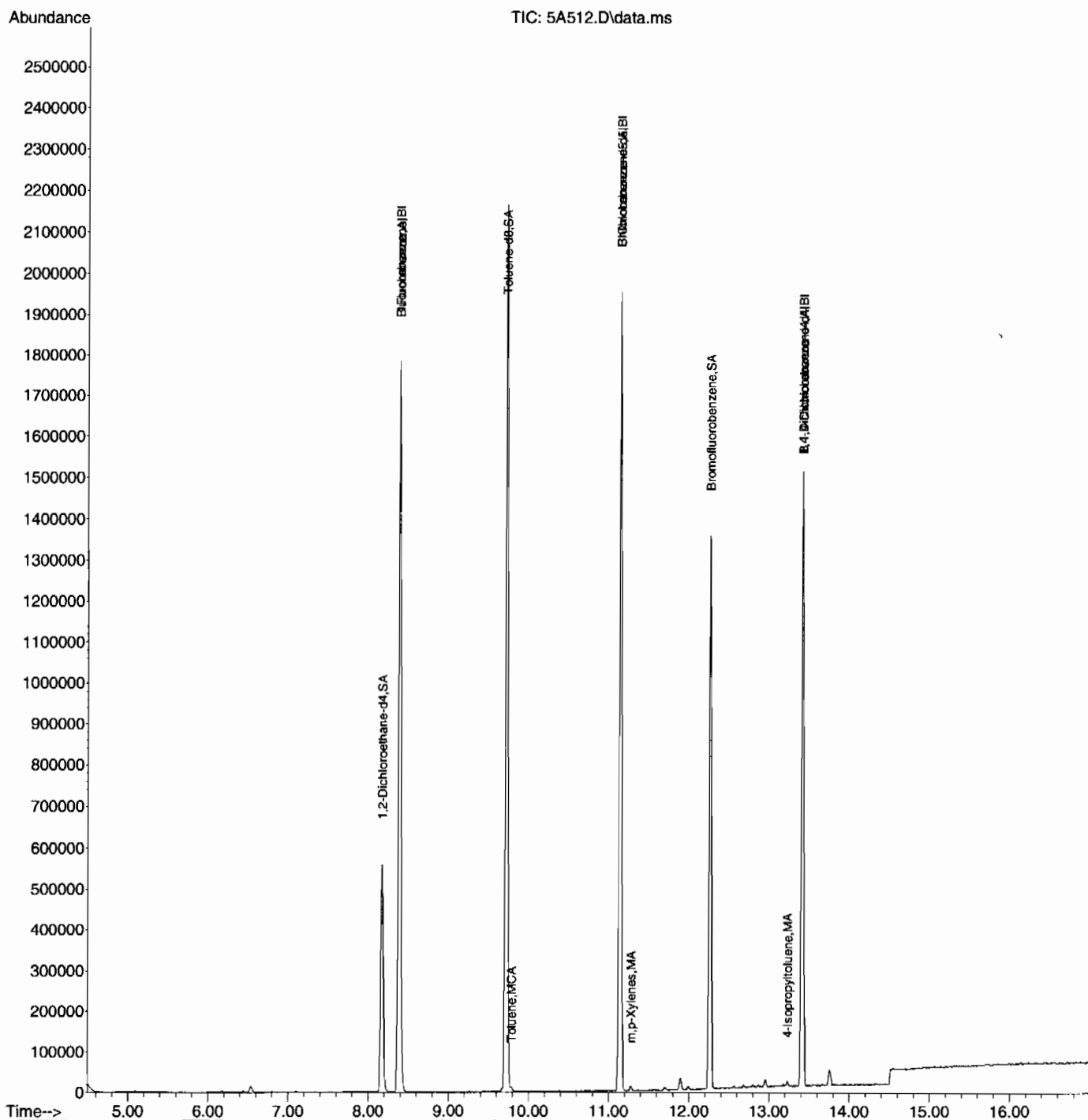
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	359	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	1105	N.D.	
98) Isobutyl alcohol	7.839	7.857	0.935	41	112	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	2206	N.D.	
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	144	N.D.	

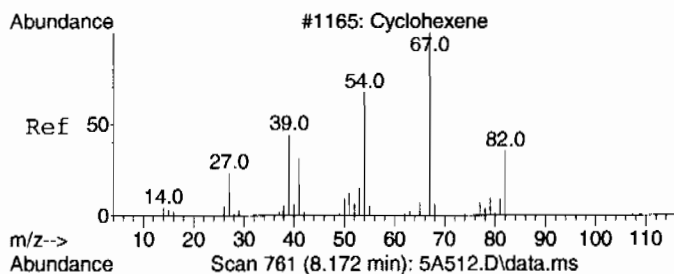
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A512.D
Acq On : 5 Mar 2010 7:52 pm
Operator : CDS1
InstName : VOA5
Sample : |248240004|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

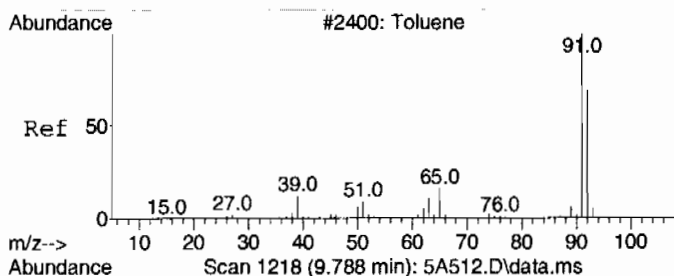
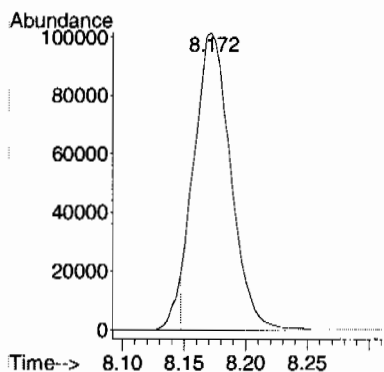
Quant Time: Mar 09 11:23:51 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





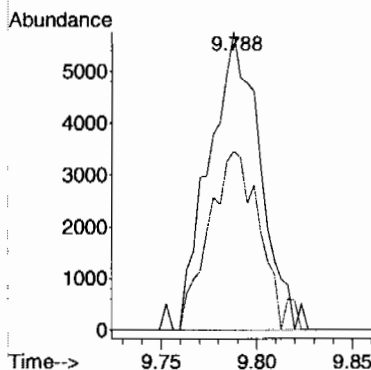
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 17.03 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A512.D
Acq: 5 Mar 2010 7:52 pm

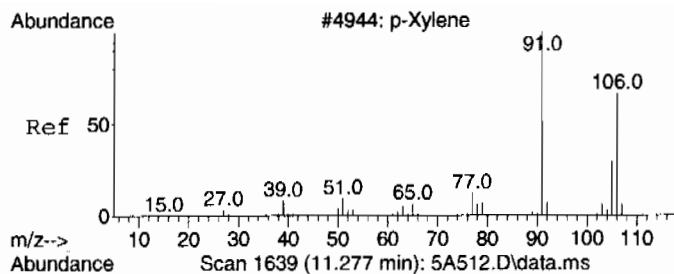
Tgt Ion: 67 Resp: 207268
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 0.40 ug/L
RT: 9.788 min Scan# 1218
Delta R.T. -0.000 min
Lab File: 5A512.D
Acq: 5 Mar 2010 7:52 pm

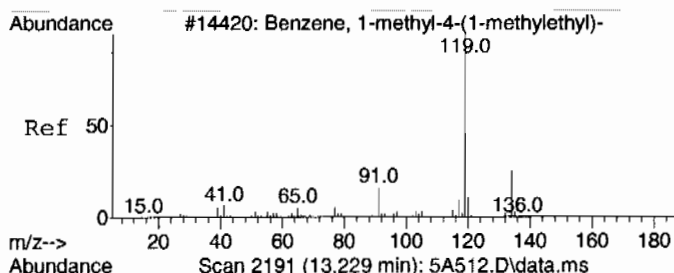
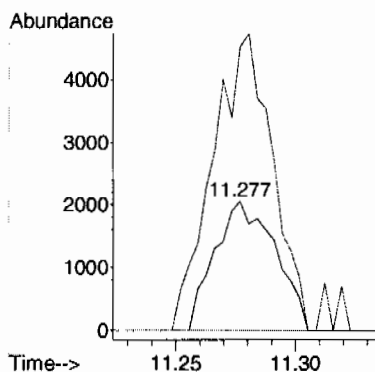
Tgt Ion: 91 Resp: 10670
Ion Ratio Lower Upper
91 100
92 60.7 29.5 89.5





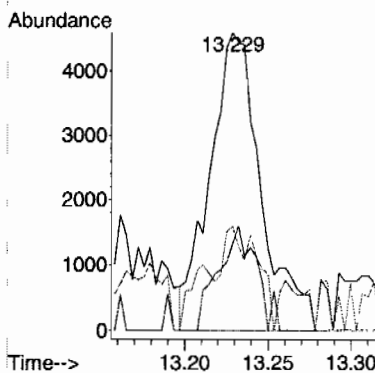
#55
m,p-Xylenes
Concen: 0.31 ug/L
RT: 11.277 min Scan# 1639
Delta R.T. -0.003 min
Lab File: 5A512.D
Acq: 5 Mar 2010 7:52 pm

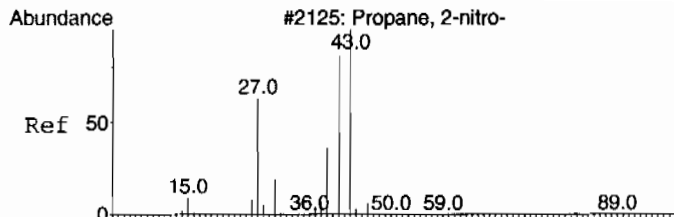
Tgt Ion:106 Resp: 3604
Ion Ratio Lower Upper
106 100
91 226.8 168.5 228.5



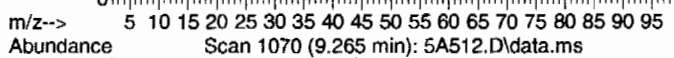
#72
4-Isopropyltoluene
Concen: 0.52 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5A512.D
Acq: 5 Mar 2010 7:52 pm

Tgt Ion:119 Resp: 9721
Ion Ratio Lower Upper
119 100
134 25.9 0.0 57.2
91 23.2 0.0 53.0

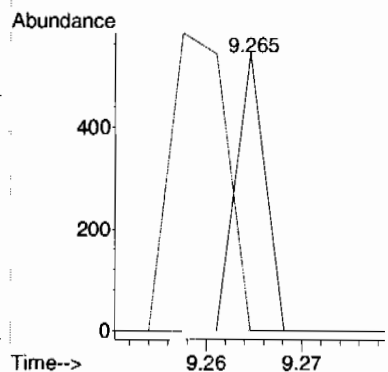
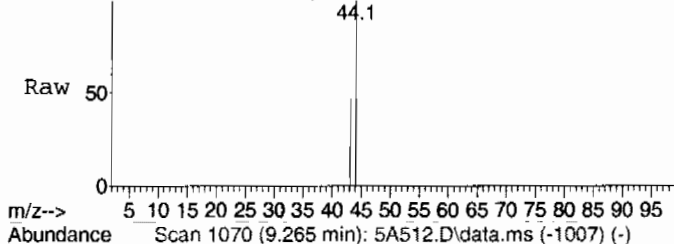




#102 BEFORE analyst DELETION
 2-Nitropropane
 Concen: 6.95 ug/L
 RT: 9.265 min Scan# 1070
 Delta R.T. -0.077 min
 Lab File: 5A512.D
 Acq: 5 Mar 2010 7:52 pm



Tgt Ion: 43 Resp: 115
 Ion Ratio Lower Upper
 43 100
 41 207.0 52.5 112.5#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\

Data File : 5A512.D

Acq On : 5 Mar 2010 7:52 pm

Operator : CDS1

Sample : |248240004|961880|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A512.D
Acq On : 5 Mar 2010 7:52 pm
Operator : CDS1
Sample : |248240004|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 248240005

Client ID: RE36-10-7456
Batch ID: 961880
Run Date: 03/05/2010 20:17
Prep Date: 03/05/2010 10:38
Data File: 030510V5A513.D

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 7.5
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	1.08	ug/kg	0.368	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.324	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.324	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.324	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.324	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.324	1.08
67-64-1	Acetone	U	5.40	ug/kg	1.79	5.40
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
74-88-4	Iodomethane	U	5.40	ug/kg	1.73	5.40
75-09-2	Methylene chloride	U	5.40	ug/kg	2.16	5.40
75-15-0	Carbon disulfide	U	5.40	ug/kg	1.35	5.40
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.324	1.08
78-93-3	2-Butanone	U	5.40	ug/kg	1.62	5.40
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.324	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.324	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.324	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.324	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.324	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.324	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.324	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.324	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.324	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.324	1.08
108-10-1	4-Methyl-2-pentanone	U	5.40	ug/kg	1.35	5.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
108-88-3	Toluene	J	0.800	ug/kg	0.324	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.324	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.324	1.08
591-78-6	2-Hexanone	U	5.40	ug/kg	1.62	5.40
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.324	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.324	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.324	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.324	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.324	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7456	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.1	Dilution: 1
Run Date: 03/05/2010 20:17	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:38	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V55A513.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.324	1.08
179601-23-1	m,p-Xylenes	J	0.530	ug/kg	0.324	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.324	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.324	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.324	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.324	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.324	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.324	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.324	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.324	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.324	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.324	1.08
95-63-6	1,2,4-Trimethylbenzene	J	0.454	ug/kg	0.324	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.324	1.08
99-87-6	4-Isopropyltoluene	J	0.670	ug/kg	0.324	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.324	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.324	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.40	ug/kg	1.73	5.40
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.324	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.324	1.08

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\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:24:33 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1748687	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1091088	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	343026	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1748687	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1091088	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	343026	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	407394	48.13	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	96.26%		
43) Toluene-d8	9.721	9.721	0.872	98	1537664	55.11	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	110.22%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	438015	63.66	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	127.32%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.880	4.900	0.582	50	1449	Below Cal		94
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	175	N.D.		
9) Acetone	6.170	6.174	0.736	43	6921	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	899	N.D.		
13) Methyl acetate	6.170	6.365	0.736	43	6921	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1621	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	10624	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	394	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	109	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945	56	149	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	1469	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	9695	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:24:33 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	17339	0.74 ug/L	100
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	6809	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	4939	0.49 ug/L	83
56) o-Xylene	11.694	11.701	1.050	106	2442	N.D.	
57) Styrene	11.712	11.715	1.051	104	120	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896	105	952	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.670	12.465	0.945	156	112	N.D.	
65) n-Propylbenzene	12.465	12.415	0.929	91	259	N.D.	
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937	105	2579	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.705	12.698	0.947	91	1155	N.D.	
69) tert-Butylbenzene	12.854	12.900	0.958	134	131	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	5774	0.42 ug/L	83
71) sec-Butylbenzene	13.112	13.119	0.978	105	755	N.D.	
72) 4-Isopropyltoluene	13.236	13.229	0.987	119	8561	0.62 ug/L	92
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	120	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	810	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	769	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1852	N.D.	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	139	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	135	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.447	7.383	0.888	43	109	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:24:33 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

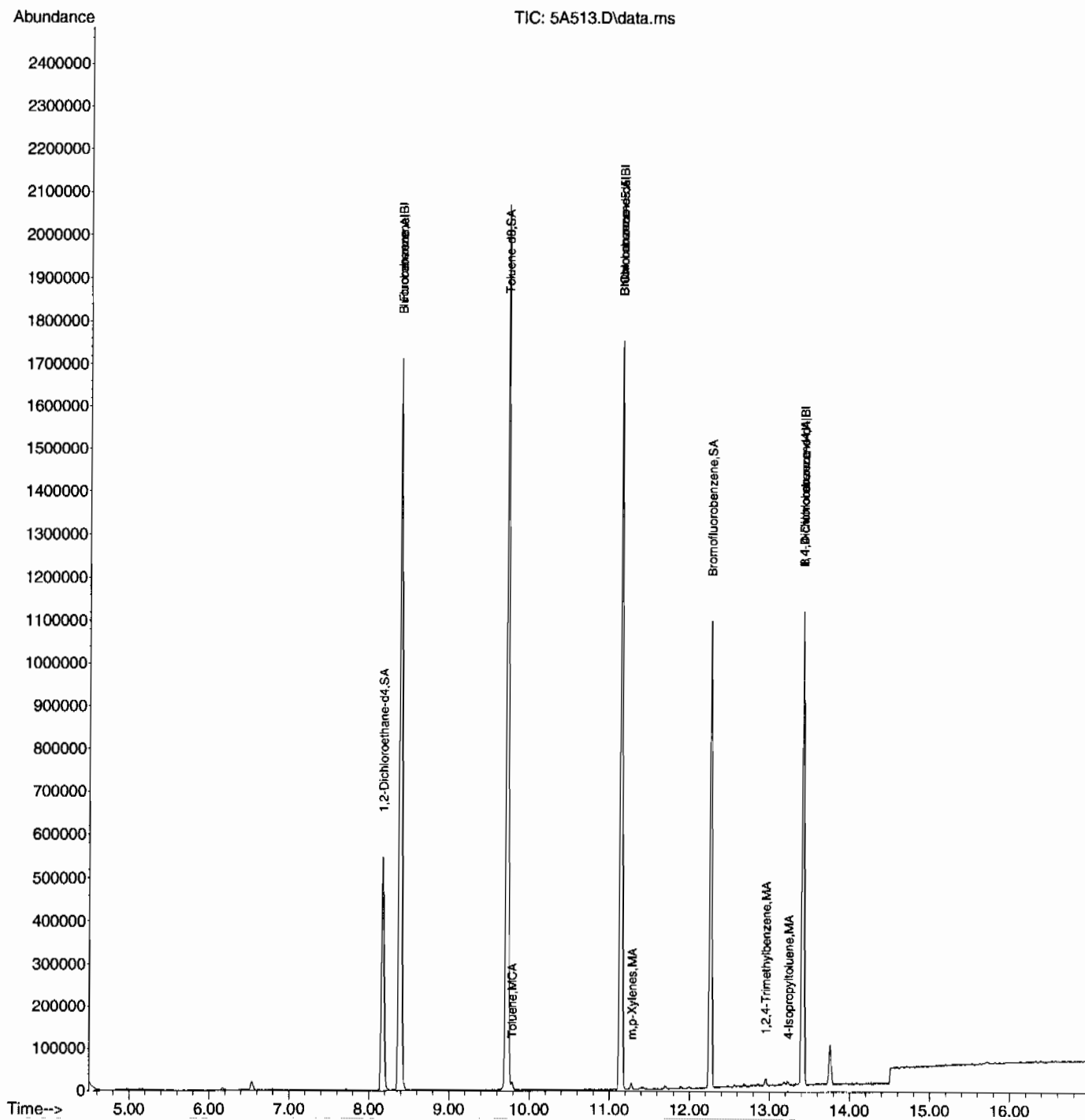
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	459	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	1436	N.D.	
98) Isobutyl alcohol	7.864	7.857	0.938	41	109	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.558	13.565	1.011	91	869	N.D.	
112) bis(2-Chloroisopropyl)...	13.936	13.929	1.039	45	333	N.D.	

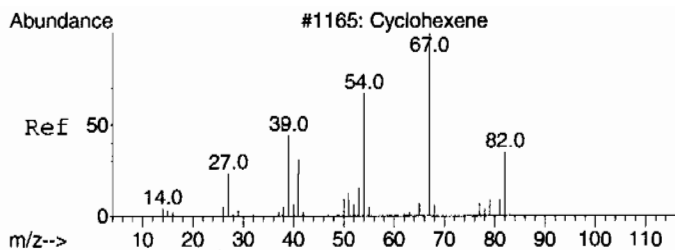
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

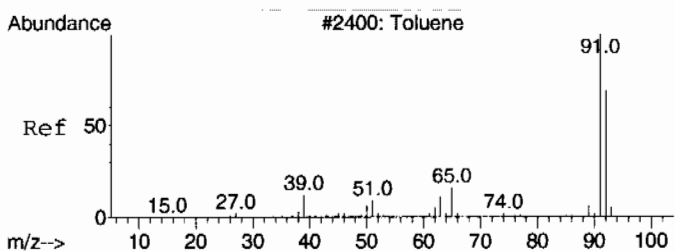
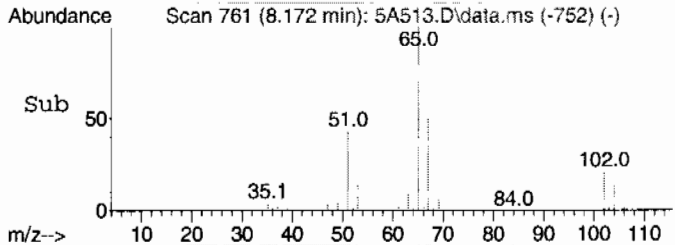
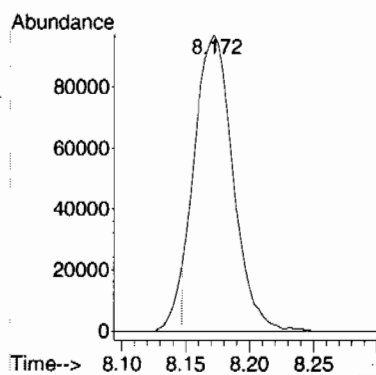
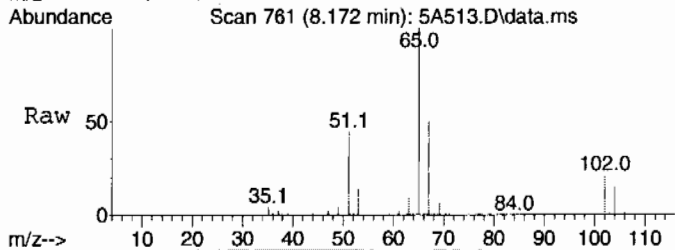
Quant Time: Mar 09 11:24:33 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





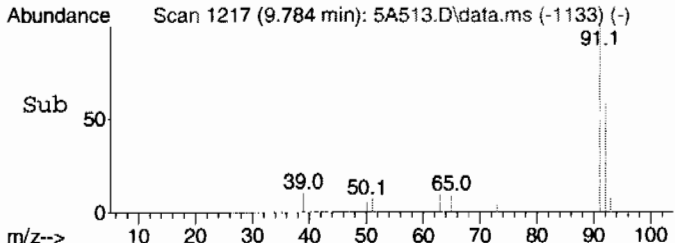
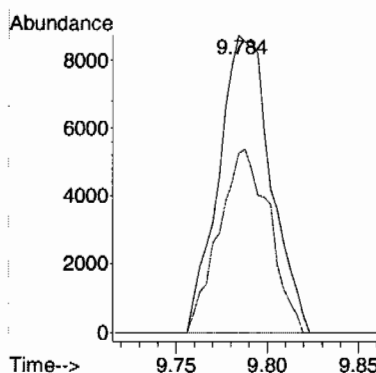
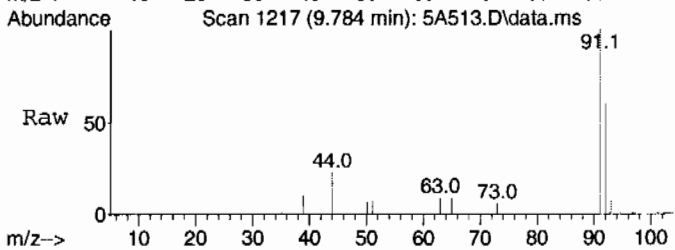
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 17.07 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm

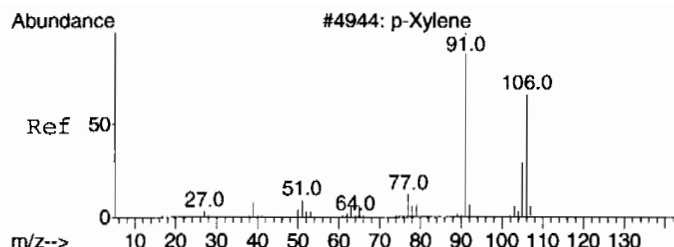
Tgt Ion: 67 Resp: 200861
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



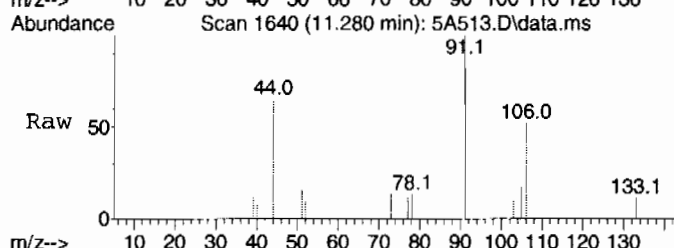
#44
Toluene
Concen: 0.74 ug/L
RT: 9.784 min Scan# 1217
Delta R.T. -0.004 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm

Tgt Ion: 91 Resp: 17339
Ion Ratio Lower Upper
91 100
92 59.5 29.5 89.5

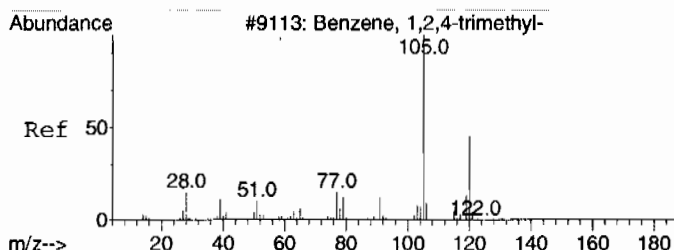
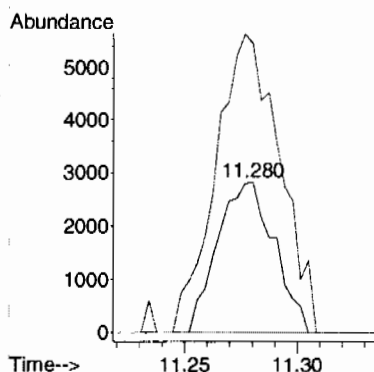
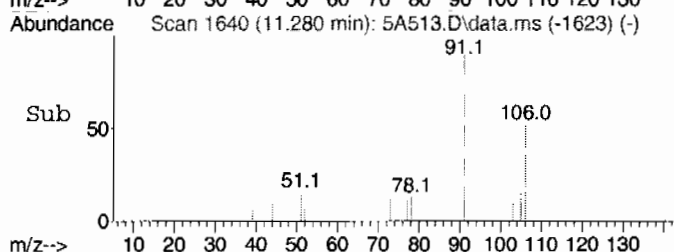




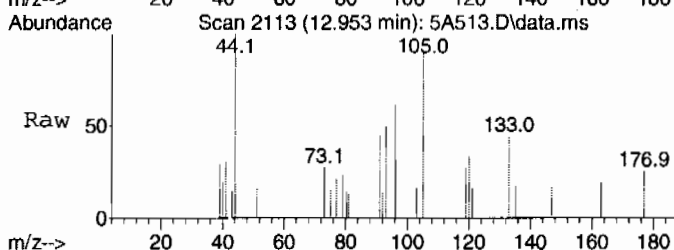
#55
m,p-Xylenes
Concen: 0.49 ug/L
RT: 11.280 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm



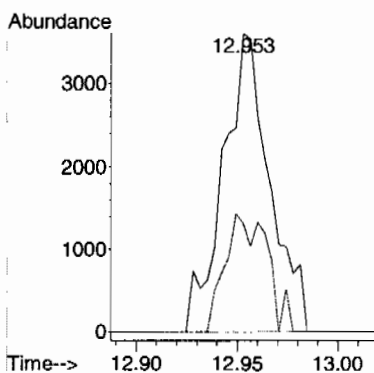
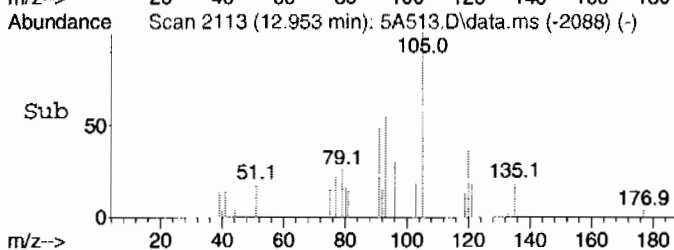
Tgt Ion:106 Resp: 4939
Ion Ratio Lower Upper
106 100
91 224.6 168.5 228.5

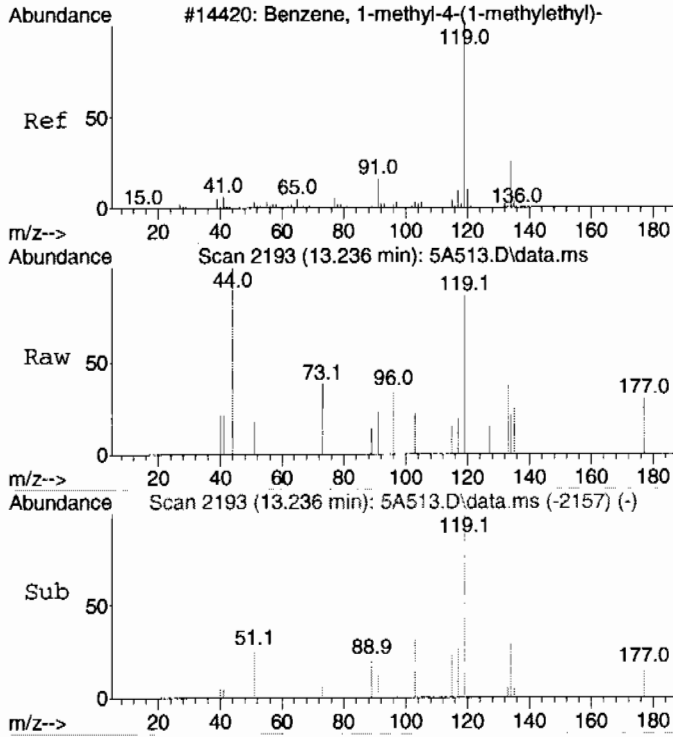


#70
1,2,4-Trimethylbenzene
Concen: 0.42 ug/L
RT: 12.953 min Scan# 2113
Delta R.T. -0.003 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm



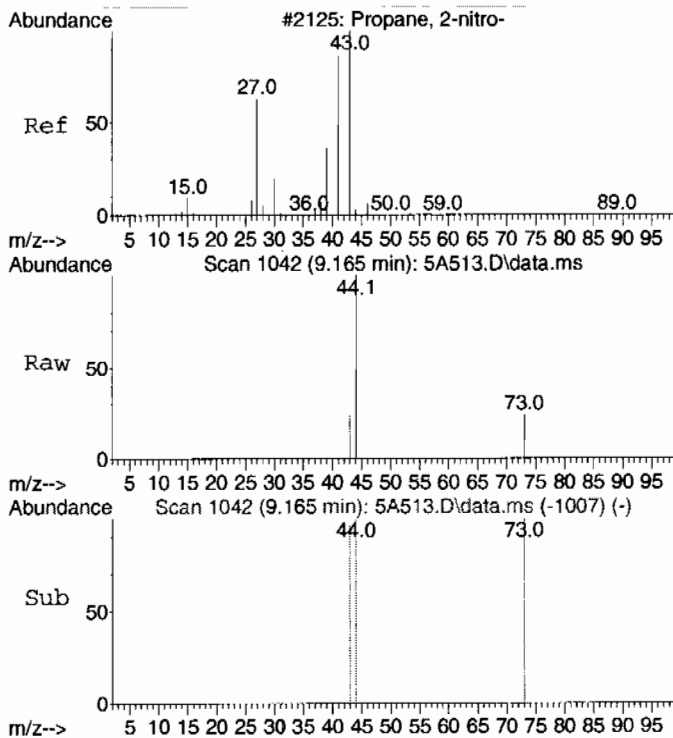
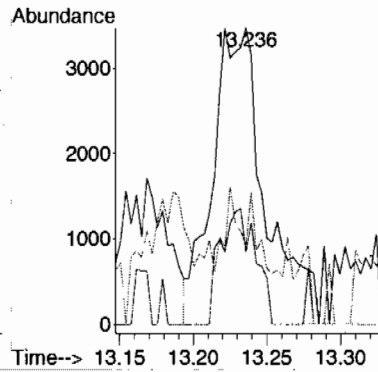
Tgt Ion:105 Resp: 5774
Ion Ratio Lower Upper
105 100
120 36.3 17.4 77.4





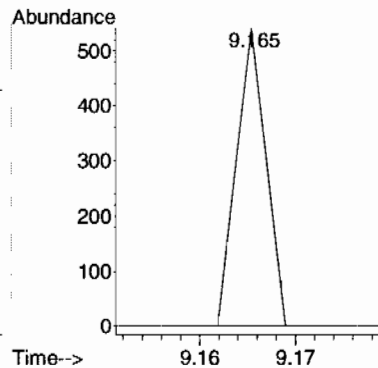
#72
4-Isopropyltoluene
Concen: 0.62 ug/L
RT: 13.236 min Scan# 2193
Delta R.T. 0.007 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm

Tgt Ion:	119	Resp:	8561
Ion Ratio	Lower	Upper	
119	100		
134	26.0	0.0	57.2
91	16.3	0.0	53.0



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.95 ug/L
RT: 9.165 min Scan# 1042
Delta R.T. -0.177 min
Lab File: 5A513.D
Acq: 5 Mar 2010 8:17 pm

Tgt Ion:	43	Resp:	115
Ion Ratio	Lower	Upper	
43	100		
41	102.6	52.5	112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A513.D
Acq On : 5 Mar 2010 8:17 pm
Operator : CDS1
Sample : |248240005|961880|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7459	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/05/2010 21:07	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/05/2010 10:42	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030510V55A515.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 18.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7459
 Batch ID: 961880
 Run Date: 03/05/2010 21:07
 Prep Date: 03/05/2010 10:42
 Data File: 030510V55A515.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene	J	1.01	ug/kg	0.369	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.15	ug/kg	1.97	6.15
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

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\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
InstName : VOA5
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 11:28:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1617681	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	946790	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	273346	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1617681	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	946790	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	273346	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	402415	51.40	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 102.80%			
43) Toluene-d8	9.721	9.721	0.872	98	1394330	57.59	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 115.18%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	363194	66.24	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 132.48%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	890	Below Cal		85
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	3761	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	382	N.D.		
13) Methyl acetate	6.361	6.365	0.758	43	114	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	1425	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	3714	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.921	7.924	0.944	56	344	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	117	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	8729	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
InstName : VOA5
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 11:28:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.798	9.788	0.879	91	2166	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.146	11.181	1.000	91	4523	N.D.	
55) m,p-Xylenes	11.393	11.280	1.023	106	111	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.994	12.016	0.894	105	118	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.426	12.415	0.926	91	185	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	107	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D.	d
69) tert-Butylbenzene	12.847	12.900	0.958	134	107	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	1019	N.D.	
71) sec-Butylbenzene	13.123	13.119	0.978	105	261	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	9019	0.82 ug/L	85
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.444	13.441	1.002	146	115	N.D.	
75) n-Butylbenzene	13.660	13.653	1.018	91	1474	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	113	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1335	N.D.	
81) 1,2,3-Trichlorobenzene	16.276	16.291	1.213	180	201	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.442	6.425	0.768	41	152	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
InstName : VOA5
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 11:28:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

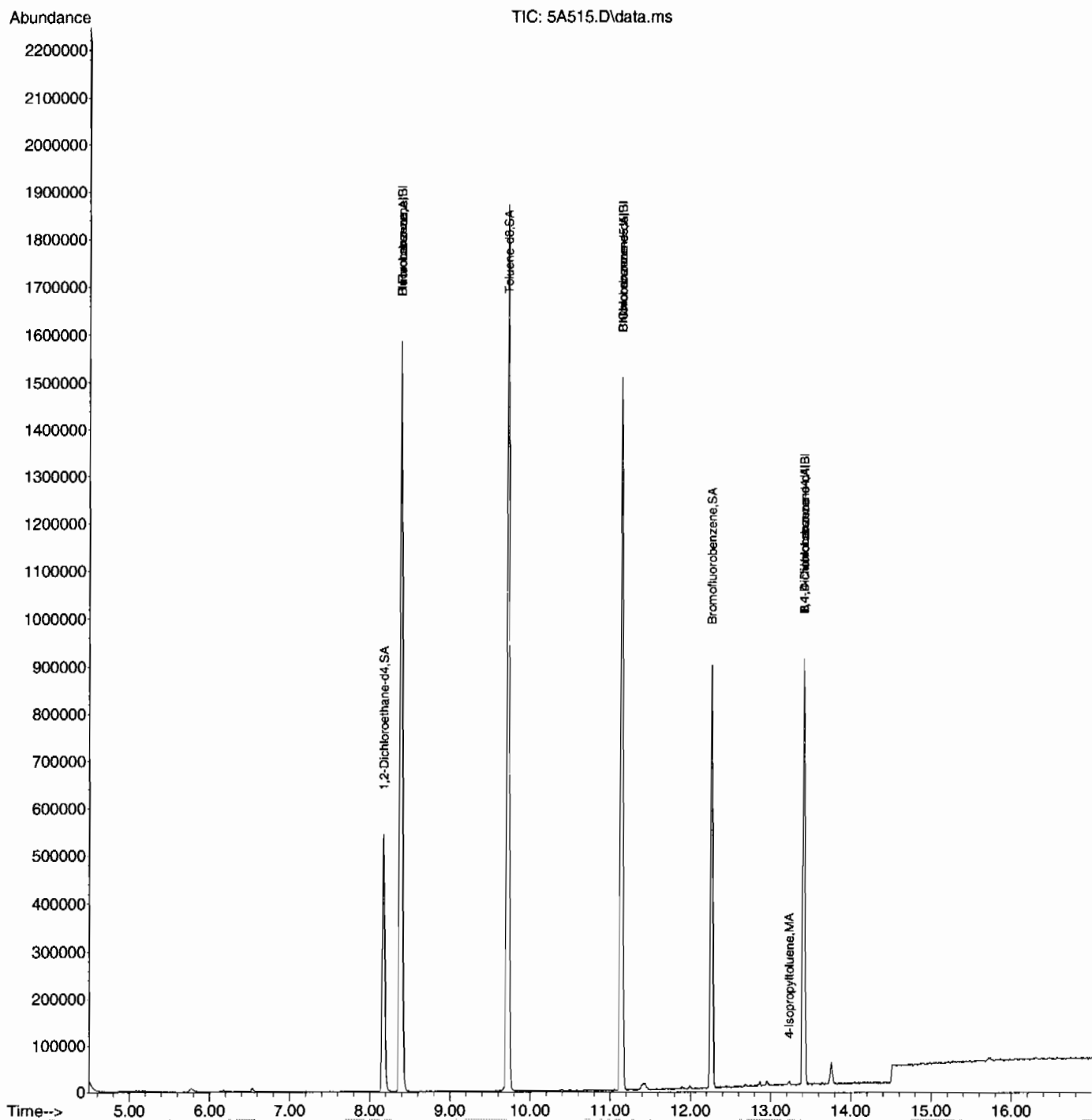
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.919	41	417	N.D.	
97) Tetrahydrofuran	7.708	7.716	0.919	42	248	N.D.	
98) Isobutyl alcohol	7.850	7.857	0.936	41	152	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.558	13.565	1.011	91	1669	N.D.	
112) bis(2-Chloroisopropyl)...	13.939	13.929	1.039	45	119	N.D.	

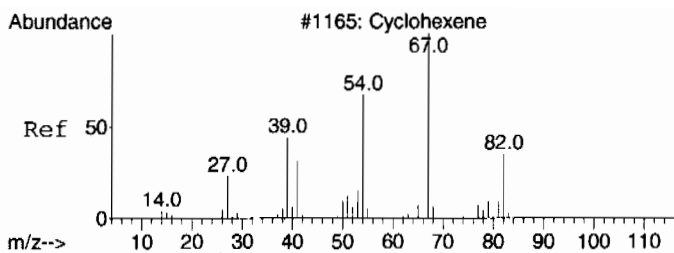
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
InstName : VOA5
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

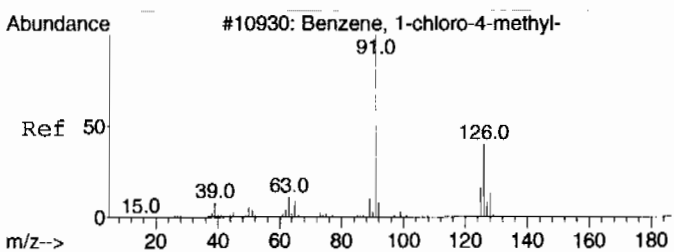
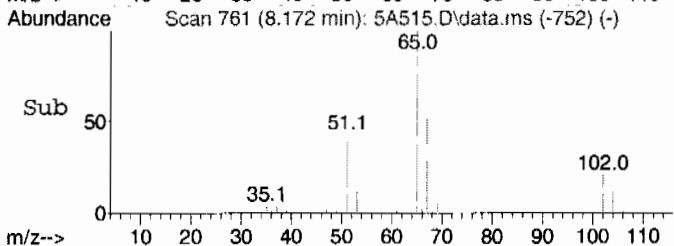
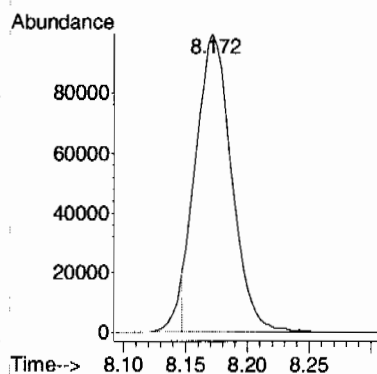
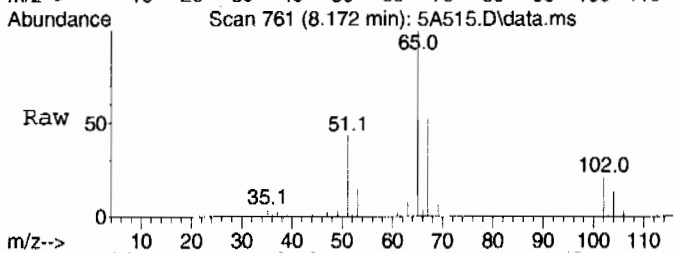
Quant Time: Mar 09 11:28:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





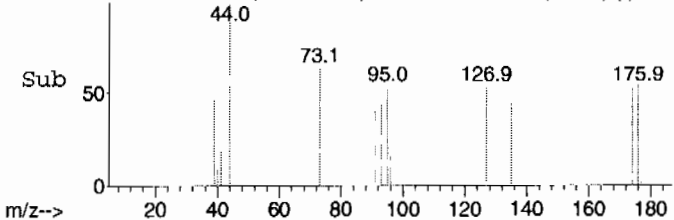
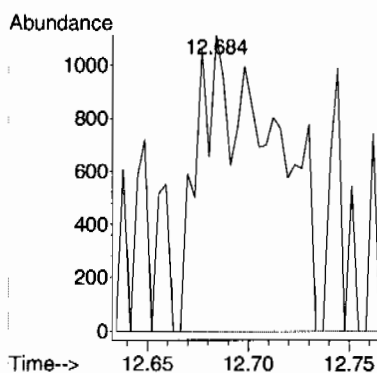
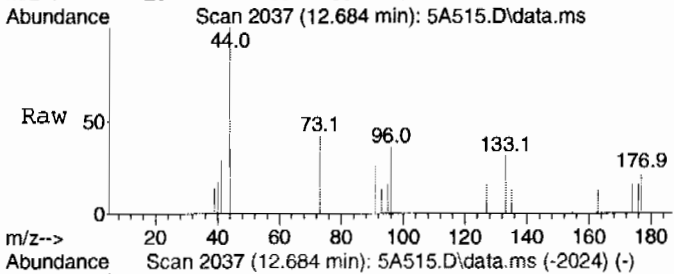
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 18.36 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A515.D
Acq: 5 Mar 2010 9:07 pm

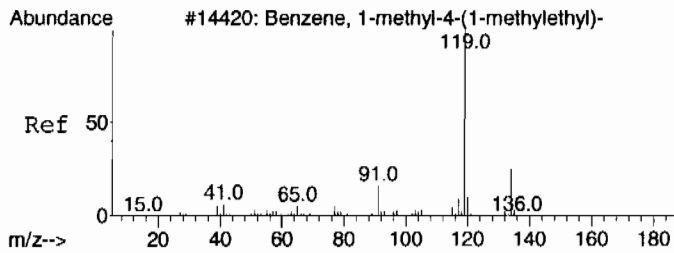
Tgt Ion: 67 Resp: 199815
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.30 ug/L
RT: 12.684 min Scan# 2037
Delta R.T. -0.014 min
Lab File: 5A515.D
Acq: 5 Mar 2010 9:07 pm

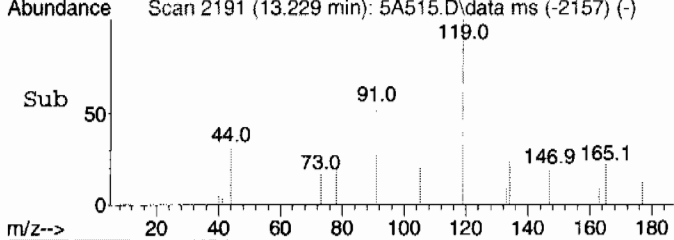
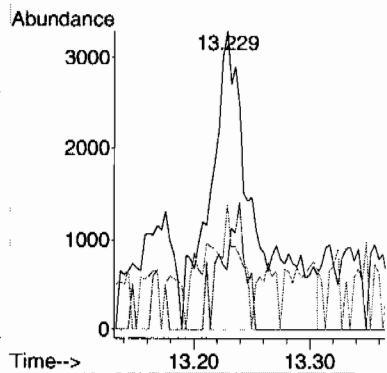
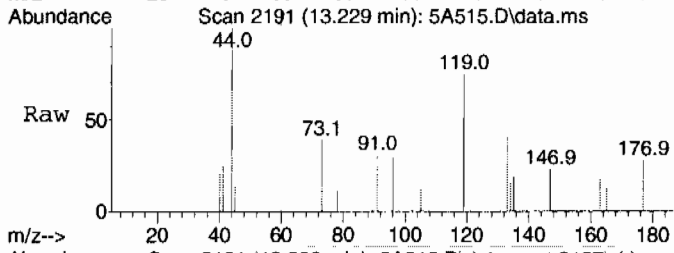
Tgt Ion: 91 Resp: 2895
Ion Ratio Lower Upper
91 100
126 0.0 3.6 63.6#





#72
 4-Isopropyltoluene
 Concen: 0.82 ug/L
 RT: 13.229 min Scan# 2191
 Delta R.T. -0.000 min
 Lab File: 5A515.D
 Acq: 5 Mar 2010 9:07 pm

Tgt Ion:	119	Resp:	9019
Ion	Ratio	Lower	Upper
119	100		
134	22.0	0.0	57.2
91	12.9	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A515.D
Acq On : 5 Mar 2010 9:07 pm
Operator : CDS1
Sample : |248240007|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 42.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7520
 Batch ID: 961880
 Run Date: 03/05/2010 21:58
 Prep Date: 03/05/2010 10:46
 Data File: 030510V55A517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.73	ug/kg	0.589	1.73
74-87-3	Chloromethane	U	1.73	ug/kg	0.519	1.73
75-01-4	Vinyl chloride	U	1.73	ug/kg	0.519	1.73
74-83-9	Bromomethane	U	1.73	ug/kg	0.519	1.73
75-00-3	Chloroethane	U	1.73	ug/kg	0.519	1.73
75-69-4	Trichlorofluoromethane	U	1.73	ug/kg	0.519	1.73
67-64-1	Acetone	J	3.90	ug/kg	2.87	8.66
75-35-4	1,1-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
74-88-4	Iodomethane	U	8.66	ug/kg	2.77	8.66
75-09-2	Methylene chloride	U	8.66	ug/kg	3.46	8.66
75-15-0	Carbon disulfide	U	8.66	ug/kg	2.16	8.66
156-60-5	trans-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
75-34-3	1,1-Dichloroethane	U	1.73	ug/kg	0.519	1.73
78-93-3	2-Butanone	U	8.66	ug/kg	2.60	8.66
156-59-2	cis-1,2-Dichloroethylene	U	1.73	ug/kg	0.519	1.73
594-20-7	2,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
67-66-3	Chloroform	U	1.73	ug/kg	0.519	1.73
74-97-5	Bromochloromethane	U	1.73	ug/kg	0.571	1.73
71-55-6	1,1,1-Trichloroethane	U	1.73	ug/kg	0.519	1.73
563-58-6	1,1-Dichloropropene	U	1.73	ug/kg	0.519	1.73
56-23-5	Carbon tetrachloride	U	1.73	ug/kg	0.519	1.73
107-06-2	1,2-Dichloroethane	U	1.73	ug/kg	0.519	1.73
71-43-2	Benzene	U	1.73	ug/kg	0.519	1.73
79-01-6	Trichloroethylene	U	1.73	ug/kg	0.571	1.73
78-87-5	1,2-Dichloropropane	U	1.73	ug/kg	0.519	1.73
75-27-4	Bromodichloromethane	U	1.73	ug/kg	0.519	1.73
74-95-3	Dibromomethane	U	1.73	ug/kg	0.519	1.73
108-10-1	4-Methyl-2-pentanone	U	8.66	ug/kg	2.16	8.66
10061-01-5	cis-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
108-88-3	Toluene	U	1.73	ug/kg	0.519	1.73
10061-02-6	trans-1,3-Dichloropropylene	U	1.73	ug/kg	0.519	1.73
79-00-5	1,1,2-Trichloroethane	U	1.73	ug/kg	0.519	1.73
591-78-6	2-Hexanone	U	8.66	ug/kg	2.60	8.66
142-28-9	1,3-Dichloropropane	U	1.73	ug/kg	0.519	1.73
127-18-4	Tetrachloroethylene	U	1.73	ug/kg	0.519	1.73
124-48-1	Dibromochloromethane	U	1.73	ug/kg	0.519	1.73
106-93-4	1,2-Dibromoethane	U	1.73	ug/kg	0.519	1.73
108-90-7	Chlorobenzene	U	1.73	ug/kg	0.519	1.73

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240009

 Client ID: RE36-10-7520
 Batch ID: 961880
 Run Date: 03/05/2010 21:58
 Prep Date: 03/05/2010 10:46
 Data File: 030510V55A517.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 42.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.73	ug/kg	0.519	1.73
179601-23-1	m,p-Xylenes	U	3.46	ug/kg	0.519	3.46
95-47-6	o-Xylene	U	1.73	ug/kg	0.519	1.73
100-42-5	Styrene	U	1.73	ug/kg	0.519	1.73
75-25-2	Bromoform	U	1.73	ug/kg	0.519	1.73
79-34-5	1,1,2,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
96-18-4	1,2,3-Trichloropropane	U	1.73	ug/kg	0.519	1.73
108-86-1	Bromobenzene	U	1.73	ug/kg	0.519	1.73
103-65-1	n-Propylbenzene	U	1.73	ug/kg	0.519	1.73
95-49-8	2-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-82-8	Isopropylbenzene	U	1.73	ug/kg	0.519	1.73
108-67-8	1,3,5-Trimethylbenzene	U	1.73	ug/kg	0.519	1.73
106-43-4	4-Chlorotoluene	U	1.73	ug/kg	0.519	1.73
98-06-6	tert-Butylbenzene	U	1.73	ug/kg	0.519	1.73
95-63-6	1,2,4-Trimethylbenzene	J	0.623	ug/kg	0.519	1.73
135-98-8	sec-Butylbenzene	U	1.73	ug/kg	0.519	1.73
99-87-6	4-Isopropyltoluene	U	1.73	ug/kg	0.519	1.73
541-73-1	1,3-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
106-46-7	1,4-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73
104-51-8	n-Butylbenzene	U	1.73	ug/kg	0.519	1.73
96-12-8	1,2-Dibromo-3-chloropropane	U	1.73	ug/kg	0.519	1.73
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.66	ug/kg	2.77	8.66
630-20-6	1,1,1,2-Tetrachloroethane	U	1.73	ug/kg	0.519	1.73
95-50-1	1,2-Dichlorobenzene	U	1.73	ug/kg	0.519	1.73

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\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 11:33:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1794111	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1174800	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	396265	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1794111	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1174800	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	396265	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	400854	46.16	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	92.32%			
43) Toluene-d8	9.721	9.721	0.872	98	1589690	52.91	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	105.82%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	492377	61.95	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	123.90%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.950	4.900	0.590	50	2570	Below Cal		91
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	604	N.D.		
9) Acetone	6.174	6.174	0.736	43	12044	2.25	ug/L	71
10) 1,1-Dichloroethylene	6.251	6.156	0.745	61	376	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	625	N.D.		
13) Methyl acetate	6.368	6.365	0.759	43	127	N.D.		
14) Carbon disulfide	6.446	6.435	0.769	76	1907	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	10920	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	664	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	1444	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.921	7.924	0.944	56	2310	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	125	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	9962	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 11:33:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.675	9.487	1.153	75	107	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	6857	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	3431	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	2848	N.D.	
56) o-Xylene	11.697	11.701	1.050	106	2176	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.005	12.016	0.895	105	154	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.497	12.465	0.932	156	113	N.D.	
65) n-Propylbenzene	12.567	12.415	0.937	91	702	N.D.	
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937	105	1463	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.698	12.698	0.947	91	831	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	5679	0.36 ug/L	78
71) sec-Butylbenzene	13.119	13.119	0.978	105	243	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	132	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	2102	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1642	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	112	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.159	6.163	0.734	45	626	N.D.	
88) Allyl chloride	6.425	6.425	0.766	41	128	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	1444	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 11:33:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

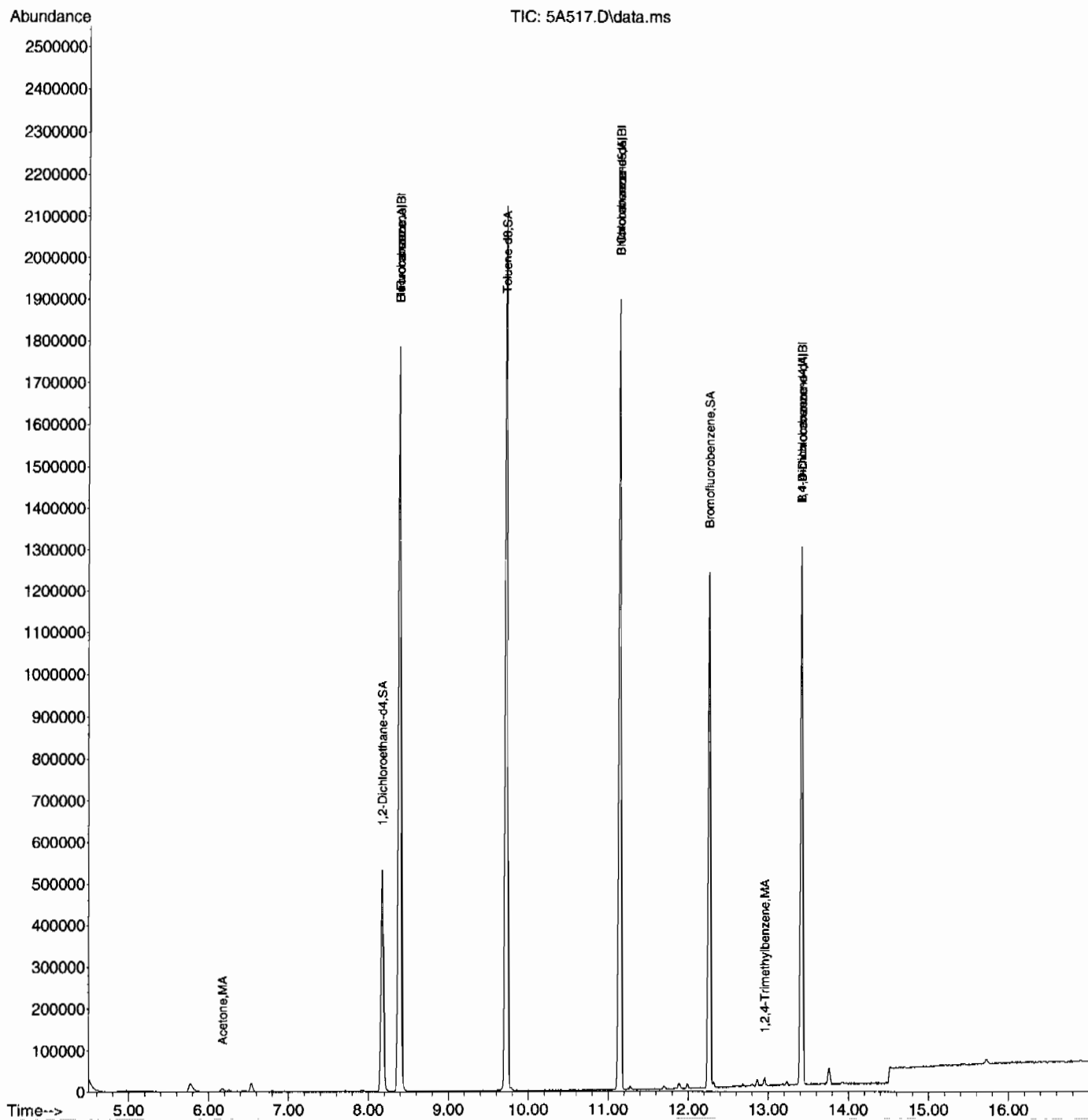
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.701	7.680	0.918	41	346	N.D.	
97) Tetrahydrofuran	7.715	7.716	0.920	42	1027	N.D.	
98) Isobutyl alcohol	7.921	7.857	0.944	41	1467	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.987	12.136	0.894	53	147	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	12.320	12.412	0.919	53	350	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.558	13.565	1.011	91	1585	N.D.	
112) bis(2-Chloroisopropyl)...	13.940	13.929	1.039	45	127	N.D.	

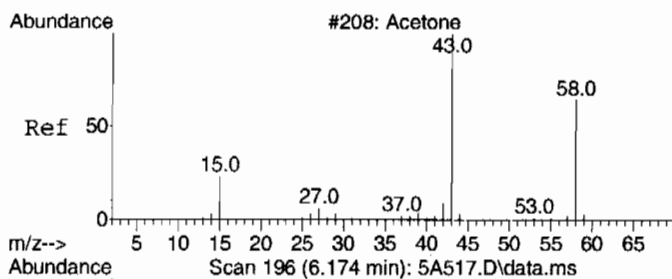
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

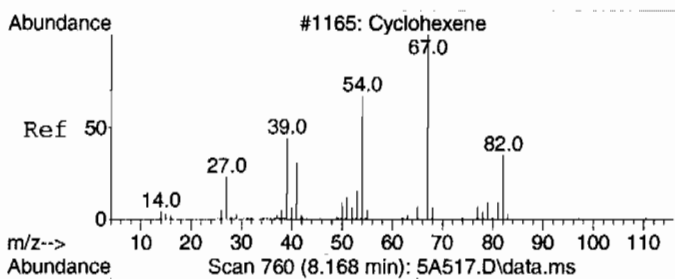
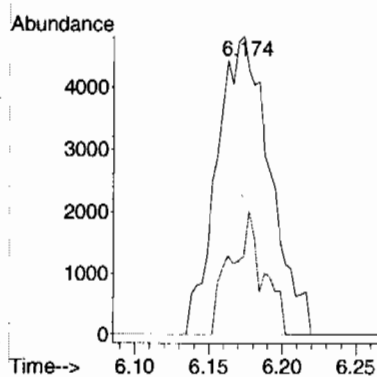
Quant Time: Mar 09 11:33:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





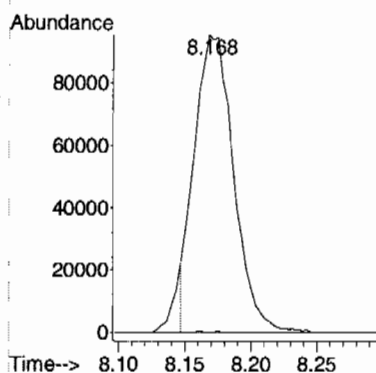
#9
Acetone
Concen: 2.25 ug/L
RT: 6.174 min Scan# 196
Delta R.T. -0.000 min
Lab File: 5A517.D
Acq: 5 Mar 2010 9:58 pm

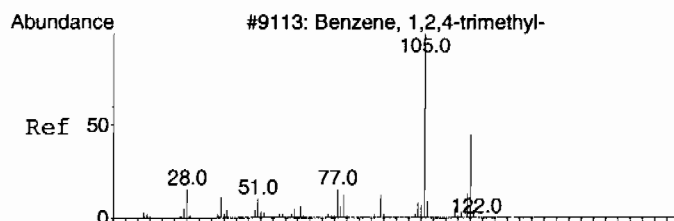
Tgt Ion: 43 Resp: 12044
Ion Ratio Lower Upper
43 100
58 15.8 1.9 61.9



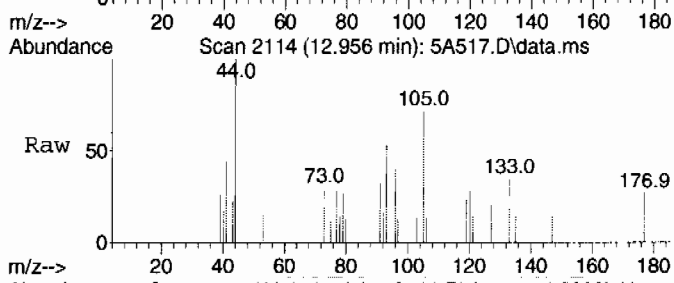
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 16.42 ug/L
RT: 8.168 min Scan# 760
Delta R.T. -0.078 min
Lab File: 5A517.D
Acq: 5 Mar 2010 9:58 pm

Tgt Ion: 67 Resp: 198147
Ion Ratio Lower Upper
67 100
54 0.1 46.3 106.3#

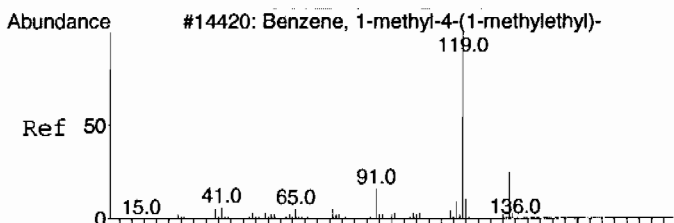
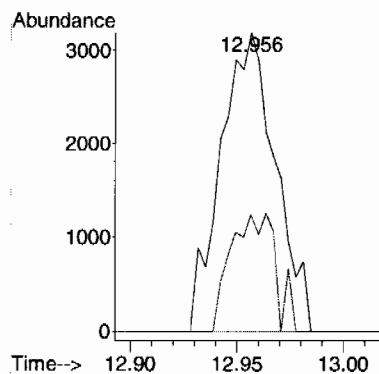
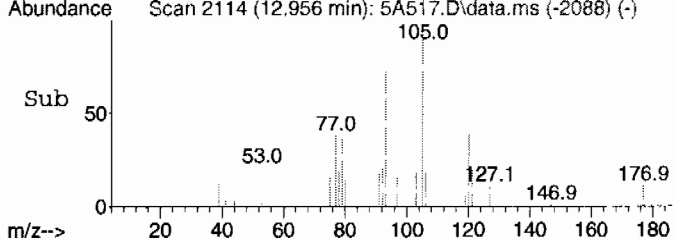




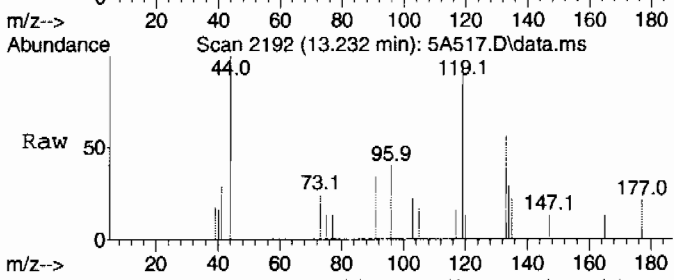
#70
1,2,4-Trimethylbenzene
Concen: 0.36 ug/L
RT: 12.956 min Scan# 2114
Delta R.T. 0.000 min
Lab File: 5A517.D
Acq: 5 Mar 2010 9:58 pm



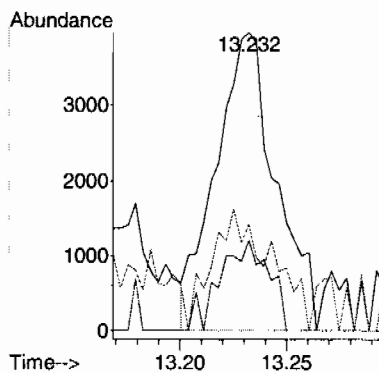
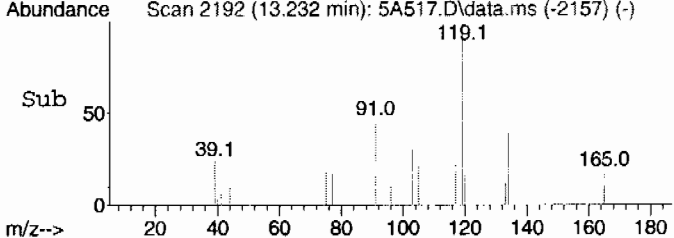
Tgt Ion:105 Resp: 5679
Ion Ratio Lower Upper
105 100
120 32.3 17.4 77.4

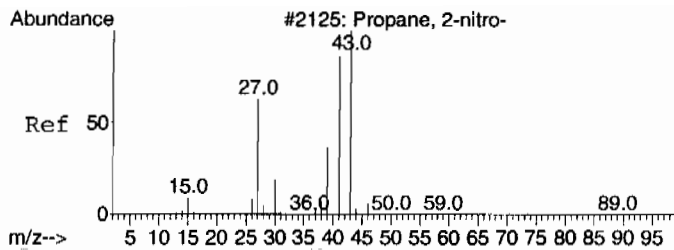


#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 0.49 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5A517.D
Acq: 5 Mar 2010 9:58 pm

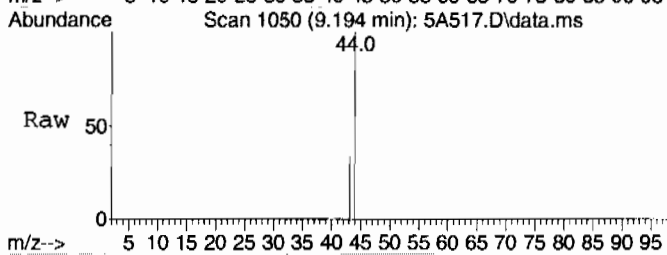


Tgt Ion:119 Resp: 7800
Ion Ratio Lower Upper
119 100
134 24.7 0.0 57.2
91 40.2 0.0 53.0

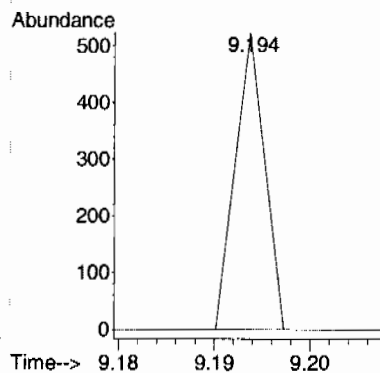
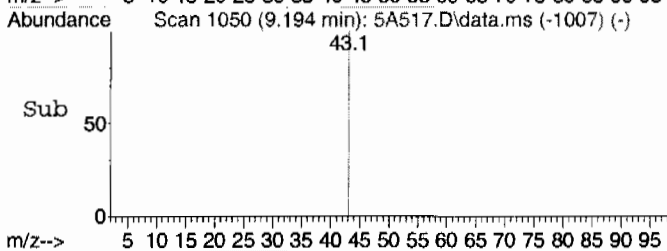




#102 BEFORE analyst DELETION
 2-Nitropropane
 Concen: 6.94 ug/L
 RT: 9.194 min Scan# 1050
 Delta R.T. -0.148 min
 Lab File: 5A517.D
 Acq: 5 Mar 2010 9:58 pm



Tgt Ion: 43 Resp: 111
 Ion Ratio Lower Upper
 43 100
 41 0.0 52.5 112.5#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030510V5\
Data File : 5A517.D
Acq On : 5 Mar 2010 9:58 pm
Operator : CDS1
Sample : |248240009|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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: 10-2134
 Lab Sample ID: 248240011
 Client ID: RE36-10-7542
 Batch ID: 961880
 Run Date: 03/09/2010 14:26
 Prep Date: 03/09/2010 13:25
 Data File: 030910V55B216.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 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	J	2.07	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: 10-2134
Lab Sample ID: 248240011

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
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: RE36-10-7542
Batch ID: 961880
Run Date: 03/09/2010 14:26
Prep Date: 03/09/2010 13:25
Data File: 030910V55B216.D

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B216.D
Acq On : 9 Mar 2010 2:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248240011|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 07:00:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1719973	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1257259	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	604801	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1719973	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1257259	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	604801	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	353637	42.48	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	84.96%			
43) Toluene-d8	9.721	9.721	0.872	98	1486793	46.24	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	92.48%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	681224	56.15	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	112.30%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1086	Below Cal		56
4) Vinyl chloride	5.041	5.041	0.601	62	351	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	2046	0.32 ug/L		79
9) Acetone	6.181	6.174	0.737	43	10660	2.07 ug/L		89
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.457	6.464	0.770	41	2166	N.D.		
13) Methyl acetate	0.000	6.365	0.000		0m	N.D. d		
14) Carbon disulfide	6.439	6.435	0.768	76	1757	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	7430	N.D.		
16) tert-Butyl methyl ether	6.630	6.640	0.790	73	386	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	683	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	390	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.197	8.203	0.977	78	109	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	10180	N.D.		
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B216.D
Acq On : 9 Mar 2010 2:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248240011|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 07:00:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	112	N.D.	
44) Toluene	9.781	9.788	0.878	91	3509	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.287	10.279	0.923	43	887	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	703	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.026	12.016	0.897	105	108	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929	156	109	N.D.	
65) n-Propylbenzene	12.408	12.415	0.925	91	512	N.D.	
66) 1,3,5-Trimethylbenzene	12.578	12.564	0.938	105	124	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	1891	N.D.	
69) tert-Butylbenzene	12.896	12.900	0.962	134	126	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1007	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	264	N.D.	
72) 4-Isopropyltoluene	13.130	13.229	0.979	119	1157	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.438	13.441	1.002	146	118	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1256	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	129	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1361	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	176	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.160	6.163	0.734	45	225	N.D.	
88) Allyl chloride	6.457	6.425	0.770	41	2166	N.D.	
89) tert-Butyl Alcohol	6.457	6.460	0.770	59	128	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	157	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B216.D
Acq On : 9 Mar 2010 2:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248240011|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 07:00:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

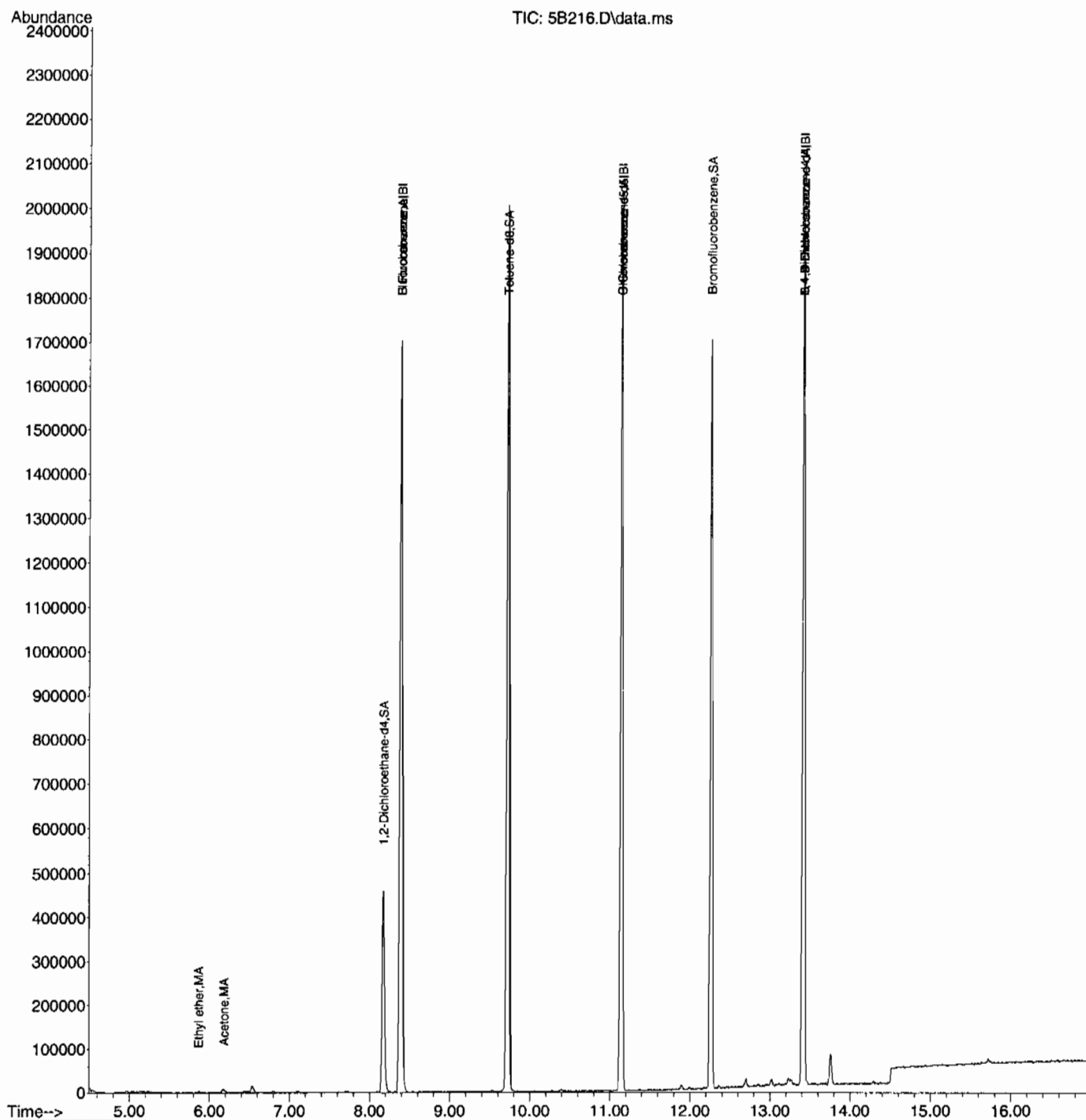
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.687	7.680	0.917	41	124	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	2632	N.D.	
98) Isobutyl alcohol	7.716	7.857	0.920	41	1663	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.065	10.980	0.825	55	107	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	2224	N.D.	
112) bis(2-Chloroisopropyl)...	13.933	13.929	1.039	45	128	N.D.	

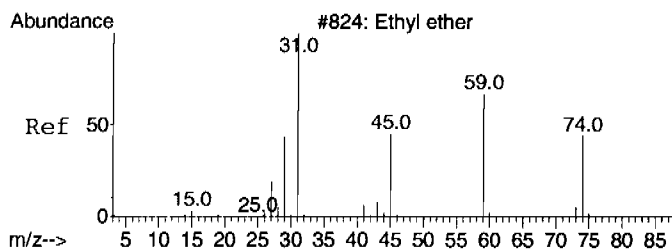
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B216.D
Acq On : 9 Mar 2010 2:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248240011|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

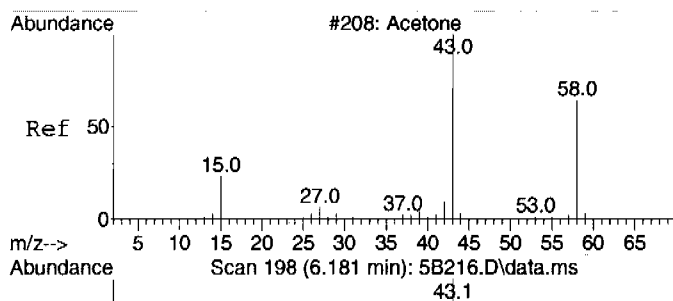
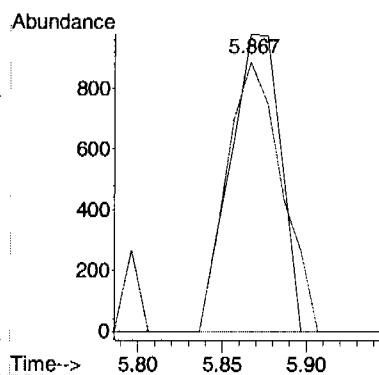
Quant Time: Mar 10 07:00:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





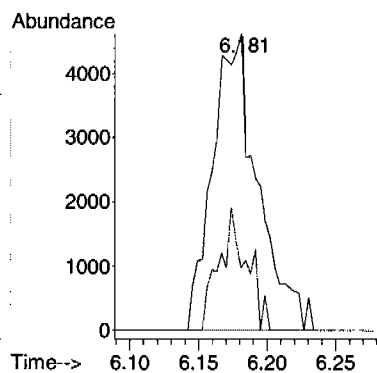
#8
Ethyl ether
Concen: 0.32 ug/L
RT: 5.867 min Scan# 137
Delta R.T. 0.001 min
Lab File: 5B216.D
Acq: 9 Mar 2010 2:26 pm

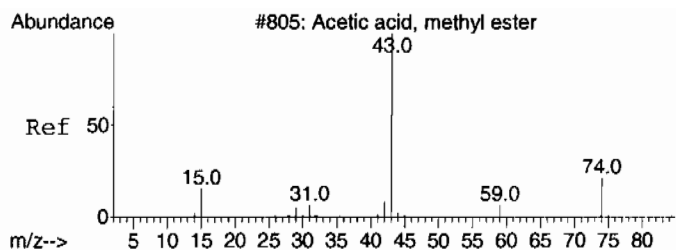
Tgt Ion: 59 Resp: 2046
Ion Ratio Lower Upper
59 100
45 98.5 49.8 109.8



#9
Acetone
Concen: 2.07 ug/L
RT: 6.181 min Scan# 198
Delta R.T. 0.007 min
Lab File: 5B216.D
Acq: 9 Mar 2010 2:26 pm

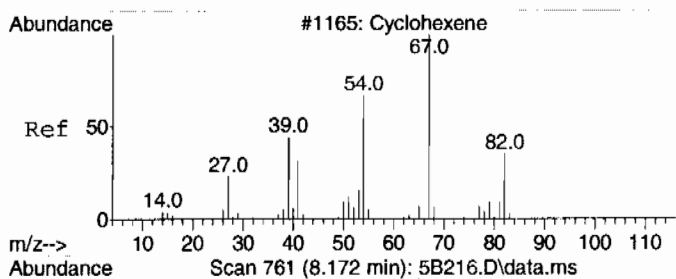
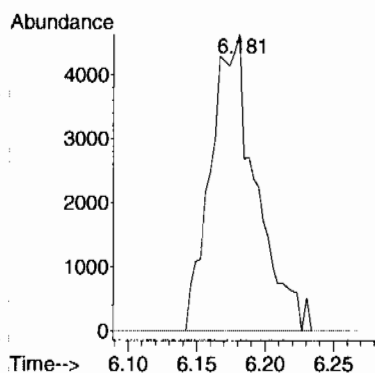
Tgt Ion: 43 Resp: 10660
Ion Ratio Lower Upper
43 100
58 25.5 1.9 61.9





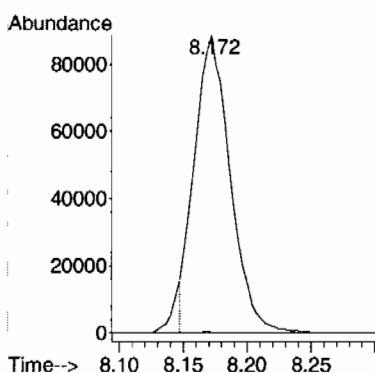
#13 BEFORE analyst DELETION
Methyl acetate
Concen: 1.90 ug/L
RT: 6.181 min Scan# 198
Delta R.T. -0.184 min
Lab File: 5B216.D
Acq: 9 Mar 2010 2:26 pm

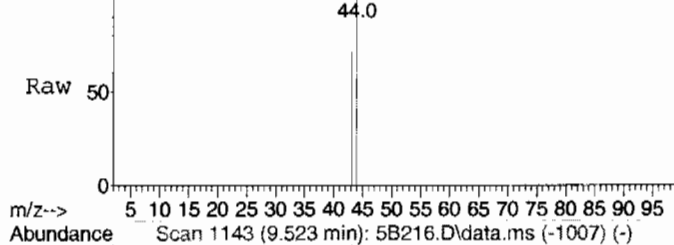
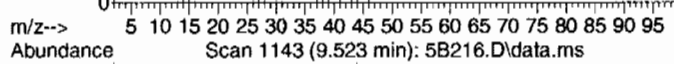
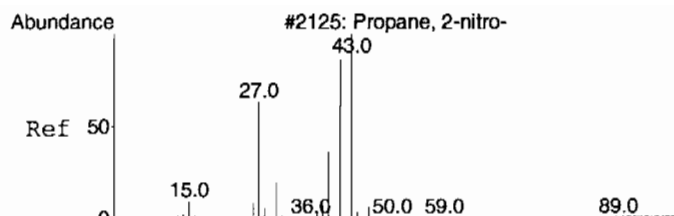
Tgt Ion	Ratio	Lower	Upper
43	100		
74	0.0	0.0	48.8
59	0.0	0.0	37.6



#32 BEFORE analyst DELETION
Cyclohexene
Concen: 14.98 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B216.D
Acq: 9 Mar 2010 2:26 pm

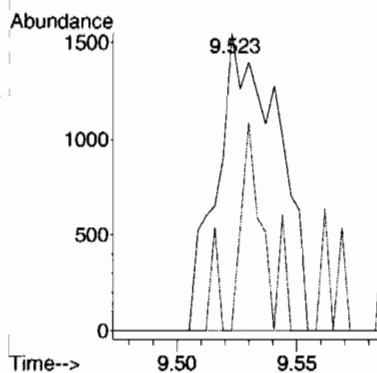
Tgt Ion	Ratio	Lower	Upper
67	100		
54	0.1	46.3	106.3#





#102 BEFORE analyst DELETION
 2-Nitropropane
 Concen: 8.20 ug/L
 RT: 9.523 min Scan# 1143
 Delta R.T. 0.181 min
 Lab File: 5B216.D
 Acq: 9 Mar 2010 2:26 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
41	21.2	52.5	112.5#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\

Data File : 5B216.D

Acq On : 9 Mar 2010 2:26 pm

Operator : CDS1

Sample : |248240011|961880|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B216.D
Acq On : 9 Mar 2010 2:26 pm
Operator : CDS1
Sample : |248240011|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240006	Date Received: 02/27/2010 09:10	%Moisture: 24.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7455	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/09/2010 15:22	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 13:21	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B218.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.450	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.397	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.397	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.397	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.397	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.397	1.32
67-64-1	Acetone	U	6.62	ug/kg	2.20	6.62
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
74-88-4	Iodomethane	U	6.62	ug/kg	2.12	6.62
75-09-2	Methylene chloride	U	6.62	ug/kg	2.65	6.62
75-15-0	Carbon disulfide	U	6.62	ug/kg	1.65	6.62
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.397	1.32
78-93-3	2-Butanone	U	6.62	ug/kg	1.98	6.62
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.397	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.397	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.437	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.397	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.397	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.397	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.397	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.397	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.437	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.397	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.397	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.397	1.32
108-10-1	4-Methyl-2-pentanone	U	6.62	ug/kg	1.65	6.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
108-88-3	Toluene	U	1.32	ug/kg	0.397	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.397	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.397	1.32
591-78-6	2-Hexanone	U	6.62	ug/kg	1.98	6.62
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.397	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.397	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.397	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.397	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.397	1.32

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 248240006
 Client ID: RE36-10-7455
 Batch ID: 961880
 Run Date: 03/09/2010 15:22
 Prep Date: 03/09/2010 13:21
 Data File: 030910V55B218.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.4
 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	1.32	ug/kg	0.397	1.32
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.397	2.65
95-47-6	o-Xylene	U	1.32	ug/kg	0.397	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.397	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.397	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.397	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.397	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.397	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.397	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.397	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.397	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.397	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.397	1.32
99-87-6	4-Isopropyltoluene	U	1.32	ug/kg	0.397	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.397	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.397	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.62	ug/kg	2.12	6.62
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.397	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.397	1.32

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\030910V5\
Data File : 5B218.D
Acq On : 9 Mar 2010 3:22 pm
Operator : CDS1
InstName : VOA5
Sample : |248240006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 10 07:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1454007	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	724345	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	172498	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1454007	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	724345	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	172498	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	306874	43.61	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	87.22%		
43) Toluene-d8	9.721	9.721	0.872	98	1084313	58.53	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	117.06%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	270461	78.17	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	156.34%#		
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.940	4.900	0.589	50	4061	N.D.		
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	363	N.D.		
9) Acetone	6.167	6.174	0.735	43	4094	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	133	N.D.		
13) Methyl acetate	6.372	6.365	0.760	43	399	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	1296	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	6409	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.807	6.969	0.812	43	239	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	422	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000	56	7840	Below Cal	#	20
34) Trichloroethylene	8.681	8.677	1.035	95	777	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B218.D
Acq On : 9 Mar 2010 3:22 pm
Operator : CDS1
InstName : VOA5
Sample : |248240006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 10 07:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	1127	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.185	11.181	1.004	91	380	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.998	12.016	0.895	105	111	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	126	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	901	N.D.	
69) tert-Butylbenzene	12.805	12.900	0.955	134	109	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	258	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	158	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1859	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	713	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	113	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.425	6.425	0.766	41	106	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B218.D
Acq On : 9 Mar 2010 3:22 pm
Operator : CDS1
InstName : VOA5
Sample : |248240006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 10 07:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

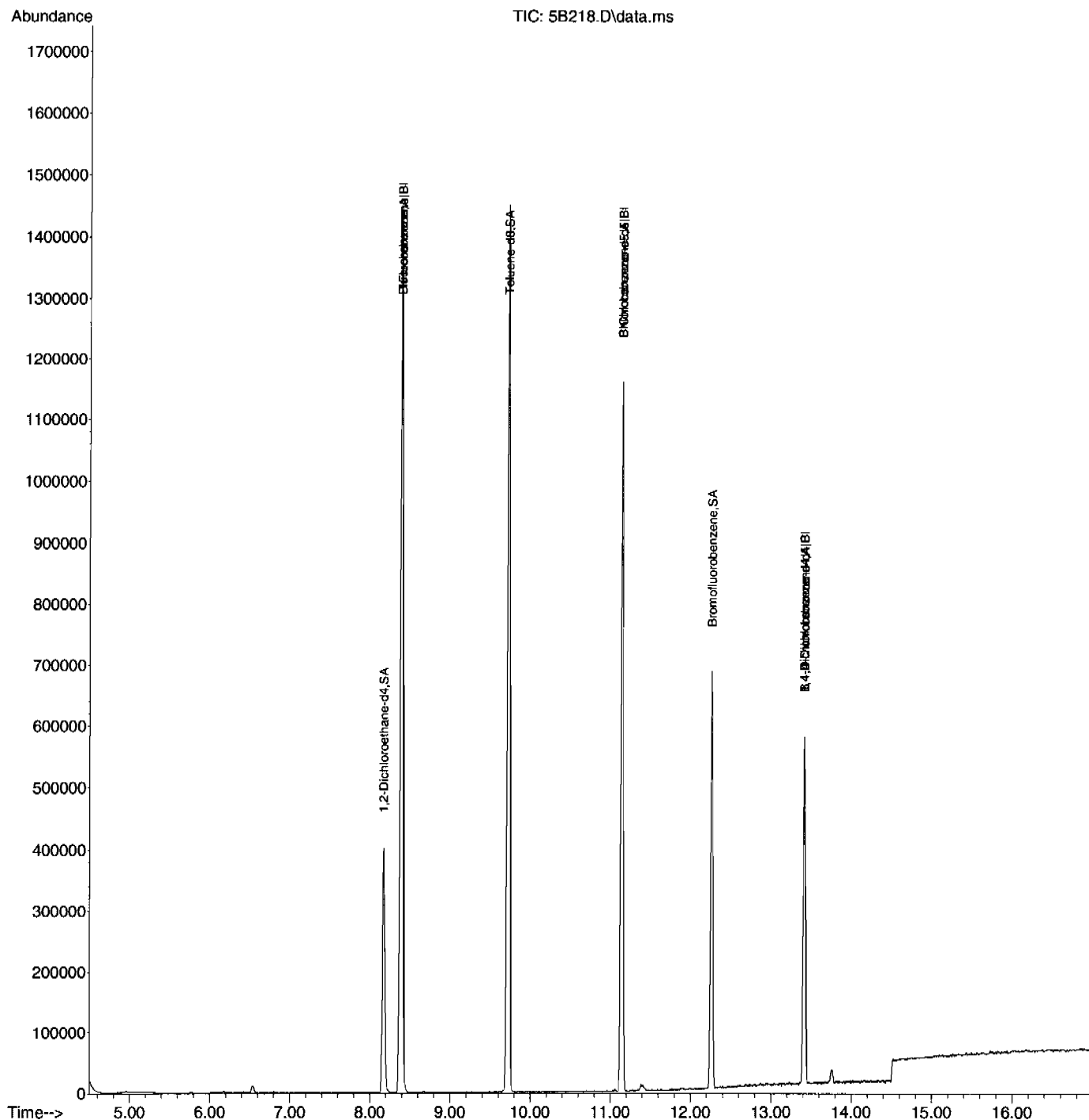
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.723	7.680	0.921	41	127	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	115	N.D.	
98) Isobutyl alcohol	7.723	7.857	0.921	41	127	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.362	12.267	0.922	42	113	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.544	13.565	1.010	91	1944	N.D.	
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	243	N.D.	

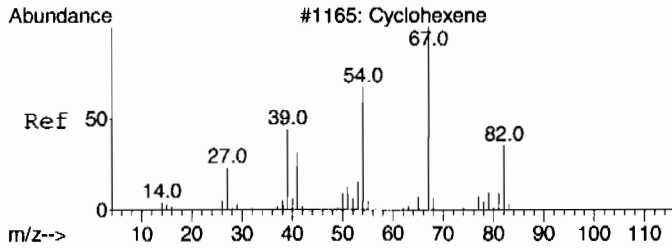
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B218.D
Acq On : 9 Mar 2010 3:22 pm
Operator : CDS1
InstName : VOA5
Sample : |248240006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

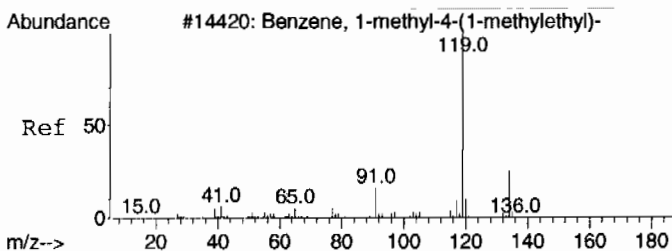
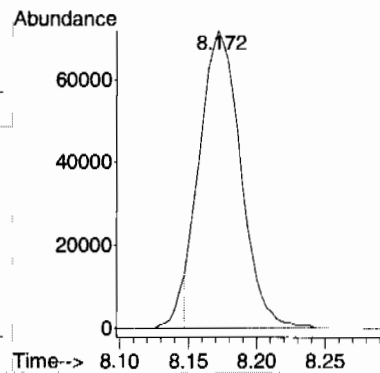
Quant Time: Mar 10 07:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





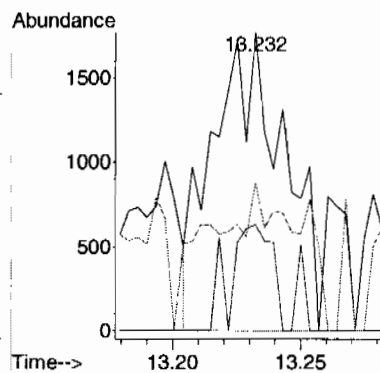
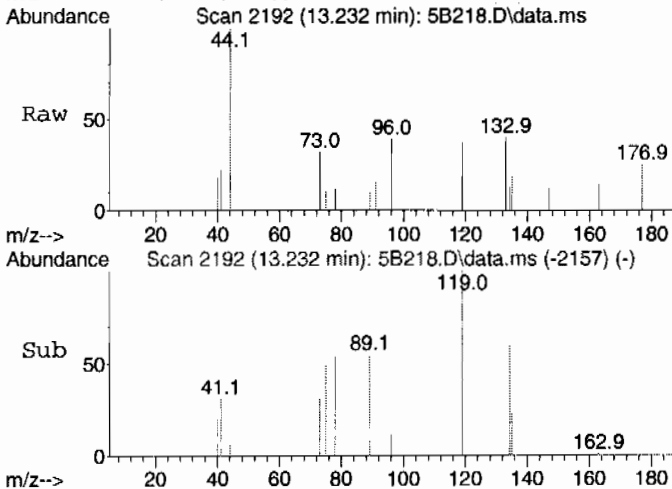
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 15.18 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B218.D
Acq: 9 Mar 2010 3:22 pm

Tgt Ion: 67 Resp: 148536
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 0.49 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5B218.D
Acq: 9 Mar 2010 3:22 pm

Tgt Ion: 119 Resp: 3412
Ion Ratio Lower Upper
119 100
134 21.1 0.0 57.2
91 29.2 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\

Data File : 5B218.D

Acq On : 9 Mar 2010 3:22 pm

Operator : CDS1

Sample : |248240006|961880|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B218.D
Acq On : 9 Mar 2010 3:22 pm
Operator : CDS1
Sample : |248240006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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: 10-2134
 Lab Sample ID: 248240008
 Client ID: RE36-10-7457
 Batch ID: 961880
 Run Date: 03/09/2010 16:17
 Prep Date: 03/09/2010 13:23
 Data File: 030910V55B220.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 18.8
 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	1.23	ug/kg	0.419	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.16	ug/kg	2.04	6.16
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.16	ug/kg	1.97	6.16
75-09-2	Methylene chloride	U	6.16	ug/kg	2.46	6.16
75-15-0	Carbon disulfide	U	6.16	ug/kg	1.54	6.16
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.16	ug/kg	1.85	6.16
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.16	ug/kg	1.54	6.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.16	ug/kg	1.85	6.16
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7457	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.I	Dilution: 1
Run Date: 03/09/2010 16:17	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 13:23	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\5B220.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.370	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.16	ug/kg	1.97	6.16
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 10 07:22:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1216729	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	538164	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	114206	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1216729	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	538164	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	114206	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	274354	46.59	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	93.18%		
43) Toluene-d8	9.721	9.721	0.872	98	877535	63.76	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	127.52%		
61) Bromofluorobenzene	12.263	12.260	0.914	95	193098	84.29	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	168.58%#		
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	701	Below Cal	#	14
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.167	6.174	0.735	43	3964	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	263	N.D.		
13) Methyl acetate	6.354	6.365	0.758	43	223	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1384	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	4273	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.465	7.450	0.890	43	115	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	222	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.388	8.377	1.000	56	6568	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 10 07:22:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	1437	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	10.290	10.290	0.924	164	118	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.185	11.181	1.004	91	240	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	306	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	572	N.D.	
69) tert-Butylbenzene	12.854	12.900	0.958	134	108	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	216	N.D.	
71) sec-Butylbenzene	13.116	13.119	0.978	105	121	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	176	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.693	15.619	1.170	180	131	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1014	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	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	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.460	6.425	0.770	41	263	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.465	7.383	0.890	43	115	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 10 07:22:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

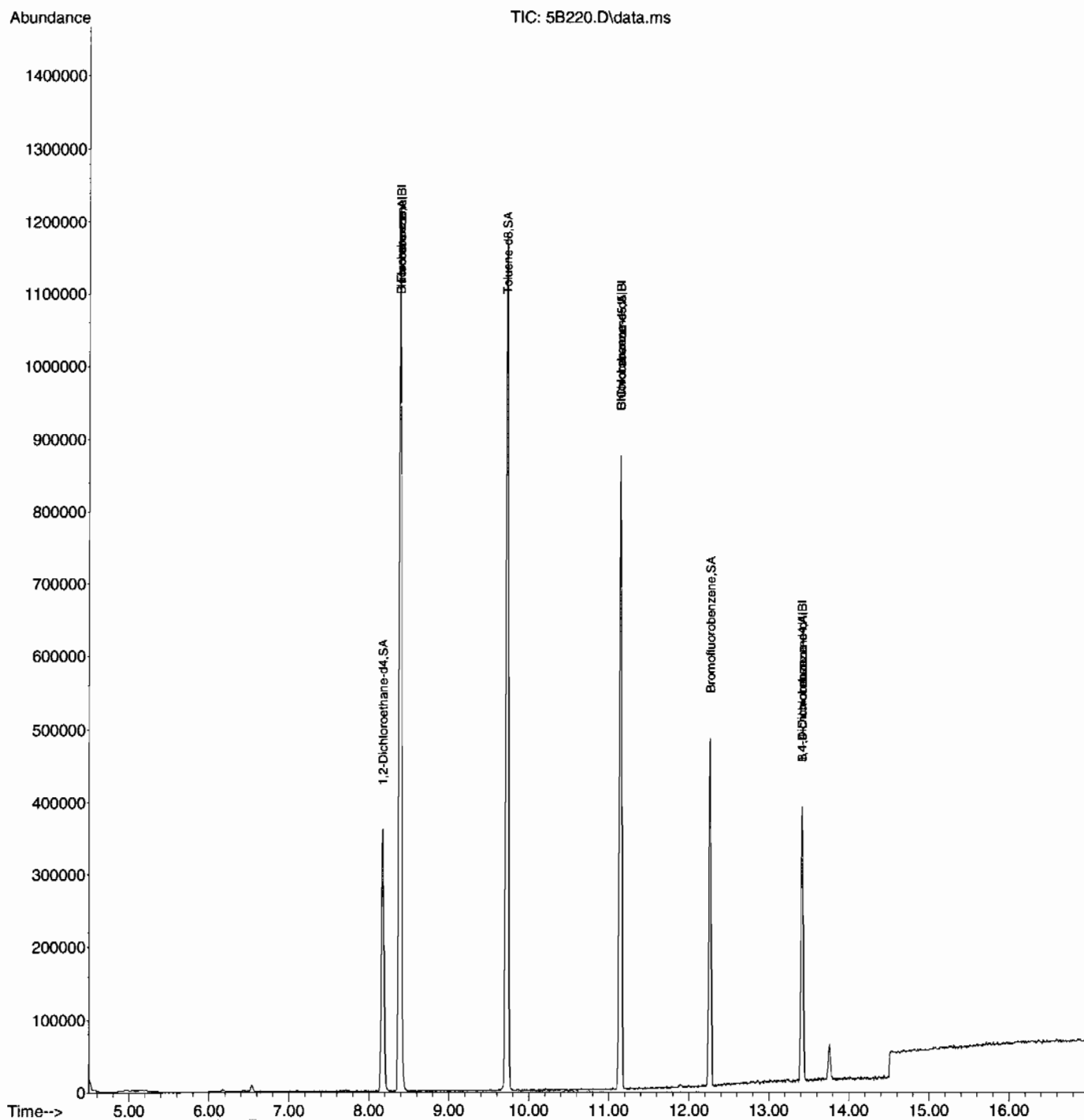
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.652	7.680	0.912	41	114	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	517	N.D.	
98) Isobutyl alcohol	7.854	7.857	0.936	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	767	N.D.	
112) bis(2-Chloroisopropyl)...	13.947	13.929	1.040	45	222	N.D.	

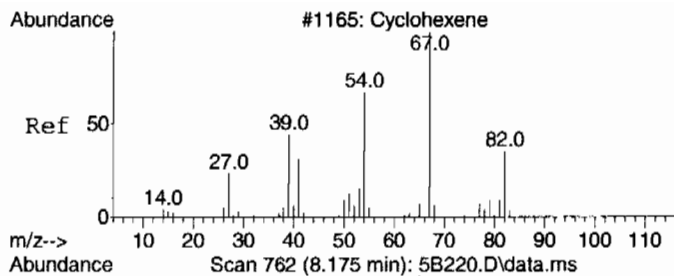
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
InstName : VOA5
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

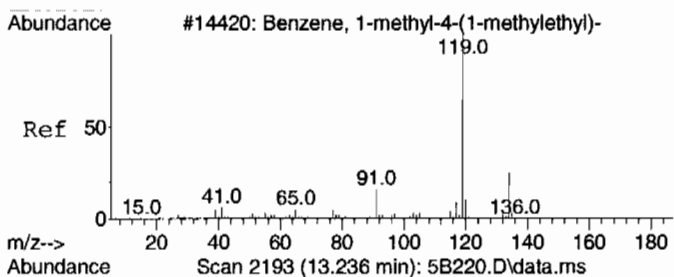
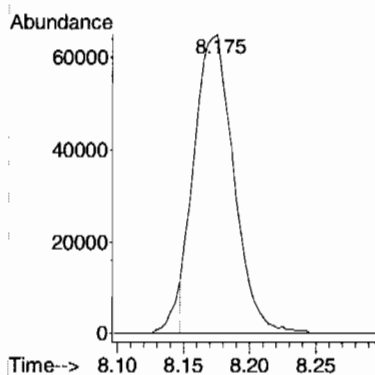
Quant Time: Mar 10 07:22:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





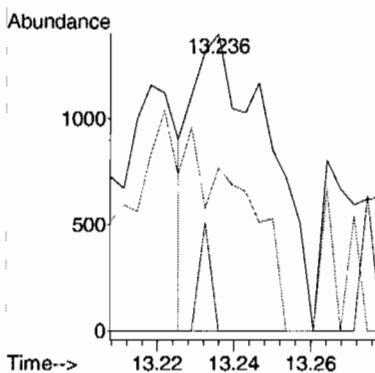
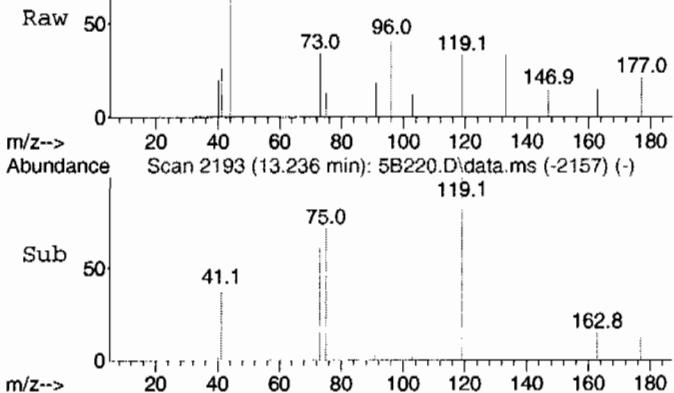
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 16.54 ug/L
RT: 8.175 min Scan# 762
Delta R.T. -0.071 min
Lab File: 5B220.D
Acq: 9 Mar 2010 4:17 pm

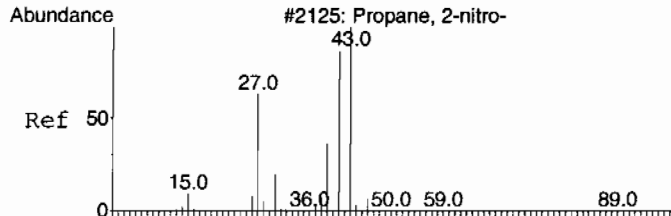
Tgt Ion: 67 Resp: 135361
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



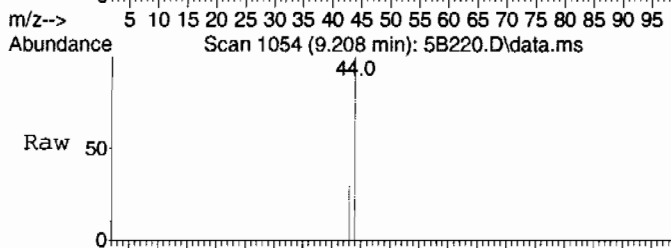
#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 0.42 ug/L
RT: 13.236 min Scan# 2193
Delta R.T. 0.007 min
Lab File: 5B220.D
Acq: 9 Mar 2010 4:17 pm

Tgt Ion: 119 Resp: 1939
Ion Ratio Lower Upper
119 100
134 5.6 0.0 57.2
91 13.4 0.0 53.0

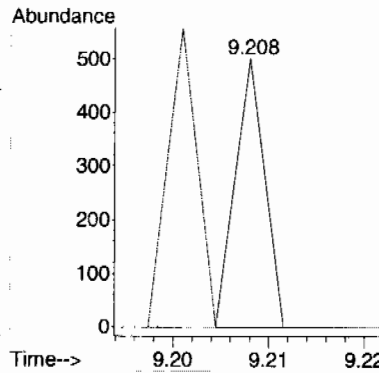
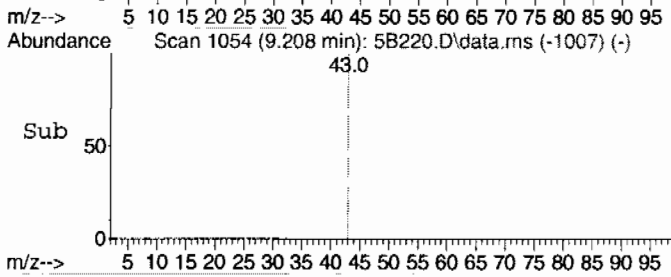




#102 BEFORE analyst DELETION
 2-Nitropropane
 Concen: 6.96 ug/L
 RT: 9.208 min Scan# 1054
 Delta R.T. -0.134 min
 Lab File: 5B220.D
 Acq: 9 Mar 2010 4:17 pm



Tgt Ion: 43 Resp: 106
 Ion Ratio Lower Upper
 43 100
 41 111.3 52.5 112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B220.D
Acq On : 9 Mar 2010 4:17 pm
Operator : CDS1
Sample : |248240008|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7519	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 961880	Inst: VOA5.1	Dilution: 1
Run Date: 03/09/2010 16:45	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 13:24	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\5B221.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.430	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	6.33	ug/kg	2.10	6.33
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	U	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	U	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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	6.33	ug/kg	1.58	6.33
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	6.33	ug/kg	1.90	6.33
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: 10-2134
 Lab Sample ID: 248240010

 Client ID: RE36-10-7519
 Batch ID: 961880
 Run Date: 03/09/2010 16:45
 Prep Date: 03/09/2010 13:24
 Data File: 030910V55B221.D

Date Collected: 02/24/2010 12:00
 Date Received: 02/27/2010 09:10
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5J
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 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	6.33	ug/kg	2.03	6.33
	<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
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
InstName : VOA5
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANTL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 10 07:22:38 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1400799	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	796645	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	237258	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1400799	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	796645	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	237258	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	307404	45.34	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	90.68%			
43) Toluene-d8	9.721	9.721	0.872	98	1085180	53.26	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	106.52%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	337881	71.00	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	142.00%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.950	4.900	0.590	50	1382	Below Cal		94
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	360	N.D.		
9) Acetone	6.174	6.174	0.736	43	2274	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	125	N.D.		
13) Methyl acetate	6.209	6.365	0.740	43	245	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	1536	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	5908	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810	43	272	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	219	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	7830	Below Cal	#	19
34) Trichloroethylene	8.688	8.677	1.036	95	119	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
InstName : VOA5
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 10 07:22:38 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	713	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	222	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.405	12.415	0.925	91	1087	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	411	N.D.	
69) tert-Butylbenzene	12.981	12.900	0.968	134	140	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	277	N.D.	
71) sec-Butylbenzene	13.123	13.119	0.978	105	106	N.D.	
72) 4-Isopropyltoluene	13.218	13.229	0.985	119	1606	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	757	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.996	15.988	1.193	128	792	N.D.	
81) 1,2,3-Trichlorobenzene	16.210	16.291	1.209	180	232	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.435	6.425	0.767	41	140	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
InstName : VOA5
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 10 07:22:38 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

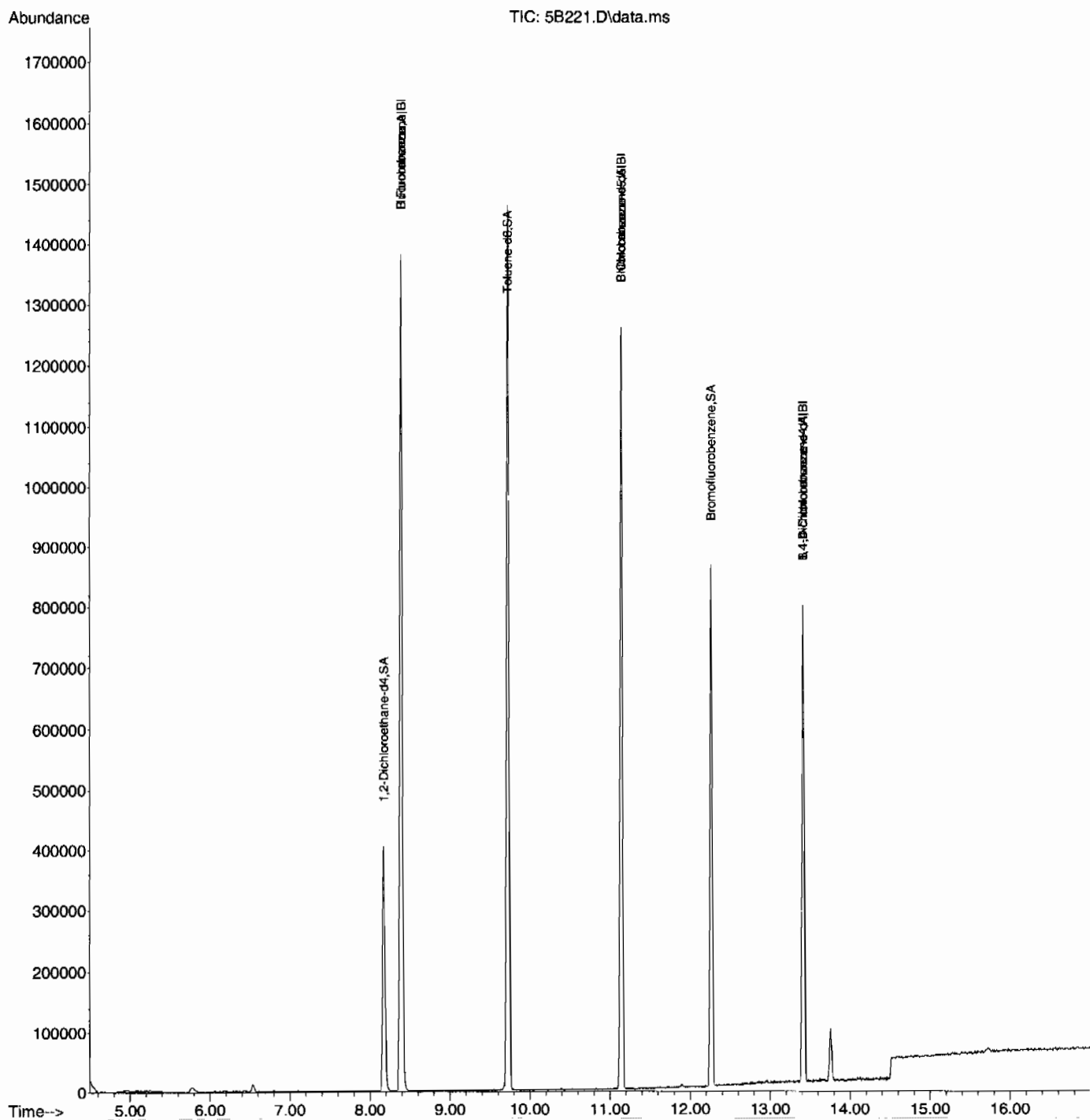
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	393	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	241	N.D.	
98) Isobutyl alcohol	7.804	7.857	0.930	41	110	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	1060	N.D.	
112) bis(2-Chloroisopropyl)...	13.950	13.929	1.040	45	107	N.D.	

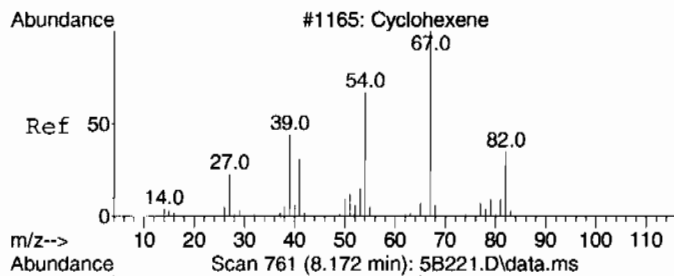
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
InstName : VOA5
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

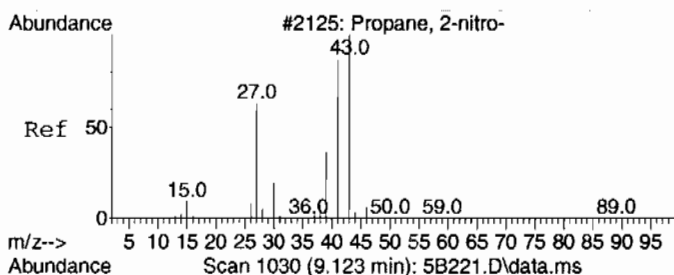
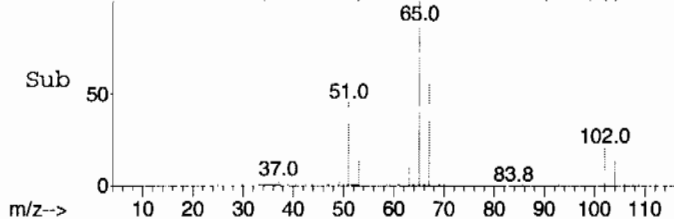
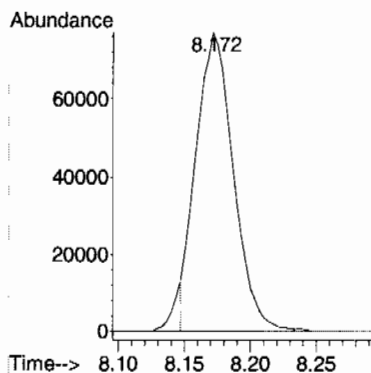
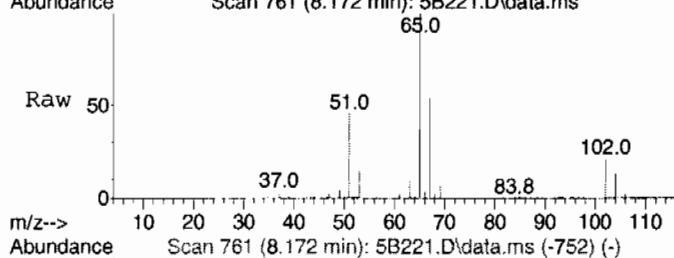
Quant Time: Mar 10 07:22:38 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





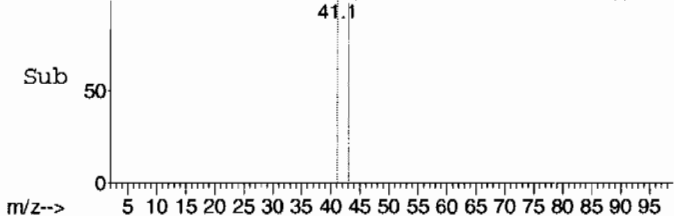
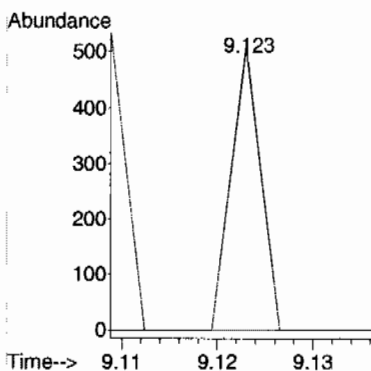
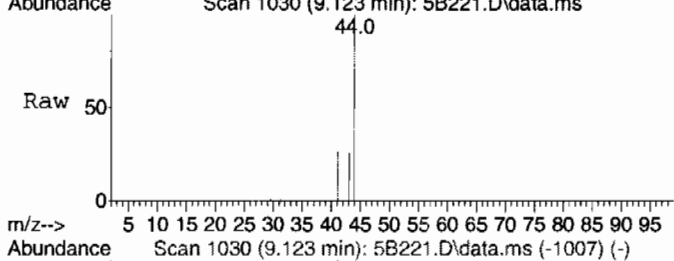
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 16.28 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B221.D
Acq: 9 Mar 2010 4:45 pm

Tgt Ion: 67 Resp: 153466
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.96 ug/L
RT: 9.123 min Scan# 1030
Delta R.T. -0.219 min
Lab File: 5B221.D
Acq: 9 Mar 2010 4:45 pm

Tgt Ion: 43 Resp: 108
Ion Ratio Lower Upper
43 100
41 100.9 52.5 112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B221.D
Acq On : 9 Mar 2010 4:45 pm
Operator : CDS1
Sample : |248240010|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Standards

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A311.D

Injection Date	Mix	Calibration File
3 Mar 2010 3:18 pm	A	C:\msdchem\1\DATA\030310V5\5A311.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A315.D

Injection Date	Mix	Calibration File
3 Mar 2010 11:52 am	A	C:\msdchem\1\DATA\030310V5\5A303.D
3 Mar 2010 5:01 pm	B	C:\msdchem\1\DATA\030310V5\5A315.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\030310V5\5A316.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:18 pm	A	C:\msdchem\1\DATA\030310V5\5A304.D
3 Mar 2010 5:27 pm	B	C:\msdchem\1\DATA\030310V5\5A316.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\030310V5\5A317.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:43 pm	A	C:\msdchem\1\DATA\030310V5\5A305.D
3 Mar 2010 5:52 pm	B	C:\msdchem\1\DATA\030310V5\5A317.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\030310V5\5A318.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:09 pm	A	C:\msdchem\1\DATA\030310V5\5A306.D
3 Mar 2010 6:18 pm	B	C:\msdchem\1\DATA\030310V5\5A318.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\030310V5\5A319.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:35 pm	A	C:\msdchem\1\DATA\030310V5\5A307.D
3 Mar 2010 6:44 pm	B	C:\msdchem\1\DATA\030310V5\5A319.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\030310V5\5A320.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:01 pm	A	C:\msdchem\1\DATA\030310V5\5A308.D
3 Mar 2010 7:10 pm	B	C:\msdchem\1\DATA\030310V5\5A320.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\030310V5\5A321.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:26 pm	A	C:\msdchem\1\DATA\030310V5\5A309.D
3 Mar 2010 7:35 pm	B	C:\msdchem\1\DATA\030310V5\5A321.D

VOA5-8260-030310.M Wed Mar 17 16:27:58 2010

VOA5-8260-030310.M Wed Mar 17 16:27:54 2010

Page: 1

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 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 ml | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
2)MA	Dichlorodifluoromethane	0.1071911	0.1343128 0.1106837	0.1140372	0.1271918	0.1076299	0.1161426	0.1167	AVRG		8.8231
3)MPA	Chloromethane 0.0020 | 0.1467 | 0.00	261159	10037 510887	13766	31895	57674	114670		LINR		0.9998
4)MCA	Vinyl chloride	0.1157351	0.1366188 0.1183938	0.1281019	0.1255313	0.1197165	0.1183782	0.1232	AVRG		5.9617
5)MA	Bromomethane	0.1170655	0.1239625 0.1206884	0.1169147	0.1094959	0.1165166	0.1190689				
6)MA	Chloroethane	0.1233612	0.1370210 0.1233229	0.1216074	0.1215156	0.1214055	0.1263787	0.1177	AVRG		3.7964
7)MA	Trichlorofluoromethane	0.2117030	0.2153456 0.2117388	0.2178553	0.2129630	0.2104313	0.2210791	0.1249	AVRG		4.4855
8)MA	Ethyl ether	0.1947530	0.1871370 0.1794319	0.1767368	0.1717271	0.1985778	0.1841458	0.2144	AVRG		1.8020
9)MA	Acetone	0.1463100	0.1866060 0.1376620	0.1644416	0.1375065	0.1478785	0.1253868	0.1846	AVRG		5.2291
10)MCA	1,1-Dichloroethylene	0.2389821	0.2398002 0.2445433	0.2409558	0.2398242	0.2475025	0.2208403	0.1494	AVRG		13.6035
11)MA	Iodomethane	0.2471140	0.2444391 0.2442657	0.2568896	0.2483905	0.2612671	0.2249439	0.2389	AVRG		3.5757
12)MA	Acetonitrile	0.0283547	0.0347170 0.0256546	0.0322725	0.0285058	0.0304863	0.0249732	0.2468	AVRG		4.6894
13)MA	Methyl acetate	0.1652002	0.1815060 0.1485899	0.1773876	0.1581228	0.1758673	0.1361690	0.0293	AVRG		11.9223
14)MA	Carbon disulfide	0.4578684	0.5050741 0.4584238	0.5194211	0.5014662	0.5065645	0.4033217	0.1633	AVRG		10.2209
15)MA	Methylene chloride 0.0023 | 0.1884 | 0.00	347452	11571 651820	21218	39402	76880	131269	0.4789	AVRG		8.5995
16)MA	tert-Butyl methyl ether	0.5036196	0.4725751 0.4964892	0.5978178	0.4559781	0.5175164	0.4382739		LINR		0.9995
								0.4975	AVRG		10.4953

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 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 m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
17)MA	trans-1,2-Dichloroethylene	0.2628117	0.2484881 0.2644957	0.2741276	0.2591751	0.2691941	0.2403411	0.2598	AVRG		4.5316
18)MA	Vinyl acetate	0.4300924	0.4257145 0.3838583	0.3882024	0.3995826	0.4134088	0.4228412	0.4091	AVRG		4.5605
19)MFA	1,1-Dichloroethane	0.3302035	0.3142904 0.3294966	0.3229238	0.3125231	0.3367887	0.3058631	0.3217	AVRG		3.4802
20)MA	2-Butanone	0.1882036	0.1936957 0.1818946	0.1811767	0.1647833	0.1816863	0.1545487	0.1780	AVRG		7.6550
21)MA	cis-1,2-Dichloroethylene	0.3090002	0.2816842 0.3063284	0.3216599	0.2968513	0.3189112	0.2809374	0.3022	AVRG		5.4422
22)MA	2,2-Dichloropropane	0.2371246	0.2583557 0.2337214	0.2487143	0.2316248	0.2394110	0.2202251	0.2385	AVRG		5.1515
23)MA	Bromochloromethane	0.0955632	0.0843041 0.0945829	0.0899282	0.0830960	0.0936185	0.0838221	0.0893	AVRG		6.1291
24)MCA	Chloroform	0.2968630	0.2880392 0.2933504	0.2944044	0.2766864	0.2987853	0.2690593	0.2882	AVRG		3.8825
25)MA	1,1,1-Trichloroethane	0.2446109	0.2341424 0.2416415	0.2408483	0.2355644	0.2432168	0.2237423	0.2377	AVRG		3.0518
26)MA	Cyclohexane	0.3362899	0.3377261 0.3291308	0.3632086	0.3428843	0.3469778	0.3103599	0.3381	AVRG		4.8083
27)MA	1,1-Dichloropropene	0.2203338	0.2256423 0.2134343	0.2194822	0.2171957	0.2254819	0.2043886	0.2180	AVRG		3.3958
28)MA	Carbon tetrachloride	0.2111430	0.1982649 0.2090476	0.2143055	0.1985177	0.2044374	0.1914744	0.2039	AVRG		4.0179
29)SA	1,2-Dichloroethane-d4	0.2469049	0.2369252 0.2490915	0.2336174	0.2380253	0.2497712	0.2396695	0.2420	AVRG		2.6779
30)MA	1,2-Dichloroethane	0.2554033	0.2479518 0.2486772	0.2572257	0.2440949	0.2612232	0.2285764	0.2490	AVRG		4.3389
31)MA	Benzene	0.7207210	0.7418443 0.7026943	0.7731024	0.7153431	0.7479119	0.6649804	0.7238	AVRG		4.8270

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 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 m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA	Cyclohexene	0.3339520	0.3123061 0.3234949	0.3866319	0.3393842	0.3509290	0.3080677	0.3364	AVRG		7.9572
33)MA	n-Butyl alcohol 0.0059 | 0.0070 | 0.00	19260 1408012	34213 2352134	56344	121141	269492	466484		LINR	#	0.9947
34)MA	Trichloroethylene	0.1724887	0.1816132 0.1698750	0.1780411	0.1681998	0.1729789	0.1601051	0.1719	AVRG		4.0477
35)MCA	1,2-Dichloropropane	0.2087711	0.2111626 0.2051990	0.2097606	0.1902748	0.2128689	0.1930853	0.2044	AVRG		4.4358
36)MA	Methylcyclohexane	0.3125154	0.3236754 0.2954954	0.3376340	0.3191597	0.3187083	0.2915431	0.3141	AVRG		5.1167
37)MA	Dibromomethane	0.1147921	0.0958611 0.1112747	0.1022045	0.0940684	0.1106872	0.0984524	0.1039	AVRG		7.9840
38)MA	Bromodichloromethane	0.2331295	0.1958516 0.2322850	0.2002811	0.2032170	0.2187202	0.2032823	0.2124	AVRG		7.3274
39)MA	2-Chloroethylvinyl ether	0.0686203	0.0564924 0.0652642	0.0601502	0.0771933	0.0701491	0.0593383	0.0653	AVRG		11.1044
40)MA	cis-1,3-Dichloropropylene	0.3125399	0.2818987 0.3029780	0.2841853	0.2759376	0.3026459	0.2752061	0.2908	AVRG		5.1555
42)MA	4-Methyl-2-pentanone	0.1271094	0.1231600 0.1177079	0.1229976	0.1118485	0.1258398	0.1083137	0.1196	AVRG		6.0173
43)SA	Toluene-d8	1.2721004	1.2715773 1.2960357	1.2614345	1.2794096	1.2985942	1.2717942	1.2787	AVRG		1.0765
44)MCA	Toluene	1.0348743	1.1518044 0.9819176	1.1664465	1.0787639	1.0942945	1.0060419	1.0734	AVRG		6.5499
45)MA	trans-1,3-Dichloropropyl	0.3858636	0.3568487 0.3673651	0.3722761	0.3512502	0.3821534	0.3436649	0.3656	AVRG		4.3186
46)MA	1,1,2-Trichloroethane	0.1865070	0.1809477 0.1759586	0.1909377	0.1747003	0.1892881	0.1696366	0.1811	AVRG		4.4615
47)MA	2-Hexanone	0.3467953	0.3284339 0.3313724	0.3316048	0.3042837	0.3395084	0.2907043	0.3247	AVRG		6.1423

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/ r^2
48)MA	1,3-Dichloropropane	0.4018238	0.3986847 0.3753277	0.3941649	0.3766925	0.4132373	0.3644275	0.3892	AVRG		4.4680
49)MA	Tetrachloroethylene	0.1886479	0.2101304 0.1744663	0.2182619	0.2019552	0.1998049	0.1830335	0.1966	AVRG		7.8477
50)MA	Dibromochloromethane	0.2419406	0.2023411 0.2365549	0.2093074	0.1956150	0.2219088	0.2007112	0.2155	AVRG		8.4921
51)MA	1,2-Dibromoethane	0.2238521	0.2177735 0.2124675	0.2045353	0.1960736	0.2183057	0.1960958	0.2099	AVRG		5.3073
52)MPA	Chlorobenzene	0.6872590	0.7408323 0.6366570	0.7386193	0.6950357	0.7183845	0.6572330	0.6963	AVRG		5.6932
53)MA	1,1,1,2-Tetrachloroethan	0.2494816	0.2332060 0.2379202	0.2374976	0.2252816	0.2425499	0.2251908	0.2359	AVRG		3.7523
54)MCA	Ethylbenzene	1.1606703	1.3980293 1.0780788	1.3671495	1.2021431	1.2341387	1.1328429	1.2247	AVRG		9.7166
55)MA	m,p-Xylenes	0.4618127	0.4755362 0.4281219	0.4871003	0.4628331	0.4838482	0.4481627	0.4639	AVRG		4.4913
56)MA	o-Xylene	0.4689336	0.4805646 0.4384802	0.4947283	0.4674384	0.4872624	0.4439087	0.4688	AVRG		4.5189
57)MA	Styrene	0.7780846	0.6852095 0.7485180	0.6985634	0.6741433	0.7377851	0.6904055	0.7161	AVRG		5.4221
59)MPA	Bromoform	0.3074710	0.2425130 0.2932519	0.2628946	0.2525902	0.2877580	0.2590520	0.2722	AVRG		8.8146
60)MA	Isopropylbenzene	2.2318182	2.3943888 2.0444667	2.5037151	2.3076026	2.3716419	2.2055021	2.2942	AVRG		6.5198
61)SA	Bromofluorobenzene	0.9869307	1.0123469 0.9932836	1.0080037	1.0035486	1.0238053	0.9924612	1.0029	AVRG		1.2932
62)MPA	1,1,2,2-Tetrachloroethan	0.5917981	0.6871449 0.5341051	0.6275343	0.5716073	0.6108623	0.5337210	0.5938	AVRG		9.1753
63)MA	1,2,3-Trichloropropane	0.1663007	0.1542994 0.1462352	0.1701851	0.1567715	0.1717308	0.1442981	0.1585	AVRG		7.0291

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 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 ml | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA	Bromobenzene	0.5547476	0.6486814 0.5243606	0.6270489	0.5549342	0.5944725	0.5351627	0.5771	AVRG		8.2053
65)MA	n-Propylbenzene	2.6188023	3.1428673 2.4230362	3.0740107	2.7659361	2.7519459	2.6123049	2.7698	AVRG		9.3207
66)MA	1,3,5-Trimethylbenzene	1.9147331	2.1140806 1.7809313	2.1176062	1.9345676	1.9838360	1.8693101	1.9593	AVRG		6.3245
67)MA	2-Chlorotoluene	0.5556979	0.6336821 0.5174526	0.6149888	0.5712532	0.5980658	0.5347064	0.5751	AVRG		7.4098
68)MA	4-Chlorotoluene	1.6724026	2.0033682 1.5676196	1.9506321	1.7393299	1.7773161	1.6165466	1.7610	AVRG		9.3178
69)MA	tert-Butylbenzene	0.4229275	0.5220044 0.3925972	0.5067096	0.4594991	0.4418889	0.4115510	0.4510	AVRG		10.7312
70)MA	1,2,4-Trimethylbenzene	1.9586218	2.1474948 1.8420857	2.1428091	1.9400417	2.0243304	1.8983398	1.9934	AVRG		5.9008
71)MA	sec-Butylbenzene	2.4689370	2.7713754 2.2728207	2.7409960	2.5556188	2.5245775	2.4127685	2.5353	AVRG		6.9611
72)MA	4-Isopropyltoluene	1.9874771	2.1276691 1.8512791	2.1644277	1.9988403	2.0283563	1.9476327	2.0151	AVRG		5.2660
73)MA	1,3-Dichlorobenzene	1.0613620	1.2393706 1.0114602	1.1735978	1.0546701	1.1091368	1.0209850	1.0958	AVRG		7.6742
74)MA	1,4-Dichlorobenzene	1.0794919	1.2623150 1.0206465	1.1764354	1.0887098	1.1479739	1.0224741	1.1140	AVRG		7.8575
75)MA	n-Butylbenzene	1.8731727	2.2862752 1.7525689	2.2057605	1.9471241	1.9465316	1.8399483	1.9788	AVRG		9.8883
76)MA	1,2-Dichlorobenzene	1.0422240	1.1619981 0.9895673	1.1046351	1.0096084	1.0812630	0.9841815	1.0534	AVRG		6.2618
77)MA	1,2-Dibromo-3-chloroprop	0.1172103	0.1466513 0.1082926	0.1103702	0.0987550	0.1134385	0.0964579	0.1130	AVRG		14.6986
78)MA	1,2,4-Trichlorobenzene	0.7207589	0.7703834 0.6948904	0.7294288	0.6781382	0.7096930	0.6624167	0.7094	AVRG		5.0317

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 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 ml | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
79)MA	Hexachlorobutadiene	0.4278299	0.4733681 0.4047082	0.4525326	0.4213133	0.4251323	0.4112408	0.4309	AVRG		5.5882
80)MA	Naphthalene	1.7289583	1.6207382 1.6143553	1.6540963	1.4827854	1.6683802	1.5100228	1.6113	AVRG		5.4224
81)MA	1,2,3-Trichlorobenzene	0.6423302	0.6276676 0.6195878	0.6346658	0.5810652	0.6448961	0.5831963	0.6191	AVRG		4.3026
83)B	Chlorotrifluoroethylene	0.0735216	0.0835210 0.0860804	0.0722722	0.0684897	0.0802235	0.0986873	0.0804	AVRG		12.7622
84)B	2-Chloro-1,1,1-trifluoro	0.1183741	0.1102455 0.1256300	0.1129374	0.1103017	0.1195944	0.1242927	0.1173	AVRG		5.4176
85)B	Acrolein -0.0097 | 0.0306 | 0.00	221757	2624 537267	5641	16329	36743	72786		LINR		0.9903
86)B	Trichlorotrifluoroethane	0.0405821	0.0459929 0.0499271	0.0456091	0.0440692	0.0471327	0.0405003	0.0448	AVRG		7.6523
87)B	Isopropyl Alcohol	0.0156865	0.0132039 0.0168508	0.0133281	0.0136177	0.0152807	0.0167250	0.0150	AVRG		10.5258
88)B	Allyl chloride	0.3013963	0.3545867 0.3247091	0.3325385	0.3315882	0.3447311	0.3139613	0.3291	AVRG		5.4472
89)B	tert-Butyl Alcohol	0.0229193	0.0182895 0.0244880	0.0196806	0.0209845	0.0227963	0.0247242	0.0220	AVRG		11.0285
90)B	Acrylonitrile	0.0699699	0.0715226 0.0753880	0.0684122	0.0745782	0.0754865	0.0711180	0.0724	AVRG		3.8849
91)B	Isopropyl ether	0.7352384	0.7025458 0.7994663	0.6794811	0.6820459	0.7654787	0.7924311	0.7367	AVRG		6.8556
92)B	2-Chloro-1,3-butadiene	0.2159482	0.1980383 0.2496900	0.1966904	0.2032729	0.2213056	0.2015126	0.2124	AVRG		8.8880
93)B	Ethyl tert-butyl ether	0.5377480	0.4313279 0.6133655	0.4816021	0.5236631	0.5726499	0.5688029	0.5327	AVRG		11.4695
94)B	Ethyl acetate	0.1873901	0.2038656 0.1978070	0.1859171	0.1985214	0.2051710	0.1930163	0.1960	AVRG		3.8432

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}, x = \text{response ratio}, y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
95)B	Propionitrile	0.0274167	0.0254057 0.0295674	0.0261084	0.0287780	0.0296110	0.0280571	0.0278	AVRG		5.8911
96)B	Methacrylonitrile	0.1462335	0.1576755 0.1544466	0.1461036	0.1559698	0.1612840	0.1496123	0.1530	AVRG		3.8305
97)B	Tetrahydrofuran	0.0649169	0.0717706 0.0687676	0.0675774	0.0711026	0.0723381	0.0676879	0.0692	AVRG		3.8938
98)B	Isobutyl alcohol	0.0077815	0.0071325 0.0076959	0.0063262	0.0072331	0.0073822	0.0074520	0.0073	AVRG	#	6.6246
99)B	Methyl tert-amyl ether	0.4244686	0.3693071 0.4894317	0.3868580	0.4285646	0.4452561	0.4538868	0.4283	AVRG		9.4811
100)B	Methyl methacrylate	0.1178945	0.1081095 0.1241707	0.1026339	0.1134532	0.1237597	0.1183364	0.1155	AVRG		6.9053
101)B	1,4-Dioxane	0.0021058	0.0019460 0.0022074	0.0018691	0.0020607	0.0021756	0.0020610	0.0021	AVRG	#	5.8304
102)B	2-Nitropropane -0.0083 | 0.0603 | 0.00	483598	8038 1057258	15631	44649	93248	187428		LINR		0.9974
104)B	Ethyl methacrylate	0.3067238	0.2614159 0.3151848	0.2550206	0.2945269	0.3244650	0.3086265	0.2951	AVRG		9.0970
106)B	1-Chlorohexane	0.4829755	0.5235250 0.5218822	0.4770701	0.4681758	0.5166419	0.5271408	0.5025	AVRG		5.0286
107)B	cis-1,4-Dichloro-2-buten	0.1870322	0.1796601 0.1976993	0.1700290	0.1860859	0.2007261	0.1875530	0.1870	AVRG		5.5493
108)B	Cyclohexanone		0.0139831	0.0143555	0.0153783	0.0164251	0.0167053	0.0154	AVRG		7.8679
109)B	trans-1,4-Dichloro-2-but		0.1664803 0.1845150	0.1640418	0.1749215	0.1913325	0.1771113	0.1761	AVRG		5.4159
110)B	Pentachloroethane	0.2461688	0.2534545 0.2701388	0.1993333	0.2360493	0.2598436	0.2423291	0.2439	AVRG		9.3035
111)B	Benzyl chloride	0.8579629	0.8960861 0.8906143	0.8542224	0.9170528	0.9675422	0.8839666	0.8953	AVRG		4.3075

Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
b	m1 | m2	6	7								
112)B	bis(2-Chloroisopropyl)et	0.3165820	0.3441093	0.3217389	0.3317707	0.3404966	0.3253184	0.3294	AVRG		3.0276
			0.3259263								

(#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.1

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.24421		.01		0.91322	30		Averaged	
SToluene-d8	1.2787	1.27452		.01		-0.32689	30		Averaged	
SBromofluorobenzene	1.0029	0.99178		.01		-1.10878	30		Averaged	
Dichlorodifluoromethane	0.1167	0.10877		.01		-6.7952	30		Averaged	
Chloromethane	50	47.23	50			-5.54	30		Linear	spcc
Vinyl chloride	0.1232	0.11935		.01		-3.125	20		Averaged	ccc
Bromomethane	0.1177	0.1182		.01		0.42481	30		Averaged	
Chloroethane	0.1249	0.12029		.01		-3.69095	30		Averaged	
Trichlorofluoromethane	0.2144	0.21193		.01		-1.15205	30		Averaged	
Ethyl ether	0.1846	0.17033		.01		-7.73023	30		Averaged	
1,1-Dichloroethylene	0.2389	0.22217		.01		-7.00293	20		Averaged	ccc
Acetone	0.1494	0.11803		.01		-20.99732	40		Averaged	
Iodomethane	0.2468	0.23547		.01		-4.59076	30		Averaged	
Methyl acetate	0.1633	0.14216		.01		-12.9455	40		Averaged	
Carbon disulfide	0.4789	0.4718		.01		-1.48256	30		Averaged	
Acetonitrile	0.0293	0.02521		.01		-13.95904	30		Averaged	
Methylene chloride	50	47.91	50			-4.18	30		Linear	
tert-Butyl methyl ether	0.4975	0.4619		.01		-7.15578	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.24929		.01		-4.04542	30		Averaged	
Vinyl acetate	0.4091	0.41961		.01		2.56905	40		Averaged	
1,1-Dichloroethane	0.3217	0.31699		.1		-1.4641	30		Averaged	spcc
2-Butanone	0.178	0.14855		.01		-16.54494	40		Averaged	
2,2-Dichloropropane	0.2385	0.22482		.01		-5.73585	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.29612		.01		-2.01191	30		Averaged	
Chloroform	0.2882	0.28311		.01		-1.76613	20		Averaged	ccc
Bromochloromethane	0.0893	0.09141		.01		2.36282	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.23371		.01		-1.67859	30		Averaged	
Cyclohexane	0.3381	0.32396		.01		-4.18219	30		Averaged	
1,1-Dichloropropene	0.218	0.20984		.01		-3.74312	30		Averaged	
Carbon tetrachloride	0.2039	0.20004		.01		-1.89308	30		Averaged	
Benzene	0.7238	0.68663		.01		-5.1354	30		Averaged	
1,2-Dichloroethane	0.249	0.23966		.01		-3.751	30		Averaged	
Cyclohexene	0.3364	0.31082		.01		-7.60404	30		Averaged	
n-Butyl alcohol	5000	4684.67	5000			-6.3066	40		Linear	
Trichloroethylene	0.1719	0.16611		.01		-3.36824	30		Averaged	
Methylcyclohexane	0.3141	0.28966		.01		-7.78096	30		Averaged	
1,2-Dichloropropane	0.2044	0.1998		.01		-2.25049	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10512		.01		1.17421	30		Averaged	
Bromodichloromethane	0.2124	0.22108		.01		4.08663	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06282		.01		-3.79786	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28903		.01		-0.60867	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.1091		.01		-8.77926	40		Averaged	
Toluene	1.0734	0.98913		.01		-7.85075	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35772		.01		-2.15536	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17385		.01		-4.00331	30		Averaged	
2-Hexanone	0.3247	0.27267		.01		-16.02402	40		Averaged	
Tetrachloroethylene	0.1966	0.1809		.01		-7.98576	30		Averaged	
1,3-Dichloropropane	0.3892	0.36897		.01		-5.19784	30		Averaged	
Dibromochloromethane	0.2155	0.21995		.01		2.06497	30		Averaged	
1,2-Dibromoethane	0.2099	0.20474		.01		-2.45831	30		Averaged	
Chlorobenzene	0.6963	0.65948		.3		-5.28795	30		Averaged	spcc
Ethylbenzene	1.2247	1.10154		.01		-10.05634	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.23427		.01		-0.69097	30		Averaged	
m,p-Xylenes	0.4639	0.43751		.01		-5.68873	30		Averaged	
o-Xylene	0.4688	0.44327		.01		-5.44582	30		Averaged	
Styrene	0.7161	0.73277		.01		2.32789	30		Averaged	
Bromoform	0.2722	0.28094		.1		3.21087	30		Averaged	spcc
Isopropylbenzene	2.2942	2.10689		.01		-8.1645	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.5349		.3		-9.91916	30		Averaged	spcc
n-Propylbenzene	2.7698	2.4928		.01		-10.00072	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.14961		.01		-5.60883	30		Averaged	
Bromobenzene	0.5771	0.53865		.01		-6.66262	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.81472		.01		-7.37917	30		Averaged	
2-Chlorotoluene	0.5751	0.532		.01		-7.49435	30		Averaged	
4-Chlorotoluene	1.761	1.61118		.01		-8.50767	30		Averaged	
tert-Butylbenzene	0.451	0.39993		.01		-11.32373	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.86402		.01		-6.49042	30		Averaged	
sec-Butylbenzene	2.5353	2.31846		.01		-8.55283	30		Averaged	
4-Isopropyltoluene	2.0151	1.87648		.01		-6.87906	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.02852		.01		-6.13981	30		Averaged	
1,4-Dichlorobenzene	1.114	1.04673		.01		-6.0386	30		Averaged	
n-Butylbenzene	1.9788	1.7573		.01		-11.19365	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.99705		.01		-5.34934	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10451		.01		-7.51327	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.69168		.01		-2.49789	30		Averaged
Hexachlorobutadiene	0.4309	0.41116		.01		-4.58111	30		Averaged
Naphthalene	1.6113	1.57133		.01		-2.48061	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.62516		.01		0.97884	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1746399	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1746399	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	426493	50.46	ug/L	0.00
43) Toluene-d8	9.724	9.721	0.873	98	1672551	49.84	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	677221	49.45	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.556	85	189950	46.58	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	245590	47.23	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	208439	48.43	ug/L	97
5) Bromomethane	5.434	5.423	0.648	94	206417	50.22	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	210081	48.14	ug/L	99
7) Trichlorofluoromethane	5.705	5.695	0.680	101	370114	49.41	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	297471	46.12	ug/L	97
9) Acetone	6.174	6.174	0.736	43	1030674	197.52	ug/L	99
10) 1,1-Dichloroethylene	6.156	6.156	0.734	61	387994	46.49	ug/L	99
11) Iodomethane	6.361	6.357	0.758	142	2056129	238.56	ug/L	99
12) Acetonitrile	6.464	6.464	0.770	41	1100599	1076.16	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1241350	217.69	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	4119792	246.31	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	319169	47.91	ug/L	99
16) tert-Butyl methyl ether	6.641	6.640	0.791	73	806665	46.43	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.800	61	435366	47.98	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	3664023	256.42	ug/L	100
19) 1,1-Dichloroethane	7.072	7.068	0.843	63	553584	49.26	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1297140	208.64	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	517143	48.99	ug/L	100
22) 2,2-Dichloropropane	7.514	7.514	0.895	77	392633	47.14	ug/L	98
23) Bromochloromethane	7.723	7.719	0.920	128	159635	51.20	ug/L	98
24) Chloroform	7.702	7.701	0.918	83	494431	49.12	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	408147	49.16	ug/L	99
26) Cyclohexane	7.924	7.924	0.944	56	565761	47.91	ug/L	99
27) 1,1-Dichloropropene	8.009	8.005	0.954	75	366466	48.13	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.956	117	349351	49.06	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.981	62	418545	48.12	ug/L	100
31) Benzene	8.200	8.203	0.977	78	1199124	47.43	ug/L	100
32) Cyclohexene	8.250	8.246	0.983	67	542810	46.20	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.998	56	1150973	4684.67	ug/L	99
34) Trichloroethylene	8.678	8.677	1.034	95	290093	48.32	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.064	63	348926	48.86	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.052	83	505866	46.11	ug/L	98
37) Dibromomethane	9.063	9.059	1.080	93	183578	50.58	ug/L	99
38) Bromodichloromethane	9.113	9.112	1.086	83	386094	52.04	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	548585	240.47	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.130	75	504766	49.70	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	715875	228.12	ug/L	99
44) Toluene	9.788	9.788	0.878	91	1298029	46.07	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	469439	48.92	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	228140	47.99	ug/L	98
47) 2-Hexanone	10.280	10.279	0.923	43	1789138	209.96	ug/L	100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	484201	47.40	ug/L	99
49) Tetrachloroethylene	10.290	10.290	0.924	164	237399	46.00	ug/L	99
50) Dibromochloromethane	10.584	10.583	0.950	129	288635	51.04	ug/L	99
51) 1,2-Dibromoethane	10.775	10.771	0.967	107	268682	48.78	ug/L	98
52) Chlorobenzene	11.174	11.174	1.003	112	865428	47.36	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	307438	49.66	ug/L	100
54) Ethylbenzene	11.181	11.181	1.003	91	1445541	44.97	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1148282	94.31	ug/L	99
56) o-Xylene	11.701	11.701	1.050	106	581707	47.28	ug/L	99
57) Styrene	11.715	11.715	1.051	104	961606	51.16	ug/L	94
59) Bromoform	12.005	12.005	0.895	173	191832	51.60	ug/L	100
60) Isopropylbenzene	12.016	12.016	0.896	105	1438651	45.92	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921	83	365248	45.04	ug/L	100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	102156	47.18	ug/L #	93
64) Bromobenzene	12.465	12.465	0.929	156	367810	46.67	ug/L	98
65) n-Propylbenzene	12.419	12.415	0.926	91	1702161	45.00	ug/L	99
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.936	105	1239147	46.31	ug/L	100
67) 2-Chlorotoluene	12.599	12.596	0.939	126	363269	46.25	ug/L #	80
68) 4-Chlorotoluene	12.698	12.698	0.946	91	1100162	45.75	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	273083	44.34	ug/L	99
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1272813	46.76	ug/L	99
71) sec-Butylbenzene	13.119	13.119	0.978	105	1583116	45.72	ug/L	99
72) 4-Isopropyltoluene	13.232	13.229	0.986	119	1281322	46.56	ug/L	100
73) 1,3-Dichlorobenzene	13.353	13.349	0.995	146	702303	46.93	ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	714738	46.98	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	1199936	44.40	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	680815	47.33	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	71362	46.23	ug/L	97
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.164	180	472299	48.75	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	280754	47.71	ug/L	98
80) Naphthalene	15.989	15.988	1.192	128	1072953	48.76	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.214	180	426882	50.49	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	5.967	6.082	0.711		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.464	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d	
90) Acrylonitrile	6.683	6.747	0.796		0m	N.D.	d	
91) Isopropyl ether	6.916	6.920	0.824		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.838		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.196	7.192	0.858		0m	N.D.	d	
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d	
95) Propionitrile	7.663	7.585	0.913		0m	N.D.	d	
96) Methacrylonitrile	7.673	7.680	0.914		0m	N.D.	d	
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

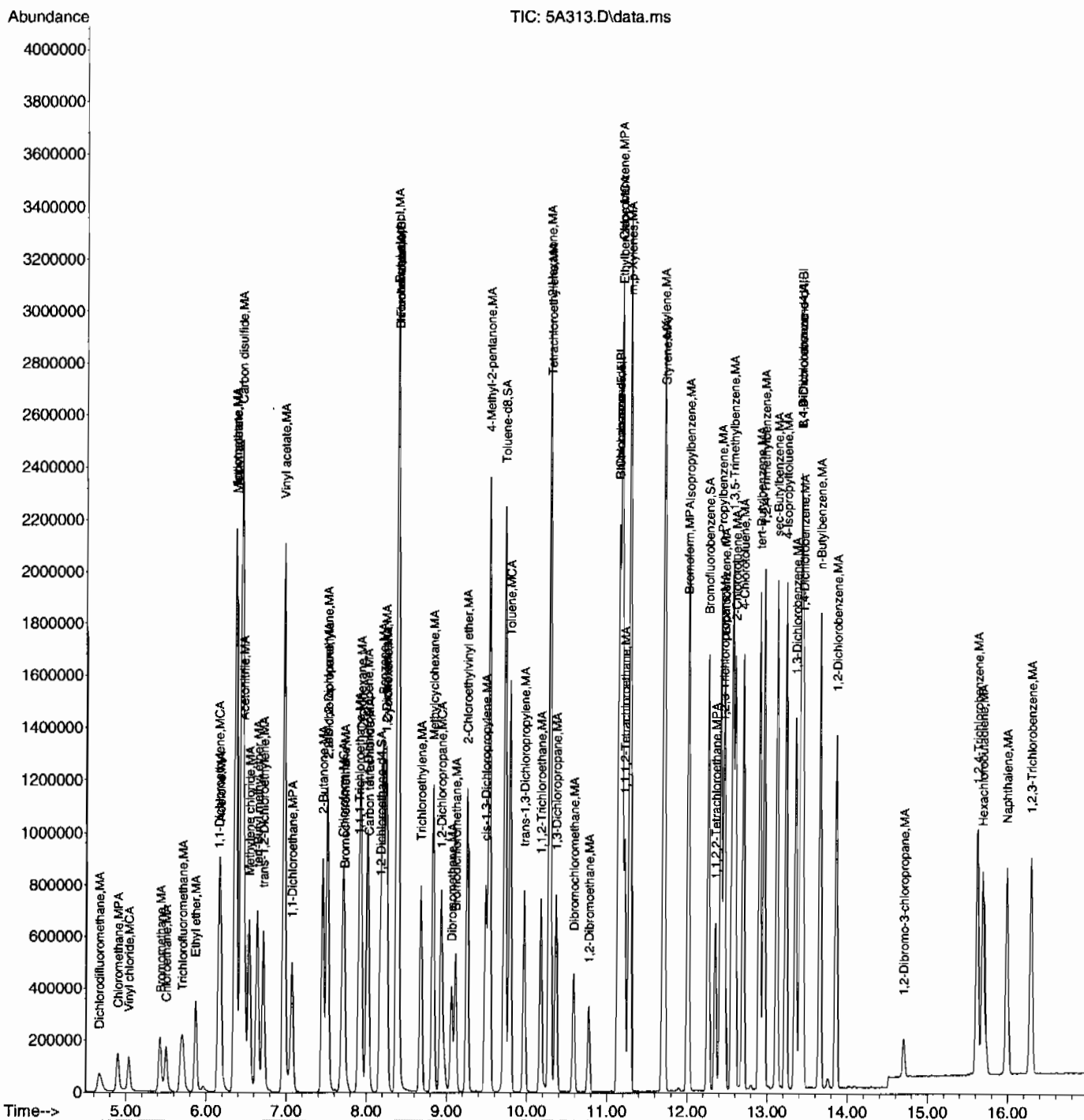
Compound	R.T.	Exp RT	Rel RT QIon	Response	Conc	Units
98) Isobutyl alcohol	7.673	7.857	0.914	0m	N.D.	d
99) Methyl tert-amyl ether	8.119	8.122	0.968	0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.052	0m	N.D.	d
101) 1,4-Dioxane	9.056	8.957	1.079	0m	N.D.	d
102) 2-Nitropropane	9.353	9.342	1.115	0m	N.D.	d
104) Ethyl methacrylate	9.869	9.859	0.886	0m	N.D.	d
106) 1-Chlorohexane	11.050	10.980	0.824	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.895	0m	N.D.	d
108) Cyclohexanone	12.267	12.267	0.914	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.925	0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.970	0m	N.D.	d
111) Benzyl chloride	13.558	13.565	1.011	0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.I

Injection Date 03-MAR-10 20:27

Data File: 030310V5\5A323.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100303-18 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.24732		.01		2.19835	30		Averaged
SToluene-d8	1.2787	1.27239		.01		-0.49347	30		Averaged
SBromofluorobenzene	1.0029	1.00377		.01		0.08675	30		Averaged
Chlorotrifluoroethylene	0.0804	0.08935		.01		11.13184	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.1173	0.12314		.01		4.97869	30		Averaged
Trichlorotrifluoroethane	0.0448	0.04225		.01		-5.69196	30		Averaged
Acrolein	250	209.83	250			-16.068	30		Linear
Isopropyl Alcohol	0.015	0.01636		.01		9.06667	40		Averaged
Allyl chloride	0.3291	0.29416		.01		-10.61683	30		Averaged
tert-Butyl Alcohol	0.022	0.02431		.01		10.5	40		Averaged
Acrylonitrile	0.0724	0.0686		.01		-5.24862	30		Averaged
Isopropyl ether	0.7367	0.73607		.01		-0.08552	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.22289		.01		4.93879	30		Averaged
Ethyl tert-butyl ether	0.5327	0.57757		.01		8.42313	30		Averaged
Ethyl acetate	0.196	0.17171		.01		-12.39286	40		Averaged
Propionitrile	0.0278	0.02682		.01		-3.52518	30		Averaged
Methacrylonitrile	0.153	0.14244		.01		-6.90196	30		Averaged
Tetrahydrofuran	0.0692	0.0645		.01		-6.79191	30		Averaged
Isobutyl alcohol	0.0073	0.00698		.01		-4.38356	40		Averaged
Methyl tert-amyl ether	0.4283	0.46461		.01		8.4777	30		Averaged
Methyl methacrylate	0.1155	0.1132		.01		-1.99134	30		Averaged
1,4-Dioxane	0.0021	0.00194		.01		-7.61905	40		Averaged
2-Nitropropane	250	229.4	250			-8.24	30		Linear
Ethyl methacrylate	0.2951	0.29405		.01		-0.35581	30		Averaged
1-Chlorohexane	0.5025	0.46939		.01		-6.58905	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.18605		.01		-0.50802	30		Averaged
Cyclohexanone	0.0154	0.03579		.01		132.4026	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.17466		.01		-0.81772	30		Averaged
Pentachloroethane	0.2439	0.16659		.01		-31.69742	30	*	Averaged
Benzyl chloride	0.8953	0.78208		.01		-12.64604	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.30154		.01		-8.4578	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1707267	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1707267	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	422235	51.10	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1629487	49.75	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	658756	50.04	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.608	4.668	0.549		0m	N.D.	d	
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.041	5.041	0.601		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699		0m	N.D.	d	
9) Acetone	6.160	6.174	0.734		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.082	6.156	0.725		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.340	6.464	0.756		0m	N.D.	d	
13) Methyl acetate	6.361	6.365	0.758		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.644	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810		0m	N.D.	d	
19) 1,1-Dichloroethane	7.100	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.482	7.507	0.892		0m	N.D.	d	
22) 2,2-Dichloropropane	7.514	7.514	0.896		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.967	7.924	0.950		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.249	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.684	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.840	8.826	1.054		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.685	9.487	1.155		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.788	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.178	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.209	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.209	11.181	1.006		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.458	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.702	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.324	13.229	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.650	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214		0m	N.D.	d
83) Chlorotrifluoroethylene	4.608	4.608	0.549	116	457640	166.70	ug/L 98
84) 2-Chloro-1,1,1-trifluo...	5.111	5.111	0.609	118	630710	157.42	ug/L 99
85) Acrolein	6.078	6.082	0.725	56	203044	209.83	ug/L 100
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	360646	235.60	ug/L 99
87) Isopropyl Alcohol	6.163	6.163	0.735	45	1396118	2733.84	ug/L 100
88) Allyl chloride	6.425	6.425	0.766	41	2511086	223.48	ug/L 100
89) tert-Butyl Alcohol	6.457	6.460	0.770	59	2075409	2764.91	ug/L 91
90) Acrylonitrile	6.743	6.747	0.804	53	585578	237.02	ug/L 99
91) Isopropyl ether	6.916	6.920	0.825	45	1256662	49.96	ug/L 100
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	380533	52.48	ug/L 99
93) Ethyl tert-butyl ether	7.192	7.192	0.857	59	986070	54.21	ug/L 100
94) Ethyl acetate	7.380	7.383	0.880	43	1465750	219.06	ug/L 100
95) Propionitrile	7.585	7.585	0.904	54	228923	240.74	ug/L 99
96) Methacrylonitrile	7.677	7.680	0.915	41	1215874	232.67	ug/L 99
97) Tetrahydrofuran	7.712	7.716	0.919	42	550635	233.15	ug/L 100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

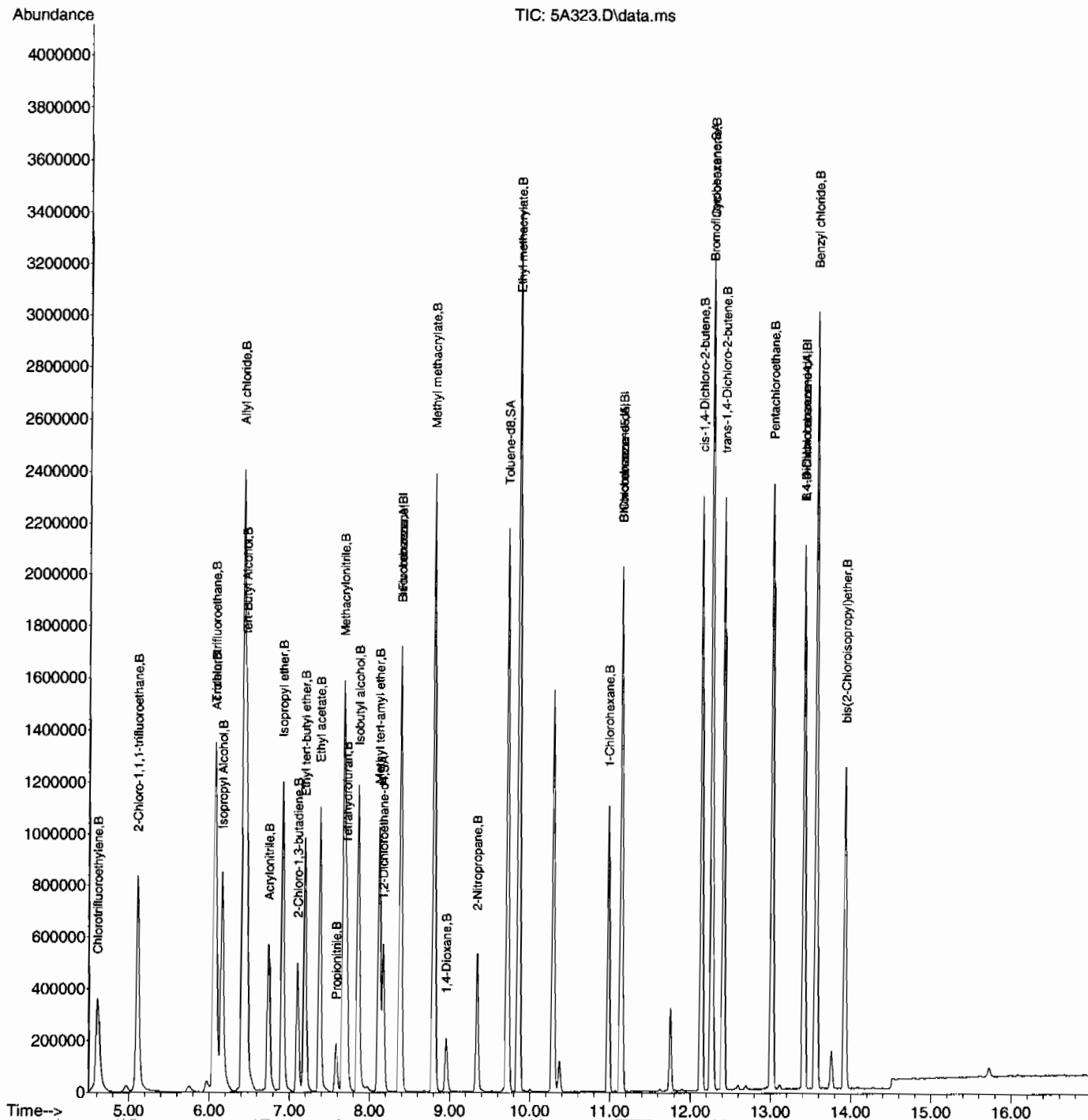
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.861	7.857	0.937	41	595640	2394.15	ug/L	98
99) Methyl tert-amyl ether	8.119	8.122	0.968	73	793220	54.25	ug/L	99
100) Methyl methacrylate	8.801	8.801	1.049	69	966318	245.07	ug/L	100
101) 1,4-Dioxane	8.957	8.957	1.068	88	165981	2358.78	ug/L	99
102) 2-Nitropropane	9.339	9.342	1.113	43	457968	229.40	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1882867	249.08	ug/L	100
106) 1-Chlorohexane	10.976	10.980	0.818	55	308055	46.71	ug/L	100
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	610518	248.78	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	587226	2910.89	ug/L	99 E
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925	53	573129	247.92	ug/L	99
110) Pentachloroethane	13.017	13.017	0.970	167	546649	170.75	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2566329	218.37	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	989493	228.84	ug/L	99

(#) = 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\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.1

Injection Date 05-MAR-10 15:17

Data File: 030510V5\5A502.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100305-01

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.25525		.01		5.47521	30		Averaged	
SToluene-d8	1.2787	1.27269		.01		-0.47001	30		Averaged	
SBromofluorobenzene	1.0029	1.01191		.01		0.89839	30		Averaged	
Dichlorodifluoromethane	0.1166	0.11252		.01		-3.49914	30		Averaged	
Chloromethane	50	49.96	50			-0.08	30		Linear	spcc
Vinyl chloride	0.1232	0.12387		.01		0.54383	20		Averaged	ccc
Bromomethane	0.1177	0.11499		.01		-2.30246	30		Averaged	
Chloroethane	0.125	0.12669		.01		1.352	30		Averaged	
Trichlorofluoromethane	0.2144	0.23441		.01		9.33302	30		Averaged	
Ethyl ether	0.1846	0.19528		.01		5.78548	30		Averaged	
1,1-Dichloroethylene	0.2389	0.22984		.01		-3.79238	20		Averaged	ccc
Acetone	0.1495	0.15367		.01		2.7893	40		Averaged	
Iodomethane	0.2468	0.2291		.01		-7.1718	30		Averaged	
Methyl acetate	0.1633	0.15652		.01		-4.15187	40		Averaged	
Carbon disulfide	0.4789	0.43509		.01		-9.14805	30		Averaged	
Acetonitrile	0.0294	0.0273		.01		-7.14286	30		Averaged	
Methylene chloride	50	45.49	50			-9.02	30		Linear	
tert-Butyl methyl ether	0.4975	0.46629		.01		-6.27337	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.24893		.01		-4.18399	30		Averaged	
Vinyl acetate	0.4091	0.43927		.01		7.37473	40		Averaged	
1,1-Dichloroethane	0.3217	0.30929		.1		-3.85763	30		Averaged	spcc
2-Butanone	0.178	0.19621		.01		10.23034	40		Averaged	
2,2-Dichloropropane	0.2385	0.22954		.01		-3.75681	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.28558		.01		-5.49967	30		Averaged	
Chloroform	0.2882	0.27489		.01		-4.61832	20		Averaged	ccc
Bromochloromethane	0.0893	0.08783		.01		-1.64614	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.23402		.01		-1.54817	30		Averaged	
Cyclohexane	0.3381	0.32537		.01		-3.76516	30		Averaged	
1,1-Dichloropropene	0.218	0.21178		.01		-2.85321	30		Averaged	
Carbon tetrachloride	0.2039	0.2045		.01		0.29426	30		Averaged	
Benzene	0.7238	0.66619		.01		-7.95938	30		Averaged	
1,2-Dichloroethane	0.249	0.23327		.01		-6.31727	30		Averaged	
Cyclohexene	0.3364	0.32115		.01		-4.53329	30		Averaged	
n-Butyl alcohol	5000	5996.96	5000			19.9392	40		Linear	
Trichloroethylene	0.1719	0.16431		.01		-4.41536	30		Averaged	
Methylcyclohexane	0.3141	0.30167		.01		-3.95734	30		Averaged	
1,2-Dichloropropane	0.2044	0.1933		.01		-5.43053	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 05-MAR-10 15:17

Data File: 030510V5\A502.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100305-01

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10459		.01		0.6641	30		Averaged	
Bromodichloromethane	0.2124	0.21514		.01		1.29002	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.0737		.01		12.86371	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28876		.01		-0.70151	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.12933		.01		8.13545	40		Averaged	
Toluene	1.0734	0.96239		.01		-10.3419	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35522		.01		-2.83917	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17174		.01		-5.16842	30		Averaged	
2-Hexanone	0.3247	0.36259		.01		11.66923	40		Averaged	
Tetrachloroethylene	0.1966	0.18267		.01		-7.08545	30		Averaged	
1,3-Dichloropropane	0.3892	0.36598		.01		-5.96608	30		Averaged	
Dibromochloromethane	0.2155	0.22388		.01		3.88863	30		Averaged	
1,2-Dibromoethane	0.2099	0.2037		.01		-2.95379	30		Averaged	
Chlorobenzene	0.6963	0.6354		.3		-8.74623	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.2359	0.22879		.01		-3.01399	30		Averaged	
m,p-Xylenes	0.4639	0.43602		.01		-6.00992	30		Averaged	
o-Xylene	0.4688	0.43682		.01		-6.82167	30		Averaged	
Ethylbenzene	0.9865	0.90394		.01		-8.36898	20		Averaged	ccc
Styrene	0.7161	0.72		.01		0.54462	30		Averaged	
Bromoform	0.2722	0.28883		.1		6.10948	30		Averaged	spcc
Isopropylbenzene	2.2942	2.13269		.01		-7.03993	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.56408		.3		-5.00505	30		Averaged	spcc
n-Propylbenzene	2.7698	2.52335		.01		-8.89775	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.15453		.01		-2.50473	30		Averaged	
Bromobenzene	0.5771	0.51018		.01		-11.59591	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.81054		.01		-7.59251	30		Averaged	
2-Chlorotoluene	0.5759	0.52044		.01		-9.63014	30		Averaged	
4-Chlorotoluene	1.7607	1.57716		.01		-10.42426	30		Averaged	
tert-Butylbenzene	0.451	0.41352		.01		-8.31042	30		Averaged	
1,2,4-Trimethylbenzene	2.5355	2.4119		.01		-4.87478	30		Averaged	
sec-Butylbenzene	2.5355	2.4119		.01		-4.87478	30		Averaged	
4-Isopropyltoluene	2.0151	1.94961		.01		-3.24996	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.00707		.01		-8.09728	30		Averaged	
1,4-Dichlorobenzene	1.114	1.01483		.01		-8.90215	30		Averaged	
n-Butylbenzene	1.9772	1.87439		.01		-5.19978	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.96971		.01		-7.94475	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.11379		.01		0.69912	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 05-MAR-10 15:17

Data File: 030510V5\SA502.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100305-01

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.72207		.01		1.78602	30		Averaged
Hexachlorobutadiene	0.4309	0.43929		.01		1.94709	30		Averaged
Naphthalene	1.6113	1.68835		.01		4.78185	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.64197		.01		3.69407	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A502.D
Acq On : 5 Mar 2010 3:17 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A]0106-07D+0222-07A
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 05 16:03:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1815452	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1382681	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	728086	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1815452	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1382681	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	728086	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.973	65	463392	52.74	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1759727	49.76	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	736760	50.45	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.556	85	204281	48.24	ug/L	100
3) Chloromethane	4.900	4.900	0.584	50	271540	49.96	ug/L	100
4) Vinyl chloride	5.041	5.041	0.601	62	224885	50.27	ug/L	100
5) Bromomethane	5.423	5.423	0.646	94	208758	48.83	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	230007	50.68	ug/L	100
7) Trichlorofluoromethane	5.705	5.695	0.680	101	425563	54.66	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	354520	52.88	ug/L	99
9) Acetone	6.177	6.174	0.736	43	1394877	256.96	ug/L	100
10) 1,1-Dichloroethylene	6.156	6.156	0.734	61	417269	48.09	ug/L	99
11) Iodomethane	6.361	6.357	0.758	142	2079614	232.11	ug/L	100
12) Acetonitrile	6.464	6.464	0.770	41	1238967	1161.77	ug/L	100
13) Methyl acetate	6.365	6.365	0.759	43	1420799	239.68	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3949382	227.14	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	315297	45.49	ug/L	97
16) tert-Butyl methyl ether	6.640	6.640	0.791	73	846535	46.87	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.800	61	451924	47.91	ug/L	100
18) Vinyl acetate	6.969	6.969	0.831	43	3987345	268.44	ug/L	100
19) 1,1-Dichloroethane	7.072	7.068	0.843	63	561501	48.07	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1781050	275.58	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	518448	47.25	ug/L	99
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	416722	48.13	ug/L	100
23) Bromochloromethane	7.723	7.719	0.920	128	159453	49.19	ug/L	100
24) Chloroform	7.701	7.701	0.918	83	499043	47.70	ug/L	99
25) 1,1,1-Trichloroethane	7.907	7.906	0.942	97	424860	49.23	ug/L	100
26) Cyclohexane	7.924	7.924	0.944	56	590700	48.12	ug/L	99
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	384475	48.57	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	371261	50.15	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.981	62	423498	46.84	ug/L	99
31) Benzene	8.204	8.203	0.978	78	1209438	46.02	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	583040	47.73	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.998	56	1528657	5996.96	ug/L	99
34) Trichloroethylene	8.677	8.677	1.034	95	298296	47.79	ug/L	100
35) 1,2-Dichloropropane	8.929	8.932	1.064	63	350933	47.27	ug/L	99
36) Methylcyclohexane	8.833	8.826	1.053	83	547667	48.02	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	189880	50.33	ug/L	99
38) Bromodichloromethane	9.109	9.112	1.086	83	390576	50.65	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	668973	282.08	ug/L	99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	524235	49.65	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A502.D
Acq On : 5 Mar 2010 3:17 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A]0106-07D+0222-07A
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 05 16:03:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	894133	270.42	ug/L 100
44) Toluene	9.788	9.788	0.878	91	1330679	44.83	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	491161	48.58	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	237458	47.40	ug/L 100
47) 2-Hexanone	10.279	10.279	0.923	43	2506717	279.20	ug/L 100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	506036	47.02	ug/L 100
49) Tetrachloroethylene	10.294	10.290	0.924	164	252579	46.45	ug/L 99
50) Dibromochloromethane	10.584	10.583	0.950	129	309549	51.95	ug/L 99
51) 1,2-Dibromoethane	10.775	10.771	0.967	107	281651	48.53	ug/L 100
52) Chlorobenzene	11.174	11.174	1.003	112	878551	45.63	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	316346	48.50	ug/L 99
54) Ethylbenzene	11.701	11.701	1.050	91	1249865	45.81	ug/L 100
55) m,p-Xylenes	11.280	11.280	1.012	106	1205765	93.99	ug/L 99
56) o-Xylene	11.701	11.701	1.050	106	603989	46.59	ug/L 100
57) Styrene	11.715	11.715	1.051	104	995528	50.27	ug/L 99
59) Bromoform	12.005	12.005	0.895	173	210291	53.05	ug/L 99
60) Isopropylbenzene	12.016	12.016	0.896	105	1552780	46.48	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	410697	47.50	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	112510	48.73	ug/L 99
64) Bromobenzene	12.465	12.465	0.929	156	371456	44.21	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1837218	45.55	ug/L 100
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	1318231	46.20	ug/L 100
67) 2-Chlorotoluene	12.599	12.596	0.939	126	378923	45.19	ug/L 98
68) 4-Chlorotoluene	12.698	12.698	0.947	91	1148308	44.79	ug/L 100
69) tert-Butylbenzene	12.903	12.900	0.962	134	301079	45.84	ug/L 98
70) 1,2,4-Trimethylbenzene	13.119	13.119	0.978	105	1756073	47.56	ug/L 100
71) sec-Butylbenzene	13.119	13.119	0.978	105	1756073	47.56	ug/L 99
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	1419485	48.38	ug/L 99
73) 1,3-Dichlorobenzene	13.353	13.349	0.996	146	733235	45.95	ug/L 99
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	738887	45.55	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1364720	47.40	ug/L 100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	706030	46.03	ug/L 99
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	82851	50.34	ug/L 99
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	525729	50.89	ug/L 100
79) Hexachlorobutadiene	15.693	15.686	1.170	225	319838	50.98	ug/L 99
80) Naphthalene	15.988	15.988	1.192	128	1229261	52.39	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	467411	51.85	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	4.970	4.960	0.592		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.163	6.163	0.734		0m	N.D.	d
88) Allyl chloride	6.464	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.640	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.966	6.920	0.830		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.040	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.047	7.192	0.840		0m	N.D.	d
94) Ethyl acetate	7.390	7.383	0.881		0m	N.D.	d
95) Propionitrile	7.606	7.585	0.906		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.765	7.716	0.925		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A502.D
Acq On : 5 Mar 2010 3:17 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A]0106-07D+0222-07A
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 05 16:03:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

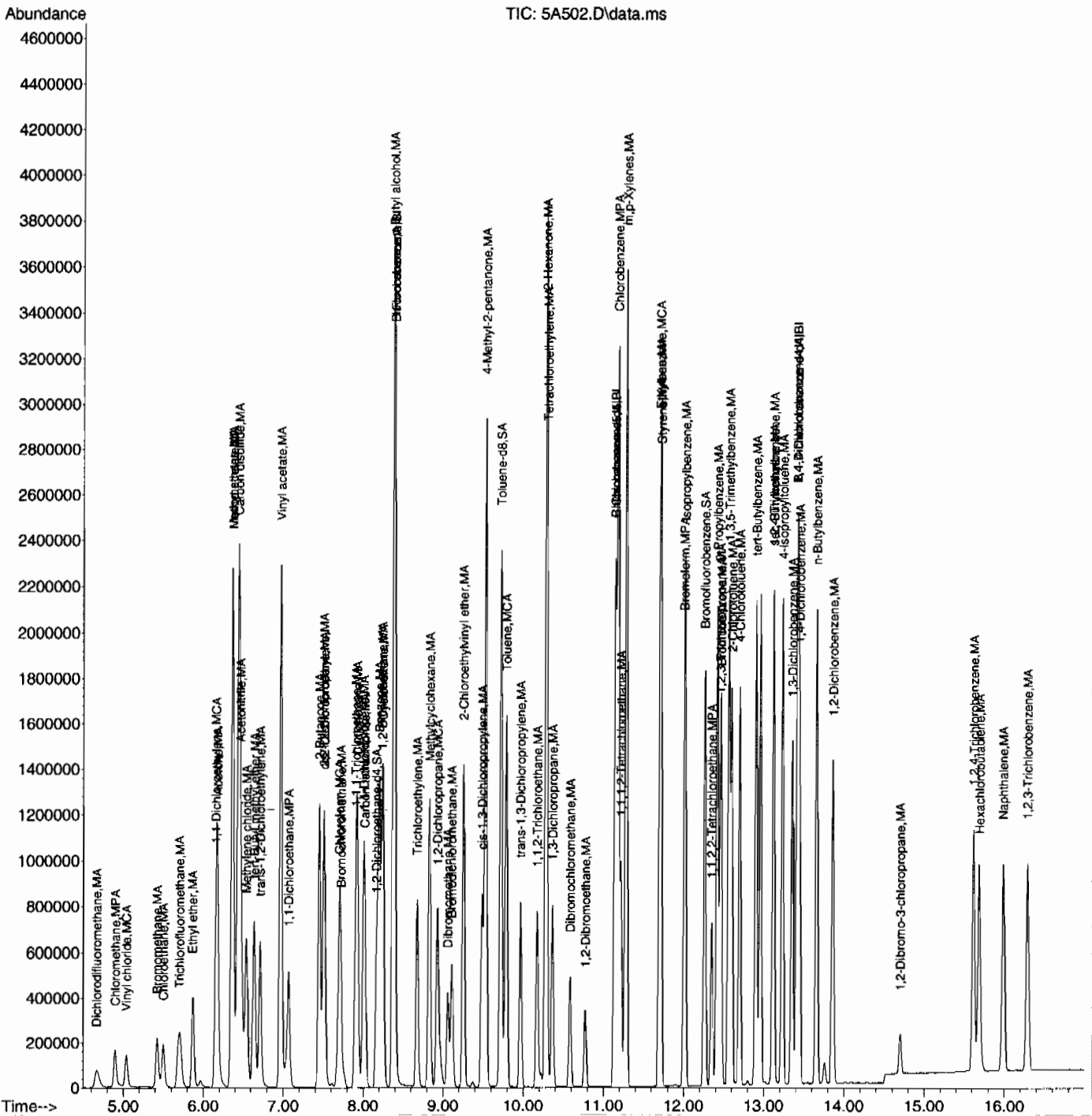
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.670	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.200	8.122	0.977		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.056	8.957	1.079		0m	N.D.	d
102) 2-Nitropropane	9.130	9.342	1.088		0m	N.D.	d
104) Ethyl methacrylate	9.859	9.859	0.885		0m	N.D.	d
106) 1-Chlorohexane	10.980	10.980	0.819		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905		0m	N.D.	d
108) Cyclohexanone	12.267	12.267	0.915		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.419	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.572	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	14.102	13.929	1.051		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\030510V5\
Data File : 5A502.D
Acq On : 5 Mar 2010 3:17 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A]0106-07D+0222-07A
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 05 16:03:14 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.I

Injection Date 05-MAR-10 16:40

Data File: 030510V5\5A505.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100305-04

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.25129		.01		3.83884	30		Averaged
SToluene-d8	1.2787	1.24629		.01		-2.53461	30		Averaged
SBromofluorobenzene	1.0029	0.98427		.01		-1.85761	30		Averaged
Trichlorotrifluoroethane	0.0448	0.06411		.01		43.10268	30	*	Averaged
Allyl chloride	0.3291	0.30922		.01		-6.04072	30		Averaged
Acrylonitrile	0.0724	0.08249		.01		13.93646	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.29234		.01		37.63653	30	*	Averaged
Ethyl acetate	0.196	0.20808		.01		6.16327	40		Averaged
Propionitrile	0.0278	0.0326		.01		17.26619	30		Averaged
Methacrylonitrile	0.153	0.16933		.01		10.6732	30		Averaged
Tetrahydrofuran	0.0692	0.07826		.01		13.09249	30		Averaged
Isobutyl alcohol	0.0073	0.00863		.01		18.21918	40		Averaged
Methyl methacrylate	0.1155	0.13386		.01		15.8961	30		Averaged
1,4-Dioxane	0.0021	0.00227		.01		8.09524	40		Averaged
2-Nitropropane	250	279.97	250			11.988	30		Linear
Ethyl methacrylate	0.2951	0.33735		.01		14.31718	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.22691		.01		21.34225	30		Averaged
Cyclohexanone	1250	1980.72	1250			58.4576	40	*	Linear
trans-1,4-Dichloro-2-butene	0.1761	0.21333		.01		21.1414	30		Averaged
Pentachloroethane	0.2439	0.26688		.01		9.42189	30		Averaged
Benzyl chloride	0.8953	1.11522		.01		24.56383	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.36358		.01		10.37644	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A505.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-04|CCV|1|VOA|1|
Misc : CCV 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 09:27:27 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1810003	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1370083	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	707376	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1810003	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1370083	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	707376	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	454839	51.92	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1707521	48.73	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	696251	49.07	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.648	4.668	0.554		0m	N.D.	d	
3) Chloromethane	4.880	4.900	0.582		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.877	5.866	0.701		0m	N.D.	d	
9) Acetone	6.174	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.142	6.156	0.732		0m	N.D.	d	
11) Iodomethane	6.361	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.531	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801		0m	N.D.	d	
18) Vinyl acetate	7.107	6.969	0.847		0m	N.D.	d	
19) 1,1-Dichloroethane	7.111	7.068	0.848		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	7.528	7.514	0.898		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.701	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.002	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	8.020	8.020	0.956		0m	N.D.	d	
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.242	8.246	0.983		0m	N.D.	d	
33) n-Butyl alcohol	8.387	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.861	8.826	1.056		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A505.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-04|CCV|1|VOA|1|
Misc : CCV 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 09:27:27 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.530	9.526	0.855		0m	N.D.	d
44) Toluene	9.781	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.767	10.771	0.966		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.698	11.701	1.050		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	11.705	11.701	1.050		0m	N.D.	d
57) Styrene	11.705	11.715	1.050		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.345	12.348	0.920		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	13.116	13.119	0.978		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.349	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.697	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.988	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	4.859	4.960	0.579	56	1894	Below Cal	86
86) Trichlorotrifluoroethane	6.075	6.071	0.724	85	580169	357.50 ug/L	97
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2798481	234.92 ug/L	93
89) tert-Butyl Alcohol	0.000	6.460	0.000		0m	N.D.	d
90) Acrylonitrile	6.743	6.747	0.804	53	746526	285.02 ug/L	99
91) Isopropyl ether	0.000	6.920	0.000		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	529134	68.83 ug/L	99
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0m	N.D.	d
94) Ethyl acetate	7.380	7.383	0.880	43	1883123	265.47 ug/L	100
95) Propionitrile	7.581	7.585	0.904	54	294996	292.61 ug/L	100
96) Methacrylonitrile	7.680	7.680	0.916	41	1532401	276.59 ug/L	99
97) Tetrahydrofuran	7.712	7.716	0.919	42	708242	282.87 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A505.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-04|CCV|1|VOA|1|
Misc : CCV 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 09:27:27 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE

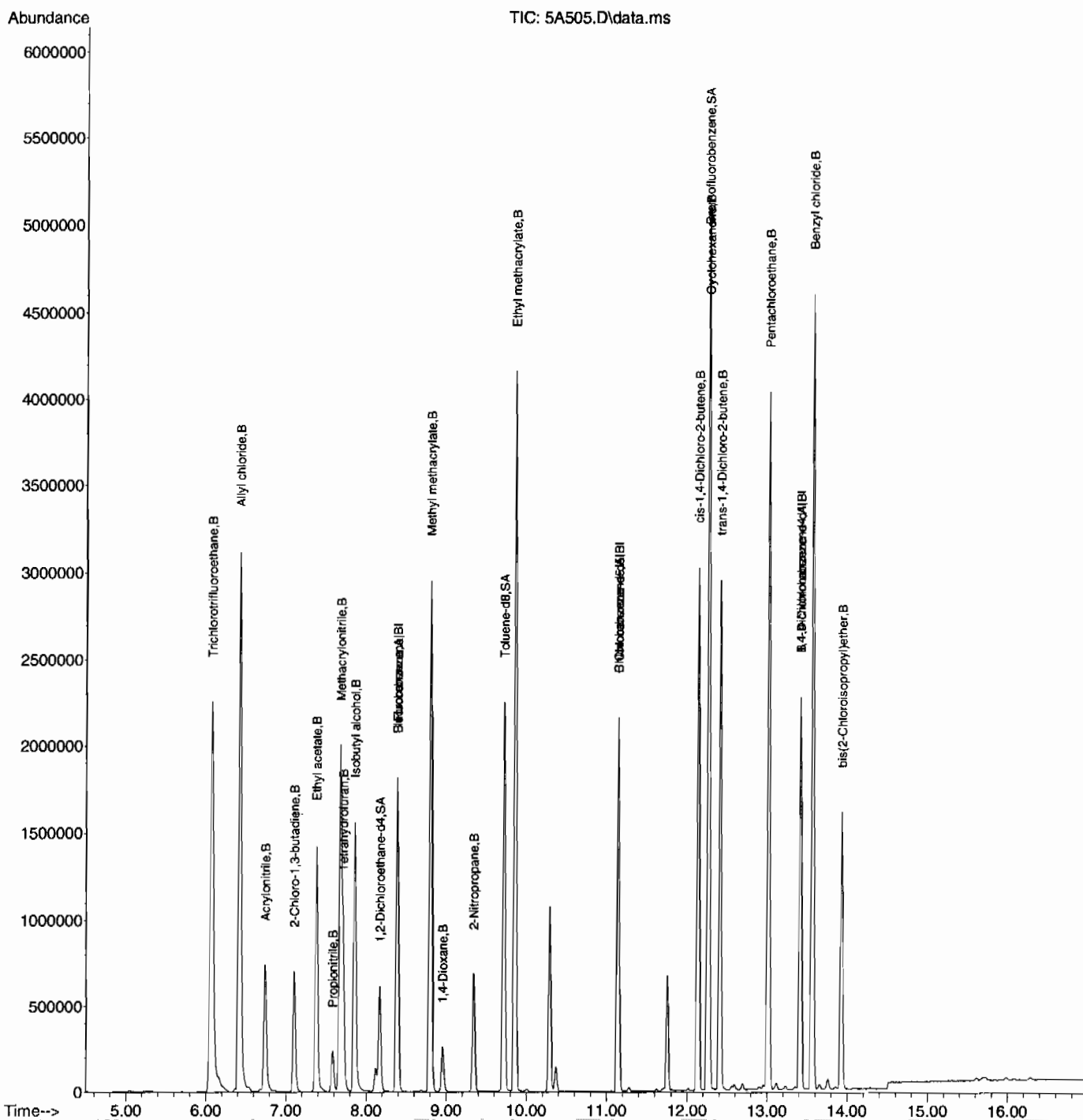
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.857	7.857	0.937	41	781266	2962.02	ug/L	99
99) Methyl tert-amyl ether	0.000	8.122	0.000		0m	N.D.	d	
100) Methyl methacrylate	8.801	8.801	1.049	69	1211433	289.79	ug/L	100
101) 1,4-Dioxane	8.957	8.957	1.068	88	205840	2759.18	ug/L	100
102) 2-Nitropropane	9.342	9.342	1.114	43	595877	279.97	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	2310980	285.76	ug/L	99
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	802558	303.41	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	1195682	1980.72	ug/L	99
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925	53	754514	302.81	ug/L	100
110) Pentachloroethane	13.017	13.017	0.970	167	943907	273.55	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	3944412	311.39	ug/L	100
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	1285922	275.92	ug/L	99

(#) = 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\030510V5\
Data File : 5A505.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100305-04|CCV|1|VOA|1|
Misc : CCV 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 09:27:27 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Fri Mar 05 15:47:51 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.I

Injection Date 09-MAR-10 08:09

Data File: 030910V5\5B203.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100309-02

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.242	0.23528		.01		-2.77686	30		Averaged	
S Toluene-d8	1.2787	1.19707		.01		-6.38383	30		Averaged	
S Bromofluorobenzene	1.0029	1.10705		.01		10.38488	30		Averaged	
Dichlorodifluoromethane	0.1167	0.10607		.01		-9.10883	30		Averaged	
Chloromethane	50	46.08	50			-7.84	30		Linear	spcc
Vinyl chloride	0.1232	0.11862		.01		-3.71753	20		Averaged	ccc
Bromomethane	0.1177	0.11005		.01		-6.49958	30		Averaged	
Chloroethane	0.1249	0.11607		.01		-7.06966	30		Averaged	
Trichlorofluoromethane	0.2144	0.20793		.01		-3.01772	30		Averaged	
Ethyl ether	0.1846	0.1701		.01		-7.85482	30		Averaged	
1,1-Dichloroethylene	0.2389	0.21904		.01		-8.3131	20		Averaged	ccc
Acetone	0.1494	0.11559		.01		-22.63052	40		Averaged	
Methyl acetate	0.1633	0.13899		.01		-14.88671	40		Averaged	
Iodomethane	0.2468	0.22185		.01		-10.1094	30		Averaged	
Carbon disulfide	0.4789	0.4591		.01		-4.13447	30		Averaged	
Acetonitrile	0.0293	0.02476		.01		-15.49488	30		Averaged	
Methylene chloride	50	45.07	50			-9.86	30		Linear	
tert-Butyl methyl ether	0.4975	0.43481		.01		-12.60101	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.2401		.01		-7.58276	30		Averaged	
Vinyl acetate	0.4091	0.42328		.01		3.46615	40		Averaged	
1,1-Dichloroethane	0.3217	0.29947		.1		-6.91016	30		Averaged	spcc
2-Butanone	0.178	0.14385		.01		-19.18539	40		Averaged	
2,2-Dichloropropane	0.2385	0.22648		.01		-5.03983	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.28004		.01		-7.33289	30		Averaged	
Chloroform	0.2882	0.26347		.01		-8.58085	20		Averaged	ccc
Bromochloromethane	0.0893	0.0828		.01		-7.27884	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.22116		.01		-6.95835	30		Averaged	
Cyclohexane	0.3381	0.32323		.01		-4.39811	30		Averaged	
1,1-Dichloropropene	0.218	0.20554		.01		-5.7156	30		Averaged	
Carbon tetrachloride	0.2039	0.1961		.01		-3.8254	30		Averaged	
Benzene	0.7238	0.64899		.01		-10.33573	30		Averaged	
1,2-Dichloroethane	0.249	0.22452		.01		-9.83133	30		Averaged	
Cyclohexene	0.3364	0.30407		.01		-9.61058	30		Averaged	
n-Butyl alcohol	5000	4717.76	5000			-5.6448	40		Linear	
Trichloroethylene	0.1719	0.15768		.01		-8.27225	30		Averaged	
Methylcyclohexane	0.3141	0.29237		.01		-6.91818	30		Averaged	
1,2-Dichloropropane	0.2044	0.18635		.01		-8.83072	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 09-MAR-10 08:09

Data File: 030910V5\5B203.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100309-02

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.09834		.01		-5.3513	30		Averaged	
Bromodichloromethane	0.2124	0.20519		.01		-3.39454	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.05318		.01		-18.56049	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.27165		.01		-6.58528	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.1065		.01		-10.95318	40		Averaged	
Toluene	1.0734	0.91355		.01		-14.89193	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.33163		.01		-9.29158	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.158		.01		-12.75538	30		Averaged	
2-Hexanone	0.3247	0.26044		.01		-19.79058	40		Averaged	
Tetrachloroethylene	0.1966	0.17018		.01		-13.43845	30		Averaged	
1,3-Dichloropropane	0.3892	0.33878		.01		-12.95478	30		Averaged	
Dibromochloromethane	0.2155	0.20129		.01		-6.59397	30		Averaged	
1,2-Dibromoethane	0.2099	0.18527		.01		-11.73416	30		Averaged	
Chlorobenzene	0.6963	0.60435		.3		-13.20551	30		Averaged	spcc
Ethylbenzene	1.2247	1.02625		.01		-16.20397	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.21134		.01		-10.41119	30		Averaged	
m,p-Xylenes	0.4639	0.4029		.01		-13.14939	30		Averaged	
o-Xylene	0.4688	0.40462		.01		-13.69027	30		Averaged	
Styrene	0.7161	0.66584		.01		-7.01857	30		Averaged	
Bromoform	0.2722	0.25527		.1		-6.21969	30		Averaged	spcc
Isopropylbenzene	2.2942	1.97862		.01		-13.75556	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.49245		.3		-17.06804	30		Averaged	spcc
n-Propylbenzene	2.7698	2.35075		.01		-15.12925	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.13519		.01		-14.70662	30		Averaged	
Bromobenzene	0.5771	0.48133		.01		-16.59504	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.6888		.01		-13.80595	30		Averaged	
2-Chlorotoluene	0.5751	0.49422		.01		-14.06364	30		Averaged	
4-Chlorotoluene	1.761	1.47846		.01		-16.04429	30		Averaged	
tert-Butylbenzene	0.451	0.37206		.01		-17.50333	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.71291		.01		-14.07093	30		Averaged	
sec-Butylbenzene	2.5353	2.19066		.01		-13.59366	30		Averaged	
4-Isopropyltoluene	2.0151	1.77009		.01		-12.1587	30		Averaged	
1,3-Dichlorobenzene	1.0958	0.93538		.01		-14.63953	30		Averaged	
1,4-Dichlorobenzene	1.114	0.93817		.01		-15.78366	30		Averaged	
n-Butylbenzene	1.9788	1.68879		.01		-14.65585	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.8975		.01		-14.7997	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.09508		.01		-15.85841	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 09-MAR-10 08:09

Data File: 030910V5\5B203.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100309-02 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.64706		.01		-8.78771	30		Averaged
Hexachlorobutadiene	0.4309	0.39488		.01		-8.35925	30		Averaged
Naphthalene	1.6113	1.45416		.01		-9.75237	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.58341		.01		-5.76482	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B203.D
Acq On : 9 Mar 2010 8:09 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML - MIX[A] 0220-01E+0308-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 08:30:05 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1974825	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1509161	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	782696	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1974825	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1509161	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	782696	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	464635	48.61	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1806573	46.81	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	866485	55.19	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	209463	45.43	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	271035	46.08	ug/L	96
4) Vinyl chloride	5.041	5.041	0.601	62	234262	48.14	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	217334	46.76	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	229211	46.45	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	410634	48.48	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	335920	46.06	ug/L	96
9) Acetone	6.174	6.174	0.736	43	1141372	193.43	ug/L	99
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	432570	45.84	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	2190574	224.76	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	1222191	1056.82	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1372387	212.83	ug/L	99
14) Carbon disulfide	6.432	6.435	0.767	76	4533260	239.68	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	339819	45.07	ug/L	97
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	858672	43.70	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	474160	46.21	ug/L	100
18) Vinyl acetate	6.969	6.969	0.831	43	4179556	258.67	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	591410	46.54	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1420430	202.04	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	553027	46.33	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	447266	47.49	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	163518	46.38	ug/L	97
24) Chloroform	7.698	7.701	0.918	83	520315	45.72	ug/L	99
25) 1,1,1-Trichloroethane	7.907	7.906	0.943	97	436762	46.53	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	638324	47.80	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	405910	47.14	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	387267	48.09	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	443386	45.08	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1281634	44.83	ug/L	99
32) Cyclohexene	8.246	8.246	0.983	67	600478	45.19	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	1310629	4717.76	ug/L	99
34) Trichloroethylene	8.677	8.677	1.035	95	311389	45.86	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	368005	45.57	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.053	83	577387	46.54	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	194200	47.32	ug/L	99
38) Bromodichloromethane	9.109	9.112	1.086	83	405215	48.30	ug/L	100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	525109	203.55	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	536470	46.71	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B203.D
Acq On : 9 Mar 2010 8:09 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML - MIX[A] 0220-01E+0308-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 08:30:05 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	803611	222.67	ug/L 99
44) Toluene	9.788	9.788	0.878	91	1378687	42.55	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	500489	45.35	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	238450	43.61	ug/L 99
47) 2-Hexanone	10.279	10.279	0.923	43	1965226	200.54	ug/L 100
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	511267	43.52	ug/L 99
49) Tetrachloroethylene	10.290	10.290	0.924	164	256828	43.28	ug/L 100
50) Dibromochloromethane	10.584	10.583	0.950	129	303778	46.71	ug/L 99
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	279595	44.14	ug/L 100
52) Chlorobenzene	11.174	11.174	1.003	112	912060	43.40	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	318943	44.80	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1548777	41.90	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	1216087	86.85	ug/L 100
56) o-Xylene	11.698	11.701	1.050	106	610634	43.16	ug/L 100
57) Styrene	11.712	11.715	1.051	104	1004856	46.49	ug/L 94
59) Bromoform	12.005	12.005	0.895	173	199798	46.89	ug/L 100
60) Isopropylbenzene	12.012	12.016	0.896	105	1548658	43.12	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	385435	41.46	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	105816	42.64	ug/L # 88
64) Bromobenzene	12.465	12.465	0.929	156	376737	41.71	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1839924	42.43	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1321815	43.10	ug/L 99
67) 2-Chlorotoluene	12.596	12.596	0.939	126	386822	42.97	ug/L # 83
68) 4-Chlorotoluene	12.698	12.698	0.947	91	1157185	41.98	ug/L 100
69) tert-Butylbenzene	12.903	12.900	0.962	134	291212	41.25	ug/L 99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1340686	42.96	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1714620	43.20	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1385439	43.92	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	732122	42.68	ug/L 99
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	734298	42.11	ug/L 99
75) n-Butylbenzene	13.653	13.653	1.018	91	1321811	42.67	ug/L 100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	702471	42.60	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	74417	42.06	ug/L 97
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	506455	45.61	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	309071	45.82	ug/L 98
80) Naphthalene	15.988	15.988	1.192	128	1138164	45.12	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	456629	47.12	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	5.967	6.082	0.711		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.170	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.637	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.923	6.920	0.825		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.037	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.058	7.192	0.841		0m	N.D.	d
94) Ethyl acetate	7.380	7.383	0.880		0m	N.D.	d
95) Propionitrile	7.670	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.673	7.680	0.915		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.919		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B203.D
Acq On : 9 Mar 2010 8:09 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML - MIX[A] 0220-01E+0308-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 08:30:05 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

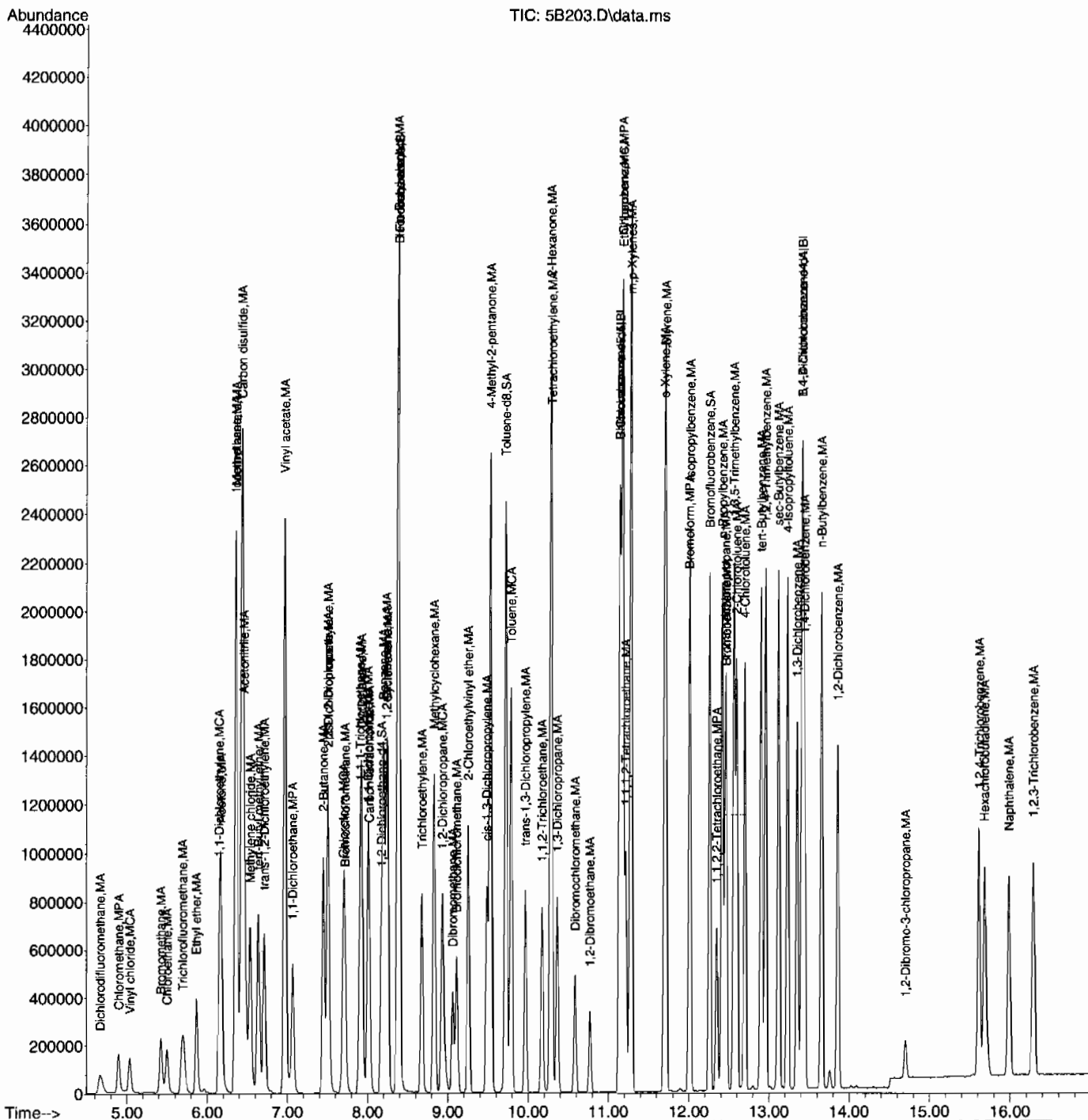
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.854	7.857	0.936		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.826	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.059	8.957	1.080		0m	N.D.	d
102) 2-Nitropropane	9.360	9.342	1.116		0m	N.D.	d
104) Ethyl methacrylate	9.848	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.292	12.267	0.916		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.561	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	14.067	13.929	1.049		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\030910V5\
Data File : 5B203.D
Acq On : 9 Mar 2010 8:09 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML - MIX[A] 0220-01E+0308-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 08:30:05 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2134

Instrument ID: VOA5.I

Injection Date 09-MAR-10 09:18

Data File: 030910V5\SB205.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100309-04

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.22435		.01		-7.29339	30		Averaged
SToluene-d8	1.2787	1.19019		.01		-6.92187	30		Averaged
SBromofluorobenzene	1.0029	1.11373		.01		11.05095	30		Averaged
Trichlorotrifluoroethane	0.0448	0.06684		.01		49.19643	30	*	Averaged
Acrolein	250	333.81	250			33.524	30	*	Linear
Allyl chloride	0.3291	0.321		.01		-2.46126	30		Averaged
Acrylonitrile	0.0724	0.07489		.01		3.43923	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.29958		.01		41.0452	30	*	Averaged
Ethyl acetate	0.196	0.18302		.01		-6.62245	40		Averaged
Propionitrile	0.0278	0.02817		.01		1.33094	30		Averaged
Methacrylonitrile	0.153	0.15353		.01		0.34641	30		Averaged
Tetrahydrofuran	0.0692	0.06821		.01		-1.43064	30		Averaged
Isobutyl alcohol	0.0073	0.00724		.01		-0.82192	40		Averaged
Methyl methacrylate	0.1155	0.12232		.01		5.90476	30		Averaged
1,4-Dioxane	0.0021	0.00184		.01		-12.38095	40		Averaged
2-Nitropropane	250	246.58	250			-1.368	30		Linear
Ethyl methacrylate	0.2951	0.31966		.01		8.3226	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.21751		.01		16.31551	30		Averaged
Cyclohexanone	0.0154	0.01464		.01		-4.93506	40		Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.20432		.01		16.02499	30		Averaged
Pentachloroethane	0.2439	0.28189		.01		15.57606	30		Averaged
Benzyl chloride	0.8953	1.08083		.01		20.72266	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.31998		.01		-2.85974	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:41:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1900502	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1419216	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	712034	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1900502	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1419216	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	712034	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	426373	46.35	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1689130	46.54	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	793013	55.52	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.920	4.900	0.587		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.061	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.358	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.708	6.715	0.800		0m	N.D.	d	
18) Vinyl acetate	7.097	6.969	0.846		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.518	7.450	0.896		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.514	7.507	0.896		0m	N.D.	d	
22) 2,2-Dichloropropane	7.503	7.514	0.895		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.702	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.861	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.002	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.381	8.377	0.999		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	9.250	9.254	1.103		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : [W5VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:41:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.526	9.526	0.855		0m	N.D.	d
44) Toluene	9.792	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.294	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.280	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.775	10.771	0.967		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.210	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.705	11.701	1.050		0m	N.D.	d
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.465	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.911	12.900	0.963		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.109	13.119	0.977		0m	N.D.	d
72) 4-Isopropyltoluene	13.236	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.353	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.660	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.848	13.858	1.032		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.690	14.704	1.095		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.989	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	370437	333.81	ug/L 97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	635147	372.74	ug/L 99
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	3050275	243.86	ug/L 93
89) tert-Butyl Alcohol	6.425	6.460	0.766	59	1736	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	711640	258.76	ug/L 99
91) Isopropyl ether	7.097	6.920	0.846	45	248	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	569347	70.54	ug/L 99
93) Ethyl tert-butyl ether	7.380	7.192	0.880	59	1043	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1739138	233.50	ug/L 100
95) Propionitrile	7.581	7.585	0.904	54	267682	252.88	ug/L 99
96) Methacrylonitrile	7.677	7.680	0.915	41	1458881	250.78	ug/L 100
97) Tetrahydrofuran	7.712	7.716	0.919	42	648171	246.55	ug/L 100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:41:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.857	7.857	0.937	41	688392	2485.63	ug/L	100
99) Methyl tert-amyl ether	8.211	8.122	0.979	73	112	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	1162326	264.80	ug/L	99
101) 1,4-Dioxane	8.953	8.957	1.067	88	175240	2237.15	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	549180	246.58	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	2268310	270.77	ug/L	100
106) 1-Chlorohexane	11.058	10.980	0.824	55	112	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	774355	290.83	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	260615	1190.72	ug/L	98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	727410	290.02	ug/L	100
110) Pentachloroethane	13.017	13.017	0.970	167	1003582	288.94	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	3847923	301.79	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	1139180	242.83	ug/L	100

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

```

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205.D
Acq On    : 9 Mar 2010 9:18 am
Operator  : CDS1
InstName  : VOA5
Sample    : |W5VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc      : CCV 5G - SOIL MIX[B]|UVM100215-08B
ALS Vial  : 5 Sample Multiplier: 1

```

Abundance

TIC: 5B205.D\data.ms

Time-->

5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00

Acrolein, B

Allyl chloride, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Ethyl acetate, B

Propionitrile, B

Tetrahydrofuran, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

1,4-Dioxane, B

2-Nitropropane, B

Toluene-d6, SA

Ethyl methacrylate, B

Bis(2-chloroisopropyl) ether, B

1,4-Dichlorobenzene-d4, B

trans-1,4-Dichloro-2-butene, B

cis-1,4-Dichloro-2-butene, B

Cyclohexanone, SA

1,4-Dichlorobenzene-d4, B

Pentachloroethane, B

Benzyl chloride, B

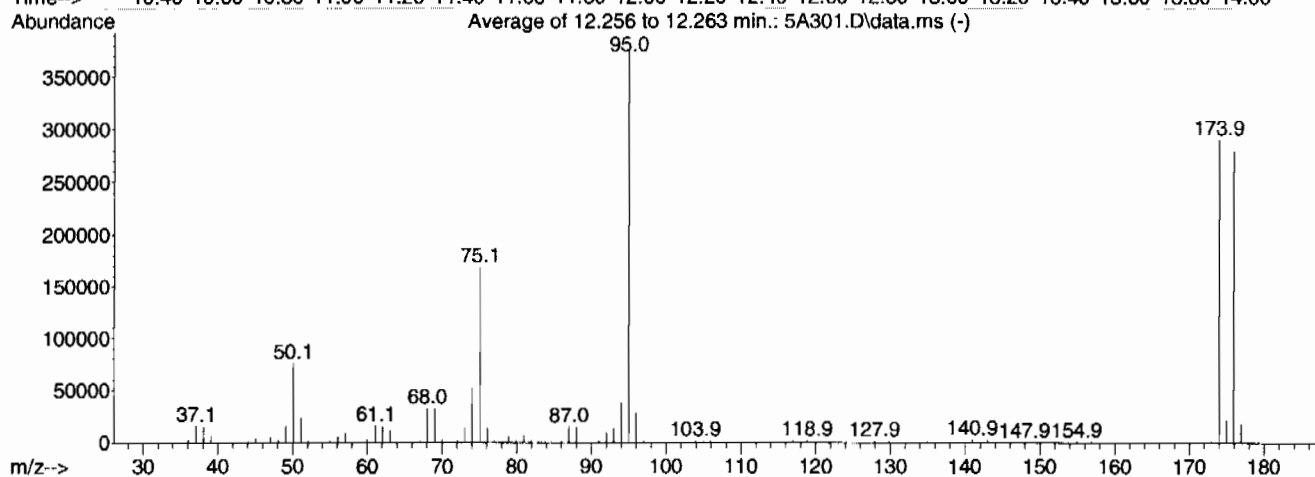
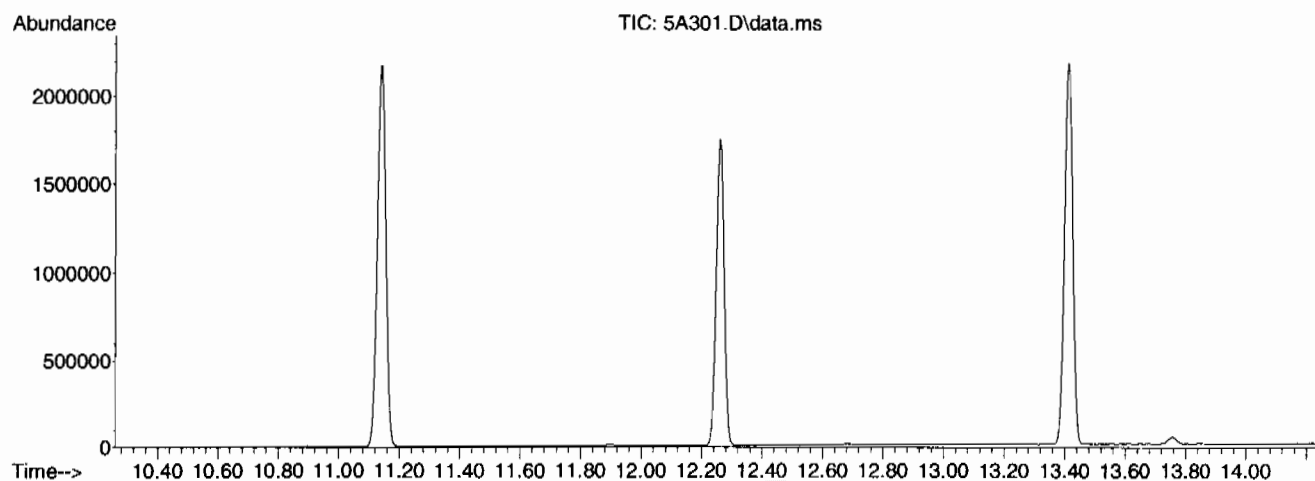
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A301.D
Acq On : 3 Mar 2010 11:00 am
Operator : CDS1
Sample : |UVM100203-02|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Fri Mar 05 15:47:51 2010



Spectrum Information: Average of 12.256 to 12.263 min.

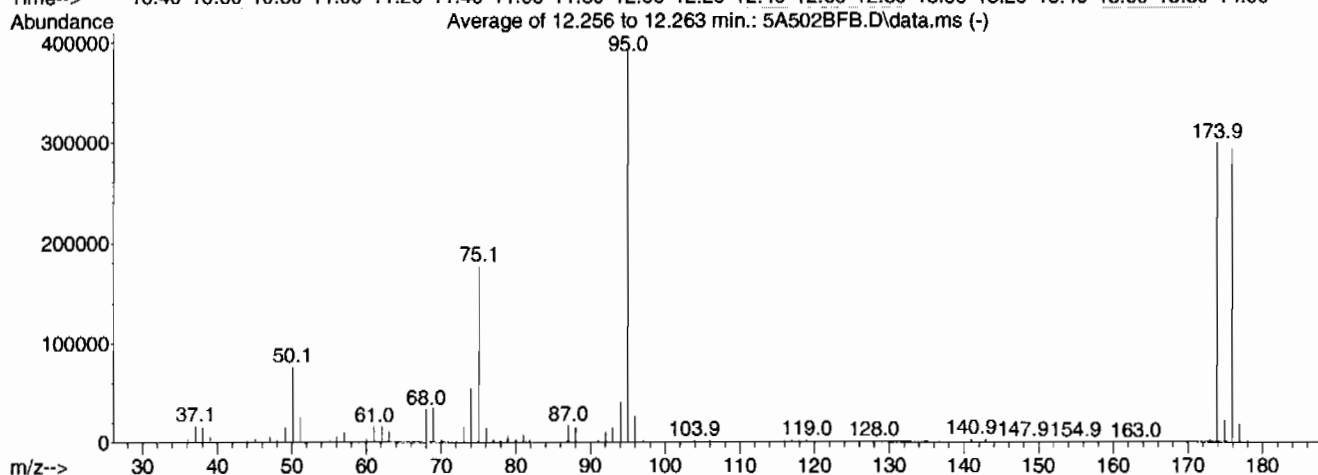
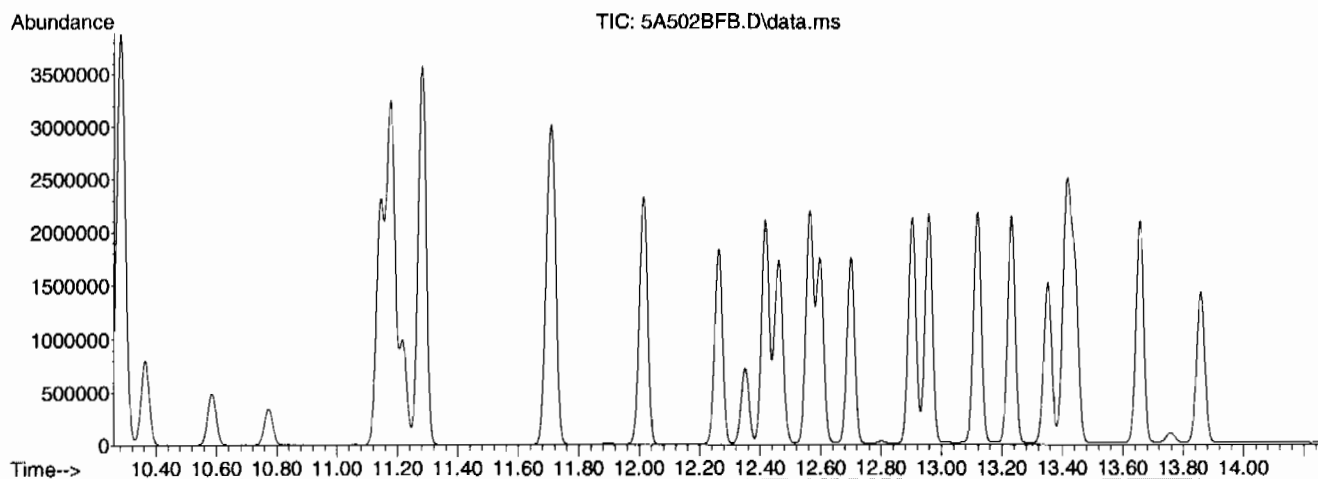
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	75616	PASS
75	95	30	60	45.2	169109	PASS
95	95	100	100	100.0	373952	PASS
96	95	5	9	7.4	27492	PASS
173	174	0.00	2	0.6	1817	PASS
174	95	50	100	77.7	290688	PASS
175	174	5	9	7.4	21371	PASS
176	174	95	101	96.2	279659	PASS
177	176	5	9	6.3	17646	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A502BFB.D
Acq On : 5 Mar 2010 3:17 pm
Operator : CDS1
Sample : |W5VM100305-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A]0106-07D+0222-07A
ALS Vial : 2 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Fri Mar 05 15:47:51 2010



AutoFind: Scans 1916, 1917, 1918; Background Corrected with Scan 1902

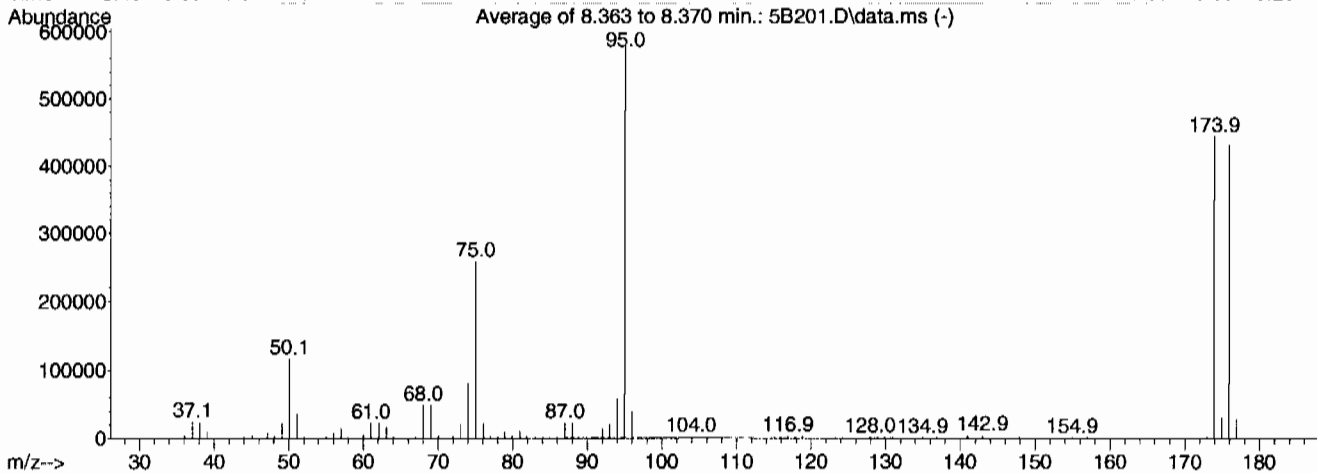
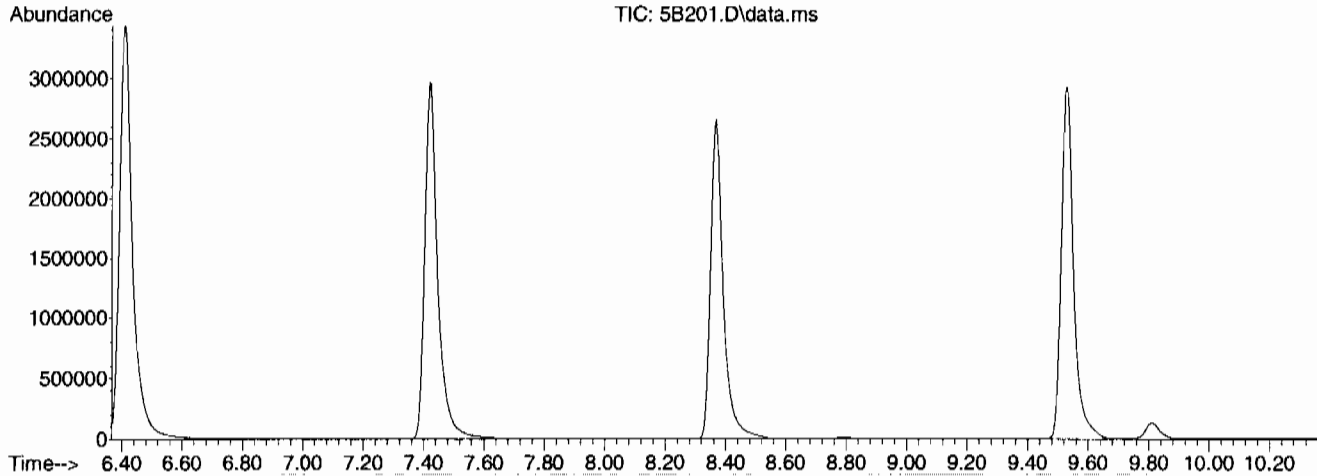
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	76397	PASS
75	95	30	60	45.3	177024	PASS
95	95	100	100	100.0	390656	PASS
96	95	5	9	6.5	25574	PASS
173	174	0.00	2	0.7	2018	PASS
174	95	50	100	76.4	298475	PASS
175	174	5	9	7.2	21480	PASS
176	174	95	101	97.7	291712	PASS
177	176	5	9	6.3	18480	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B201.D
Acq On : 9 Mar 2010 7:14 am
Operator : CDS1
Sample : |UVM100217-02|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 09 07:08:19 2010



Spectrum Information: Average of 8.363 to 8.370 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	115432	PASS
75	95	30	60	44.8	257877	PASS
95	95	100	100	100.0	575680	PASS
96	95	5	9	6.9	39640	PASS
173	174	0.00	2	0.6	2818	PASS
174	95	50	100	77.0	443520	PASS
175	174	5	9	7.1	31653	PASS
176	174	95	101	97.3	431573	PASS
177	176	5	9	6.6	28499	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 1202063154
 Client Sample: QC for batch 961878
 Client ID: MB for batch 961878
 Batch ID: 961880
 Run Date: 03/05/2010 17:46
 Prep Date: 03/05/2010 15:26
 Data File: 030510V5\SA507LA.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 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: 10-2134
Lab Sample ID: 1202063154
Client Sample: QC for batch 961878
Client ID: MB for batch 961878
Batch ID: 961880
Run Date: 03/05/2010 17:46
Prep Date: 03/05/2010 15:26
Data File: 030510V5SA507LA.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
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\030510V5\
Data File : 5A507LA.D
Acq On : 5 Mar 2010 5:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063154|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 19 07:55:54 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1793806	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1339902	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	676292	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1793806	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1339902	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	676292	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	440572	50.75	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	101.50%			
43) Toluene-d8	9.721	9.721	0.872	98	1690066	49.32	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	98.64%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	689245	50.81	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	101.62%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	2646	Below Cal		70
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.170	6.174	0.736	43	2162	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.457	6.464	0.770	41	1456	N.D.		
13) Methyl acetate	6.368	6.365	0.759	43	168	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	2520	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	7194	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.966	6.969	0.831	43	131	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	404	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	398	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	9615	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A507LA.D
Acq On : 5 Mar 2010 5:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063154|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 19 07:55:54 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	1673	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.276	10.279	0.922	43	1117	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.171	11.174	1.003	112	108	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	1136	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	333	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.726	11.715	1.052	104	394	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896	105	111	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.472	12.465	0.930	156	121	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	2356	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	657	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.698	12.698	0.947	91	2249	N.D.	
69) tert-Butylbenzene	12.896	12.900	0.962	134	134	N.D.	
70) 1,2,4-Trimethylbenzene	12.949	12.956	0.965	105	1097	N.D.	
71) sec-Butylbenzene	13.105	13.119	0.977	105	1202	N.D.	
72) 4-Isopropyltoluene	13.225	13.229	0.986	119	3472	N.D.	
73) 1,3-Dichlorobenzene	13.345	13.349	0.995	146	397	N.D.	
74) 1,4-Dichlorobenzene	13.451	13.441	1.003	146	149	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1778	N.D.	
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	251	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	1109	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	3253	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	796	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.421	6.425	0.766	41	626	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	7.090	6.920	0.845	45	124	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	404	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A507LA.D
Acq On : 5 Mar 2010 5:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063154|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 19 07:55:54 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

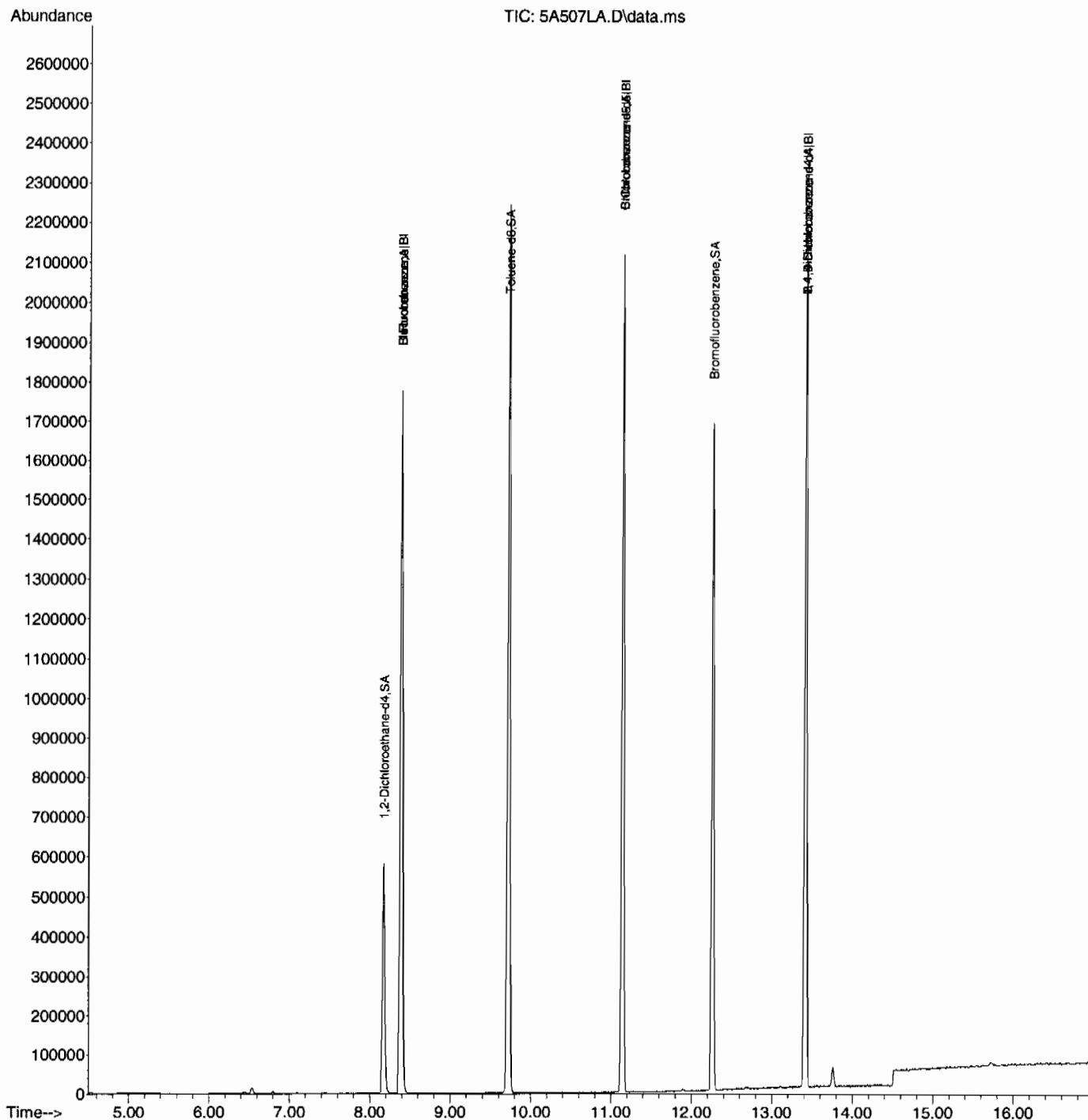
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.677	7.680	0.915	41	117	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	683	N.D.	
98) Isobutyl alcohol	7.882	7.857	0.940	41	112	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	9.848	9.859	0.884	69	112	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.267	12.267	0.915	42	262	N.D.	
109) trans-1,4-Dichloro-2-b...	12.405	12.412	0.925	53	108	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	4129	N.D.	
112) bis(2-Chloroisopropyl)...	13.922	13.929	1.038	45	944	N.D.	

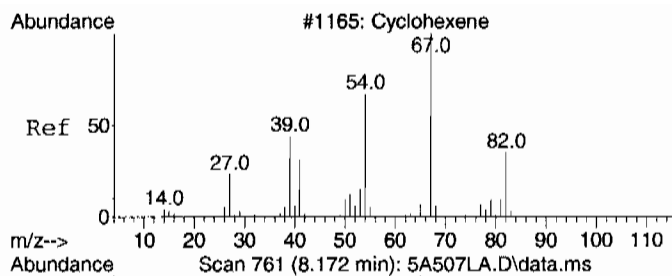
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A507LA.D
Acq On : 5 Mar 2010 5:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063154|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

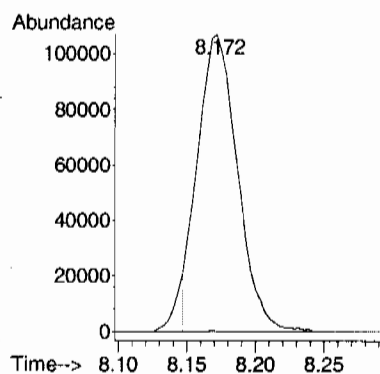
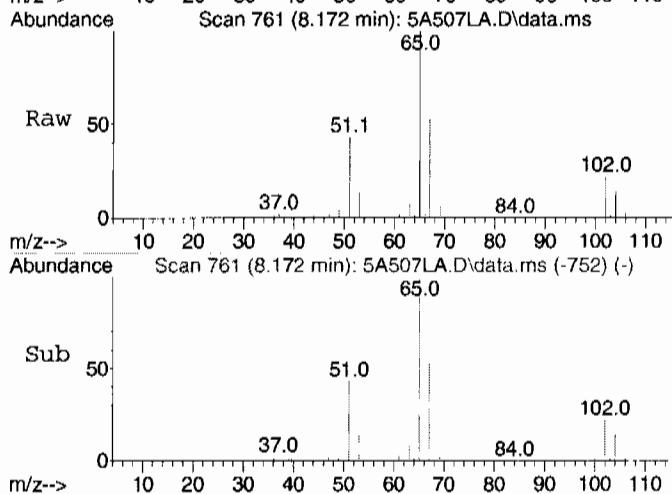
Quant Time: Mar 19 07:55:54 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





#32 BEFORE analyst DELETION
Cyclohexene
Concen: 17.85 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5A507LA.D
Acq: 5 Mar 2010 5:46 pm

Tgt Ion	Resp	Ratio	Lower	Upper
67	100			
54	0.1	46.3	106.3	



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\

Data File : 5A507LA.D

Acq On : 5 Mar 2010 5:46 pm

Operator : CDS1

Sample : |1202063154|961880|1|VOA|1|VOA8260BS|

Misc : BLANK 5G - SOIL

ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.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\030510V5\
Data File : 5A507LA.D
Acq On : 5 Mar 2010 5:46 pm
Operator : CDS1
Sample : |1202063154|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 1202067797
 Client Sample: QC for batch 961878
 Client ID: MB for batch 961878
 Batch ID: 961880
 Run Date: 03/09/2010 10:12
 Prep Date: 03/09/2010 07:26
 Data File: 030910V5\SB207LA.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 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-Dichloroethylen	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: 10-2134
 Lab Sample ID: 1202067797
 Client Sample: QC for batch 961878
 Client ID: MB for batch 961878
 Batch ID: 961880
 Run Date: 03/09/2010 10:12
 Prep Date: 03/09/2010 07:26
 Data File: 030910V5\5B207L.A.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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	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\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
InstName : VOA5
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 09 10:45:34 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1868406	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1378477	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	671495	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1868406	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1378477	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	671495	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	389480	43.07	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery =		86.14%			
43) Toluene-d8	9.724	9.721	0.873	98	1618750	45.92	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery =		91.84%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	739194	54.88	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery =		109.76%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	848	Below Cal	#	13
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	508	N.D.		
9) Acetone	6.167	6.174	0.735	43	2322	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	613	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	223	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	2553	N.D.		
15) Methylene chloride	6.541	6.538	0.780	84	8038	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	1262	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.454	7.450	0.889	43	308	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	143	N.D.		
32) Cyclohexene	8.257	8.246	0.984	67	116	N.D.		
33) n-Butyl alcohol	8.387	8.377	1.000	56	10893	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
InstName : VOA5
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 09 10:45:34 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	2707	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	723	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.174	11.174	1.003	112	119	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.213	11.181	1.006	91	115	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	150	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.697	11.715	1.050	104	225	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.242	12.016	0.913	105	113	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.681	12.465	0.945	156	112	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	2128	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	364	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	2957	N.D.	
69) tert-Butylbenzene	12.949	12.900	0.965	134	115	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	461	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	1077	N.D.	
72) 4-Isopropyltoluene	13.137	13.229	0.979	119	1019	N.D.	
73) 1,3-Dichlorobenzene	13.352	13.349	0.996	146	366	N.D.	
74) 1,4-Dichlorobenzene	13.444	13.441	1.002	146	980	N.D.	
75) n-Butylbenzene	13.649	13.653	1.018	91	2235	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	1047	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	3078	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	919	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.159	6.163	0.734	45	112	N.D.	
88) Allyl chloride	6.425	6.425	0.766	41	136	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.454	7.383	0.889	43	308	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
InstName : VOA5
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 09 10:45:34 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

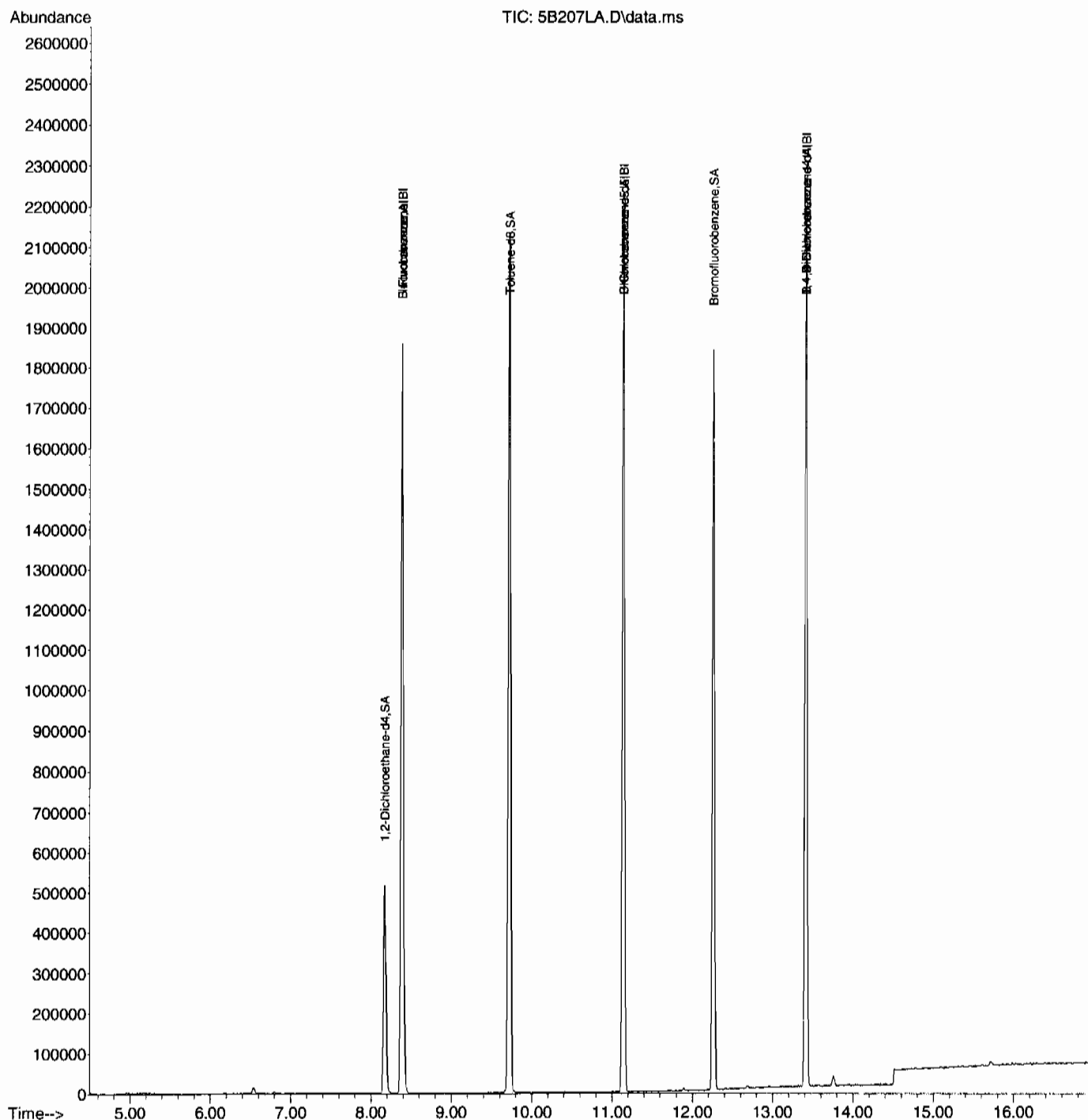
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.677	7.680	0.915	41	108	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	748	N.D.	
98) Isobutyl alcohol	7.871	7.857	0.938	41	109	N.D.	
99) Methyl tert-amyl ether	8.143	8.122	0.971	73	127	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	5455	N.D.	
112) bis(2-Chloroisopropyl)...	13.936	13.929	1.039	45	1492	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\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
InstName : VOA5
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 09 10:45:34 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B207LA.D
Acq On : 9 Mar 2010 10:12 am
Operator : CDS1
Sample : |1202067797|961880|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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
------------------	----	---------	-------	----------	---	----	------	------

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134

Lab Sample ID: 1202063157

Client Sample: QC for batch 961878

Client ID: LCS for batch 961878

Batch ID: 961880

Run Date: 03/05/2010 16:13

Prep Date: 03/05/2010 15:26

Data File: 030510V5SA504LA.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: CDS1

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		47.9	ug/kg	0.340	1.00
74-87-3	Chloromethane		47.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		50.5	ug/kg	0.300	1.00
74-83-9	Bromomethane		49.1	ug/kg	0.300	1.00
75-00-3	Chloroethane		48.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		51.2	ug/kg	0.300	1.00
67-64-1	Acetone		207	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		48.2	ug/kg	0.300	1.00
74-88-4	Iodomethane		238	ug/kg	1.60	5.00
75-09-2	Methylene chloride		48.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		252	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		49.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		219	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		48.7	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.3	ug/kg	0.300	1.00
67-66-3	Chloroform		48.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		49.8	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		49.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		50.9	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		47.6	ug/kg	0.300	1.00
71-43-2	Benzene		47.3	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		48.0	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		50.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		243	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		49.3	ug/kg	0.300	1.00
108-88-3	Toluene		44.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		47.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		46.1	ug/kg	0.300	1.00
591-78-6	2-Hexanone		218	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		45.9	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		50.3	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		48.2	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		45.4	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2134
Lab Sample ID: 1202063157
Client Sample: QC for batch 961878
Client ID: LCS for batch 961878
Batch ID: 961880
Run Date: 03/05/2010 16:13
Prep Date: 03/05/2010 15:26
Data File: 030510V5SA504LA.D

Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
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		44.3	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		92.3	ug/kg	0.300	2.00
95-47-6	o-Xylene		46.5	ug/kg	0.300	1.00
100-42-5	Styrene		49.7	ug/kg	0.300	1.00
75-25-2	Bromoform		50.7	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		44.6	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.5	ug/kg	0.300	1.00
108-86-1	Bromobenzene		44.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		44.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		44.8	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		42.8	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.9	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		44.4	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.0	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		44.1	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		44.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		42.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		46.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		48.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.1	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A504LA.D
Acq On : 5 Mar 2010 4:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063157|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01D+0304-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 19 07:55:18 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1785361	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1373211	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	726937	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1785361	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1373211	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	726937	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	446478	51.67	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 103.34%			
43) Toluene-d8	9.721	9.721	0.872	98	1722010	49.03	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 98.06%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	725377	49.75	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 99.50%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	199513	47.86	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	254193	47.83	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	221998	50.46	ug/L	97
5) Bromomethane	5.423	5.423	0.647	94	206192	49.07	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	215907	48.39	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	392005	51.19	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	312812	47.45	ug/L	99
9) Acetone	6.174	6.174	0.736	43	1103769	206.91	ug/L	99
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	410746	48.15	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	2098734	238.19	ug/L	100
12) Acetonitrile	6.464	6.464	0.771	41	1189286	1137.50	ug/L	97
13) Methyl acetate	6.361	6.365	0.758	43	1352734	232.04	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	4316027	252.41	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	326686	47.96	ug/L	99
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	847253	47.70	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	454777	49.02	ug/L	100
18) Vinyl acetate	6.966	6.969	0.831	43	3890409	266.32	ug/L	100
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	565709	49.24	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1394114	219.34	ug/L	100
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	525446	48.69	ug/L	99
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	419690	49.29	ug/L	99
23) Bromochloromethane	7.719	7.719	0.920	128	158658	49.77	ug/L	99
24) Chloroform	7.698	7.701	0.918	83	502366	48.82	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	430426	50.72	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	593089	49.13	ug/L	99
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	384592	49.41	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	370759	50.93	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	423190	47.59	ug/L	99
31) Benzene	8.200	8.203	0.978	78	1223265	47.33	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	571277	47.56	ug/L	99
33) n-Butyl alcohol	8.373	8.377	0.998	56	1319873	5260.02	ug/L	99
34) Trichloroethylene	8.678	8.677	1.035	95	296357	48.28	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	350186	47.97	ug/L	98
36) Methylcyclohexane	8.826	8.826	1.052	83	526232	46.92	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	187697	50.59	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A504LA.D
Acq On : 5 Mar 2010 4:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063157|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01D+0304-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 19 07:55:18 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	386810	51.00	ug/L 100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	574219	246.21	ug/L 100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	511553	49.27	ug/L 98
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	796436	242.53	ug/L 100
44) Toluene	9.788	9.788	0.878	91	1321221	44.82	ug/L 99
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	481255	47.93	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	229402	46.11	ug/L 97
47) 2-Hexanone	10.279	10.279	0.923	43	1945593	218.19	ug/L 100
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	495392	46.35	ug/L 100
49) Tetrachloroethylene	10.290	10.290	0.924	164	247709	45.87	ug/L 99
50) Dibromochloromethane	10.584	10.583	0.950	129	297356	50.25	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	277872	48.21	ug/L 100
52) Chlorobenzene	11.171	11.174	1.003	112	868235	45.40	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	311882	48.14	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1488318	44.25	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	1176465	92.34	ug/L 99
56) o-Xylene	11.701	11.701	1.050	106	598867	46.52	ug/L 99
57) Styrene	11.715	11.715	1.051	104	977380	49.70	ug/L 94
59) Bromoform	12.005	12.005	0.895	173	200786	50.73	ug/L 100
60) Isopropylbenzene	12.012	12.016	0.895	105	1492568	44.75	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.920	83	384700	44.56	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.928	110	107209	46.51	ug/L 98
64) Bromobenzene	12.461	12.465	0.929	156	370043	44.11	ug/L 98
65) n-Propylbenzene	12.415	12.415	0.925	91	1750601	43.47	ug/L 100
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.936	105	1273951	44.72	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	370525	44.31	ug/L # 81
68) 4-Chlorotoluene	12.698	12.698	0.946	91	1108034	43.28	ug/L 100
69) tert-Butylbenzene	12.903	12.900	0.962	134	280634	42.80	ug/L 100
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1302296	44.94	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1635093	44.36	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1318090	44.99	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	702699	44.11	ug/L 99
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	716920	44.26	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1231753	42.82	ug/L 99
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	690206	45.07	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	76058	46.29	ug/L 95
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.164	180	485770	47.10	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	280031	44.70	ug/L 99
80) Naphthalene	15.989	15.988	1.192	128	1168382	49.87	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.214	180	450391	50.04	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	5.967	6.082	0.711		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.170	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.464	6.425	0.771		0m	N.D.	d
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.641	6.747	0.792		0m	N.D.	d
91) Isopropyl ether	6.920	6.920	0.825		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.185	7.192	0.857		0m	N.D.	d
94) Ethyl acetate	7.383	7.383	0.880		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A504LA.D
Acq On : 5 Mar 2010 4:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063157|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01D+0304-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 19 07:55:18 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.680	7.585	0.916		0m	N.D.	d
96) Methacrylonitrile	7.677	7.680	0.915		0m	N.D.	d
97) Tetrahydrofuran	7.719	7.716	0.920		0m	N.D.	d
98) Isobutyl alcohol	7.850	7.857	0.936		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.826	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.049	8.957	1.079		0m	N.D.	d
102) 2-Nitropropane	9.349	9.342	1.115		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.043	10.980	0.823		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.009	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.369	12.267	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.419	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.013	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.554	13.565	1.010		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.759	13.929	1.026		0m	N.D.	d

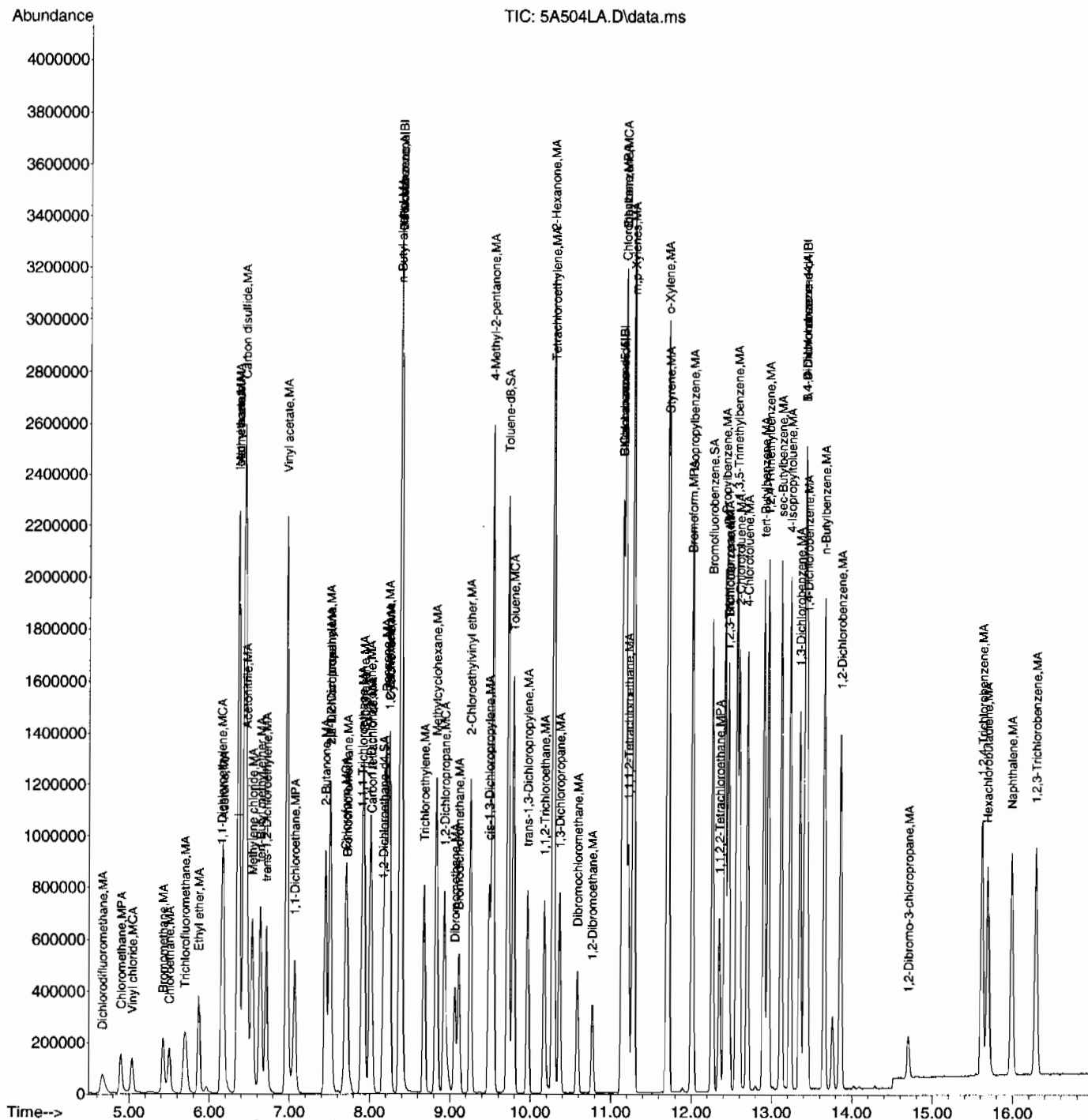
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted


```

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A504LA.D
Acq On    : 5 Mar 2010    4:13 pm
Operator  : CDS1
InstName  : VOA5
Sample    : |1202063157|961880|1|VOA|1|VOA8260BS|
Misc      : LCS 5G - SOIL MIX[A] 0220-01D+0304-01
ALS Vial  : 4    Sample Multiplier: 1

```

Quant Time: Mar 19 07:55:18 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList ;
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134

Matrix: SOIL

Lab Sample ID: 1202063158

Client Sample: QC for batch 961878

Client: LANL010

Project: QC

Client ID: LCS for batch 961878

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 961880

Inst: VOAS.I

Dilution: 1

Run Date: 03/05/2010 16:40

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/05/2010 15:26

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030510V55A505LA.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: 10-2134
 Lab Sample ID: 1202063158
 Client Sample: QC for batch 961878
 Client ID: LCS for batch 961878
 Batch ID: 961880
 Run Date: 03/05/2010 16:40
 Prep Date: 03/05/2010 15:26
 Data File: 030510V5\SA505LA.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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		358	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\030510V5\
Data File : 5A505LA.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063158|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 19 07:53:56 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1810003	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1370083	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	707376	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1810003	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1370083	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	707376	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	454839	51.92	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	103.84%			
43) Toluene-d8	9.721	9.721	0.872	98	1707521	48.73	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	97.46%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	696251	49.07	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	98.14%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.648	4.668	0.554		0m	N.D.	d	
3) Chloromethane	4.880	4.900	0.582		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.877	5.866	0.701		0m	N.D.	d	
9) Acetone	6.174	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.142	6.156	0.732		0m	N.D.	d	
11) Iodomethane	6.361	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.531	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801		0m	N.D.	d	
18) Vinyl acetate	7.107	6.969	0.847		0m	N.D.	d	
19) 1,1-Dichloroethane	7.111	7.068	0.848		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.510	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	7.528	7.514	0.898		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.701	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.002	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	8.020	8.020	0.956		0m	N.D.	d	
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.242	8.246	0.983		0m	N.D.	d	
33) n-Butyl alcohol	8.387	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.861	8.826	1.056		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A505LA.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063158|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 19 07:53:56 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.530	9.526	0.855		0m	N.D.	d
44) Toluene	9.781	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.767	10.771	0.966		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	11.705	11.701	1.050		0m	N.D.	d
57) Styrene	11.705	11.715	1.050		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.345	12.348	0.920		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.949	12.956	0.965		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.349	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.697	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.988	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.078	6.082	0.725	56	315498	300.19 ug/L	99
86) Trichlorotrifluoroethane	6.075	6.071	0.724	85	580169	357.50 ug/L	97
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2798481	234.92 ug/L	93
89) tert-Butyl Alcohol	6.464	6.460	0.771	59	124	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	746526	285.02 ug/L	99
91) Isopropyl ether	7.111	6.920	0.848	45	118	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	529134	68.83 ug/L	99
93) Ethyl tert-butyl ether	7.026	7.192	0.838	59	108	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1883123	265.47 ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030510V5\
Data File : 5A505LA.D
Acq On : 5 Mar 2010 4:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063158|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B] UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

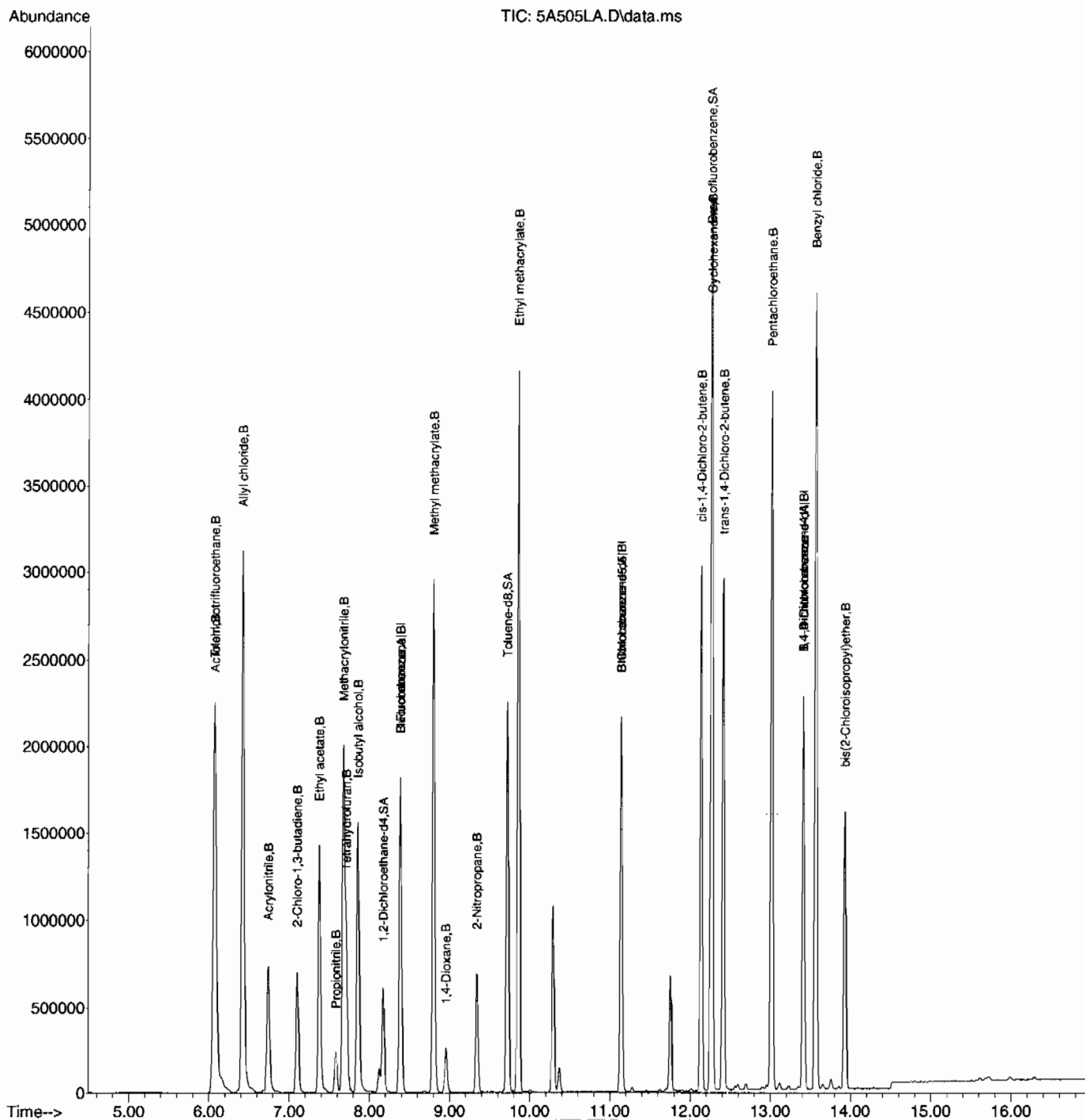
Quant Time: Mar 19 07:53:56 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.581	7.585	0.904	54	294996	292.61	ug/L	100
96) Methacrylonitrile	7.680	7.680	0.916	41	1532401	276.59	ug/L	99
97) Tetrahydrofuran	7.712	7.716	0.919	42	708242	282.87	ug/L	99
98) Isobutyl alcohol	7.857	7.857	0.937	41	781266	2962.02	ug/L	99
99) Methyl tert-amyl ether	8.115	8.122	0.968	73	402	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	1211433	289.79	ug/L	100
101) 1,4-Dioxane	8.957	8.957	1.068	88	205840	2759.18	ug/L	100
102) 2-Nitropropane	9.342	9.342	1.114	43	595877	279.97	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	2310980	285.76	ug/L	99
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	802558	303.41	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	1195682	5498.92	ug/L	99 E
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925	53	754514	302.81	ug/L	100
110) Pentachloroethane	13.017	13.017	0.970	167	943907	273.55	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	3944412	311.39	ug/L	100
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	1285922	275.92	ug/L	99

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

```
Data Path : C:\msdchem\1\DATA\030510V5\  
Data File : 5A505LA.D  
Acq On : 5 Mar 2010 4:40 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202063158|961880|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B] UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1
```

Quant Time: Mar 19 07:53:56 2010
Quant Method : C:\msdchem\1\DATA\030510V5\Methods\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 1202067798
 Client Sample: QC for batch 961878
 Client ID: LCS for batch 961878
 Batch ID: 961880
 Run Date: 03/09/2010 08:50
 Prep Date: 03/09/2010 07:26
 Data File: 030910V55B204LA.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 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		42.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		43.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		46.5	ug/kg	0.300	1.00
74-83-9	Bromomethane		42.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		42.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		45.5	ug/kg	0.300	1.00
67-64-1	Acetone		189	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		42.9	ug/kg	0.300	1.00
74-88-4	Iodomethane		207	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.2	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		224	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		42.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		42.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		198	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		42.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		43.7	ug/kg	0.300	1.00
67-66-3	Chloroform		42.0	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		42.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		43.8	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		44.5	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		45.1	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		41.3	ug/kg	0.300	1.00
71-43-2	Benzene		41.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		42.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		41.2	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		43.4	ug/kg	0.300	1.00
74-95-3	Dibromomethane		43.9	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		219	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		42.7	ug/kg	0.300	1.00
108-88-3	Toluene		39.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		41.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		40.7	ug/kg	0.300	1.00
591-78-6	2-Hexanone		197	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		40.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		40.8	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		43.0	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		41.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		39.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 1202067798
 Client Sample: QC for batch 961878
 Client ID: LCS for batch 961878
 Batch ID: 961880
 Run Date: 03/09/2010 08:50
 Prep Date: 03/09/2010 07:26
 Data File: 030910V55B204LA.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 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		38.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		80.5	ug/kg	0.300	2.00
95-47-6	o-Xylene		39.8	ug/kg	0.300	1.00
100-42-5	Styrene		42.0	ug/kg	0.300	1.00
75-25-2	Bromoform		44.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		39.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		41.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		38.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		39.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		39.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		39.8	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		39.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		38.1	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		38.0	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		39.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		39.9	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		39.9	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		38.3	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		38.2	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		39.0	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		41.2	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		41.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		38.7	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B204LA.D
Acq On : 9 Mar 2010 8:50 am
Operator : CDS1
InstName : VOA5
Sample : |1202067798|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 09:07:35 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	2013309	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1536970	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	795168	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	2013309	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1536970	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	795168	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	490557	50.34	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.68%		
43) Toluene-d8	9.721	9.721	0.872	98	1842312	46.87	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	93.74%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	890025	55.80	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	111.60%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	198363	42.20	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	259772	43.28	ug/L	96
4) Vinyl chloride	5.031	5.041	0.600	62	230520	46.46	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	199955	42.20	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	215601	42.85	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	392668	45.47	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	317638	42.72	ug/L	98
9) Acetone	6.170	6.174	0.736	43	1136806	188.97	ug/L	99
10) 1,1-Dichloroethylene	6.149	6.156	0.733	61	412229	42.85	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	2053312	206.65	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	1202404	1019.84	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1353211	205.84	ug/L	99
14) Carbon disulfide	6.432	6.435	0.767	76	4316545	223.86	ug/L	100
15) Methylene chloride	6.534	6.538	0.779	84	317096	41.20	ug/L	97
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	825742	41.22	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	448103	42.83	ug/L	100
18) Vinyl acetate	6.966	6.969	0.831	43	3917687	237.83	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	555272	42.86	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1421855	198.38	ug/L	100
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	515381	42.35	ug/L	99
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	419339	43.67	ug/L	99
23) Bromochloromethane	7.715	7.719	0.920	128	152101	42.31	ug/L	98
24) Chloroform	7.698	7.701	0.918	83	487643	42.03	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	419224	43.80	ug/L	100
26) Cyclohexane	7.924	7.924	0.945	56	610591	44.85	ug/L	100
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	390314	44.47	ug/L	100
28) Carbon tetrachloride	8.020	8.020	0.956	117	370008	45.07	ug/L	100
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	413592	41.25	ug/L	99
31) Benzene	8.200	8.203	0.978	78	1205402	41.36	ug/L	97
32) Cyclohexene	8.246	8.246	0.983	67	580051	42.82	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	1348866	4762.99	ug/L	98
34) Trichloroethylene	8.677	8.677	1.035	95	294667	42.57	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	338918	41.17	ug/L	99
36) Methylcyclohexane	8.826	8.826	1.052	83	550102	43.49	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	183639	43.89	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B204LA.D
Acq On : 9 Mar 2010 8:50 am
Operator : CDS1
InstName : VOA5
Sample : |1202067798|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 09:07:35 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	371279	43.41	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	574066	218.28	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	499805	42.69	ug/L	99
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	804468	218.88	ug/L	100
44) Toluene	9.784	9.788	0.878	91	1298201	39.34	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	468495	41.68	ug/L	100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	226734	40.72	ug/L	98
47) 2-Hexanone	10.276	10.279	0.922	43	1961668	196.56	ug/L	99
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	479622	40.09	ug/L	99
49) Tetrachloroethylene	10.290	10.290	0.924	164	246367	40.76	ug/L	100
50) Dibromochloromethane	10.584	10.583	0.950	129	284843	43.00	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	266947	41.38	ug/L	100
52) Chlorobenzene	11.171	11.174	1.003	112	844132	39.44	ug/L	98
53) 1,1,1,2-Tetrachloroethane	11.213	11.216	1.006	131	298443	41.16	ug/L	100
54) Ethylbenzene	11.178	11.181	1.003	91	1463831	38.88	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1147429	80.46	ug/L	100
56) o-Xylene	11.697	11.701	1.050	106	574009	39.84	ug/L	99
57) Styrene	11.712	11.715	1.051	104	923845	41.97	ug/L	93
59) Bromoform	12.002	12.005	0.895	173	190875	44.09	ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	1450198	39.75	ug/L	99
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	373181	39.52	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	103525	41.06	ug/L	96
64) Bromobenzene	12.461	12.465	0.929	156	349565	38.09	ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	1716776	38.97	ug/L	100
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1237062	39.70	ug/L	99
67) 2-Chlorotoluene	12.596	12.596	0.939	126	357372	39.07	ug/L	# 81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	1065616	38.05	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	272451	37.98	ug/L	100
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1247903	39.36	ug/L	99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1608656	39.90	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1277627	39.87	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	666854	38.27	ug/L	100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	675988	38.16	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	1227893	39.02	ug/L	100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	647956	38.68	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	74081	41.21	ug/L	98
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	459202	40.70	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	278255	40.61	ug/L	98
80) Naphthalene	15.988	15.988	1.192	128	1085830	42.37	ug/L	99
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	417595	42.42	ug/L	100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	6.163	6.082	0.735		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.160	6.163	0.734		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.630	6.747	0.790		0m	N.D.	d	
91) Isopropyl ether	6.916	6.920	0.825		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.037	7.104	0.839		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.068	7.192	0.843		0m	N.D.	d	
94) Ethyl acetate	7.394	7.383	0.882		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B204LA.D
Acq On : 9 Mar 2010 8:50 am
Operator : CDS1
InstName : VOA5
Sample : |1202067798|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 09:07:35 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

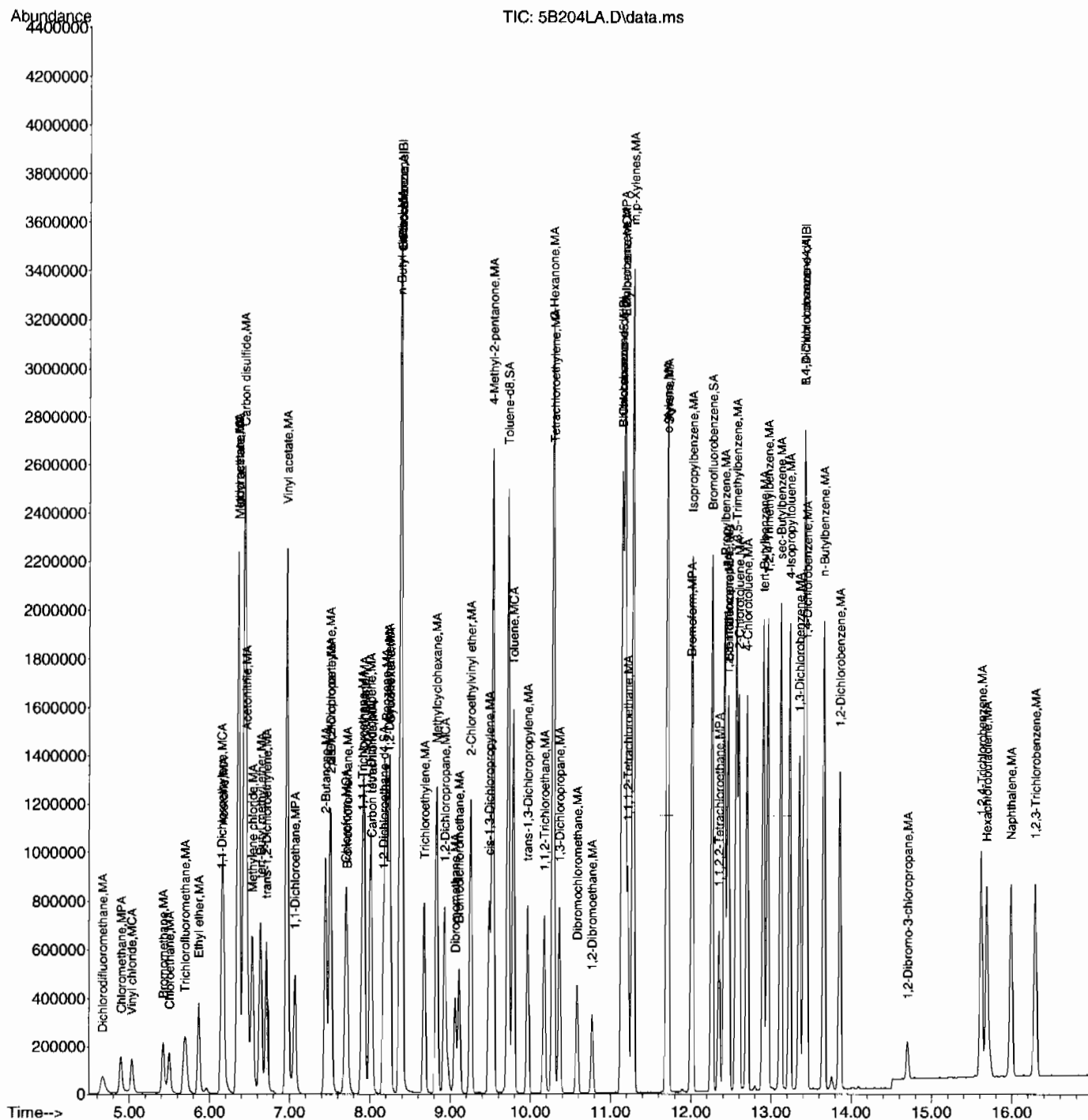
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.673	7.585	0.915		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.708	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.857	7.857	0.937		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.052	8.957	1.079		0m	N.D.	d
102) 2-Nitropropane	9.325	9.342	1.112		0m	N.D.	d
104) Ethyl methacrylate	9.862	9.859	0.885		0m	N.D.	d
106) 1-Chlorohexane	10.912	10.980	0.814		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.009	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.355	12.267	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.759	13.929	1.026		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\030910V5\
Data File : 5B204LA.D
Acq On : 9 Mar 2010 8:50 am
Operator : CDS1
InstName : VOA5
Sample : |1202067798|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 09:07:35 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
 Lab Sample ID: 1202067799
 Client Sample: QC for batch 961878
 Client ID: LCS for batch 961878
 Batch ID: 961880
 Run Date: 03/09/2010 09:18
 Prep Date: 03/09/2010 07:26
 Data File: 030910V55B2051A.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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: 10-2134

Matrix: SOIL

Lab Sample ID: 1202067799

Client Sample: QC for batch 961878

Client: LANL010

Project: QC

Client ID: LCS for batch 961878

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 961880

Inst: VOA5.I

Dilution: 1

Run Date: 03/09/2010 09:18

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/09/2010 07:26

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030910V55B205LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		373	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\030910V5\
Data File : 5B205LA.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202067799|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:44:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1900502	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1419216	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	712034	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1900502	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1419216	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	712034	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	426373	46.35	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 92.70%			
43) Toluene-d8	9.721	9.721	0.872	98	1689130	46.54	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 93.08%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	793013	55.52	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 111.04%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.920	4.900	0.587		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.061	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.358	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.708	6.715	0.800		0m	N.D.	d	
18) Vinyl acetate	7.097	6.969	0.846		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.518	7.450	0.896		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.514	7.507	0.896		0m	N.D.	d	
22) 2,2-Dichloropropane	7.503	7.514	0.895		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.702	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.861	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.002	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.381	8.377	0.999		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205LA.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202067799|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:44:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	9.250	9.254	1.103		0m	N.D. d	
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D. d	
42) 4-Methyl-2-pentanone	9.526	9.526	0.855		0m	N.D. d	
44) Toluene	9.792	9.788	0.879		0m	N.D. d	
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894		0m	N.D. d	
46) 1,1,2-Trichloroethane	10.294	10.173	0.924		0m	N.D. d	
47) 2-Hexanone	10.280	10.279	0.923		0m	N.D. d	
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D. d	
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D. d	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.775	10.771	0.967		0m	N.D. d	
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	11.210	11.216	1.006		0m	N.D. d	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D. d	
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D. d	
56) o-Xylene	11.705	11.701	1.050		0m	N.D. d	
57) Styrene	11.712	11.715	1.051		0m	N.D. d	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.465	12.465	0.929		0m	N.D. d	
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936		0m	N.D. d	
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D. d	
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D. d	
69) tert-Butylbenzene	12.911	12.900	0.963		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966		0m	N.D. d	
71) sec-Butylbenzene	13.109	13.119	0.977		0m	N.D. d	
72) 4-Isopropyltoluene	13.236	13.229	0.987		0m	N.D. d	
73) 1,3-Dichlorobenzene	13.353	13.349	0.996		0m	N.D. d	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D. d	
75) n-Butylbenzene	13.660	13.653	1.018		0m	N.D. d	
76) 1,2-Dichlorobenzene	13.848	13.858	1.032		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	14.690	14.704	1.095		0m	N.D. d	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D. d	
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D. d	
80) Naphthalene	15.989	15.988	1.192		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D. d	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	370437	333.81 ug/L	97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	635147	372.74 ug/L	99
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D. d	
88) Allyl chloride	6.421	6.425	0.766	41	3050275	243.86 ug/L	93
89) tert-Butyl Alcohol	6.425	6.460	0.766	59	1736	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	711640	258.76 ug/L	99
91) Isopropyl ether	7.097	6.920	0.846	45	248	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	569347	70.54 ug/L	99
93) Ethyl tert-butyl ether	7.380	7.192	0.880	59	1043	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1739138	233.50 ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B205LA.D
Acq On : 9 Mar 2010 9:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202067799|961880|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:44:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.581	7.585	0.904	54	267682	252.88	ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1458881	250.78	ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	648171	246.55	ug/L	100
98) Isobutyl alcohol	7.857	7.857	0.937	41	688392	2485.63	ug/L	100
99) Methyl tert-amyl ether	8.211	8.122	0.979	73	112	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	1162326	264.80	ug/L	99
101) 1,4-Dioxane	8.953	8.957	1.067	88	175240	2237.15	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	549180	246.58	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	2268310	270.77	ug/L	100
106) 1-Chlorohexane	11.058	10.980	0.824	55	112	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	774355	290.83	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	260615	1190.72	ug/L	98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	727410	290.02	ug/L	100
110) Pentachloroethane	13.017	13.017	0.970	167	1003582	288.94	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	3847923	301.79	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	1139180	242.83	ug/L	100

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

```
Data Path : C:\msdchem\1\DATA\030910V5\  
Data File : 5B205LA.D  
Acq On : 9 Mar 2010 9:18 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067799|961880|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B] UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1
```

TIC: 5B205LA.D\data.ms

Abundance

Time-->

5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00

Acrolein, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Propionitrile, B

Ethyl acetate, B

Tetrahydrofuran, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

1,4-Dioxane, B

2-Nitropropane, B

Toluene-d8, SA

Ethyl methacrylate, B

Methyl methacrylate, B

Benzonitrile, B

trans-1,4-Dichloro-2-butene, B

dis-1,4-Dichloro-2-butene, B

Cyclohexanone, B

Pentachloroethane, B

1,4-Dichlorobenzene-d4, B

Benzyl chloride, B

bis(2-Chloroisopropyl)ether, B

Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: 961878 Verified by: _____
Analyst: Crystal Stacey
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 14
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
248244001	05-MAR-2010 10:10:00	Soil	5	5	1							
248244002	05-MAR-2010 10:12:00	Soil	5	5	1							
248244003	05-MAR-2010 10:14:00	Soil	5	5	1							
248244004	05-MAR-2010 10:16:00	Soil	5	5	1							
248244005	05-MAR-2010 10:18:00	Soil	5	5	1							
248244007	05-MAR-2010 10:22:00	Soil	5	5	1							
248244008	05-MAR-2010 10:24:00	Soil	5	5	1							
248240001	05-MAR-2010 10:26:00	Soil	5	5	1							
248240002	05-MAR-2010 10:32:00	Soil	5	5	1							
248240003	05-MAR-2010 10:34:00	Soil	5	5	1							
248240004	05-MAR-2010 10:36:00	Soil	5	5	1							
248240005	05-MAR-2010 10:38:00	Soil	5	5	1							
248240007	05-MAR-2010 10:42:00	Soil	5	5	1							
248240009	05-MAR-2010 10:46:00	Soil	5	5	1							
1202063154 MB	05-MAR-2010 15:26:00	Soil	5	5	1							
1202063157 LCS	05-MAR-2010 15:26:00	Soil	5	5	1							
1202063158 LCS	05-MAR-2010 15:26:00	Soil	5	5	1							
1202067797 MB	09-MAR-2010 07:26:00	Soil	5	5	1							
1202067798 LCS	09-MAR-2010 07:26:00	Soil	5	5	1							
1202067799 LCS	09-MAR-2010 07:26:00	Soil	5	5	1							
248240006	09-MAR-2010 13:21:00	Soil	5	5	1							
248240008	09-MAR-2010 13:23:00	Soil	5	5	1							
248240010	09-MAR-2010 13:24:00	Soil	5	5	1							
248240011	09-MAR-2010 13:25:00	Misc Solid	5	5	1							
248244006	09-MAR-2010 13:26:00	Soil	5	5	1							
1202063155 PS (248244006)	09-MAR-2010 13:27:00	Soil	5	5	1							

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 961878

Analyst: Crystal Stacey

Method: SW846 5030

Lab SOP: GL-OA-E-038 REV# 14

Instrument: Sartorius Balance B-001

Verified by:

Type

Sample Id

Description

Serial Number

Spike Amount

Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202063156 PSD (248244006)	09-MAR-2010 13:28:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount	Comments:
------------------------	-------------	--------	-----------

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B222.D
Acq On : 9 Mar 2010 5:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063155|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248244006 MIX[A]
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 10 06:18:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1747842	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1269284	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	578314	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1747842	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1269284	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	578314	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	347223	41.04	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	82.08%			
43) Toluene-d8	9.721	9.721	0.872	98	1464475	45.12	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	90.24%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	666170	57.43	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	114.86%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	169821	41.61	ug/L	98
3) Chloromethane	4.900	4.900	0.584	50	246339	47.34	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	216593	50.29	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	193342	47.00	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	213233	48.82	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	367434	49.02	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	290520	45.01	ug/L	98
9) Acetone	6.170	6.174	0.736	43	897481	171.85	ug/L	100
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	398151	47.67	ug/L	100
11) Iodomethane	6.358	6.357	0.758	142	1860105	215.64	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	984362	961.71	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1302816	228.28	ug/L	100
14) Carbon disulfide	6.432	6.435	0.767	76	4134669	246.99	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	307471	46.09	ug/L	98
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	726229	41.76	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	443245	48.81	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	54490	3.81	ug/L	93
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	545206	48.48	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1103771	177.39	ug/L	100
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	503263	47.64	ug/L	98
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	417307	50.06	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	144336	46.25	ug/L	96
24) Chloroform	7.698	7.701	0.918	83	473906	47.04	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	407824	49.08	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	569771	48.21	ug/L	100
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	378348	49.65	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	352637	49.48	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	388689	44.65	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1185184	46.84	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	561414	47.74	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	965319	3918.95	ug/L	100
34) Trichloroethylene	8.674	8.677	1.034	95	281360	46.82	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	332640	46.54	ug/L	98
36) Methylcyclohexane	8.830	8.826	1.053	83	490285	44.65	ug/L	100
37) Dibromomethane	9.063	9.059	1.081	93	166779	45.92	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B222.D
Acq On : 9 Mar 2010 5:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063155|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248244006 MIX[A]
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 10 06:18:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	352916	47.53	ug/L 100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	431447	188.96	ug/L 99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	427312	42.04	ug/L 98
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	634446	209.02	ug/L 99
44) Toluene	9.788	9.788	0.878	91	1244901	45.68	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	397497	42.83	ug/L 98
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	201568	43.83	ug/L 98
47) 2-Hexanone	10.280	10.279	0.923	43	1411509	171.26	ug/L 99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	437428	44.27	ug/L 98
49) Tetrachloroethylene	10.294	10.290	0.924	164	229986	46.08	ug/L 99
50) Dibromochloromethane	10.584	10.583	0.950	129	249082	45.53	ug/L 99
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	228052	42.80	ug/L 100
52) Chlorobenzene	11.174	11.174	1.003	112	788303	44.60	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	274921	45.91	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1364469	43.89	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	1067675	90.66	ug/L 100
56) o-Xylene	11.701	11.701	1.050	106	534881	44.95	ug/L 99
57) Styrene	11.715	11.715	1.051	104	816485	44.91	ug/L 92
59) Bromoform	12.002	12.005	0.895	173	153835	48.86	ug/L 99
60) Isopropylbenzene	12.012	12.016	0.896	105	1295966	48.84	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	303593	44.20	ug/L 99
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	83600	45.59	ug/L # 85
64) Bromobenzene	12.465	12.465	0.929	156	303234	45.43	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1485037	46.35	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1080099	47.66	ug/L 99
67) 2-Chlorotoluene	12.596	12.596	0.939	126	315366	47.41	ug/L # 80
68) 4-Chlorotoluene	12.698	12.698	0.947	91	923690	45.35	ug/L 100
69) tert-Butylbenzene	12.900	12.900	0.962	134	238592	45.74	ug/L 100
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1075018	46.63	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1299436	44.31	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	918717	39.42	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	537920	42.44	ug/L 100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	541101	41.99	ug/L 99
75) n-Butylbenzene	13.653	13.653	1.018	91	907771	39.66	ug/L 100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	499029	40.96	ug/L 99
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	51195	39.16	ug/L 98
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	246439	30.04	ug/L 99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	136852	27.46	ug/L 99
80) Naphthalene	15.989	15.988	1.192	128	542035	29.08	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	198655	27.74	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	6.064	6.071	0.723		0m	N.D.	d
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.637	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.047	7.104	0.840		0m	N.D.	d
93) Ethyl tert-butyl ether	7.065	7.192	0.842		0m	N.D.	d
94) Ethyl acetate	7.330	7.383	0.874		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B222.D
Acq On : 9 Mar 2010 5:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063155|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248244006 MIX[A]
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 10 06:18:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

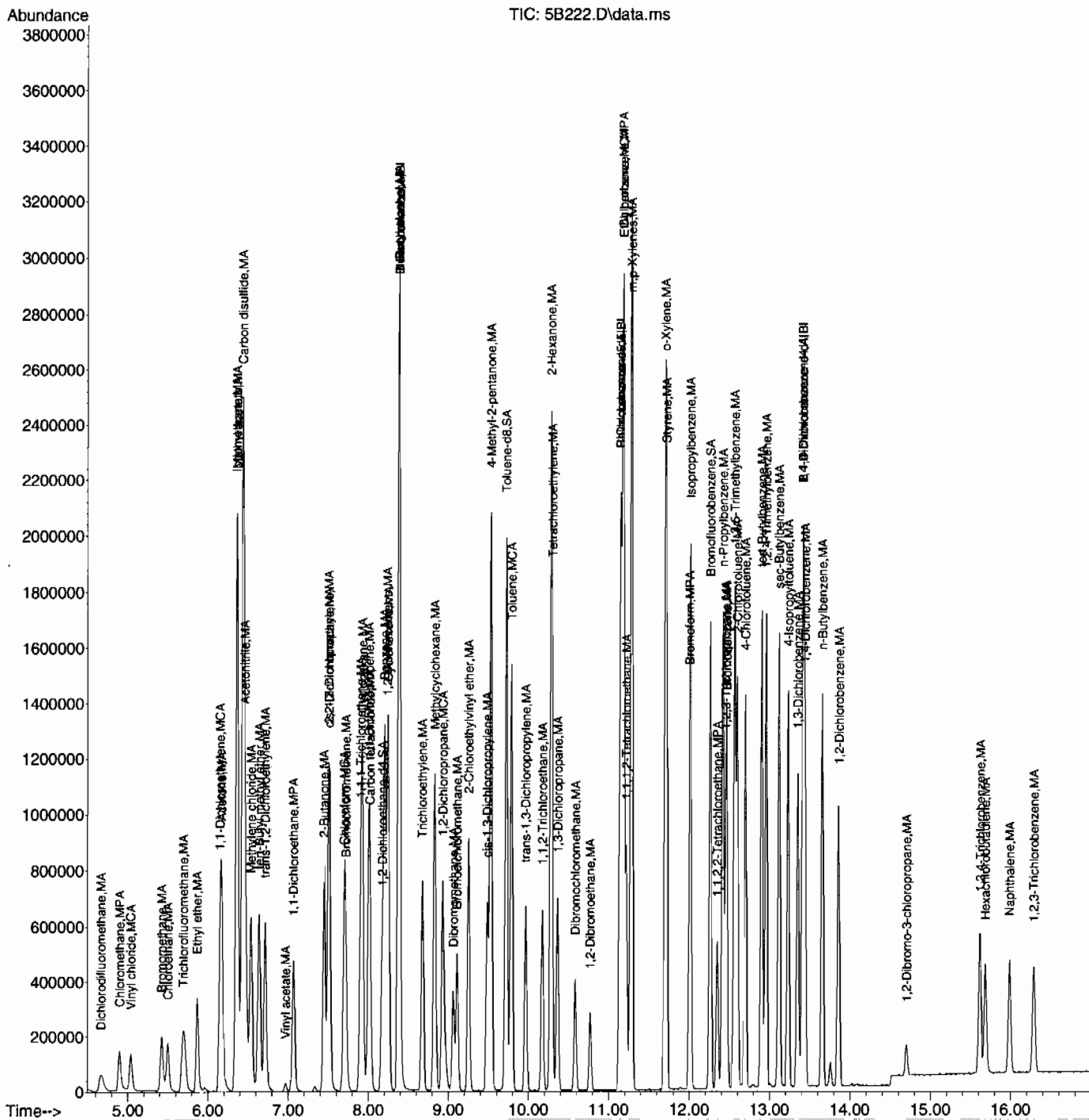
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.666	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.670	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.059	8.957	1.080		0m	N.D.	d
102) 2-Nitropropane	9.346	9.342	1.114		0m	N.D.	d
104) Ethyl methacrylate	9.855	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	11.061	10.980	0.825		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.267	12.267	0.915		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.419	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.013	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.561	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.933	13.929	1.039		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\030910V5\
Data File : 5B222.D
Acq On : 9 Mar 2010 5:13 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063155|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248244006 MIX[A]
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 10 06:18:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B223.D
Acq On : 9 Mar 2010 5:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063156|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248244006 MIX[A]
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 10 06:18:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1680435	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1223276	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	568620	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1680435	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1223276	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	568620	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	342331	42.09	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	84.18%		
43) Toluene-d8	9.721	9.721	0.872	98	1426341	45.59	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	91.18%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	652631	57.22	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	114.44%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	167623	42.72	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	232885	46.54	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	210922	50.94	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	180753	45.70	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	201958	48.09	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	359987	49.95	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	282459	45.52	ug/L	100
9) Acetone	6.170	6.174	0.736	43	950389	189.28	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	382726	47.66	ug/L	100
11) Iodomethane	6.357	6.357	0.758	142	1744594	210.36	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	1053897	1070.94	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1355506	247.04	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3951839	245.54	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	286152	44.60	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	718374	42.97	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	420710	48.18	ug/L	99
18) Vinyl acetate	6.973	6.969	0.831	43	115802	8.42	ug/L	96
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	516349	47.75	ug/L	99
20) 2-Butanone	7.450	7.450	0.888	43	1179413	197.15	ug/L	99
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	479028	47.17	ug/L	97
22) 2,2-Dichloropropane	7.514	7.514	0.896	77	394799	49.26	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	138313	46.10	ug/L	98
24) Chloroform	7.698	7.701	0.918	83	451263	46.59	ug/L	99
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	392898	49.19	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	550930	48.49	ug/L	99
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	360674	49.23	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	341193	49.79	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	374507	44.75	ug/L	99
31) Benzene	8.200	8.203	0.978	78	1118699	45.99	ug/L	99
32) Cyclohexene	8.246	8.246	0.983	67	537101	47.51	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	1073652	4540.21	ug/L	98
34) Trichloroethylene	8.674	8.677	1.034	95	269470	46.64	ug/L	99
35) 1,2-Dichloropropane	8.932	8.932	1.065	63	311288	45.30	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	464373	43.99	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	162172	46.44	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B223.D
Acq On : 9 Mar 2010 5:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063156|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248244006 MIX[A]
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 10 06:18:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	335779	47.04	ug/L	100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	418521	190.66	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	409032	41.86	ug/L	99
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	661811	226.24	ug/L	98
44) Toluene	9.788	9.788	0.878	91	1184312	45.10	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	390457	43.65	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	197126	44.48	ug/L	98
47) 2-Hexanone	10.279	10.279	0.923	43	1465782	184.53	ug/L	99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	430487	45.21	ug/L	99
49) Tetrachloroethylene	10.290	10.290	0.924	164	218885	45.50	ug/L	99
50) Dibromochloromethane	10.583	10.583	0.950	129	246365	46.73	ug/L	97
51) 1,2-Dibromoethane	10.774	10.771	0.967	107	226111	44.04	ug/L	98
52) Chlorobenzene	11.174	11.174	1.003	112	746211	43.80	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	262278	45.45	ug/L	100
54) Ethylbenzene	11.178	11.181	1.003	91	1291386	43.10	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1011865	89.15	ug/L	100
56) o-Xylene	11.697	11.701	1.050	106	501789	43.75	ug/L	100
57) Styrene	11.712	11.715	1.051	104	780264	44.54	ug/L	93
59) Bromoform	12.005	12.005	0.895	173	155835	50.34	ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	1225037	46.95	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	309030	45.76	ug/L	99
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	87291	48.41	ug/L	96
64) Bromobenzene	12.465	12.465	0.929	156	288427	43.95	ug/L	97
65) n-Propylbenzene	12.415	12.415	0.926	91	1397532	44.37	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1018477	45.71	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	301587	46.11	ug/L #	82
68) 4-Chlorotoluene	12.698	12.698	0.947	91	875021	43.69	ug/L	100
69) tert-Butylbenzene	12.900	12.900	0.962	134	228256	44.50	ug/L	98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1013274	44.70	ug/L	99
71) sec-Butylbenzene	13.119	13.119	0.978	105	1230899	42.69	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	904143	39.45	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	516666	41.46	ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	517082	40.81	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	883426	39.26	ug/L	99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	482431	40.27	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.704	14.704	1.096	157	54504	42.40	ug/L	95
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	254172	31.51	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	147162	30.03	ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	592442	32.33	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	209805	29.80	ug/L	100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	6.071	6.071	0.724		0m	N.D.	d	
87) Isopropyl Alcohol	6.166	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D.	d	
91) Isopropyl ether	6.923	6.920	0.825		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.043	7.104	0.840		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.079	7.192	0.844		0m	N.D.	d	
94) Ethyl acetate	7.333	7.383	0.874		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B223.D
Acq On : 9 Mar 2010 5:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063156|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248244006 MIX[A]
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 10 06:18:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

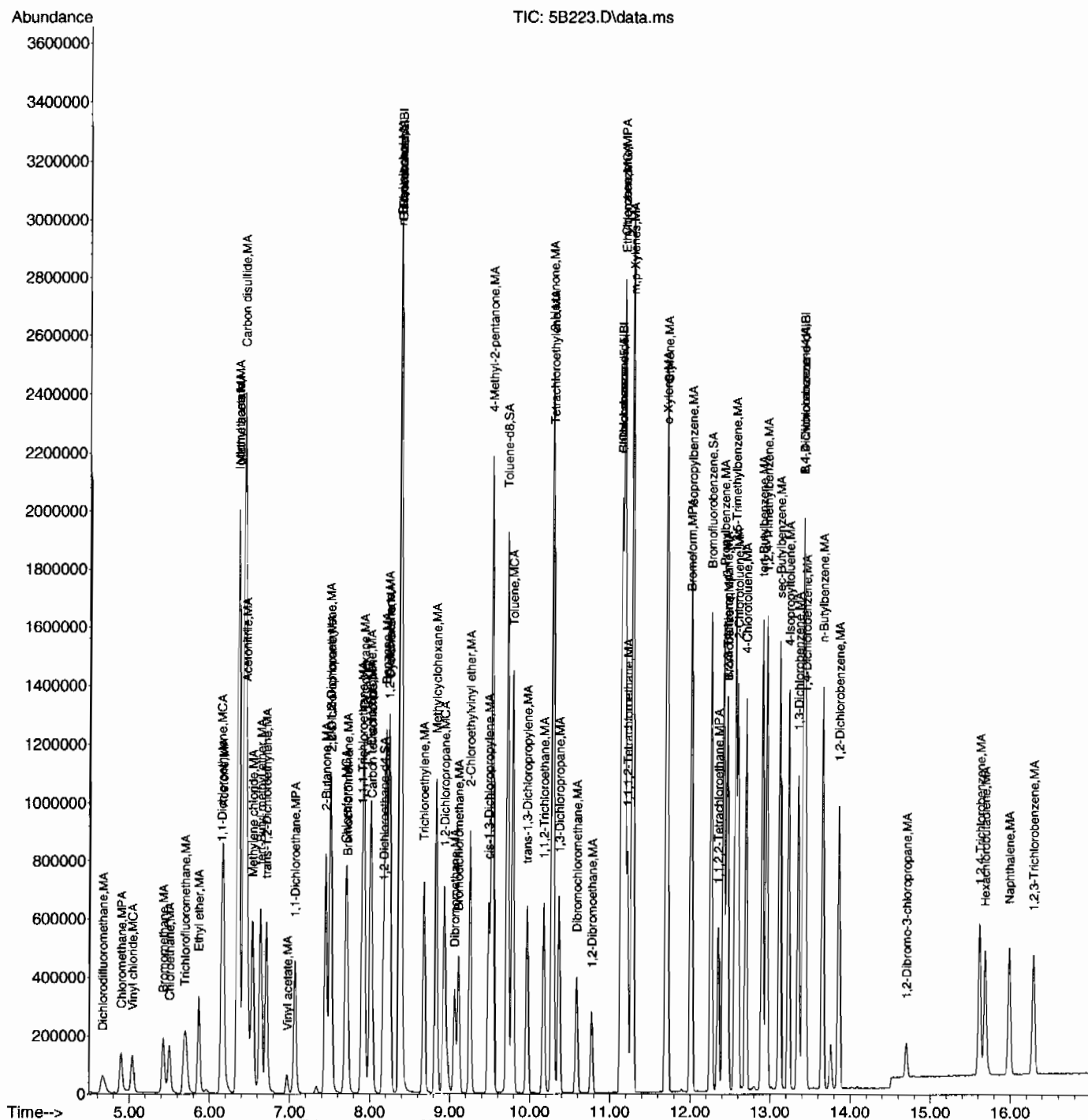
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.666	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.666	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.761	7.857	0.925		0m	N.D.	d
99) Methyl tert-amyl ether	8.129	8.122	0.969		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.059	8.957	1.080		0m	N.D.	d
102) 2-Nitropropane	9.165	9.342	1.093		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.270	12.267	0.915		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.419	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.016	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.565	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B223.D
Acq On : 9 Mar 2010 5:40 pm
Operator : CDS1
InstName : VOA5
Sample : |1202063156|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248244006 MIX[A]
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 10 06:18:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 14:13:32 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1796912	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1281835	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	546016	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1796912	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1281835	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	546016	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	358140	41.18	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	82.36%		
43) Toluene-d8	9.721	9.721	0.872	98	1499151	45.73	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	91.46%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	647665	59.14	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	118.28%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1810	Below Cal		63
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	608	N.D.		
9) Acetone	6.181	6.174	0.737	43	4039	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	798	N.D.		
13) Methyl acetate	6.361	6.365	0.758	43	113	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1714	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	9465	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.807	6.969	0.812	43	339	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	117	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.214	8.203	0.979	78	109	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000	56	10182	Below Cal	#	23
34) Trichloroethylene	8.455	8.677	1.008	95	151	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 14:13:32 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	2283	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	133	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.192	11.181	1.004	91	352	N.D.	
55) m,p-Xylenes	11.273	11.280	1.012	106	118	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.253	12.016	0.914	105	111	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	592	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	524	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1079	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	369	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	3609	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	106	N.D.	
75) n-Butylbenzene	13.660	13.653	1.018	91	2356	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.974	15.988	1.191	128	1449	N.D.	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	112	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.460	6.425	0.770	41	798	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	117	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 14:13:32 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

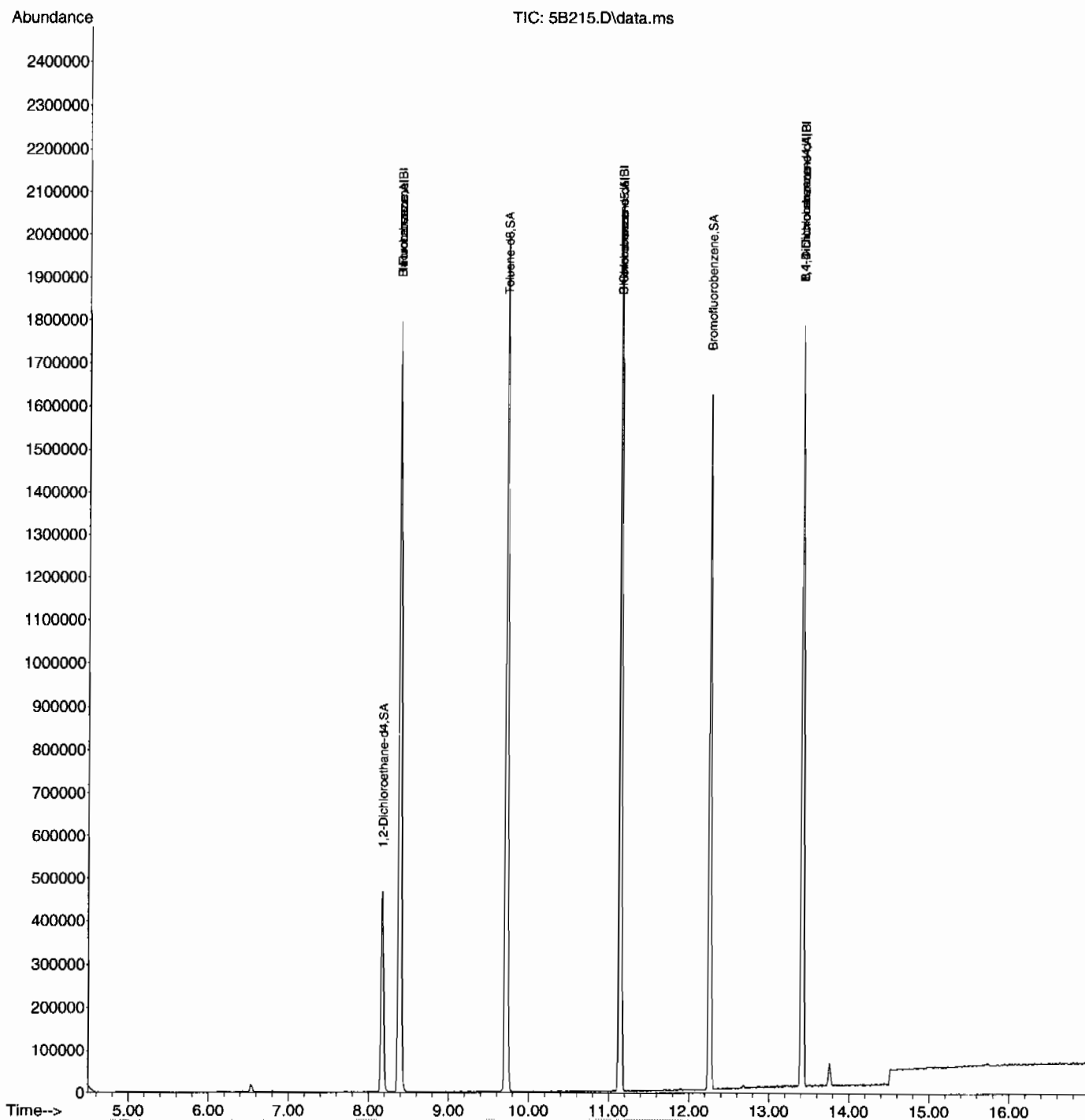
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	409	N.D.	
97) Tetrahydrofuran	7.709	7.716	0.919	42	839	N.D.	
98) Isobutyl alcohol	7.815	7.857	0.932	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	1516	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	232	N.D.	

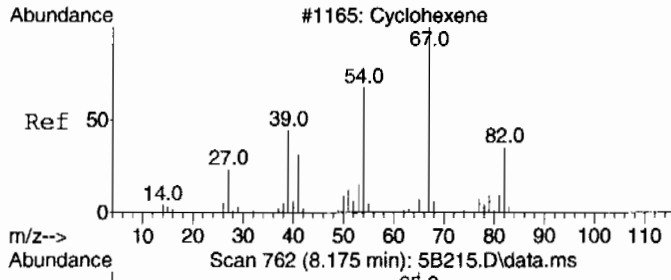
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
InstName : VOA5
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

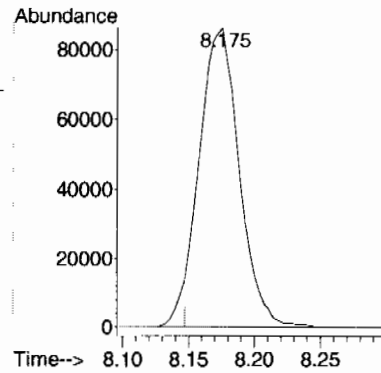
Quant Time: Mar 09 14:13:32 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





#32 BEFORE analyst DELETION
Cyclohexene
Concen: 14.76 ug/L
RT: 8.175 min Scan# 762
Delta R.T. -0.071 min
Lab File: 5B215.D
Acq: 9 Mar 2010 1:58 pm

Tgt Ion	Resp	Lower	Upper
67	100		
54	0.0	46.3	106.3#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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\030910V5\
Data File : 5B215.D
Acq On : 9 Mar 2010 1:58 pm
Operator : CDS1
Sample : |248244006|961880|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.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

Date: 3/3/2010 Method 8260/624 Operator: cds1 REVIEWED BY: _____
 Date: _____
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings: _____
 Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: _____

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/	Bk/	Smpl	CCV	LCS	BFB	Purge Amount
IS	UVM100203-01	1	1	1					5
SS	UVM100203-02	1	1	1					N/A
Long ICV	W5VM100303-10								N/A
BFB	UVM100203-02								N/A
Short ICV	W5VM100303-18								N/A
									X

(See pg. _____ for ICAL Std. Sci. Ids)

NaHSO₄ lot # n/a

Cl test lot # n/a

Sequence Number: 03310V5

Water Purge Vol: _____
 Soil Purge Wt. _____
 Mid level ext. MeOH Vol: _____
 ul _____
 Methanol Lot # _____
 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)	Acceptance ble(O/X)	Comments
3 Mar 2010 11:00	5A301.D	UVM100203-02	120206-----	BLANK	BFB	5mL	1	1	N/A	1	w	CDS1	N/A	O	clean-up blank
3 Mar 2010 11:26	5A302.D	UVM100203-02	120206-----	BLANK	BFB	5mL	1	1	N/A	2	w	CDS1	N/A	X	UVM100106-02D+UVM100222-02A
3 Mar 2010 11:52	5A303.D	W5VM100303-01	120206-----	VSTD001L	ICAL	5uL ea.	1	1	N/A	3	w	CDS1	N/A	O	UVM100106-03D+UVM100222-03A
3 Mar 2010 12:18	5A304.D	W5VM100303-02	120206-----	VSTD002L	ICAL	5uL ea.	1	1	N/A	4	w	CDS1	N/A	O	UVM100106-04D+UVM100222-04A
3 Mar 2010 12:43	5A305.D	W5VM100303-03	120206-----	VSTD005L	ICAL	5uL ea.	1	1	N/A	5	w	CDS1	N/A	O	UVM100106-05D+UVM100222-05A
3 Mar 2010 13:09	5A306.D	W5VM100303-04	120206-----	VSTD010L	ICAL	5uL ea.	1	1	N/A	6	w	CDS1	N/A	O	UVM100106-06D+UVM100222-06A
3 Mar 2010 13:35	5A307.D	W5VM100303-05	120206-----	VSTD020L	ICAL	5uL ea.	1	1	N/A	7	w	CDS1	N/A	O	UVM100106-07D+UVM100222-07A
3 Mar 2010 14:01	5A308.D	W5VM100303-06	120206-----	VSTD050L	ICAL	5uL ea.	1	1	N/A	8	w	CDS1	N/A	O	UVM100106-08D+UVM100222-08A
3 Mar 2010 14:26	5A309.D	W5VM100303-07	120206-----	VSTD100L	ICAL	5uL ea.	1	1	N/A	9	w	CDS1	N/A	O	clean-up blank
3 Mar 2010 14:52	5A310.D	120206-----	120206-----	BLANK	BFB	5mL	1	1	N/A	10	w	CDS1	N/A	X	UVM100106-01D+UVM100222-01A
3 Mar 2010 15:18	5A311.D	W5VM100303-08	120206-----	VSTD005L	ICAL	5uL ea.	1	1	N/A	11	w	CDS1	N/A	O	UVM100125-02E+UVM100301-01
3 Mar 2010 15:44	5A312.D	W5VM100303-09	120206-----	ICV	LCS	5uL ea.	1	1	N/A	12	w	CDS1	N/A	X	clean-up blank
3 Mar 2010 16:10	5A313.D	W5VM100303-10	120206-----	ICV	LCS	5uL ea.	1	1	N/A	13	w	CDS1	N/A	O	UVM100215-01+UVM100227-01A
3 Mar 2010 16:35	5A314.D	120206-----	120206-----	BLANK	BFB	5mL	1	1	N/A	14	w	CDS1	N/A	X	UVM100215-02+UVM100227-02A
3 Mar 2010 17:01	5A315.D	W5VM100303-11	120206-----	VSTD005S	ICAL	5uL ea.	1	1	N/A	15	w	CDS1	N/A	O	UVM100215-03+UVM100227-03A
3 Mar 2010 17:27	5A316.D	W5VM100303-12	120206-----	VSTD010S	ICAL	5uL ea.	1	1	N/A	16	w	CDS1	N/A	O	UVM100215-04+UVM100227-04A
3 Mar 2010 17:52	5A317.D	W5VM100303-13	120206-----	VSTD025S	ICAL	5uL ea.	1	1	N/A	17	w	CDS1	N/A	O	UVM100215-05+UVM100227-05A
3 Mar 2010 18:18	5A318.D	W5VM100303-14	120206-----	VSTD050S	ICAL	5uL ea.	1	1	N/A	18	w	CDS1	N/A	O	UVM100215-06+UVM100227-06A
3 Mar 2010 18:44	5A319.D	W5VM100303-15	120206-----	VSTD100S	ICAL	5uL ea.	1	1	N/A	19	w	CDS1	N/A	O	UVM100215-07+UVM100227-07A
3 Mar 2010 19:10	5A320.D	W5VM100303-16	120206-----	VSTD250S	ICAL	5uL ea.	1	1	N/A	20	w	CDS1	N/A	O	clean-up blank
3 Mar 2010 19:35	5A321.D	W5VM100303-17	120206-----	VSTD500S	ICAL	5uL ea.	1	1	N/A	21	w	CDS1	N/A	O	UVM100215-08A+UVM100125-08E
3 Mar 2010 20:01	5A322.D	120206-----	120206-----	BLANK	BFB	5mL	1	1	N/A	22	w	CDS1	N/A	X	
3 Mar 2010 20:27	5A323.D	W5VM100303-18	120206-----	ICV	ICAL	5uL ea.	1	1	N/A	23	w	CDS1	N/A	O	

Date: 3/5/2010 Method 8260/624 Operator: CDS1 REVIEWED BY: _____
 DATE: _____
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings: _____
 Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010 Daily Standard Volume Added for Purge (ul) Purge Amount
 Solution ID# CCV W5VM100305-01 5+5
 IS UVM100203-01 1 1 1
 SS UVM100217-02 1 1 1
 LCS/MS W5VM100305-02/03 5+5
 BFB UVM100217-02 1
 SHORT W5VM100305-04 5 5
 Sequence Number: 030510V5

(See pg. 43 for I/CAL Std. Sol. Ids)
 NaHSO4 lot # n/a
 CI test lot # 81710
 Sequence Number: 030510V5

Water Purge Vol: 5
 Soil Purge Wt: 5
 Mid level ext. MeOH Vol: ul
 Methanol Lot # X
 Heated Purge X

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor	pH	AS Slot #	Matrix	Analyst	CI test (Y/N)	Acceptance (ble(O/X))	Comments
5 Mar 2010	14:49	5A501.D	UVM100217-02	-----	BFB	5ml	1	1	N/A	1	W	CDS1	N/A	X	passes but see 5A502
5 Mar 2010	15:17	5A502.D	W5VM100305-01	-----	CCV	5ml	1	1	N/A	2	W	CDS1	N/A	O	UVM100106-07D-UVM100222-07A
5 Mar 2010	15:45	5A503.D	W5VM100305-02	-----	LCS	5ml	1	1	N/A	3	W	CDS1	N/A	O	UVM100220-01D-UVM100304-01
5 Mar 2010	16:13	5A504.D	W5VM100305-03	-----	LCS	5g	1	1	N/A	4	S	CDS1	N/A	O	UVM100220-01D-UVM100304-01
5 Mar 2010	16:40	5A505.D	W5VM100305-04	-----	CCV/LCS	5g	1	1	N/A	5	S	CDS1	N/A	O	UVM100215-08B
5 Mar 2010	17:21	5A506.D	120206-----	-----	BLANK	5ML	1	1	N/A	6	W	CDS1	N/A	O	
5 Mar 2010	17:46	5A507.D	120206-----	-----	BLANK	5G	1	1	N/A	7	S	CDS1	N/A	O	
5 Mar 2010	18:11	5A508.D	248200001	CH2M	960660	5ML	1	1	PH2	8	W	JEB	N	X	SS high
5 Mar 2010	18:37	5A509.D	248240001	LANL	961880	5G	1	1	N/A	9	S	CDS1	N/A	O	IS low-conf. by
5 Mar 2010	19:02	5A510.D	248240002	LANL	961880	5G	1	1	N/A	10	S	CDS1	N/A	O	
5 Mar 2010	19:28	5A511.D	248240003	LANL	961880	5G	1	1	N/A	11	S	CDS1	N/A	O	
5 Mar 2010	19:52	5A512.D	248240004	LANL	961880	5G	1	1	N/A	12	S	CDS1	N/A	O	
5 Mar 2010	20:17	5A513.D	248240005	LANL	961880	5G	1	1	N/A	13	S	CDS1	N/A	O	IS low-conf. by 5B217
5 Mar 2010	20:42	5A514.D	248240006	LANL	961880	5G	1	1	N/A	14	S	CDS1	N/A	X	IS low, SS high-conf. of 5B218
5 Mar 2010	21:07	5A515.D	248240007	LANL	961880	5G	1	1	N/A	15	S	CDS1	N/A	O	IS low, SS high-conf. by 5B219
5 Mar 2010	21:33	5A516.D	248240008	LANL	961880	5G	1	1	N/A	16	S	CDS1	N/A	X	IS low, SS high-conf. of 5B220
5 Mar 2010	21:58	5A517.D	248240009	LANL	961880	5G	1	1	N/A	17	S	CDS1	N/A	O	
5 Mar 2010	22:24	5A518.D	248240010	LANL	961880	5G	1	1	N/A	18	S	CDS1	N/A	X	IS low, SS high-conf. of 5B221
5 Mar 2010	22:49	5A519.D	248240011	LANL	961880	5G	1	1	N/A	19	S	CDS1	N/A	X	IS low-see 5B216
5 Mar 2010	23:15	5A520.D	24824001	LANL	961880	5G	1	1	N/A	20	S	CDS1	N/A	O	
5 Mar 2010	23:40	5A521.D	24824002	LANL	961880	5G	1	1	N/A	21	S	CDS1	N/A	O	
6 Mar 2010	00:05	5A522.D	24824003	LANL	961880	5G	1	1	N/A	22	S	CDS1	N/A	O	
6 Mar 2010	00:31	5A523.D	24824004	LANL	961880	5G	1	1	N/A	23	S	CDS1	N/A	O	
6 Mar 2010	00:56	5A524.D	24824005	LANL	961880	5G	1	1	N/A	24	S	CDS1	N/A	O	
6 Mar 2010	01:22	5A525.D	24824006	LANL	961880	5G	1	1	N/A	25	S	CDS1	N/A	X	REP C/O see 5B215
6 Mar 2010	01:47	5A526.D	24824007	LANL	961880	5G	1	1	N/A	26	S	CDS1	N/A	O	
6 Mar 2010	02:13	5A527.D	24824008	LANL	961880	5G	1	1	N/A	27	S	CDS1	N/A	O	

GEL Laboratories, LLC
Revision: 11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA5

Date: 3/5/2010 Method 8260/624 Operator: CDS1 REVIEWED BY: _____
 DATE: _____
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings: _____
 Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010 Daily Standard Volume Added for Purge (ul) Purge Amount
 (See pg. 43 for ICAI Std. Sci. Ids) Solution ID# CCV W5VM100305-01 5+5 5 Water Purge Vol:
 NaHSO4 lot # n/a IS UVM100203-01 1 1 1 5 Soil Purge Wt.
 SS UVM100217-02 1 1 1 Mid level ext. MeOH Vol:
 LCS/MS W5VM100305-02/03 5+5
 BFB UVM100217-02 1 Methanol Lot #
 SHORT W5VM100305-04 5 5 Heated Purge
 Sequence Number: 030510V5

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptance ble(O/X)	Comments
6 Mar 2010	02:38	5A528.D	1202063155	LANL	961880	5G	1	N/A	28	s	CDS1	N/A	X	MS 248240001 IS low-mult. recovery failures
6 Mar 2010	03:04	5A529.D	1202063156	LANL	961880	5G	1	N/A	29	s	CDS1	N/A	X	MSD 248240001 IS low-mult. recovery failures

Date: 3/9/2010 Method 8260/624 Operator: CDS1 REVIEWED BY: _____
 DATE: _____
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings: _____
 Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010 Daily Standard Volume Added for Purge (ul) Purge Amount
 Solution ID# Smp/ Blk/ MS/ MS/ BFB
 CCV W5VM100309-02 5+5
 IS UVM100203-01 1 1 1
 SS UVM100217-02 1 1 1
 LCS/MS W5VM100309-02/03 5+5
 BFB UVM100217-02 1
 SHORT W5VM100309-04 5 5
 Sequence Number: 030910V5

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)	Acceptance ble(O/X)	Comments
9 Mar 2010	07:14	5B201.D	UVM100217-02	-----	BFB	5ML	1	1	N/A	1	w	CDS1	N/A	O	
9 Mar 2010	07:42	5B202.D	W5VM100309-01		CCV	5ML	1	1	N/A	2	w	CDS1	N/A	X	UVM100222-07B+UVM100106-07D poor prep
9 Mar 2010	08:09	5B203.D	W5VM100309-02	-----	LCS/CCV	5ML	1	1	N/A	3	w	CDS1	N/A	O	UVM100220-01E+UVM100308-01 passes as CCV & LCS
9 Mar 2010	08:50	5B204.D	W5VM100309-03	-----	LCS	5g	1	1	N/A	4	s	CDS1	N/A	O	UVM100220-01E+UVM100308-01
9 Mar 2010	09:18	5B205.D	W5VM100309-04	-----	CCV/LCS	5g	1	1	N/A	5	s	CDS1	N/A	O	UVM100215-08B
9 Mar 2010	09:45	5B206.D	120206-----	-----	BLANK	5ML	1	1	N/A	6	w	CDS1	N/A	O	
9 Mar 2010	10:12	5B207.D	120206-----	-----	BLANK	5G	1	1	N/A	7	s	CDS1	N/A	O	
9 Mar 2010	10:40	5B208.D	1202063711	BY12	963021	500UL	10	10	N/A	8	w	CDS1	N/A	O	TCLPBLANK
9 Mar 2010	11:08	5B209.D	248212003	BY12	963021	500UL	10	10	N/A	9	w	CDS1	N/A	O	
9 Mar 2010	11:36	5B210.D	248212006	BY12	963021	500UL	10	10	N/A	10	w	CDS1	N/A	O	
9 Mar 2010	12:03	5B211.D	248212014	BY12	963021	500UL	10	10	N/A	11	w	CDS1	N/A	O	
9 Mar 2010	12:31	5B212.D	248212017	BY12	963021	500UL	10	10	N/A	12	w	CDS1	N/A	O	
9 Mar 2010	12:59	5B213.D	248212021	BY12	963021	500UL	10	10	N/A	13	w	CDS1	N/A	O	
9 Mar 2010	13:27	5B214.D	248212025	BY12	963021	500UL	10	10	N/A	14	w	CDS1	N/A	O	
9 Mar 2010	13:58	5B215.D	248244006	LANL	961880	5G	1	1	N/A	15	s	CDS1	N/A	O	
9 Mar 2010	14:26	5B216.D	2482440011	LANL	961880	5G	1	1	N/A	16	s	CDS1	N/A	O	IS low, SS high--conf. of 5A513
9 Mar 2010	14:54	5B217.D	2482440005	LANL	961880	5G	1	1	N/A	17	s	CDS1	N/A	X	IS low, SS high--conf. by 5A514
9 Mar 2010	15:22	5B218.D	2482440006	LANL	961880	5G	1	1	N/A	18	s	CDS1	N/A	O	IS low, SS high--conf. of 5A515
9 Mar 2010	15:50	5B219.D	2482440007	LANL	961880	5G	1	1	N/A	19	s	CDS1	N/A	X	IS low, SS high--conf. by 5A516
9 Mar 2010	16:17	5B220.D	2482440008	LANL	961880	5G	1	1	N/A	20	s	CDS1	N/A	O	IS low, SS high--conf. by 5A518
9 Mar 2010	16:45	5B221.D	2482440010	LANL	961880	5G	1	1	N/A	21	s	CDS1	N/A	O	MS 248244006 MIX[A]
9 Mar 2010	17:13	5B222.D	120206-----	LANL	961880	5G	1	1	N/A	22	s	CDS1	N/A	O	MSD 248244006 MIX[A]
9 Mar 2010	17:40	5B223.D	120206-----	LANL	961880	5G	1	1	N/A	23	s	CDS1	N/A	O	MS 248212003 MIX[A]
9 Mar 2010	18:07	5B224.D	1202065958	BY12	963021	500UL	10	10	N/A	24	w	CDS1	N/A	O	MSD 248212003 MIX[A]
9 Mar 2010	18:35	5B225.D	1202065959	BY12	963021	500UL	10	10	N/A	25	w	CDS1	N/A	O	

DATA EXCEPTION REPORT

Mo./Day Yr. 17-MAR-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: 961880	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248240(10-2134),248244(10-2137)			
Application Issues: Container scanning event for custody missed Failed Recovery for LCS/LCSD Failed Yield for Surrogates			
Specification and Requirements		DER Disposition:	
Exception Description: 1. The following LCS's did not meet acceptance criteria for Trichlorotrifluoroethane. 1202067799 LCS recovered Trichlorotrifluoroethane at 149.1%. 1202063158 LCS recovered Trichlorotrifluoroethane at 143%. The limits are 67%-140%. 2.The following samples did not meet acceptance criteria for Bromofluorobenzene: 248240007 recovered Bromofluorobenzene at 133%. 248240008 recovered Bromofluorobenzene at 169%. 248240010 recovered Bromofluorobenzene at 142%. 248240006 recovered Bromofluorobenzene at 156%. The limits are 65%-130%. 3.The following samples did not meet acceptance criteria for internal standard recoveries: 248240001,248240005,248240006,248240007,248240008,248240010		1. The LCS recoveries that did not meet the acceptable recovery criteria were less than 5% of the total requested compound list; therefore, the client request was satisfied. The data were reported. 2.The samples were reanalyzed with similar results therefore, matrix interference was demonstrated. The data were reported. 3. The samples were reanalyzed with similar results therefore, matrix interference was demonstrated. The data were reported.	

Originator's Name:

John Bell, Jr.

17-MAR-10

Data Validator/Group Leader:

Kelle Bellamy

18-MAR-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2134**

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:	960659
Prep Batch Number:	960658

Sample Analysis

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

Sample ID	Client ID
248240001	RE36-10-7458
248240002	RE36-10-7453
248240003	RE36-10-7454
248240004	RE36-10-7460
248240005	RE36-10-7456
248240006	RE36-10-7455
248240007	RE36-10-7459
248240008	RE36-10-7457
248240009	RE36-10-7520
248240010	RE36-10-7519
1202060535	Method Blank (MB)
1202060536	Laboratory Control Sample (LCS)
1202060537	248234004(RE11-10-1857) Matrix Spike (MS)
1202060538	248234004(RE11-10-1857) 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.

Initial calibration and continuing calibration requirements may not be satisfied for all requested target analytes analyzed according to Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. Please see the Initial Calibration and/or CCV Requirements Section of the case narrative for any samples impacted by calibration failures.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less than 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria of the method.

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(1202060536) recovered 2,4-Dinitrophenol at 132%. The limits are 18%-127%. The LCS failure represents less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data results have been reported.

QC Sample Designation

The sample 248234004 (RE11-10-1857) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement

The MS(1202060537) and MSD(1202060538) both recovered 3,3'-Dichlorobenzidine at 0%. The limits are 30%-124%. Since the MSD spike recovery confirmed the MS spike recovery, the failures were attributed to sample matrix interference and the data results have been reported.

Matrix Spike Duplicate (MSD) Recovery Statement

The MS(1202060537) and MSD(1202060538) both recovered 3,3'-Dichlorobenzidine at 0%. The limits are 30%-124%. Since the MSD spike recovery confirmed the MS spike recovery, the failures were attributed to sample matrix interference and the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

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

The following DER was generated for this SDG: 804005. It is located in the Miscellaneous Section of the data report.

Manual Integrations

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

Additional Comments

Additional comments were not required for this SDG.

Electronic Package Comment

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

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

System Configuration

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

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

Certification Statement

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

Review Validation:

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

Reviewer: Dan Benham Date: 3-26-10

Roadmap for LANL 10-2134 SVOA

This roadmap was analyzed by rmb on 03-15-2010, 08:20.

This roadmap was reviewed by bar00895 on 03-16-2010, 09:55.

This roadmap was packaged by CHA01131 on 03-25-2010, 16:47.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1031.d	248240001	10-MAR-2010	21:11	10-2134.sub	RE36-10-7458	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1032.d	248240002	10-MAR-2010	21:34	10-2134.sub	RE36-10-7453	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1033.d	248240003	10-MAR-2010	21:58	10-2134.sub	RE36-10-7454	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1034.d	248240004	10-MAR-2010	22:21	10-2134.sub	RE36-10-7460	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1035.d	248240005	10-MAR-2010	22:44	10-2134.sub	RE36-10-7456	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1036.d	248240006	10-MAR-2010	23:06	10-2134.sub	RE36-10-7455	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031110.b/s5c1124.d	248240007	11-MAR-2010	19:25	10-2134.sub	RE36-10-7459	1	960659	
<input checked="" type="checkbox"/>	N	/chem/MSD5.i/s031110.b/s5c1125.d	248240008	11-MAR-2010	19:48	10-2134.sub	RE36-10-7457	1	960659	DUSE - s5c1228 passes - Fail IS - rr
<input checked="" type="checkbox"/>	N	/chem/MSD5.i/s031110.b/s5c1126.d	248240009	11-MAR-2010	20:10	10-2134.sub	RE36-10-7520	1	960659	DUSE - s5c1229 passes - Fail IS - rr
<input type="checkbox"/>	N	/chem/MSD5.i/s031110.b/s5c1127.d	248240010	11-MAR-2010	20:33	10-2134.sub	RE36-10-7519	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031210.b/s5c1228.d	248240008	12-MAR-2010	20:57	10-2134.sub	RE36-10-7457	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031210.b/s5c1229.d	248240009	12-MAR-2010	21:20	10-2134.sub	RE36-10-7520	1	960659	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1014-2.d	1202060535	mb	10-MAR-2010	14:41	10-2134.sub	SBLK01	1	960659	
<input type="checkbox"/>	N	/chem/MSD5.i/s031010.b/s5c1015-2.d	1202060536	lcs	10-MAR-2010	15:05	10-2134.sub	SBLK01LCS	1	960659	

Sample Data Summary

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

SDG Number: 10-2134
Lab Sample ID: 248240002

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 44.7
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	601	ug/kg	120	601
108-95-2	Phenol	U	601	ug/kg	120	601
95-57-8	2-Chlorophenol	U	601	ug/kg	120	601
106-46-7	1,4-Dichlorobenzene	U	601	ug/kg	120	601
621-64-7	N-Nitrosodipropylamine	U	601	ug/kg	120	601
59-50-7	4-Chloro-3-methylphenol	U	601	ug/kg	120	601
83-32-9	Acenaphthene	U	60.1	ug/kg	19.8	60.1
121-14-2	2,4-Dinitrotoluene	U	601	ug/kg	60.1	601
100-02-7	4-Nitrophenol	U	601	ug/kg	198	601
87-86-5	Pentachlorophenol	U	601	ug/kg	150	601
129-00-0	Pyrene		107	ug/kg	18.0	60.1
110-86-1	Pyridine	U	601	ug/kg	120	601
62-53-3	Aniline	U	601	ug/kg	180	601
111-44-4	bis(2-Chloroethyl) ether	U	601	ug/kg	120	601
541-73-1	1,3-Dichlorobenzene	U	601	ug/kg	120	601
100-51-6	Benzyl alcohol	U	601	ug/kg	180	601
95-50-1	1,2-Dichlorobenzene	U	601	ug/kg	120	601
108-60-1	bis(2-Chloroisopropyl)ether	U	601	ug/kg	120	601
95-48-7	o-Cresol	U	601	ug/kg	120	601
65794-96-9	m,p-Cresols	U	601	ug/kg	180	601
67-72-1	Hexachloroethane	U	601	ug/kg	120	601
98-95-3	Nitrobenzene	U	601	ug/kg	120	601
78-59-1	Isophorone	U	601	ug/kg	120	601
88-75-5	2-Nitrophenol	U	601	ug/kg	120	601
105-67-9	2,4-Dimethylphenol	U	601	ug/kg	210	601
111-91-1	bis(2-Chloroethoxy)methane	U	601	ug/kg	120	601
120-83-2	2,4-Dichlorophenol	U	601	ug/kg	120	601
65-85-0	Benzoic acid	U	1200	ug/kg	301	1200
91-20-3	Naphthalene	U	60.1	ug/kg	18.0	60.1
106-47-8	4-Chloroaniline	U	601	ug/kg	120	601
87-68-3	Hexachlorobutadiene	U	601	ug/kg	120	601
91-57-6	2-Methylnaphthalene	U	60.1	ug/kg	12.0	60.1
77-47-4	Hexachlorocyclopentadiene	U	601	ug/kg	120	601
88-06-2	2,4,6-Trichlorophenol	U	601	ug/kg	120	601
95-95-4	2,4,5-Trichlorophenol	U	601	ug/kg	120	601
91-58-7	2-Chloronaphthalene	U	60.1	ug/kg	19.8	60.1
88-74-4	2-Nitroaniline	U	601	ug/kg	120	601
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	601	ug/kg	120	601

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	%Moisture: 44.7
	Client: LANL010	Project: I.ANL01004
Client ID: RE36-10-7453	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 21:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s5c1032.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	601	ug/kg	120	601
606-20-2	2,6-Dinitrotoluene	U	601	ug/kg	60.1	601
208-96-8	Acenaphthylene	U	60.1	ug/kg	18.0	60.1
51-28-5	2,4-Dinitrophenol	U	1200	ug/kg	228	1200
132-64-9	Dibenzofuran	U	601	ug/kg	120	601
84-66-2	Diethylphthalate	U	601	ug/kg	120	601
86-73-7	Fluorene	U	60.1	ug/kg	18.0	60.1
7005-72-3	4-Chlorophenylphenylether	U	601	ug/kg	120	601
534-52-1	2-Methyl-4,6-dinitrophenol	U	601	ug/kg	120	601
100-01-6	4-Nitroaniline	U	601	ug/kg	180	601
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	601	ug/kg	120	601
122-66-7	Azobenzene	U	601	ug/kg	120	601
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	601	ug/kg	120	601
118-74-1	Hexachlorobenzene	U	601	ug/kg	120	601
85-01-8	Phenanthrene		89.0	ug/kg	18.0	60.1
120-12-7	Anthracene	U	60.1	ug/kg	12.0	60.1
84-74-2	Di-n-butylphthalate	U	601	ug/kg	120	601
206-44-0	Fluoranthene		146	ug/kg	18.0	60.1
85-68-7	Butylbenzylphthalate	U	601	ug/kg	120	601
56-55-3	Benzo(a)anthracene	J	52.1	ug/kg	18.0	60.1
91-94-1	3,3'-Dichlorobenzidine	U	601	ug/kg	180	601
218-01-9	Chrysene		63.6	ug/kg	18.0	60.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	601	ug/kg	120	601
117-84-0	Di-n-octylphthalate	U	601	ug/kg	120	601
205-99-2	Benzo(b)fluoranthene		75.2	ug/kg	18.0	60.1
207-08-9	Benzo(k)fluoranthene	J	32.4	ug/kg	18.0	60.1
50-32-8	Benzo(a)pyrene	J	55.4	ug/kg	18.0	60.1
193-39-5	Indeno(1,2,3-cd)pyrene	J	31.3	ug/kg	18.0	60.1
53-70-3	Dibenzo(a,h)anthracene	U	60.1	ug/kg	18.0	60.1
191-24-2	Benzo(ghi)perylene	U	60.1	ug/kg	18.0	60.1
120-82-1	1,2,4-Trichlorobenzene	U	601	ug/kg	120	601

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	352	ug/kg		JA
	Unknown	3.05	2200	ug/kg		J

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

Page 3 of 3

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	%Moisture: 44.7
Client ID: RE36-10-7453	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 21:34	Inst: MSD5.1	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1032.d	Aliquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	---------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
112-95-8	Eicosane	9.87	327	ug/kg	91	NJ
1599-67-3	1-Docosene	9.89	500	ug/kg	99	NJ
	Unknown	10.32	504	ug/kg		J
	Unknown	10.42	796	ug/kg		J
	Unknown	11.18	5380	ug/kg		J
	Unknown	11.45	3540	ug/kg		J
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.56	385	ug/kg	86	NJ
	Unknown	11.93	12600	ug/kg		J
	Unknown	12.01	850	ug/kg		J
	Unknown	12.32	270	ug/kg		J
	Unknown	12.58	869	ug/kg		J
	Unknown	12.6	895	ug/kg		J
	Unknown	13.33	406	ug/kg		J
	Unknown	13.84	249	ug/kg		J
	Unknown	13.87	287	ug/kg		J
	Unknown	13.95	321	ug/kg		J
	Unknown	14.25	257	ug/kg		J
	Unknown	14.47	359	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Client ID: RE36-10-7454
Batch ID: 960659
Run Date: 03/10/2010 21:58
Prep Date: 03/04/2010 10:53
Data File: s5c1033.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363
108-95-2	Phenol	U	363	ug/kg	72.6	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.6	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363
95-48-7	o-Cresol	U	363	ug/kg	72.6	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363
78-59-1	Isophorone	U	363	ug/kg	72.6	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363
65-85-0	Benzoic acid	U	726	ug/kg	181	726
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.6	363
99-09-2	<i>o</i> -Nitroaniline	U	363	ug/kg	72.6	363
	3-Nitroaniline					

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.6	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	726	ug/kg	138	726
132-64-9	Dibenzofuran	U	363	ug/kg	72.6	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.6	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.6	363
122-66-7	Azobenzene	U	363	ug/kg	72.6	363
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.6	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.6	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.26	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.6	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.6	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.6	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	221	ug/kg		JA
559-74-0	Friedelan-3-one	9.28	782	ug/kg	97	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.76	151	ug/kg		J
	Unknown	11.32	254	ug/kg		J
	Unknown	11.35	155	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.4
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	441	ug/kg	88.2	441
108-95-2	Phenol	U	441	ug/kg	88.2	441
95-57-8	2-Chlorophenol	U	441	ug/kg	88.2	441
106-46-7	1,4-Dichlorobenzene	U	441	ug/kg	88.2	441
621-64-7	N-Nitrosodipropylamine	U	441	ug/kg	88.2	441
59-50-7	4-Chloro-3-methylphenol	U	441	ug/kg	88.2	441
83-32-9	Acenaphthene	U	44.1	ug/kg	14.5	44.1
121-14-2	2,4-Dinitrotoluene	U	441	ug/kg	44.1	441
100-02-7	4-Nitrophenol	U	441	ug/kg	145	441
87-86-5	Pentachlorophenol	U	441	ug/kg	110	441
129-00-0	Pyrene		75.4	ug/kg	13.2	44.1
110-86-1	Pyridine	U	441	ug/kg	88.2	441
62-53-3	Aniline	U	441	ug/kg	132	441
111-44-4	bis(2-Chloroethyl) ether	U	441	ug/kg	88.2	441
541-73-1	1,3-Dichlorobenzene	U	441	ug/kg	88.2	441
100-51-6	Benzyl alcohol	U	441	ug/kg	132	441
95-50-1	1,2-Dichlorobenzene	U	441	ug/kg	88.2	441
108-60-1	bis(2-Chloroisopropyl)ether	U	441	ug/kg	88.2	441
95-48-7	o-Cresol	U	441	ug/kg	88.2	441
65794-96-9	m,p-Cresols	U	441	ug/kg	132	441
67-72-1	Hexachloroethane	U	441	ug/kg	88.2	441
98-95-3	Nitrobenzene	U	441	ug/kg	88.2	441
78-59-1	Isophorone	U	441	ug/kg	88.2	441
88-75-5	2-Nitrophenol	U	441	ug/kg	88.2	441
105-67-9	2,4-Dimethylphenol	U	441	ug/kg	154	441
111-91-1	bis(2-Chloroethoxy)methane	U	441	ug/kg	88.2	441
120-83-2	2,4-Dichlorophenol	U	441	ug/kg	88.2	441
65-85-0	Benzoic acid	J	627	ug/kg	220	882
91-20-3	Naphthalene	U	44.1	ug/kg	13.2	44.1
106-47-8	4-Chloroaniline	U	441	ug/kg	88.2	441
87-68-3	Hexachlorobutadiene	U	441	ug/kg	88.2	441
91-57-6	2-Methylnaphthalene	U	44.1	ug/kg	8.82	44.1
77-47-4	Hexachlorocyclopentadiene	U	441	ug/kg	88.2	441
88-06-2	2,4,6-Trichlorophenol	U	441	ug/kg	88.2	441
95-95-4	2,4,5-Trichlorophenol	U	441	ug/kg	88.2	441
91-58-7	2-Chloronaphthalene	U	44.1	ug/kg	14.5	44.1
88-74-4	2-Nitroaniline	U	441	ug/kg	88.2	441
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	441	ug/kg	88.2	441

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240006	Date Received: 02/27/2010 09:10	%Moisture: 24.4
Client ID: RE36-10-7455	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 23:06	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1036.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	441	ug/kg	88.2	441
606-20-2	2,6-Dinitrotoluene	U	441	ug/kg	44.1	441
208-96-8	Acenaphthylene	U	44.1	ug/kg	13.2	44.1
51-28-5	2,4-Dinitrophenol	U	882	ug/kg	168	882
132-64-9	Dibenzofuran	U	441	ug/kg	88.2	441
84-66-2	Diethylphthalate	U	441	ug/kg	88.2	441
86-73-7	Fluorene	U	44.1	ug/kg	13.2	44.1
7005-72-3	4-Chlorophenylphenylether	U	441	ug/kg	88.2	441
534-52-1	2-Methyl-4,6-dinitrophenol	U	441	ug/kg	88.2	441
100-01-6	4-Nitroaniline	U	441	ug/kg	132	441
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	441	ug/kg	88.2	441
122-66-7	Azobenzene	U	441	ug/kg	88.2	441
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	441	ug/kg	88.2	441
118-74-1	Hexachlorobenzene	U	441	ug/kg	88.2	441
85-01-8	Phenanthrene		53.7	ug/kg	13.2	44.1
120-12-7	Anthracene	U	44.1	ug/kg	8.82	44.1
84-74-2	Di-n-butylphthalate	U	441	ug/kg	88.2	441
206-44-0	Fluoranthene		90.3	ug/kg	13.2	44.1
85-68-7	Butylbenzylphthalate	U	441	ug/kg	88.2	441
56-55-3	Benzo(a)anthracene	J	36.0	ug/kg	13.2	44.1
91-94-1	3,3'-Dichlorobenzidine	U	441	ug/kg	132	441
218-01-9	Chrysene		47.7	ug/kg	13.2	44.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	441	ug/kg	88.2	441
117-84-0	Di-n-octylphthalate	U	441	ug/kg	88.2	441
205-99-2	Benzo(b)fluoranthene		50.7	ug/kg	13.2	44.1
207-08-9	Benzo(k)fluoranthene	U	44.1	ug/kg	13.2	44.1
50-32-8	Benzo(a)pyrene	J	36.5	ug/kg	13.2	44.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.1	ug/kg	13.2	44.1
53-70-3	Dibenzo(a,h)anthracene	U	44.1	ug/kg	13.2	44.1
191-24-2	Benzo(ghi)perylene	U	44.1	ug/kg	13.2	44.1
120-82-1	1,2,4-Trichlorobenzene	U	441	ug/kg	88.2	441

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.74	636	ug/kg	96	NJ
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.56	541	ug/kg	99	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.4
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
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.8	560	ug/kg	97	NJ
	Unknown	8.87	345	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	641	ug/kg	98	NJ
	Unknown	8.94	539	ug/kg		J
	Unknown	9.08	447	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1760	ug/kg	97	NJ
110936-78-2	7-Oxodehydroabiatic acid, methyl ester	9.67	908	ug/kg	95	NJ
629-78-7	Heptadecane	9.87	557	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1570	ug/kg	99	NJ
	Unknown	10.2	461	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.29	668	ug/kg	95	NJ
	Unknown	10.32	579	ug/kg		J
	Unknown	10.63	573	ug/kg		J
	Unknown	11.11	2080	ug/kg		J
112-95-8	Eicosane	11.49	572	ug/kg	98	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.57	1300	ug/kg	91	NJ
	Unknown	11.81	2330	ug/kg		J
57-87-4	Ergosterol	12.52	625	ug/kg	91	NJ
83-47-6	.gamma.-Sitosterol	13.34	1350	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	14.48	652	ug/kg	91	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.5
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	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	o-Nitroaniline	U	360	ug/kg	72.1	360
	3-Nitroaniline					

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

SDG Number: 10-2134
Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.5
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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	72.1	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	721	ug/kg	137	721
132-64-9	Dibenzofuran	U	360	ug/kg	72.1	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.1	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360
122-66-7	Azobenzene	U	360	ug/kg	72.1	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360
206-44-0	Fluoranthene	U	36.0	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	U	36.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.51	387	ug/kg		J
	Unknown	8.81	454	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	% Moisture: 7.5
Client ID: RE36-10-7456	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 22:44	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1035.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary				Estimated			
CAS No.	Tentatively Identified Compound (TIC)		RT		Units	Fit	Qual
65899-10-7	trans-1,2-Bis(methyldichlorosilyl)ethyle		8.9	1230	ug/kg	95	NJ
	Unknown		8.94	243	ug/kg		J
	Unknown		9.08	449	ug/kg		J
	Unknown		9.18	543	ug/kg		J
1000130-93-3	2-Methyl-cis-7,8-epoxynonadecane		9.27	1090	ug/kg	89	NJ
	Unknown		9.67	863	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4		9.72	311	ug/kg	96	NJ
1599-67-3	1-Docosene		9.9	484	ug/kg	99	NJ
55591-17-8	s-Indacene-1,7-dione, 2,3,5,6-tetrahydro		10.01	231	ug/kg	80	NJ
	Unknown		10.2	285	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif		10.3	465	ug/kg	95	NJ
	Unknown		10.32	628	ug/kg		J
	Unknown		10.58	340	ug/kg		J
	Unknown		11.78	590	ug/kg		J
83-46-5	.beta.-Sitosterol		13.34	859	ug/kg	96	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240008

Client ID: RE36-10-7457
Batch ID: 960659
Run Date: 03/12/2010 20:57
Prep Date: 03/04/2010 10:53
Data File: s5c1228.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
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	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	103	410
129-00-0	Pyrene		161	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	144	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	615	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	410	ug/kg	82.0	410

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

SDG Number: 10-2134
Lab Sample ID: 248240008

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 18.8
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	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	J	13.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene		126	ug/kg	12.3	41.0
120-12-7	Anthracene	J	20.4	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		181	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene		72.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene		89.9	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		148	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene		74.1	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene		42.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	J	39.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.79	208	ug/kg		J
	Unknown	8.95	716	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
Client ID: RE36-10-7457	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/12/2010 20:57	Inst: MSD5.J	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1228.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	298	ug/kg	95	NJ
	Unknown	9.44	1400	ug/kg		J
	Unknown	9.7	442	ug/kg		J
	Unknown	9.72	283	ug/kg		J
31559-86-1	3Beta-acetoxy-6-nitroandrost-5-en-17-one	9.83	524	ug/kg	90	NJ
118625-56-2	1-Hexadecene, 16-bromo-	10.08	772	ug/kg	89	NJ
	Unknown	10.18	415	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	2670	ug/kg	96	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7458	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 21:11	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1031.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	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Accenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene		42.7	ug/kg	11.7	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388
62-53-3	Aniline	U	388	ug/kg	117	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	117	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	117	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	J	568	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.7	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	388	ug/kg	77.7	388

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240001	Date Received: 02/27/2010 09:10	%Moisture: 14.2
Client ID: RE36-10-7458	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 21:11	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1031.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.7	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.7	38.8
51-28-5	2,4-Dinitrophenol	U	777	ug/kg	148	777
132-64-9	Dibenzofuran	U	388	ug/kg	77.7	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.7	388
86-73-7	Fluorene	U	38.8	ug/kg	11.7	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388
100-01-6	4-Nitroaniline	U	388	ug/kg	117	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.7	388
122-66-7	Azobenzene	U	388	ug/kg	77.7	388
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.7	388
85-01-8	Phenanthrene	J	34.4	ug/kg	11.7	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.77	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.7	388
206-44-0	Fluoranthene		52.7	ug/kg	11.7	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.7	388
56-55-3	Benzo(a)anthracene	J	26.7	ug/kg	11.7	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	117	388
218-01-9	Chrysene	J	26.4	ug/kg	11.7	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.7	388
205-99-2	Benzo(b)fluoranthene	J	30.1	ug/kg	11.7	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.7	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.7	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.7	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.7	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.7	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1940	ug/kg	99	NJ
	Unknown	8.81	376	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	463	ug/kg	98	NJ
	Unknown	8.94	738	ug/kg		J
	Unknown	9.08	496	ug/kg		J
	Unknown	9.18	408	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1530	ug/kg	97	NJ
	Unknown	9.3	449	ug/kg		J
	Unknown	9.37	412	ug/kg		J
	Unknown	9.51	581	ug/kg		J
	Unknown	9.54	569	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	9.58	746	ug/kg	91	NJ
	Unknown	9.67	847	ug/kg		J
	Unknown	9.73	555	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.87	526	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1160	ug/kg	99	NJ
	Unknown	10.01	497	ug/kg		J
	Unknown	10.08	631	ug/kg		J
	Unknown	10.21	519	ug/kg		J
106-28-5	2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	10.3	670	ug/kg	90	NJ
	Unknown	11.09	849	ug/kg		J
	Unknown	11.79	670	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.52	966	ug/kg	92	NJ
83-47-6	.gamma.-Sitosterol	13.35	2810	ug/kg	99	NJ
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	13.68	747	ug/kg	91	NJ
	Unknown	13.87	1040	ug/kg		J
	Unknown	14.26	609	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
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	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene		51.7	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	552	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	410	ug/kg	82.0	410

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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7459
Batch ID: 960659
Run Date: 03/11/2010 19:25
Prep Date: 03/04/2010 10:53
Data File: s5c1124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	J	36.9	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		63.4	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	J	27.8	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	J	36.8	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		43.9	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	J	24.7	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	230	ug/kg		JA
13466-78-9	3-Carene	3.87	349	ug/kg	97	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
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	MDI/L.O.D	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
103-82-2	Benzeneacetic acid	4.9	249	ug/kg	91	NJ
3386-33-2	Octadecane, 1-chloro-	8.74	182	ug/kg	96	NJ
	Unknown	8.96	199	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	237	ug/kg	93	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	243	ug/kg	98	NJ
	Unknown	9.08	332	ug/kg		J
1599-67-3	1-Docosene	9.4	561	ug/kg	99	NJ
	Unknown	9.83	166	ug/kg		J
	Unknown	9.9	208	ug/kg		J
	Unknown	10.05	553	ug/kg		J
	Unknown	10.16	190	ug/kg		J
	Unknown	10.38	241	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ci	10.48	319	ug/kg	89	NJ
	Unknown	10.82	268	ug/kg		J
112-95-8	Eicosane	11.75	197	ug/kg	95	NJ
55030-21-2	Cyclohexane, 1,1'-(2-propyl-1,3-propaned	11.82	774	ug/kg	91	NJ
	Unknown	11.99	215	ug/kg		J
	Unknown	12.09	274	ug/kg		J
	Unknown	12.58	435	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.86	405	ug/kg	93	NJ
	Unknown	13.22	246	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.73	1390	ug/kg	96	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240004

Client ID: RE36-10-7460
Batch ID: 960659
Run Date: 03/10/2010 22:21
Prep Date: 03/04/2010 10:53
Data File: s5c1034.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.5
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	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	184	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367

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

SDG Number: 10-2134
Lab Sample ID: 248240004

Client ID: RE36-10-7460
Batch ID: 960659
Run Date: 03/10/2010 22:21
Prep Date: 03/04/2010 10:53
Data File: s5c1034.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.5
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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	140	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	232	ug/kg	99	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 9.5
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				Estimated			
CAS No.	Tentatively Identified Compound (TIC)		RT	Units	Fit	Qual	
1599-67-3	1-Docosene		9.27	346	ug/kg	93	NJ
112-95-8	Eicosane		9.87	181	ug/kg	98	NJ
629-96-9	1-Eicosanol		9.89	1310	ug/kg	94	NJ
	Unknown		10.2	212	ug/kg		J
	Unknown		10.29	161	ug/kg		J
638-66-4	Octadecanal		10.37	209	ug/kg	91	NJ
	Unknown		10.58	374	ug/kg		J
7320-37-8	Oxirane, tetradecyl-		11.23	318	ug/kg	89	NJ
	Unknown		11.49	151	ug/kg		J
	Unknown		11.57	279	ug/kg		J
83-46-5	.beta.-Sitosterol		13.34	608	ug/kg	97	NJ
	Unknown		14.27	195	ug/kg		J
	Unknown		14.47	164	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7519
Batch ID: 960659
Run Date: 03/11/2010 20:33
Prep Date: 03/04/2010 10:53
Data File: s5c1127.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	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		45.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid		854	ug/kg	211	844
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	422	ug/kg	84.4	422

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
Client ID: RE36-10-7519	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/11/2010 20:33	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1127.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	J	295	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene		892	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	844	ug/kg	160	844
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	J	34.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene		54.5	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	J	26.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	J	32.8	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	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	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	430	ug/kg		JA
103-82-2	Benzeneacetic acid	4.91	467	ug/kg	90	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
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
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.71	187	ug/kg	93	NJ
295-48-7	Cyclopentadecane	8.73	274	ug/kg	96	NJ
	Unknown	8.96	296	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	280	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	239	ug/kg	97	NJ
	Unknown	9.08	393	ug/kg		J
1599-67-3	1-Docosene	9.4	587	ug/kg	99	NJ
	Unknown	9.7	786	ug/kg		J
	Unknown	9.94	2270	ug/kg		J
	Unknown	10.05	964	ug/kg		J
	Unknown	10.38	295	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	10.48	447	ug/kg	95	NJ
930-02-9	Octadecane, 1-(ethenyloxy)-	10.82	332	ug/kg	93	NJ
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.82	866	ug/kg	89	NJ
	Unknown	12	282	ug/kg		J
	Unknown	12.11	283	ug/kg		J
	Unknown	12.58	500	ug/kg		J
	Unknown	12.86	314	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.74	1230	ug/kg	93	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	575	ug/kg	115	575
108-95-2	Phenol	U	575	ug/kg	115	575
95-57-8	2-Chlorophenol	U	575	ug/kg	115	575
106-46-7	1,4-Dichlorobenzene	U	575	ug/kg	115	575
621-64-7	N-Nitrosodipropylamine	U	575	ug/kg	115	575
59-50-7	4-Chloro-3-methylphenol	U	575	ug/kg	115	575
83-32-9	Acenaphthene	U	57.5	ug/kg	19.0	57.5
121-14-2	2,4-Dinitrotoluene	U	575	ug/kg	57.5	575
100-02-7	4-Nitrophenol	U	575	ug/kg	190	575
87-86-5	Pentachlorophenol	U	575	ug/kg	144	575
129-00-0	Pyrene		101	ug/kg	17.3	57.5
110-86-1	Pyridine	U	575	ug/kg	115	575
62-53-3	Aniline	U	575	ug/kg	173	575
111-44-4	bis(2-Chloroethyl) ether	U	575	ug/kg	115	575
541-73-1	1,3-Dichlorobenzene	U	575	ug/kg	115	575
100-51-6	Benzyl alcohol	U	575	ug/kg	173	575
95-50-1	1,2-Dichlorobenzene	U	575	ug/kg	115	575
108-60-1	bis(2-Chloroisopropyl)ether	U	575	ug/kg	115	575
95-48-7	o-Cresol	U	575	ug/kg	115	575
65794-96-9	m,p-Cresols	U	575	ug/kg	173	575
67-72-1	Hexachloroethane	U	575	ug/kg	115	575
98-95-3	Nitrobenzene	U	575	ug/kg	115	575
78-59-1	Isophorone	U	575	ug/kg	115	575
88-75-5	2-Nitrophenol	U	575	ug/kg	115	575
105-67-9	2,4-Dimethylphenol	U	575	ug/kg	201	575
111-91-1	bis(2-Chloroethoxy)methane	U	575	ug/kg	115	575
120-83-2	2,4-Dichlorophenol	U	575	ug/kg	115	575
65-85-0	Benzoic acid	U	1150	ug/kg	288	1150
91-20-3	Naphthalene	U	57.5	ug/kg	17.3	57.5
106-47-8	4-Chloroaniline	U	575	ug/kg	115	575
87-68-3	Hexachlorobutadiene	U	575	ug/kg	115	575
91-57-6	2-Methylnaphthalene	U	57.5	ug/kg	11.5	57.5
77-47-4	Hexachlorocyclopentadiene	U	575	ug/kg	115	575
88-06-2	2,4,6-Trichlorophenol	U	575	ug/kg	115	575
95-95-4	2,4,5-Trichlorophenol	U	575	ug/kg	115	575
91-58-7	2-Chloronaphthalene	U	57.5	ug/kg	19.0	57.5
88-74-4	2-Nitroaniline	U	575	ug/kg	115	575
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	575	ug/kg	115	575

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240009	Date Received: 02/27/2010 09:10	%Moisture: 42.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7520	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/12/2010 21:20	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s5c1229.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	575	ug/kg	115	575
606-20-2	2,6-Dinitrotoluene	U	575	ug/kg	57.5	575
208-96-8	Acenaphthylene	U	57.5	ug/kg	17.3	57.5
51-28-5	2,4-Dinitrophenol	U	1150	ug/kg	219	1150
132-64-9	Dibenzofuran	U	575	ug/kg	115	575
84-66-2	Diethylphthalate	U	575	ug/kg	115	575
86-73-7	Fluorene	U	57.5	ug/kg	17.3	57.5
7005-72-3	4-Chlorophenylphenylether	U	575	ug/kg	115	575
534-52-1	2-Methyl-4,6-dinitrophenol	U	575	ug/kg	115	575
100-01-6	4-Nitroaniline	U	575	ug/kg	173	575
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	575	ug/kg	115	575
122-66-7	Azobenzene	U	575	ug/kg	115	575
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	575	ug/kg	115	575
118-74-1	Hexachlorobenzene	U	575	ug/kg	115	575
85-01-8	Phenanthrene		86.0	ug/kg	17.3	57.5
120-12-7	Anthracene	U	57.5	ug/kg	11.5	57.5
84-74-2	Di-n-butylphthalate	U	575	ug/kg	115	575
206-44-0	Fluoranthene		131	ug/kg	17.3	57.5
85-68-7	Butylbenzylphthalate	U	575	ug/kg	115	575
56-55-3	Benzo(a)anthracene	J	49.0	ug/kg	17.3	57.5
91-94-1	3,3'-Dichlorobenzidine	U	575	ug/kg	173	575
218-01-9	Chrysene	J	52.3	ug/kg	17.3	57.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	575	ug/kg	115	575
117-84-0	Di-n-octylphthalate	U	575	ug/kg	115	575
205-99-2	Benzo(b)fluoranthene		67.1	ug/kg	17.3	57.5
207-08-9	Benzo(k)fluoranthene	J	29.2	ug/kg	17.3	57.5
50-32-8	Benzo(a)pyrene	J	43.3	ug/kg	17.3	57.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	26.0	ug/kg	17.3	57.5
53-70-3	Dibenzo(a,h)anthracene	U	57.5	ug/kg	17.3	57.5
191-24-2	Benzo(ghi)perylene	J	26.7	ug/kg	17.3	57.5
120-82-1	1,2,4-Trichlorobenzene	U	575	ug/kg	115	575

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	754	ug/kg		JA
	Unknown	3.18	1460	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Client ID: RE36-10-7520
Batch ID: 960659
Run Date: 03/12/2010 21:20
Prep Date: 03/04/2010 10:53
Data File: s5c1229.d

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.19	328	ug/kg		J
112-95-8	Eicosane	9.38	252	ug/kg	96	NJ
1599-67-3	1-Docosene	9.42	667	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	9.68	291	ug/kg	95	NJ
559-74-0	Friedelan-3-one	9.9	3840	ug/kg	99	NJ
	Unknown	10.01	479	ug/kg		J
	Unknown	10.07	1740	ug/kg		J
629-78-7	Heptadecane	10.36	394	ug/kg	91	NJ
	Unknown	11.72	690	ug/kg		J
	Unknown	11.8	2180	ug/kg		J
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.84	1500	ug/kg	83	NJ
	Unknown	11.96	558	ug/kg		J
	Unknown	12.1	891	ug/kg		J
	Unknown	12.57	5360	ug/kg		J
	Unknown	12.91	383	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1090	ug/kg	94	NJ
	Unknown	14.38	742	ug/kg		J

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2134

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
1202060535	MB for batch 960658	73	74	73	75	81	93
1202060536	LCS for batch 960658	82	78	85	80	82	87
248240001	RE36-10-7458	68	65	72	66	67	71
248240002	RE36-10-7453	64	66	62	47	64	54
248240003	RE36-10-7454	70	71	73	65	69	78
248240004	RE36-10-7460	71	73	78	71	72	87
248240005	RE36-10-7456	70	71	75	70	73	81
248240006	RE36-10-7455	69	70	72	67	69	74
248240007	RE36-10-7459	65	63	71	68	68	70
248240010	RE36-10-7519	61	59	68	66	71	78
248240008	RE36-10-7457	67	66	71	63	60	68
248240009	RE36-10-7520	63	63	62	58	68	70

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: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 960658

Matrix: SOIL

Lab Sample ID: 1202060536

Instrument: MSD5.I

Analysis Date: 03/10/2010 15:05

Dilution: 1

Analyst: RMB

Pred Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	1330	80	22-114
108-95-2	LCS Phenol	1670	0.0	1410	84	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1510	90	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1240	75	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1550	93	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1620	97	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1390	83	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1510	91	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	1860	112	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1600	96	27-116
129-00-0	LCS Pyrene	1670	0.0	1310	78	42-113
110-86-1	LCS Pyridine	1670	0.0	1370	82	8-125
62-53-3	LCS Aniline	1670	0.0	1240	75	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1340	81	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1240	75	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	1520	91	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1330	80	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1600	96	28-117
95-48-7	LCS o-Cresol	1670	0.0	1570	94	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1600	96	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1290	78	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1560	94	33-116

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 4

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 960658

Matrix: SOIL

Lab Sample ID: 1202060536

Instrument: MSD5.I

Analysis Date: 03/10/2010 15:05

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	1480	89	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	1350	81	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1430	86	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1380	83	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1460	88	34-116
65-85-0	LCS Benzoic acid	3330	0.0	3600	108	22-138
91-20-3	LCS Naphthalene	1670	0.0	1180	71	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	1190	71	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1340	80	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1370	82	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1280	77	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1520	91	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1430	86	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1340	80	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1580	95	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1470	88	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1500	90	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1420	85	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1430	86	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	2200	132 *	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1420	85	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1590	95	51-126

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 4

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 960658

Matrix: SOIL

Lab Sample ID: 1202060536

Instrument: MSD5.I

Analysis Date: 03/10/2010 15:05

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	1330	80	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1380	83	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1660	99	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1980	119	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1470	88	46-114
122-66-7	LCS Azobenzene <i>1,2</i> -Diphenylhydrazine	1670	0.0	1700	102	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1310	78	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1300	78	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	1690	101	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1520	91	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1640	98	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1480	89	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1240	74	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	1820	109	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1550	93	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1460	88	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1370	82	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1520	91	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1930	116	53-120

Semi-Volatile

Page 4 of 4

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 960658

Matrix: SOIL

Lab Sample ID:1202060536

Instrument: MSD5.I

Analysis Date: 03/10/2010 15:05

Dilution: 1

Analyst: RMB

Prep Batch II 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	1990	119	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1970	118	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1350	81	32-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike

Client ID: RE11-10-1857MS

Matrix: S

Lab Sample ID: 1202060537

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:16

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2170	0.00 U	1300	60	27-98
108-95-2	MS Phenol	2170	0.00 U	1390	64	33-94
95-57-8	MS 2-Chlorophenol	2170	0.00 U	1390	64	29-96
106-46-7	MS 1,4-Dichlorobenzene	2170	0.00 U	804	37	27-96
621-64-7	MS N-Nitrosodipropylamine	2170	0.00 U	1380	63	29-102
59-50-7	MS 4-Chloro-3-methylphenol	2170	0.00 U	1590	73	29-110
83-32-9	MS Acenaphthene	2170	0.00 U	1150	53	17-109
121-14-2	MS 2,4-Dinitrotoluene	2170	0.00 U	1230	56	33-107
100-02-7	MS 4-Nitrophenol	2170	0.00 U	1470	68	15-110
87-86-5	MS Pentachlorophenol	2170	0.00 U	1680	78	23-110
129-00-0	MS Pyrene	2170	0.00 U	1130	52	24-118
110-86-1	MS Pyridine	2170	0.00 U	1070	49	25-102
62-53-3	MS Aniline	2170	0.00 U	585	27	18-109
111-44-4	MS bis(2-Chloroethyl) ether	2170	0.00 U	1230	57	29-96
541-73-1	MS 1,3-Dichlorobenzene	2170	0.00 U	754	35	26-97
100-51-6	MS Benzyl alcohol	2170	0.00 U	1440	66	19-112
95-50-1	MS 1,2-Dichlorobenzene	2170	0.00 U	948	44	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	2170	0.00 U	1370	63	28-103
95-48-7	MS o-Cresol	2170	0.00 U	1460	67	32-107
65794-96-9	MS m,p-Cresols	2170	0.00 U	1410	65	33-115
67-72-1	MS Hexachloroethane	2170	0.00 U	883	41	25-100
98-95-3	MS Nitrobenzene	2170	0.00 U	1370	63	27-106

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike

Client ID: RE11-10-1857MS

Matrix: S

Lab Sample ID: 1202060537

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:16

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	2170	0.00 U	1410	65	29-104
88-75-5	MS 2-Nitrophenol	2170	0.00 U	1270	59	26-102
105-67-9	MS 2,4-Dimethylphenol	2170	0.00 U	1140	53	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	2170	0.00 U	1290	59	27-101
120-83-2	MS 2,4-Dichlorophenol	2170	0.00 U	1380	64	26-103
65-85-0	MS Benzoic acid	4340	0.00 U	4460	103	13-131
91-20-3	MS Naphthalene	2170	0.00 U	983	45	23-103
106-47-8	MS 4-Chloroaniline	2170	0.00 U	760	35	26-103
87-68-3	MS Hexachlorobutadiene	2170	0.00 U	801	37	28-101
91-57-6	MS 2-Methylnaphthalene	2170	0.00 U	1120	52	27-106
77-47-4	MS Hexachlorocyclopentadiene	2170	0.00 U	513	24	24-117
88-06-2	MS 2,4,6-Trichlorophenol	2170	0.00 U	1450	67	26-105
95-95-4	MS 2,4,5-Trichlorophenol	2170	0.00 U	1360	62	30-110
91-58-7	MS 2-Chloronaphthalene	2170	0.00 U	1110	51	28-102
88-74-4	MS 2-Nitroaniline <i>o</i> -Nitroaniline	2170	0.00 U	1380	63	33-106
99-09-2	MS 3-Nitroaniline <i>m</i> -Nitroaniline	2170	0.00 U	934	43	33-116
131-11-3	MS Dimethylphthalate	2170	0.00 U	1420	65	38-113
606-20-2	MS 2,6-Dinitrotoluene	2170	0.00 U	1300	60	29-107
208-96-8	MS Acenaphthylene	2170	0.00 U	1240	57	25-108
51-28-5	MS 2,4-Dinitrophenol	2170	0.00 U	1510	70	14-102
132-64-9	MS Dibenzofuran	2170	0.00 U	1210	56	35-112
84-66-2	MS Diethylphthalate	2170	0.00 U	1520	70	36-122

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike

Client ID: RE11-10-1857MS

Matrix: S

Lab Sample ID: 1202060537

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:16

Dilution: 1

Analyst: RMB

Pre Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	2170	0.00 U	1140	53	33-105
7005-72-3	MS 4-Chlorophenylphenylether	2170	0.00 U	1140	52	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	2170	0.00 U	1210	56	26-97
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	2170	0.00 U	1400	65	28-135
122-39-4	MS Diphenylamine	2170	0.00 U	1190	55	33-109
122-66-7	MS Azobenzene <i>1,2</i> -Diphenylhydrazine	2170	0.00 U	1450	67	31-113
101-55-3	MS 4-Bromophenylphenylether	2170	0.00 U	1100	51	31-109
118-74-1	MS Hexachlorobenzene	2170	0.00 U	1060	49	37-99
85-01-8	MS Phenanthrene	2170	0.00 U	1150	53	29-109
120-12-7	MS Anthracene	2170	0.00 U	1120	52	19-118
84-74-2	MS Di-n-butylphthalate	2170	0.00 U	1440	66	39-123
206-44-0	MS Fluoranthene	2170	0.00 U	1140	52	33-114
85-68-7	MS Butylbenzylphthalate	2170	0.00 U	1470	67	35-131
56-55-3	MS Benzo(a)anthracene	2170	0.00 U	1040	48	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	2170	0.00 U	0.00	0 *	30-124
218-01-9	MS Chrysene	2170	0.00 U	1080	50	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	2170	0.00 U	1580	73	37-129
117-84-0	MS Di-n-octylphthalate	2170	0.00 U	1550	71	31-143
205-99-2	MS Benzo(b)fluoranthene	2170	0.00 U	1070	49	29-118
207-08-9	MS Benzo(k)fluoranthene	2170	0.00 U	1100	51	32-118
50-32-8	MS Benzo(a)pyrene	2170	0.00 U	1030	47	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	2170	0.00 U	944	43	29-114

Semi-Volatile

Page 4 of 8

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Matrix Spike

Client ID: RE11-10-1857MS

Matrix: S

Lab Sample ID: 1202060537

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:16

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2170	0.00 U	1060	49	27-119
191-24-2	MS Benzo(ghi)perylene	2170	0.00 U	860	40	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	2170	0.00 U	1000	46	28-99

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike Duplicate

Client ID: RE11-10-1857MSD

Matrix: S

Lab Sample ID: 1202060538

% Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:39

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2180	0.00 U	1330	61	27-98	2	0-30
108-95-2	MSD Phenol	2180	0.00 U	1460	67	33-94	5	0-30
95-57-8	MSD 2-Chlorophenol	2180	0.00 U	1440	66	29-96	4	0-30
106-46-7	MSD 1,4-Dichlorobenzene	2180	0.00 U	850	39	27-96	6	0-30
621-64-7	MSD N-Nitrosodipropylamine	2180	0.00 U	1440	66	29-102	5	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	2180	0.00 U	1570	72	29-110	1	0-30
83-32-9	MSD Acenaphthene	2180	0.00 U	1140	53	17-109	1	0-30
121-14-2	MSD 2,4-Dinitrotoluene	2180	0.00 U	1240	57	33-107	1	0-30
100-02-7	MSD 4-Nitrophenol	2180	0.00 U	1560	71	15-110	5	0-30
87-86-5	MSD Pentachlorophenol	2180	0.00 U	1550	71	23-110	8	0-30
129-00-0	MSD Pyrene	2180	0.00 U	978	45	24-118	15	0-30
110-86-1	MSD Pyridine	2180	0.00 U	1120	52	25-102	5	0-30
62-53-3	MSD Aniline	2180	0.00 U	524	24	18-109	11	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	2180	0.00 U	1190	55	29-96	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	2180	0.00 U	805	37	26-97	6	0-30
100-51-6	MSD Benzyl alcohol	2180	0.00 U	1500	69	19-112	4	0-30
95-50-1	MSD 1,2-Dichlorobenzene	2180	0.00 U	999	46	30-97	5	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	2180	0.00 U	1400	64	28-103	2	0-30
95-48-7	MSD o-Cresol	2180	0.00 U	1600	74	32-107	10	0-30
65794-96-9	MSD m,p-Cresols	2180	0.00 U	1420	65	33-115	1	0-30
67-72-1	MSD Hexachloroethane	2180	0.00 U	958	44	25-100	8	0-30
98-95-3	MSD Nitrobenzene	2180	0.00 U	1390	64	27-106	2	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike Duplicate

Client ID: RE11-10-1857MSD

Matrix: S

Lab Sample ID: 1202060538

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:39

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2180	0.00 U	1430	66	29-104	1	0-30
88-75-5	MSD 2-Nitrophenol	2180	0.00 U	1280	59	26-102	1	0-30
105-67-9	MSD 2,4-Dimethylphenol	2180	0.00 U	1070	49	22-104	6	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2180	0.00 U	1340	62	27-101	4	0-30
120-83-2	MSD 2,4-Dichlorophenol	2180	0.00 U	1370	63	26-103	0	0-30
65-85-0	MSD Benzoic acid	4360	0.00 U	4410	101	13-131	1	0-30
91-20-3	MSD Naphthalene	2180	0.00 U	992	46	23-103	1	0-30
106-47-8	MSD 4-Chloroaniline	2180	0.00 U	739	34	26-103	3	0-30
87-68-3	MSD Hexachlorobutadiene	2180	0.00 U	810	37	28-101	1	0-30
91-57-6	MSD 2-Methylnaphthalene	2180	0.00 U	1120	52	27-106	0	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2180	0.00 U	530	24	24-117	3	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2180	0.00 U	1390	64	26-105	4	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2180	0.00 U	1320	60	30-110	3	0-30
91-58-7	MSD 2-Chloronaphthalene	2180	0.00 U	1110	51	28-102	1	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	2180	0.00 U	1380	63	33-106	0	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	2180	0.00 U	920	42	33-116	2	0-30
131-11-3	MSD Dimethylphthalate	2180	0.00 U	1460	67	38-113	3	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2180	0.00 U	1280	59	29-107	2	0-30
208-96-8	MSD Acenaphthylene	2180	0.00 U	1220	56	25-108	1	0-30
51-28-5	MSD 2,4-Dinitrophenol	2180	0.00 U	1600	73	14-102	6	0-30
132-64-9	MSD Dibenzofuran	2180	0.00 U	1190	54	35-112	2	0-30
84-66-2	MSD Diethylphthalate	2180	0.00 U	1480	68	36-122	2	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 7 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike Duplicate

Client ID: RE11-10-1857MSD

Matrix: S

Lab Sample ID: 1202060538

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:39

Dilution: 1

Analyst: RMB

Pre Batch II 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2180	0.00 U	1120	51	33-105	2	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2180	0.00 U	1110	51	30-110	2	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2180	0.00 U	1280	59	26-97	5	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	2180	0.00 U	1220	56	28-135	14	0-30
122-39-4	MSD Diphenylamine	2180	0.00 U	1120	51	33-109	6	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	2180	0.00 U	1400	64	31-113	3	0-30
101-55-3	MSD 4-Bromophenylphenylether	2180	0.00 U	1020	47	31-109	7	0-30
118-74-1	MSD Hexachlorobenzene	2180	0.00 U	1030	47	37-99	3	0-30
85-01-8	MSD Phenanthrene	2180	0.00 U	1090	50	29-109	5	0-30
120-12-7	MSD Anthracene	2180	0.00 U	1070	49	19-118	5	0-30
84-74-2	MSD Di-n-butylphthalate	2180	0.00 U	1320	61	39-123	9	0-30
206-44-0	MSD Fluoranthene	2180	0.00 U	1100	50	33-114	4	0-30
85-68-7	MSD Butylbenzylphthalate	2180	0.00 U	1280	59	35-131	14	0-30
56-55-3	MSD Benzo(a)anthracene	2180	0.00 U	988	45	30-111	5	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2180	0.00 U	0.00	0 *	30-124	0	0-30
218-01-9	MSD Chrysene	2180	0.00 U	1070	49	32-108	1	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2180	0.00 U	1390	64	37-129	13	0-30
117-84-0	MSD Di-n-octylphthalate	2180	0.00 U	1310	60	31-143	17	0-30
205-99-2	MSD Benzo(b)fluoranthene	2180	0.00 U	950	44	29-118	12	0-30
207-08-9	MSD Benzo(k)fluoranthene	2180	0.00 U	1000	46	32-118	10	0-30
50-32-8	MSD Benzo(a)pyrene	2180	0.00 U	959	44	33-115	7	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2180	0.00 U	939	43	29-114	1	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 8 of 8

SDG Number: 10-2134

Sample Type: Matrix Spike Duplicate

Client ID: RE11-10-1857MSD

Matrix: S

Lab Sample ID: 1202060538

%Moisture: 23.5

Instrument: MSD5.I

Analysis Date: 03/10/2010 19:39

Dilution: 1

Analyst: RMB

Prep Batch ID: 960658

Inj. Vol: .5 uL

Batch ID: 960659

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	2180	0.00 U	1070	49	27-119	1	0-30
191-24-2	MSD Benzo(ghi)perylene	2180	0.00 U	856	39	28-112	0	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2180	0.00 U	1040	48	28-99	3	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-2134	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 960658	Instrument ID:	MSD5.I	Data File:	s5c1014-2.d
Lab Sample ID:	1202060535	Prep Date:	03/04/2010 10:53	Analyzed:	03/10/10 14:41
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 960658	1202060536	s5c1015-2.d	03/10/10	1505
04 RE36-10-7458	248240001	s5c1031.d	03/10/10	2111
05 RE36-10-7453	248240002	s5c1032.d	03/10/10	2134
06 RE36-10-7454	248240003	s5c1033.d	03/10/10	2158
07 RE36-10-7460	248240004	s5c1034.d	03/10/10	2221
08 RE36-10-7456	248240005	s5c1035.d	03/10/10	2244
09 RE36-10-7455	248240006	s5c1036.d	03/10/10	2306
10 RE36-10-7459	248240007	s5c1124.d	03/11/10	1925
11 RE36-10-7519	248240010	s5c1127.d	03/11/10	2033
12 RE36-10-7457	248240008	s5c1228.d	03/12/10	2057
13 RE36-10-7520	248240009	s5c1229.d	03/12/10	2120

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: MSD5.I

Injection Date/Time: 10-MAR-10 11:15

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s031010.b/s5c1006.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	57.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	50.5
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	57.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.9
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	63.2
443	17 - 23% of mass 442	21.6

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
API2CVS	WBN100218-03.2	s5c1008.d	10-MAR-10 11:57
MEGACVS	WBN100129-05.5	s5c1010.d	10-MAR-10 12:50
SBLK01	1202060535	s5c1014-2.d	10-MAR-10 14:41
SBLK01LCS	1202060536	s5c1015-2.d	10-MAR-10 15:05
RE36-10-7458	248240001	s5c1031.d	10-MAR-10 21:11
RE36-10-7453	248240002	s5c1032.d	10-MAR-10 21:34
RE36-10-7454	248240003	s5c1033.d	10-MAR-10 21:58
RE36-10-7460	248240004	s5c1034.d	10-MAR-10 22:21
RE36-10-7456	248240005	s5c1035.d	10-MAR-10 22:44
RE36-10-7455	248240006	s5c1036.d	10-MAR-10 23:06

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: MSD5.I

Injection Date/Time: 11-MAR-10 10:38

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s031110.b/s5c1101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	50.6
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	45.8
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	55.7
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	7.1
275	10 - 30% of mass 198	25.3
365	Greater than 1% of mass 198	4.3
441	Present, but less than mass 443	75.2
442	Greater than 40% of mass 198	73.4
443	17 - 23% of mass 442	21

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	WBN100129-05.5	s5c1102.d	11-MAR-10 10:52
API2CVS	WBN100218-03.2	s5c1103.d	11-MAR-10 11:20
RE36-10-7459	248240007	s5c1124.d	11-MAR-10 19:25
RE36-10-7519	248240010	s5c1127.d	11-MAR-10 20:33

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: MSD5.I

Injection Date/Time: 12-MAR-10 10:40

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s031210.b/s5c1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	51.4
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	47
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	56.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	25.8
365	Greater than 1% of mass 198	4.3
441	Present, but less than mass 443	74.3
442	Greater than 40% of mass 198	73.7
443	17 - 23% of mass 442	20.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100129-05.5	s5c1202.d	12-MAR-10 10:54
AP12CVS	WBN100218-03.2	s5c1203.d	12-MAR-10 11:22
RE36-10-7457	248240008	s5c1228.d	12-MAR-10 20:57
RE36-10-7520	248240009	s5c1229.d	12-MAR-10 21:20

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: MSD5.I

Injection Date/Time: 17-FEB-10 14:51

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s021710.b/s5b1701.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.5
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	41.3
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	49.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	26.6
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	67.4
442	Greater than 40% of mass 198	82.6
443	17 - 23% of mass 442	21.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICAL010	WBN100120-01	s5b1711.d	17-FEB-10 19:16
AP12ICAL020	WBN100120-02	s5b1712.d	17-FEB-10 19:38
AP12ICAL040	WBN100120-03.1	s5b1713.d	17-FEB-10 20:01
AP12ICAL050	WBN100120-04	s5b1714.d	17-FEB-10 20:24
AP12ICAL080	WBN100120-05	s5b1715.d	17-FEB-10 20:47
AP12ICAL100	WBN100120-06	s5b1716.d	17-FEB-10 21:10
AP12ICAL120	WBN100120-07	s5b1717.d	17-FEB-10 21:33
AP12ICV	WBN100120-08.1	s5b1719.d	17-FEB-10 22:24

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2134

Instrument ID: MSD5.I

Injection Date/Time: 18-FEB-10 08:43

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s021710.b/s5b1727.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	43.6
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	40.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	25.7
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	72.2
442	Greater than 40% of mass 198	86.9
443	17 - 23% of mass 442	21.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN100215-08	s5b1729.d	18-FEB-10 09:42
MEGAICAL010	WBN100215-07	s5b1730.d	18-FEB-10 10:10
MEGAICAL020	WBN100215-06	s5b1731.d	18-FEB-10 10:39
MEGAICAL040	WBN100215-05.1	s5b1732.d	18-FEB-10 11:08
MEGAICAL050	WBN100215-04	s5b1733.d	18-FEB-10 11:35
MEGAICAL080	WBN100215-03	s5b1734.d	18-FEB-10 12:04
MEGAICAL100	WBN100215-02	s5b1735.d	18-FEB-10 12:32
MEGAICAL120	WBN100215-01	s5b1736.d	18-FEB-10 13:01
MEGAICV	WBN100215-09.1	s5b1738.d	18-FEB-10 13:53

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2134

Instrument: MSD5.1

STD Analysis Time: 10-MAR-10 12:50

GC Column: J&W DB-5MS

Data File: s5c1010.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	264428		3.79	1030643		4.65	587510		5.9	1034302		7.06	1013728		9.46	1011401		11.0
Upper Limit	528856		4.29	2061286		5.15	1175020		6.4	2068604		7.56	2027456		9.96	2022802		11.5
Lower Limit	132214		3.29	515322		4.15	293755		5.4	517151		6.56	506864		8.96	505701		10.5
Sample ID																		
BLK01	226602		3.78	830368		4.64	478134		5.9	825330		7.05	777461		9.44	719553		11.0
BLK01LCS	254005		3.78	983809		4.65	562431		5.9	1012204		7.05	983637		9.45	964682		11.0
RE36-10-7458	250591		3.78	940492		4.65	554149		5.9	972857		7.05	833420		9.45	675945		11.0
RE36-10-7453	238371		3.78	918618		4.65	529856		5.9	925815		7.05	837838		9.45	646842		11.0
RE36-10-7454	234053		3.78	892697		4.65	527119		5.9	920413		7.05	801717		9.45	623850		11.0
RE36-10-7460	273880		3.78	1031258		4.65	606664		5.9	1055711		7.05	870993		9.45	622287		11.0
RE36-10-7456	263241		3.78	1004597		4.64	582475		5.9	1007459		7.05	852507		9.45	608111		11.0
RE36-10-7455	227889		3.78	893343		4.65	508368		5.9	883984		7.05	754970		9.45	513812		11.0

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: 10-2134

Instrument: MSD5.I

STD Analysis Time: 11-MAR-10 10:52

GC Column: J&W DB-5MS

Data File: s5c1102.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	223442		3.92	899668		4.78	502203		6.03	899929		7.2	893171		9.62	888565		11.3
Upper Limit	446884		4.42	1799336		5.28	1004406		6.53	1799858		7.7	1786342		10.1	1777130		11.8
Lower Limit	111721		3.42	449834		4.28	251102		5.53	449965		6.7	446586		9.12	444283		10.8
Sample ID																		
RE36-10-7459	260431		3.91	984814		4.77	565629		6.02	1008268		7.2	895169		9.61	680007		11.3
RE36-10-7519	255110		3.91	955862		4.77	544101		6.03	944635		7.2	798313		9.61	629685		11.3

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2134

Instrument: MSD5.I

STD Analysis Time: 12-MAR-10 10:54

GC Column: J&W DB-5MS

Data File: s5c1202.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	243328		3.91	964709		4.77	553511		6.03	970735		7.2	964578		9.61	947823		11.3
Upper Limit	486656		4.41	1929418		5.27	1107022		6.53	1941470		7.7	1929156		10.1	1895646		11.8
Lower Limit	121664		3.41	482355		4.27	276756		5.53	485368		6.7	482289		9.11	473912		10.8
Sample ID																		
RE36-10-7457	270648		3.91	1024054		4.77	588893		6.02	1013781		7.19	787770		9.61	519738		11.3
RE36-10-7520	275565		3.91	1047163		4.77	600811		6.02	1035579		7.19	914625		9.6	663583		11.3

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	%Moisture: 44.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7453	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 21:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s5c1032.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	601	ug/kg	120	601
108-95-2	Phenol	U	601	ug/kg	120	601
95-57-8	2-Chlorophenol	U	601	ug/kg	120	601
106-46-7	1,4-Dichlorobenzene	U	601	ug/kg	120	601
621-64-7	N-Nitrosodipropylamine	U	601	ug/kg	120	601
59-50-7	4-Chloro-3-methylphenol	U	601	ug/kg	120	601
83-32-9	Acenaphthene	U	60.1	ug/kg	19.8	60.1
121-14-2	2,4-Dinitrotoluene	U	601	ug/kg	60.1	601
100-02-7	4-Nitrophenol	U	601	ug/kg	198	601
87-86-5	Pentachlorophenol	U	601	ug/kg	150	601
129-00-0	Pyrene		107	ug/kg	18.0	60.1
110-86-1	Pyridine	U	601	ug/kg	120	601
62-53-3	Aniline	U	601	ug/kg	180	601
111-44-4	bis(2-Chloroethyl) ether	U	601	ug/kg	120	601
541-73-1	1,3-Dichlorobenzene	U	601	ug/kg	120	601
100-51-6	Benzyl alcohol	U	601	ug/kg	180	601
95-50-1	1,2-Dichlorobenzene	U	601	ug/kg	120	601
108-60-1	bis(2-Chloroisopropyl)ether	U	601	ug/kg	120	601
95-48-7	o-Cresol	U	601	ug/kg	120	601
65794-96-9	m,p-Cresols	U	601	ug/kg	180	601
67-72-1	Hexachloroethane	U	601	ug/kg	120	601
98-95-3	Nitrobenzene	U	601	ug/kg	120	601
78-59-1	Isophorone	U	601	ug/kg	120	601
88-75-5	2-Nitrophenol	U	601	ug/kg	120	601
105-67-9	2,4-Dimethylphenol	U	601	ug/kg	210	601
111-91-1	bis(2-Chloroethoxy)methane	U	601	ug/kg	120	601
120-83-2	2,4-Dichlorophenol	U	601	ug/kg	120	601
65-85-0	Benzoic acid	U	1200	ug/kg	301	1200
91-20-3	Naphthalene	U	60.1	ug/kg	18.0	60.1
106-47-8	4-Chloroaniline	U	601	ug/kg	120	601
87-68-3	Hexachlorobutadiene	U	601	ug/kg	120	601
91-57-6	2-Methylnaphthalene	U	60.1	ug/kg	12.0	60.1
77-47-4	Hexachlorocyclopentadiene	U	601	ug/kg	120	601
88-06-2	2,4,6-Trichlorophenol	U	601	ug/kg	120	601
95-95-4	2,4,5-Trichlorophenol	U	601	ug/kg	120	601
91-58-7	2-Chloronaphthalene	U	60.1	ug/kg	19.8	60.1
88-74-4	2-Nitroaniline	U	601	ug/kg	120	601
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	601	ug/kg	120	601

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	%Moisture: 44.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7453	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.1	Dilution: 1
Run Date: 03/10/2010 21:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s5c1032.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	601	ug/kg	120	601
606-20-2	2,6-Dinitrotoluene	U	601	ug/kg	60.1	601
208-96-8	Acenaphthylene	U	60.1	ug/kg	18.0	60.1
51-28-5	2,4-Dinitrophenol	U	1200	ug/kg	228	1200
132-64-9	Dibenzofuran	U	601	ug/kg	120	601
84-66-2	Diethylphthalate	U	601	ug/kg	120	601
86-73-7	Fluorene	U	60.1	ug/kg	18.0	60.1
7005-72-3	4-Chlorophenylphenylether	U	601	ug/kg	120	601
534-52-1	2-Methyl-4,6-dinitrophenol	U	601	ug/kg	120	601
100-01-6	4-Nitroaniline	U	601	ug/kg	180	601
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	601	ug/kg	120	601
122-66-7	Azobenzene	U	601	ug/kg	120	601
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	601	ug/kg	120	601
118-74-1	Hexachlorobenzene	U	601	ug/kg	120	601
85-01-8	Phenanthrene		89.0	ug/kg	18.0	60.1
120-12-7	Anthracene	U	60.1	ug/kg	12.0	60.1
84-74-2	Di-n-butylphthalate	U	601	ug/kg	120	601
206-44-0	Fluoranthene		146	ug/kg	18.0	60.1
85-68-7	Butylbenzylphthalate	U	601	ug/kg	120	601
56-55-3	Benzo(a)anthracene	J	52.1	ug/kg	18.0	60.1
91-94-1	3,3'-Dichlorobenzidine	U	601	ug/kg	180	601
218-01-9	Chrysene		63.6	ug/kg	18.0	60.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	601	ug/kg	120	601
117-84-0	Di-n-octylphthalate	U	601	ug/kg	120	601
205-99-2	Benzo(b)fluoranthene		75.2	ug/kg	18.0	60.1
207-08-9	Benzo(k)fluoranthene	J	32.4	ug/kg	18.0	60.1
50-32-8	Benzo(a)pyrene	J	55.4	ug/kg	18.0	60.1
193-39-5	Indeno(1,2,3-cd)pyrene	J	31.3	ug/kg	18.0	60.1
53-70-3	Dibenzo(a,h)anthracene	U	60.1	ug/kg	18.0	60.1
191-24-2	Benzo(ghi)perylene	U	60.1	ug/kg	18.0	60.1
120-82-1	1,2,4-Trichlorobenzene	U	601	ug/kg	120	601

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	352	ug/kg		JA
	Unknown	3.05	2200	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240002	Date Received: 02/27/2010 09:10	% Moisture: 44.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7453	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 21:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s5c1032.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
112-95-8	Eicosane	9.87	327	ug/kg	91	NJ
1599-67-3	1-Docosene	9.89	500	ug/kg	99	NJ
	Unknown	10.32	504	ug/kg		J
	Unknown	10.42	796	ug/kg		J
	Unknown	11.18	5380	ug/kg		J
	Unknown	11.45	3540	ug/kg		J
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.56	385	ug/kg	86	NJ
	Unknown	11.93	12600	ug/kg		J
	Unknown	12.01	850	ug/kg		J
	Unknown	12.32	270	ug/kg		J
	Unknown	12.58	869	ug/kg		J
	Unknown	12.6	895	ug/kg		J
	Unknown	13.33	406	ug/kg		J
	Unknown	13.84	249	ug/kg		J
	Unknown	13.87	287	ug/kg		J
	Unknown	13.95	321	ug/kg		J
	Unknown	14.25	257	ug/kg		J
	Unknown	14.47	359	ug/kg		J

Data File: /chem/MSD5.i/s031010.b/s5c1032.d
Report Date: 11-Mar-2010 07:55

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1032.d
Lab Smp Id: 248240002 Client Smp ID: RE36-10-7453
Inj Date : 10-MAR-2010 21:34
Operator : RMB Inst ID: MSD5.i
Smp Info : |248240002|960659|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	44.72180	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791 (1.000)	238371	40.0000	
* 29 Naphthalene-d8	136	4.648	4.653 (1.000)	918618	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905 (1.000)	529856	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060 (1.000)	925815	40.0000	
* 91 Chrysene-d12	240	9.448	9.458 (1.000)	837838	40.0000	
* 98 Perylene-d12	264	11.024	11.033 (1.000)	646842	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977 (0.789)	382594	64.2771	3860
\$ 5 Phenol-d5	99	3.507	3.507 (0.927)	469024	65.5606	3940
\$ 20 Nitrobenzene-d5	82	4.143	4.152 (0.891)	210478	30.8350	1850
\$ 39 2-Fluorobiphenyl	172	5.389	5.394 (0.914)	309952	23.4208	1410
\$ 60 2,4,6-Tribromophenol	329	6.489	6.492 (1.101)	126868	63.7489	3830
\$ 81 p-Terphenyl-d14	244	8.425	8.428 (0.892)	378227	27.1388	1630

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.319	8.322	(0.880)	41284	1.78324	107
68 Phenanthrene	178	7.072	7.079	(1.002)	29015	1.48046	89.0
76 Fluoranthene	202	8.107	8.110	(1.149)	49674	2.42970	146
89 Benzo(a)anthracene	228	9.436	9.444	(0.999)	16247	0.86711	52.1(a)
92 Chrysene	228	9.472	9.482	(1.002)	18458	1.05717	63.6
95 Benzo(b)fluoranthene	252	10.542	10.551	(0.956)	19315	1.25013	75.2
96 Benzo(k)fluoranthene	252	10.566	10.580	(0.958)	8102	0.53863	32.4(a)
97 Benzo(a)pyrene	252	10.942	10.961	(0.993)	11962	0.92160	55.4(a)
99 Indeno(1,2,3-cd)pyrene	276	12.654	12.675	(1.148)	5579	0.52123	31.3(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5c1032.d

Report Date: 03/11/2010 07:23

Lab. ID: 248240002

SampleType: SAMPLE

Injection Date: 10-MAR-2010 21:34

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240002|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	28067	3.51	3.57	80-120	100	(T)
93	2644	3.46	3.57	220-280	9	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	30163	4.14	4.03	80-120	100	(T)
42	20970	4.14	4.03	57-117	70	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	1474	4.40	4.43	80-120	100	()
122	823	4.40	4.43	45-105	56	()
77	1732	4.42	4.43	40-100	117	(Q)

43	Dimethylphthalate		CAS#: 131-11-3			
163	94279	5.90	5.67	80-120	100	(T)
164	529856	5.90	5.67	0- 40	562	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	69190	5.90	5.73	80-120	100	(T)
63	1146	5.90	5.72	62-122	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	69007	5.90	6.02	80-120	100	(T)
89	1302	5.90	6.02	50-110	2	(QT)
63	1146	5.90	6.02	24- 84	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52 4-Nitrophenol		CAS#: 100-02-7				
139	779	6.04	5.94	80-120	100	(T)
109	427	6.01	5.94	50-110	55	(T)
65	530	5.96	5.94	82-142	68	(Q)

53 Fluorene		CAS#: 86-73-7				
166	6273	6.49	6.31	80-120	100	(T)
165	6638	6.48	6.31	61-121	106	(T)
167	2313	6.48	6.31	0- 44	37	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	531	6.49	6.32	80-120	100	(T)
105	1442	6.48	6.32	12- 72	271	(QT)
51	931	6.48	6.32	36- 96	175	(QT)

68 Phenanthrene		CAS#: 85-01-8				
178	29015	7.07	7.08	80-120	100	()
179	5672	7.07	7.08	0- 46	20	()
176	6076	7.07	7.08	0- 49	21	()

69 Anthracene		CAS#: 120-12-7				
178	29015	7.07	7.12	80-120	100	()
179	5672	7.07	7.12	0- 46	20	()
176	6076	7.07	7.12	0- 48	21	()

76 Fluoranthene		CAS#: 206-44-0				
202	49674	8.11	8.11	80-120	100	()
203	8103	8.11	8.11	0- 48	16	()
101	6174	8.10	8.11	0- 42	12	()

79 Pyrene		CAS#: 129-00-0				
202	41284	8.32	8.32	80-120	100	()
200	8636	8.32	8.32	0- 51	21	()
101	6789	8.32	8.32	0- 44	16	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	16247	9.44	9.44	80-120	100	()
226	4704	9.44	9.44	0- 56	29	()
229	4215	9.44	9.44	0- 50	26	()

92 Chrysene		CAS#: 218-01-9				
228	18458	9.47	9.48	80-120	100	()
229	4013	9.47	9.48	0- 51	22	()
226	6136	9.47	9.48	0- 60	33	()

93 bis(2-Ethylhexyl)phthalate		CAS#: 117-81-7				
149	23907	9.38	9.39	80-120	100	()
167	3521	9.38	9.39	2- 62	15	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	19315	10.54	10.55	80-120	100	()
253	4560	10.55	10.55	0- 52	24	()
125	2808	10.54	10.55	0- 41	15	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	8102	10.57	10.58	80-120	100	()
253	2376	10.57	10.58	0- 52	29	()
125	2079	10.57	10.58	0- 42	26	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	11962	10.94	10.96	80-120	100	()
253	2460	10.94	10.96	0- 52	21	()
125	2144	10.94	10.96	0- 30	18	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	5579	12.65	12.67	80-120	100	()
138	2172	12.65	12.68	0- 59	39	()

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	4608	13.15	13.18	80-120	100	()
138	1581	13.15	13.18	0- 30	34	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1032.d
 Lab Smp Id: 248240002 Client Smp ID: RE36-10-7453
 Inj Date : 10-MAR-2010 21:34
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240002|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 32
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	44.72180	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.784	1597454	40.000
* 91 Chrysene-d12	9.448	2230377	40.000
* 98 Perylene-d12	11.024	1944047	40.000

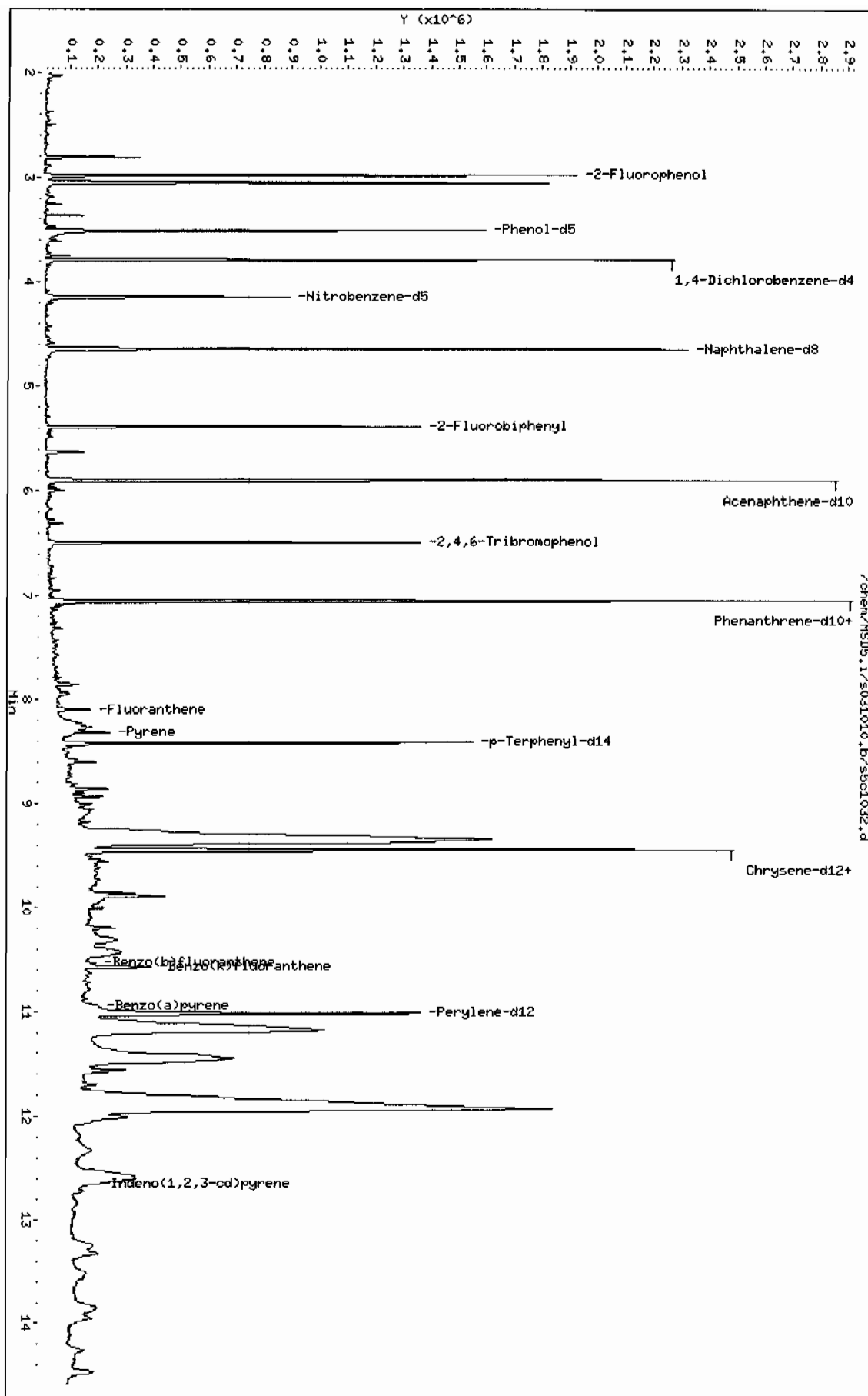
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.813	233981	5.85885164	352	0		0	10
Unknown					CAS #:		
3.054	1460407	36.5683546	2200	0		0	10
Eicosane					CAS #: 112-95-8		
9.866	303012	5.43426786	327	91	NIST05.L	113488	91
1-Docosene					CAS #: 1599-67-3		
9.889	463355	8.30988988	500	99	NIST05.L	129889	91
Unknown					CAS #:		
10.319	407320	8.38086301	504	0		0	98
Unknown					CAS #:		
10.424	643300	13.2363016	796	0		0	98
Unknown					CAS #:		
11.183	4350760	89.5196360	5380	0		0	98
Unknown					CAS #:		
11.454	2865363	58.9566654	3540	0		0	98
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi					CAS #: 54833-34-0		
11.560	311613	6.41163444	385	86	NIST05.L	82661	98
Unknown					CAS #:		
11.930	10153552	208.915755	12600	0		0	98
Unknown					CAS #:		
12.007	686781	14.1309498	850	0		0	98
Unknown					CAS #:		
12.318	218417	4.49407309	270	0		0	98
Unknown					CAS #:		
12.577	702804	14.4606346	869	0		0	98
Unknown					CAS #:		
12.601	723403	14.8844827	895	0		0	98
Unknown					CAS #:		
13.330	328284	6.75465551	406	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
----	----	-----	-----	----	-----	-----	-----
Unknown					CAS #:		
13.842	201258	4.14101815	249	0		0	98
Unknown					CAS #:		
13.865	232084	4.77527695	287	0		0	98
Unknown					CAS #:		
13.954	259454	5.33842875	321	0		0	98
Unknown					CAS #:		
14.254	207360	4.26655643	256	0		0	98
Unknown					CAS #:		
14.465	290304	5.97318762	359	0		0	98

Data File: /chem/HSD5.i/s031010.b/s501032.d
 Date : 10-MAR-2010 21:34
 Client ID: RE36-10-7453
 Sample Info: 1248240002196065911/SW111/LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD5.i
 Operator: RHB
 Column diameter: 0.20



Data File: /chem/HSD5.i/s031010.b/s5c1032.d

Page 2

Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: I248240002196065911ISVM11ILANL

Volume Injected (uL): 0.5

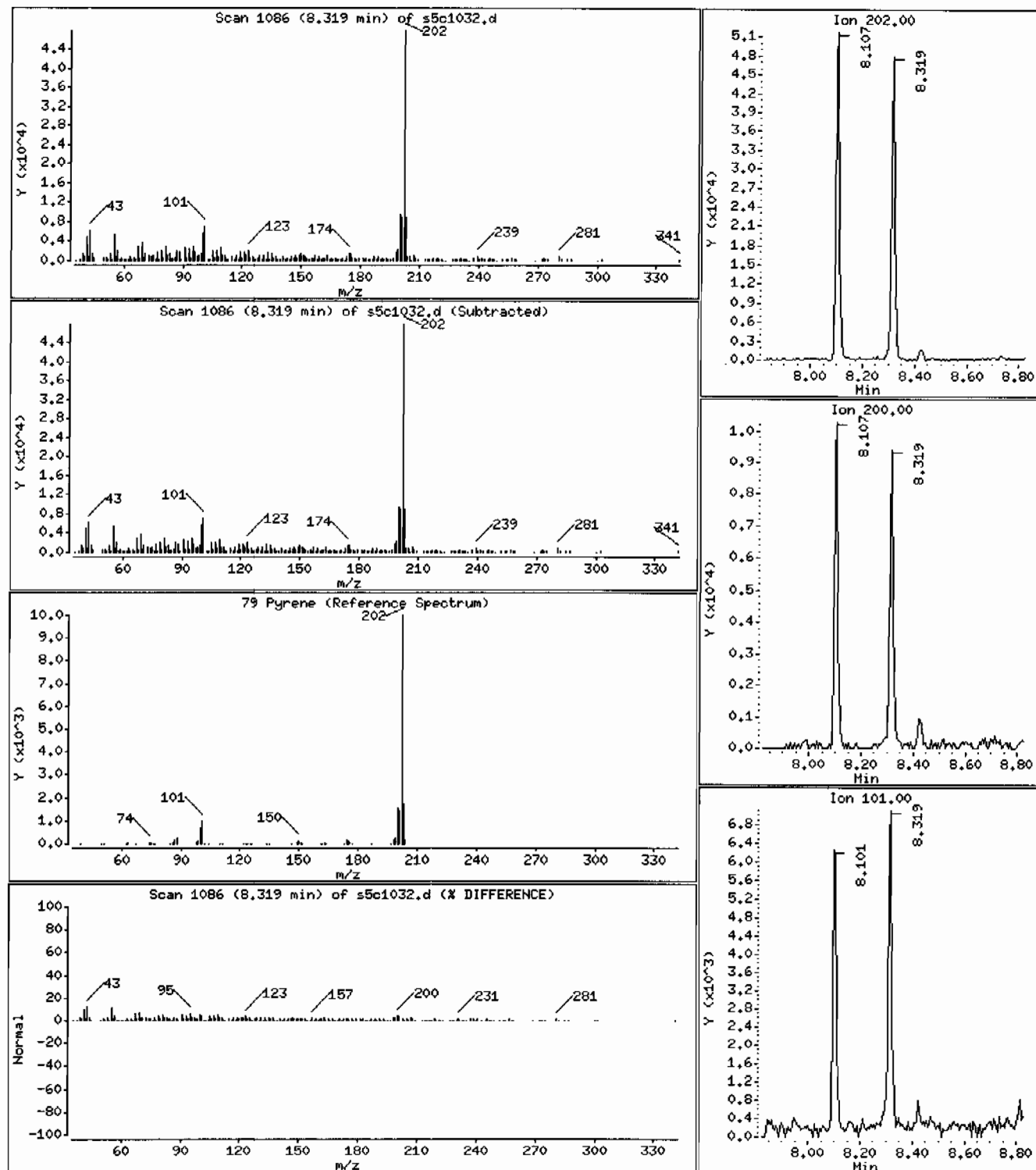
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 107 ug/Kg



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: I248240002196065911SVH11ILANL

Volume Injected (uL): 0.5

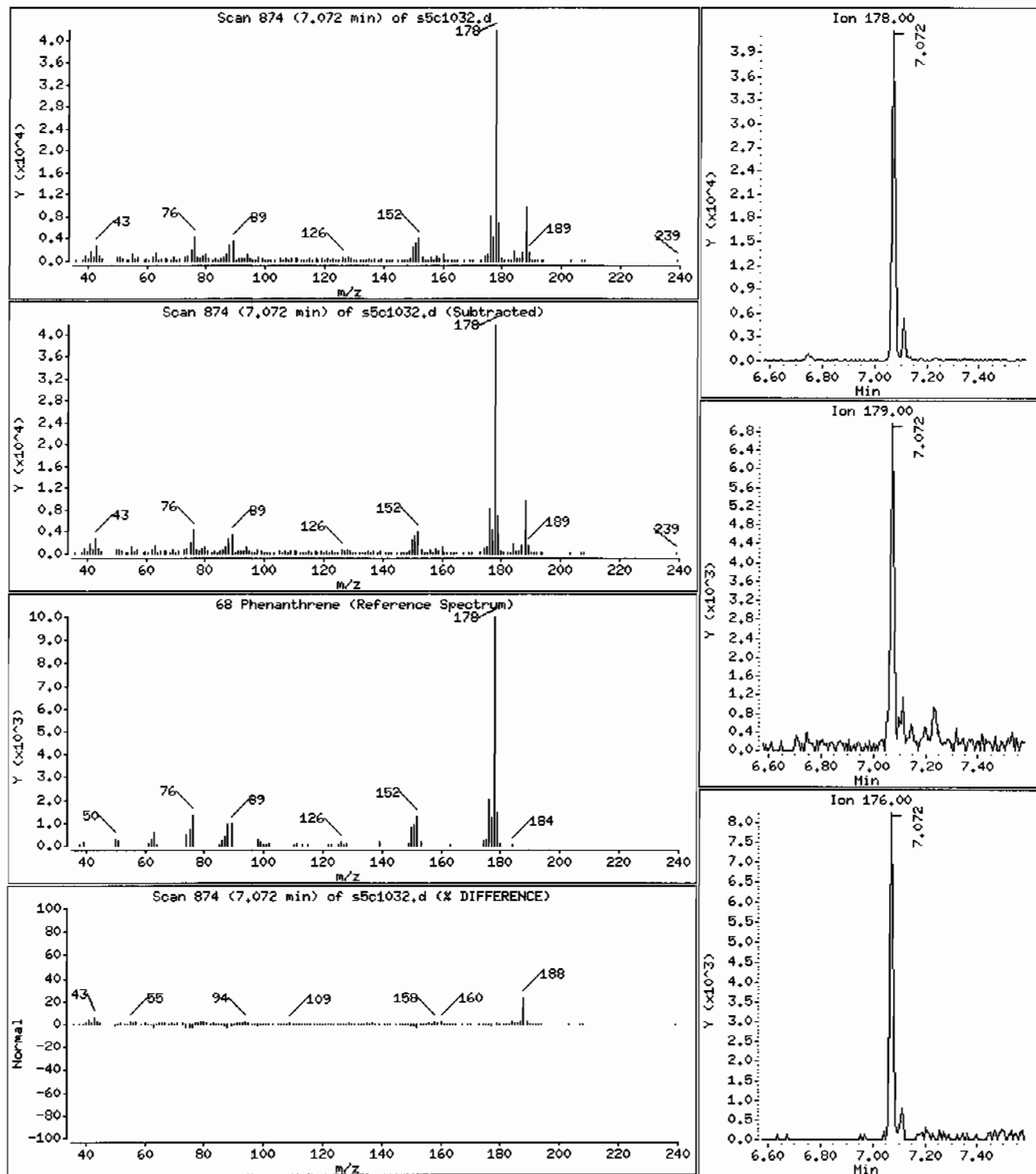
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 89.0 ug/Kg



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002196065911ISVH11ILANL

Volume Injected (uL): 0.5

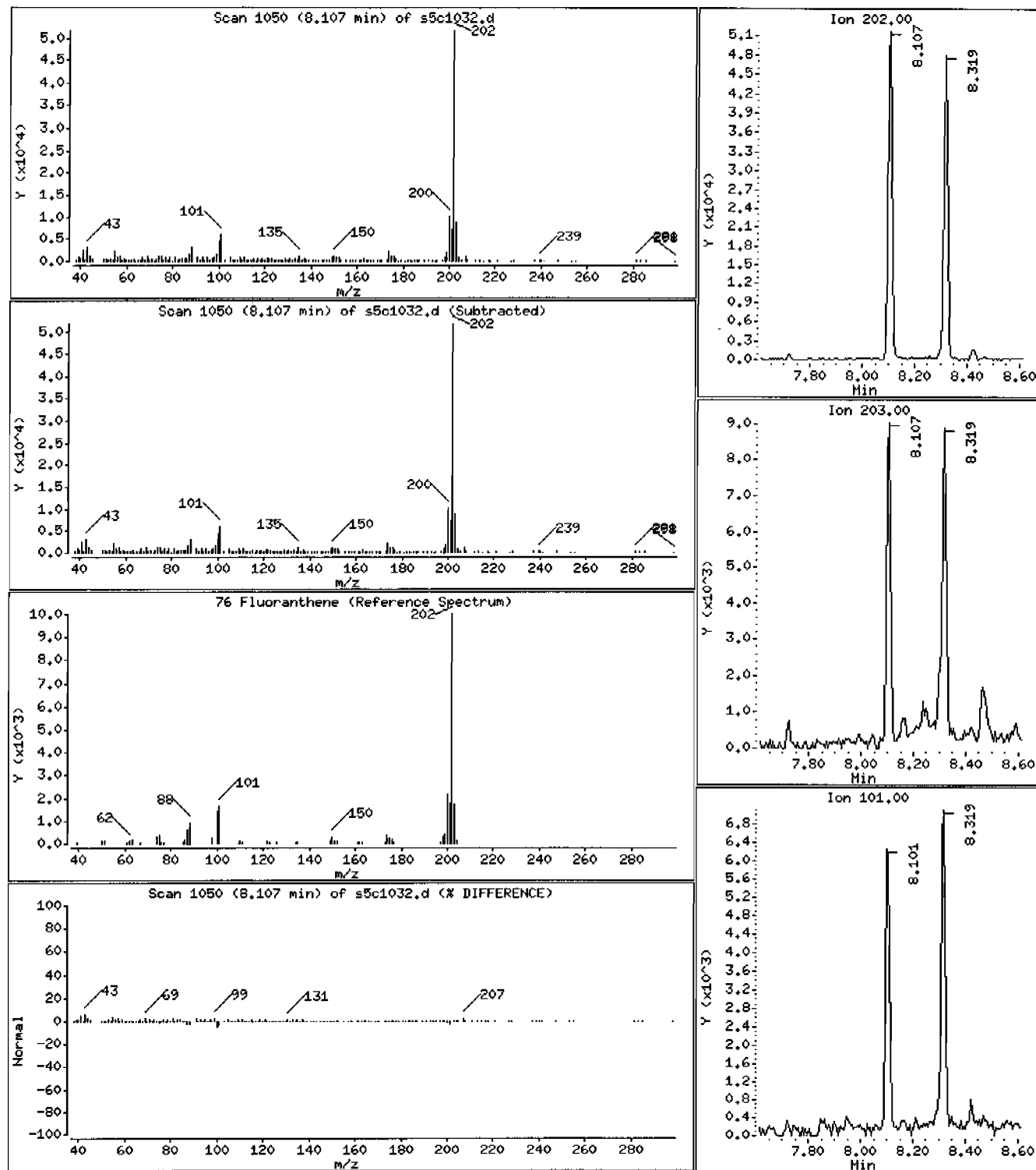
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 146 ug/Kg



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911ISVM11ILANL

Volume Injected (uL): 0.5

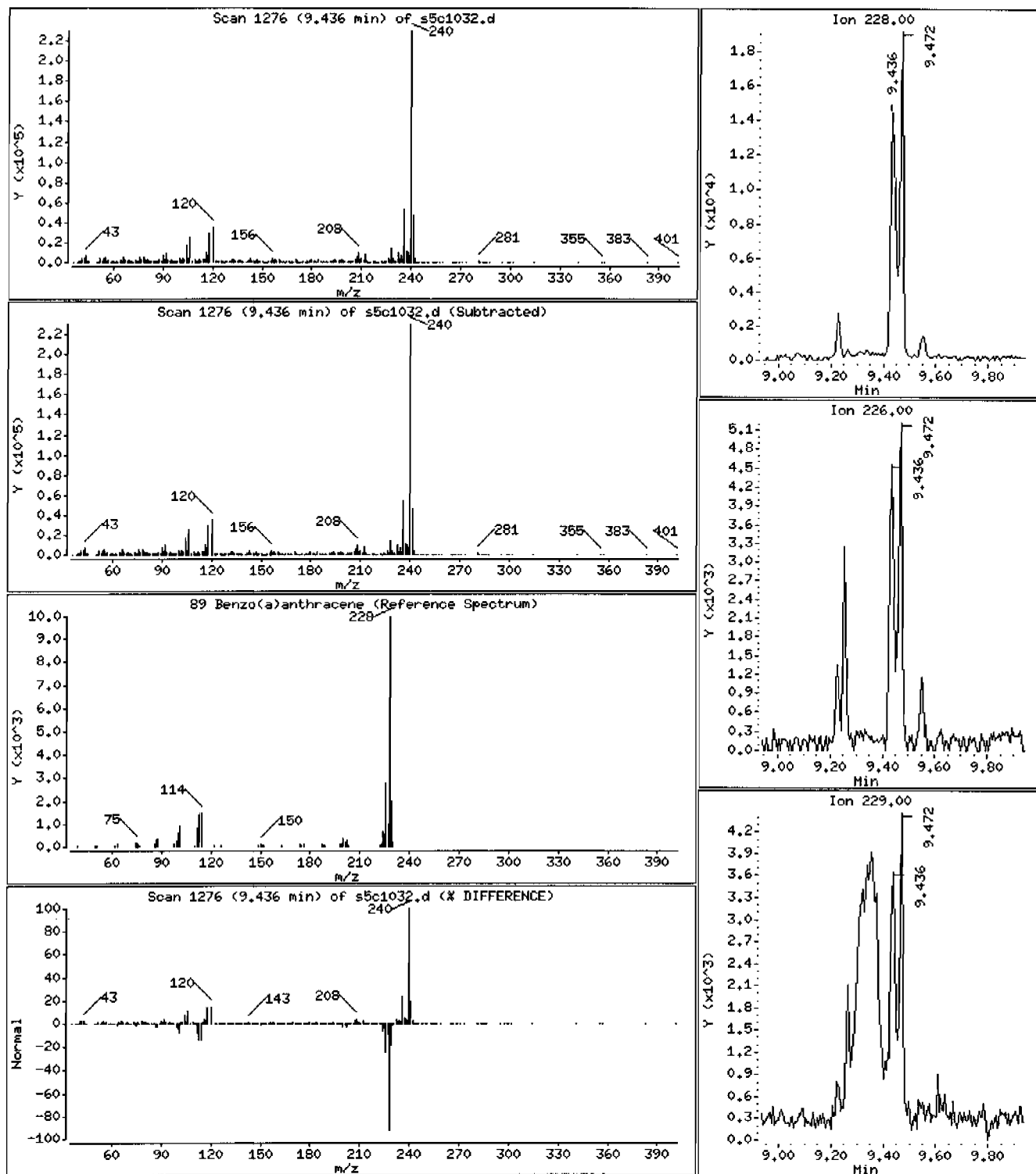
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 52.1 ug/Kg



Data File: /chem/HSD5.i/s031010.b/s5c1032.d

Page 6

Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: 1248240002196065911SVH111LANL

Volume Injected (uL): 0.5

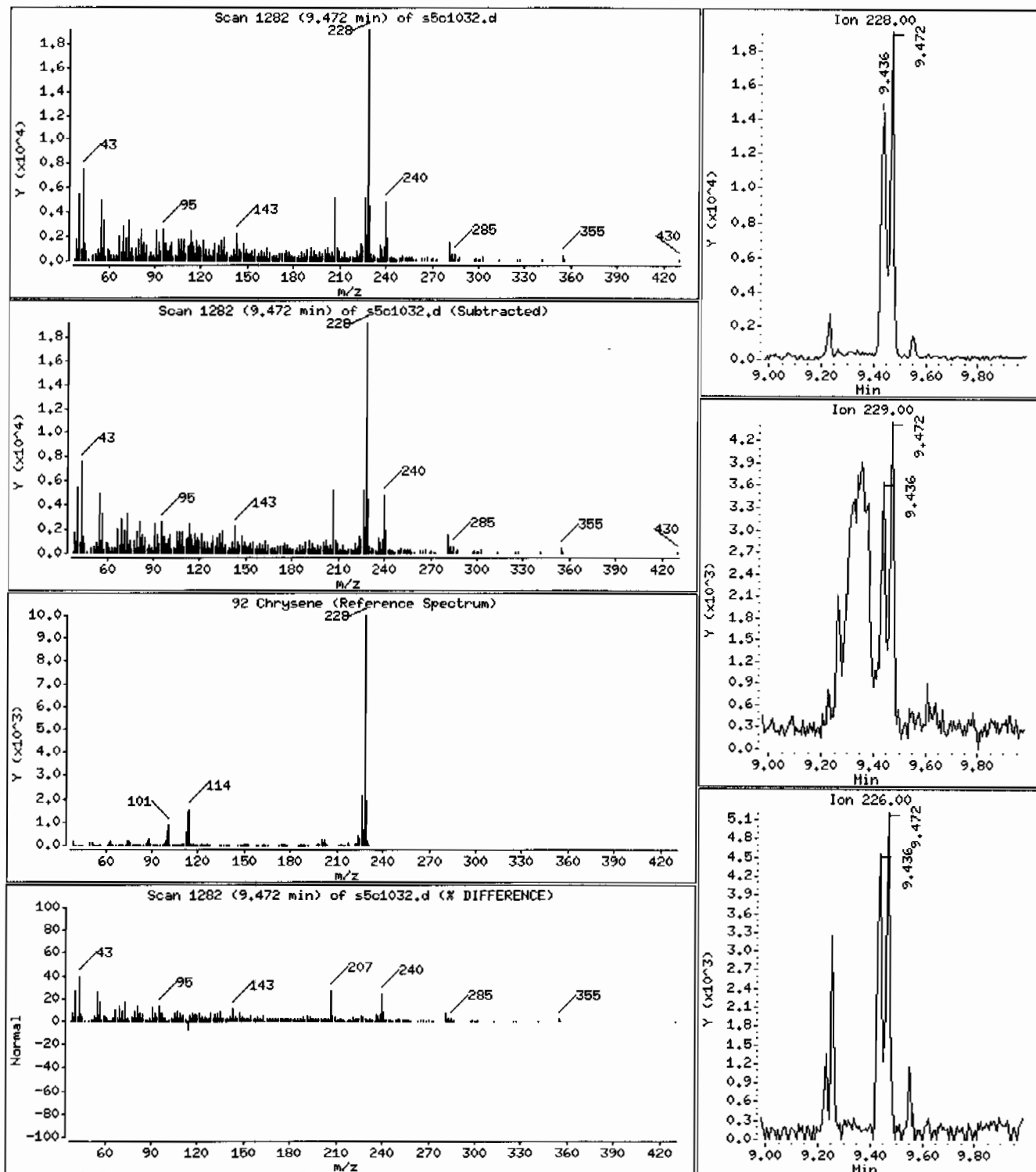
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 63.6 ug/Kg



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002I960659I1ISVMI1ILANL

Volume Injected (uL): 0.5

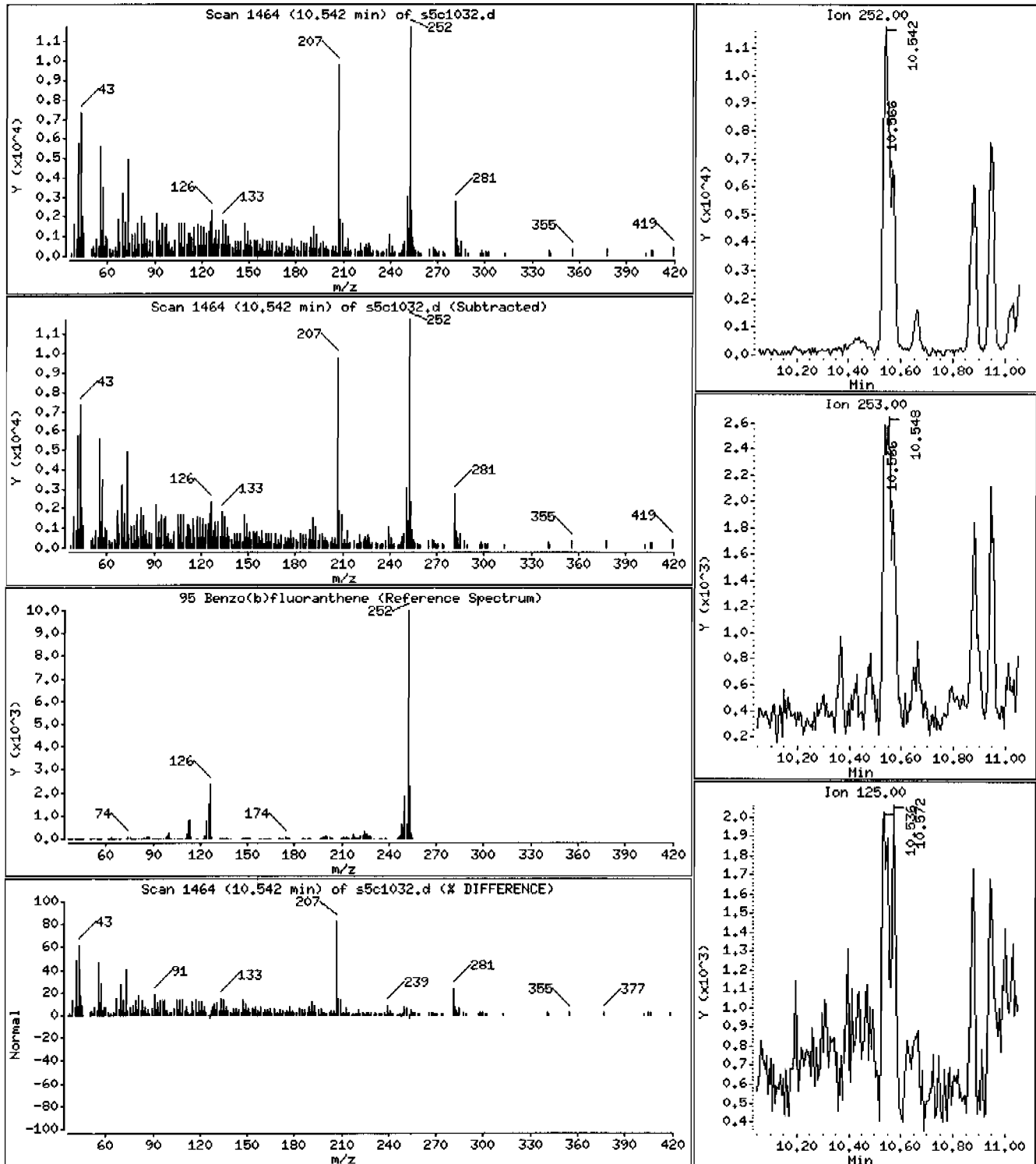
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 75.2 ug/Kg



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002196065911SVH111LANL

Volume Injected (uL): 0.5

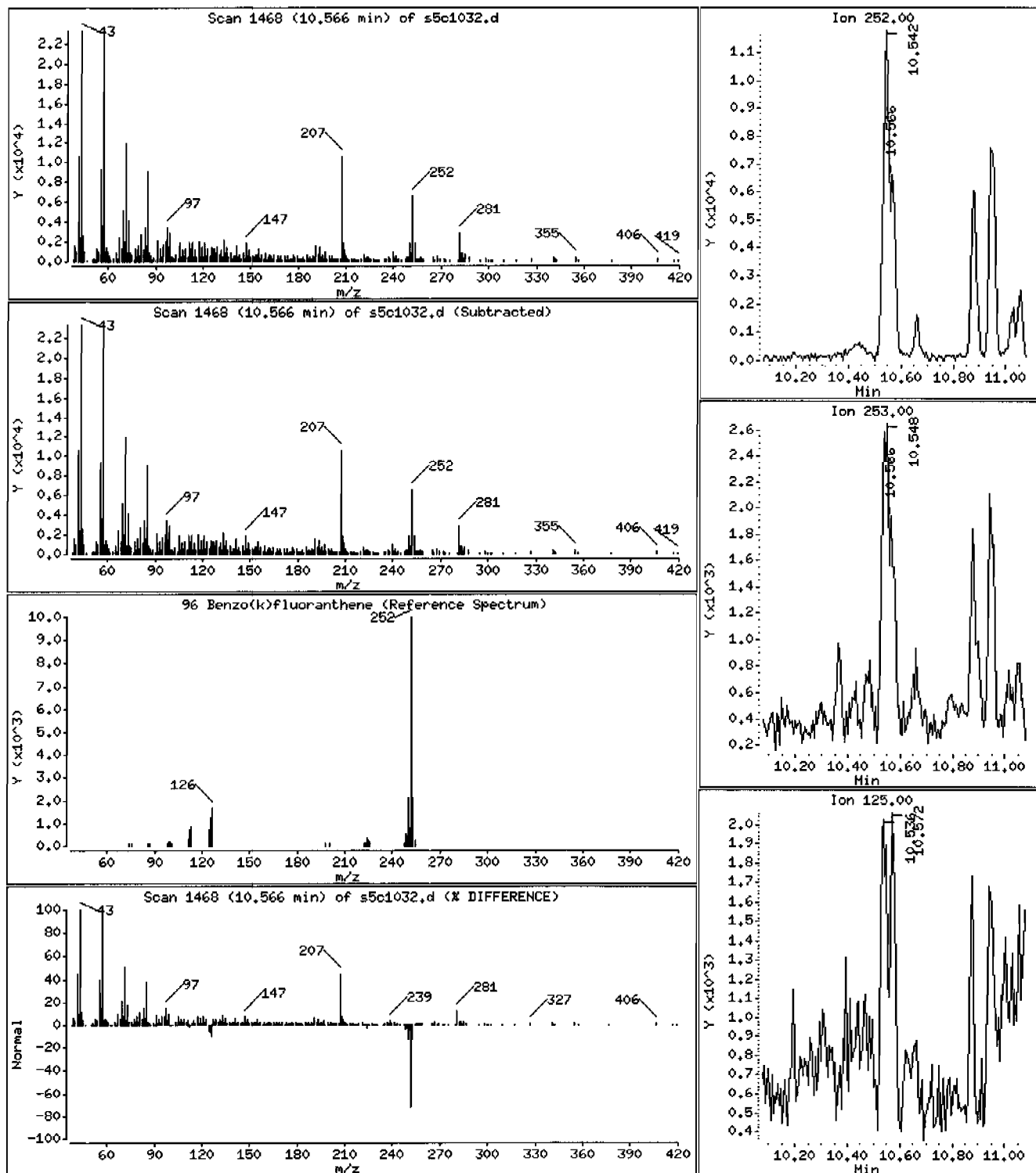
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 32.4 ug/Kg



Data File: /chem/HSD5.i/s031010.b/s5c1032.d

Page 9

Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: I248240002196065911SVH11ILANL

Volume Injected (uL): 0.5

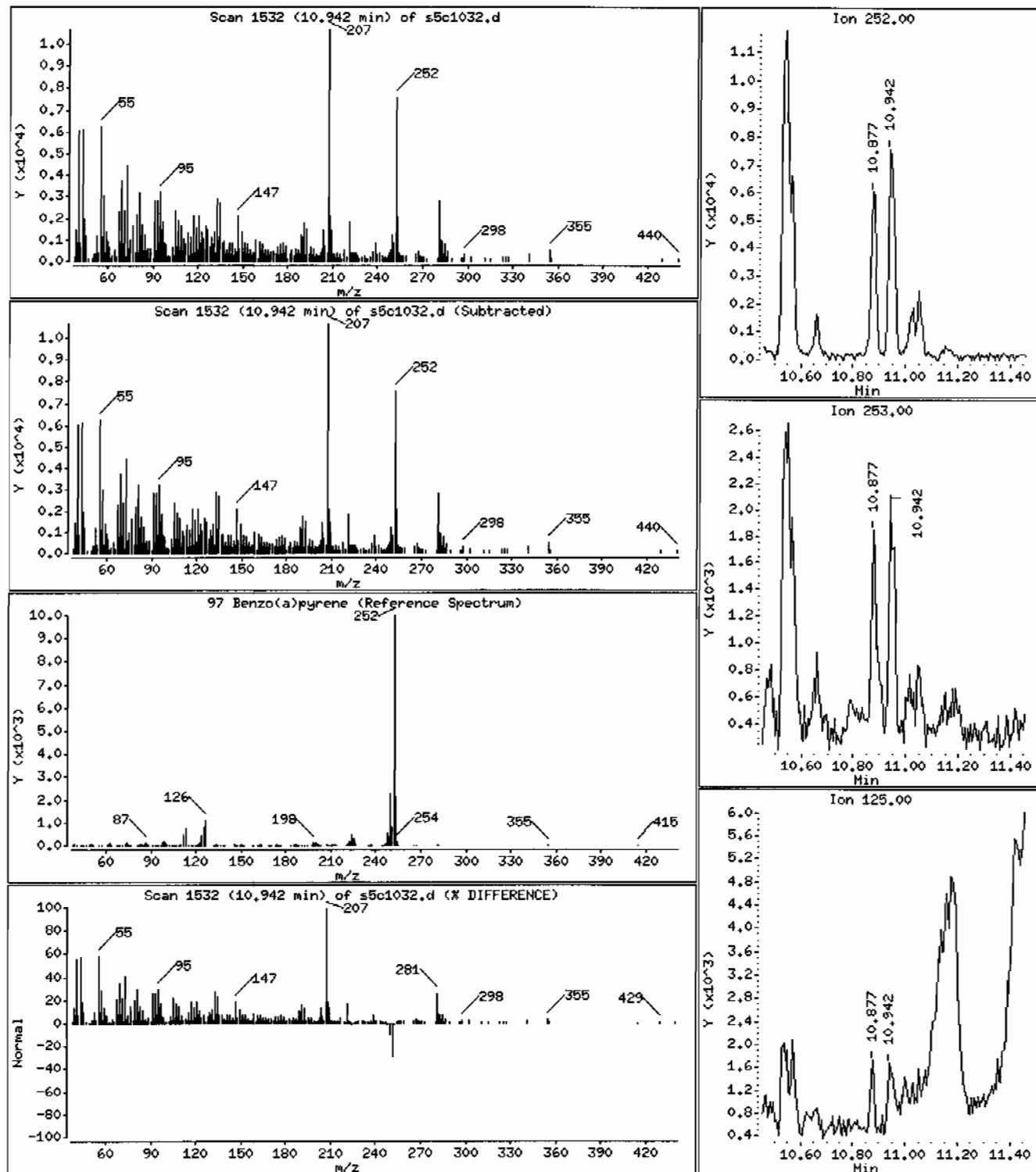
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 55.4 ug/Kg



Data File: /chem/HSD5.i/s031010.b/s5c1032.d

Page 10

Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: 1248240002196065911|SVH11|LANL

Volume Injected (uL): 0.5

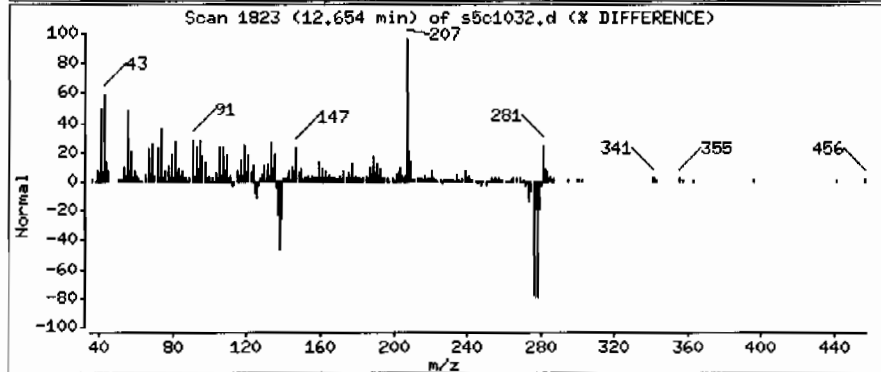
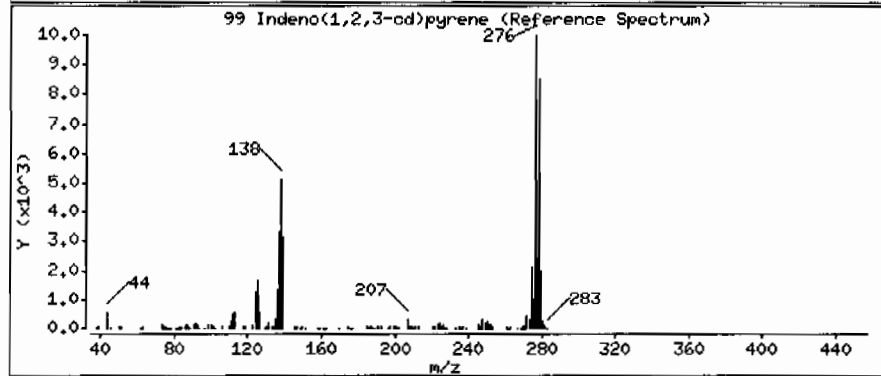
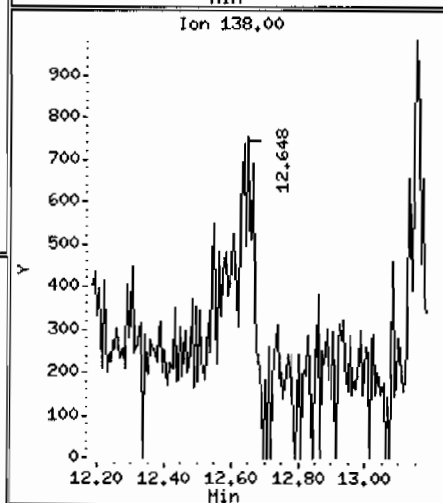
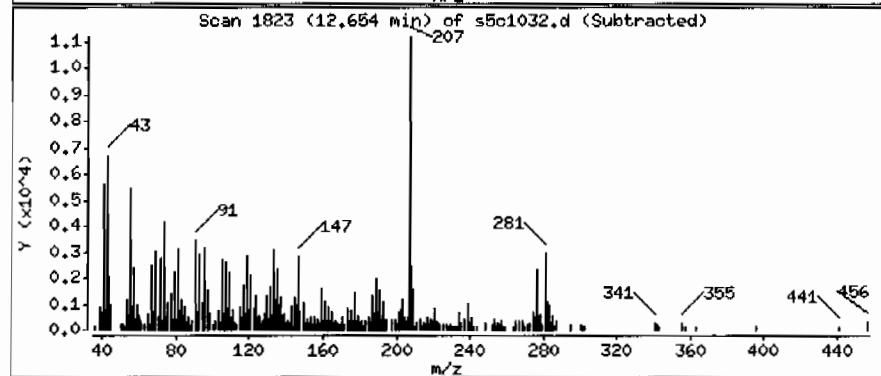
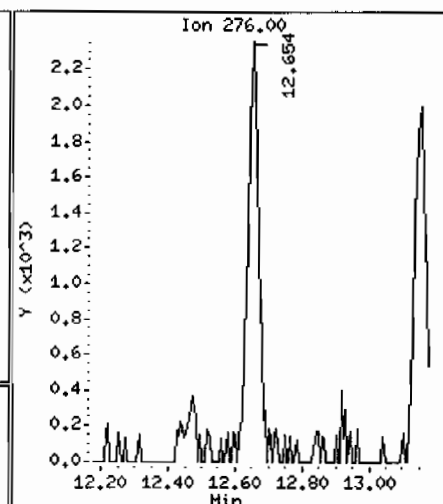
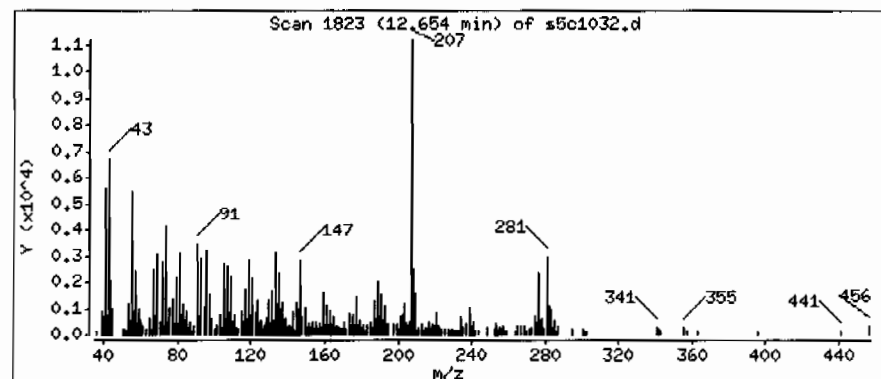
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 31.3 ug/Kg



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002I960659I1ISVM11ILANL

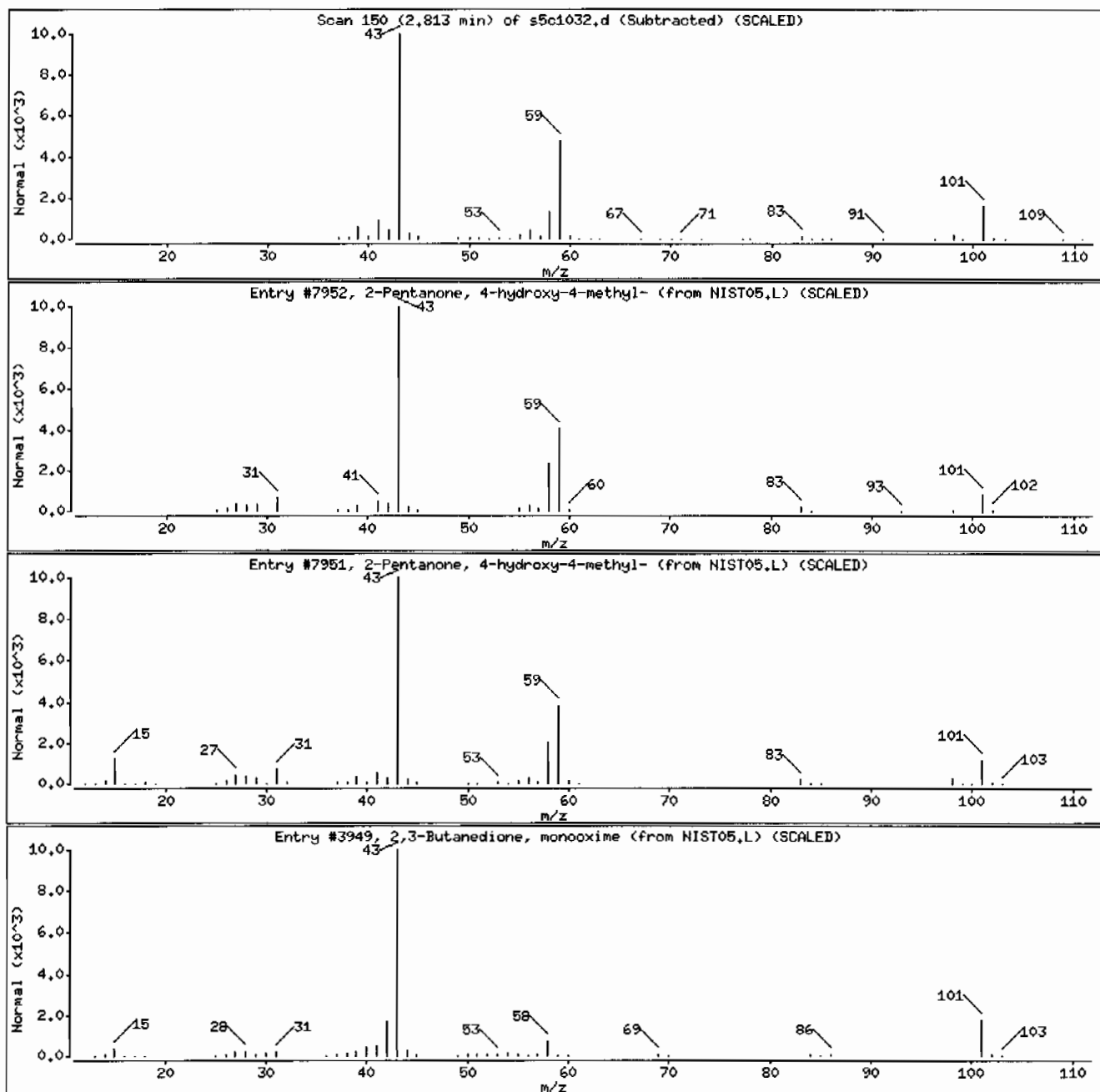
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH111LANL

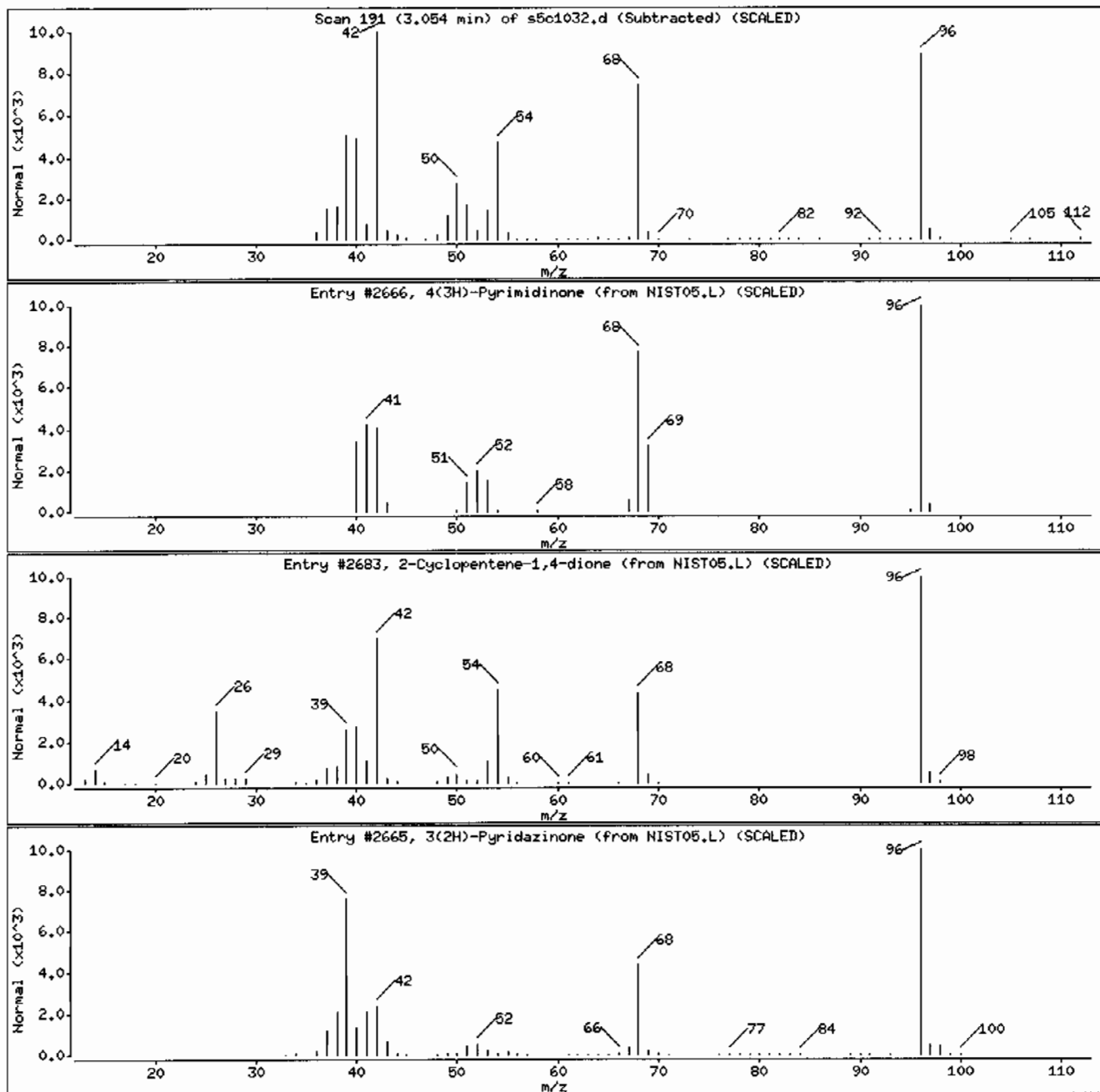
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4(3H)-Pyrimidinone	51953-17-4	NIST05.L	2666	46	C4H4N2O	96
2-Cyclopentene-1,4-dione	930-60-9	NIST05.L	2683	43	C5H4O2	96
3(2H)-Pyridazinone	504-30-3	NIST05.L	2665	43	C4H4N2O	96



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH11ILANL

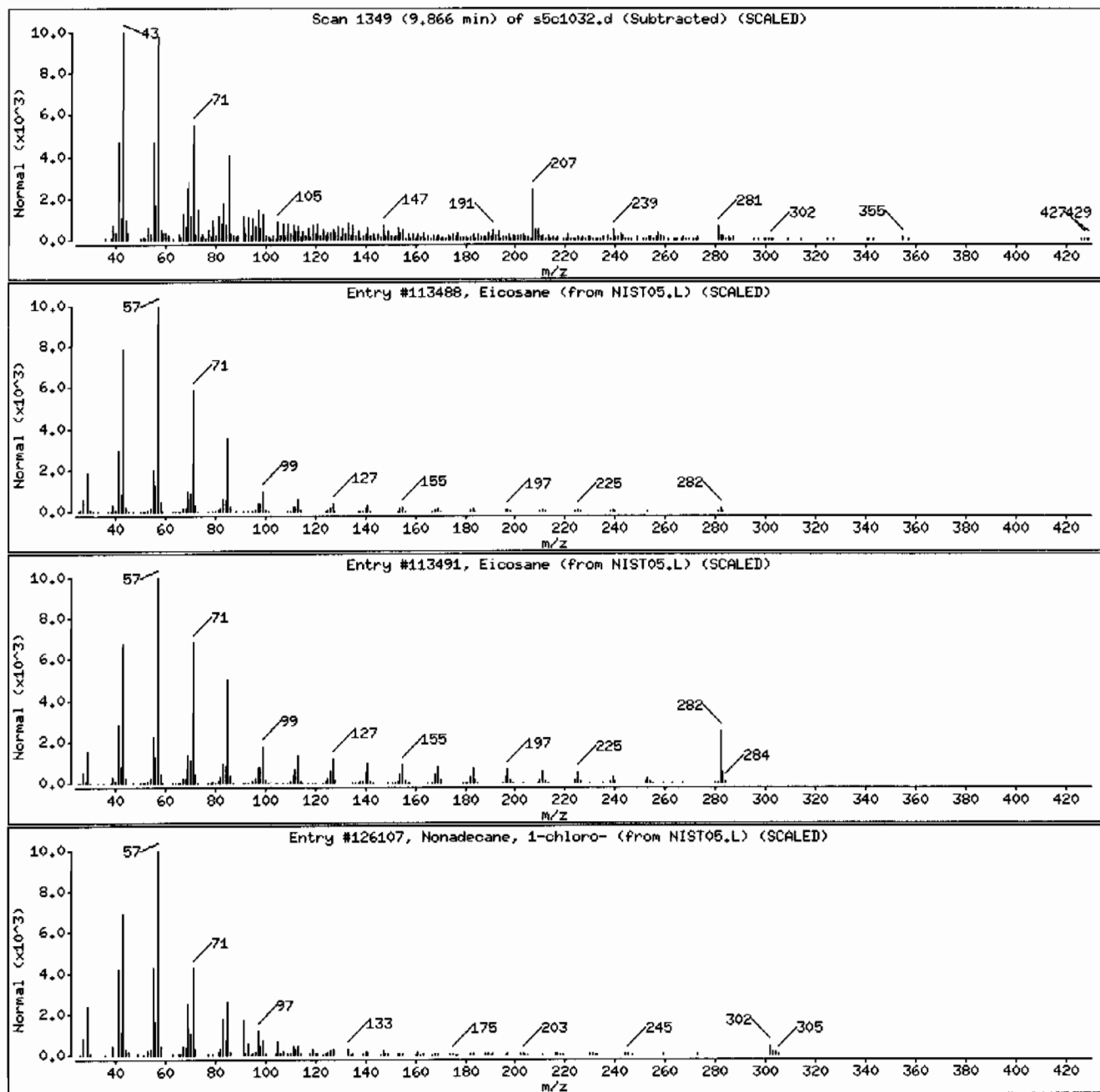
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	91	C20H42	282
Eicosane	112-95-8	NIST05.L	113491	90	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	90	C19H39Cl	302



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVMI11LANL

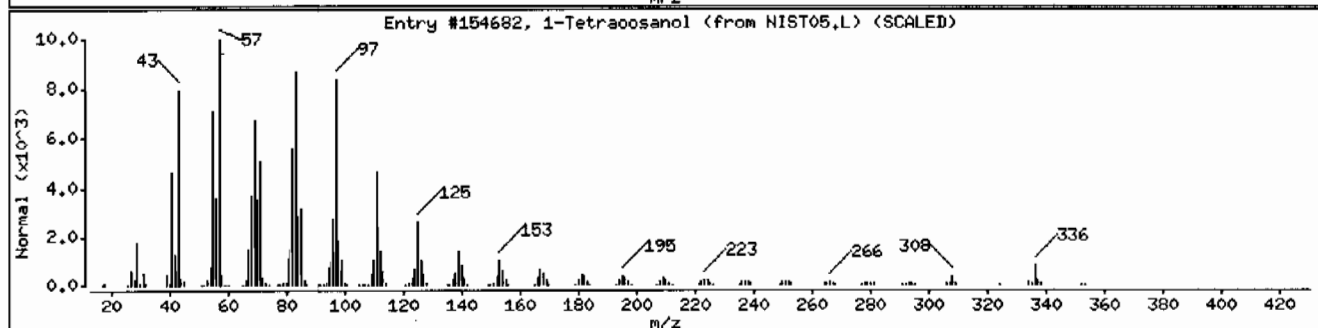
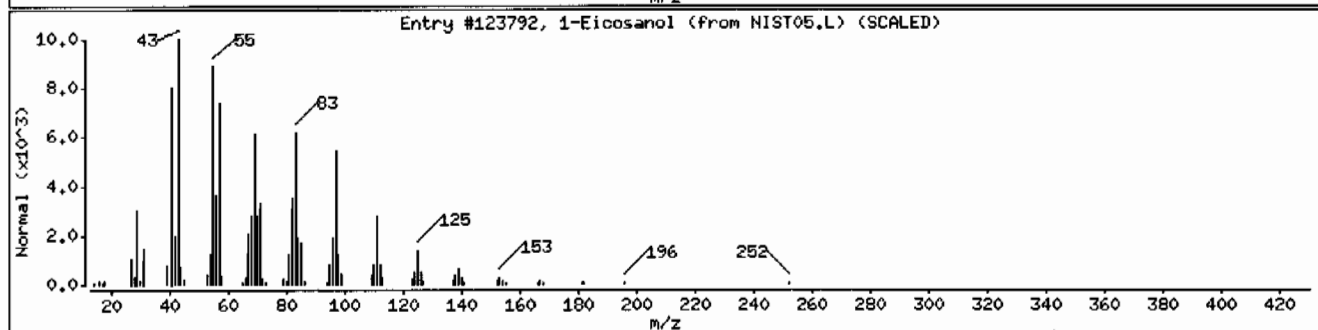
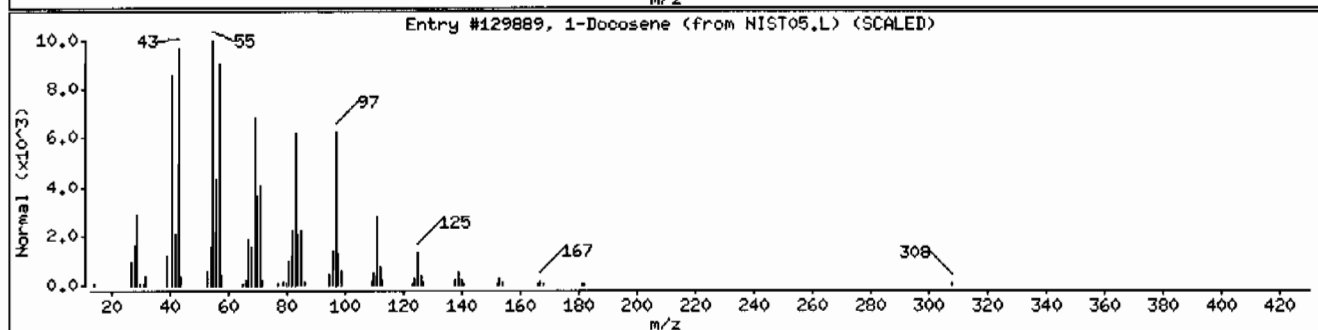
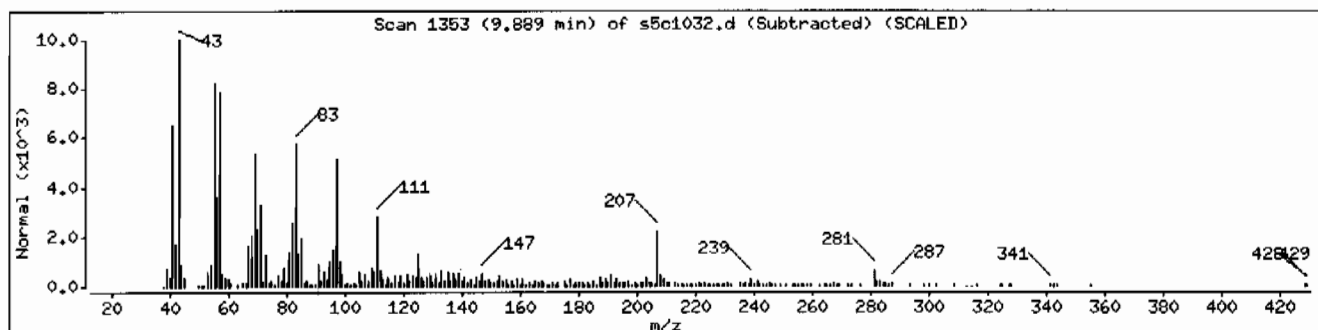
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	93	C20H42O	298
1-Tetracosanol	506-51-4	NIST05.L	154682	70	C24H50O	354



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002196065911ISVH11ILANL

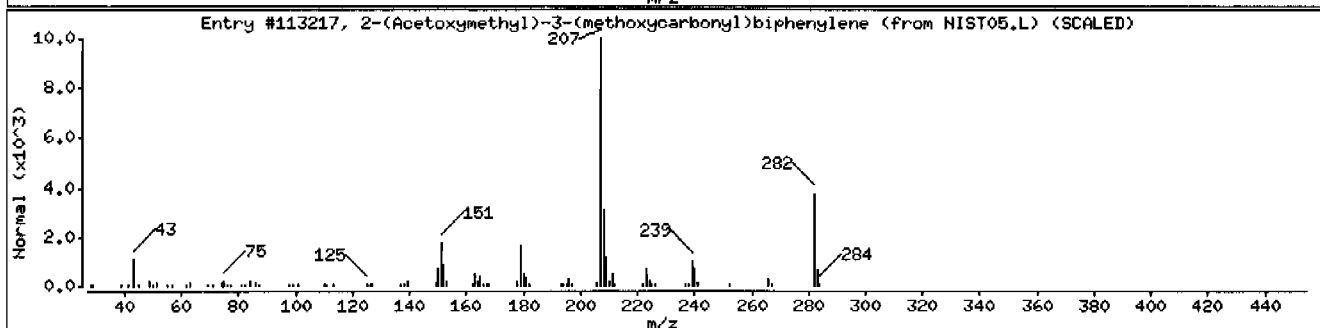
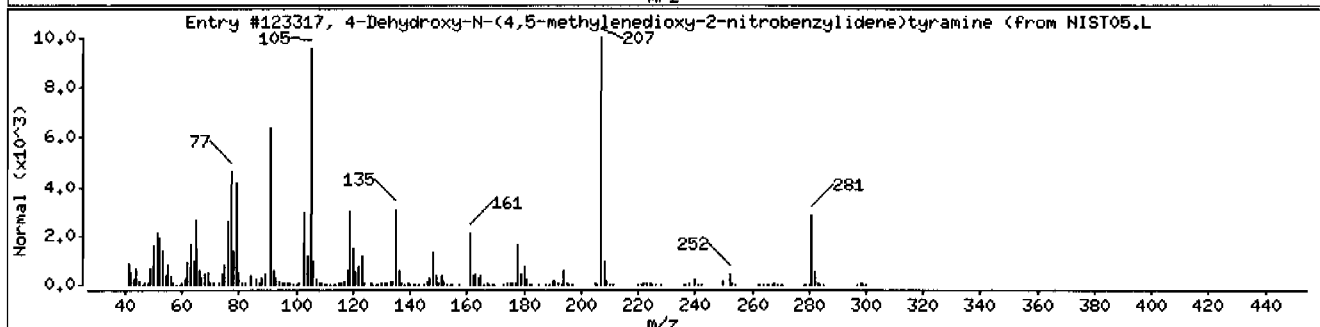
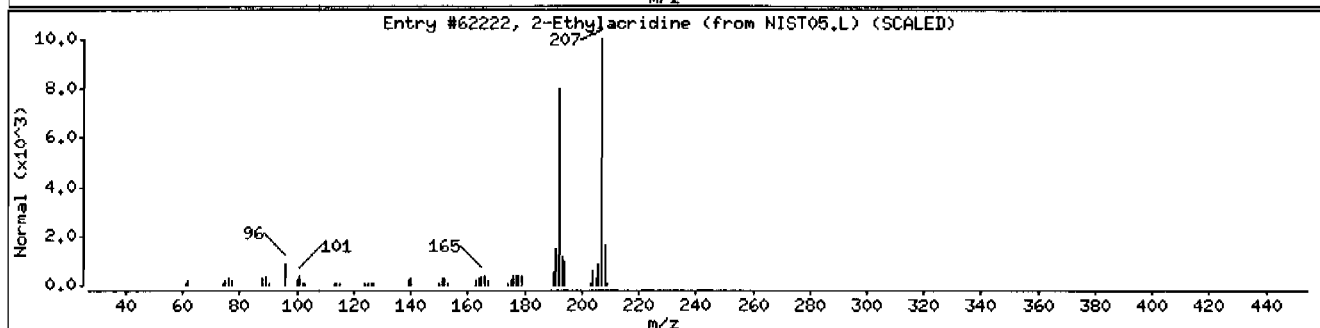
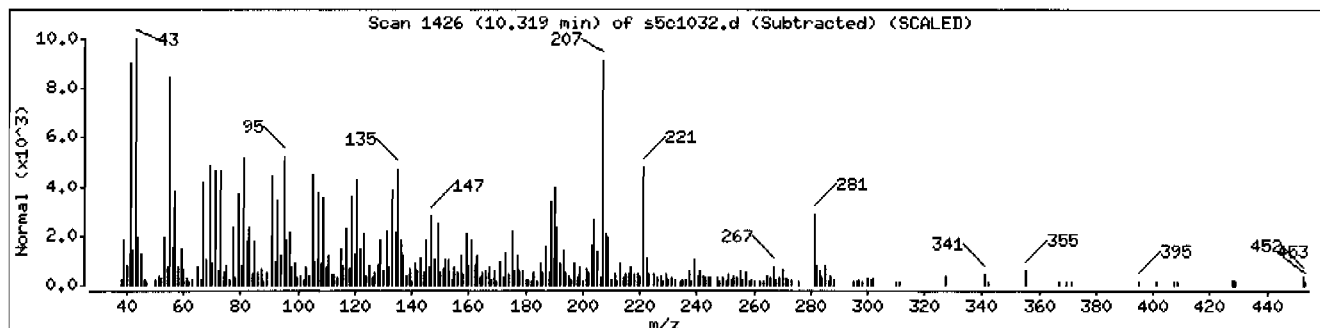
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	35	C15H13N	207
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	22	C16H14N2O4	298
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	18	C17H14O4	282



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: 1248240002196065911SVH111LANL

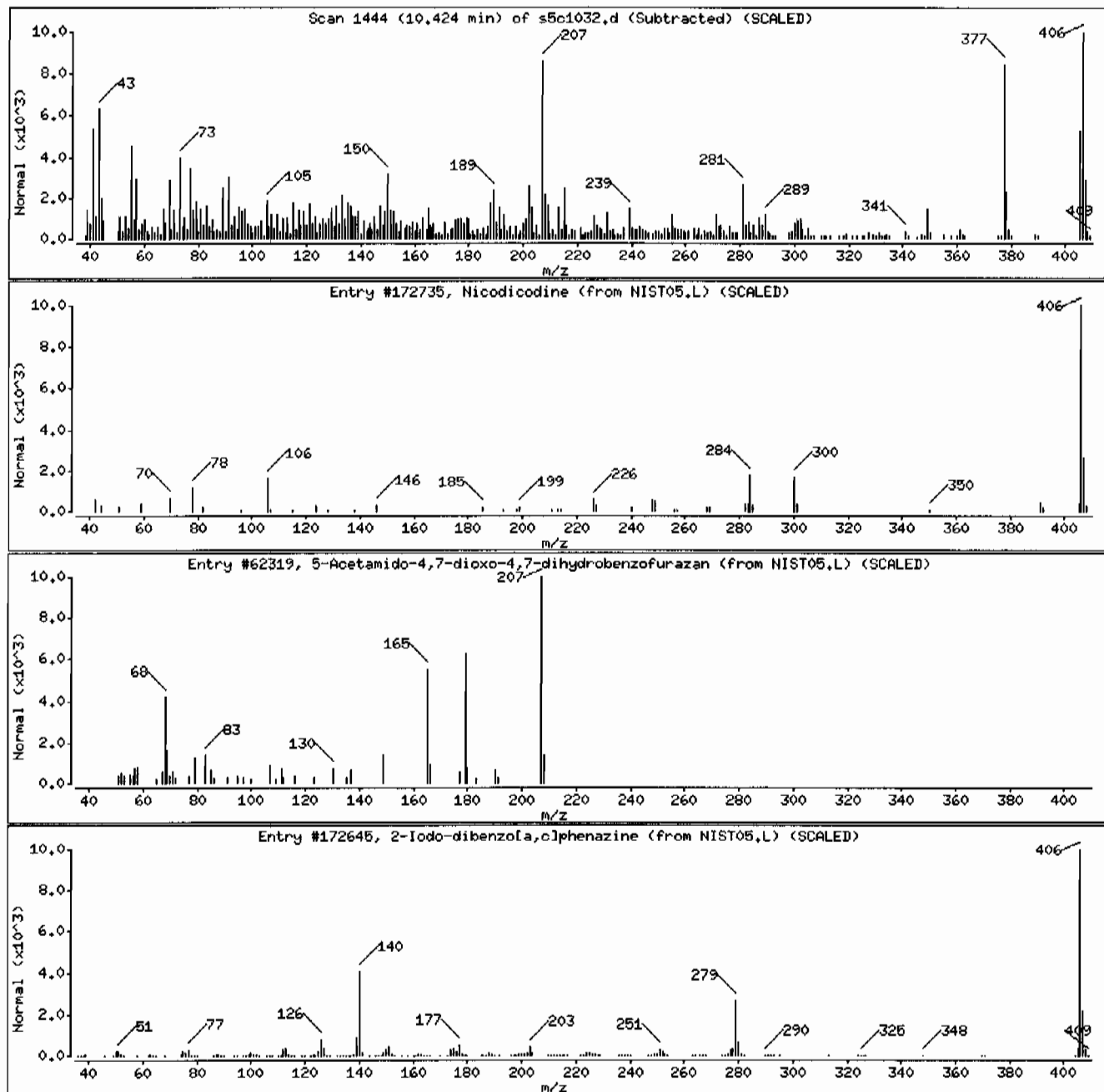
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Nicodicodeine	808-24-2	NIST05.L	172735	35	C24H26N2O4	406
5-Acetamido-4,7-dioxo-4,7-dihydrobenzofu	153136-27-7	NIST05.L	62319	25	C8H5N3O4	207
2-Iodo-dibenzo[a,c]phenazine	330449-60-0	NIST05.L	172645	20	C20H11IN2	406



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH111LANL

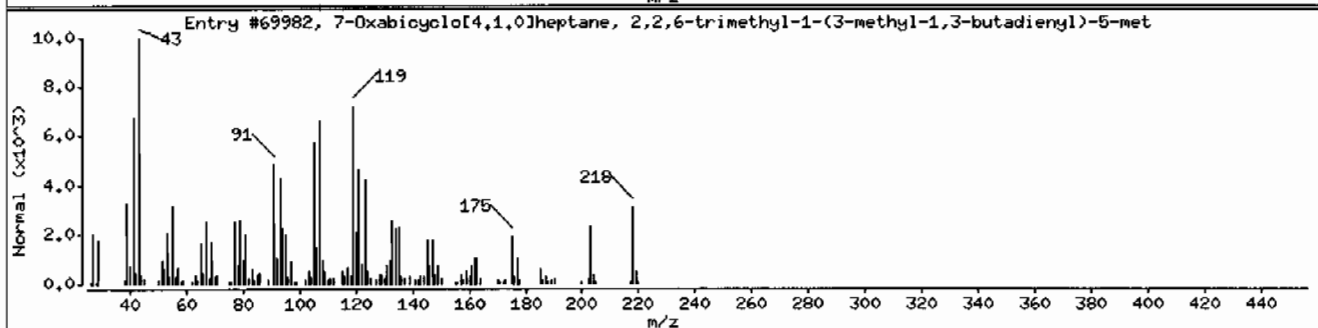
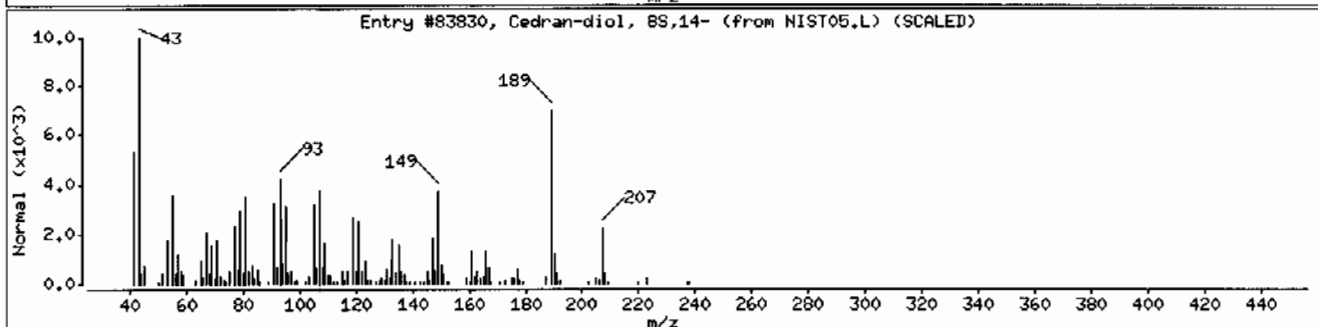
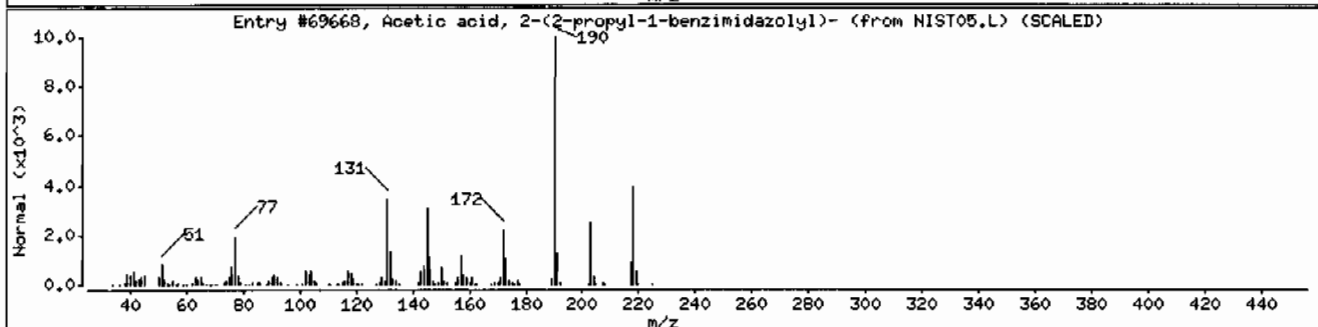
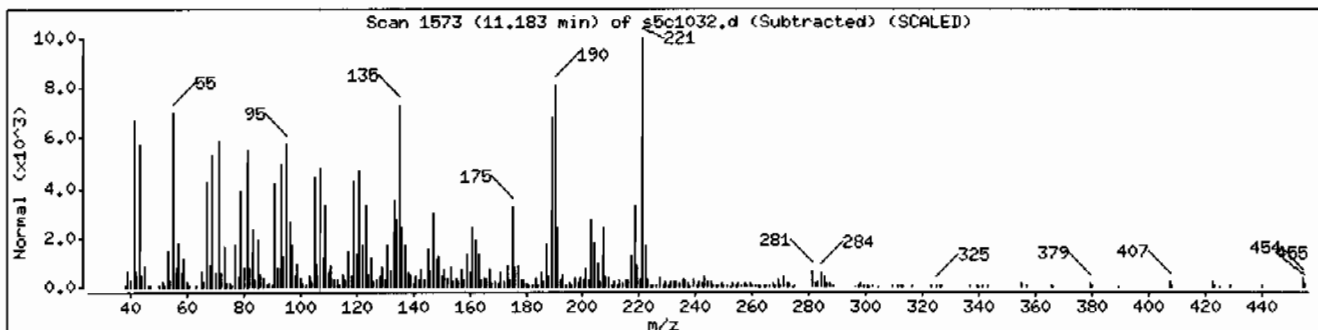
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazolyl)	331736-92-6	NIST05.L	69668	53	C12H14N2O2	218
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	51	C15H26O2	238
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	43	C15H22O	218



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: I248240002196065911ISVM11ILANL

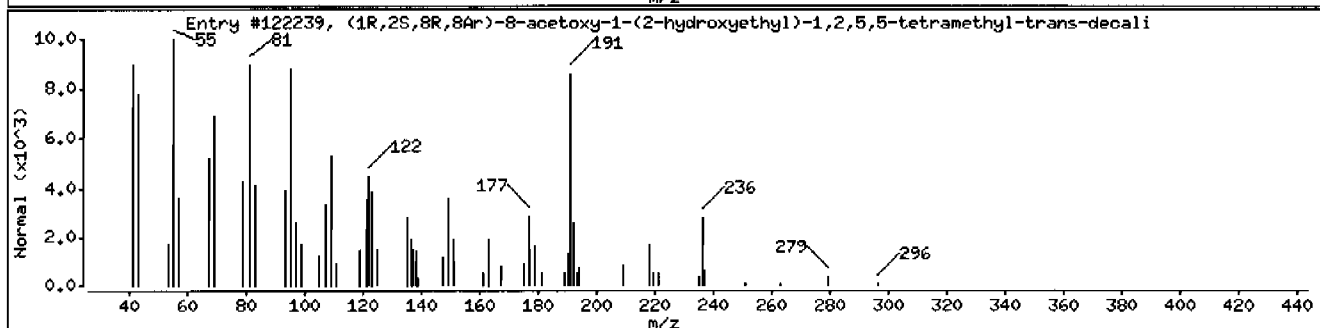
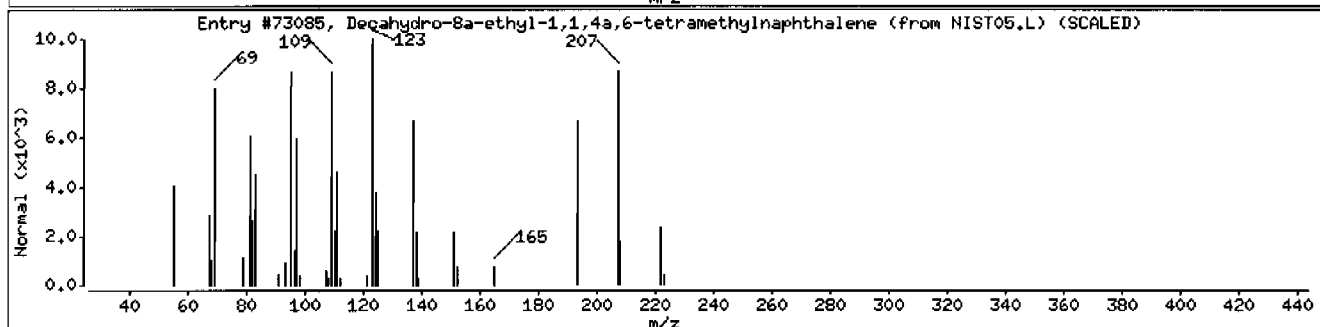
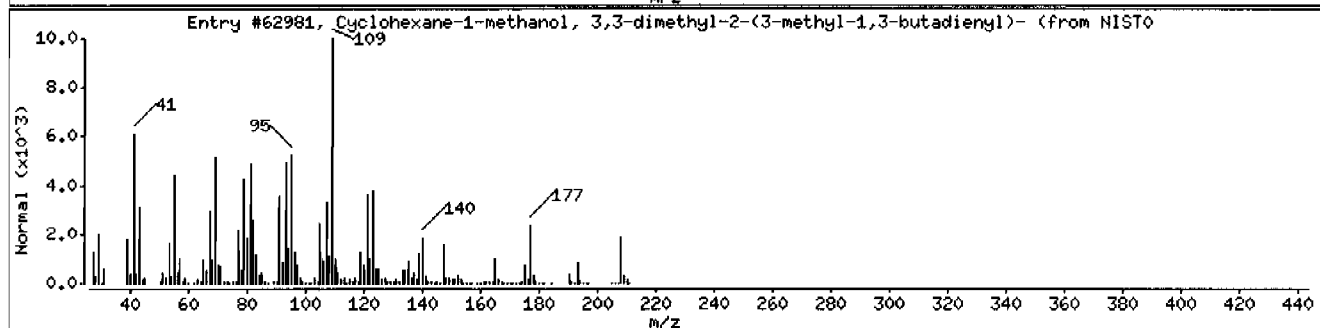
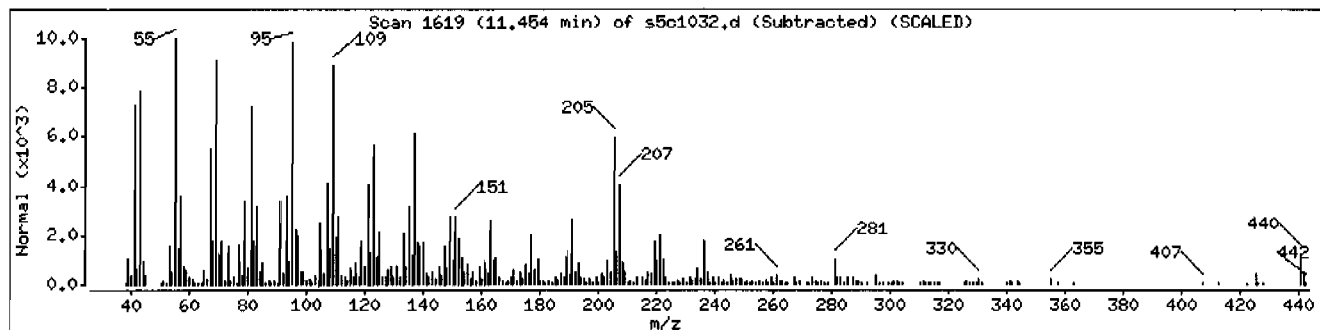
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane-1-methanol, 3,3-dimethyl-2-(	1000196-01-5	NIST05.L	62981	47	C14H24O	208
Decahydro-8a-ethyl-1,1,4a,6-tetramethyln	1000100-23-6	NIST05.L	73085	45	C16H30	222
(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hydroxyeth	1000298-98-4	NIST05.L	122239	45	C18H32O3	296



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: 1248240002196065911ISVH111LANL

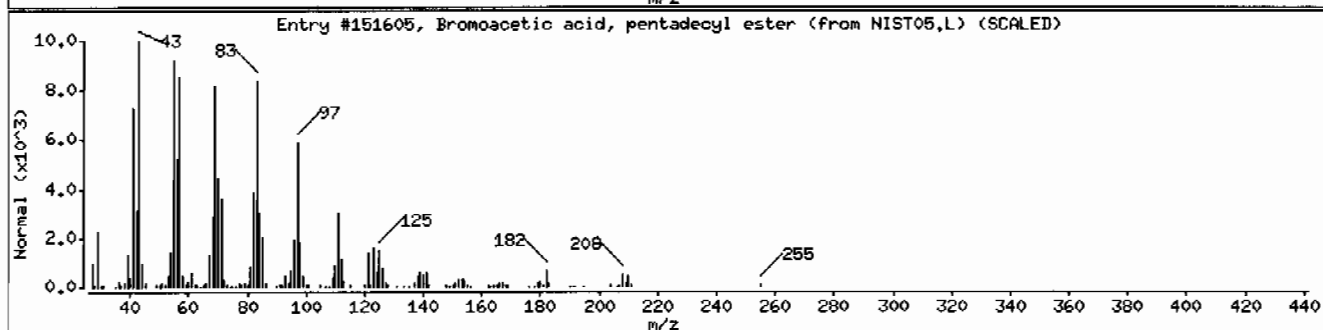
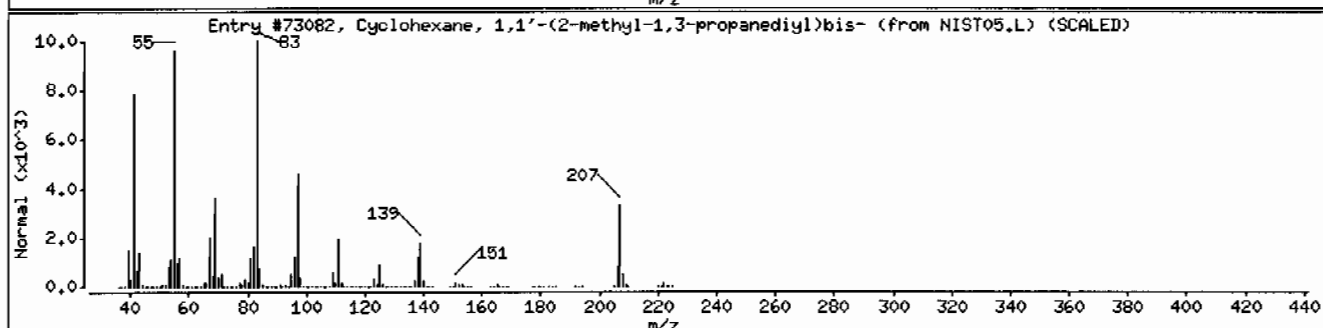
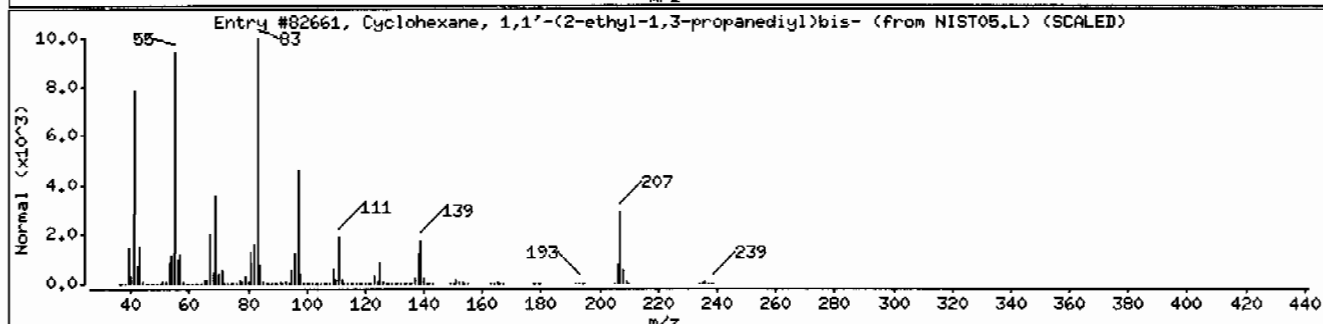
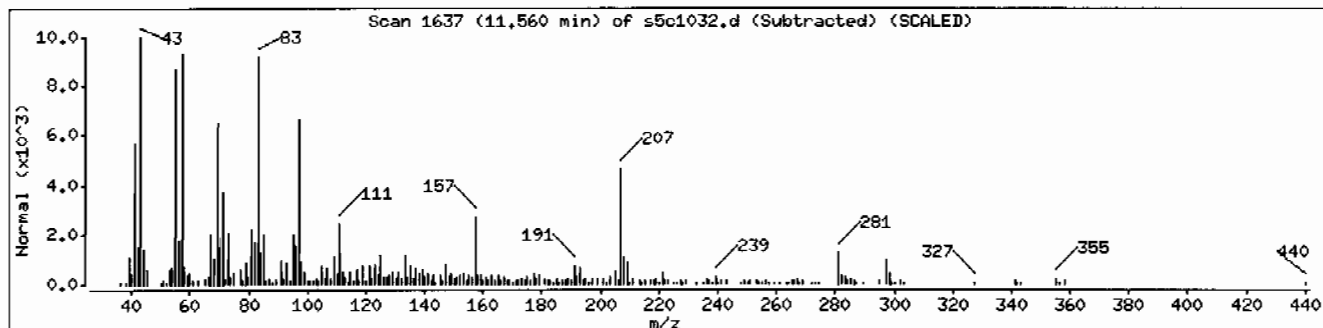
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	86	C17H32	236
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	86	C16H30	222
Bromoacetic acid, pentadecyl ester	131143-01-6	NIST05.L	151605	49	C17H33BrO2	348



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVMI1ILANL

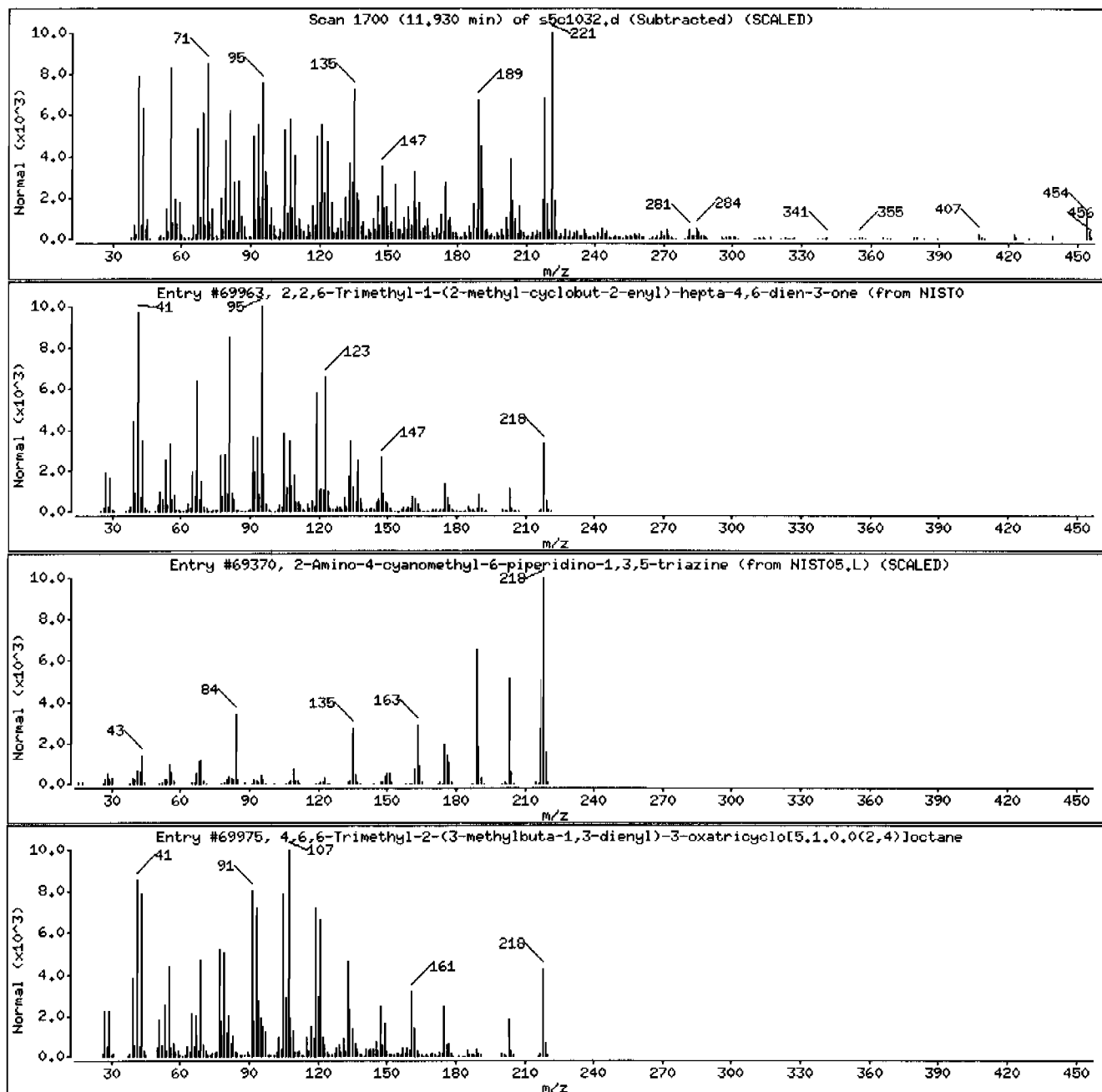
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-enyl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	52	C15H22O	218
2-Amino-4-cyanomethyl-6-piperidino-1,3,5-triazine	1000241-05-9	NIST05.L	69370	43	C10H14N6	218
4,6,6-Trimethyl-2-(3-methylbuta-1,3-dienyl)-3-oxatricyclo[5.1.0.0(2,4)]octane	1000190-22-2	NIST05.L	69975	42	C15H22O	218



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: HSD5.i

Sample Info: 1248240002196065911SVMI1ILANL

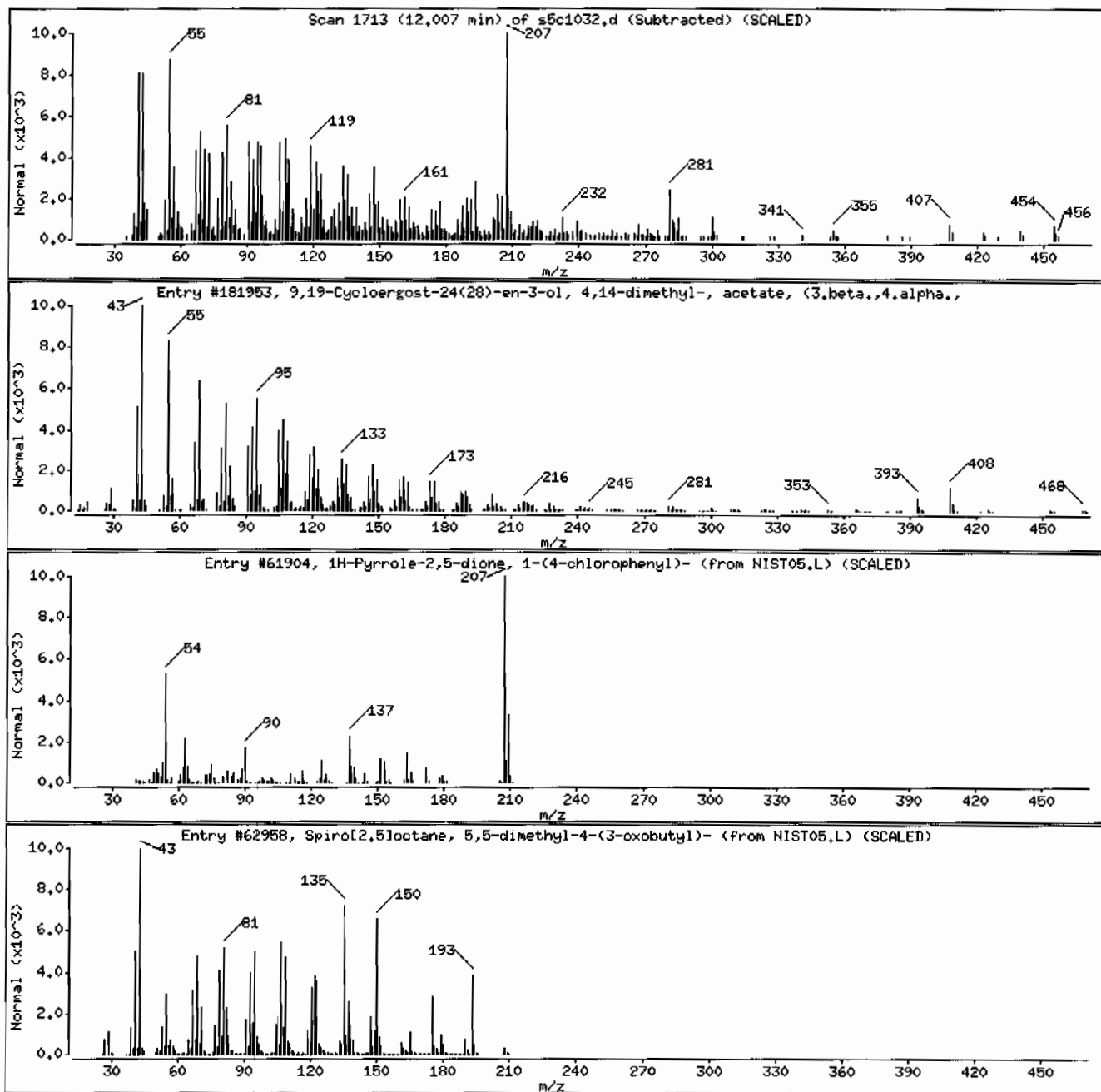
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,19-Cycloergost-24(28)-en-3-ol, 4,14-di	10376-42-8	NIST05.L	181953	30	C32H52O2	468
1H-Pyrrole-2,5-dione, 1-(4-chlorophenyl)	1631-29-4	NIST05.L	61904	25	C10H6ClNO2	207
Spiro[2.5]octane, 5,5-dimethyl-4-(3-oxob	77143-32-9	NIST05.L	62958	22	C14H24O	208



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH11ILANL

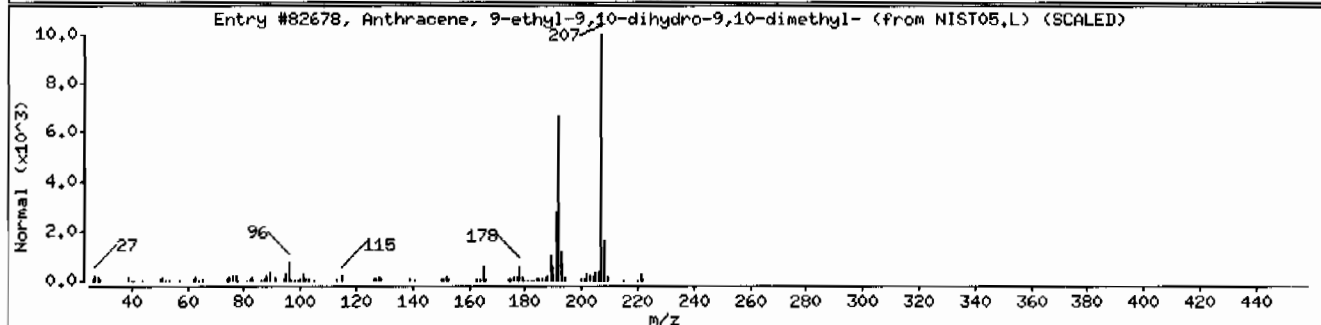
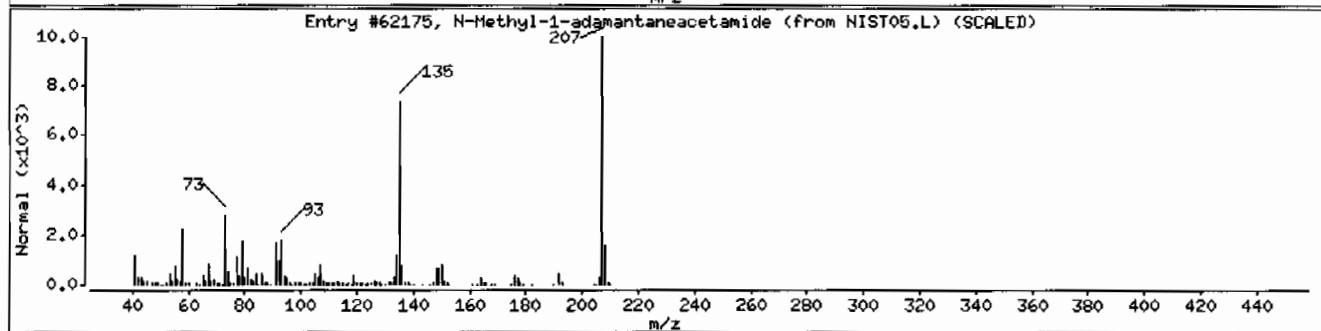
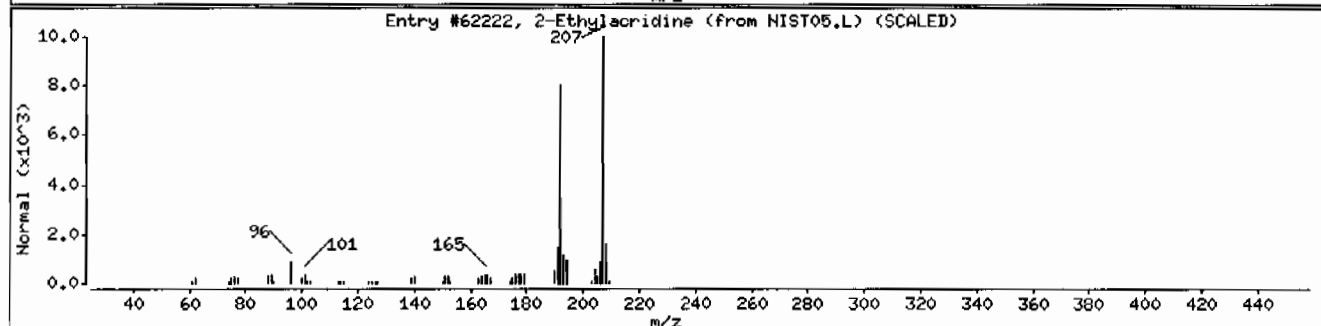
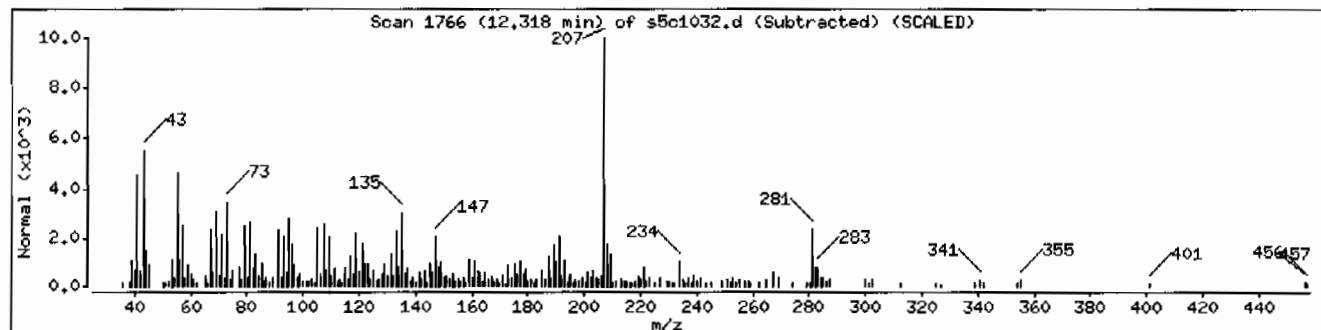
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207
Anthracene, 9-ethyl-9,10-dihydro-9,10-di	54947-86-3	NIST05.L	82678	38	C18H20	236



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH11LANL

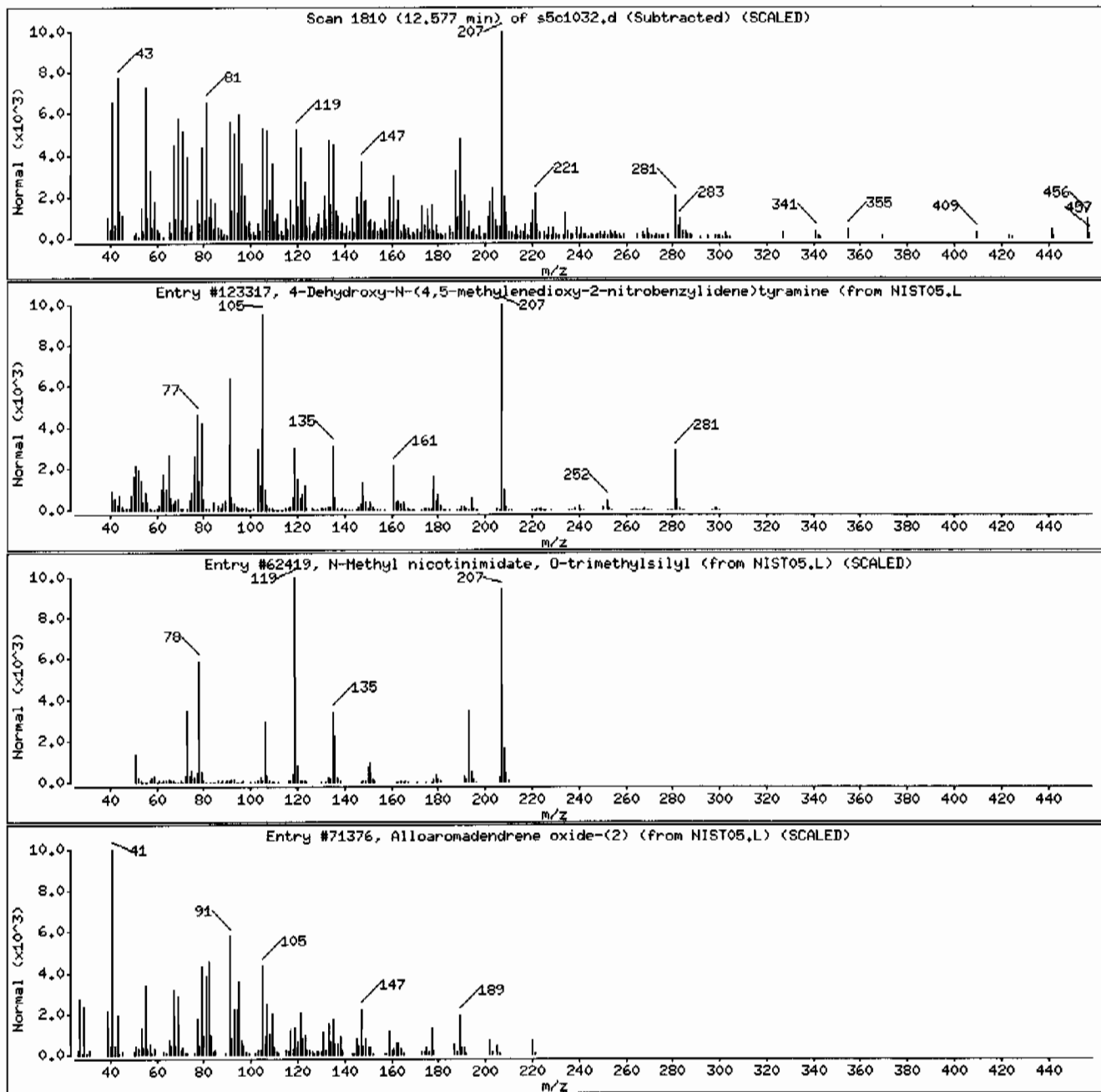
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	42	C16H14N2O4	298
N-Methyl nicotinimide, O-trimethylsilyl	1000141-33-7	NIST05.L	62419	38	C10H16N2OSi	208
Alloaromadendrene oxide-(2)	1000156-12-7	NIST05.L	71376	30	C15H24O	220



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH11LANL

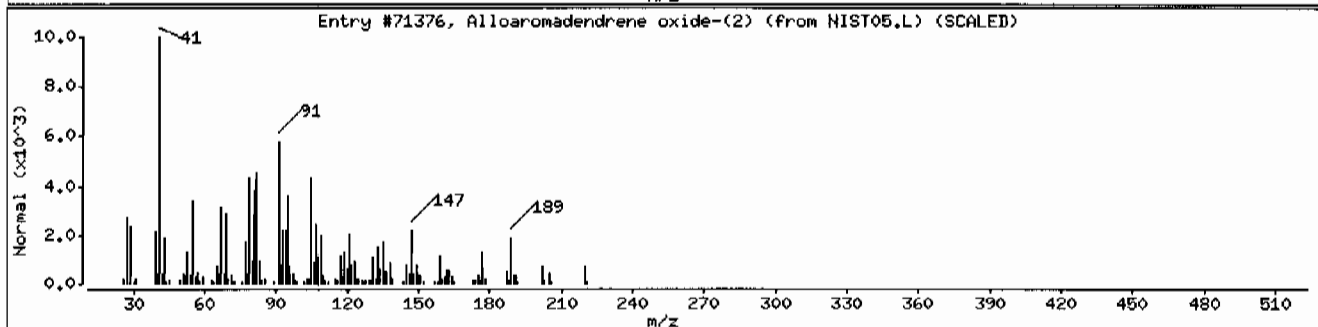
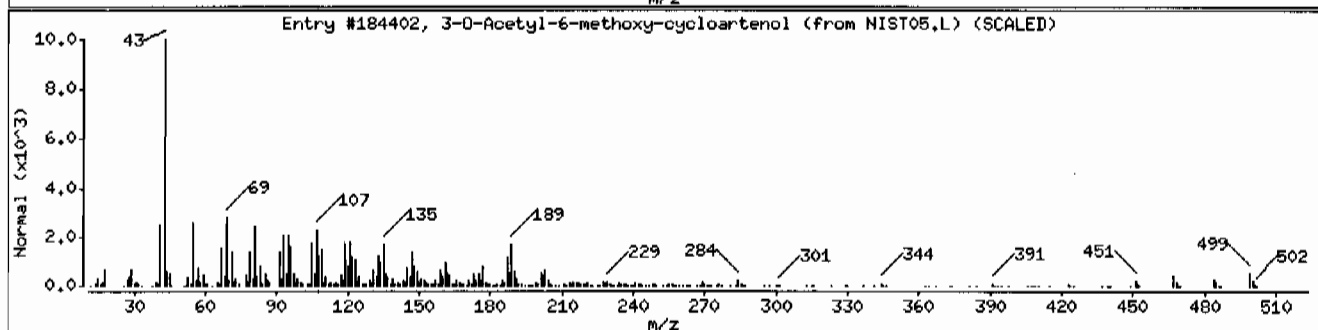
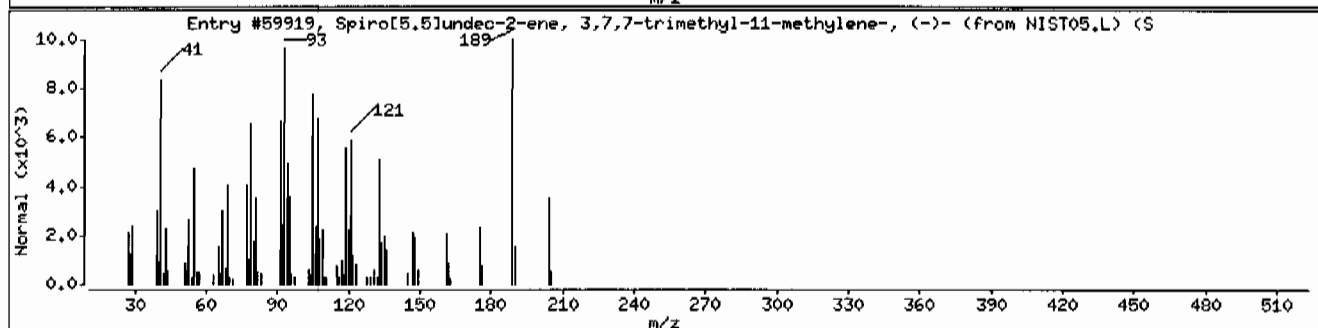
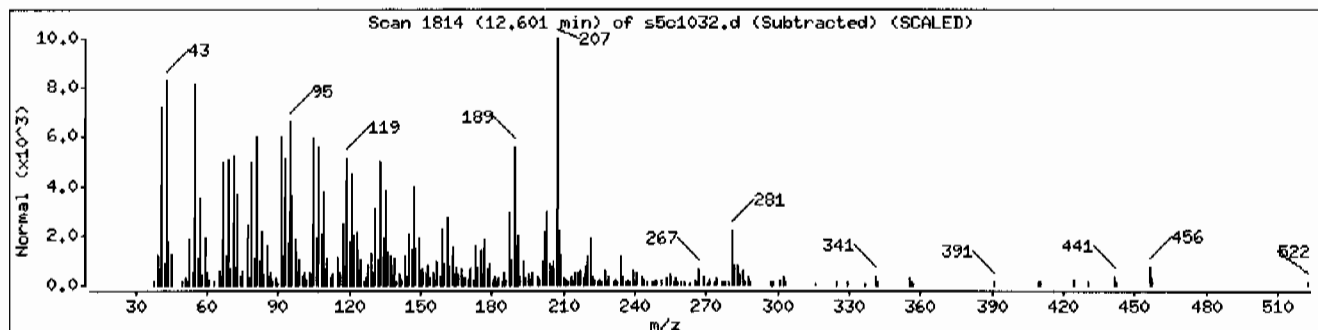
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[5.5]undec-2-ene, 3,7,7-trimethyl-1	18431-82-8	NIST05.L	59919	64	C15H24	204
3-O-Acetyl-6-methoxy-cycloartenol	1000286-40-9	NIST05.L	184402	46	C33H54O3	498
Alloaromadendrene oxide-(2)	1000156-12-7	NIST05.L	71376	30	C15H24O	220



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVMI11LANL

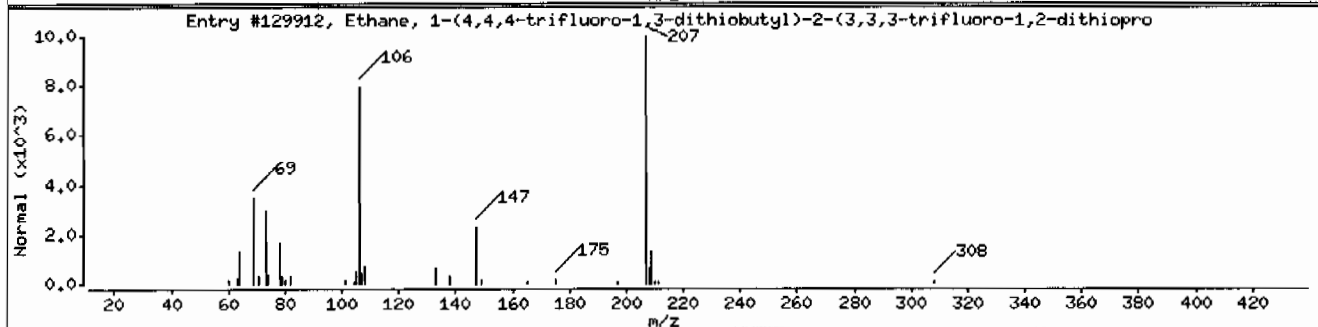
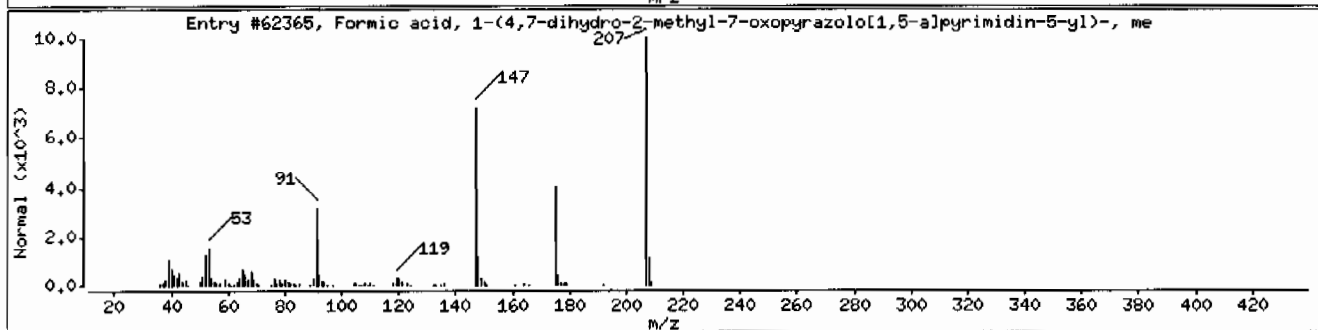
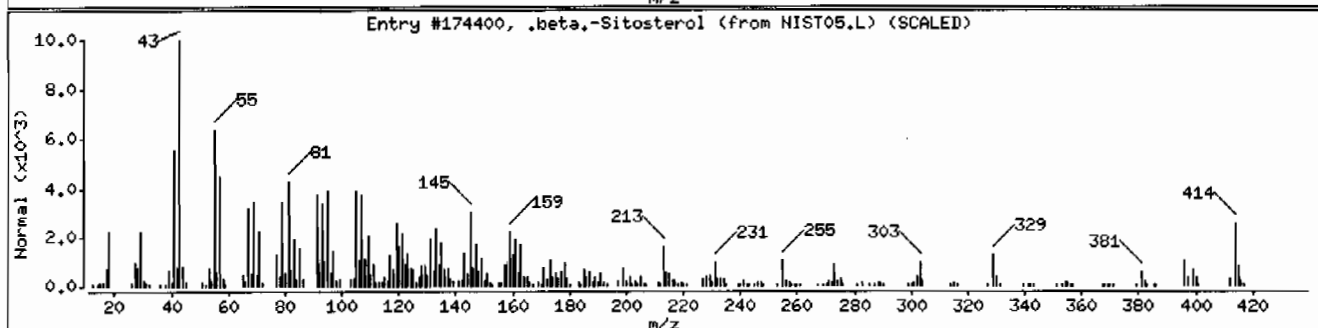
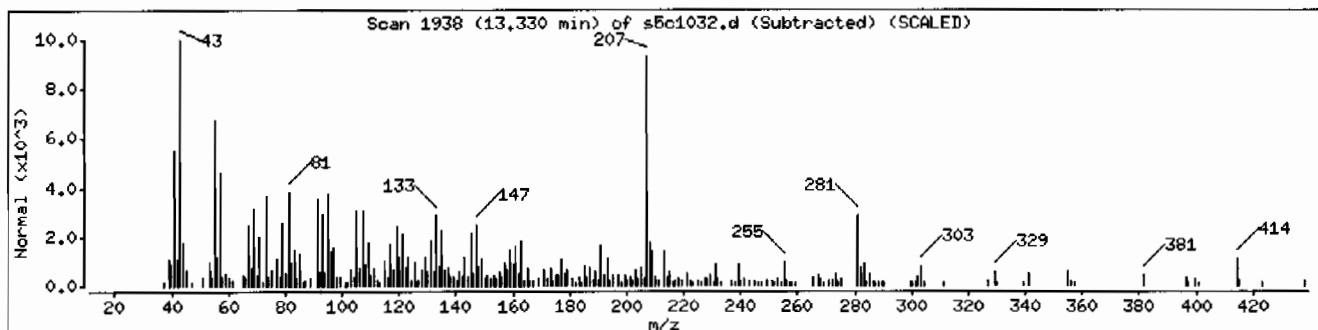
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-Sitosterol	83-46-5	NIST05.L	174400	66	C29H50O	414
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	35	C9H9N3O3	207
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	35	C5H6F6S4	308



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5,i

Sample Info: 12482400021960659111SVH111LANL

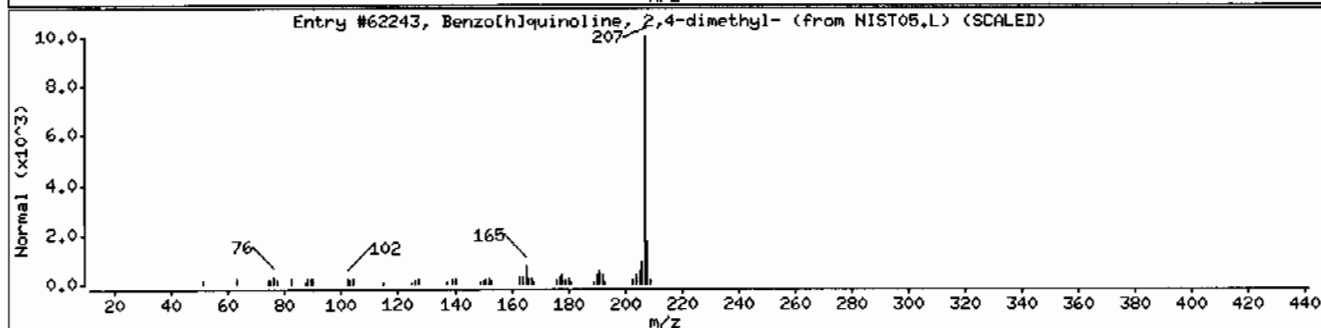
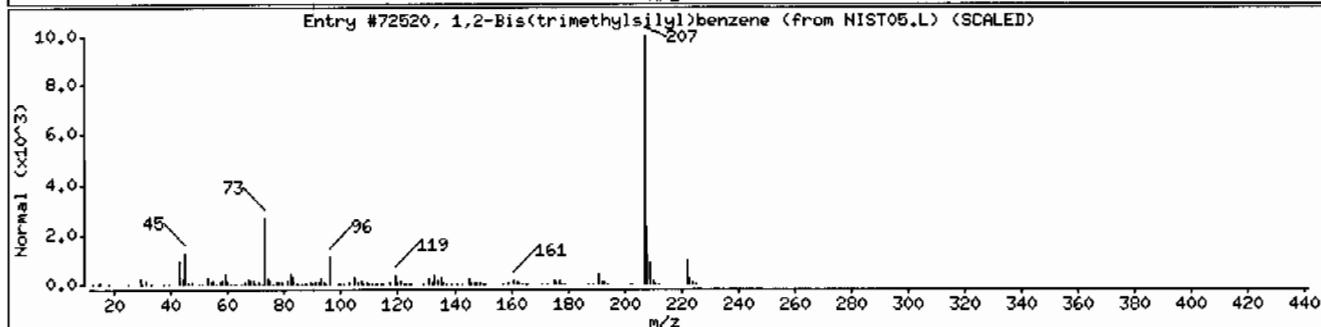
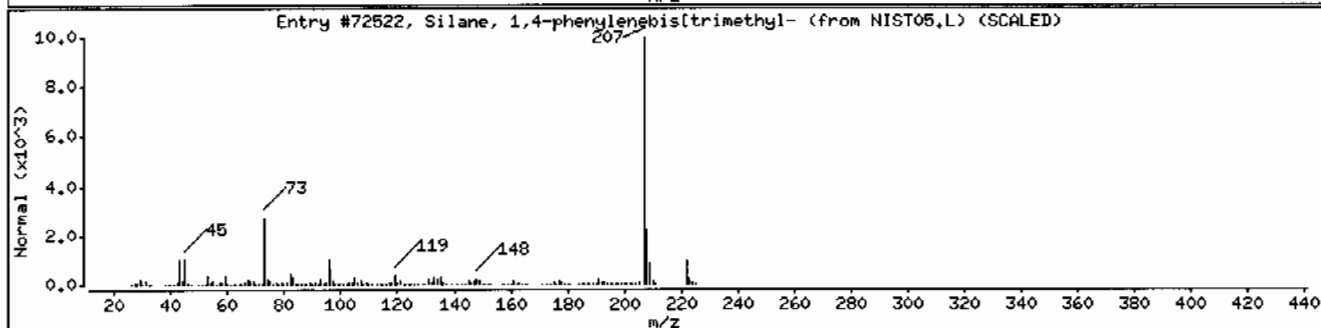
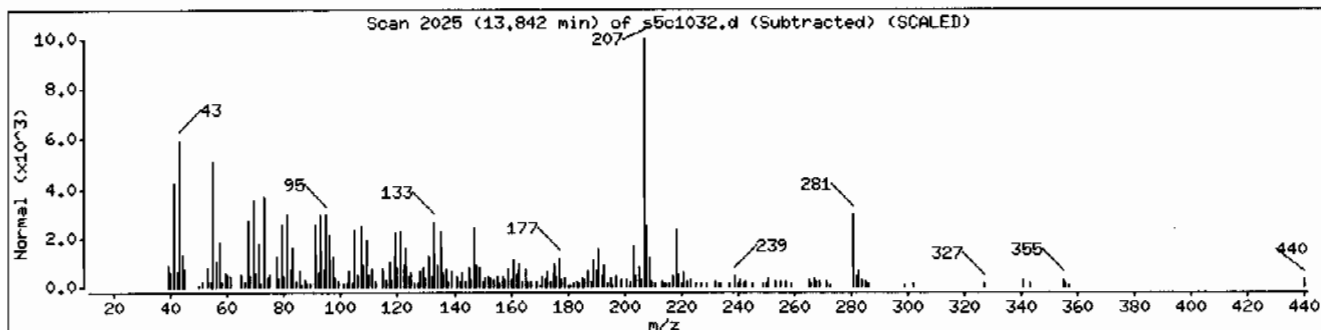
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	42	C12H22Si2	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	35	C12H22Si2	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH111LANL

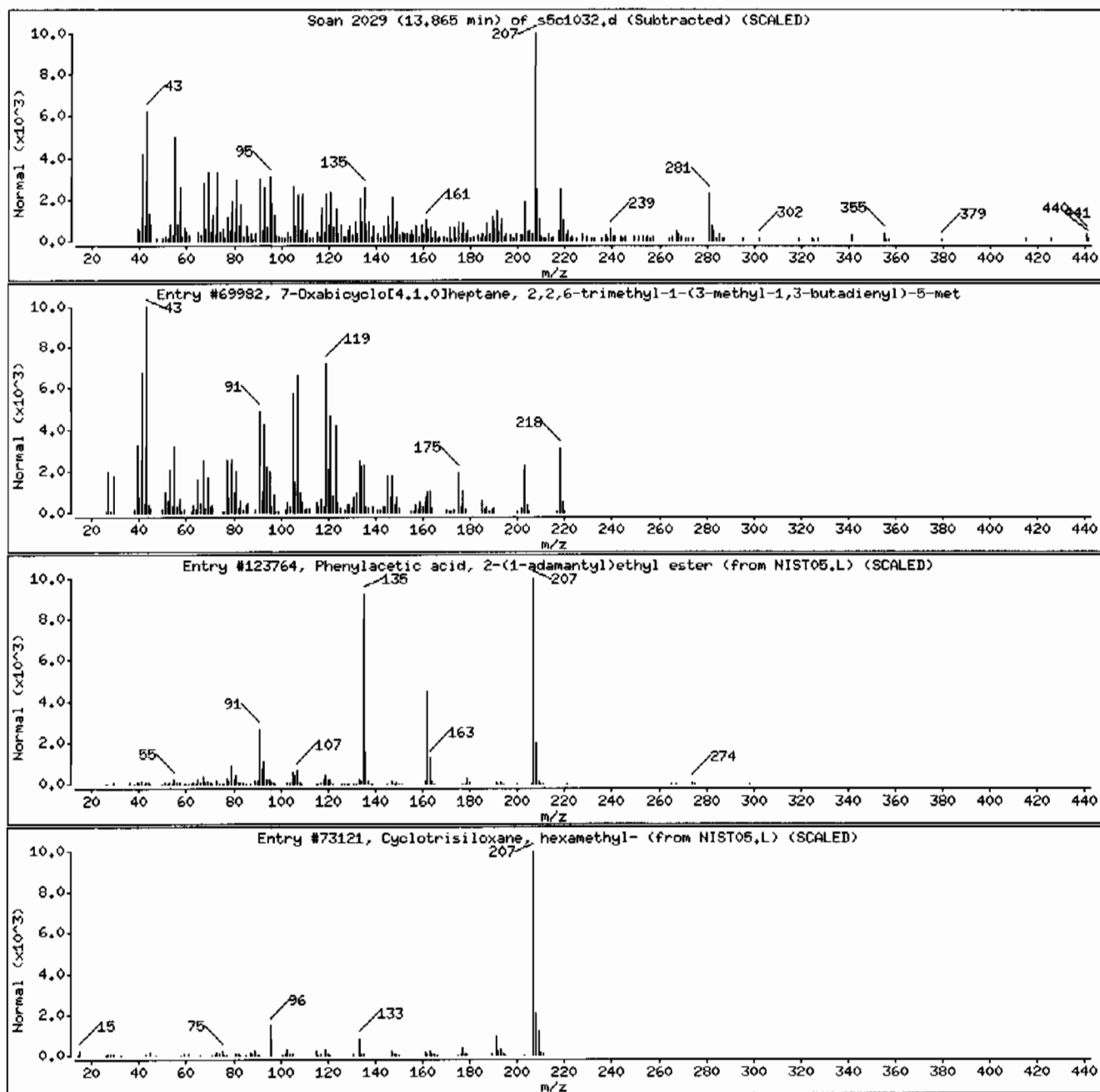
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	43	C15H22O	218
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	38	C20H26O2	298
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C6H18O3Si3	222



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVMI11LANL

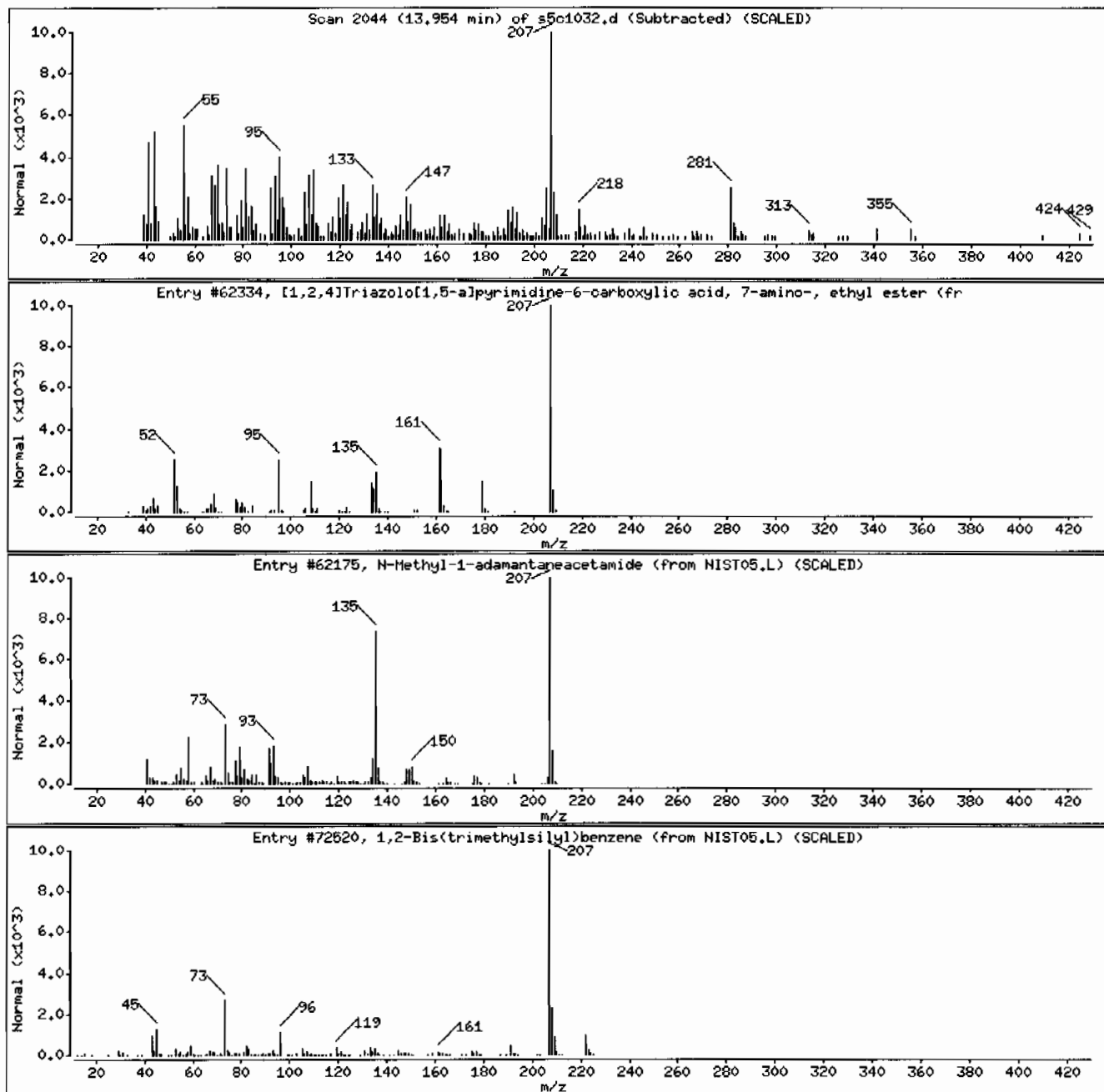
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	30	C13H21NO	207
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	27	C12H22Si2	222



Date: 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 12482400021960659111SVH111LANL

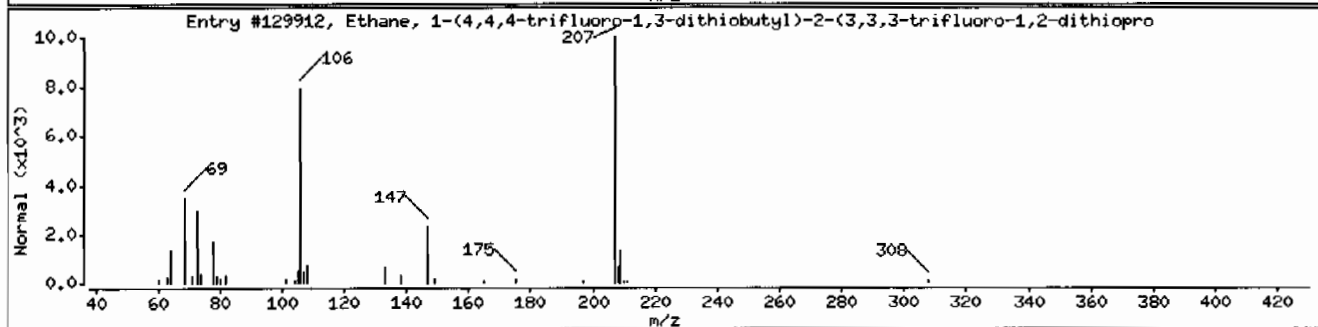
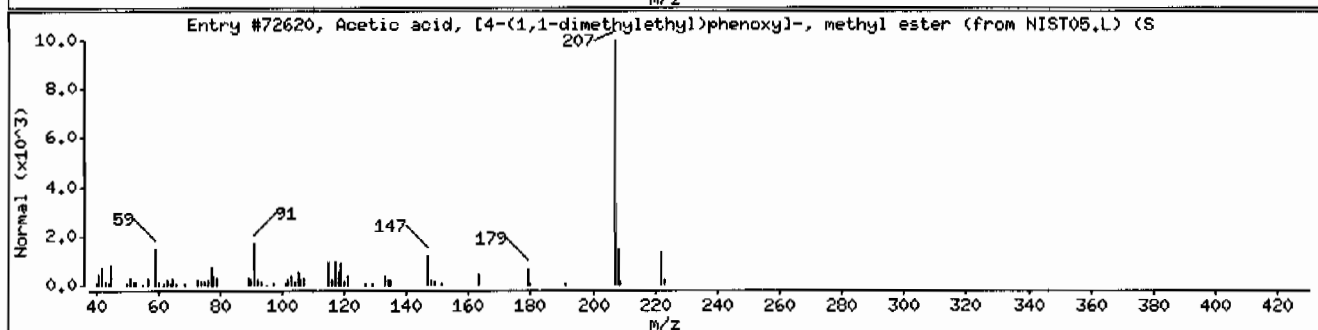
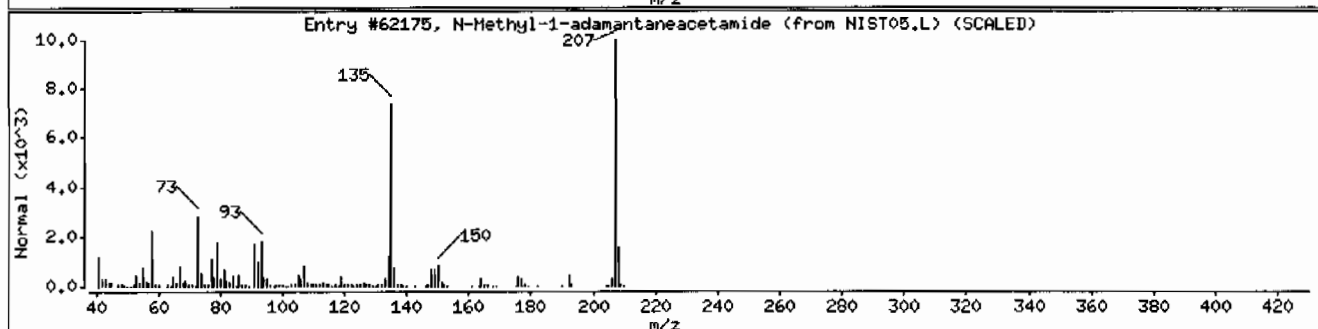
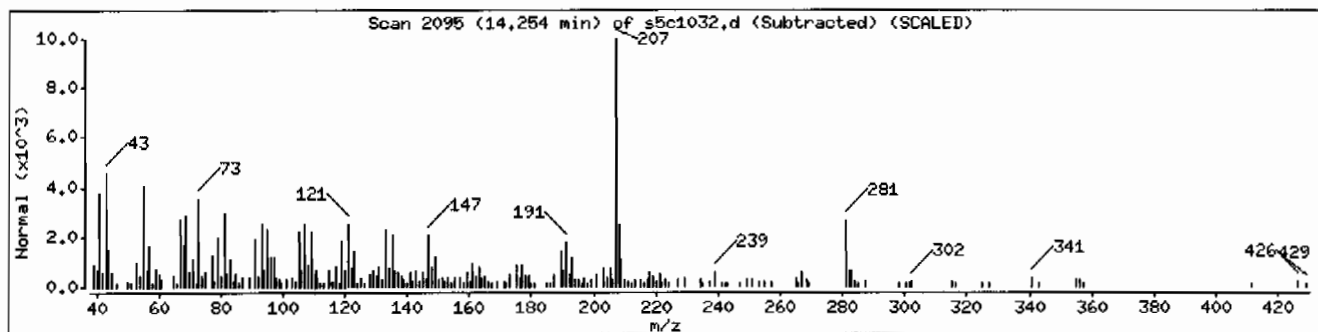
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207
Acetic acid, [4-(1,1-dimethylethyl)pheno	88539-52-3	NIST05.L	72620	35	C13H18O3	222
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	32	C5H6F6S4	308



Date : 10-MAR-2010 21:34

Client ID: RE36-10-7453

Instrument: MSD5.i

Sample Info: 1248240002196065911SVH111LANL

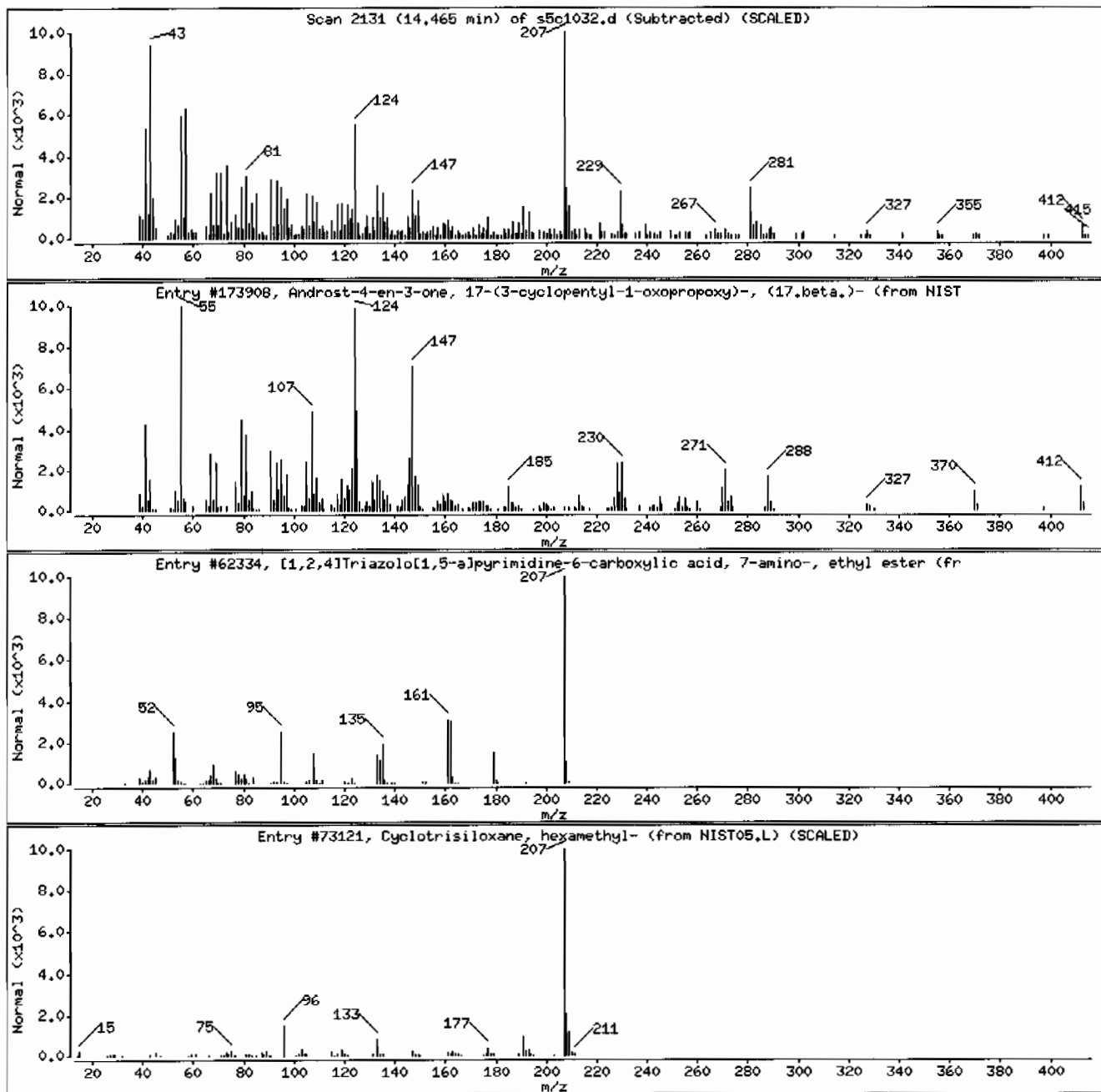
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-4-en-3-one, 17-(3-cyclopentyl-1-	58-20-8	NIST05.L	173908	60	C27H40O3	412
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	30	C6H18OSi3	222



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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.J
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7454
Batch ID: 960659
Run Date: 03/10/2010 21:58
Prep Date: 03/04/2010 10:53
Data File: sSc1033.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363
108-95-2	Phenol	U	363	ug/kg	72.6	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.6	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363
95-48-7	o-Cresol	U	363	ug/kg	72.6	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363
78-59-1	Isophorone	U	363	ug/kg	72.6	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363
65-85-0	Benzoic acid	U	726	ug/kg	181	726
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.6	363
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	363	ug/kg	72.6	363

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

SDG Number: 10-2134
Lab Sample ID: 248240003

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.6	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	726	ug/kg	138	726
132-64-9	Dibenzofuran	U	363	ug/kg	72.6	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.6	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.6	363
122-66-7	Azobenzene	U	363	ug/kg	72.6	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.6	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.6	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.26	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.6	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.6	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.6	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	221	ug/kg		JA
559-74-0	Friedelan-3-one	9.28	782	ug/kg	97	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240003	Date Received: 02/27/2010 09:10	%Moisture: 8.2
Client ID: RE36-10-7454	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 21:58	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1033.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.76	151	ug/kg		J
	Unknown	11.32	254	ug/kg		J
	Unknown	11.35	155	ug/kg		J

Data File: /chem/MSD5.i/s031010.b/s5c1033.d
Report Date: 11-Mar-2010 07:55

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1033.d
Lab Smp Id: 248240003 Client Smp ID: RE36-10-7454
Inj Date : 10-MAR-2010 21:58
Operator : RMB Inst ID: MSD5.i
Smp Info : |248240003|960659|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	8.15480	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791	(1.000)	234053	40.0000	
* 29 Naphthalene-d8	136	4.649	4.653	(1.000)	892697	40.0000	
* 46 Acenaphthene-d10	164	5.896	5.905	(1.000)	527119	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060	(1.000)	920413	40.0000	
* 91 Chrysene-d12	240	9.448	9.458	(1.000)	801717	40.0000	
* 98 Perylene-d12	264	11.025	11.033	(1.000)	623850	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977	(0.789)	408842	69.9541	2540
\$ 5 Phenol-d5	99	3.507	3.507	(0.927)	500613	71.2671	2580
\$ 20 Nitrobenzene-d5	82	4.143	4.152	(0.891)	241457	36.4005	1320
\$ 39 2-Fluorobiphenyl	172	5.390	5.394	(0.914)	431165	32.7492	1190
\$ 60 2,4,6-Tribromophenol	329	6.490	6.492	(1.101)	136292	68.8399	2500
\$ 81 p-Terphenyl-d14	244	8.425	8.428	(0.892)	521676	39.1181	1420

ION RATIO REPORT

SV REPORT

Data file: s5c1033.d

Report Date: 03/11/2010 07:23

Lab. ID: 248240003

SampleType: SAMPLE

Injection Date: 10-MAR-2010 21:58

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240003|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	29166	3.51	3.57	80-120	100	(T)
93	336	3.55	3.57	220-280	1	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	35226	4.14	4.03	80-120	100	(T)
42	23277	4.14	4.03	57-117	66	(T)

43	Dimethylphthalate	CAS#: 131-11-3				
163	94471	5.90	5.67	80-120	100	(T)
164	527119	5.90	5.67	0- 40	558	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	69340	5.90	5.73	80-120	100	(T)
63	802	5.90	5.72	62-122	1	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	69340	5.90	6.02	80-120	100	(T)
89	1240	5.90	6.02	50-110	2	(QT)
63	802	5.90	6.02	24- 84	1	(QT)

53	Fluorene	CAS#: 86-73-7				
166	6741	6.48	6.31	80-120	100	(T)
165	6340	6.49	6.31	61-121	94	(T)
167	2468	6.48	6.31	0- 44	37	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	590	6.49	6.32	80-120	100	(T)
105	1403	6.49	6.32	12- 72	238	(QT)
51	1064	6.48	6.32	36- 96	180	(QT)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1033.d
 Lab Smp Id: 248240003 Client Smp ID: RE36-10-7454
 Inj Date : 10-MAR-2010 21:58
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240003|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 33
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	8.15480	% moisture

Cpnd Variable

Local Compound Variable

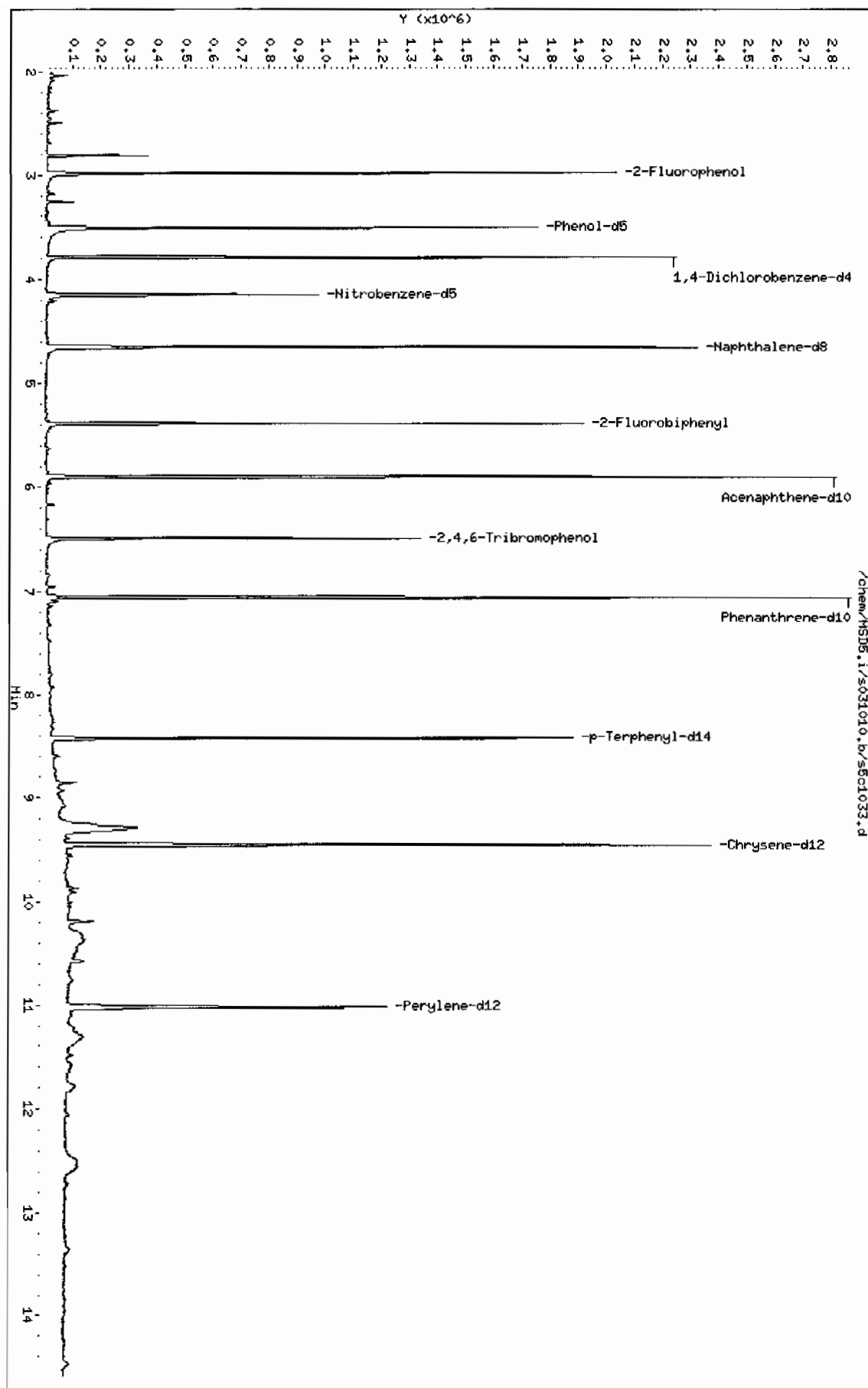
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.784	1591341	40.000
* 91 Chrysene-d12	9.448	2159165	40.000
* 98 Perylene-d12	11.025	1798655	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.813	242023	6.08349316	221	0		0	10
Friedelan-3-one					CAS #: 559-74-0		
9.278	1163422	21.5531851	782	97	NIST05.L	176566	91
Unknown					CAS #:		
10.760	186869	4.15575458	151	0		0	98
Unknown					CAS #:		
11.319	315211	7.00993677	254	0		0	98
Unknown					CAS #:		
11.354	192231	4.27500210	155	0		0	98

Data File: /chem/MSD5.i/s031010.b/s0c1033.d
Date: 10-MAR-2010 21:58
Client ID: RE36-10-7454
Sample Info: 1248240003196065911SMH11LNL
Volume Injected (uL): 0.5
Column phase: 3M DB-SHS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20



Date: 10-MAR-2010 21:58

Client ID: RE36-10-7454

Instrument: MSD5.i

Sample Info: 1248240003196065911SVMI11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

2-Pentanone, 4-hydroxy-4-methyl-

Acetic acid, 1,1-dimethylethyl ester

CAS Number

Library

Entry

Quality

Formula

Weight

123-42-2

NIST05.L

7951

72

C6H12O2

116

123-42-2

NIST05.L

7952

45

C6H12O2

116

540-88-5

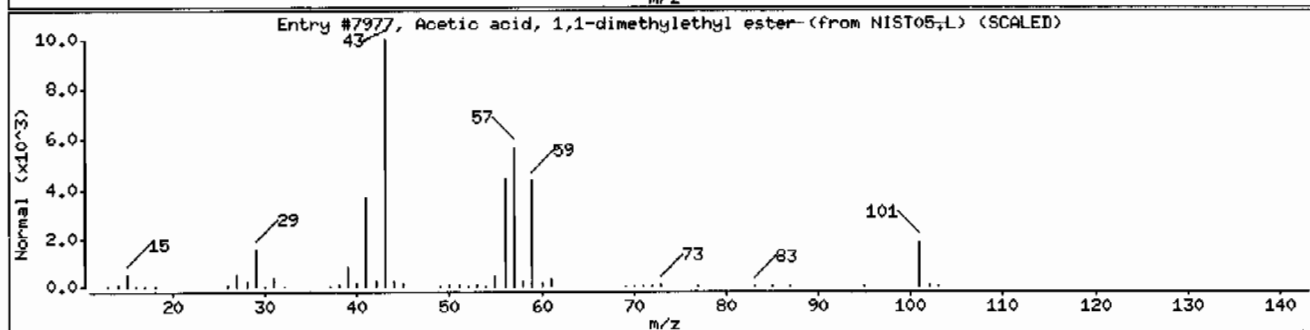
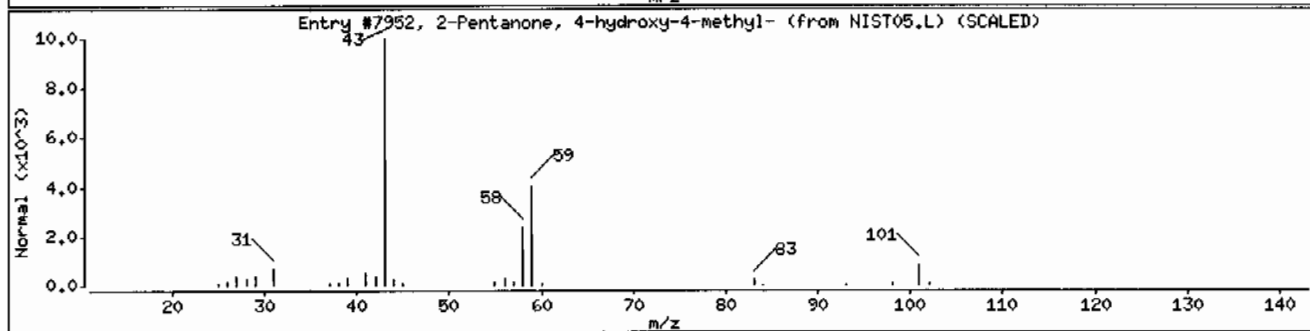
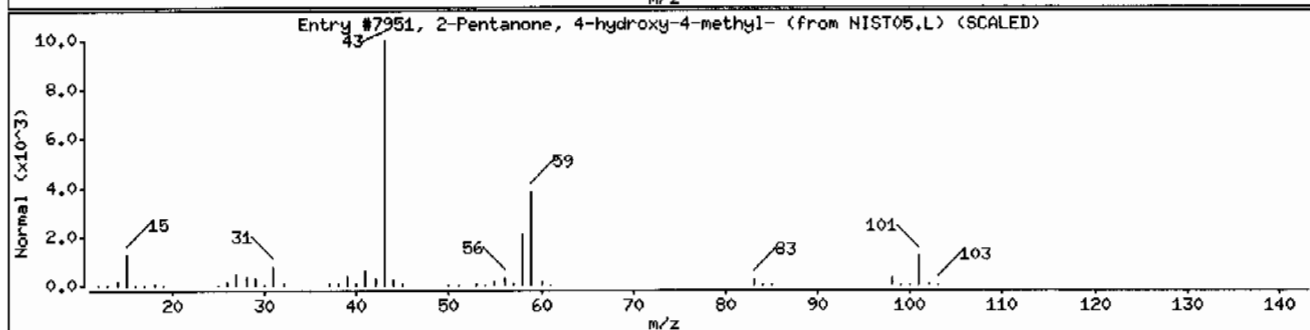
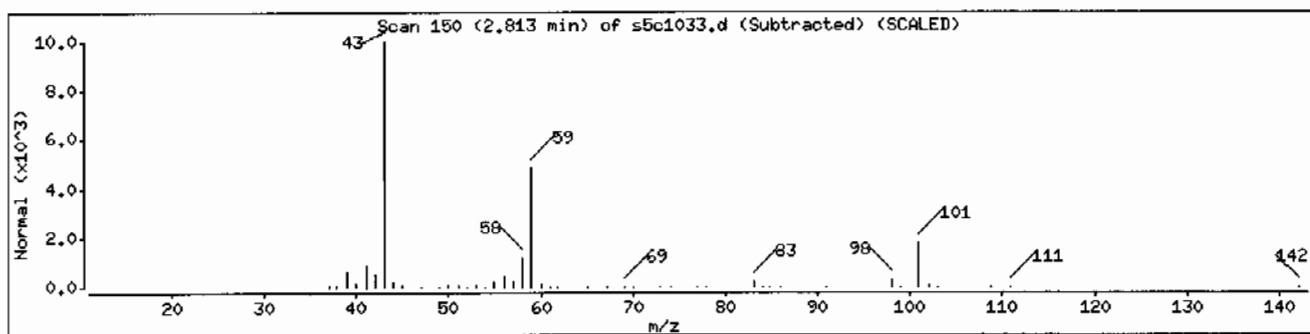
NIST05.L

7977

38

C6H12O2

116



Date : 10-MAR-2010 21:58

Client ID: RE36-10-7454

Instrument: MSD5.i

Sample Info: 1248240003196065911ISVH11ILANL

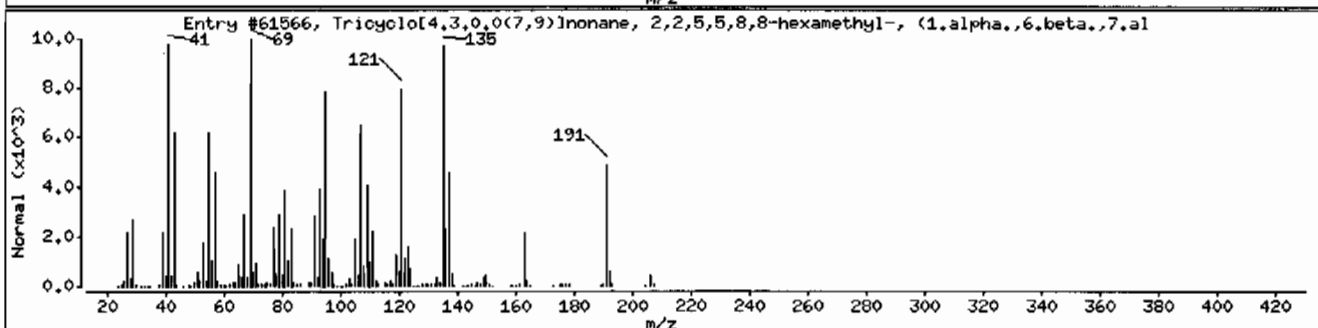
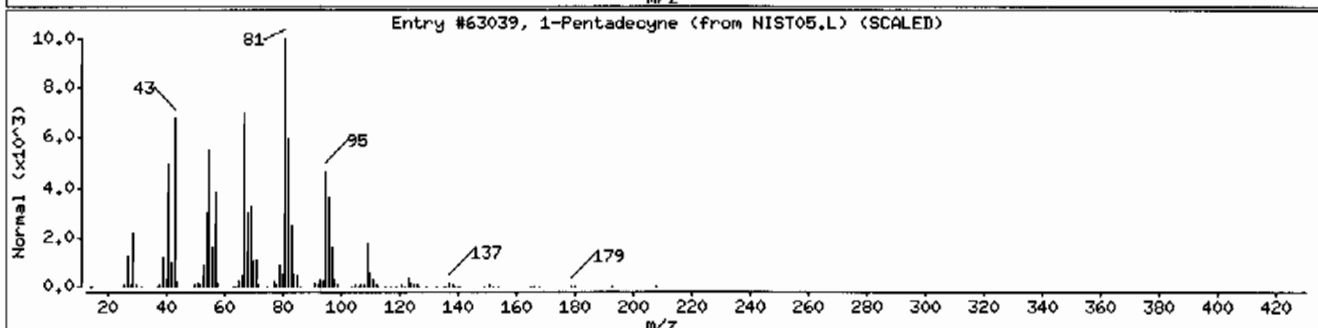
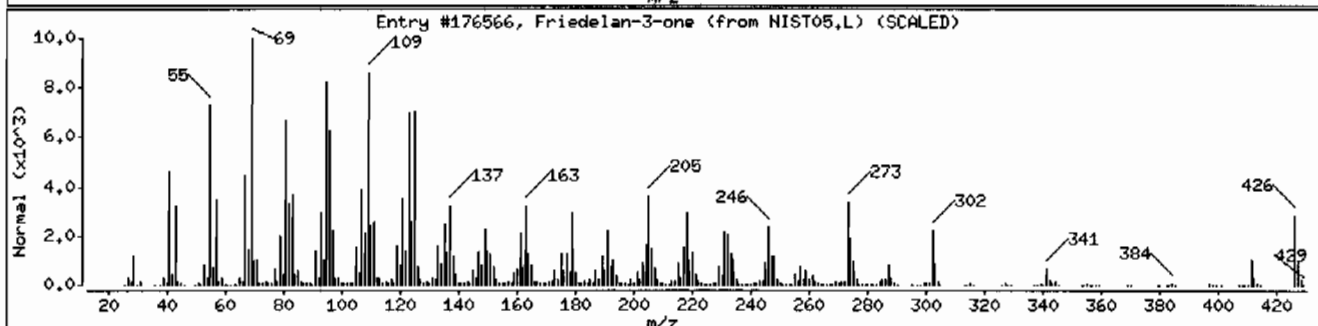
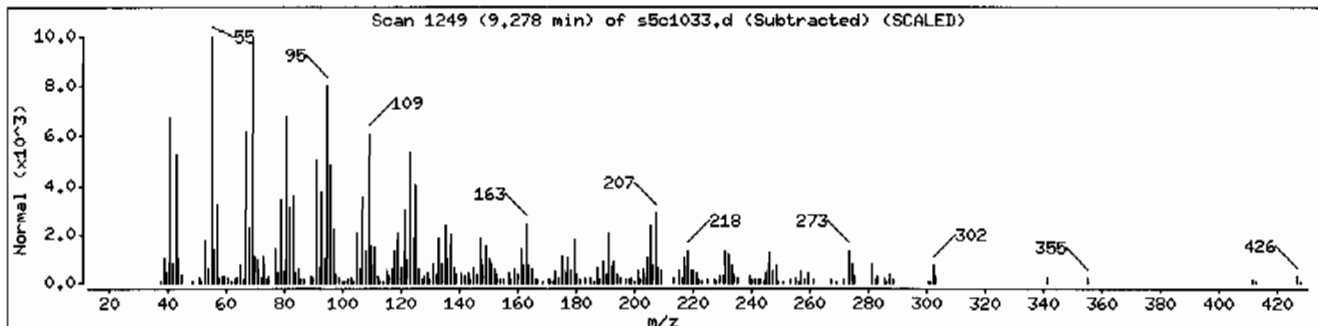
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	97	C30H50O	426
1-Pentadecyne	765-13-9	NIST05.L	63039	92	C15H28	208
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5,5,8,8-	54832-82-5	NIST05.L	61566	45	C15H26	206



Date: 10-MAR-2010 21:58

Client ID: RE36-10-7454

Instrument: HSD5.i

Sample Info: I248240003196065911ISVM111LANL

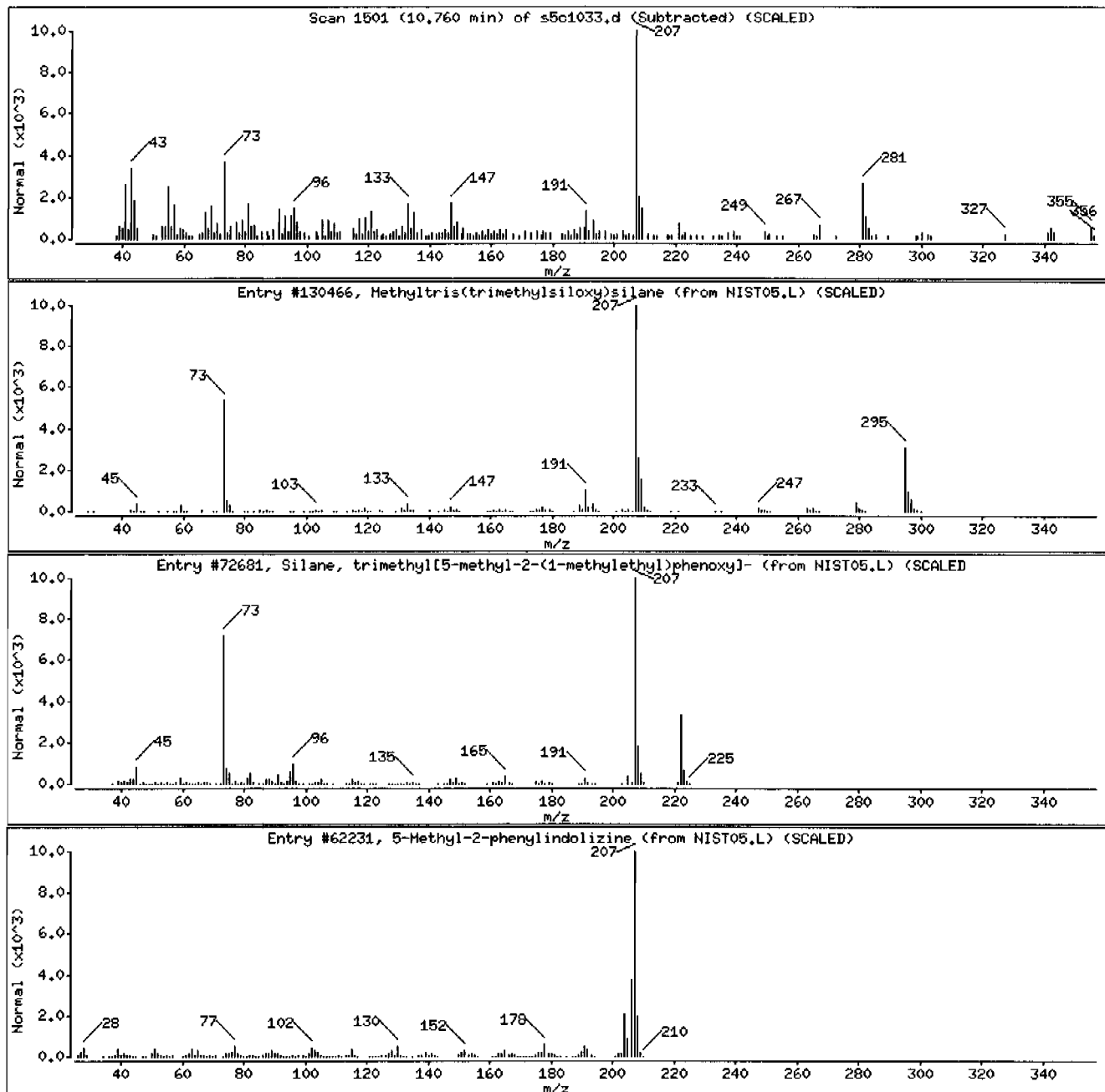
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	59	C10H30O3Si4	310
Silane, trimethyl[5-methyl-2-(1-methylethyl)-	55012-80-1	NIST05.L	72681	58	C13H22OSi	222
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	47	C15H13N	207



Date : 10-MAR-2010 21:58

Client ID: RE36-10-7454

Instrument: MSD5.i

Sample Info: 1248240003196065911SVH11ILANL

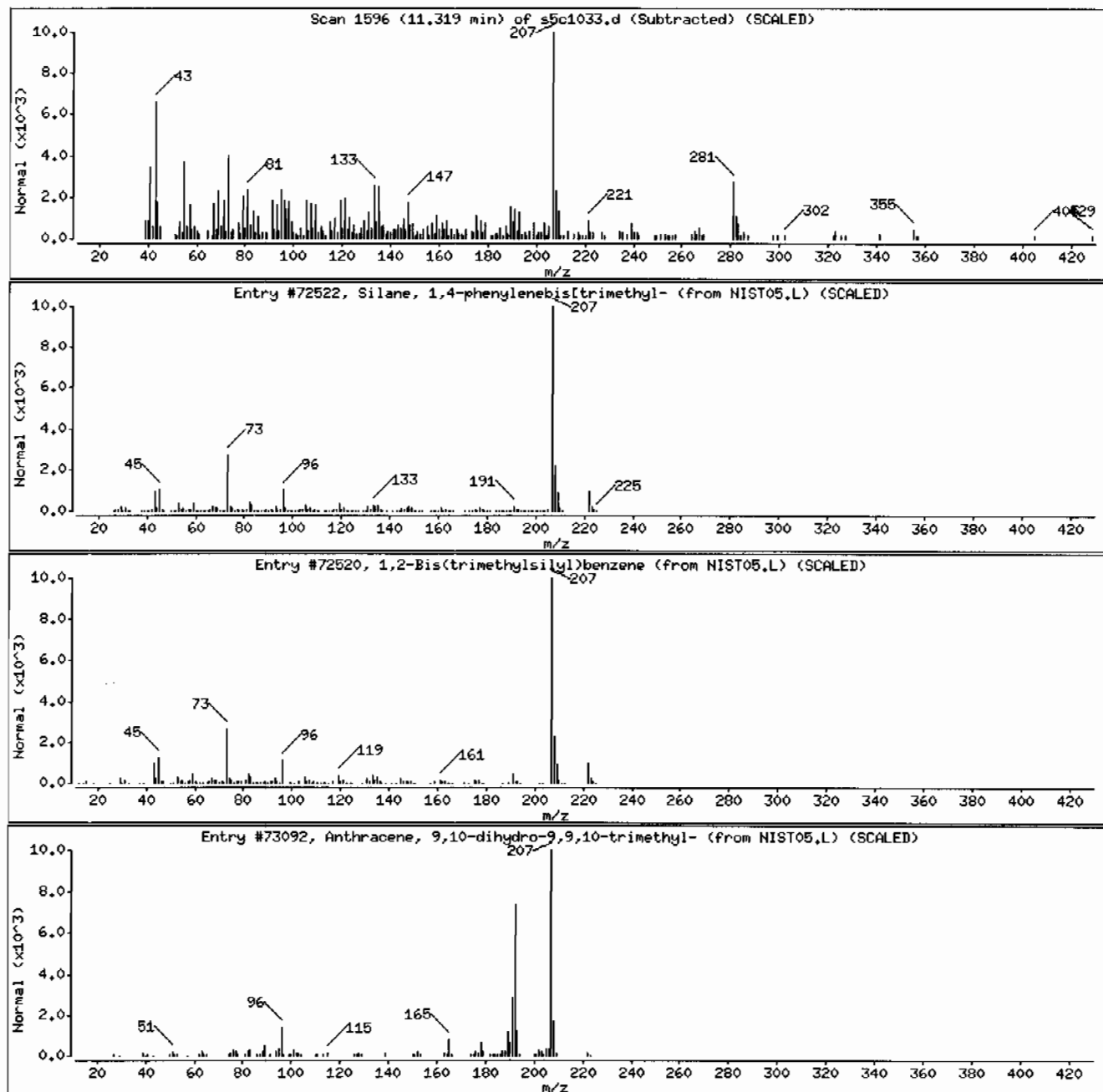
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	50	C12H22Si2	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	49	C12H22Si2	222
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	45	C17H18	222



Date: 10-MAR-2010 21:58

Client ID: RE36-10-7454

Instrument: HSD5.i

Sample Info: 1248240003196065911SVMI1ILANL

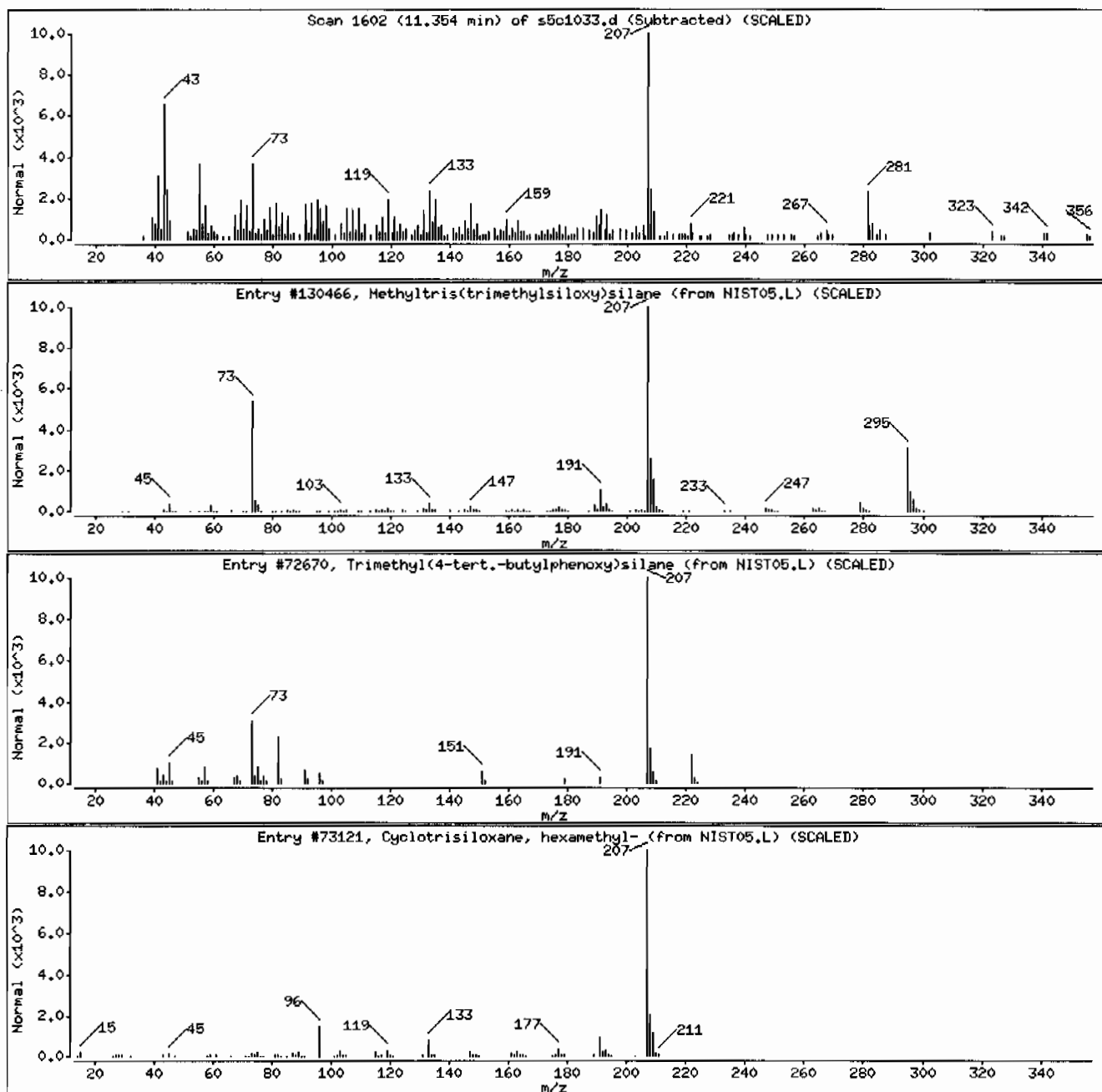
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	50	C ₁₀ H ₃₀ O ₃ Si ₄	310
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	43	C ₁₃ H ₂₂ O ₂ Si	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222



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

SDG Number: 10-2134
Lab Sample ID: 248240006

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7455
Batch ID: 960659
Run Date: 03/10/2010 23:06
Prep Date: 03/04/2010 10:53
Data File: s5c1036.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	441	ug/kg	88.2	441
108-95-2	Phenol	U	441	ug/kg	88.2	441
95-57-8	2-Chlorophenol	U	441	ug/kg	88.2	441
106-46-7	1,4-Dichlorobenzene	U	441	ug/kg	88.2	441
621-64-7	N-Nitrosodipropylamine	U	441	ug/kg	88.2	441
59-50-7	4-Chloro-3-methylphenol	U	441	ug/kg	88.2	441
83-32-9	Acenaphthene	U	44.1	ug/kg	14.5	44.1
121-14-2	2,4-Dinitrotoluene	U	441	ug/kg	44.1	441
100-02-7	4-Nitrophenol	U	441	ug/kg	145	441
87-86-5	Pentachlorophenol	U	441	ug/kg	110	441
129-00-0	Pyrene		75.4	ug/kg	13.2	44.1
110-86-1	Pyridine	U	441	ug/kg	88.2	441
62-53-3	Aniline	U	441	ug/kg	132	441
111-44-4	bis(2-Chloroethyl) ether	U	441	ug/kg	88.2	441
541-73-1	1,3-Dichlorobenzene	U	441	ug/kg	88.2	441
100-51-6	Benzyl alcohol	U	441	ug/kg	132	441
95-50-1	1,2-Dichlorobenzene	U	441	ug/kg	88.2	441
108-60-1	bis(2-Chloroisopropyl)ether	U	441	ug/kg	88.2	441
95-48-7	o-Cresol	U	441	ug/kg	88.2	441
65794-96-9	m,p-Cresols	U	441	ug/kg	132	441
67-72-1	Hexachloroethane	U	441	ug/kg	88.2	441
98-95-3	Nitrobenzene	U	441	ug/kg	88.2	441
78-59-1	Isophorone	U	441	ug/kg	88.2	441
88-75-5	2-Nitrophenol	U	441	ug/kg	88.2	441
105-67-9	2,4-Dimethylphenol	U	441	ug/kg	154	441
111-91-1	bis(2-Chloroethoxy)methane	U	441	ug/kg	88.2	441
120-83-2	2,4-Dichlorophenol	U	441	ug/kg	88.2	441
65-85-0	Benzoic acid	J	627	ug/kg	220	882
91-20-3	Naphthalene	U	44.1	ug/kg	13.2	44.1
106-47-8	4-Chloroaniline	U	441	ug/kg	88.2	441
87-68-3	Hexachlorobutadiene	U	441	ug/kg	88.2	441
91-57-6	2-Methylnaphthalene	U	44.1	ug/kg	8.82	44.1
77-47-4	Hexachlorocyclopentadiene	U	441	ug/kg	88.2	441
88-06-2	2,4,6-Trichlorophenol	U	441	ug/kg	88.2	441
95-95-4	2,4,5-Trichlorophenol	U	441	ug/kg	88.2	441
91-58-7	2-Chloronaphthalene	U	44.1	ug/kg	14.5	44.1
88-74-4	2-Nitroaniline	U	441	ug/kg	88.2	441
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	441	ug/kg	88.2	441

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240006	Date Received: 02/27/2010 09:10	%Moisture: 24.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.1	Dilution: 1
Run Date: 03/10/2010 23:06	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5c1036.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	441	ug/kg	88.2	441
606-20-2	2,6-Dinitrotoluene	U	441	ug/kg	44.1	441
208-96-8	Acenaphthylene	U	44.1	ug/kg	13.2	44.1
51-28-5	2,4-Dinitrophenol	U	882	ug/kg	168	882
132-64-9	Dibenzofuran	U	441	ug/kg	88.2	441
84-66-2	Diethylphthalate	U	441	ug/kg	88.2	441
86-73-7	Fluorene	U	44.1	ug/kg	13.2	44.1
7005-72-3	4-Chlorophenylphenylether	U	441	ug/kg	88.2	441
534-52-1	2-Methyl-4,6-dinitrophenol	U	441	ug/kg	88.2	441
100-01-6	4-Nitroaniline	U	441	ug/kg	132	441
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	441	ug/kg	88.2	441
122-66-7	Azobenzene	U	441	ug/kg	88.2	441
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	441	ug/kg	88.2	441
118-74-1	Hexachlorobenzene	U	441	ug/kg	88.2	441
85-01-8	Phenanthrene		53.7	ug/kg	13.2	44.1
120-12-7	Anthracene	U	44.1	ug/kg	8.82	44.1
84-74-2	Di-n-butylphthalate	U	441	ug/kg	88.2	441
206-44-0	Fluoranthene		90.3	ug/kg	13.2	44.1
85-68-7	Butylbenzylphthalate	U	441	ug/kg	88.2	441
56-55-3	Benzo(a)anthracene	J	36.0	ug/kg	13.2	44.1
91-94-1	3,3'-Dichlorobenzidine	U	441	ug/kg	132	441
218-01-9	Chrysene		47.7	ug/kg	13.2	44.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	441	ug/kg	88.2	441
117-84-0	Di-n-octylphthalate	U	441	ug/kg	88.2	441
205-99-2	Benzo(b)fluoranthene		50.7	ug/kg	13.2	44.1
207-08-9	Benzo(k)fluoranthene	U	44.1	ug/kg	13.2	44.1
50-32-8	Benzo(a)pyrene	J	36.5	ug/kg	13.2	44.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.1	ug/kg	13.2	44.1
53-70-3	Dibenzo(a,h)anthracene	U	44.1	ug/kg	13.2	44.1
191-24-2	Benzo(ghi)perylene	U	44.1	ug/kg	13.2	44.1
120-82-1	1,2,4-Trichlorobenzene	U	441	ug/kg	88.2	441

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.74	636	ug/kg	96	NJ
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.56	541	ug/kg	99	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240006	Date Received: 02/27/2010 09:10	%Moisture: 24.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 23:06	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5c1036.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.8	560	ug/kg	97	NJ
	Unknown	8.87	345	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	641	ug/kg	98	NJ
	Unknown	8.94	539	ug/kg		J
	Unknown	9.08	447	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1760	ug/kg	97	NJ
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.67	908	ug/kg	95	NJ
629-78-7	Heptadecane	9.87	557	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1570	ug/kg	99	NJ
	Unknown	10.2	461	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.29	668	ug/kg	95	NJ
	Unknown	10.32	579	ug/kg		J
	Unknown	10.63	573	ug/kg		J
	Unknown	11.11	2080	ug/kg		J
112-95-8	Eicosane	11.49	572	ug/kg	98	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.57	1300	ug/kg	91	NJ
	Unknown	11.81	2330	ug/kg		J
57-87-4	Ergosterol	12.52	625	ug/kg	91	NJ
83-47-6	.gamma.-Sitosterol	13.34	1350	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	14.48	652	ug/kg	91	NJ

Data File: /chem/MSD5.i/s031010.b/s5c1036.d
Report Date: 11-Mar-2010 07:56

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1036.d
Lab Smp Id: 248240006 Client Smp ID: RE36-10-7455
Inj Date : 10-MAR-2010 23:06
Operator : RMB Inst ID: MSD5.i
Smp Info : |248240006|960659|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	24.41770	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791 (1.000)	227889	40.0000	
* 29 Naphthalene-d8	136	4.648	4.653 (1.000)	893343	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905 (1.000)	508368	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060 (1.000)	883984	40.0000	
* 91 Chrysene-d12	240	9.448	9.458 (1.000)	754970	40.0000	
* 98 Perylene-d12	264	11.030	11.033 (1.000)	513812	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977 (0.789)	392286	68.9368	3040
\$ 5 Phenol-d5	99	3.507	3.507 (0.927)	476099	69.6105	3070
\$ 20 Nitrobenzene-d5	82	4.143	4.152 (0.891)	237878	35.8350	1580
\$ 39 2-Fluorobiphenyl	172	5.390	5.394 (0.914)	427932	33.7025	1480
\$ 60 2,4,6-Tribromophenol	329	6.489	6.492 (1.101)	132040	69.1522	3050
\$ 81 p-Terphenyl-d14	244	8.425	8.428 (0.892)	463350	36.8959	1630

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.319	8.322	(0.880)	35662	1.70948	75.4
27 Benzoic acid	105	4.396	4.426	(0.946)	19033	14.2208	627(a)
68 Phenanthrene	178	7.072	7.079	(1.002)	22792	1.21797	53.7
76 Fluoranthene	202	8.101	8.110	(1.148)	39988	2.04848	90.3
89 Benzo(a)anthracene	228	9.436	9.444	(0.999)	13783	0.81635	36.0(a)
92 Chrysene	228	9.472	9.482	(1.002)	17017	1.08162	47.7
95 Benzo(b)fluoranthene	252	10.542	10.551	(0.956)	14117	1.15026	50.7
97 Benzo(a)pyrene	252	10.954	10.961	(0.993)	8528	0.82714	36.5(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5c1036.d

Report Date: 03/11/2010 07:25

Lab. ID: 248240006

SampleType: SAMPLE

Injection Date: 10-MAR-2010 23:06

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240006|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	29279	3.51	3.57	80-120	100	(T)
93	9857	3.55	3.57	220-280	34	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	34495	4.14	4.03	80-120	100	(T)
42	24310	4.14	4.03	57-117	70	(T)

22 Isophorone		CAS#: 78-59-1				
82	233038	4.14	4.32	80-120	100	(T)
138	160	4.35	4.32	0- 49	0	()

27 Benzoic acid		CAS#: 65-85-0				
105	19033	4.40	4.43	80-120	100	()
122	16975	4.40	4.43	45-105	89	()
77	14906	4.40	4.43	40-100	78	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	13488	5.63	5.50	80-120	100	(T)
164	948	5.63	5.50	3- 63	7	(T)
127	1500	5.63	5.50	10- 70	11	(T)

42 o-Nitroaniline		CAS#: 88-74-4				
65	21473	5.63	5.56	80-120	100	(T)
92	24855	5.63	5.56	31- 91	116	(QT)
138	1767	5.63	5.56	70-130	8	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	91299	5.90	5.67	80-120	100	(T)
164	508368	5.90	5.67	0- 40	557	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	67047	5.90	5.73	80-120	100	(T)
63	1172	5.90	5.72	62-122	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	66074	5.90	6.02	80-120	100	(T)
89	967	5.90	6.02	50-110	1	(QT)
63	1029	5.90	6.02	24- 84	2	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	986	5.96	5.94	80-120	100	()
109	1141	5.99	5.94	50-110	116	(Q)
65	839	5.96	5.94	82-142	85	()

53 Fluorene				CAS#: 86-73-7		
166	6749	6.48	6.31	80-120	100	(T)
165	7065	6.49	6.31	61-121	105	(T)
167	2329	6.48	6.31	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	284	6.37	6.32	80-120	100	()
105	982	6.35	6.32	12- 72	345	(Q)
51	614	6.33	6.32	36- 96	216	(Q)

61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	8521	6.49	6.67	80-120	100	(T)
141	63370	6.48	6.67	50-110	744	(QT)
250	17088	6.49	6.67	69-129	201	(QT)

65 Pentachlorophenol				CAS#: 87-86-5		
266	298	6.88	6.89	80-120	100	()
264	134	6.89	6.89	33- 93	45	()
268	228	6.88	6.89	32- 92	77	()

68 Phenanthrene				CAS#: 85-01-8		
178	22792	7.07	7.08	80-120	100	()
179	3627	7.07	7.08	0- 46	16	()
176	4617	7.07	7.08	0- 49	20	()

69 Anthracene				CAS#: 120-12-7		
178	22792	7.07	7.12	80-120	100	()
179	3627	7.07	7.12	0- 46	16	()
176	4617	7.07	7.12	0- 48	20	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene		CAS#: 206-44-0				
202	39988	8.10	8.11	80-120	100	()
203	6997	8.10	8.11	0- 48	17	()
101	4848	8.10	8.11	0- 42	12	()

79 Pyrene		CAS#: 129-00-0				
202	35662	8.32	8.32	80-120	100	()
200	8094	8.32	8.32	0- 51	23	()
101	6123	8.32	8.32	0- 44	17	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	13783	9.44	9.44	80-120	100	()
226	3211	9.44	9.44	0- 56	23	()
229	4694	9.44	9.44	0- 50	34	()

92 Chrysene		CAS#: 218-01-9				
228	17017	9.47	9.48	80-120	100	()
229	3967	9.47	9.48	0- 51	23	()
226	6265	9.47	9.48	0- 60	37	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	14117	10.54	10.55	80-120	100	()
253	3683	10.54	10.55	0- 52	26	()
125	2411	10.55	10.55	0- 41	17	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	5229	10.57	10.58	80-120	100	()
253	1299	10.57	10.58	0- 52	25	()
125	2238	10.58	10.58	0- 42	43	(Q)

97 Benzo(a)pyrene		CAS#: 50-32-8				
252	8528	10.95	10.96	80-120	100	()
253	1806	10.95	10.96	0- 52	21	()
125	1509	10.95	10.96	0- 30	18	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	3431	12.65	12.67	80-120	100	()
138	792	12.66	12.68	0- 59	23	()

101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	3505	13.16	13.18	80-120	100	()
138	1319	13.16	13.18	0- 30	38	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1036.d
 Lab Smp Id: 248240006 Client Smp ID: RE36-10-7455
 Inj Date : 10-MAR-2010 23:06
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240006|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	24.41770	% moisture

Cpnd Variable

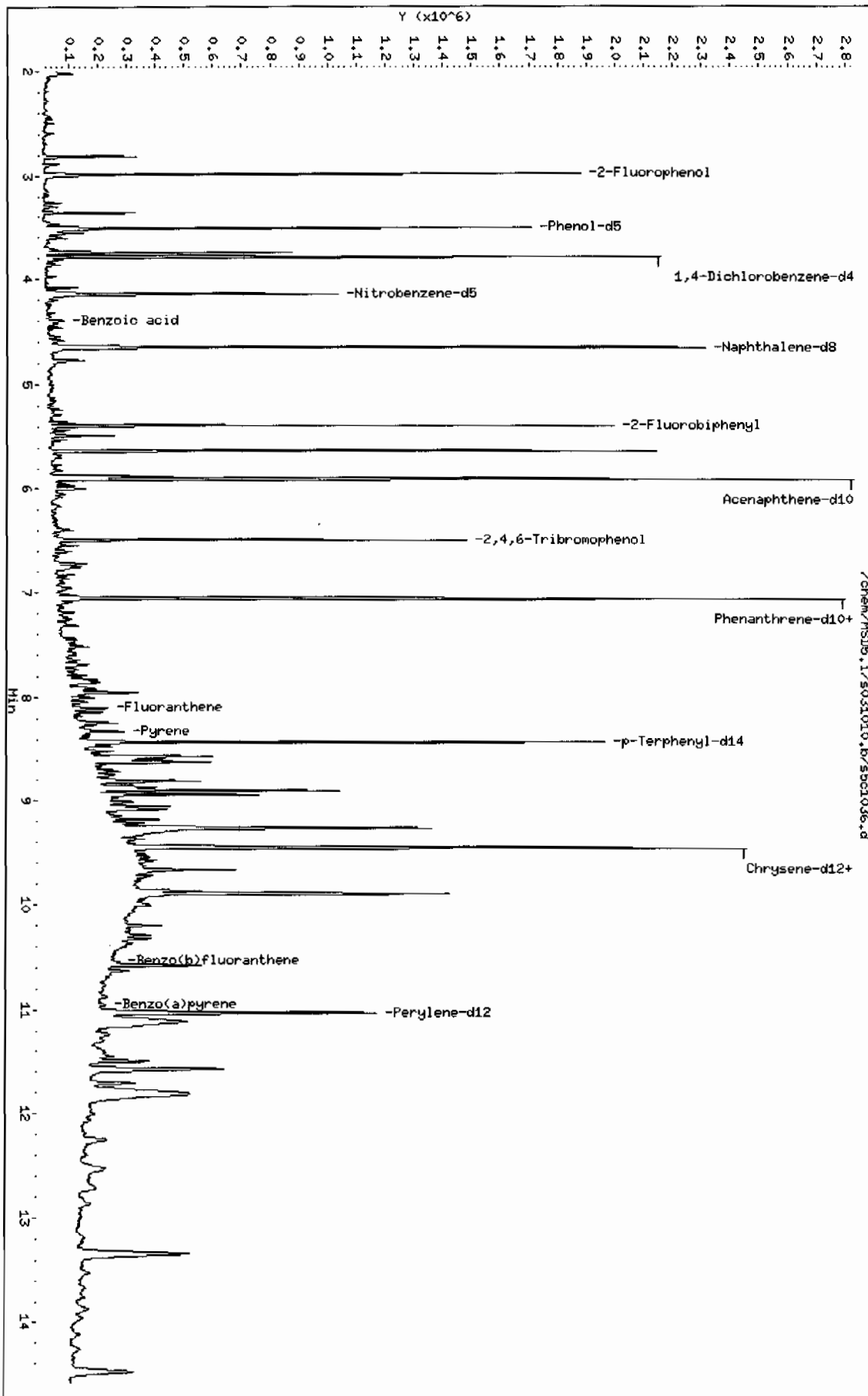
Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.784	1551857	40.000
* 91 Chrysene-d12	9.448	2817541	40.000
* 98 Perylene-d12	11.030	1860265	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	
3-Carene					CAS #: 13466-78-9		
3.743	559302	14.4163136	636	96	NIST05.L	15156	10
Phenanthrene, 1-methyl-7-(1-methylethyl)					CAS #: 483-65-8		
8.560	863695	12.2616882	540	99	NIST05.L	81277	91
1-Phenanthrenecarboxylic acid, 7-ethenyl					CAS #: 1686-62-0		
8.801	894697	12.7018138	560	97	NIST05.L	134785	91
Unknown					CAS #:		
8.866	551192	7.82514562	345	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.895	1024437	14.5437013	641	98	NIST05.L	133618	91
Unknown					CAS #:		
8.936	860837	12.2211139	539	0		0	91
Unknown					CAS #:		
9.078	713719	10.1325024	447	0		0	91
Cyclohexadecane, 1,2-diethyl-					CAS #: 1000155-85-3		
9.260	2806834	39.8479887	1760	97	NIST05.L	112113	91
7-Oxodehydroabiatic acid, methyl ester					CAS #: 110936-78-2		
9.666	1450849	20.5973699	908	95	NIST05.L	141448	91
Heptadecane					CAS #: 629-78-7		
9.866	889560	12.6288853	557	95	NIST05.L	85524	91
1-Docosene					CAS #: 1599-67-3		
9.895	2511660	35.6574673	1570	99	NIST05.L	129888	91
Unknown					CAS #:		
10.201	736449	10.4552003	461	0		0	91
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
10.289	704733	15.1533813	668	95	NIST05.L	112295	98
Unknown					CAS #:		
10.325	610653	13.1304437	579	0		0	98
Unknown					CAS #:		
10.630	604245	12.9926515	573	0		0	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
11.113	2193445	47.1641281	2080	0		0	98
Eicosane					CAS #: 112-95-8		
11.489	603401	12.9745237	572	98	NIST05.L	113492	98
Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)					CAS #: 2883-08-1		
11.566	1374580	29.5566477	1300	91	NIST05.L	73082	98
Unknown					CAS #:		
11.813	2458145	52.8557908	2330	0		0	98
Ergosterol					CAS #: 57-87-4		
12.524	659257	14.1755403	625	91	NIST05.L	170282	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.336	1421673	30.5692543	1350	97	NIST05.L	174402	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
14.477	687457	14.7819177	652	91	NIST05.L	173936	98



Data File: /chem/HSD5.i/s031010.b/s5c1036.d
Date: 10-MAR-2010 23:06
Client ID: RE36-10-7455
Sample Info: 1248240006196065911SVN111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: HSD5.i
Operator: RHB
Column diameter: 0.20

Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 1248240006196065911SVMI1ILANL

Volume Injected (uL): 0.5

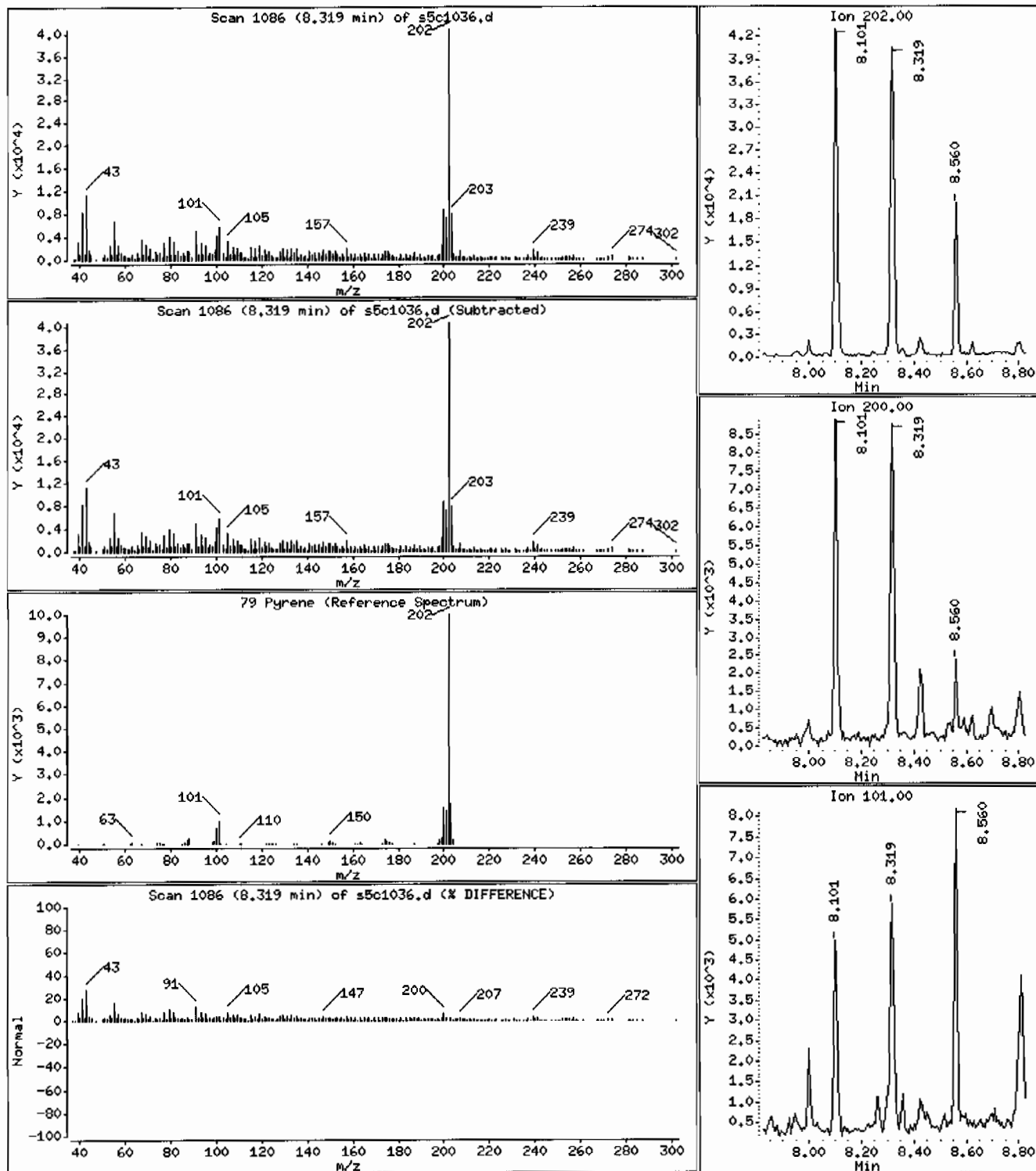
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 75.4 ug/Kg



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911SVH11LANL

Volume Injected (uL): 0.5

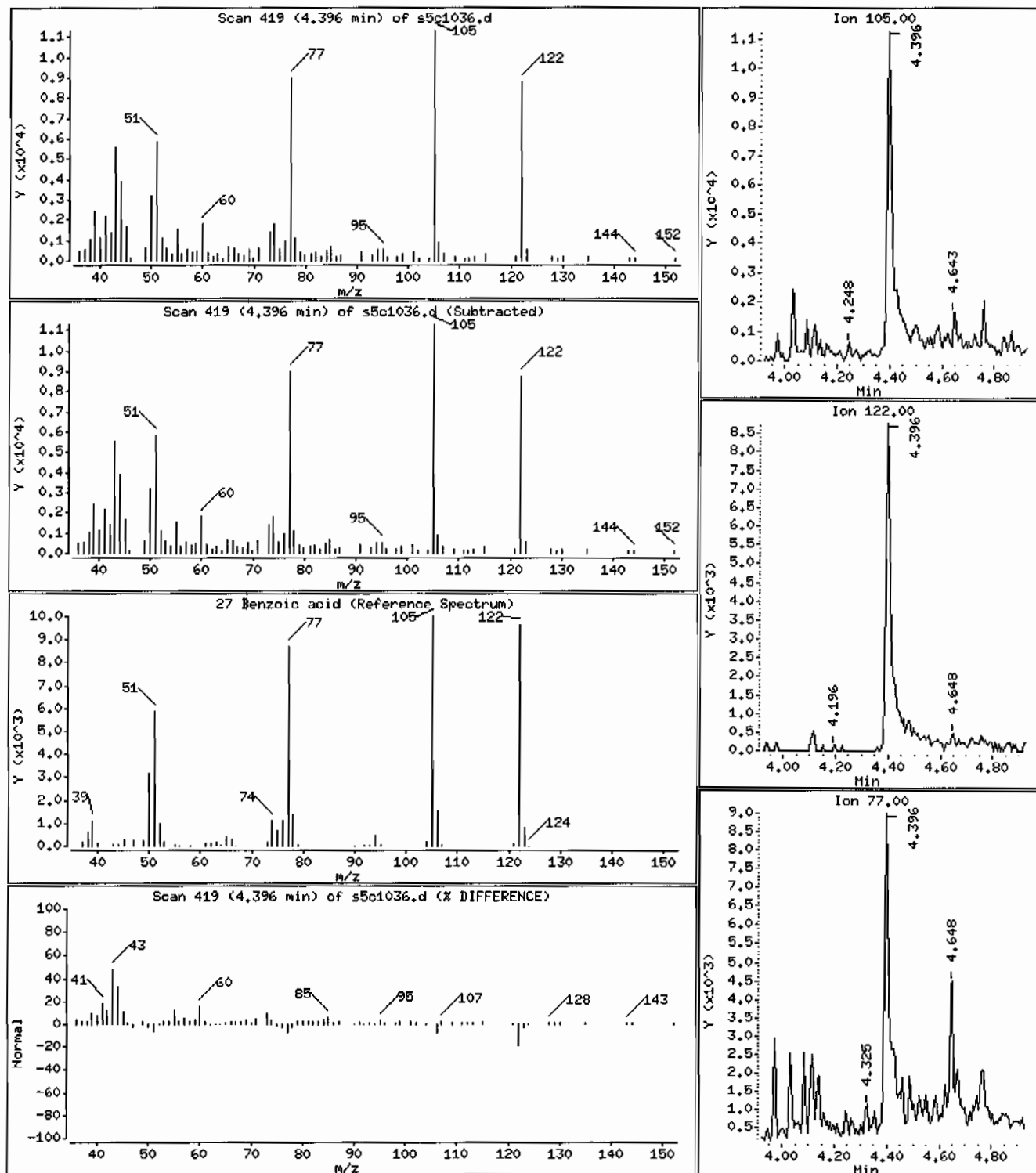
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 627 ug/Kg



Data File: /chem/MSD5.i/s031010.b/s5c1036.d

Page 4

Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911SVH11ILANL

Volume Injected (uL): 0.5

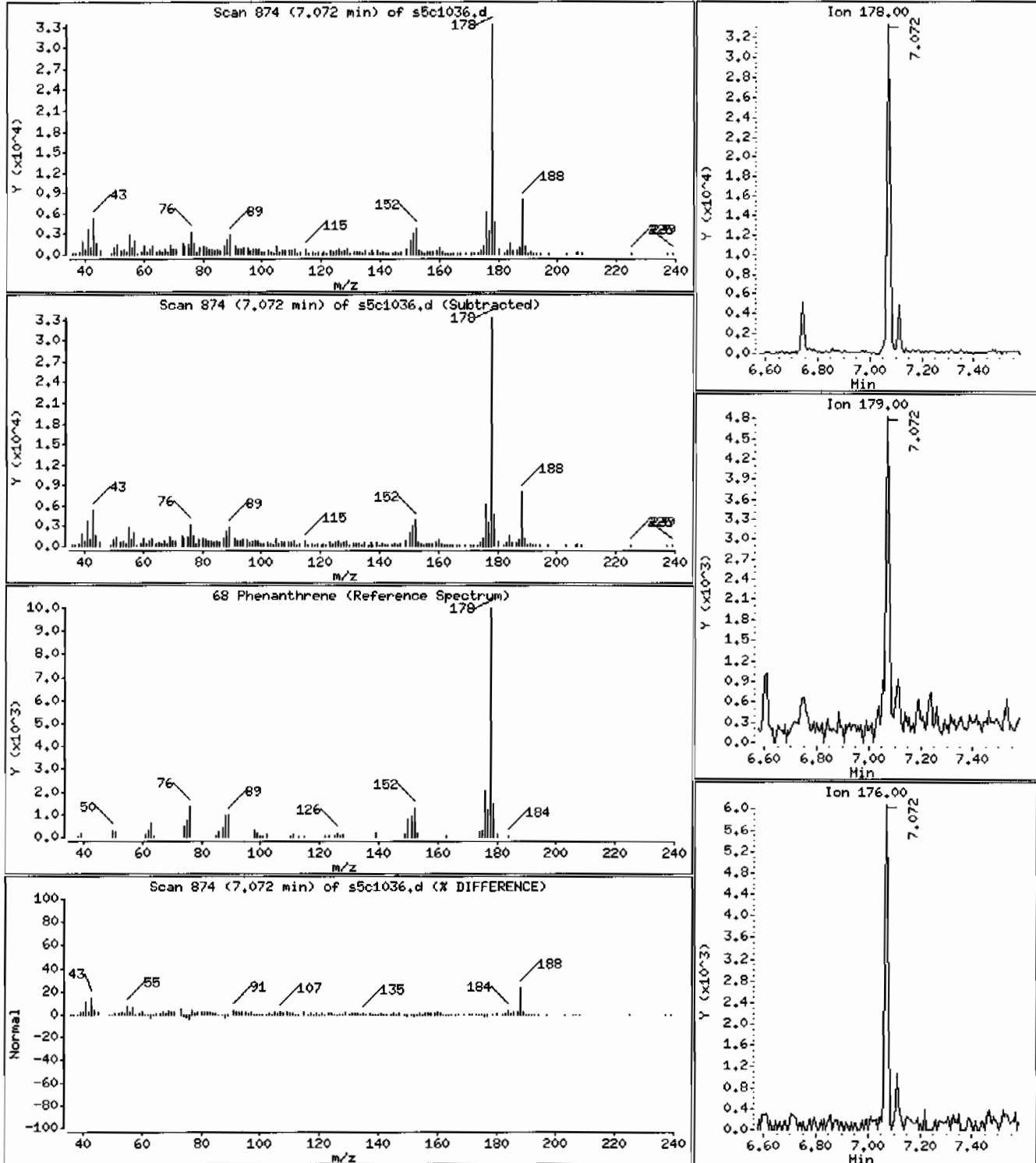
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 53.7 ug/Kg



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 1248240006196065911ISVM11ILANL

Volume Injected (uL): 0.5

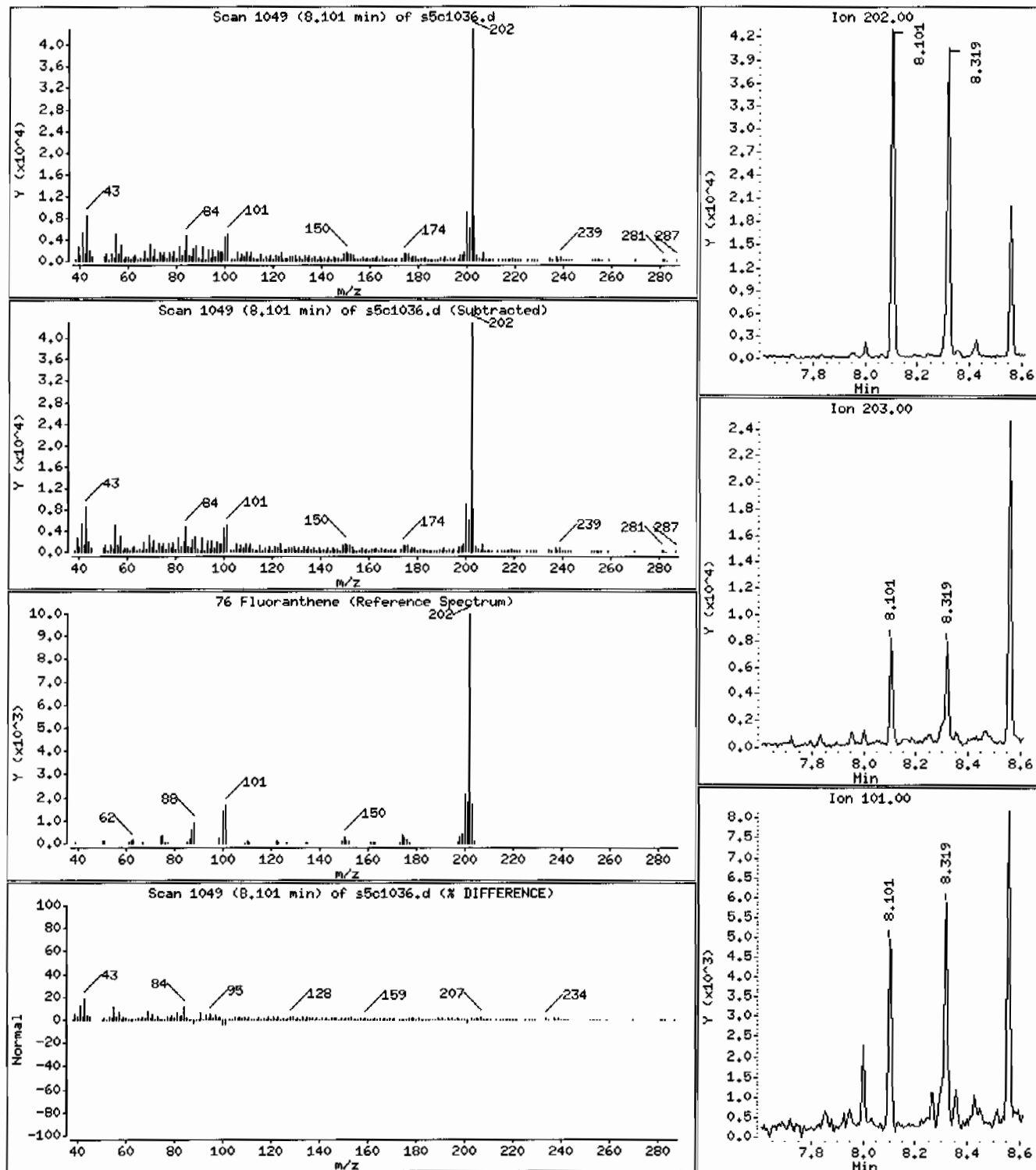
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 90.3 ug/Kg



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 1248240006196065911SVH111LANL

Volume Injected (uL): 0.5

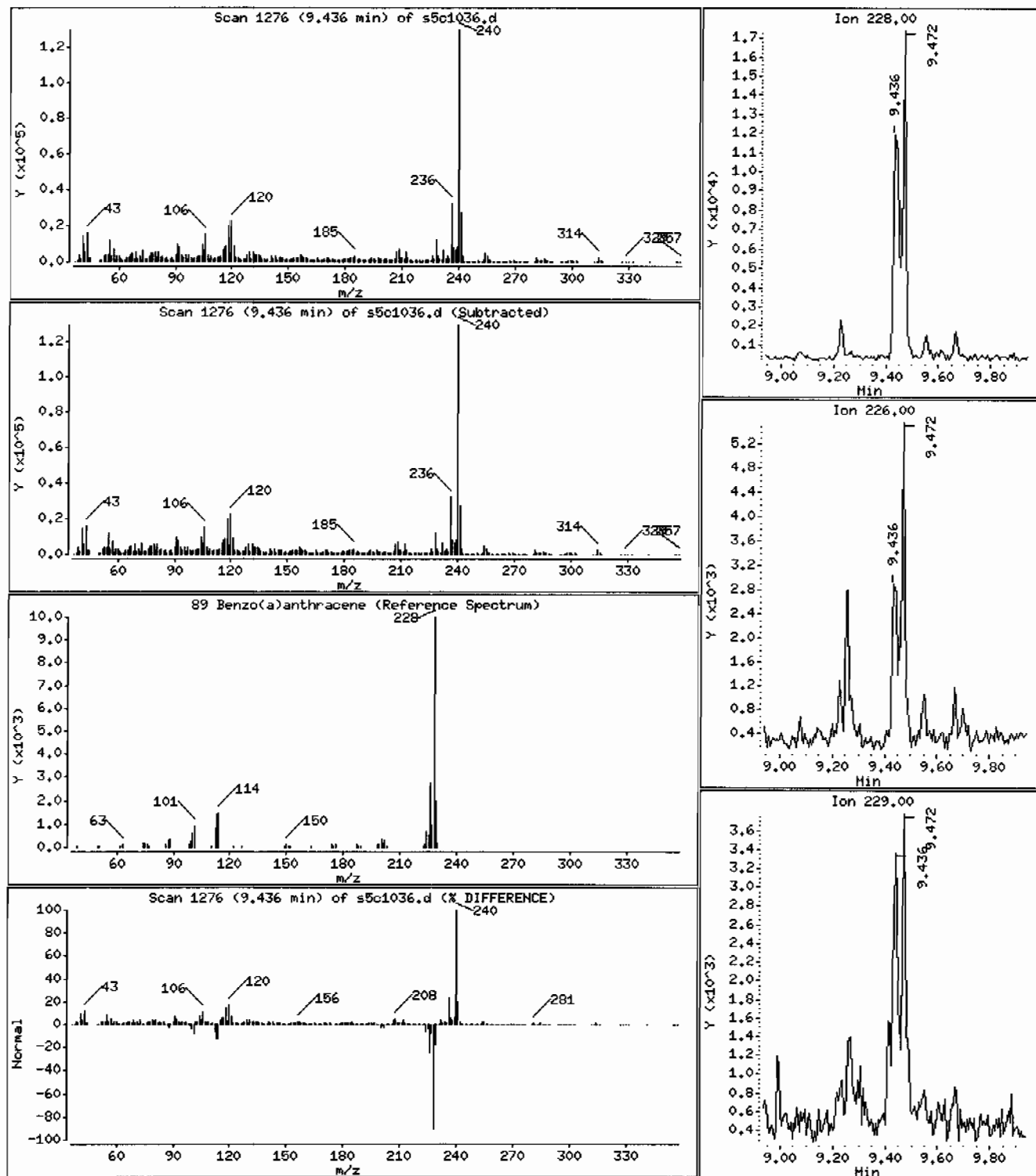
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 36.0 ug/Kg



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.1

Sample Info: 12482400061960659111SVMI1ILANL

Volume Injected (uL): 0.5

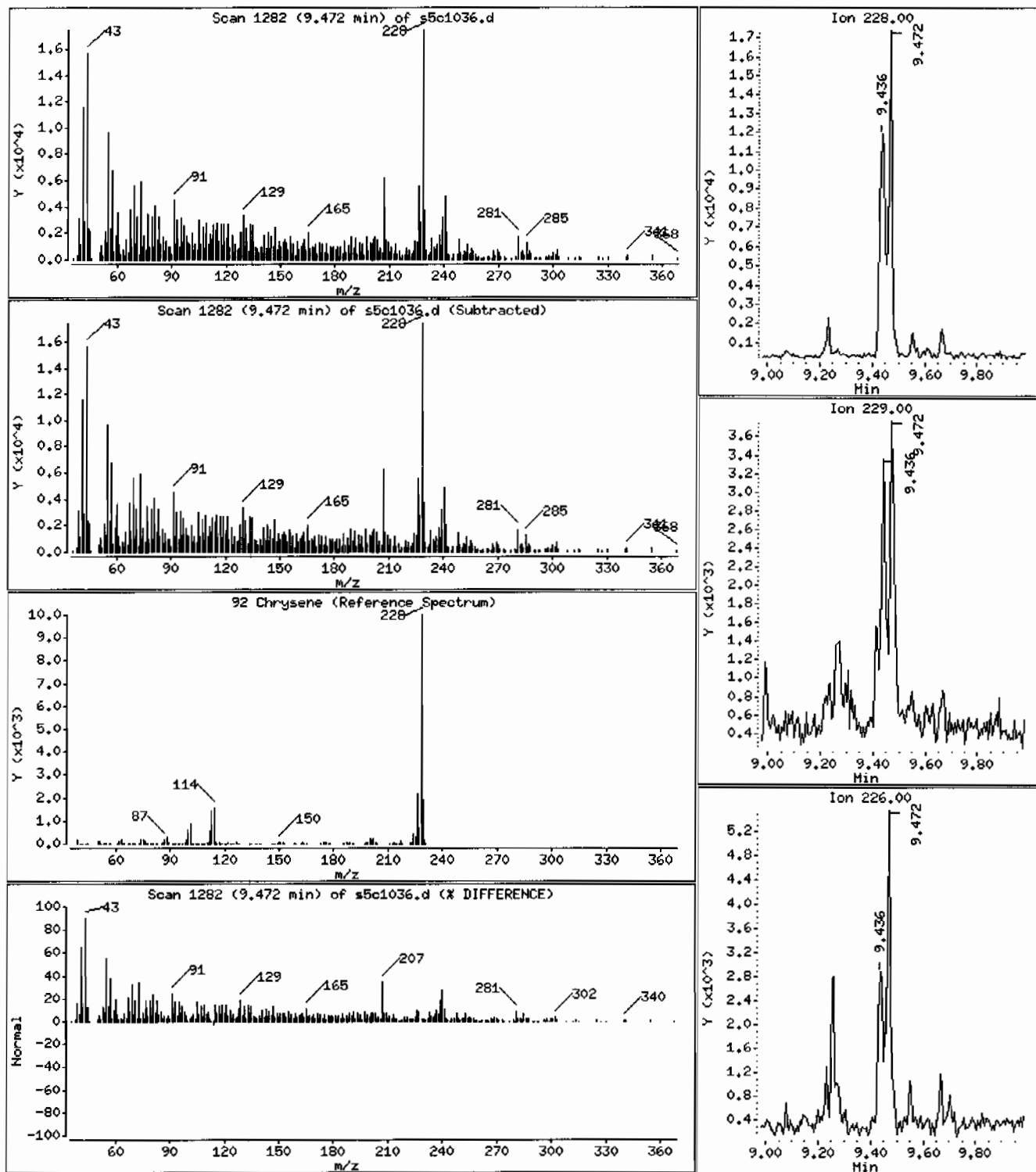
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 47.7 ug/Kg



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911|SVH11|LANL

Volume Injected (UL): 0.5

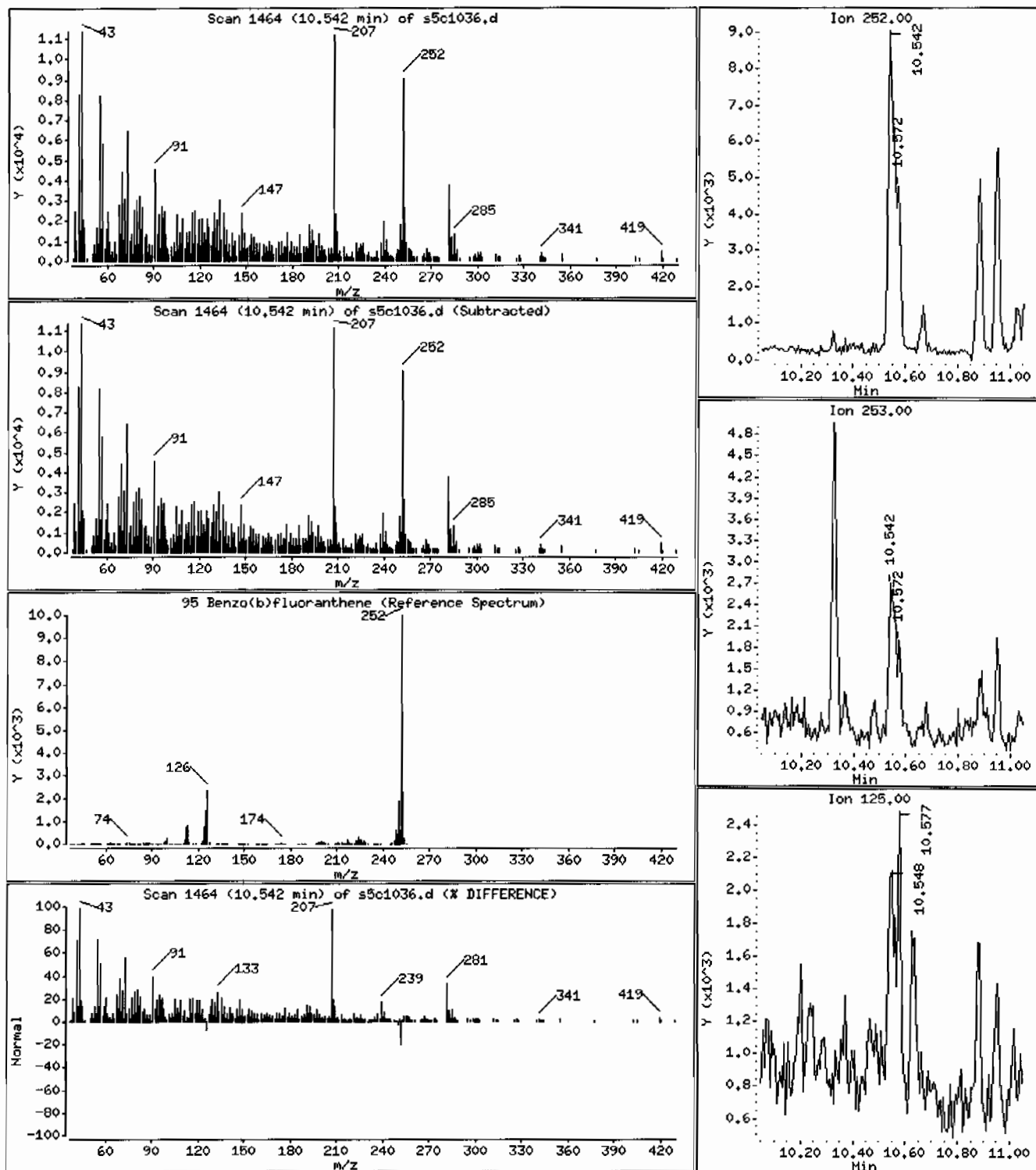
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 50.7 ug/Kg



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911ISVH11ILANL

Volume Injected (uL): 0.5

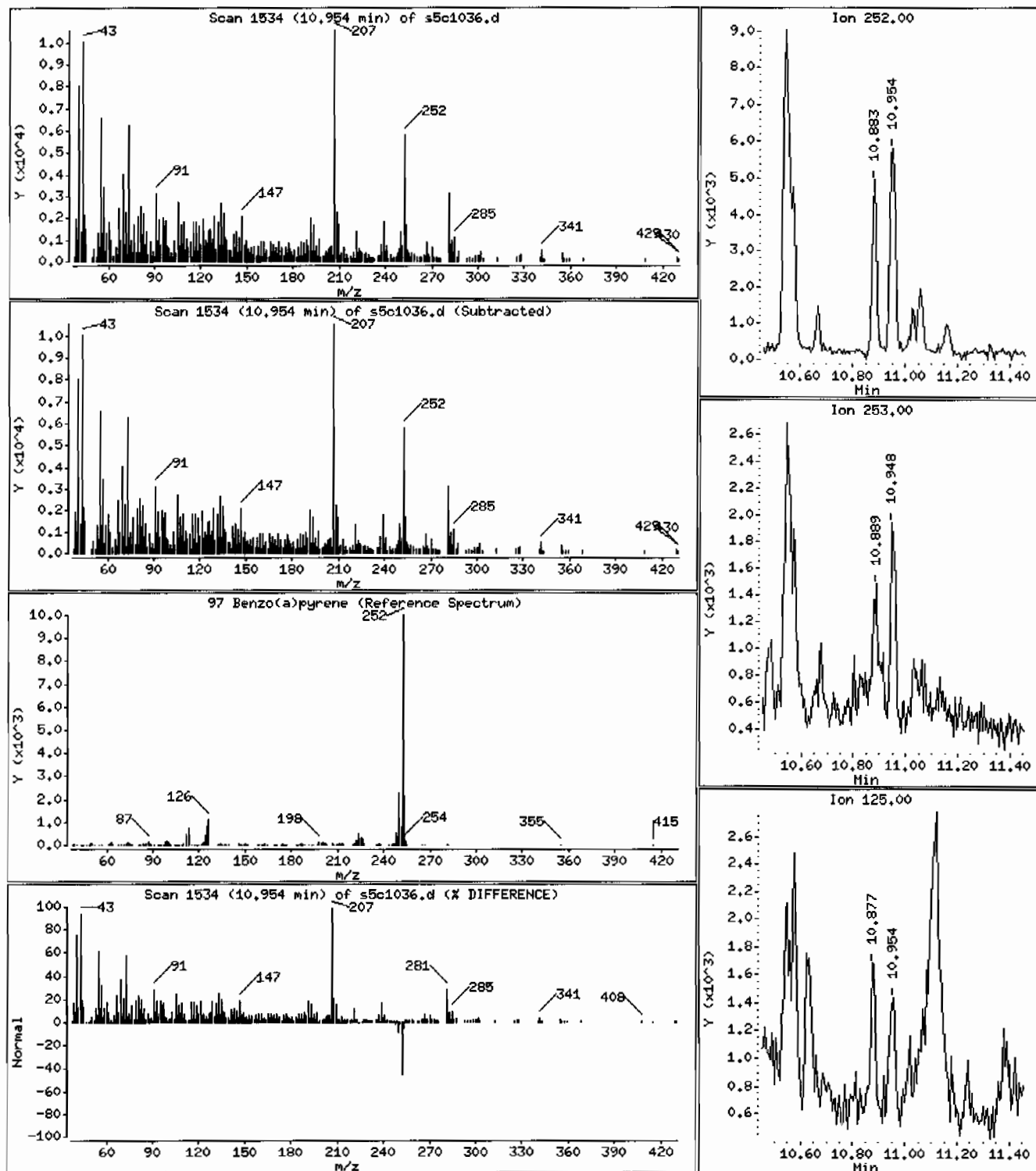
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 36.5 ug/Kg



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 12482400061960659111SVMI11LANL

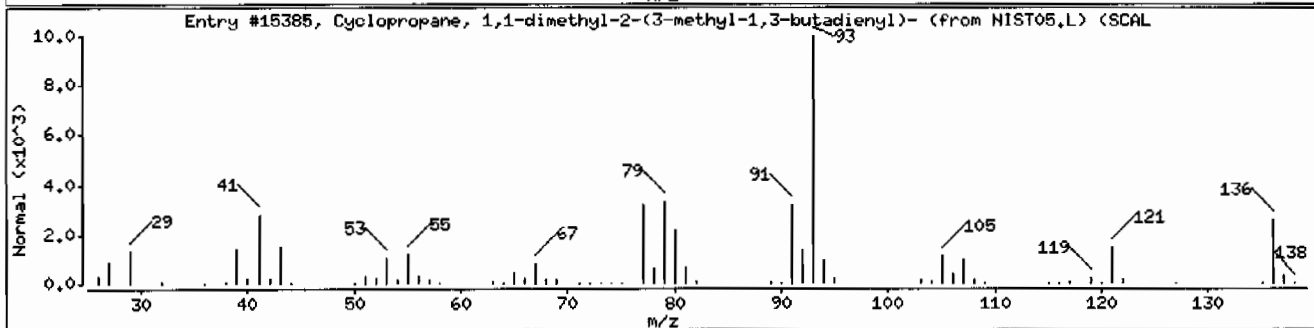
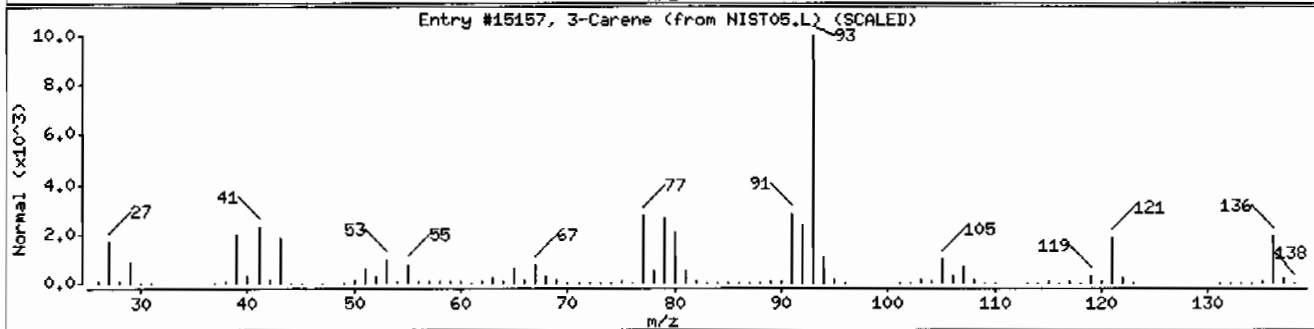
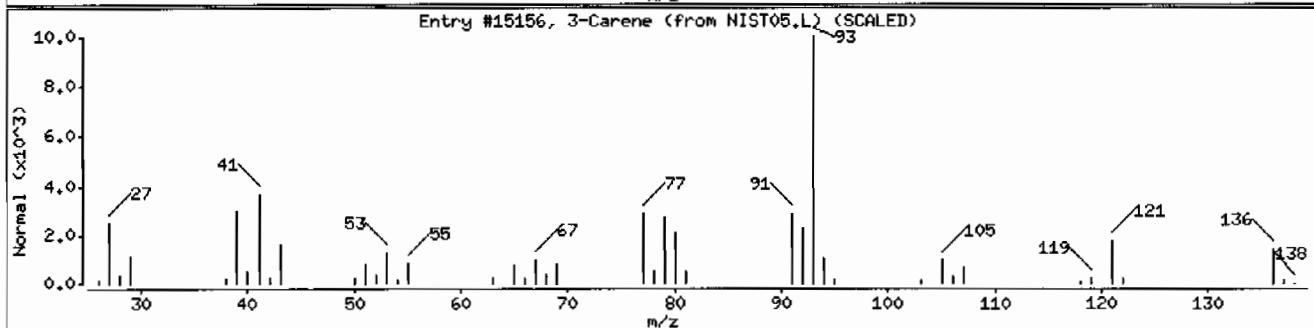
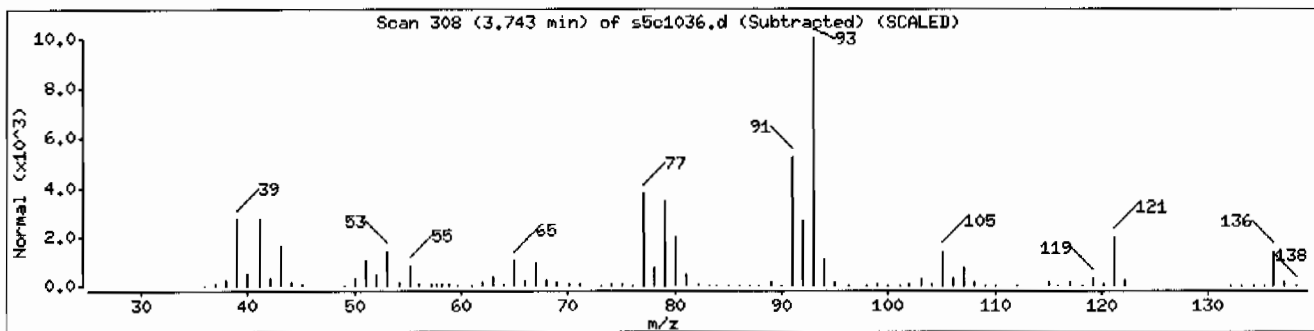
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	94	C10H16	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	94	C10H16	136



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 12482400061960659111SVH111LANL

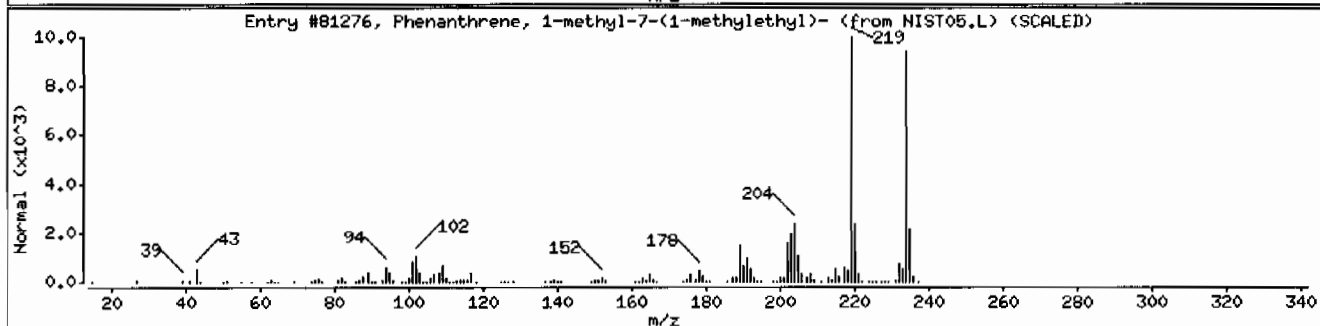
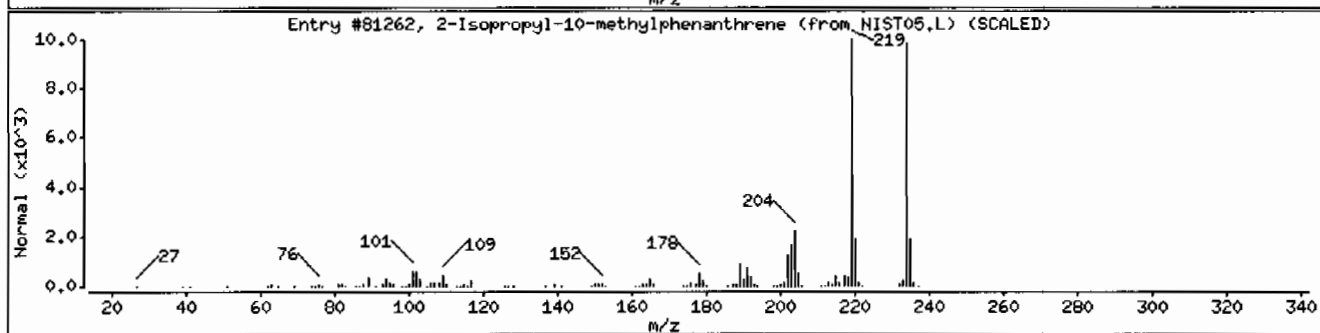
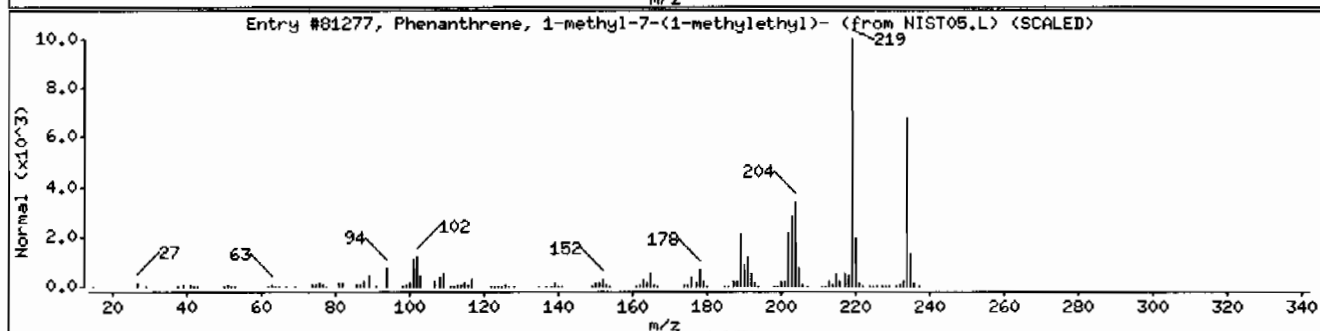
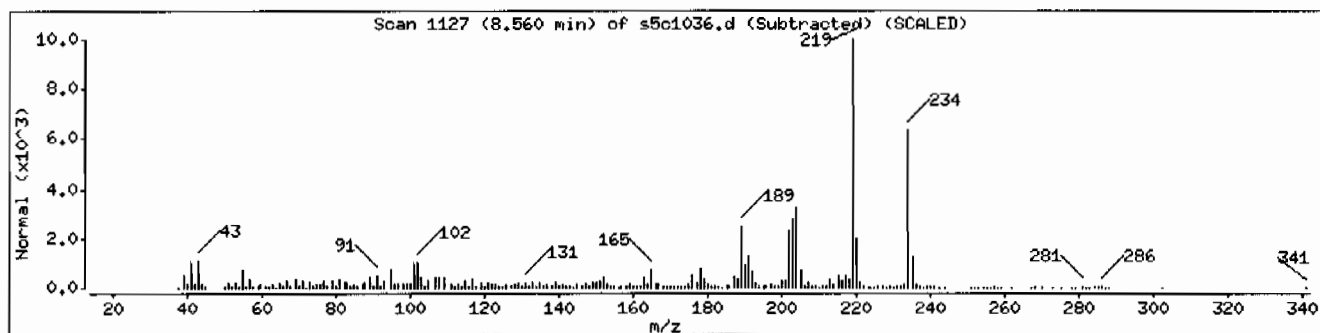
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenanthrene, 1-methyl-7-(1-methylethyl)	483-65-8	NIST05.L	81277	99	C18H18	234
2-Isopropyl-10-methylphenanthrene	66552-97-4	NIST05.L	81262	95	C18H18	234
Phenanthrene, 1-methyl-7-(1-methylethyl)	483-65-8	NIST05.L	81276	95	C18H18	234



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 12482400061960659111SVH111LANL

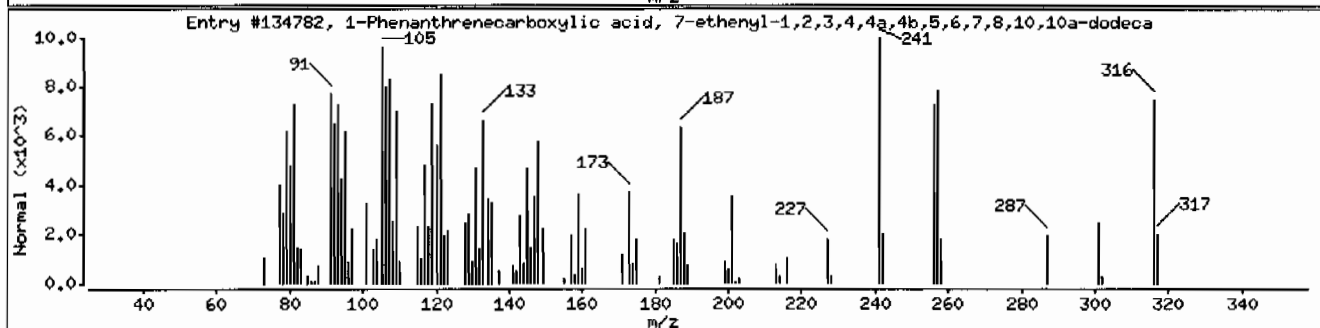
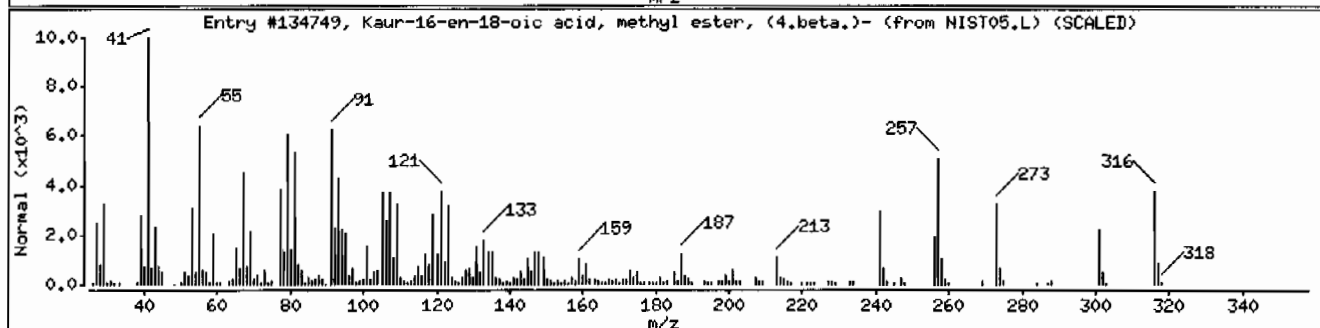
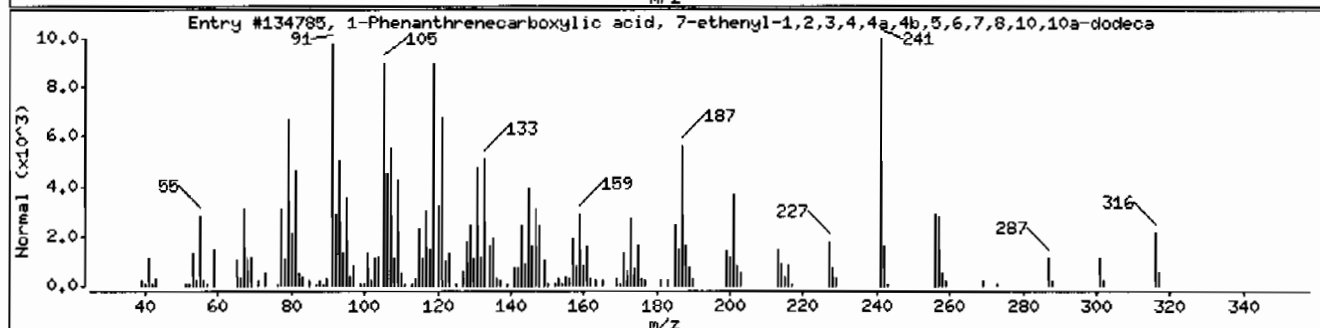
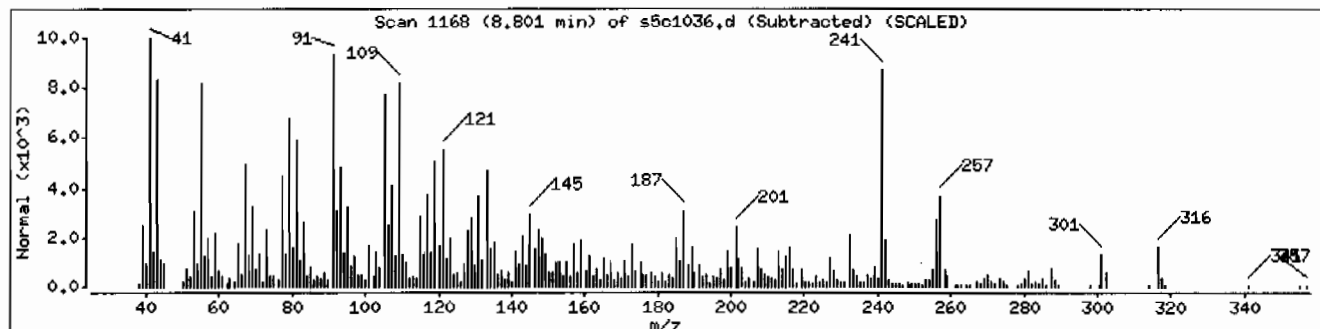
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134785	97	C21H32O2	316
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	53	C21H32O2	316
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134782	53	C21H32O2	316



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 1248240006196065911SVH111LANL

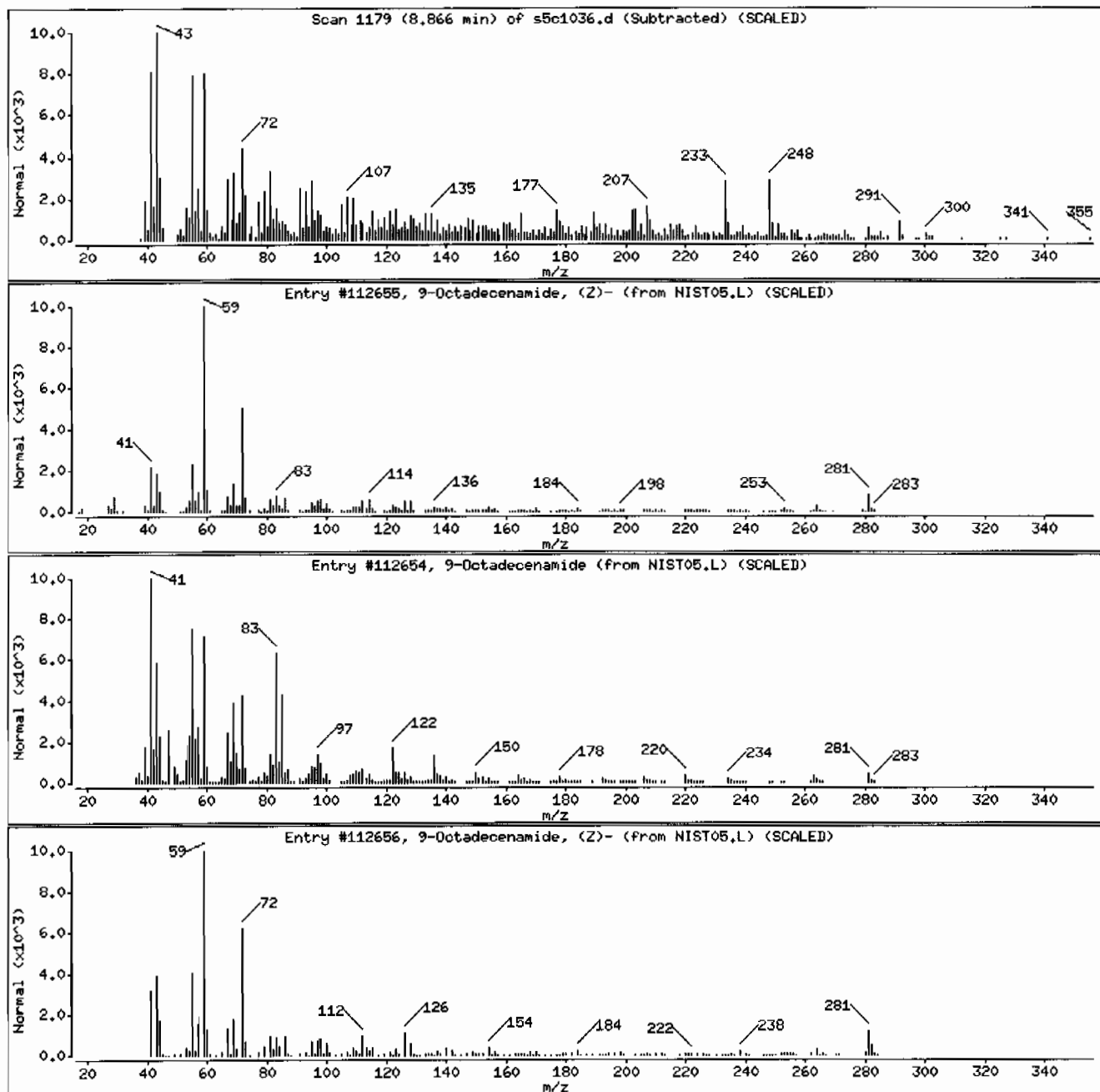
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	64	C18H35NO	281
9-Octadecenamide	3322-62-1	NIST05.L	112654	46	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	46	C18H35NO	281



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 124824006196065911SVH11LANL

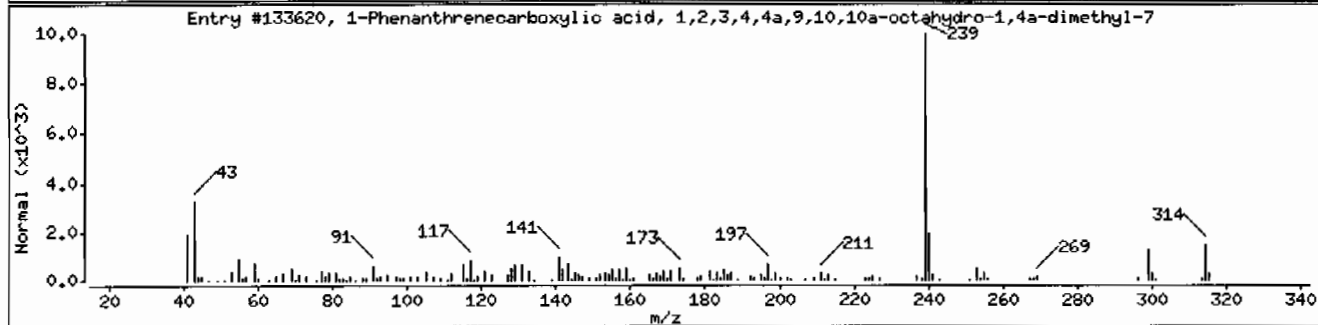
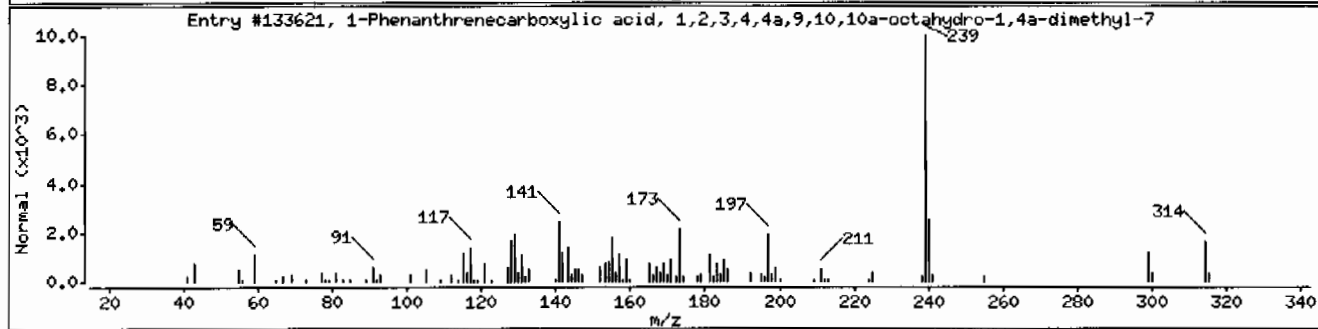
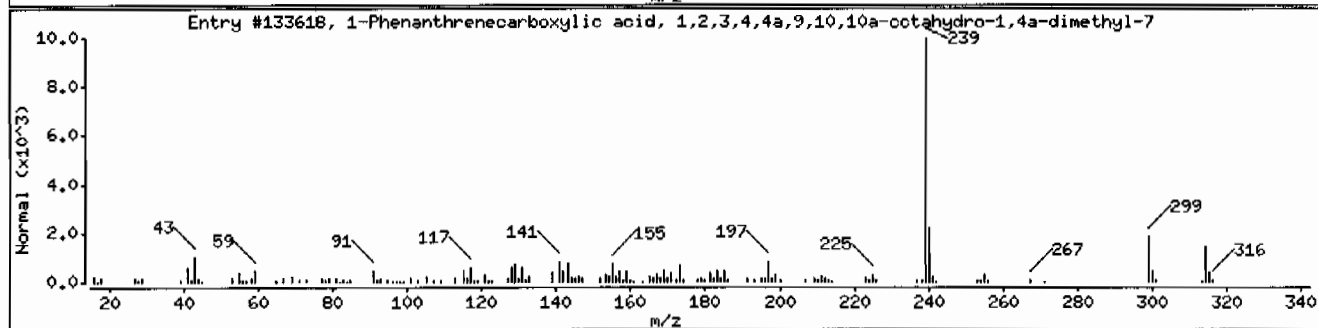
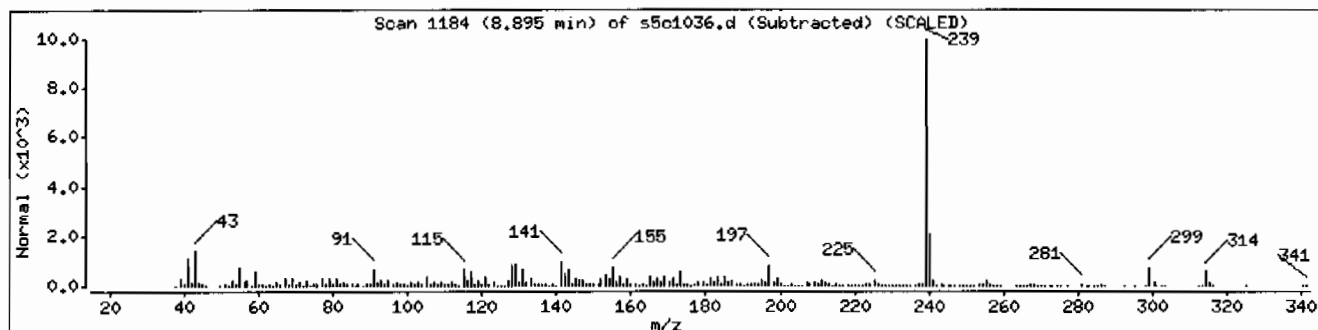
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	70	C21H30O2	314



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911SVH111LANL

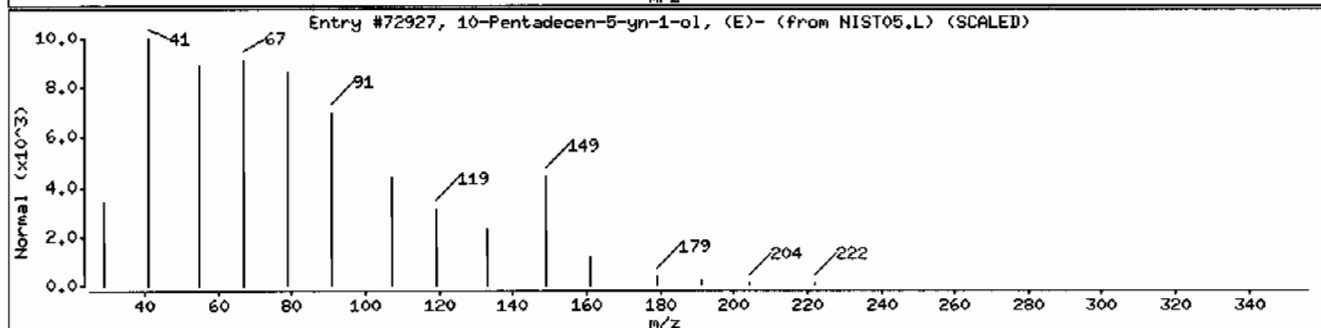
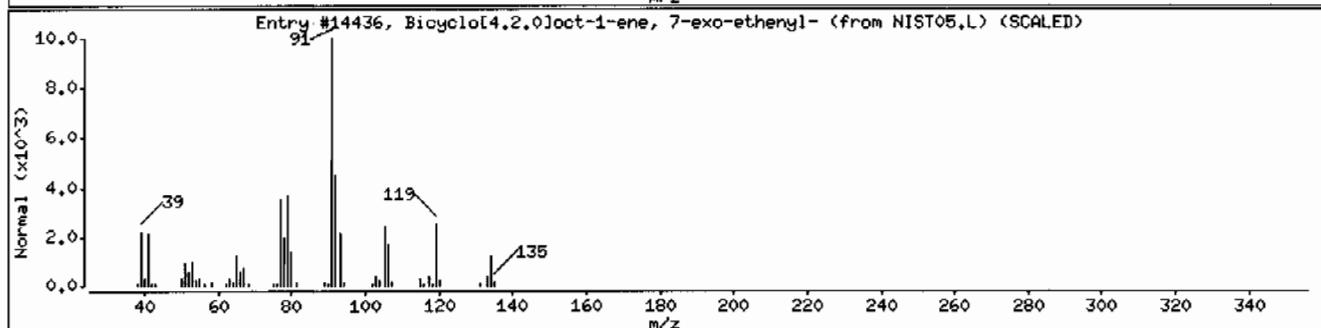
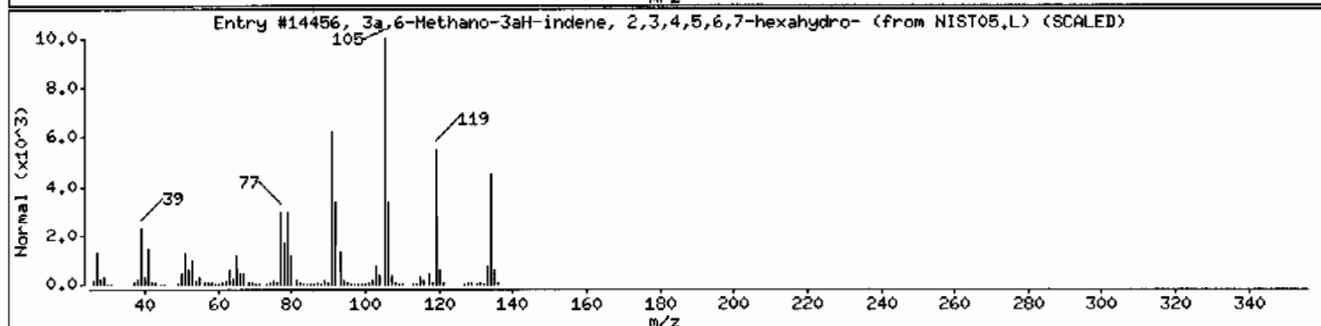
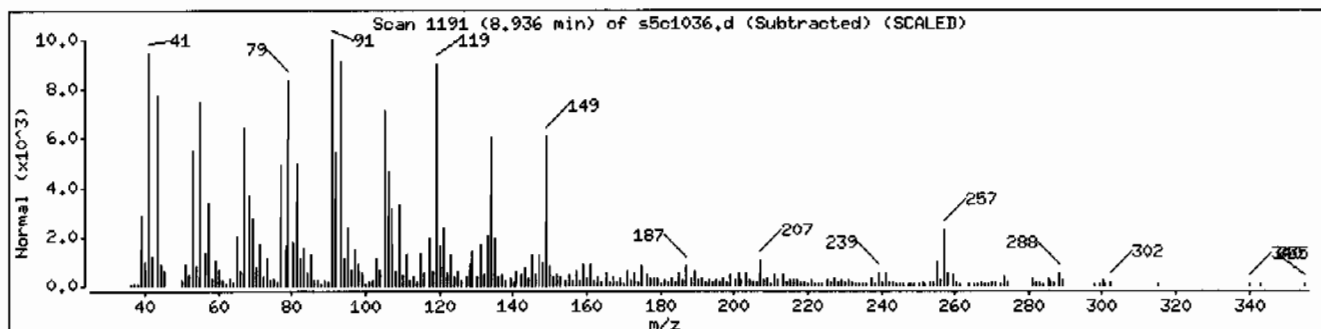
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3a,6-Methano-3aH-indene, 2,3,4,5,6,7-hex	98640-10-9	NIST05.L	14456	42	C10H14	134
Bicyclo[4.2.0]oct-1-ene, 7-exo-ethenyl-	1000142-18-2	NIST05.L	14436	30	C10H14	134
10-Pentadecen-5-yn-1-ol, (E)-	64275-59-8	NIST05.L	72927	25	C15H26O	222



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911SVH11ILANL

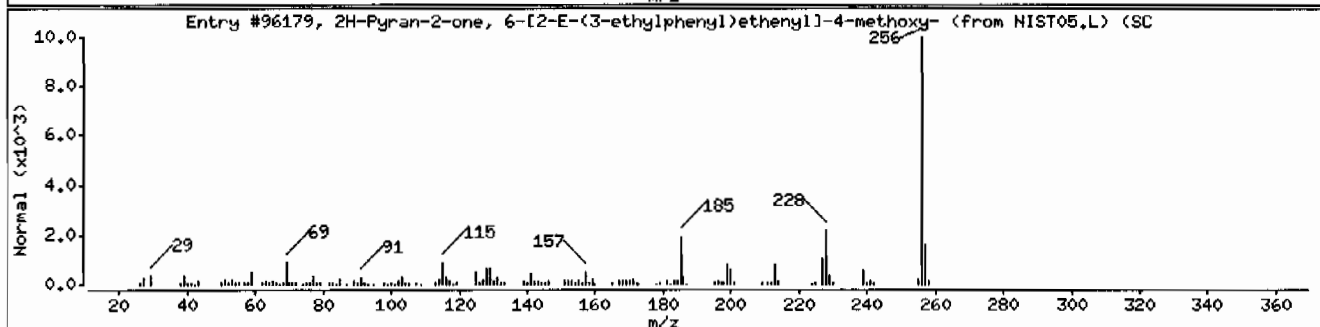
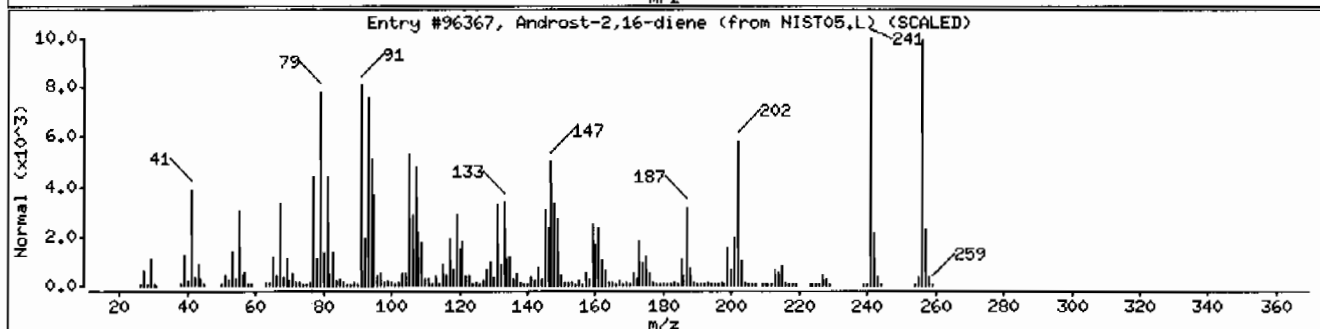
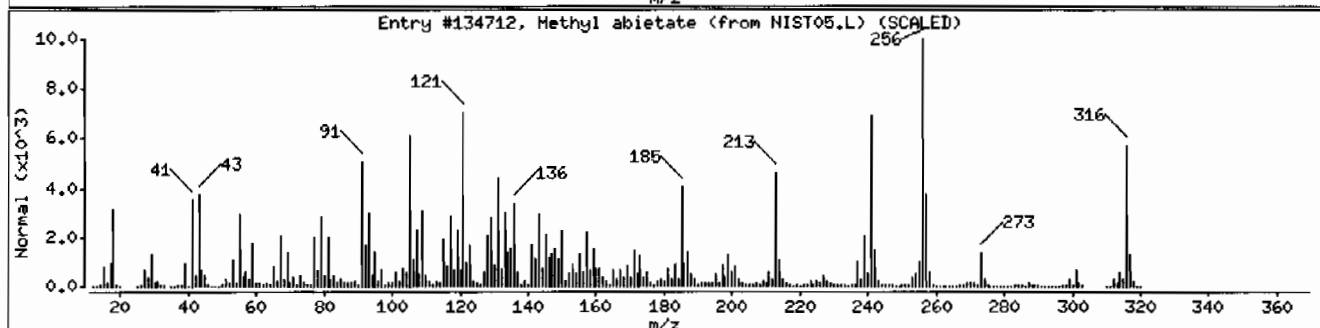
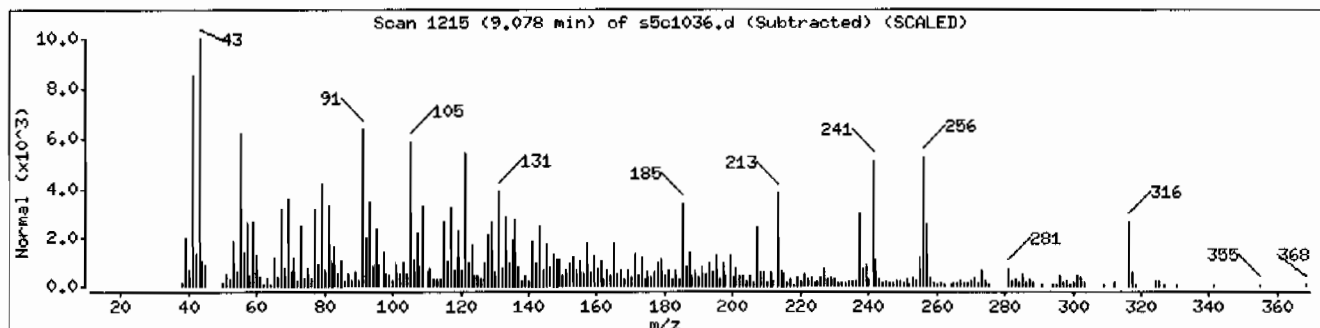
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl abietate	127-25-3	NIST05.L	134712	58	C21H32O2	316
Androst-2,16-diene	1000193-07-5	NIST05.L	96367	50	C19H28	256
2H-Pyran-2-one, 6-[2-E-(3-ethylphenyl)et	1000159-82-7	NIST05.L	96179	46	C16H16O3	256



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911SVMI11LANL

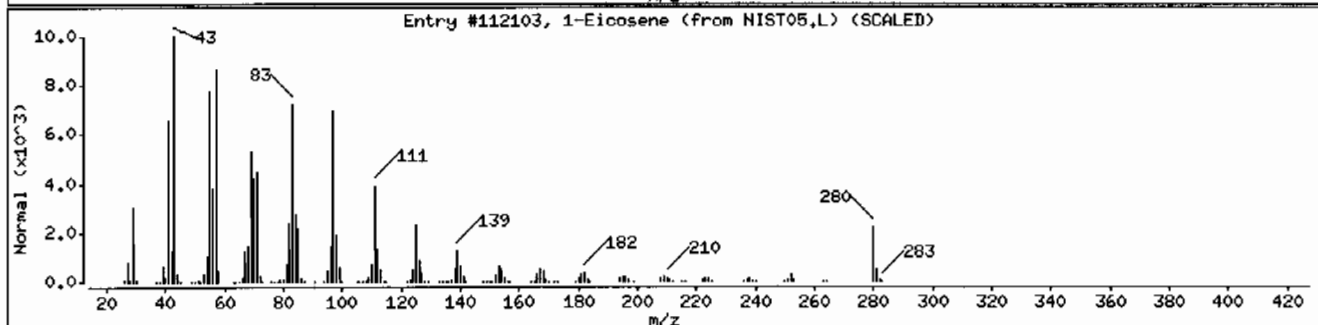
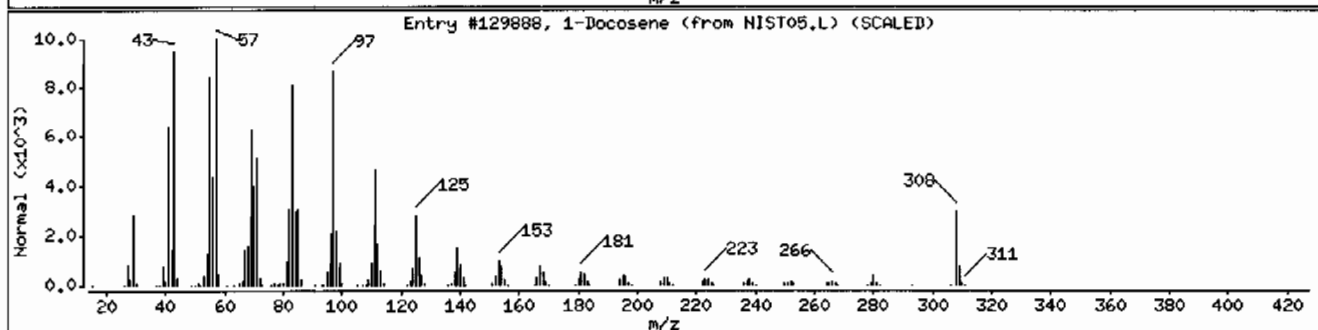
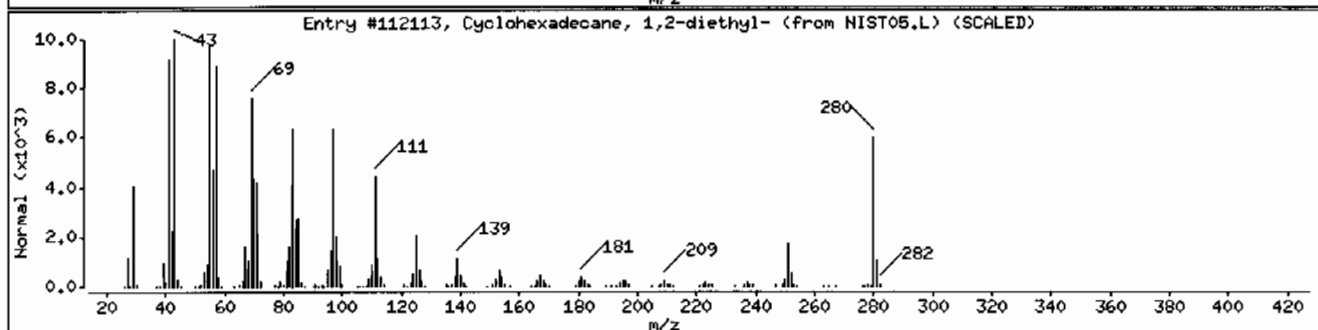
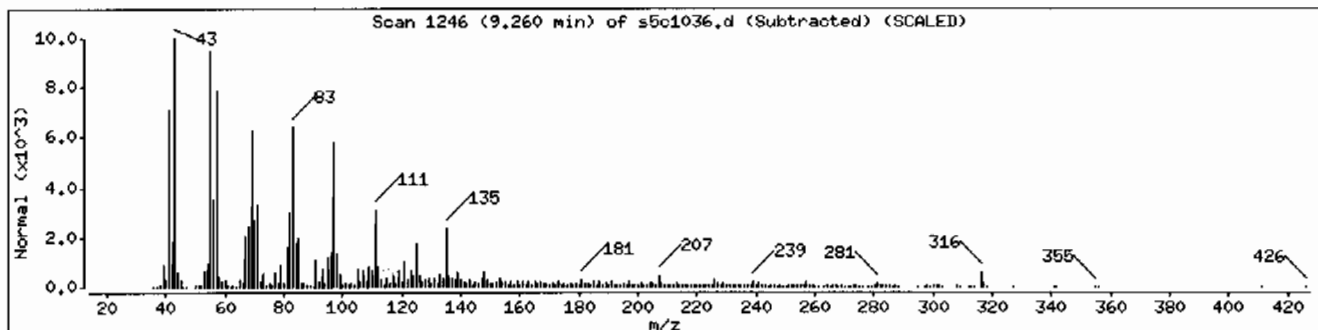
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexadecane, 1,2-diethyl-	1000155-85-3	NIST05.L	112113	97	C20H40	280
1-Docosene	1599-67-3	NIST05.L	129888	96	C22H44	308
1-Eicosene	3452-07-1	NIST05.L	112103	93	C20H40	280



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: I248240006196065911SVMI1ILANL

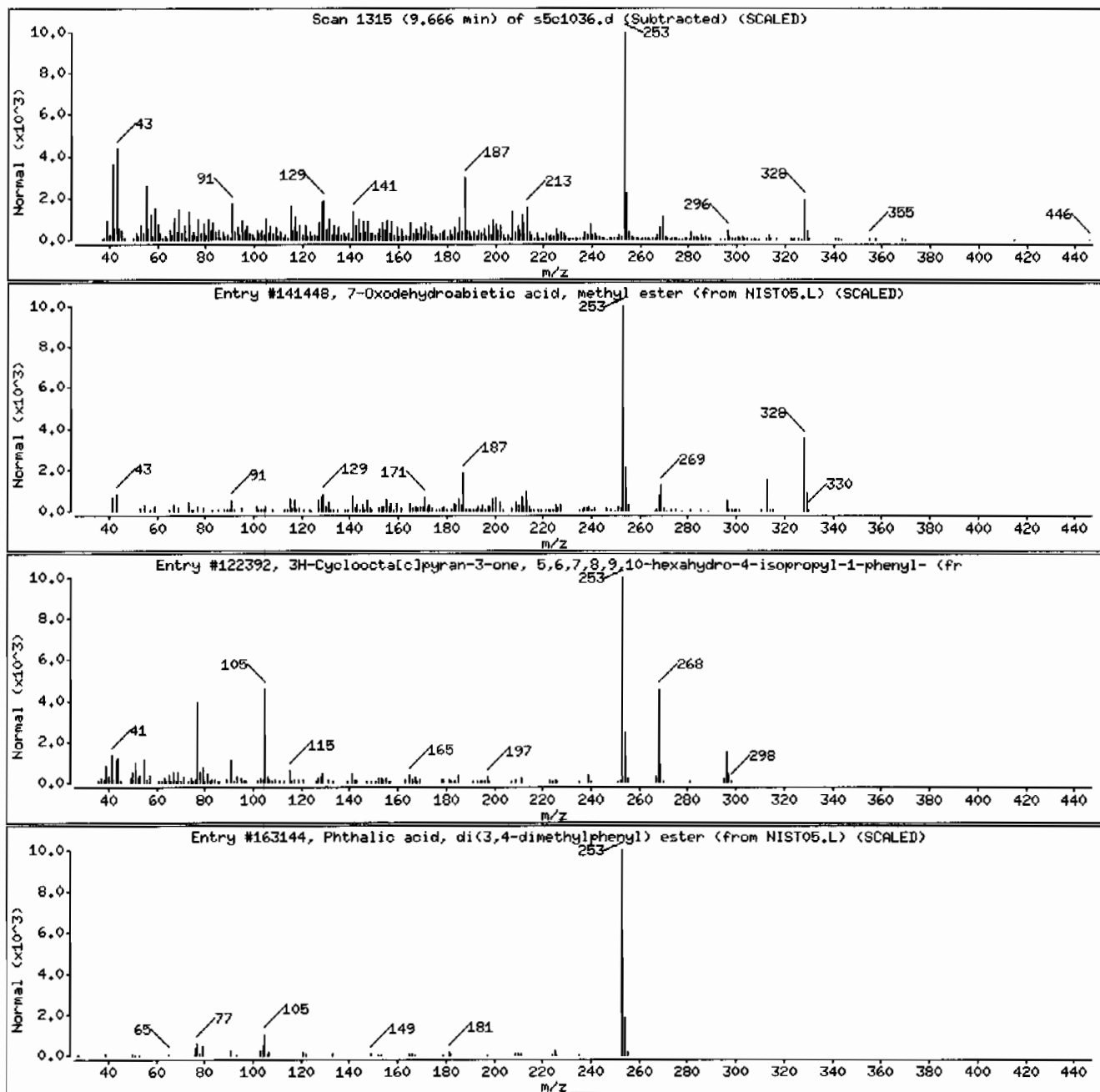
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	96	C21H28O3	328
3H-Cycloocta[c]pyran-3-one, 5,6,7,8,9,10	1000221-48-3	NIST05.L	122392	52	C20H24O2	296
Phthalic acid, di(3,4-dimethylphenyl) es	1000309-82-6	NIST05.L	163144	43	C24H22O4	374



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 1248240006196065911ISVM11ILANL

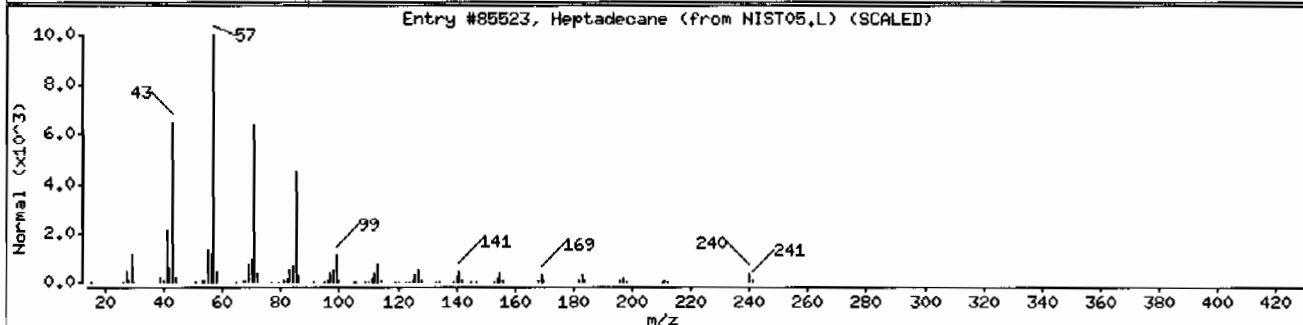
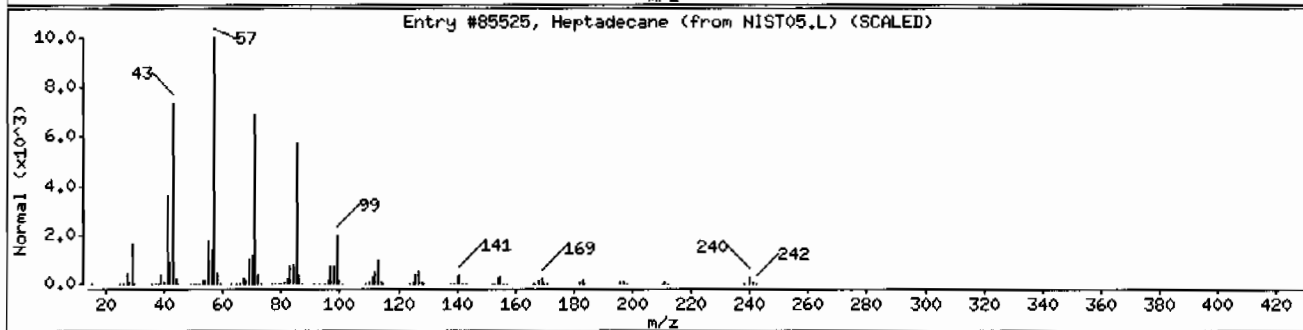
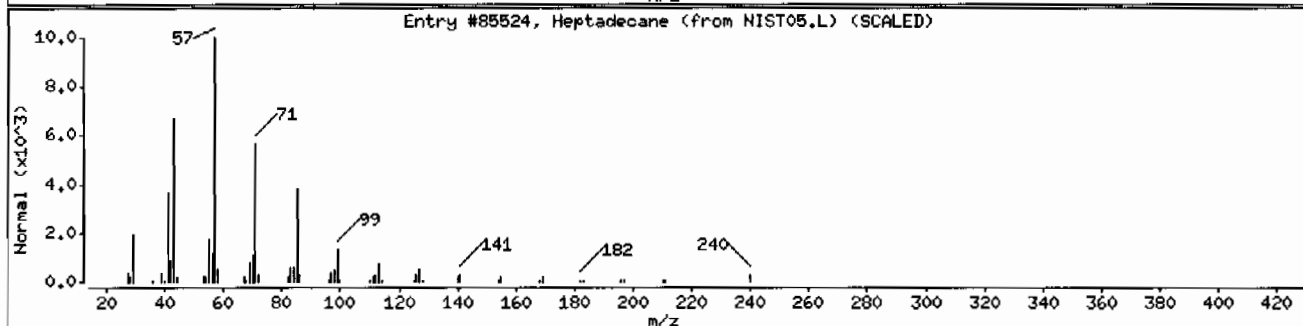
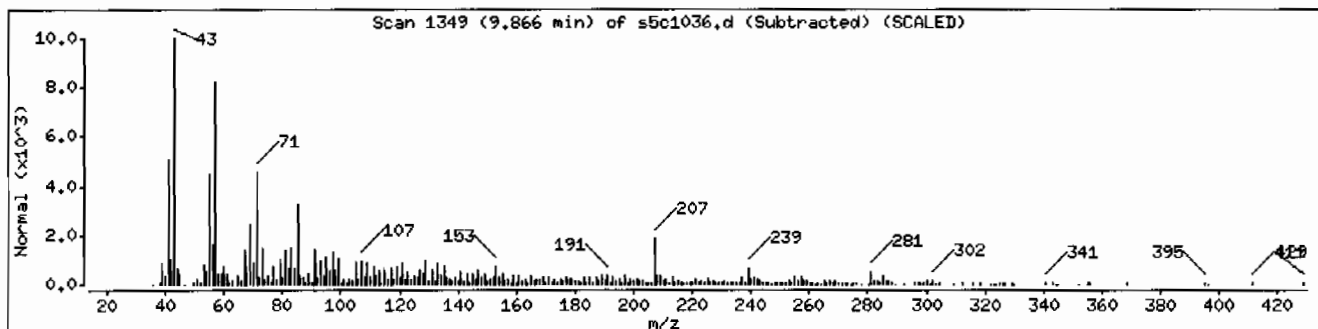
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NIST05.L	85524	95	C17H36	240
Heptadecane	629-78-7	NIST05.L	85525	90	C17H36	240
Heptadecane	629-78-7	NIST05.L	85523	90	C17H36	240



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 1248240006196065911SVMI1ILANL

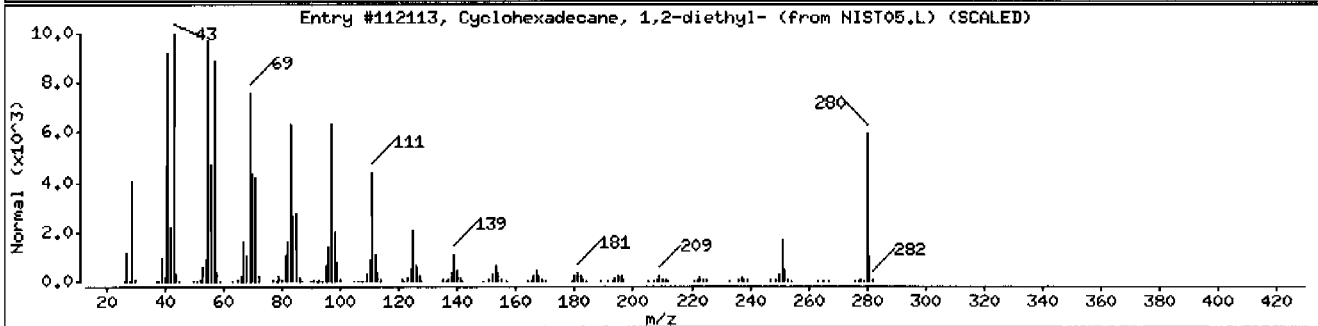
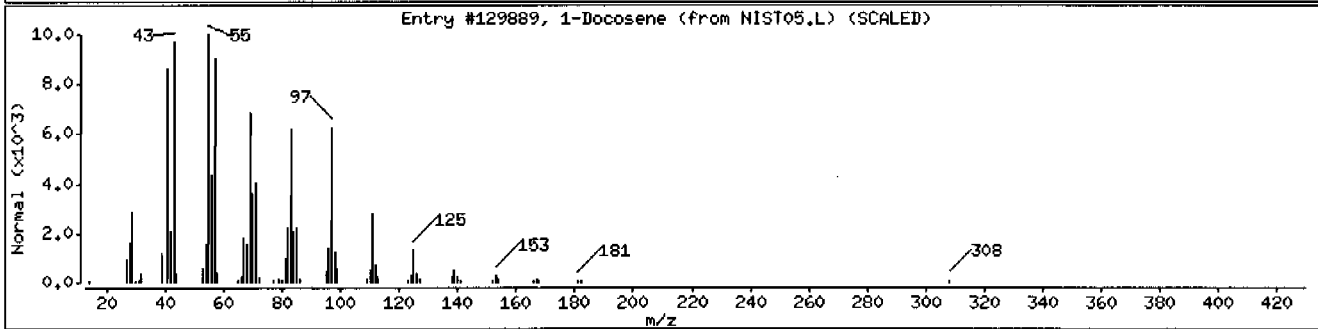
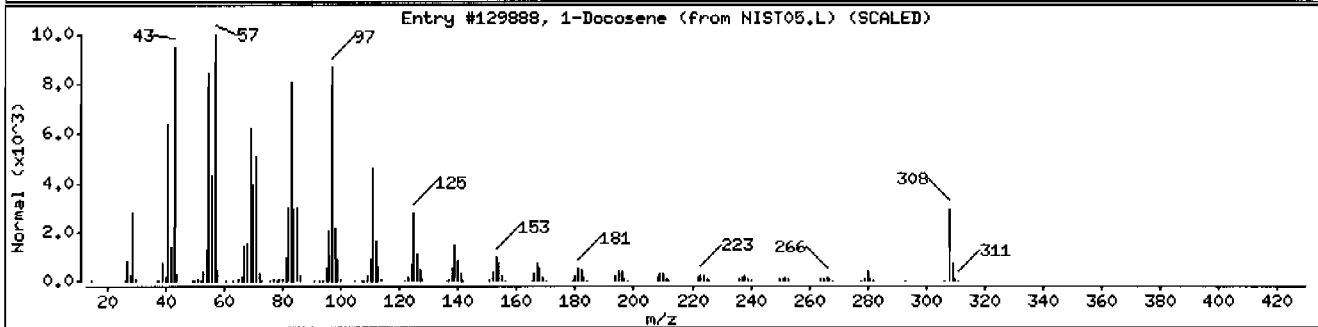
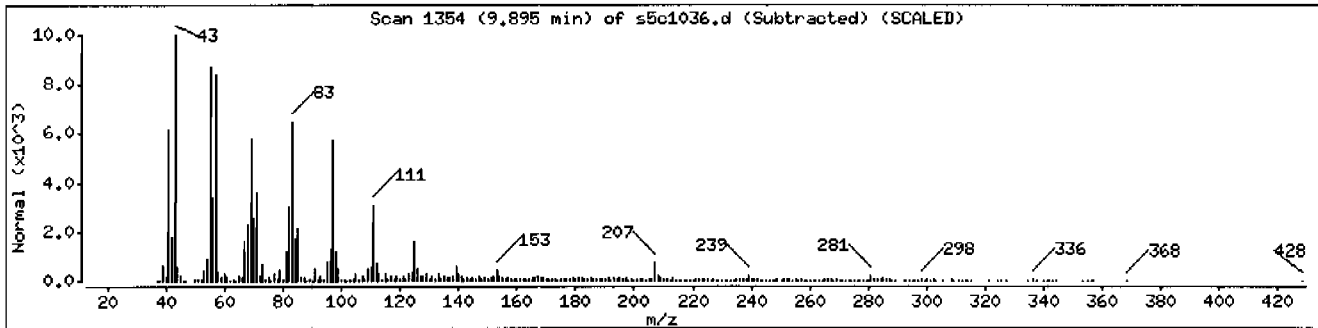
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129889	97	C22H44	308
Cyclohexadecane, 1,2-diethyl-	1000155-85-3	NIST05.L	112113	95	C20H40	280



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: 124824006196065911SVMI1/LANL

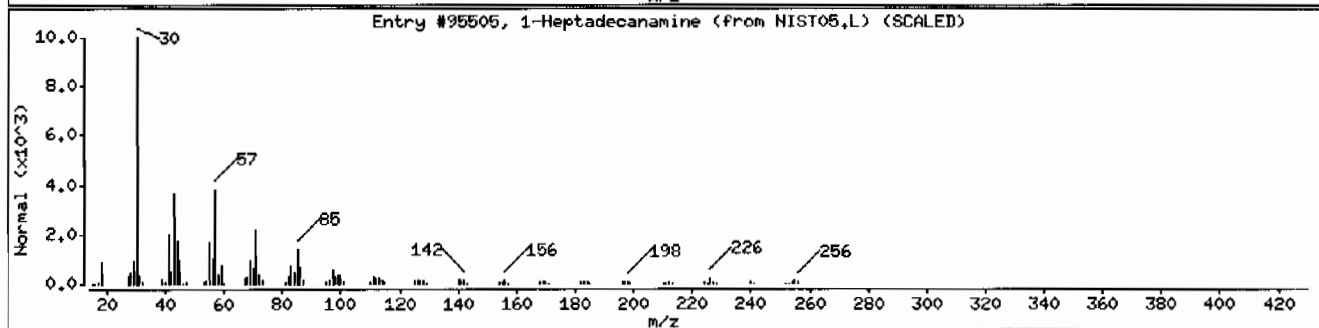
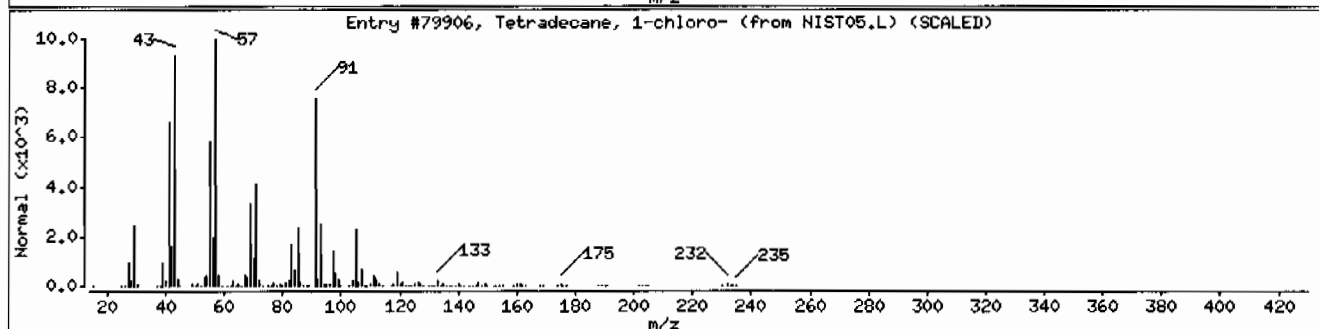
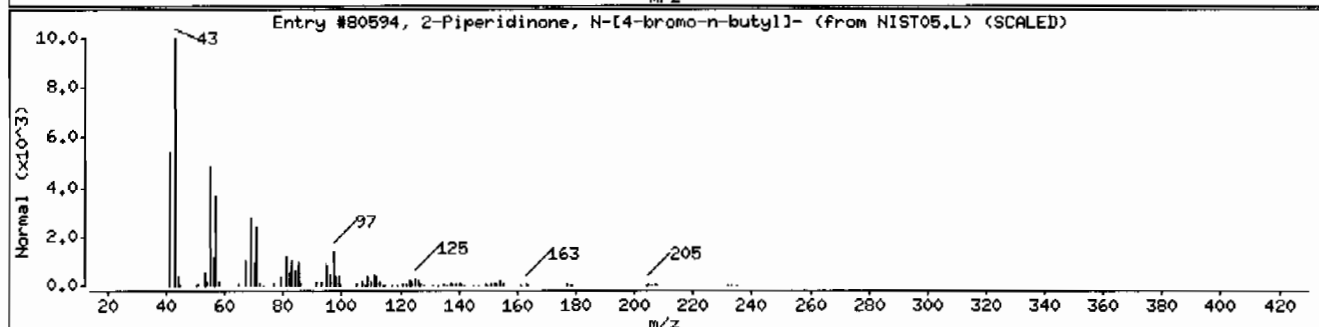
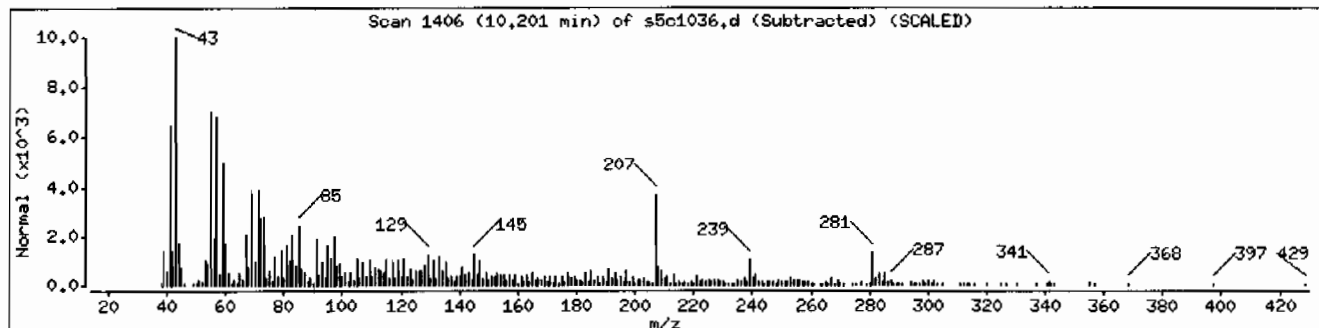
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	70	C9H16BrNO	233
Tetradecane, 1-chloro-	2425-54-9	NIST05.L	79906	52	C14H29Cl	232
1-Heptadecanamine	4200-95-7	NIST05.L	95505	42	C17H37N	255



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: I248240006196065911SVH11ILANL

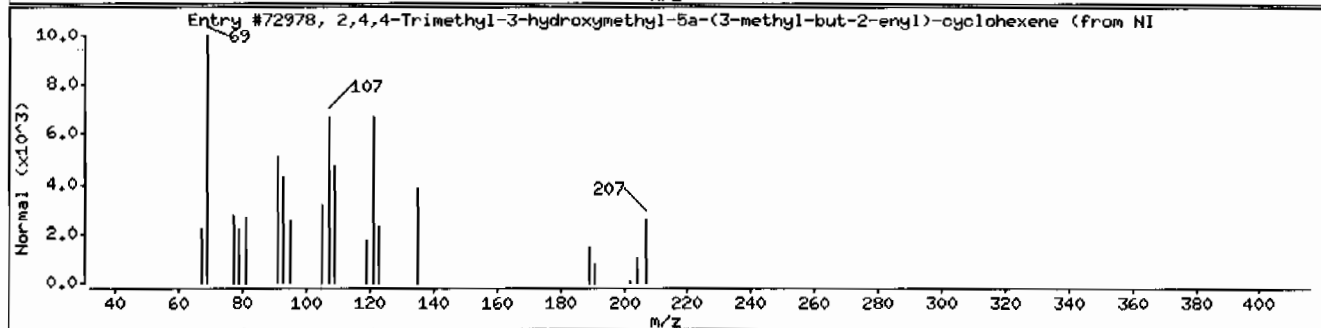
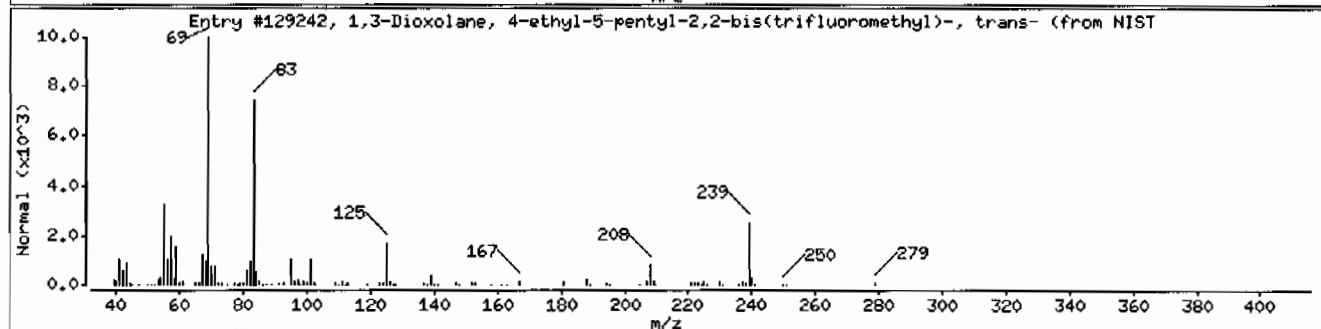
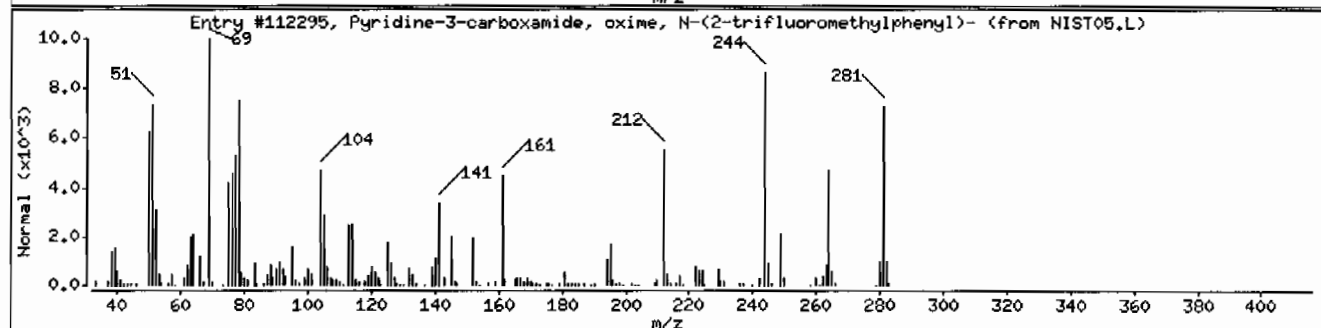
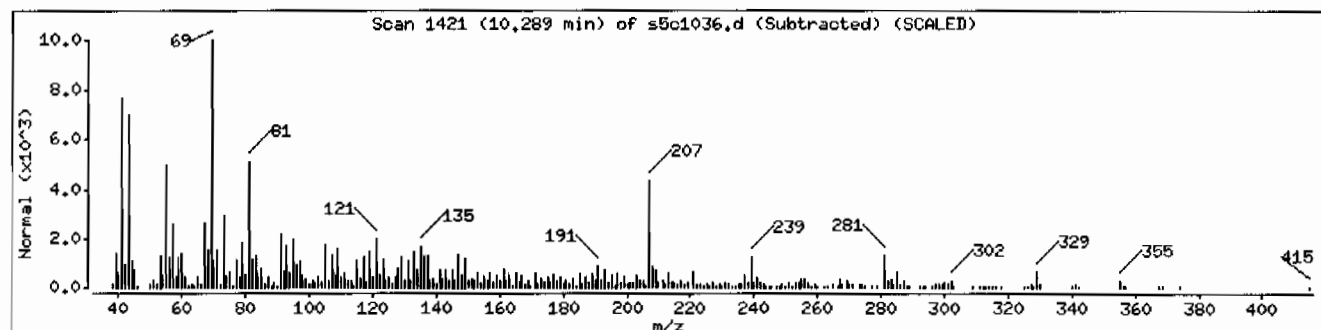
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	95	C13H10F3N3O	281
1,3-Dioxolane, 4-ethyl-5-pentyl-2,2-bis(	38363-94-9	NIST05.L	129242	35	C12H18F6O2	308
2,4,4-Trimethyl-3-hydroxymethyl-5a-(3-me	1000144-10-5	NIST05.L	72978	28	C15H26O	222



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5,i

Sample Info: 12482400061960659111SVH111LANL

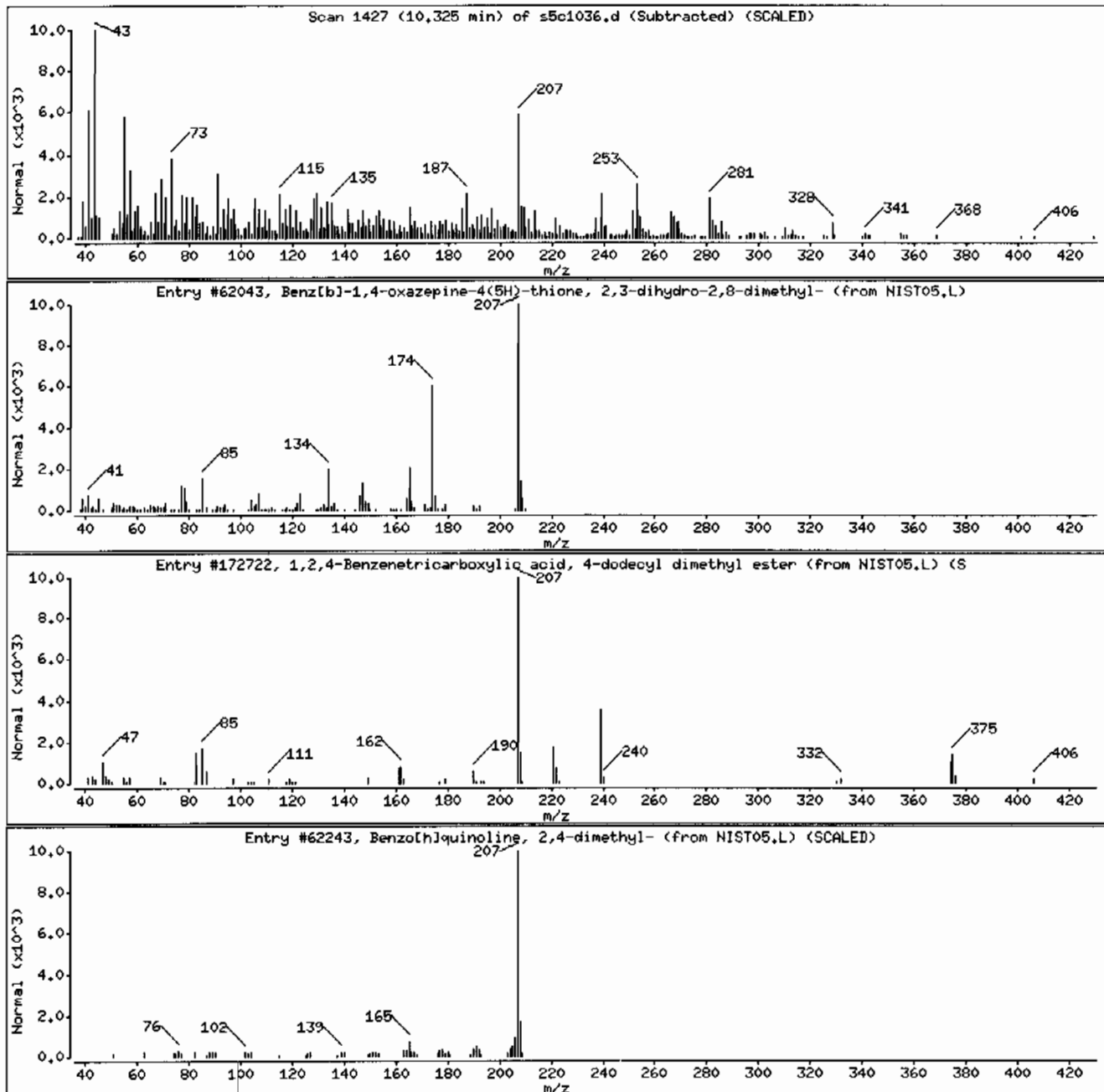
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	35	C11H13NOS	207
1,2,4-Benzenetricarboxylic acid, 4-dodecyl	33975-29-0	NIST05.L	172722	30	C23H34O6	406
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	25	C15H13N	207



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 124824006196065911SVMI11LANL

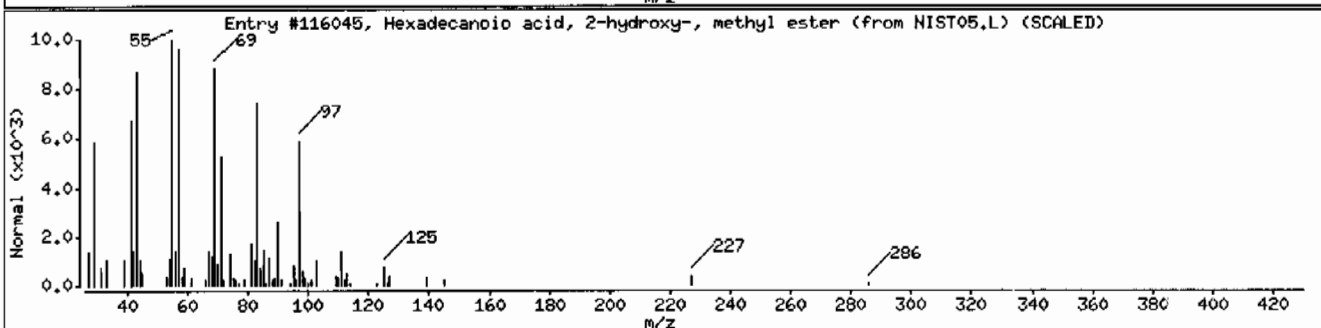
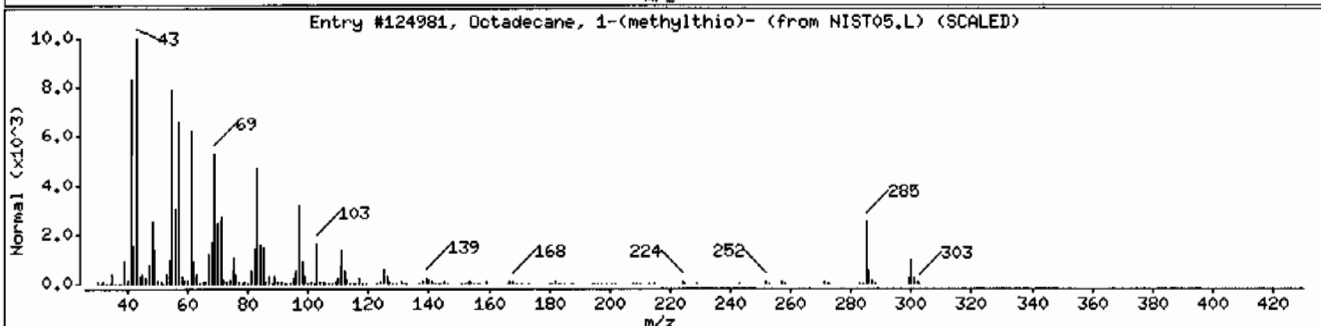
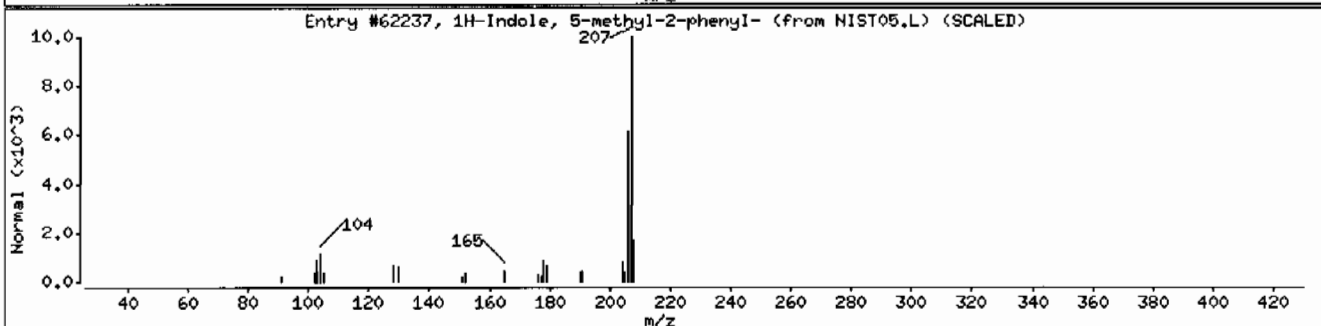
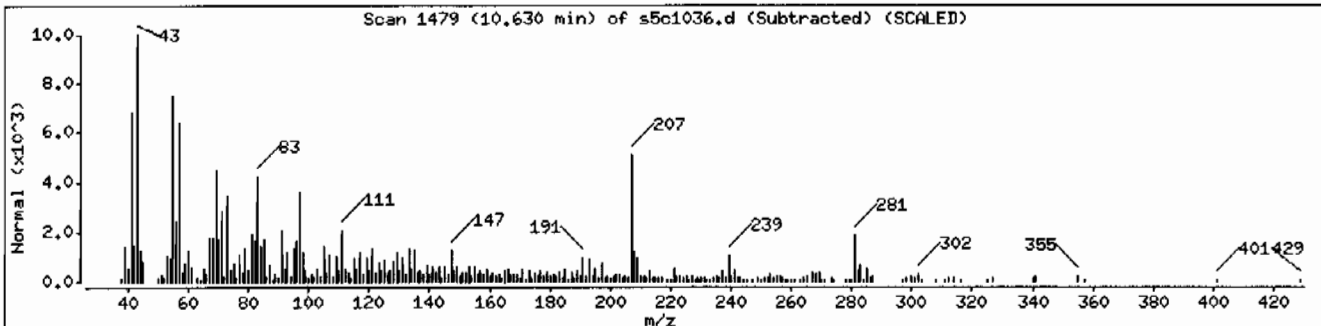
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	42	C15H13N	207
Octadecane, 1-(methylthio)-	40289-98-3	NIST05.L	124981	30	C19H40S	300
Hexadecanoic acid, 2-hydroxy-, methyl es	16742-51-1	NIST05.L	116045	22	C17H34O3	286



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 12482400061960659111SVMI11LANL

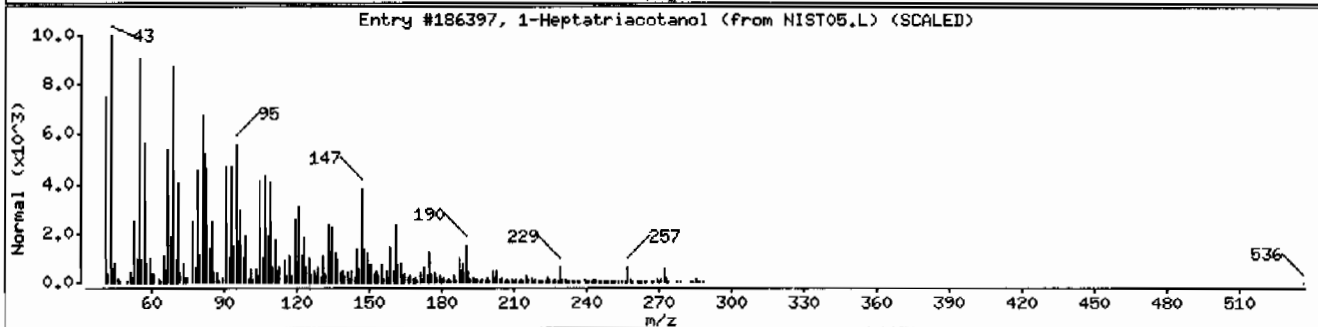
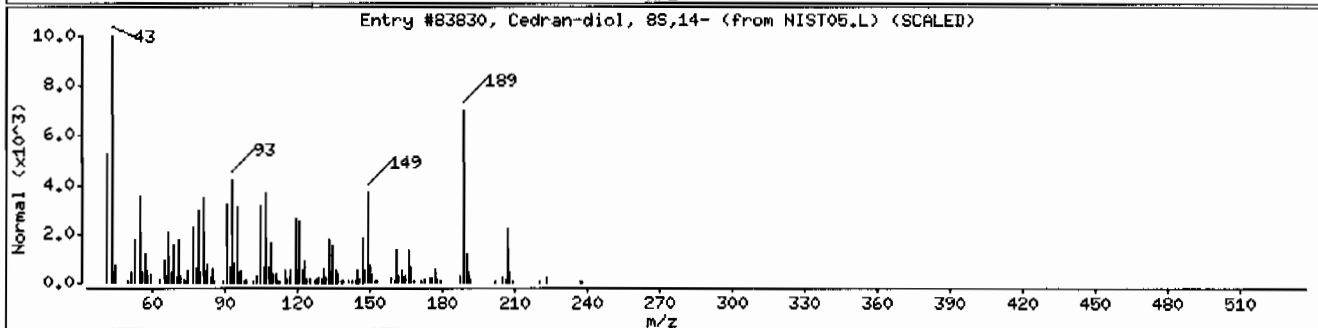
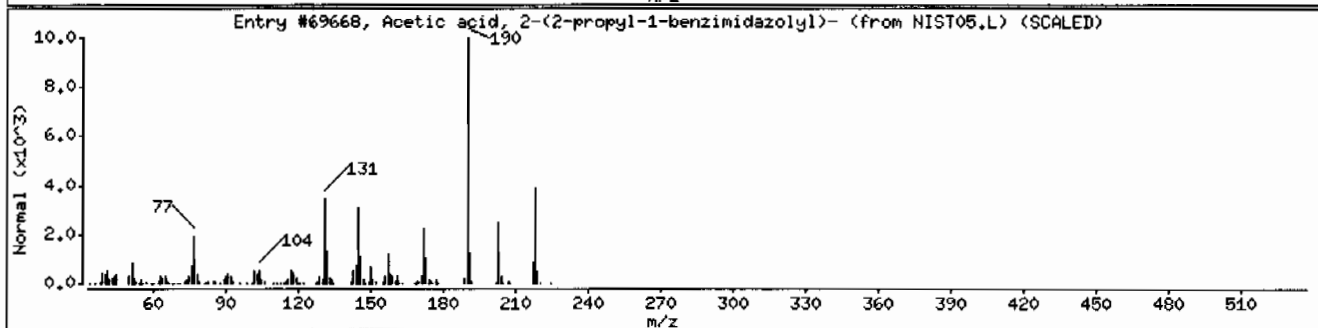
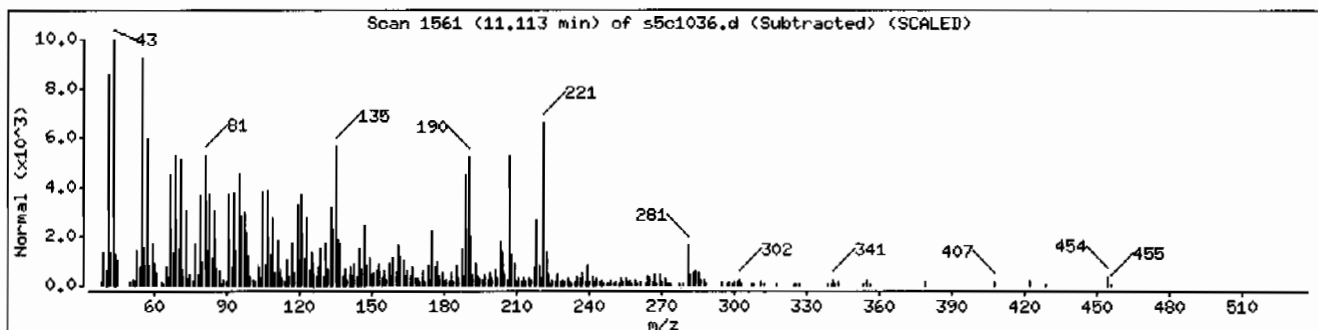
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazolyl)	331736-92-6	NIST05.L	69668	40	C12H14N2O2	218
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	35	C15H26O2	238
1-Heptatriacotanol	105794-58-9	NIST05.L	186397	25	C37H76O	537



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: HSD5.i

Sample Info: I248240006I960659I1ISVMH11LANL

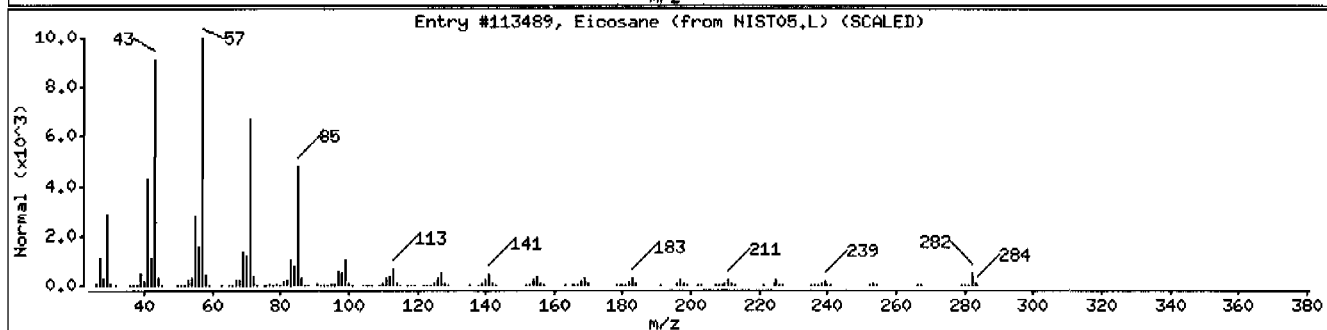
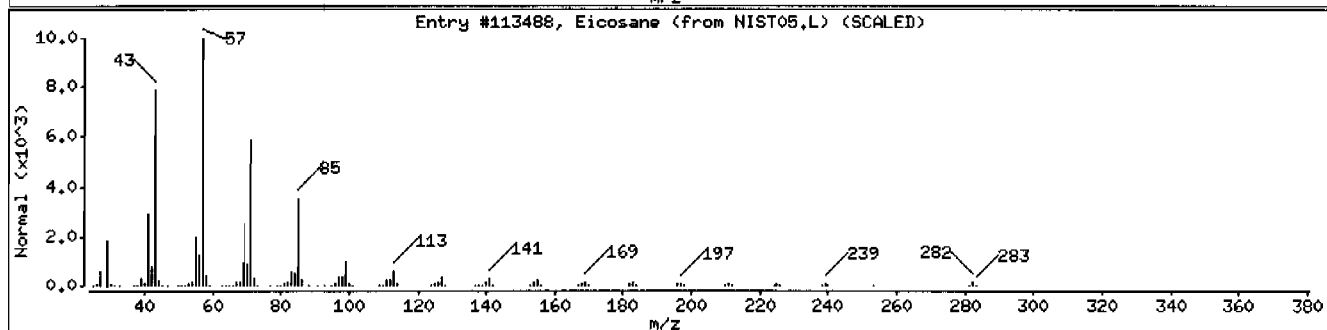
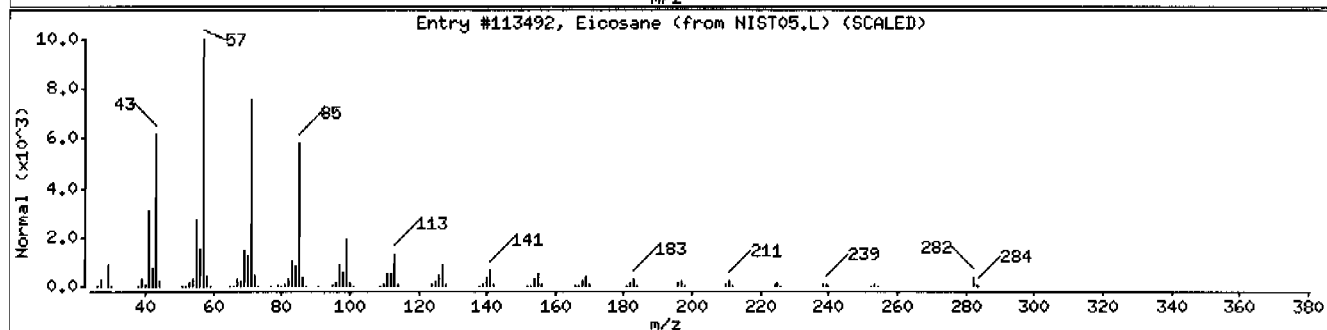
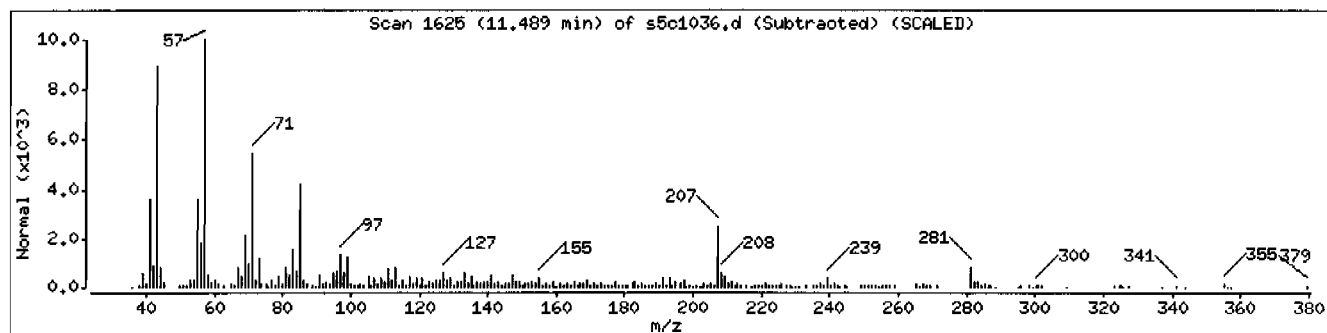
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	95	C ₂₀ H ₄₂	282



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: 12482400061960659111SVH111LANL

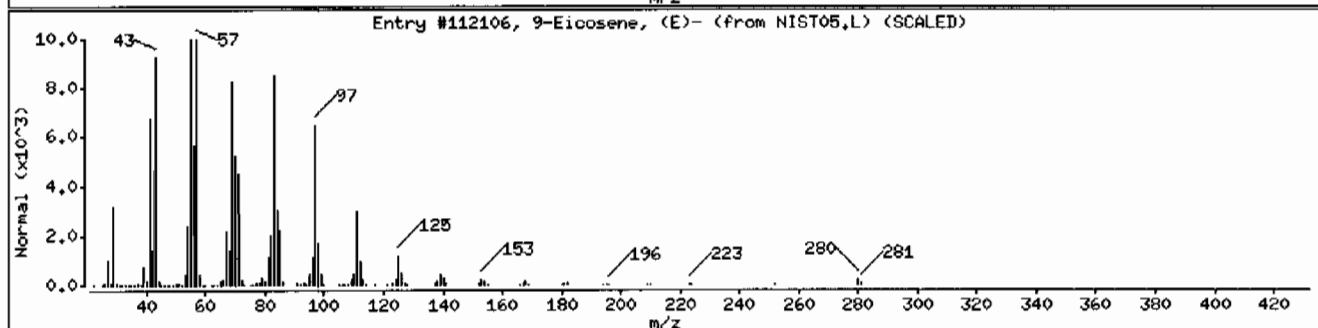
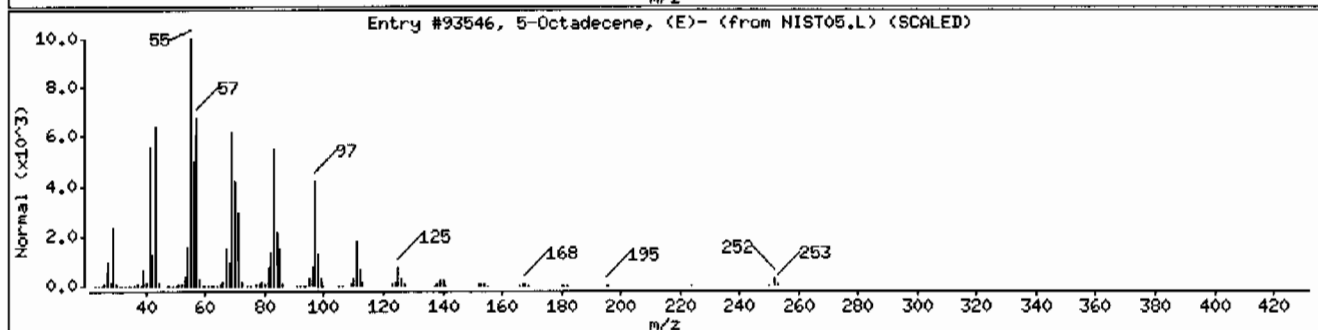
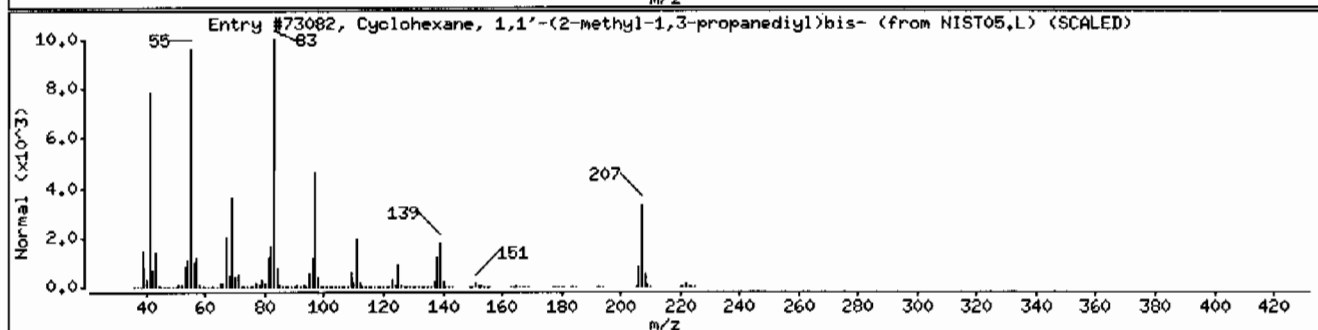
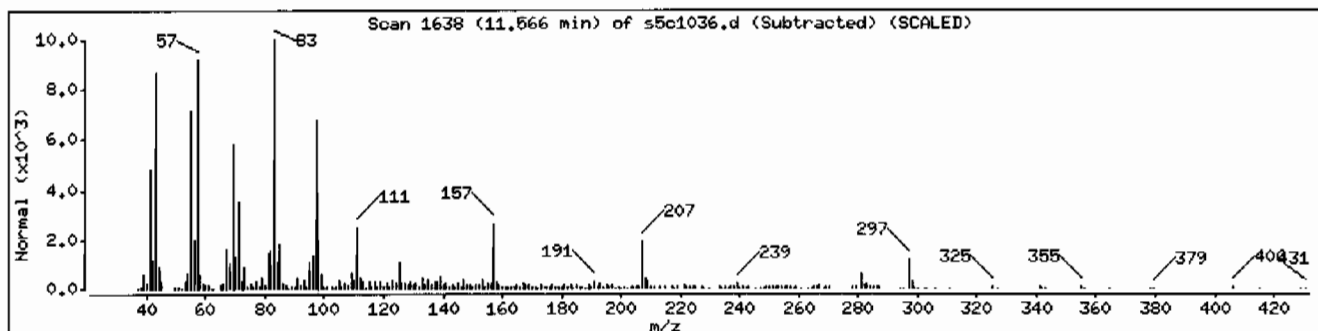
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)bis-	2883-08-1	NIST05.L	73082	91	C16H30	222
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	49	C18H36	252
9-Eicosene, (E)-	74685-29-3	NIST05.L	112106	46	C20H40	280



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.1

Sample Info: 1248240006196065911SVMI11LANL

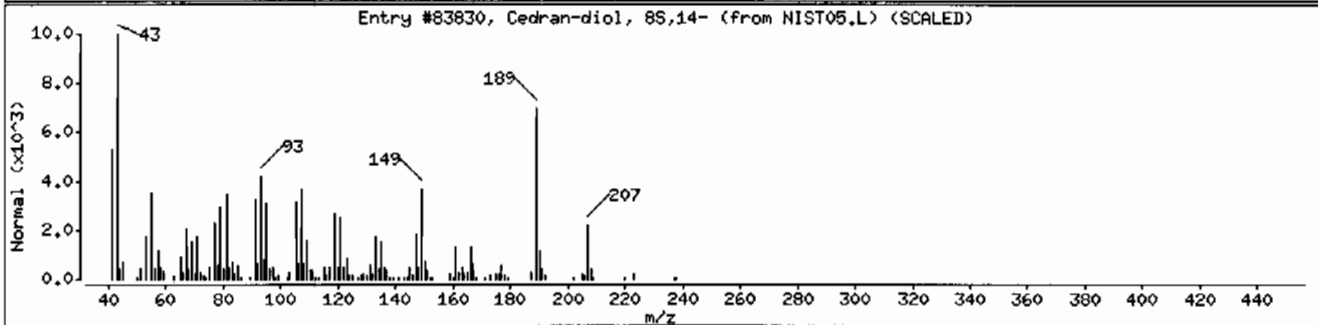
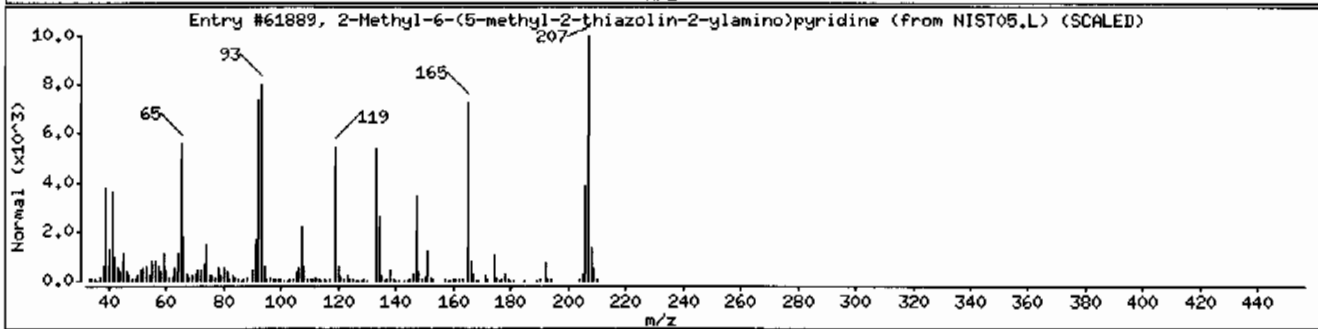
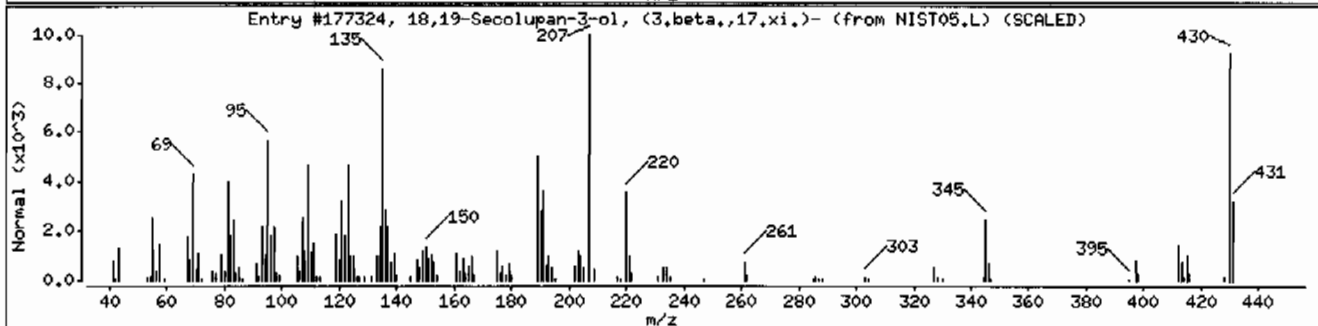
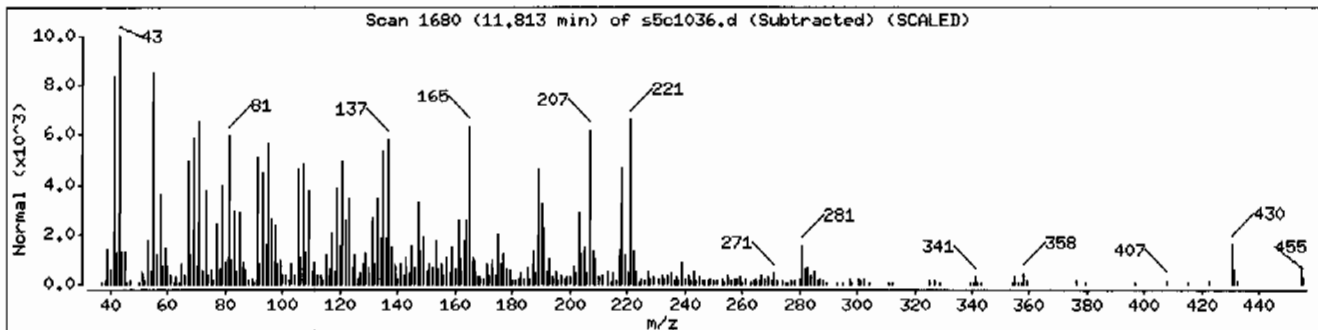
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
18,19-Secolupan-3-ol, (3,β,17,xi.)-	30211-96-2	NIST05.L	177324	51	C30H54O	430
2-Methyl-6-(5-methyl-2-thiazolin-2-ylamino)	339352-50-0	NIST05.L	61889	38	C10H13N3S	207
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	35	C15H26O2	238



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: I248240006I96065911ISVM11ILANL

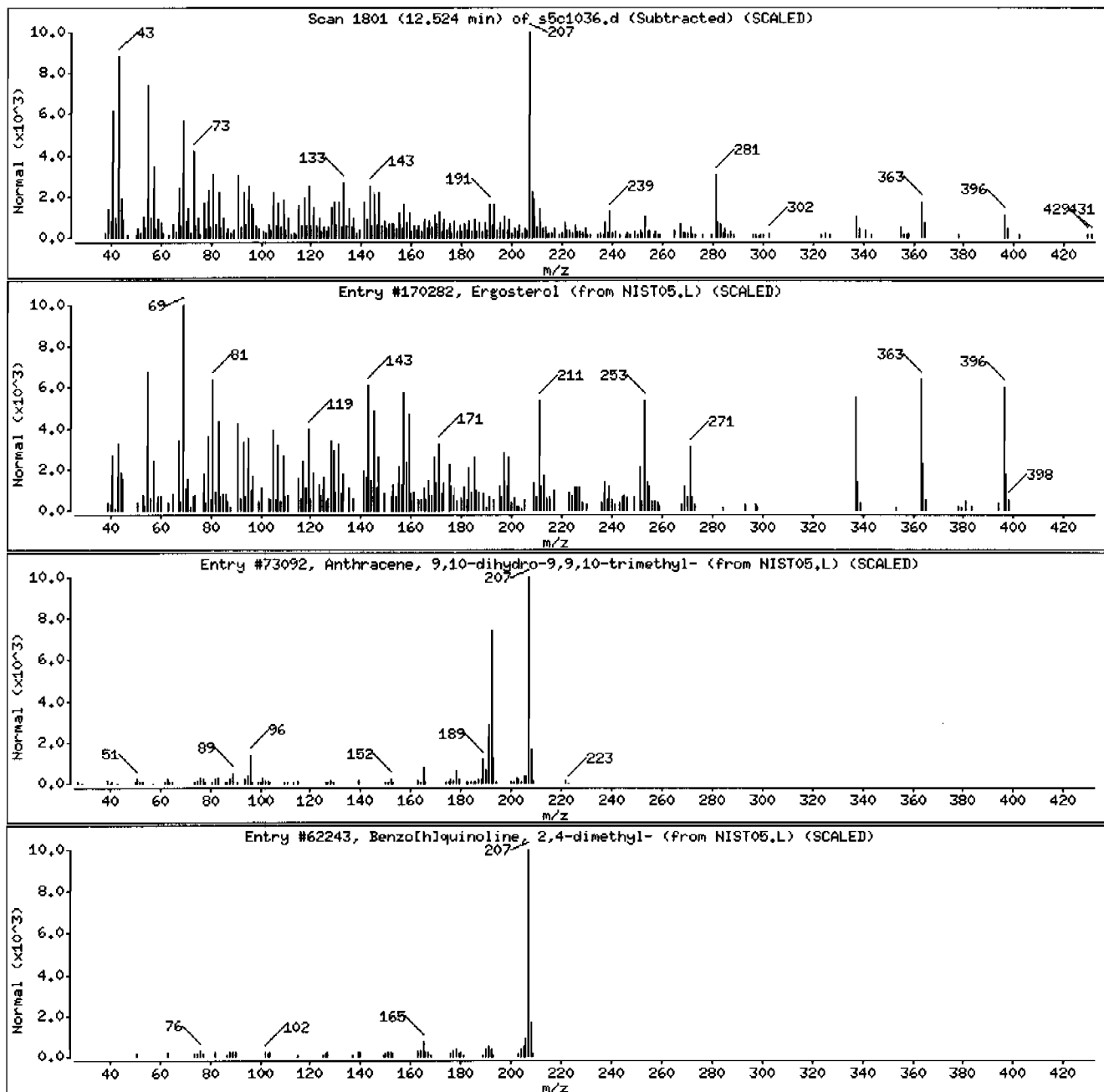
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ergosterol	57-87-4	NIST05.L	170282	91	C ₂₈ H ₄₄ O	386
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	42	C ₁₇ H ₁₈	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C ₁₅ H ₁₃ N	207



Date : 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: I248240006196065911SVMI1ILANL

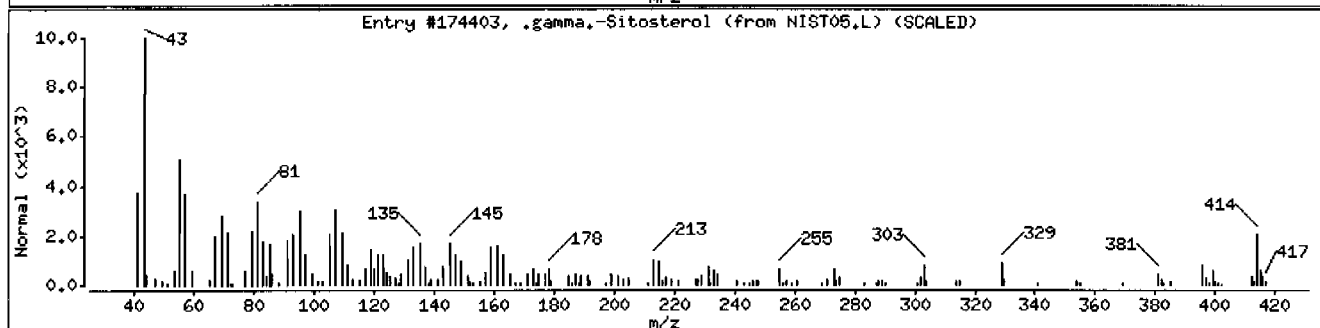
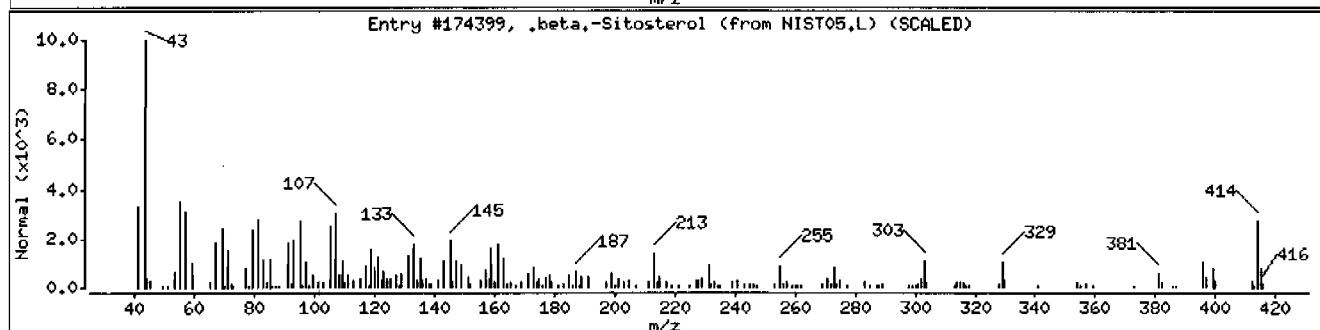
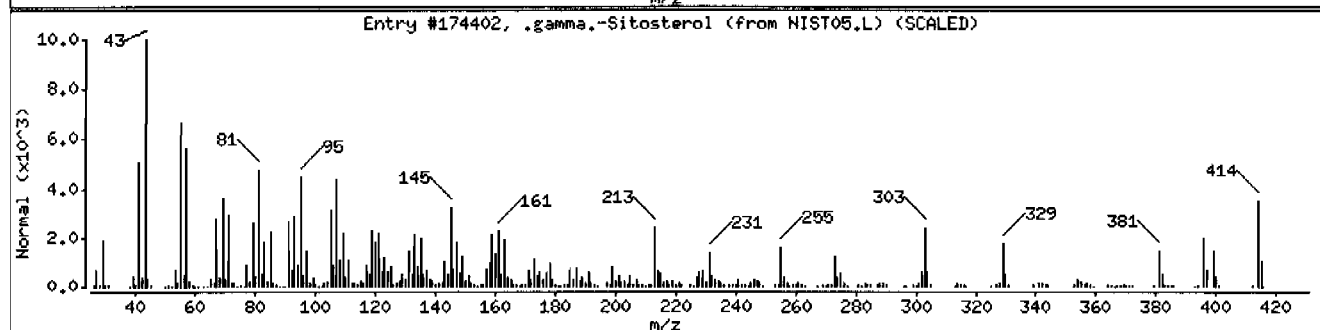
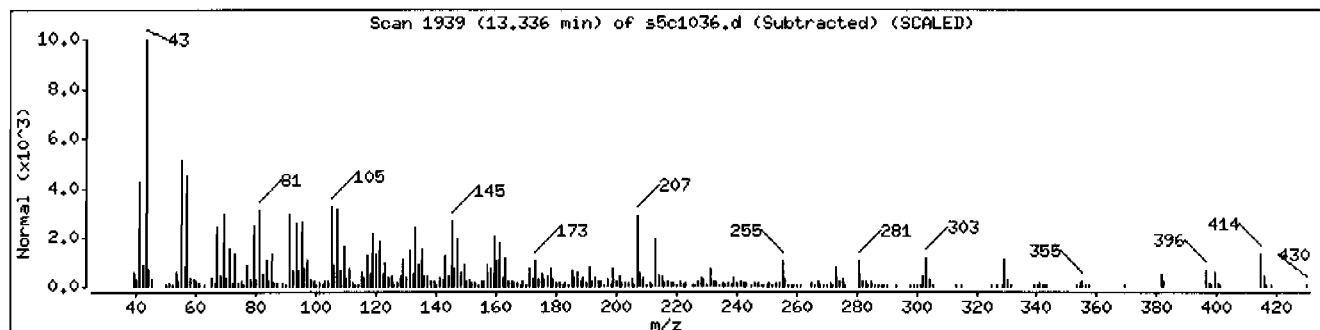
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	97	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	50	C29H50O	414



Date: 10-MAR-2010 23:06

Client ID: RE36-10-7455

Instrument: MSD5.i

Sample Info: I248240006196065911ISVM11ILANL

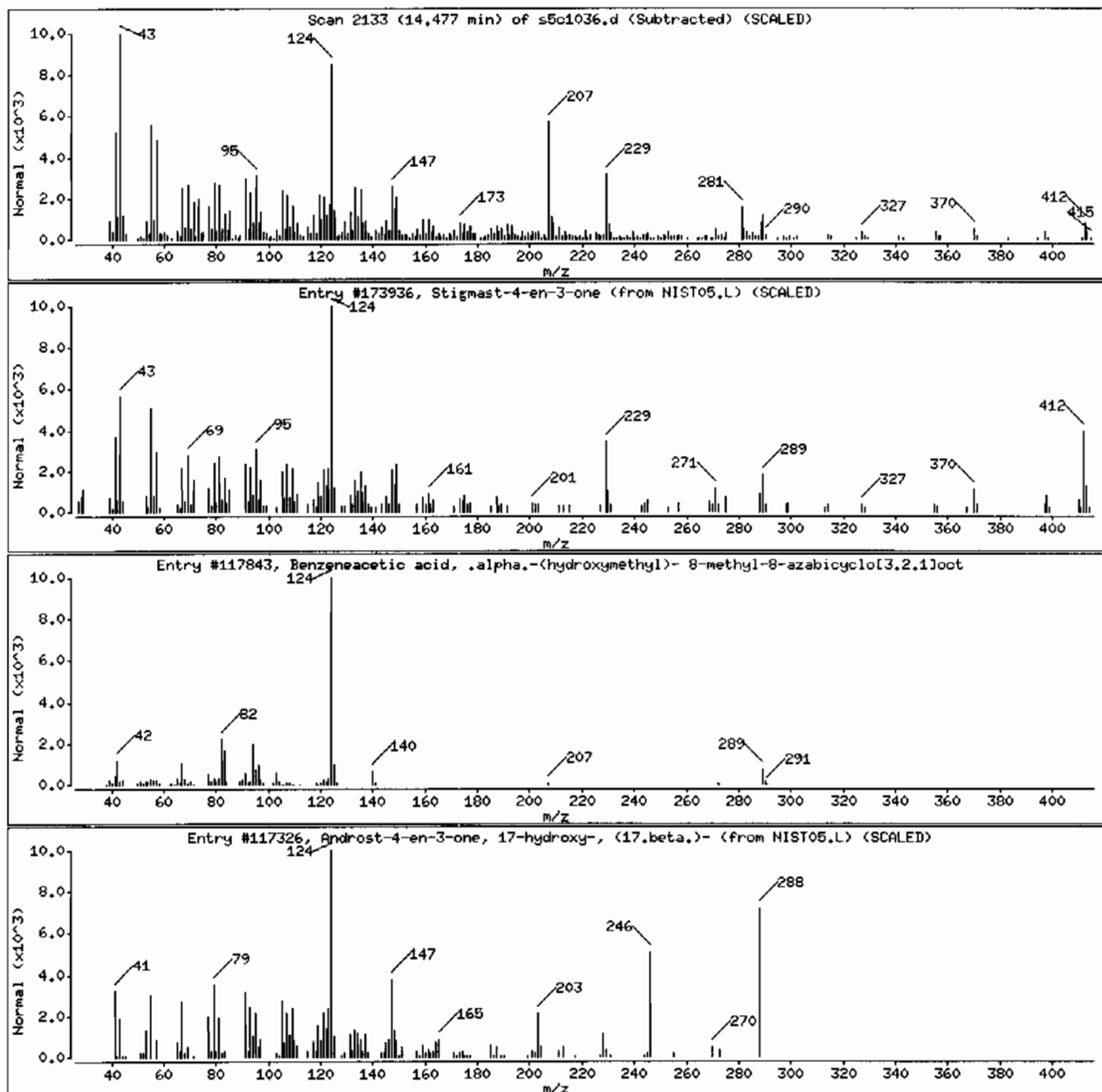
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	91	C29H48O	412
Benzeneacetic acid, .alpha.-(hydroxymeth	51-55-8	NIST05.L	117843	42	C17H23NO3	289
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	41	C19H28O2	288



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

SDG Number: 10-2134
Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7456
Batch ID: 960659
Run Date: 03/10/2010 22:44
Prep Date: 03/04/2010 10:53
Data File: s5c1035.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	3-Nitroaniline	U	360	ug/kg	72.1	360

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240005	Date Received: 02/27/2010 09:10	%Moisture: 7.5
Client ID: RE36-10-7456	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/10/2010 22:44	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1035.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	360	ug/kg	72.1	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	721	ug/kg	137	721
132-64-9	Dibenzofuran	U	360	ug/kg	72.1	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.1	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360
122-66-7	Azobenzene	U	360	ug/kg	72.1	360
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360
206-44-0	Fluoranthene	U	36.0	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	U	36.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.51	387	ug/kg		J
	Unknown	8.81	454	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240005

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7456
Batch ID: 960659
Run Date: 03/10/2010 22:44
Prep Date: 03/04/2010 10:53
Data File: sSc1035.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
65899-10-7	trans-1,2-Bis(methyldichlorosilyl)ethyle	8.9	1230	ug/kg	95	NJ
	Unknown	8.94	243	ug/kg		J
	Unknown	9.08	449	ug/kg		J
	Unknown	9.18	543	ug/kg		J
1000130-93-3	2-Methyl-cis-7,8-epoxynonadecane	9.27	1090	ug/kg	89	NJ
	Unknown	9.67	863	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.72	311	ug/kg	96	NJ
1599-67-3	1-Docosene	9.9	484	ug/kg	99	NJ
55591-17-8	s-Indacene-1,7-dione, 2,3,5,6-tetrahydro	10.01	231	ug/kg	80	NJ
	Unknown	10.2	285	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.3	465	ug/kg	95	NJ
	Unknown	10.32	628	ug/kg		J
	Unknown	10.58	340	ug/kg		J
	Unknown	11.78	590	ug/kg		J
83-46-5	.beta.-Sitosterol	13.34	859	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1035.d
 Lab Smp Id: 248240005 Client Smp ID: RE36-10-7456
 Inj Date : 10-MAR-2010 22:44
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240005|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	7.48330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791	(1.000)	263241	40.0000	
* 29 Naphthalene-d8	136	4.643	4.653	(1.000)	1004597	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905	(1.000)	582475	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060	(1.000)	1007459	40.0000	
* 91 Chrysene-d12	240	9.454	9.458	(1.000)	852507	40.0000	
* 98 Perylene-d12	264	11.030	11.033	(1.000)	608111	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977	(0.789)	460779	70.0989	2520
\$ 5 Phenol-d5	99	3.507	3.507	(0.927)	558136	70.6460	2540
\$ 20 Nitrobenzene-d5	82	4.143	4.152	(0.892)	281370	37.6927	1360
\$ 39 2-Fluorobiphenyl	172	5.390	5.394	(0.914)	509851	35.0455	1260
\$ 60 2,4,6-Tribromophenol	329	6.489	6.492	(1.101)	158690	72.5355	2610
\$ 81 p-Terphenyl-d14	244	8.431	8.428	(0.892)	573076	40.4122	1460

ION RATIO REPORT

SV REPORT

Data file: s5c1035.d

Report Date: 03/11/2010 07:24

Lab. ID: 248240005

SampleType: SAMPLE

Injection Date: 10-MAR-2010 22:44

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240005|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	33880	3.51	3.57	80-120	100	(T)
93	1481	3.46	3.57	220-280	4	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	39232	4.14	4.03	80-120	100	(T)
42	27947	4.14	4.03	57-117	71	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	9611	4.40	4.43	80-120	100	()
122	9643	4.40	4.43	45-105	100	()
77	8167	4.40	4.43	40-100	85	()

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	6936	5.63	5.50	80-120	100	(T)
164	680	5.63	5.50	3- 63	10	(T)
127	815	5.63	5.50	10- 70	12	(T)

42	o-Nitroaniline		CAS#: 88-74-4			
65	10146	5.63	5.56	80-120	100	(T)
92	10932	5.63	5.56	31- 91	108	(QT)
138	853	5.63	5.56	70-130	8	(QT)

43	Dimethylphthalate		CAS#: 131-11-3			
163	106490	5.90	5.67	80-120	100	(T)
164	582475	5.90	5.67	0- 40	547	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	76145	5.90	5.73	80-120	100	(T)
63	1406	5.90	5.72	62-122	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	75379	5.90	6.02	80-120	100	(T)
89	1555	5.90	6.02	50-110	2	(QT)
63	1406	5.90	6.02	24- 84	2	(QT)

52	4-Nitrophenol			CAS#: 100-02-7		
139	276	5.97	5.94	80-120	100	()
109	966	5.97	5.94	50-110	350	(Q)
65	913	5.96	5.94	82-142	331	(Q)

53	Fluorene			CAS#: 86-73-7		
166	7498	6.49	6.31	80-120	100	(T)
165	8494	6.48	6.31	61-121	113	(T)
167	2930	6.49	6.31	0- 44	39	(T)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	171	6.37	6.32	80-120	100	()
105	1952	6.39	6.32	12- 72	1141	(QT)
51	803	6.40	6.32	36- 96	469	(QT)

61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	9893	6.49	6.67	80-120	100	(T)
141	75921	6.48	6.67	50-110	767	(QT)
250	19815	6.49	6.67	69-129	200	(QT)

79	Pyrene			CAS#: 129-00-0		
202	64778	8.57	8.32	80-120	100	(T)
200	5855	8.57	8.32	0- 51	9	(T)
101	25209	8.56	8.32	0- 44	39	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1035.d
 Lab Smp Id: 248240005 Client Smp ID: RE36-10-7456
 Inj Date : 10-MAR-2010 22:44
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240005|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	7.48330	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.454	3284246	40.000
* 98 Perylene-d12	11.030	2128512	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
8.513	881440	10.7353635	387	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
8.807	1034217	12.5960939	454	0		0	91
trans-1,2-Bis(methyldichlorosilyl)ethyle					CAS #: 65899-10-7		
8.895	2797454	34.0711733	1230	95	NIST05.L	93595	91
Unknown					CAS #:		
8.936	554066	6.74816703	243	0		0	91
Unknown					CAS #:		
9.083	1023573	12.4664512	449	0		0	91
Unknown					CAS #:		
9.178	1237990	15.0779161	543	0		0	91
2-Methyl-cis-7,8-epoxynonadecane					CAS #: 1000130-93-3		
9.266	2481167	30.2190104	1090	89	NIST05.L	122417	91
Unknown					CAS #:		
9.666	1965718	23.9411781	862	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.725	708910	8.63406861	311	96	NIST05.L	133620	91
1-Docosene					CAS #: 1599-67-3		
9.901	1102170	13.4237226	484	99	NIST05.L	129889	91
s-Indacene-1,7-dione, 2,3,5,6-tetrahydro					CAS #: 55591-17-8		
10.007	526724	6.41515742	231	80	NIST05.L	86823	91
Unknown					CAS #:		
10.201	649412	7.90941214	285	0		0	91
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
10.295	686511	12.9012462	465	95	NIST05.L	112295	98
Unknown					CAS #:		
10.325	926855	17.4179000	628	0		0	98
Unknown					CAS #:		
10.577	501775	9.42960036	340	0		0	98
Unknown					CAS #:		
11.783	870914	16.3666297	590	0		0	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
----	----	-----	-----	----	-----	-----	-----
.beta.-Sitosterol					CAS #: 83-46-5		
13.336	1269126	23.8500208	859	96	NIST05.L	174399	98

Data File: /chem/HSD5.i/s031010.b/s5c1035.d

Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Sample Info: 1248240005196065911ISWH11LALN

Volume Injected (uL): 0.5

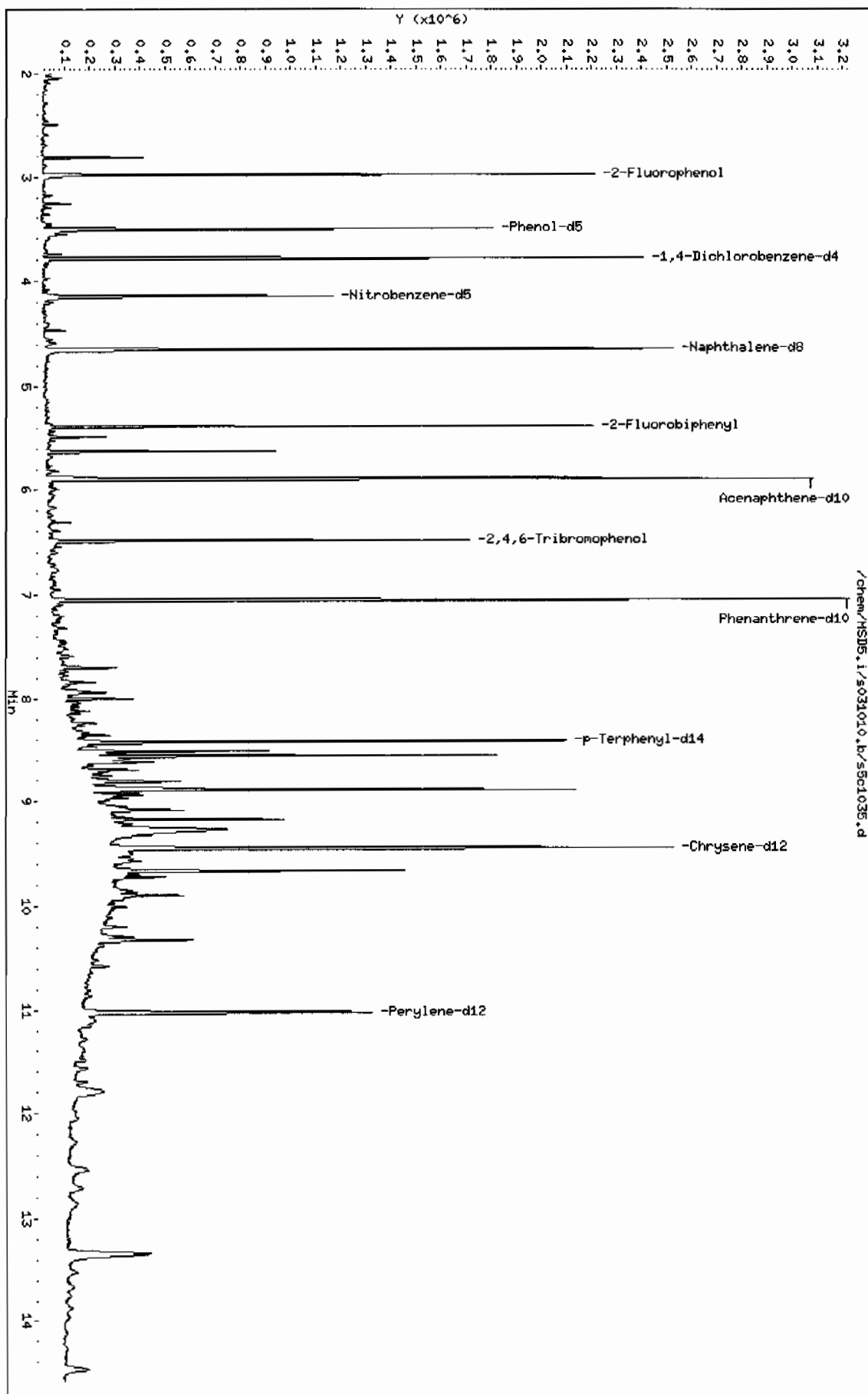
Column phase: J&W DB-5MS

Instrument: HSD5.i

Operator: RMB

Column diameter: 0.20

Page 1



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 1248240005196065911SVH111LANL

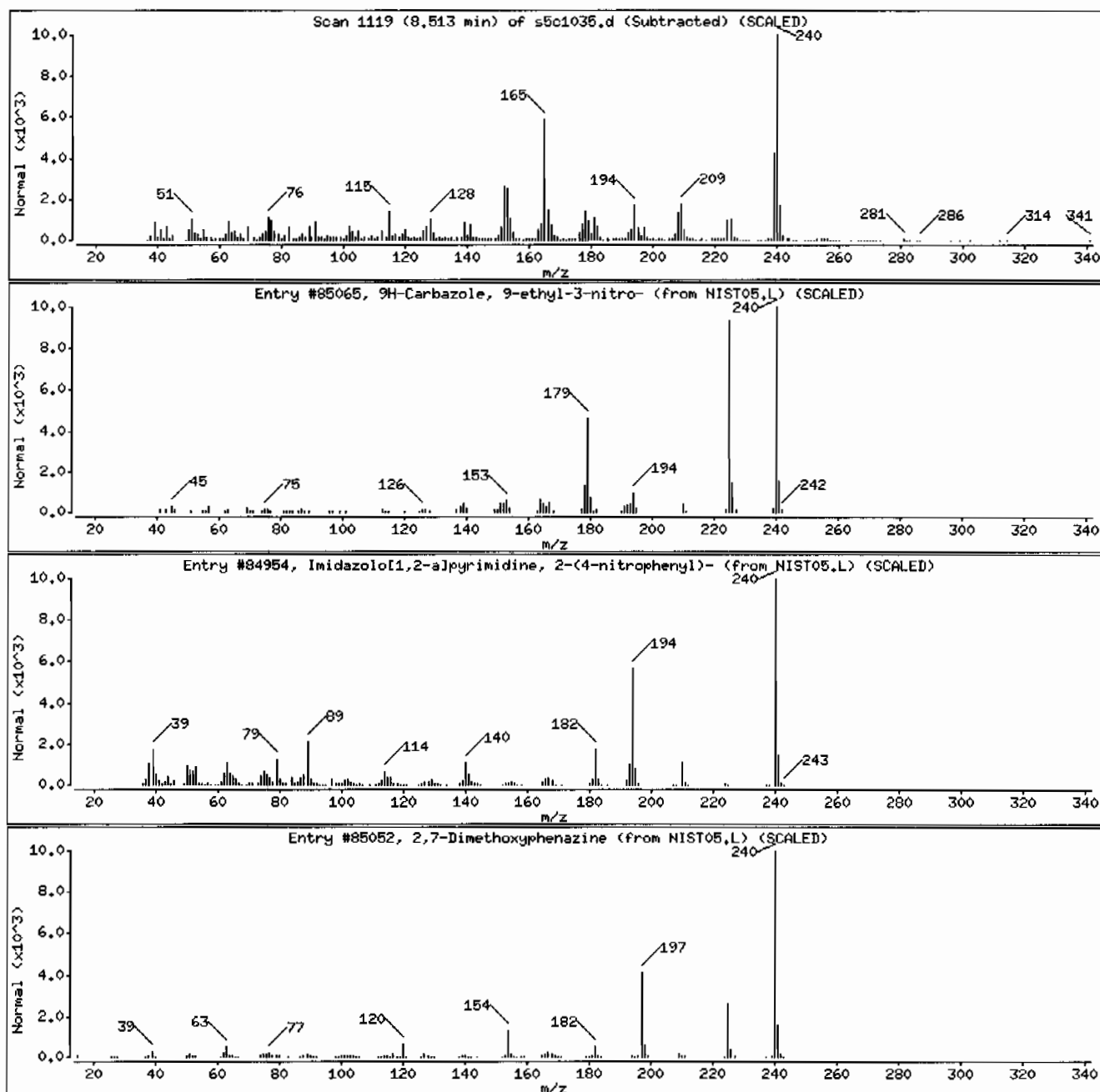
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9H-Carbazole, 9-ethyl-3-nitro-	86-20-4	NIST05.L	85065	46	C14H12N2O2	240
Imidazolo[1,2-a]pyrimidine, 2-(4-nitroph	28266-96-8	NIST05.L	84954	42	C12H8N4O2	240
2,7-Dimethoxyphenazine	5051-19-4	NIST05.L	85052	42	C14H12N2O2	240



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911SVH111LANL

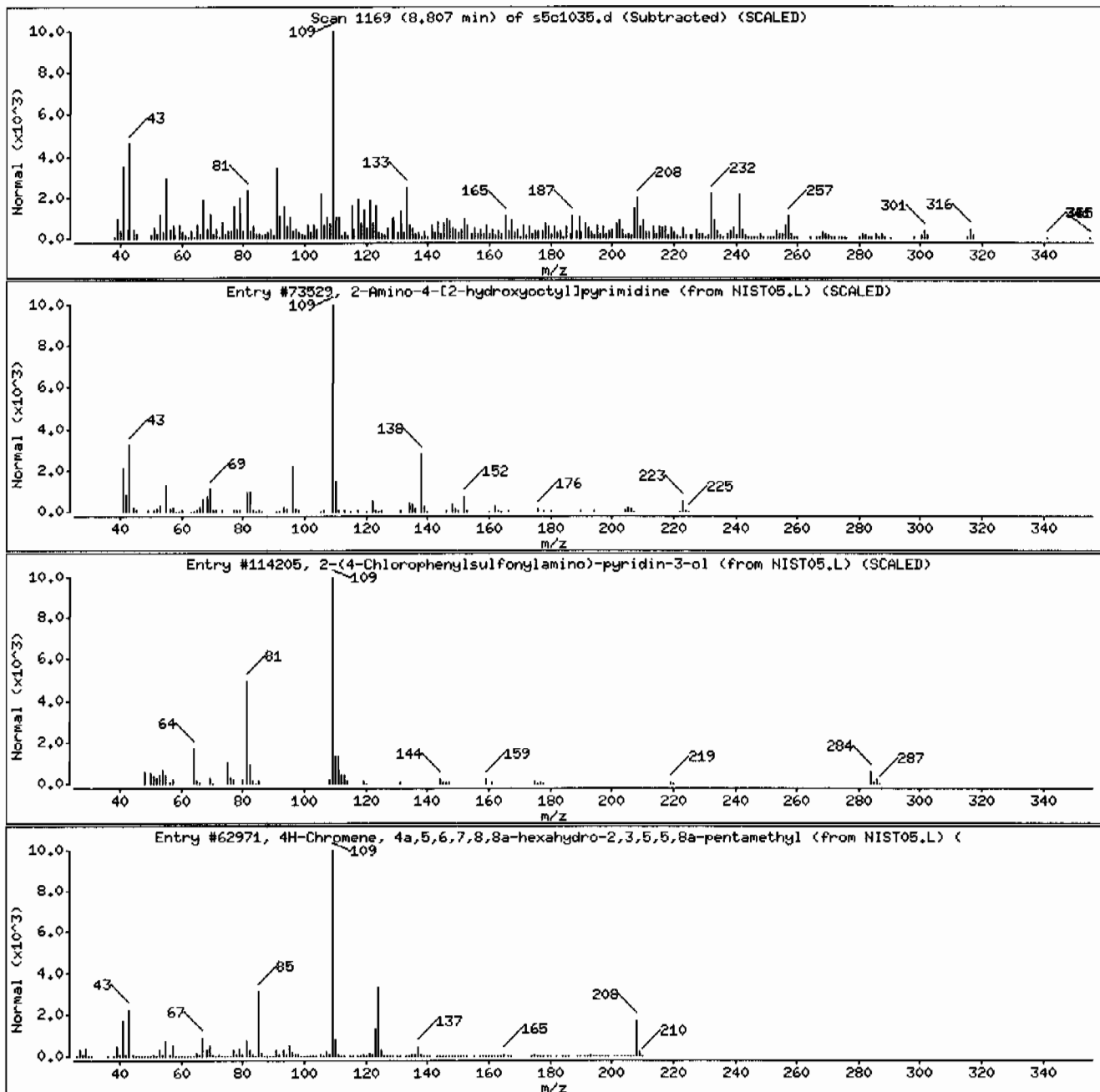
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Amino-4-[2-hydroxyoctyl]pyrimidine	50324-62-4	NIST05.L	73529	55	C12H21N3O	223
2-(4-Chlorophenylsulfonylamino)-pyridin-	296772-59-3	NIST05.L	114205	42	C11H9ClN2O3S	284
4H-Chromene, 4a,5,6,7,8,8a-hexahydro-2,3	1000196-77-4	NIST05.L	62971	38	C14H24O	208



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 1248240005196065911SVMI11LANL

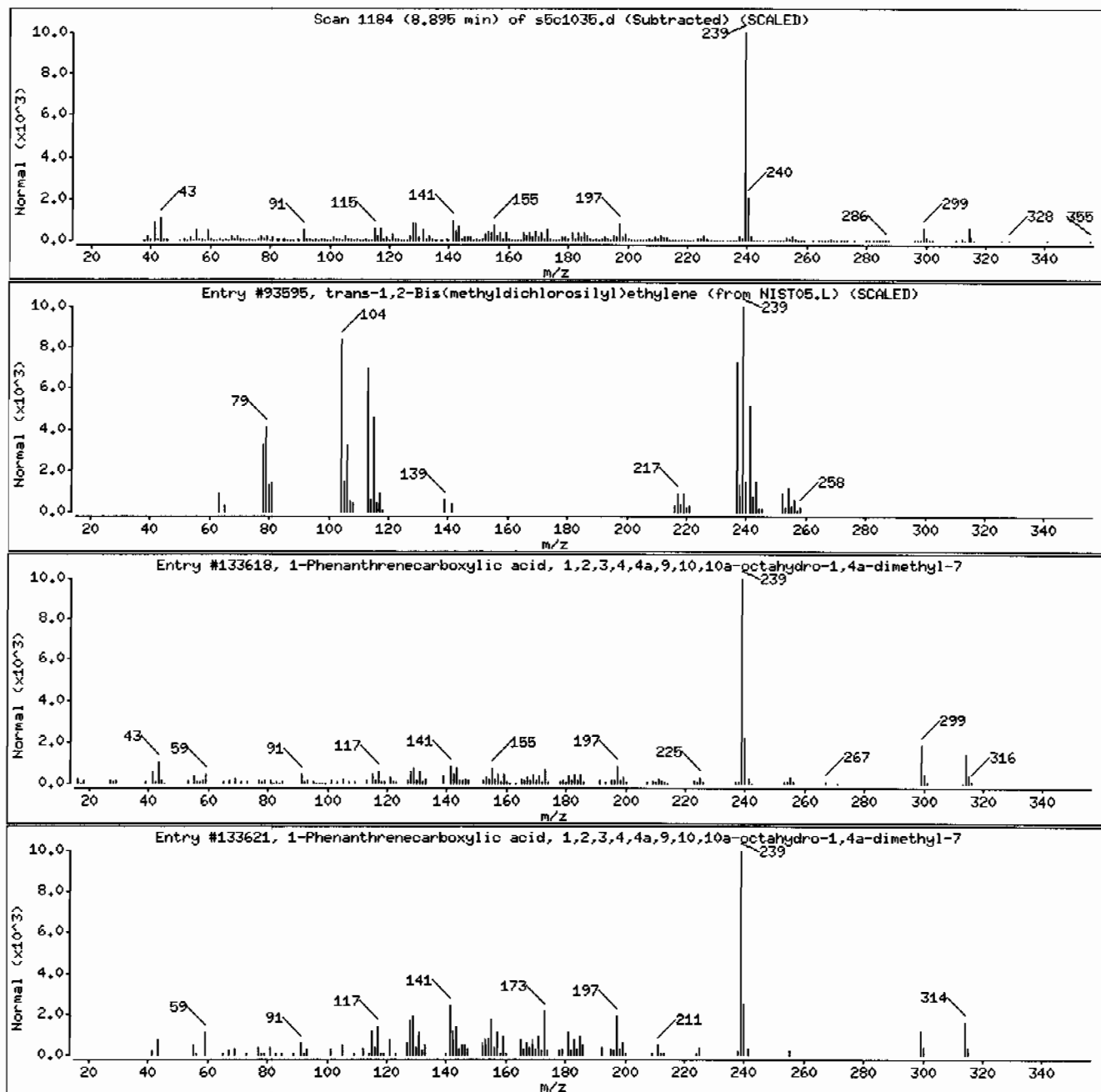
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
trans-1,2-Bis(methyldichlorosilyl)ethylene	65899-10-7	NIST05.L	93595	96	C4H8Cl4Si2	252
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.1

Sample Info: 1248240005196065911SVMI11LANL

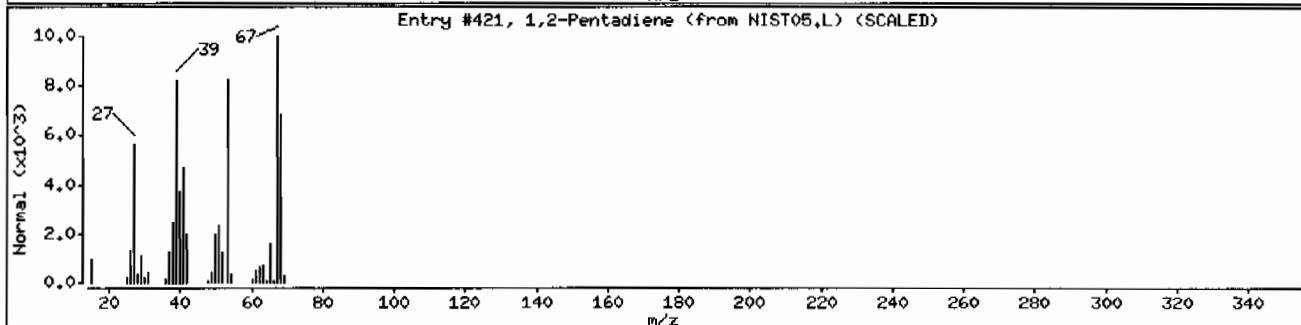
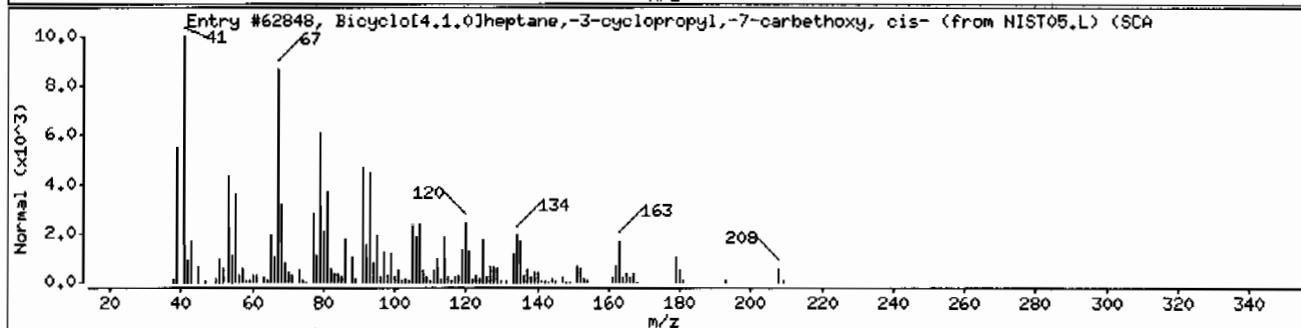
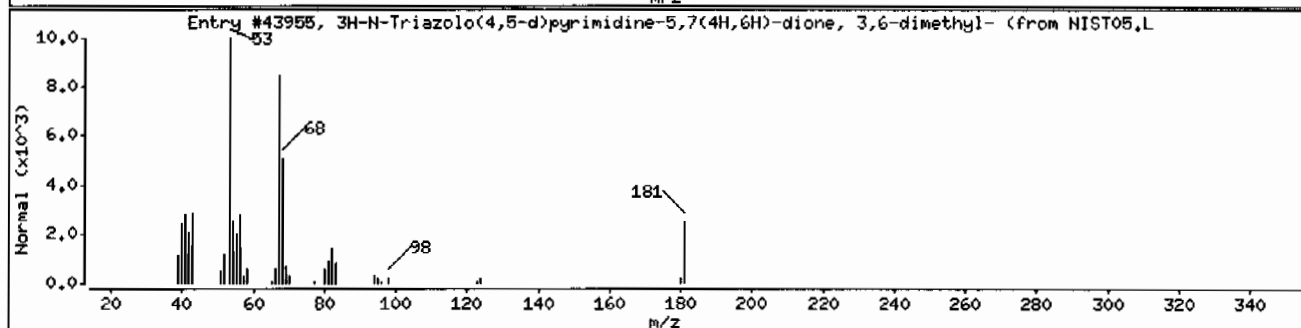
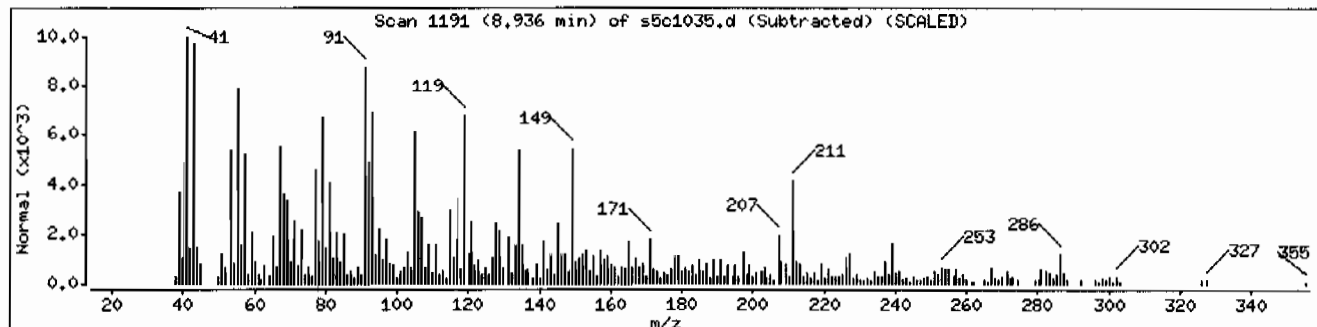
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3H-N-Triazolo(4,5-d)pyrimidine-5,7(4H,6H	2278-14-0	NIST05.L	43955	38	C6H7N5O2	181
Bicyclo[4.1.0]heptane,-3-cyclopropyl,-7-	1000222-97-2	NIST05.L	62848	30	C13H20O2	208
1,2-Pentadiene	591-95-7	NIST05.L	421	25	C5H8	68



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 12482400051960659111SVH111LANL

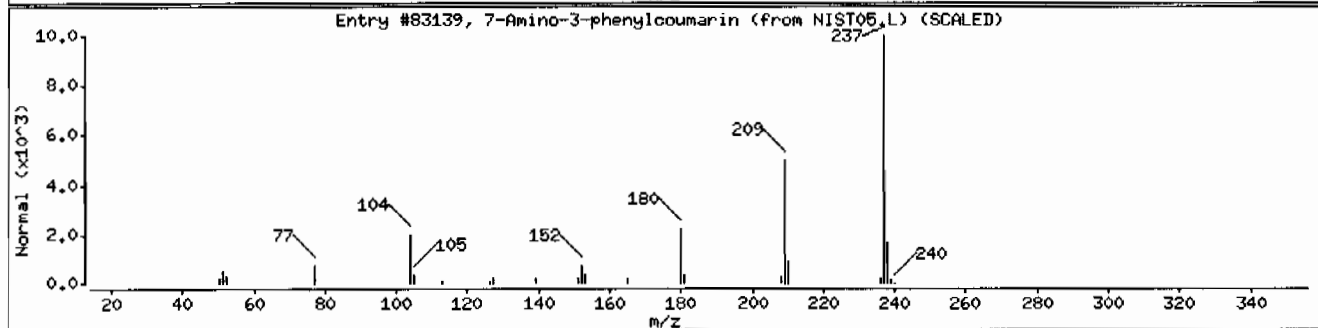
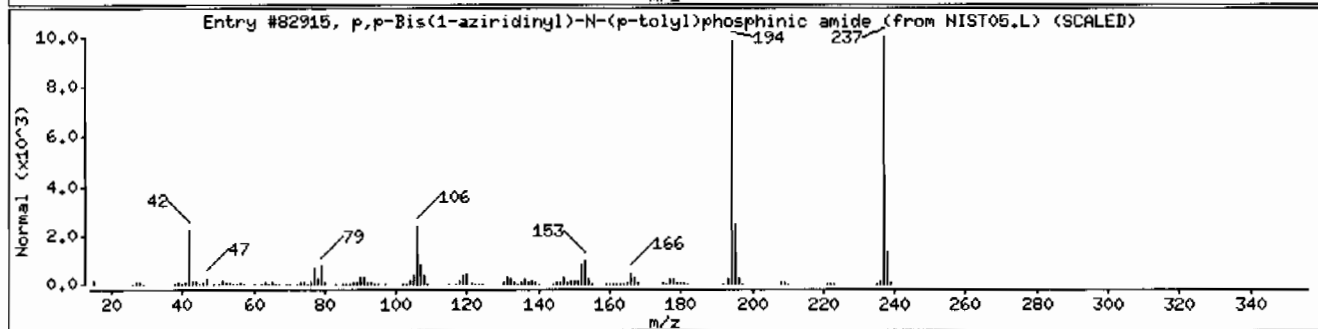
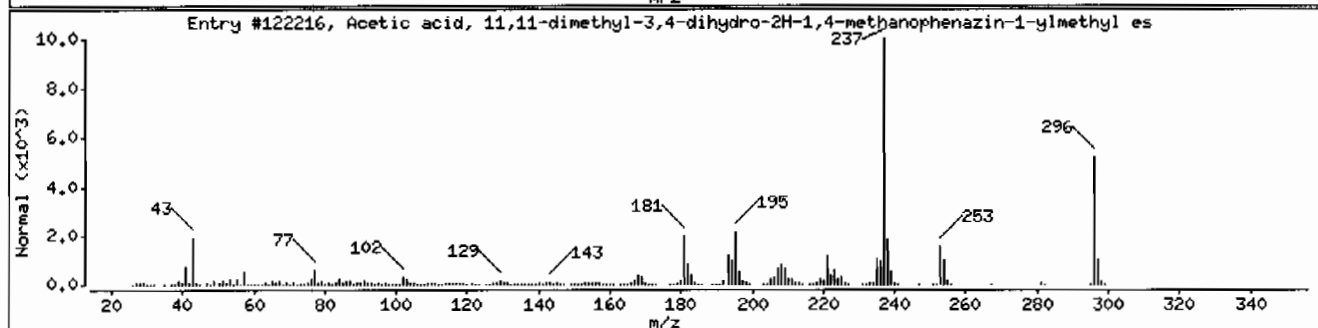
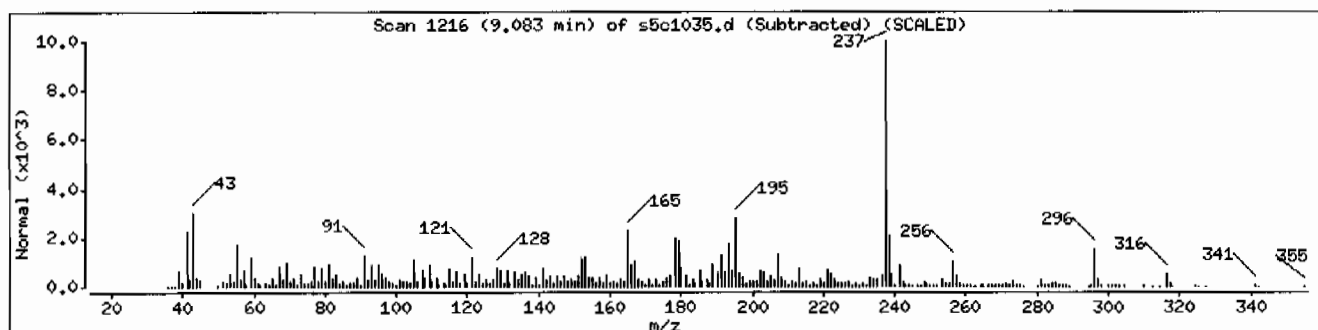
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 11,11-dimethyl-3,4-dihydro-	1000210-61-4	NIST05.L	122216	47	C18H20N2O2	296
p,p-Bis(1-aziridinyl)-N-(p-tolyl)phosphi	27824-40-4	NIST05.L	82915	46	C11H16N3OP	237
7-Amino-3-phenylcoumarin	4108-61-6	NIST05.L	83139	43	C15H11NO2	237



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911SVMI1ILANL

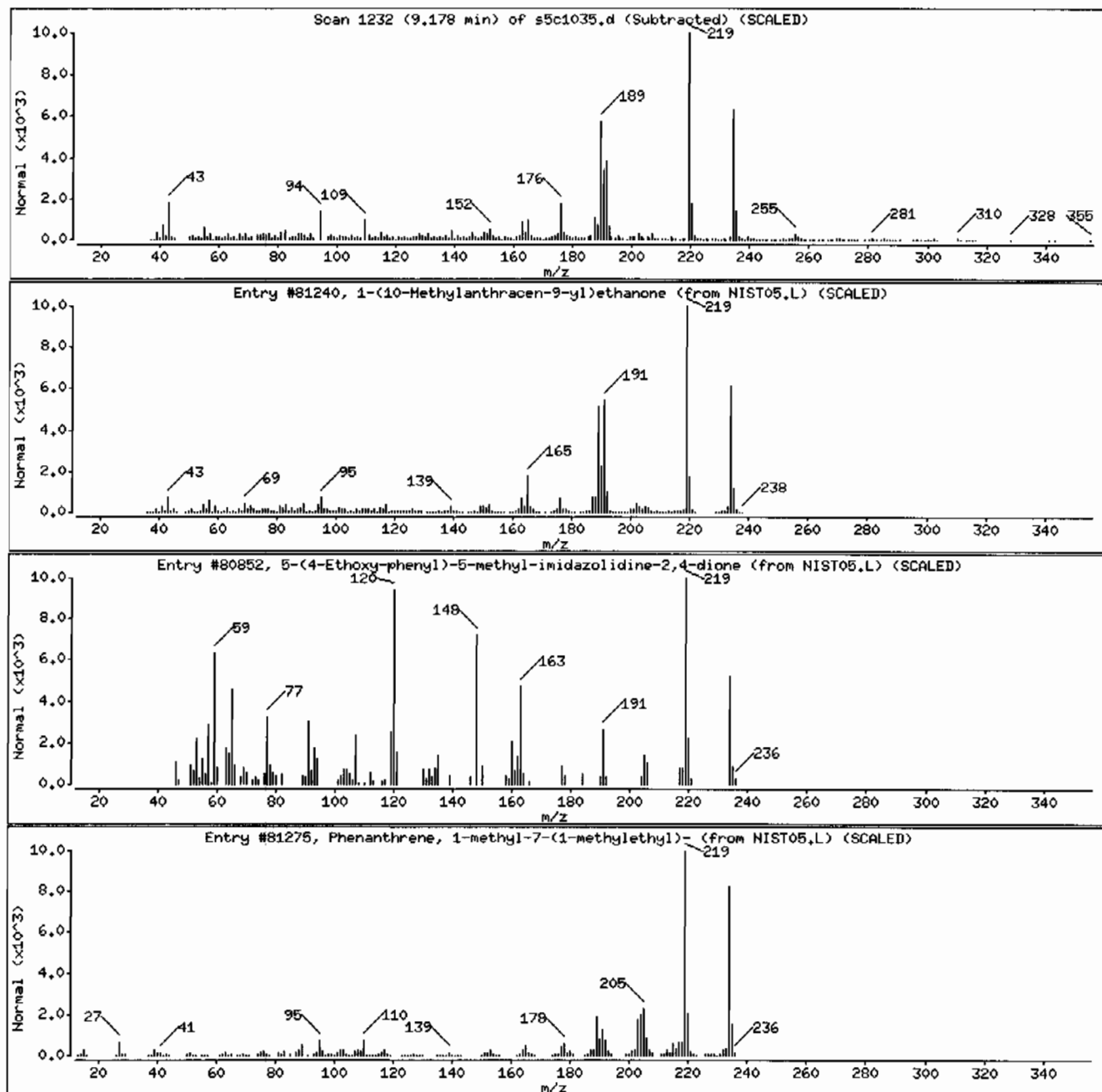
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-(10-Methylantracen-9-yl)ethanone	36778-18-4	NIST05.L	81240	74	C17H14O	234
5-(4-Ethoxy-phenyl)-5-methyl-imidazolidi	1000297-64-8	NIST05.L	80852	64	C12H14N2O3	234
Phenanthrene, 1-methyl-7-(1-methylethyl)	483-65-8	NIST05.L	81275	49	C18H18	234



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.1

Sample Info: I248240005196065911SVMI11LANL

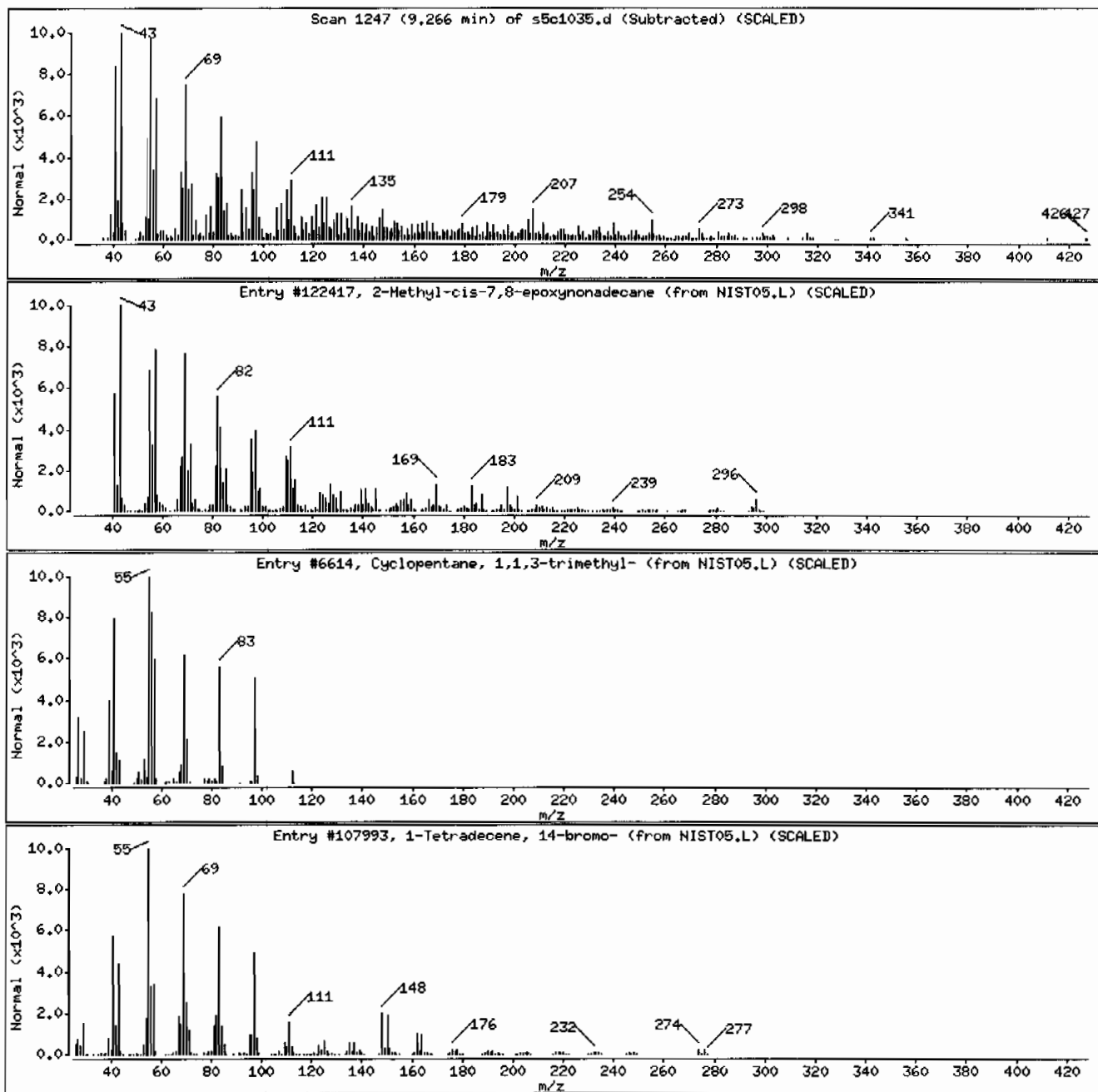
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methyl-cis-7,8-epoxynonadecane	1000130-93-3	NIST05.L	122417	89	C20H40O	296
Cyclopentane, 1,1,3-trimethyl-	4616-69-2	NIST05.L	6614	70	C8H16	112
1-Tetradecene, 14-bromo-	74646-31-4	NIST05.L	107993	60	C14H27Br	274



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911ISVH11ILANL

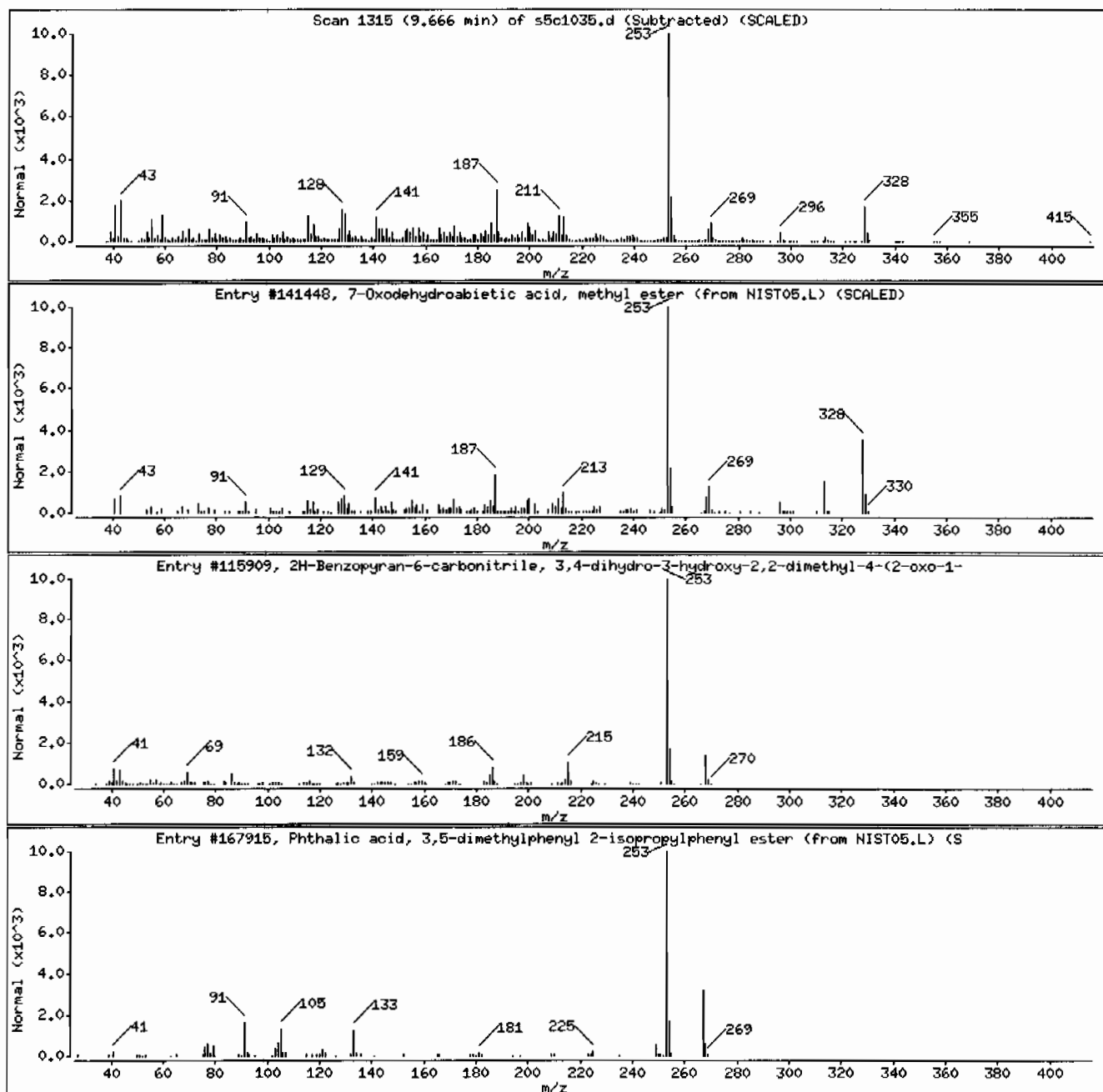
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	72	C21H28O3	328
2H-Benzopyran-6-carbonitrile, 3,4-dihydr	150871-62-8	NIST05.L	115909	47	C16H18N2O3	286
Phthalic acid, 3,5-dimethylphenyl 2-isop	1000315-52-6	NIST05.L	167915	47	C25H24O4	388



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 12482400051960659111SVH111LANL

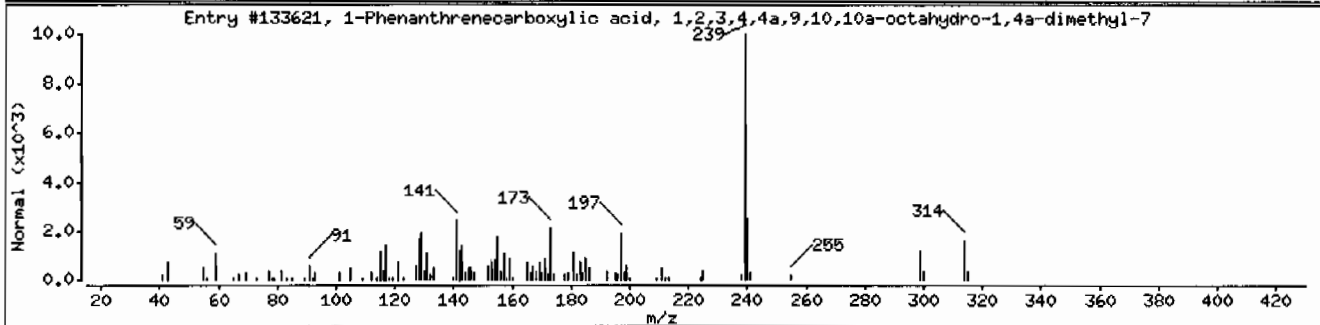
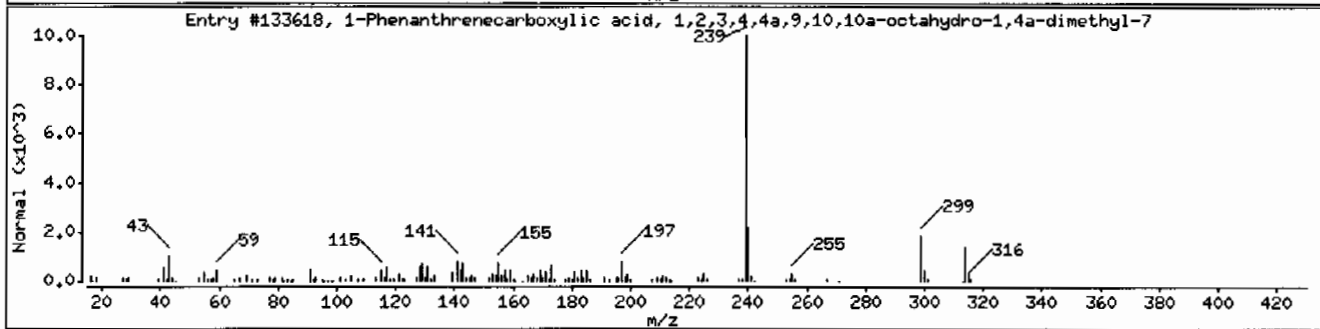
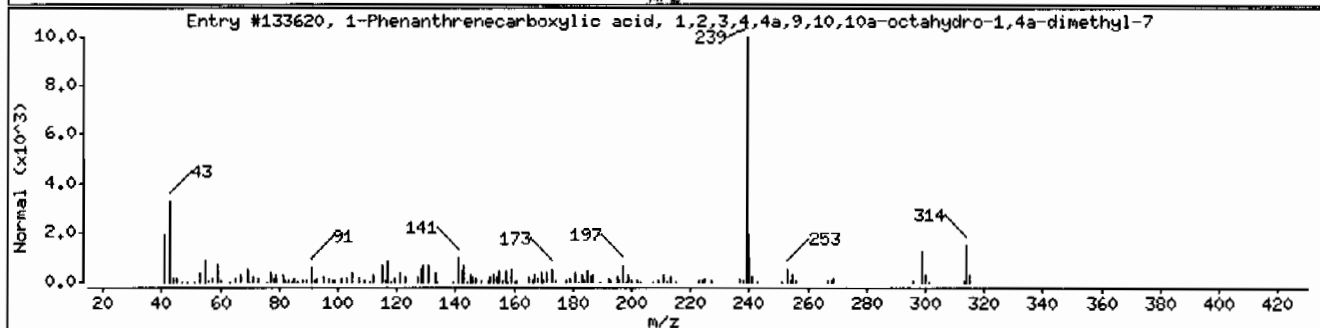
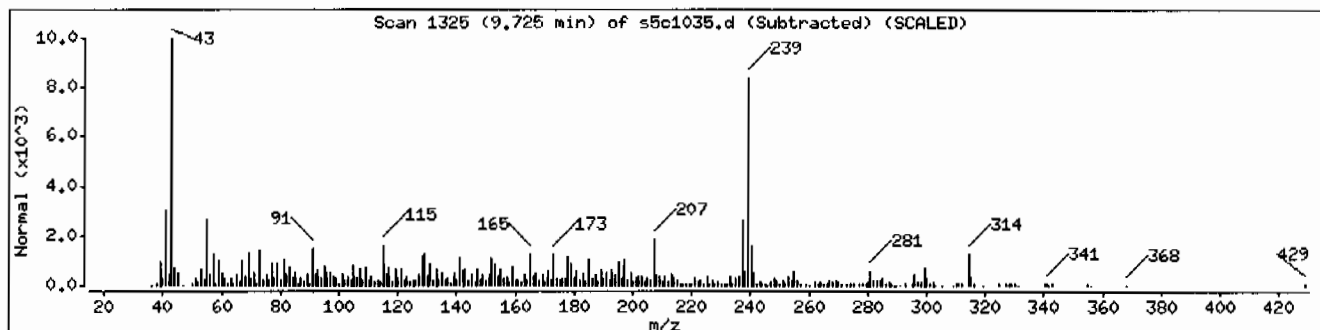
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	92	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	91	C21H30O2	314



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 1248240005196065911SVH111LANL

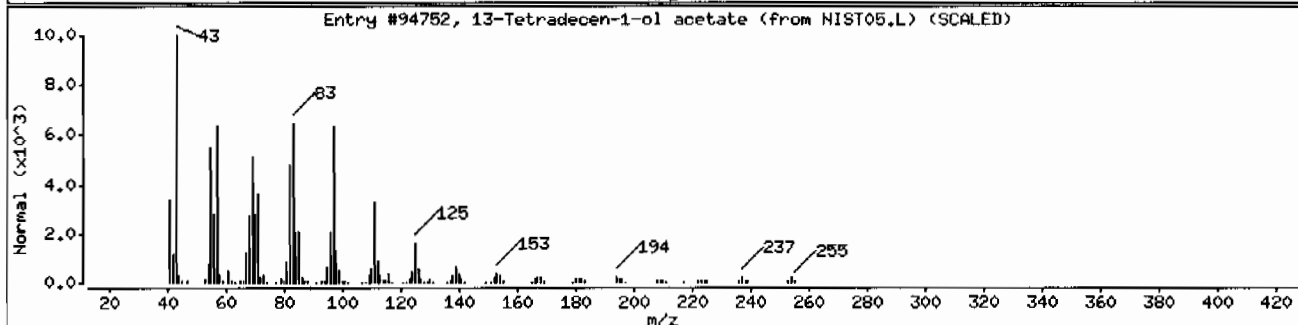
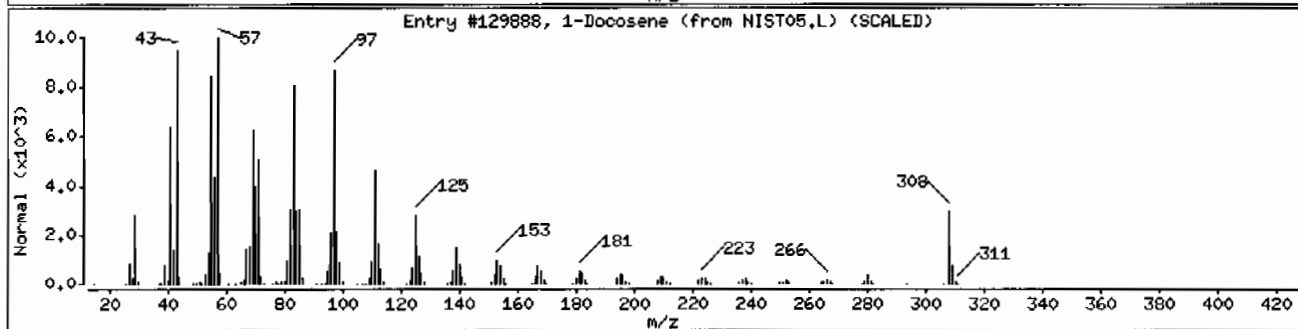
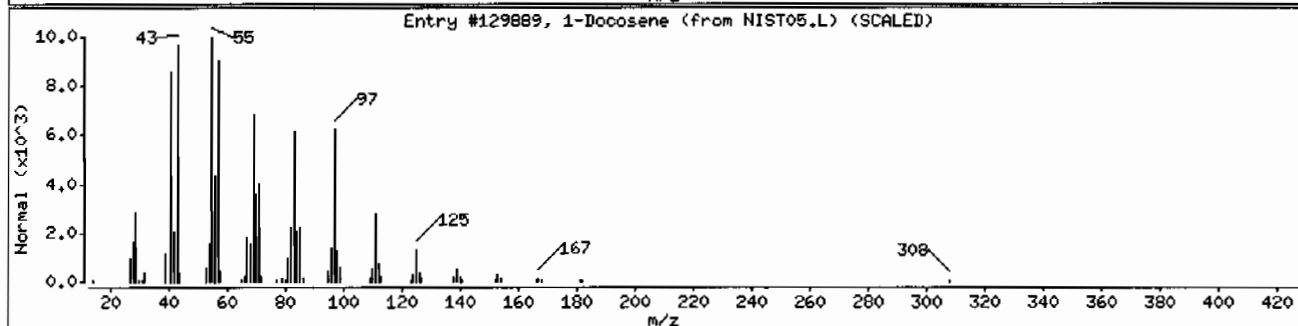
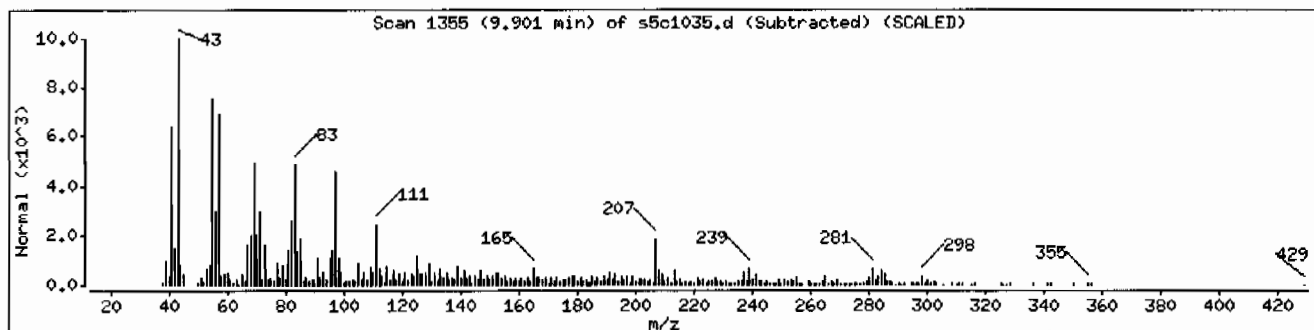
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129888	98	C22H44	308
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	96	C16H30O2	254



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 12482400081960659111SVH111LANL

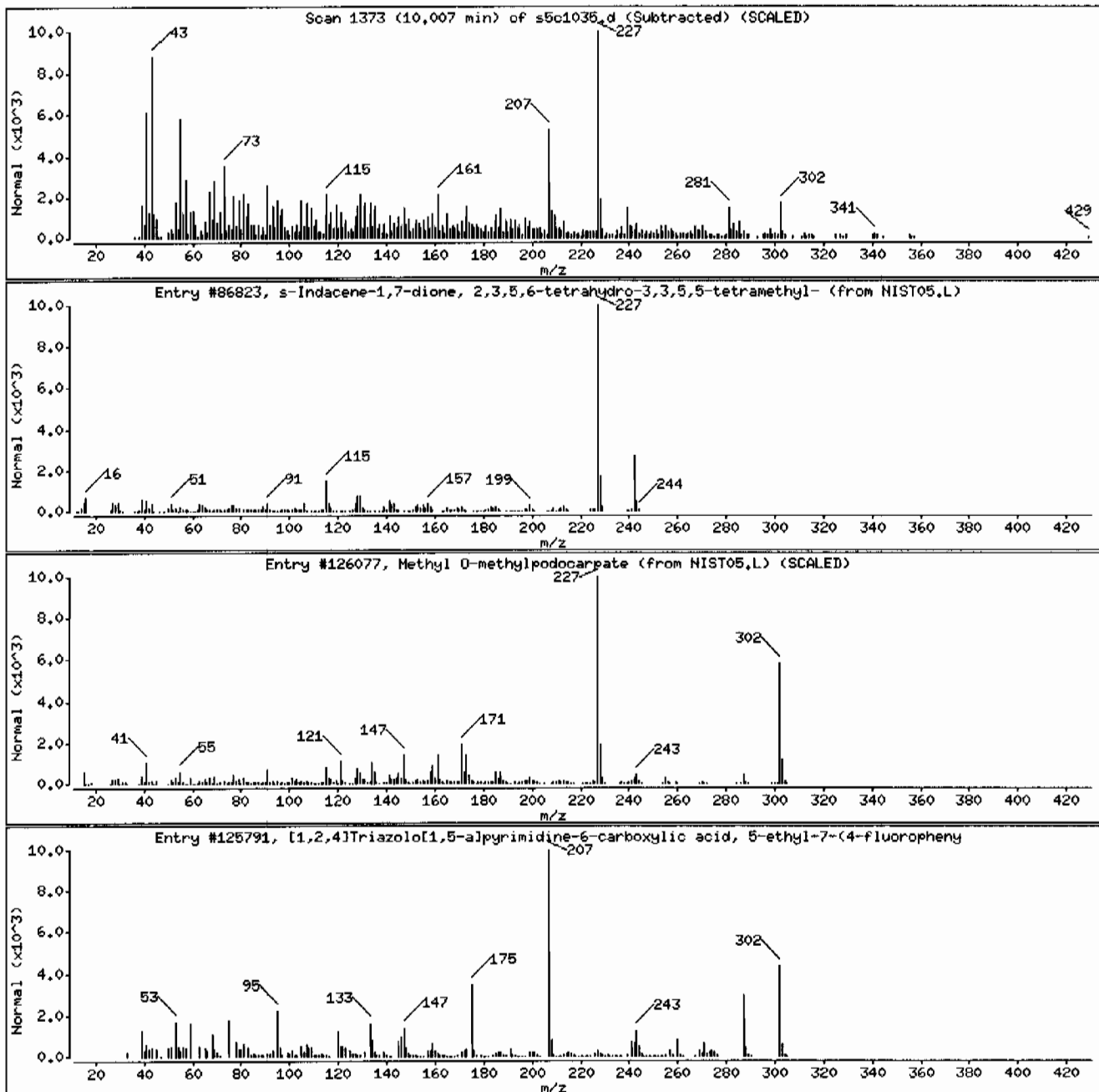
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
s-Indacene-1,7-dione, 2,3,5,6-tetrahydro	55591-17-8	NIST05.L	86823	80	C16H18O2	242
Methyl O-methylpodocarpate	1231-74-9	NIST05.L	126077	64	C19H26O3	302
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000317-15-2	NIST05.L	125791	44	C15H15FN4O2	302



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911SVMI11LANL

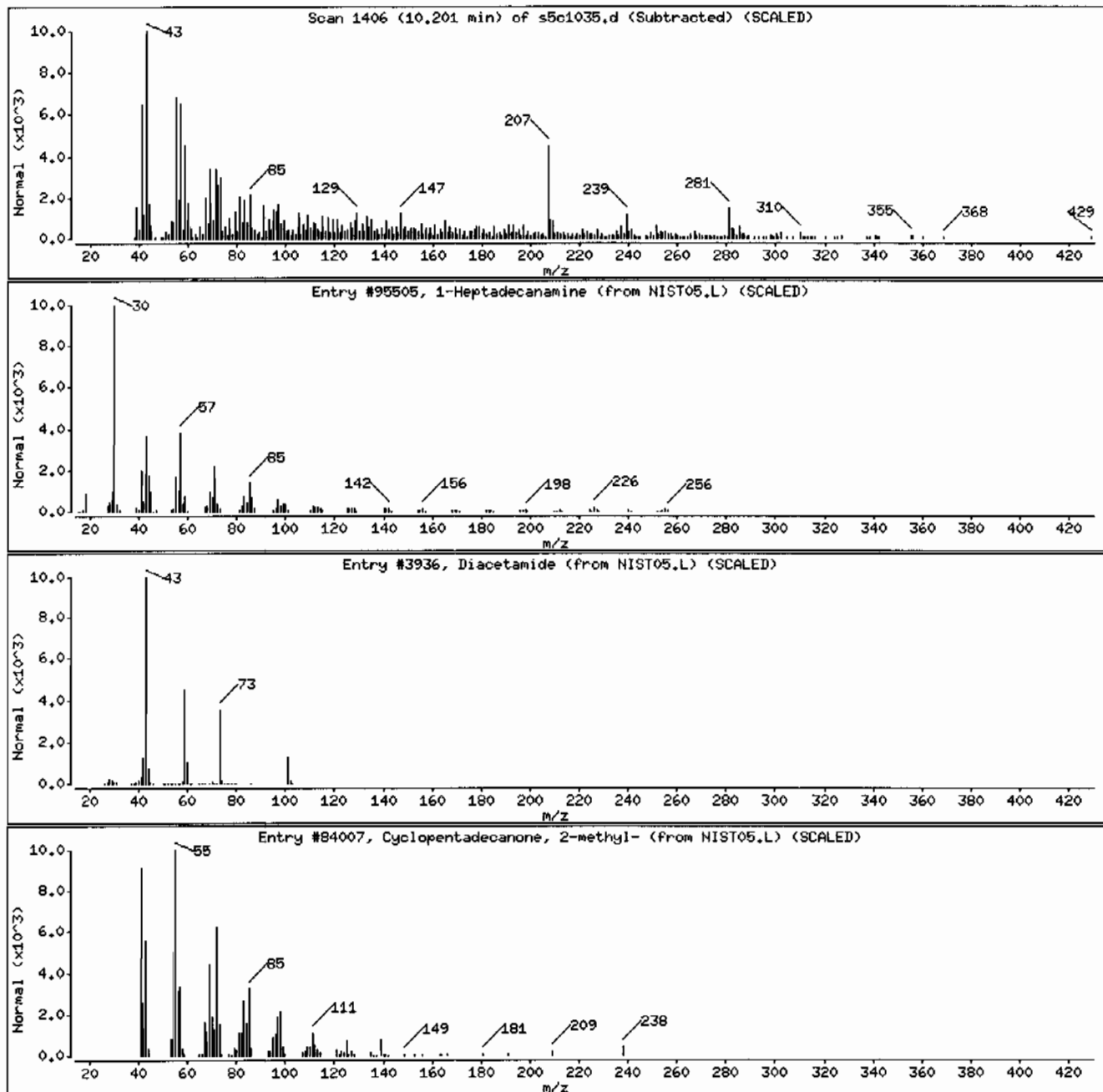
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Heptadecanamine	4200-95-7	NIST05.L	95505	25	C17H37N	255
Diacetamide	625-77-4	NIST05.L	3936	25	C4H7NO2	101
Cyclopentadecanone, 2-methyl-	52914-66-6	NIST05.L	84007	11	C16H30O	238



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911SVH11LANL

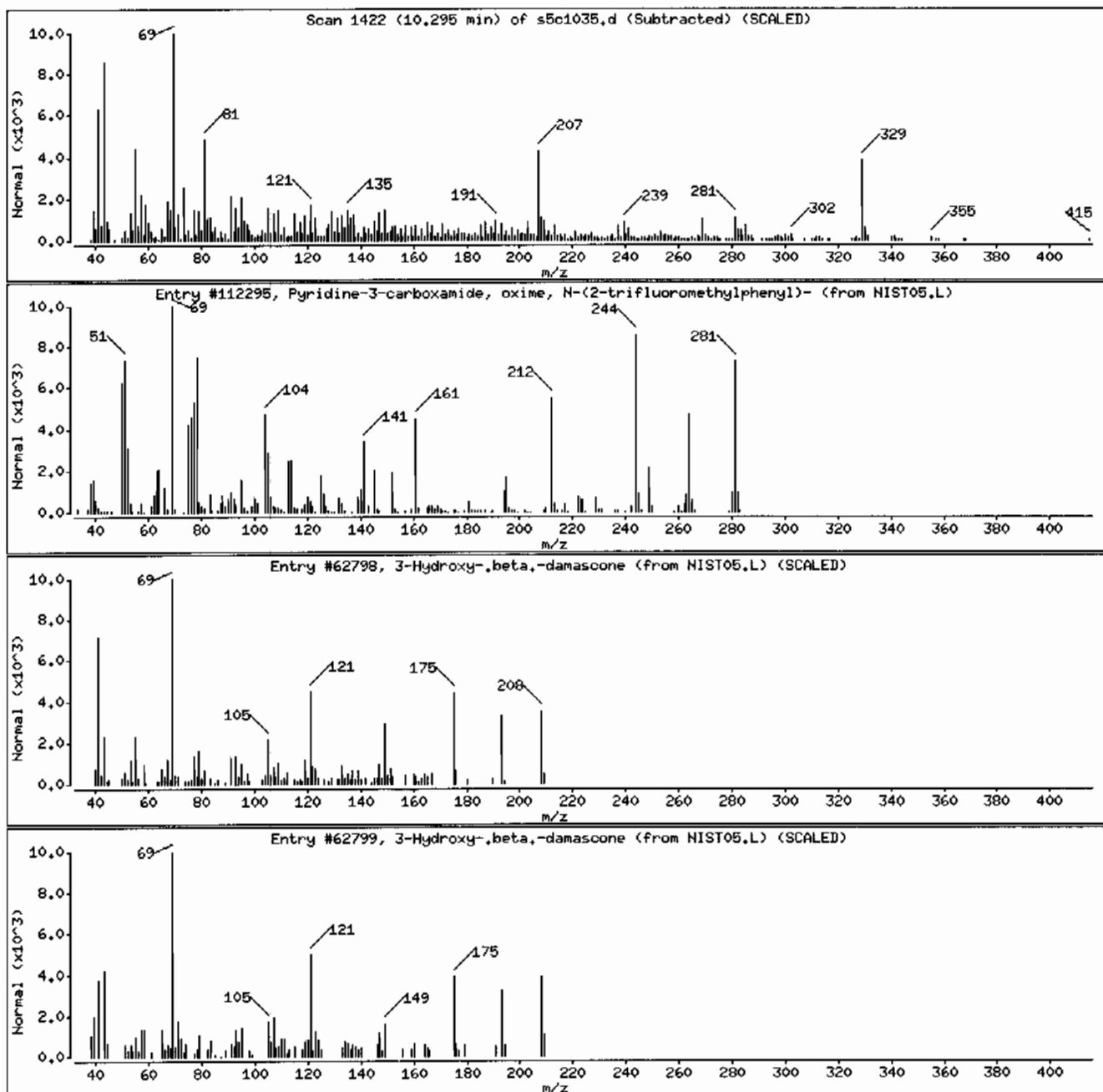
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	95	C13H10F3N3O	281
3-Hydroxy-,beta,-damascone	1000314-35-7	NIST05.L	62798	27	C13H20O2	208
3-Hydroxy-,beta,-damascone	102488-09-5	NIST05.L	62799	27	C13H20O2	208



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 12482400051960659111SVMI11LANL

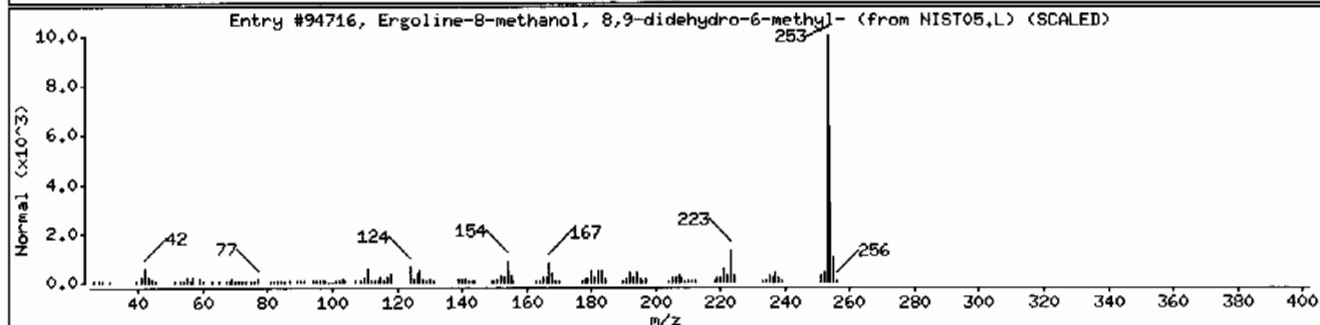
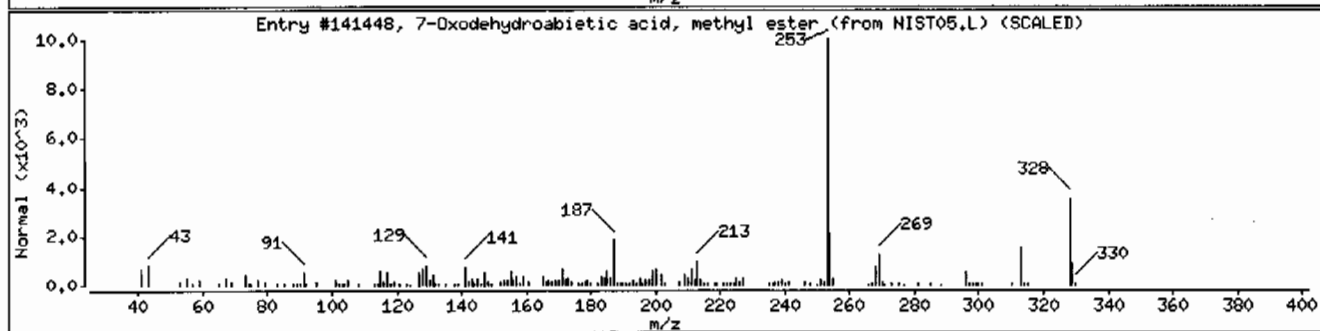
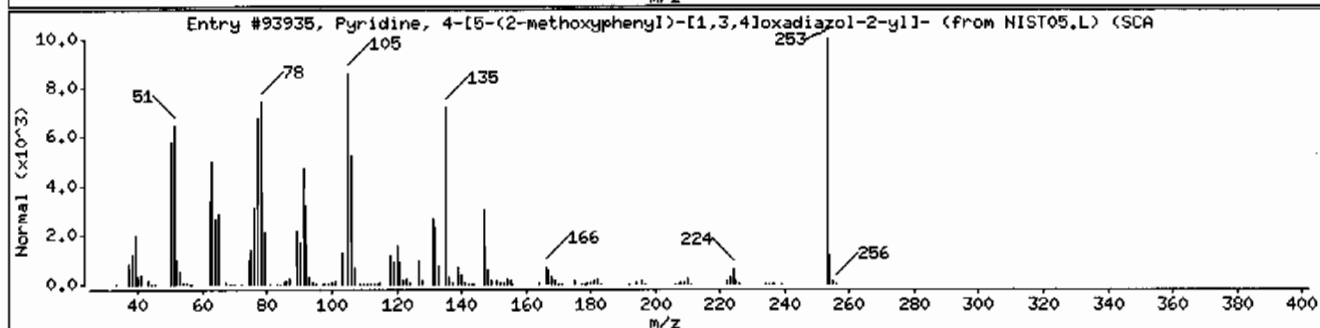
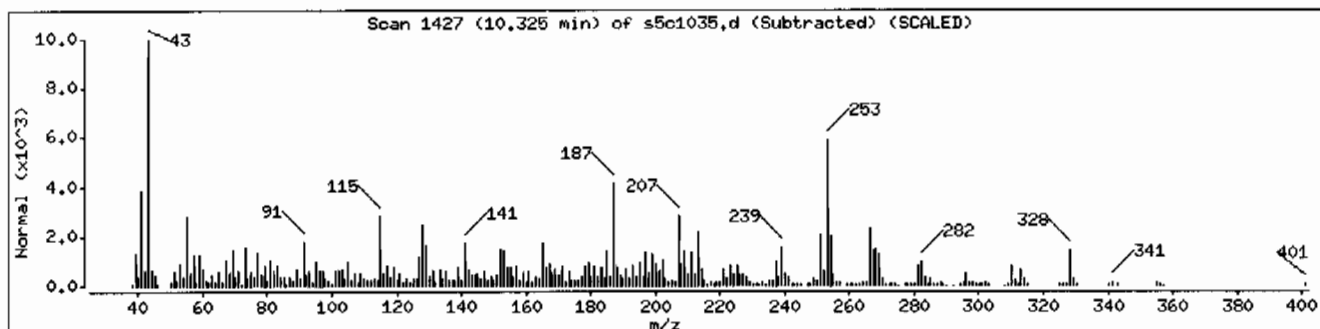
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyridine, 4-[5-(2-methoxyphenyl)-[1,3,4]	1000303-05-9	NIST05.L	93935	53	C14H11N3O2	253
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	46	C21H28O3	328
Ergoline-8-methanol, 8,9-didehydro-6-met	548-43-6	NIST05.L	94716	25	C16H18N2O	254



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: MSD5.i

Sample Info: 1248240005196065911ISVM11ILANL

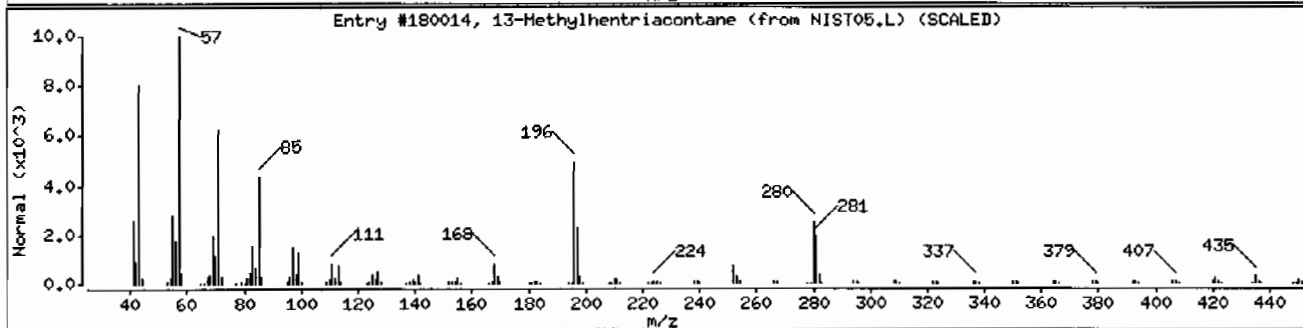
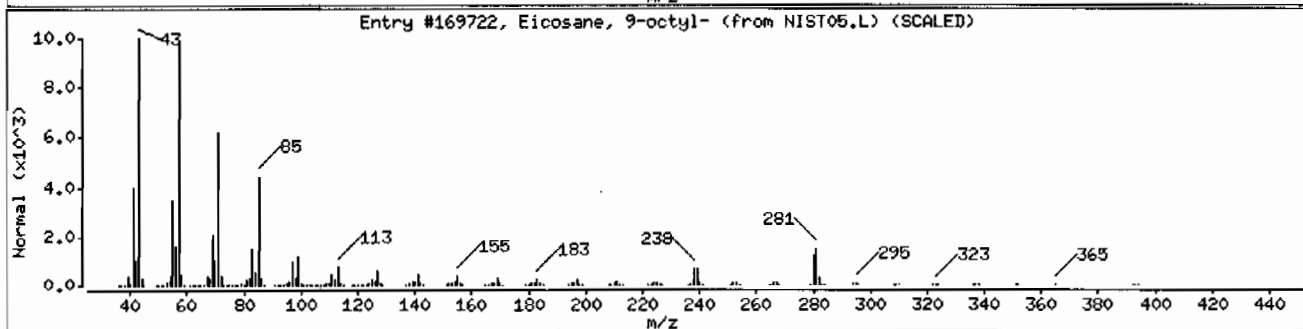
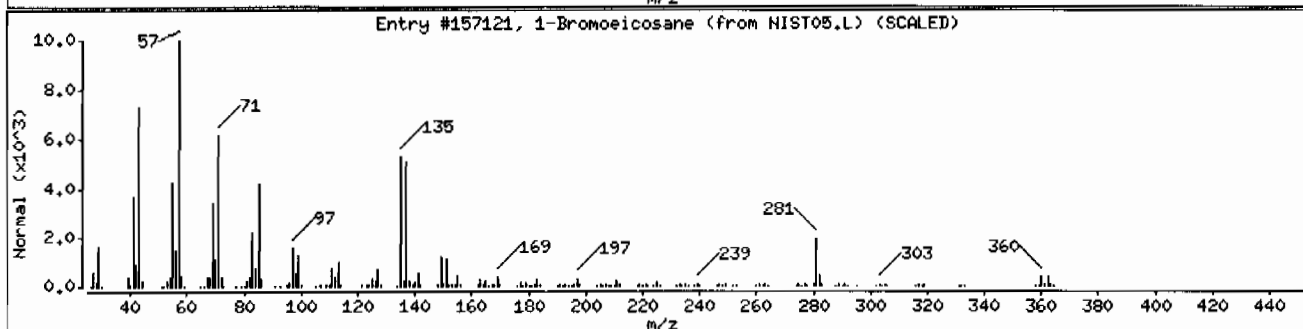
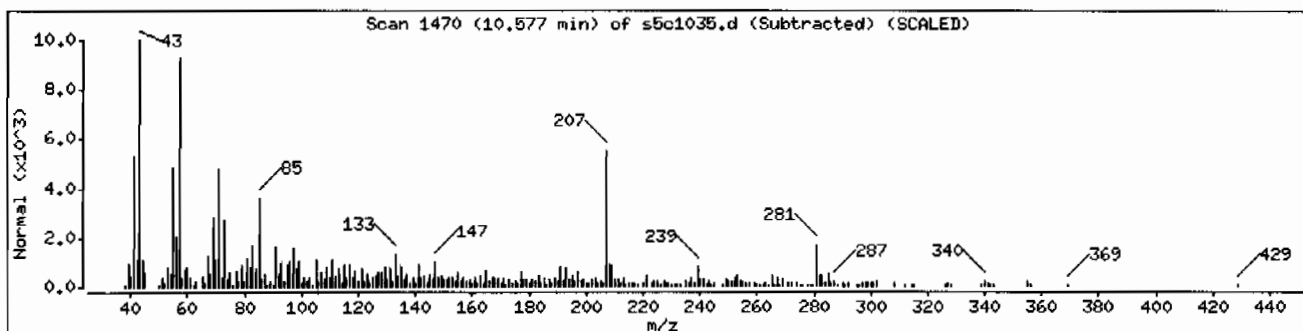
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Bromoeicosane	4276-49-7	NIST05.L	157121	46	C ₂₀ H ₄₁ Br	360
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	41	C ₂₈ H ₅₈	394
13-Methylhentriacontane	1000131-19-4	NIST05.L	180014	38	C ₃₂ H ₆₆	451



Date: 10-MAR-2010 22:44

Client ID: RE36-10-7456

Instrument: HSD5.i

Sample Info: 1248240005196065911SVH11ILANL

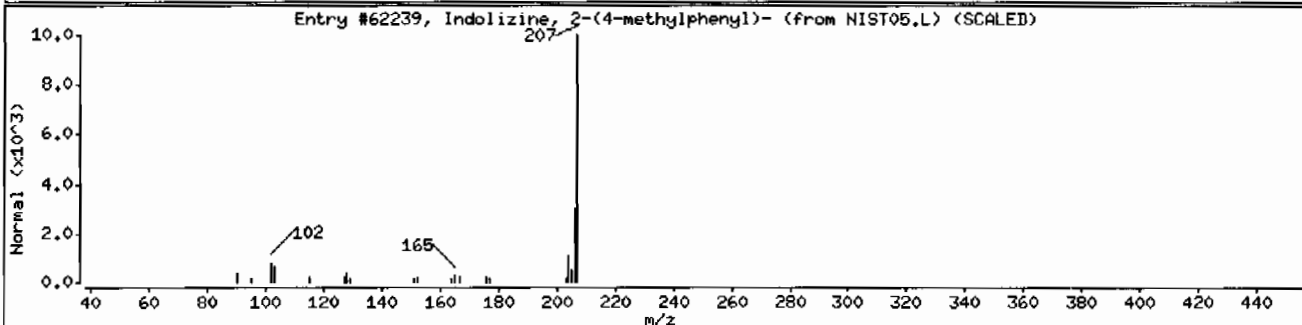
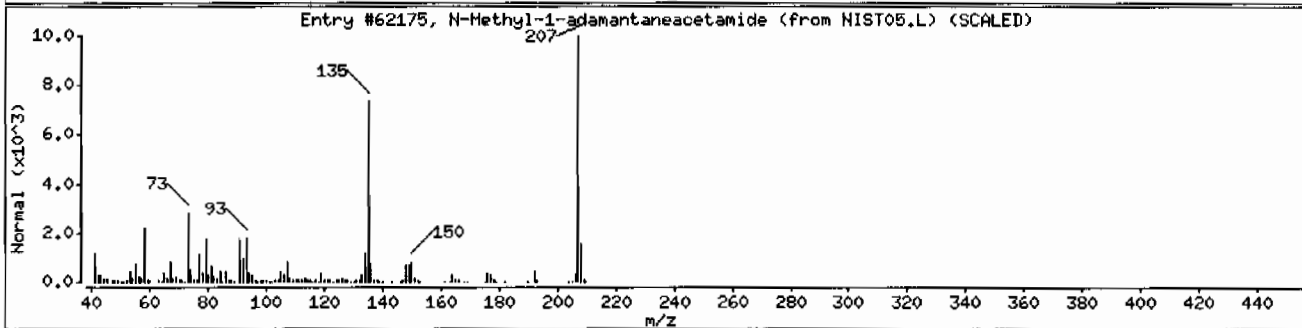
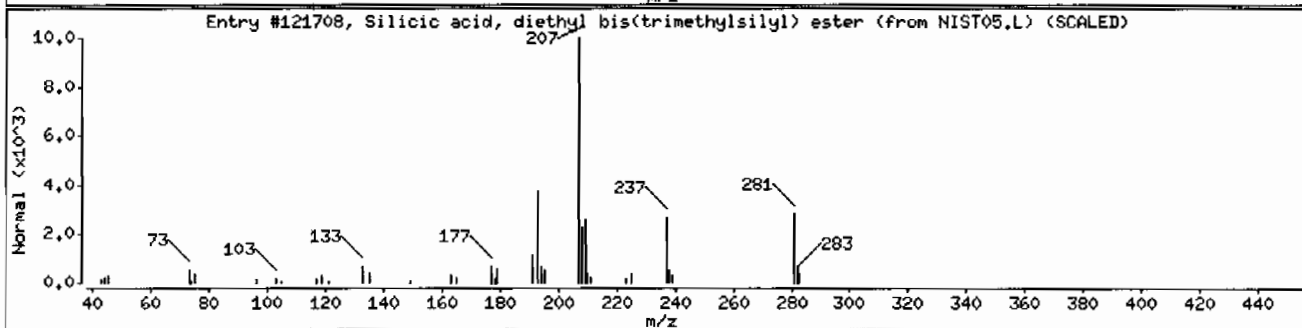
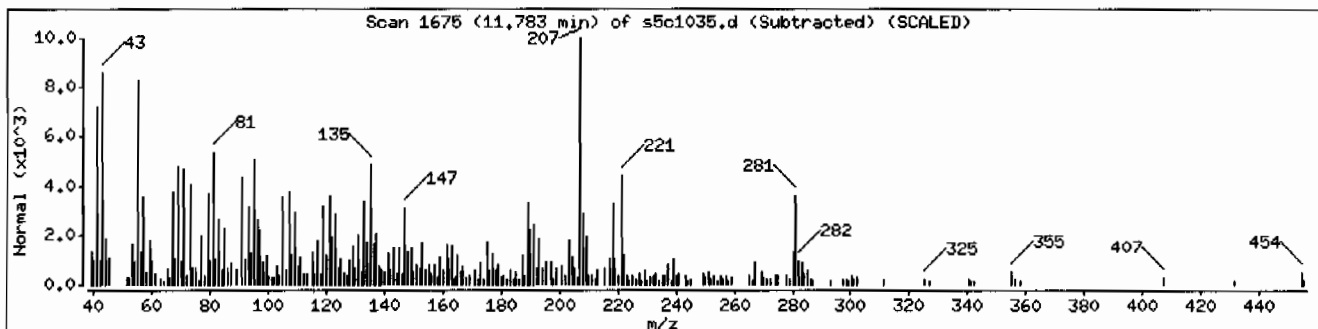
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	38	C10H28O4Si3	296
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	35	C13H21NO	207
Indolizine, 2-(4-methylphenyl)-	7496-81-3	NIST05.L	62239	35	C15H13N	207



Date : 10-MAR-2010 22:44

Client ID: RE36-10-7486

Instrument: MSD5.i

Sample Info: 1248240005196065911SVMI11LANL

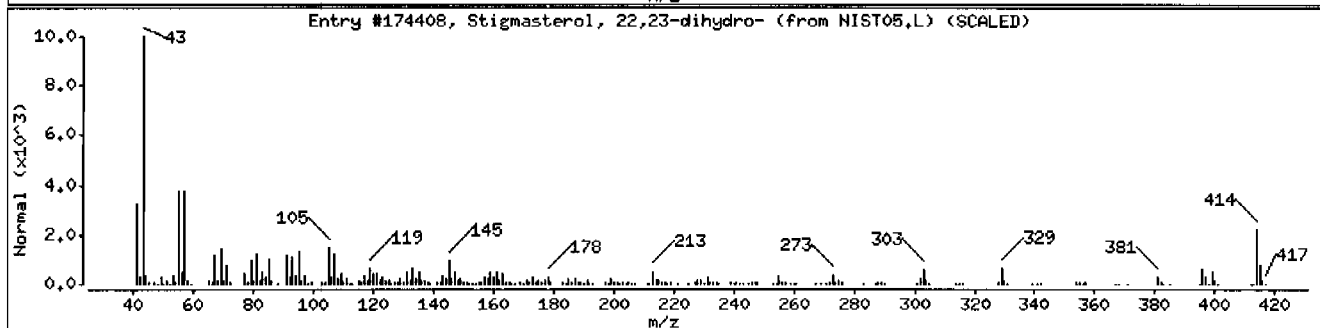
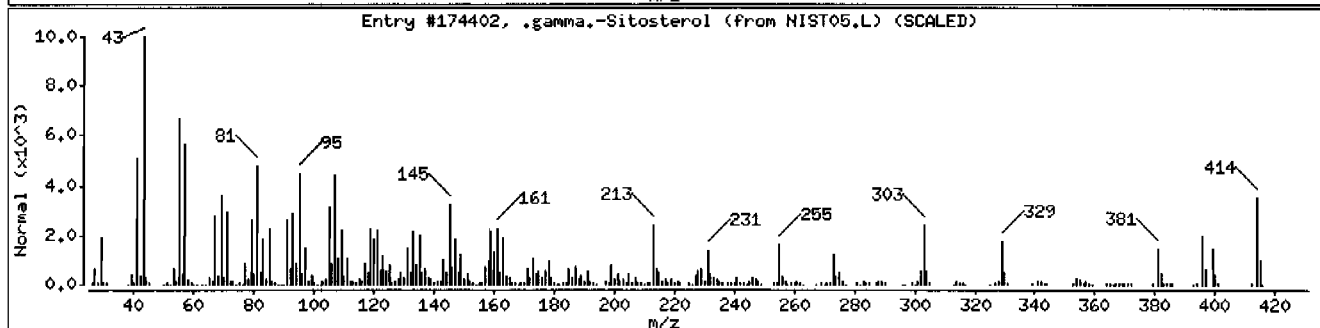
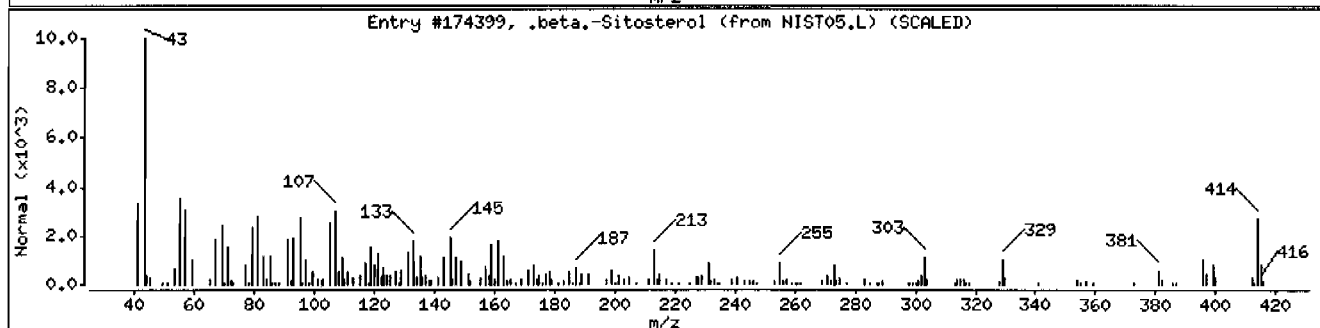
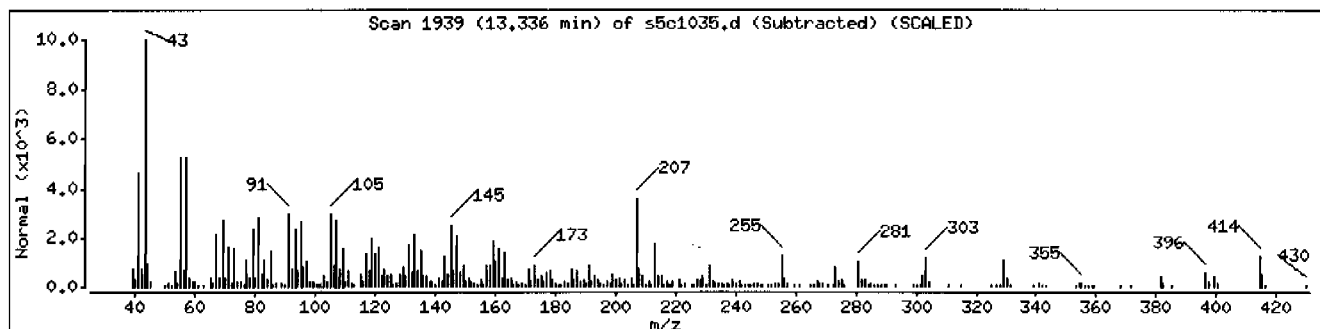
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C29H50O	414



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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7457	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.1	Dilution: 1
Run Date: 03/12/2010 20:57	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5c1228.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	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	103	410
129-00-0	Pyrene		161	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	144	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	615	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	410	ug/kg	82.0	410

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
Client ID: RE36-10-7457	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/12/2010 20:57	Inst: MSD5.1	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1228.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	J	13.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene		126	ug/kg	12.3	41.0
120-12-7	Anthracene	J	20.4	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		181	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene		72.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene		89.9	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		148	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene		74.1	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene		42.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	J	39.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.79	208	ug/kg		J
	Unknown	8.95	716	ug/kg		J

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240008	Date Received: 02/27/2010 09:10	%Moisture: 18.8
Client ID: RE36-10-7457	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/12/2010 20:57	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1228.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	298	ug/kg	95	NJ
	Unknown	9.44	1400	ug/kg		J
	Unknown	9.7	442	ug/kg		J
	Unknown	9.72	283	ug/kg		J
31559-86-1	3Beta-acetoxy-6-nitroandrost-5-en-17-one	9.83	524	ug/kg	90	NJ
118625-56-2	1-Hexadecene, 16-bromo-	10.08	772	ug/kg	89	NJ
	Unknown	10.18	415	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	2670	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1228.d
 Lab Smp Id: 248240008 Client Smp ID: RE36-10-7457
 Inj Date : 12-MAR-2010 20:57
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240008|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 28
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	18.81400	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.907	3.911 (1.000)	270648	40.0000	
* 29 Naphthalene-d8	136	4.766	4.773 (1.000)	1024054	40.0000	
* 46 Acenaphthene-d10	164	6.019	6.030 (1.000)	588893	40.0000	
* 67 Phenanthrene-d10	188	7.189	7.195 (1.000)	1013781	40.0000	
* 91 Chrysene-d12	240	9.607	9.608 (1.000)	787770	40.0000	
* 98 Perylene-d12	264	11.272	11.269 (1.000)	519738	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.107 (0.795)	452155	66.9043	2740
\$ 5 Phenol-d5	99	3.619	3.627 (0.926)	535265	65.8969	2700
\$ 20 Nitrobenzene-d5	82	4.260	4.272 (0.894)	271806	35.7197	1460
\$ 39 2-Fluorobiphenyl	172	5.507	5.515 (0.915)	464085	31.5520	1290
\$ 60 2,4,6-Tribromophenol	329	6.619	6.622 (1.100)	132756	60.0200	2460
\$ 81 p-Terphenyl-d14	244	8.566	8.572 (0.892)	448243	34.2068	1400

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
79 Pyrene		202	8.460	8.471	(0.881)	85507	3.92818 161
27 Benzoic acid		105	4.513	4.542	(0.947)	25000	14.9906 615 (a)
53 Fluorene		166	6.425	6.439	(1.067)	4865	0.31810 13.0 (a)
68 Phenanthrene		178	7.207	7.214	(1.002)	65986	3.07472 126
69 Anthracene		178	7.248	7.258	(1.008)	10823	0.49852 20.4 (a)
76 Fluoranthene		202	8.248	8.254	(1.147)	98685	4.40813 181
89 Benzo(a)anthracene		228	9.595	9.593	(0.999)	30950	1.75680 72.0
92 Chrysene		228	9.631	9.632	(1.002)	35979	2.19165 89.9
95 Benzo(b)fluoranthene		252	10.766	10.754	(0.955)	44690	3.59986 148
97 Benzo(a)pyrene		252	11.195	11.192	(0.993)	18858	1.80820 74.1
99 Indeno(1,2,3-cd)pyrene		276	13.007	13.017	(1.154)	8803	1.02357 42.0
101 Benzo(ghi)perylene		276	13.548	13.556	(1.202)	6842	0.95211 39.0 (aQ)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s5c1228.d

Report Date: 03/13/2010 09:28

Lab. ID: 248240008

SampleType: SAMPLE

Injection Date: 12-MAR-2010 20:57

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240008|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	27302	2.18	2.43	80-120	100	(T)
42	8056	2.18	2.43	93-153	30	(QT)
43	38158	2.18	2.43	21- 81	140	(QT)

4 Aniline				CAS#: 62-53-3		
66	32886	3.62	3.69	80-120	100	(T)
93	16980	3.58	3.69	234-294	52	(QT)

6 Phenol				CAS#: 108-95-2		
94	49088	3.48	3.64	80-120	100	(T)
66	12780	3.48	3.64	21- 81	26	(T)
65	45888	3.48	3.64	0- 30	93	(QT)

7 bis(2-Chloroethyl) ether				CAS#: 111-44-4		
63	12980	3.91	3.71	80-120	100	(T)
93	15517	3.90	3.71	99-159	120	(T)
95	774	3.91	3.71	7- 67	6	(QT)

15 o-Cresol				CAS#: 95-48-7		
107	22935	3.87	4.03	80-120	100	(T)
108	5407	3.87	4.03	88-148	24	(QT)
77	120051	3.87	4.03	28- 88	523	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38894	4.26	4.15	80-120	100	(T)
42	28893	4.26	4.15	57-117	74	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
22	Isophorone		CAS#: 78-59-1			
82	268889	4.26	4.44	80-120	100	(T)
138	236	4.32	4.44	0- 49	0	(T)
<hr/>						
25	bis(2-Chloroethoxy)methane		CAS#: 111-91-1			
93	18385	4.74	4.56	80-120	100	(T)
123	325	4.71	4.56	0- 45	2	(T)
95	4050	4.76	4.56	3- 63	22	(T)
<hr/>						
27	Benzoic acid		CAS#: 65-85-0			
105	25000	4.51	4.54	80-120	100	()
122	20005	4.51	4.54	57-117	80	()
77	17978	4.52	4.54	55-115	72	()
<hr/>						
33	4-Chloro-3-methylphenol		CAS#: 59-50-7			
107	12574	5.28	5.11	80-120	100	(T)
144	114	5.34	5.11	0- 56	1	(T)
142	681	5.26	5.11	51-111	5	(QT)
<hr/>						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	46535	5.75	5.62	80-120	100	(T)
164	3600	5.75	5.63	3- 63	8	(T)
127	5062	5.75	5.62	11- 71	11	(T)
<hr/>						
42	o-Nitroaniline		CAS#: 88-74-4			
65	72017	5.75	5.68	80-120	100	(T)
92	79159	5.75	5.68	31- 91	110	(QT)
138	4490	5.75	5.68	68-128	6	(QT)
<hr/>						
43	Dimethylphthalate		CAS#: 131-11-3			
163	106146	6.02	5.79	80-120	100	(T)
164	588893	6.02	5.79	0- 40	555	(QT)
<hr/>						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	78295	6.02	5.85	80-120	100	(T)
63	1435	6.02	5.85	66-126	2	(QT)
<hr/>						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	78295	6.02	6.15	80-120	100	(T)
89	1627	6.02	6.15	50-110	2	(QT)
63	1059	6.02	6.14	26- 86	1	(QT)
<hr/>						
52	4-Nitrophenol		CAS#: 100-02-7			
139	889	6.08	6.07	80-120	100	()
109	209	6.06	6.07	56-116	24	(Q)
65	2377	6.08	6.07	90-150	267	(Q)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	4865	6.42	6.44	80-120	100	()
165	4208	6.42	6.44	62-122	86	()
167	1950	6.43	6.44	0- 44	40	()

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	226	6.57	6.45	80-120	100	(T)
105	3428	6.57	6.45	14- 74	1511	(QT)
51	1068	6.57	6.45	38- 98	471	(QT)

65 Pentachlorophenol		CAS#: 87-86-5				
266	731	7.01	7.02	80-120	100	()
264	366	7.02	7.02	32- 92	50	()
268	504	7.02	7.02	35- 95	69	()

68 Phenanthrene		CAS#: 85-01-8				
178	65986	7.21	7.21	80-120	100	()
179	11072	7.21	7.21	0- 46	17	()
176	12599	7.21	7.21	0- 49	19	()

69 Anthracene		CAS#: 120-12-7				
178	10823	7.25	7.26	80-120	100	()
179	2518	7.25	7.26	0- 46	23	()
176	1826	7.25	7.26	0- 48	17	()

76 Fluoranthene		CAS#: 206-44-0				
202	98685	8.25	8.25	80-120	100	()
203	17901	8.25	8.25	0- 48	18	()
101	13201	8.25	8.25	0- 41	13	()

79 Pyrene		CAS#: 129-00-0				
202	85507	8.46	8.47	80-120	100	()
200	19533	8.47	8.47	0- 51	23	()
101	13163	8.46	8.47	0- 43	15	()

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	22862	9.08	9.00	80-120	100	(T)
91	50102	9.08	9.00	48-108	219	(QT)
206	503	9.07	9.00	0- 50	2	(T)

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	30950	9.60	9.59	80-120	100	()
226	9843	9.60	9.59	0- 56	32	()
229	14041	9.59	9.59	0- 50	45	()

92 Chrysene		CAS#: 218-01-9				
228	35979	9.63	9.63	80-120	100	()
229	8700	9.63	9.63	0- 50	24	()
226	11664	9.63	9.63	0- 60	32	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	44690	10.77	10.75	80-120	100	()
253	10144	10.77	10.75	0- 52	23	()
125	7246	10.77	10.75	0- 41	16	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	45346	10.77	10.79	80-120	100	()
253	10141	10.77	10.79	0- 52	22	()
125	6573	10.77	10.79	0- 40	14	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	18858	11.20	11.19	80-120	100	()
253	5247	11.19	11.19	0- 52	28	()
125	3846	11.20	11.19	0- 30	20	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	8803	13.01	13.02	80-120	100	()
138	2165	13.00	13.03	0- 58	25	()

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	2247	13.01	13.04	80-120	100	()
139	1055	13.02	13.04	0- 30	47	(Q)

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	6842	13.55	13.56	80-120	100	()
138	2412	13.55	13.56	0- 30	35	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1228.d
 Lab Smp Id: 248240008 Client Smp ID: RE36-10-7457
 Inj Date : 12-MAR-2010 20:57
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240008|960659|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 28
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	18.81400	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.607	15276929	40.000
* 98 Perylene-d12	11.272	1955190	40.000

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown					CAS #:		
8.789	1935800	5.06855687	208	0		0	91

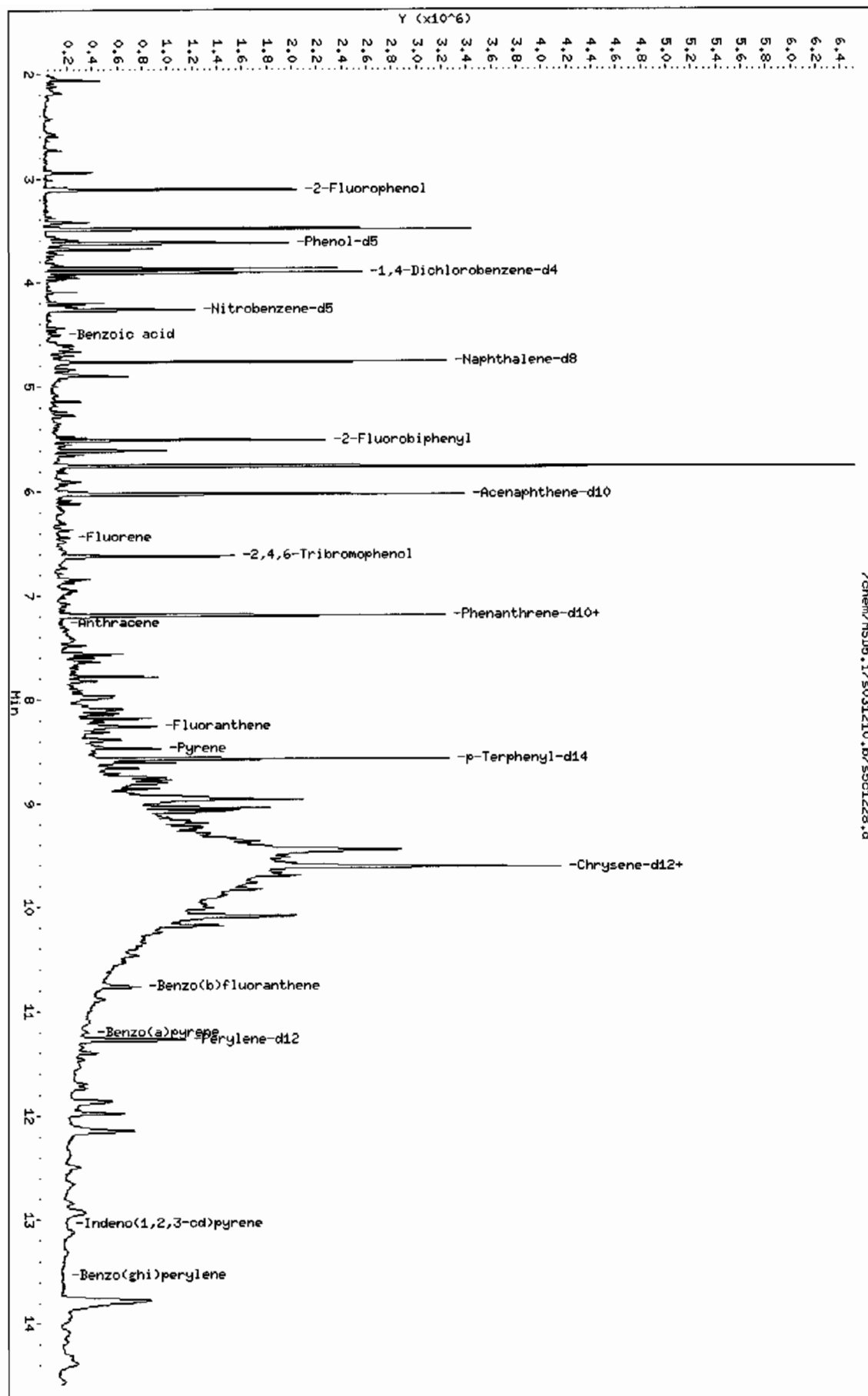
RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
8.954	6668958	17.4615135	716	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.036	2775324	7.26670647	298	95	NIST05.L	133621	91
Unknown					CAS #:		
9.442	13067107	34.2139613	1400	0		0	91
Unknown					CAS #:		
9.695	4115524	10.7757892	442	0		0	91
Unknown					CAS #:		
9.725	2639025	6.90982985	283	0		0	91
3Beta-acetoxy-6-nitroandrost-5-en-17-one					CAS #: 31559-86-1		
9.831	4881466	12.7812762	524	90	NIST05.L	163448	91
1-Hexadecene, 16-bromo-					CAS #: 118625-56-2		
10.083	7188093	18.8207800	772	89	NIST05.L	125925	91
Unknown					CAS #:		
10.183	3868742	10.1296310	415	0		0	91
.gamma.-Sitosterol					CAS #: 83-47-6		
13.777	3187178	65.2044354	2670	96	NIST05.L	174402	98 (L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/MSD5.i/s031210.b/s5c1228.d
 Date: 12-MAR-2010 20:57
 Client ID: RE36-10-7457
 Sample Info: 1248240008196065911(SM111)LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVH11ILANL

Volume Injected (uL): 0.5

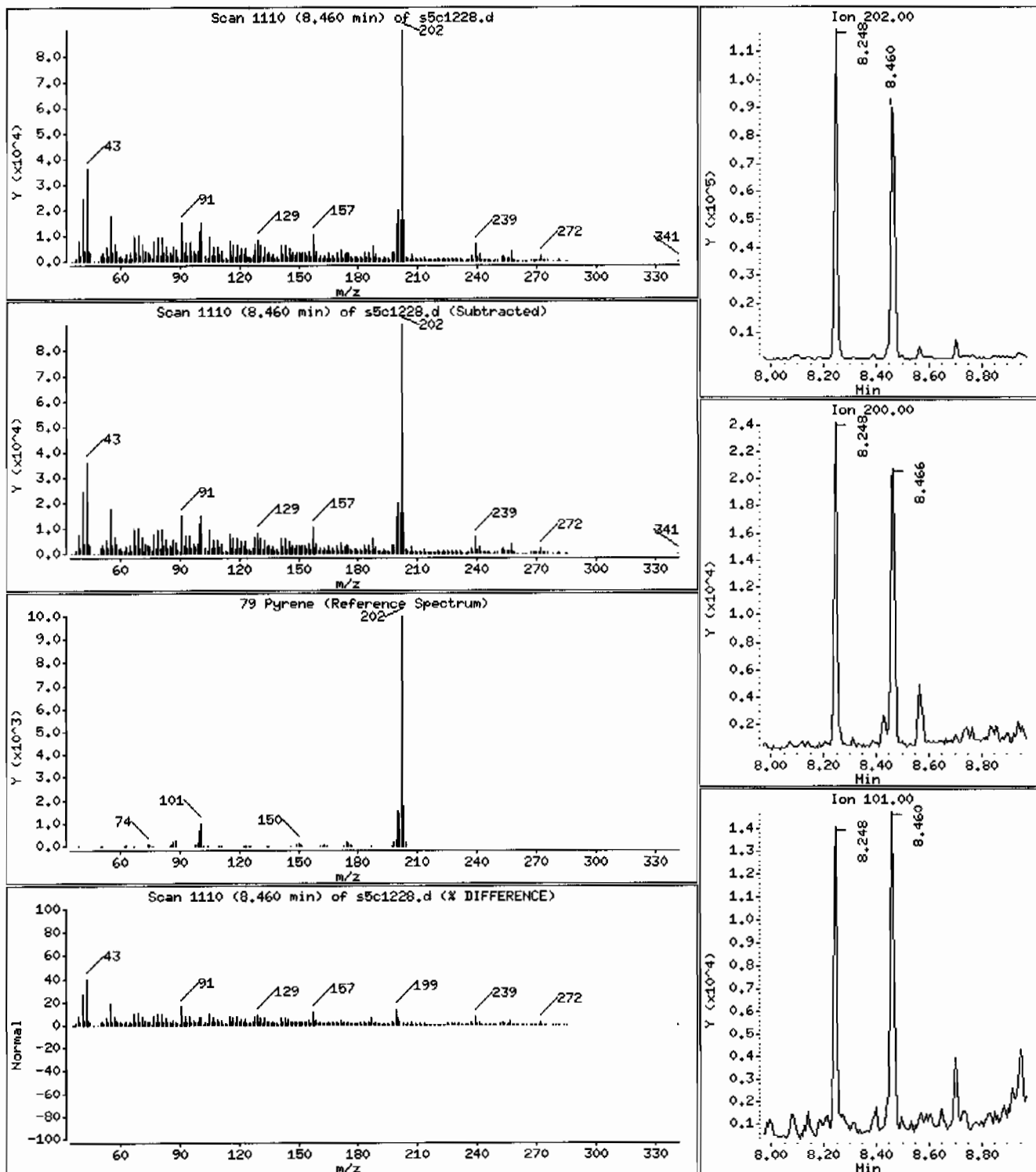
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 161 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVH11ILANL

Volume Injected (uL): 0.5

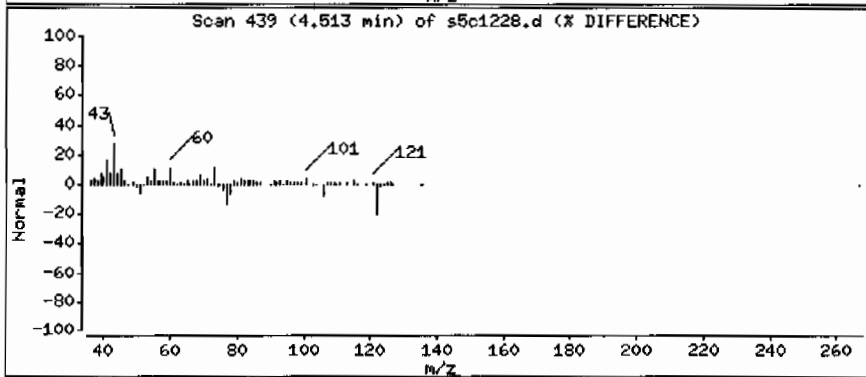
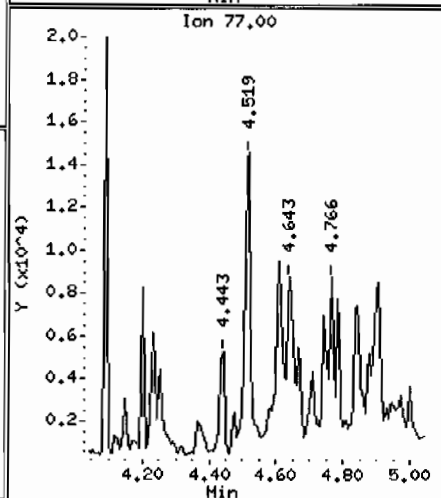
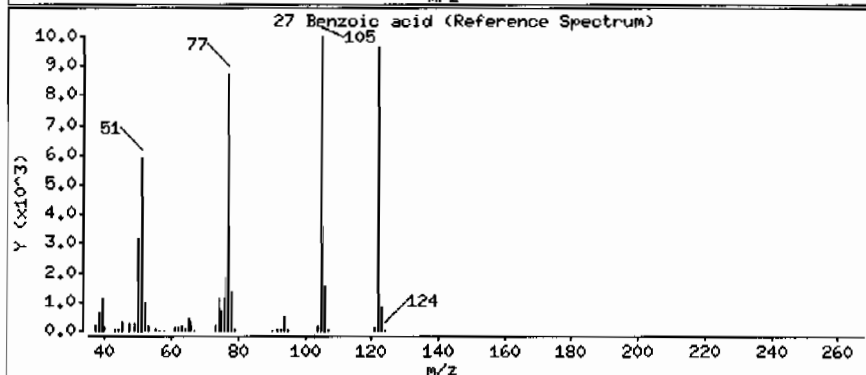
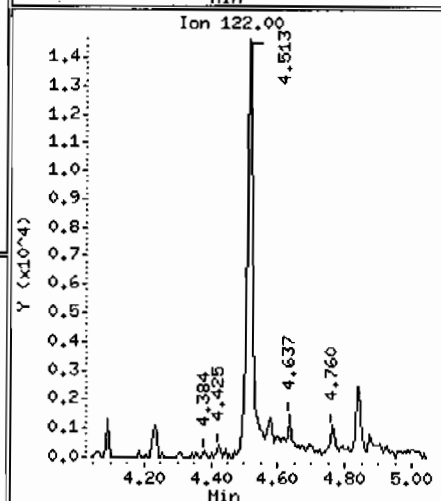
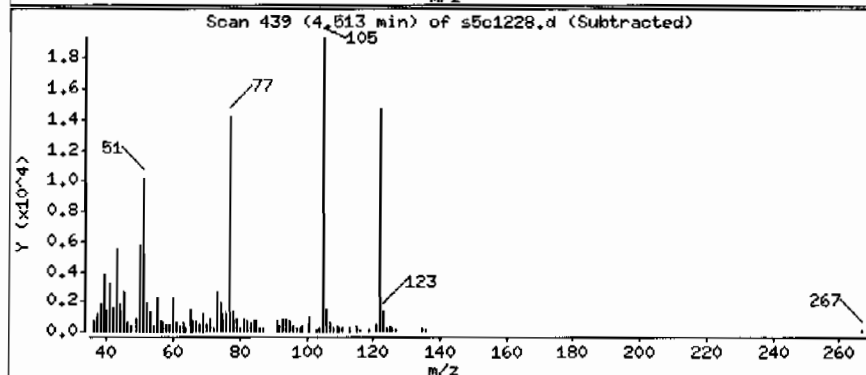
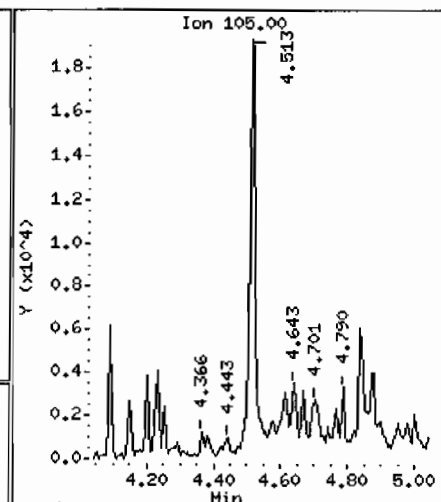
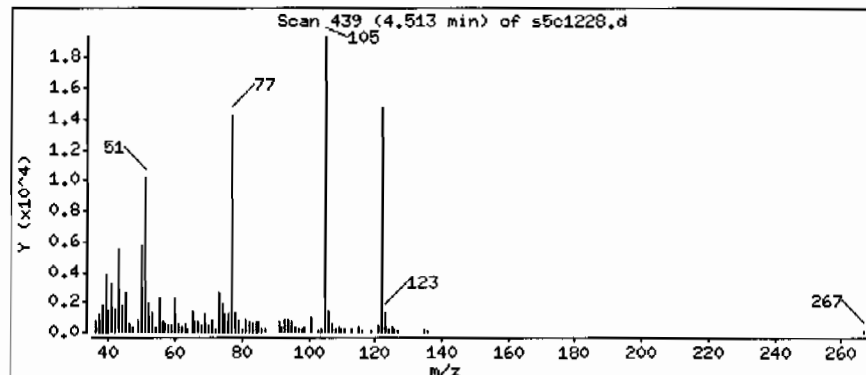
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 615 ug/Kg



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVM11ILANL

Volume Injected (uL): 0.5

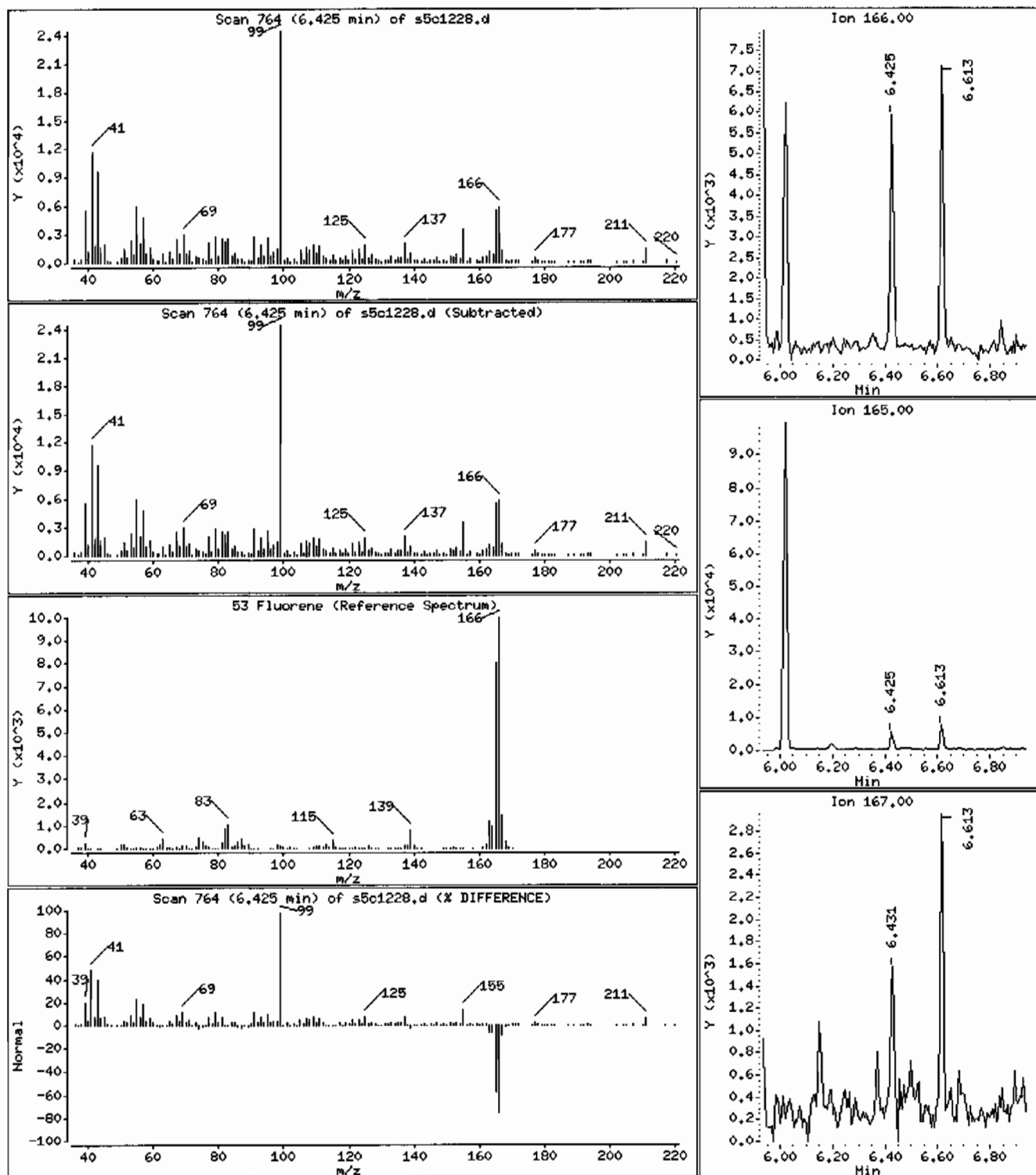
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 13.0 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVM11ILANL

Volume Injected (uL): 0.5

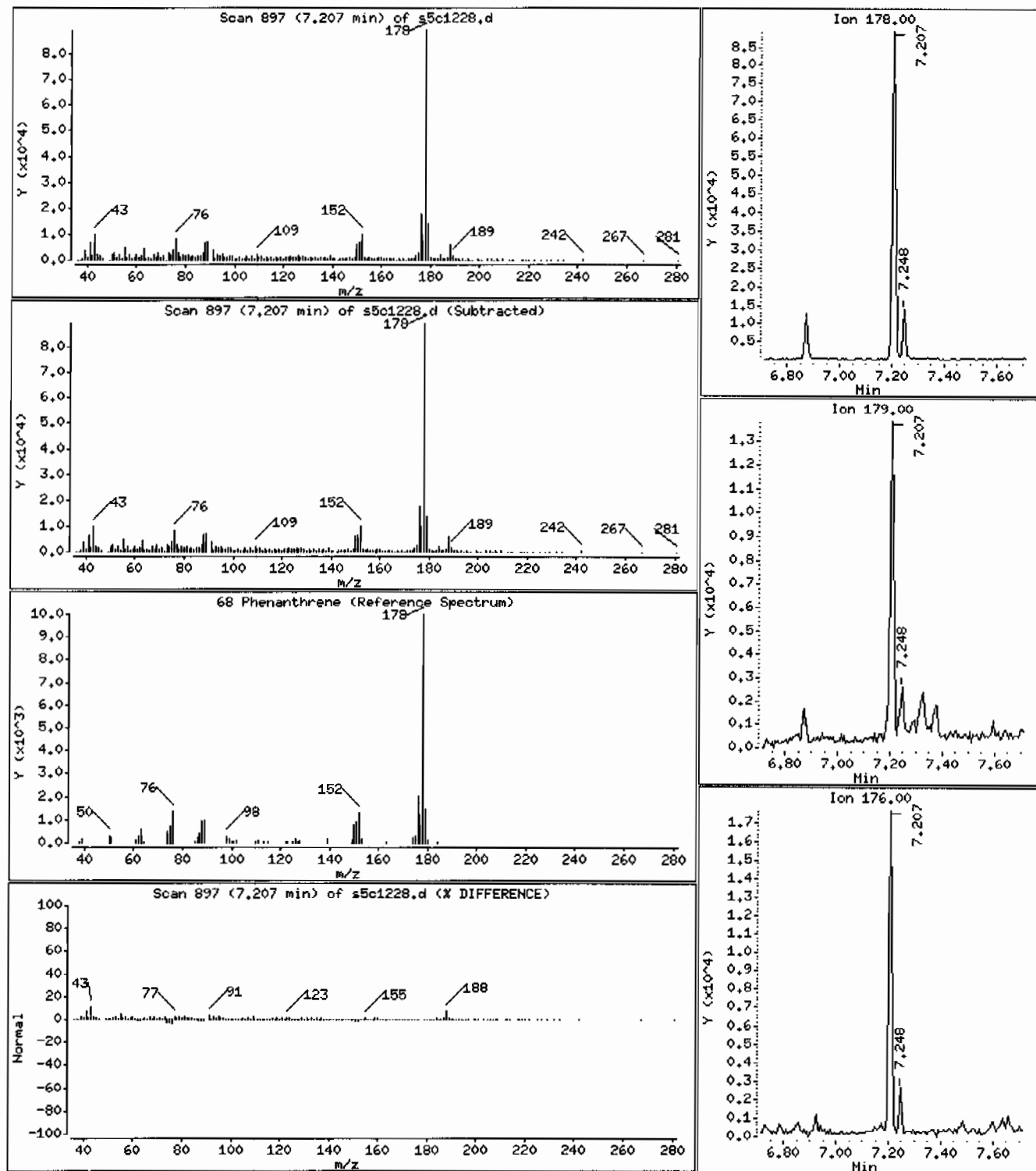
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 126 ug/Kg



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVMI11LANL

Volume Injected (uL): 0.5

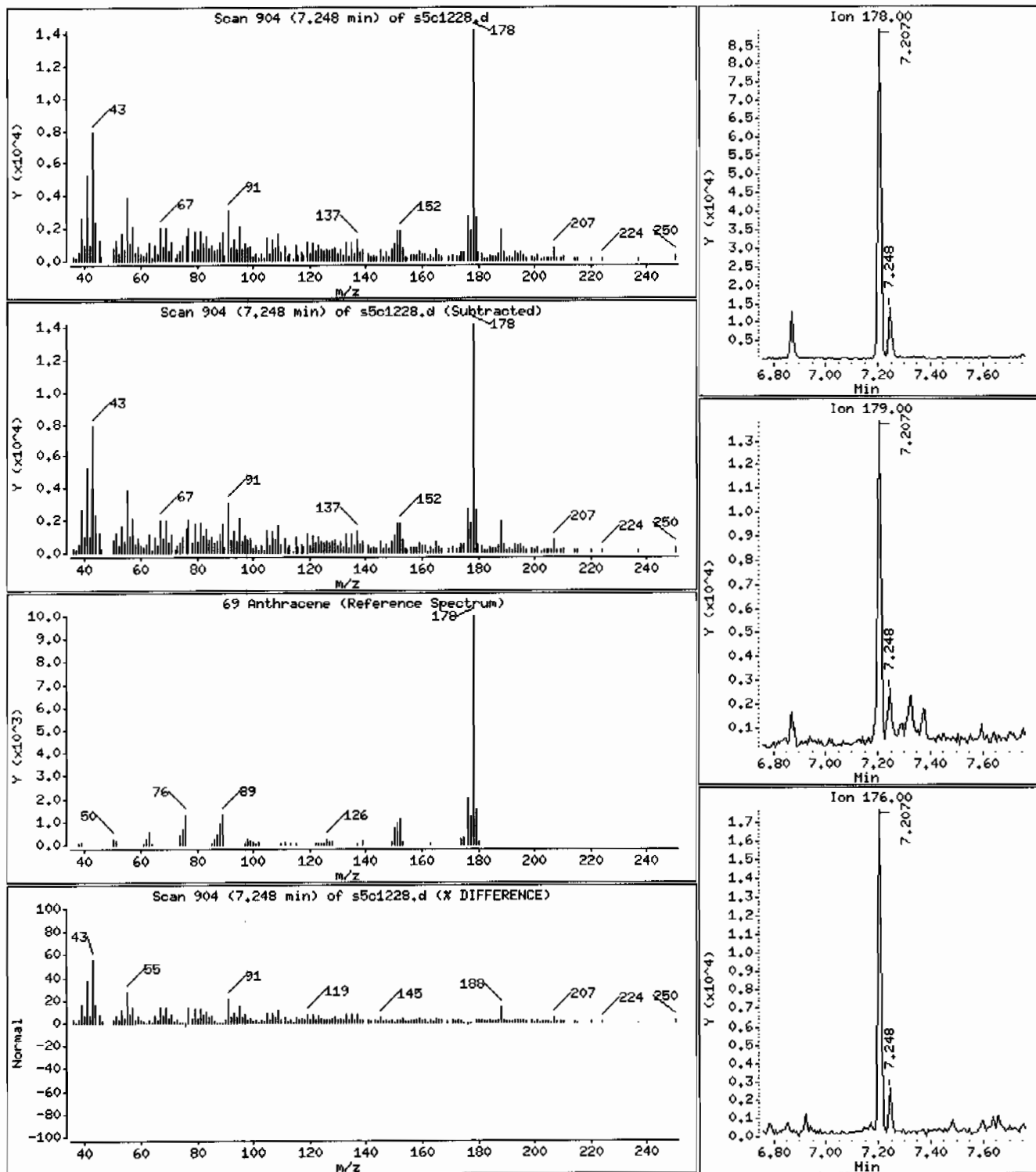
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 20.4 ug/Kg



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 12482400081960659111SVH111LANL

Volume Injected (ul): 0.5

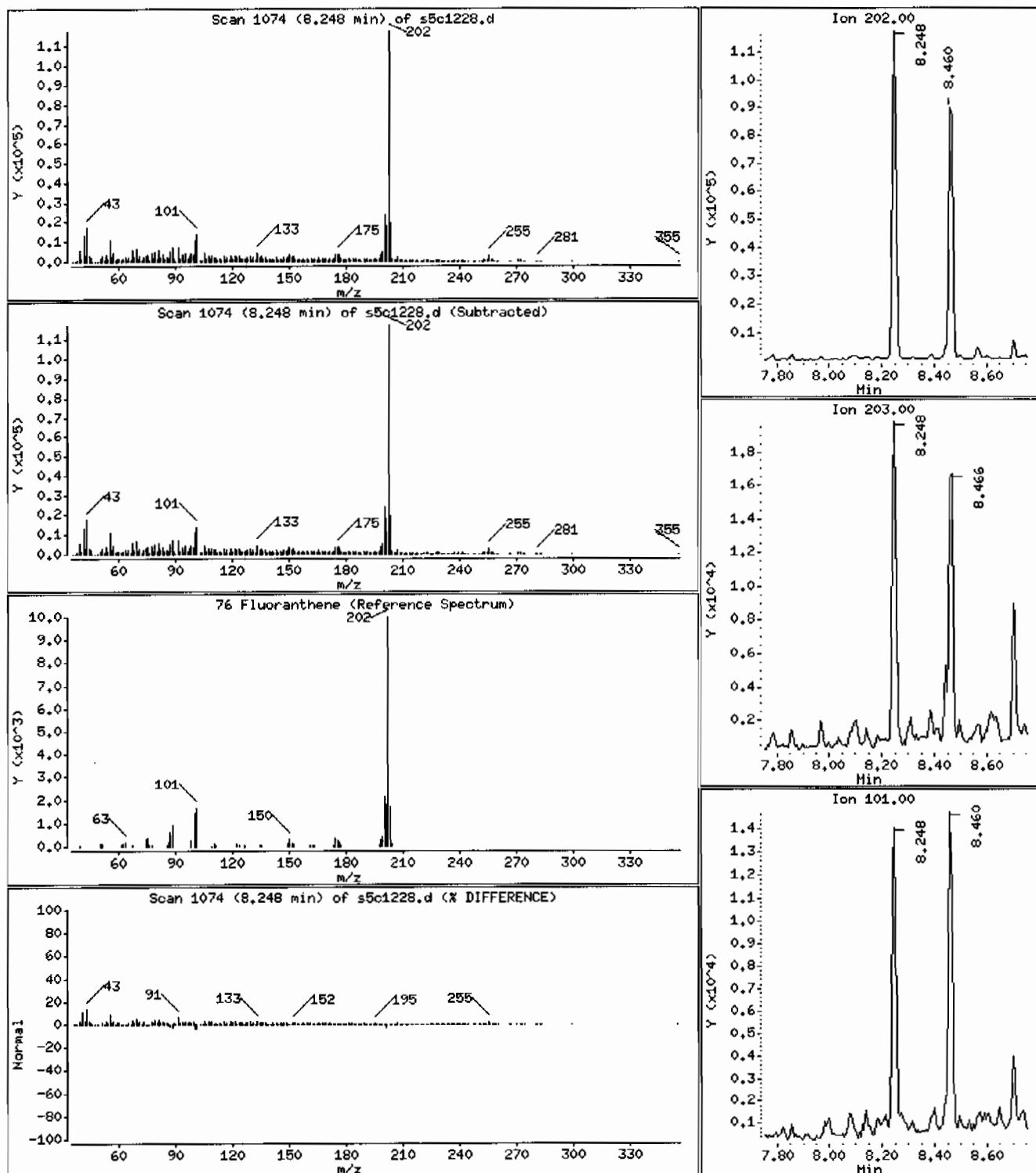
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 181 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911|SVH11|LANL

Volume Injected (uL): 0.5

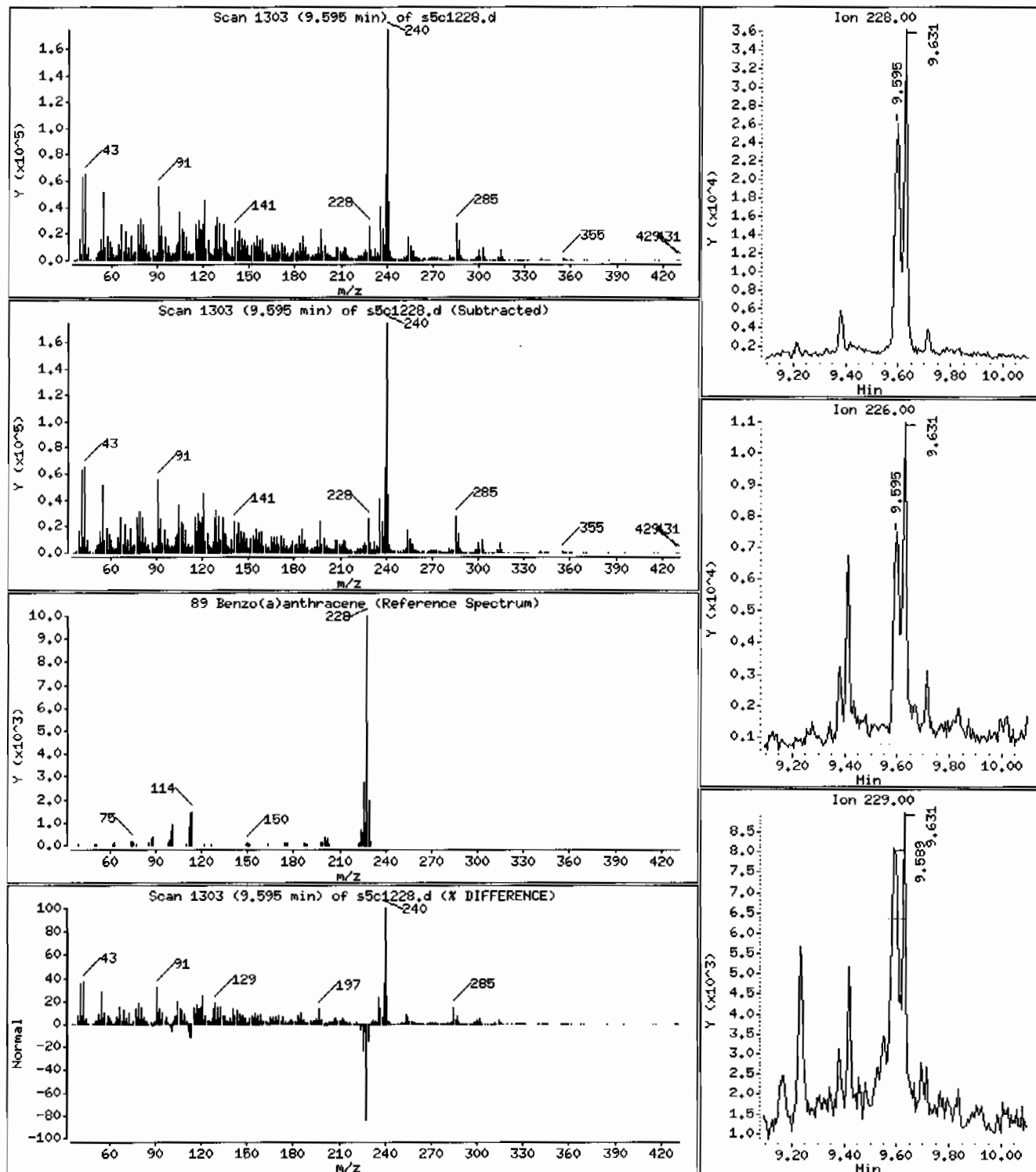
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 72.0 ug/Kg



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVH11ILANL

Volume Injected (uL): 0.5

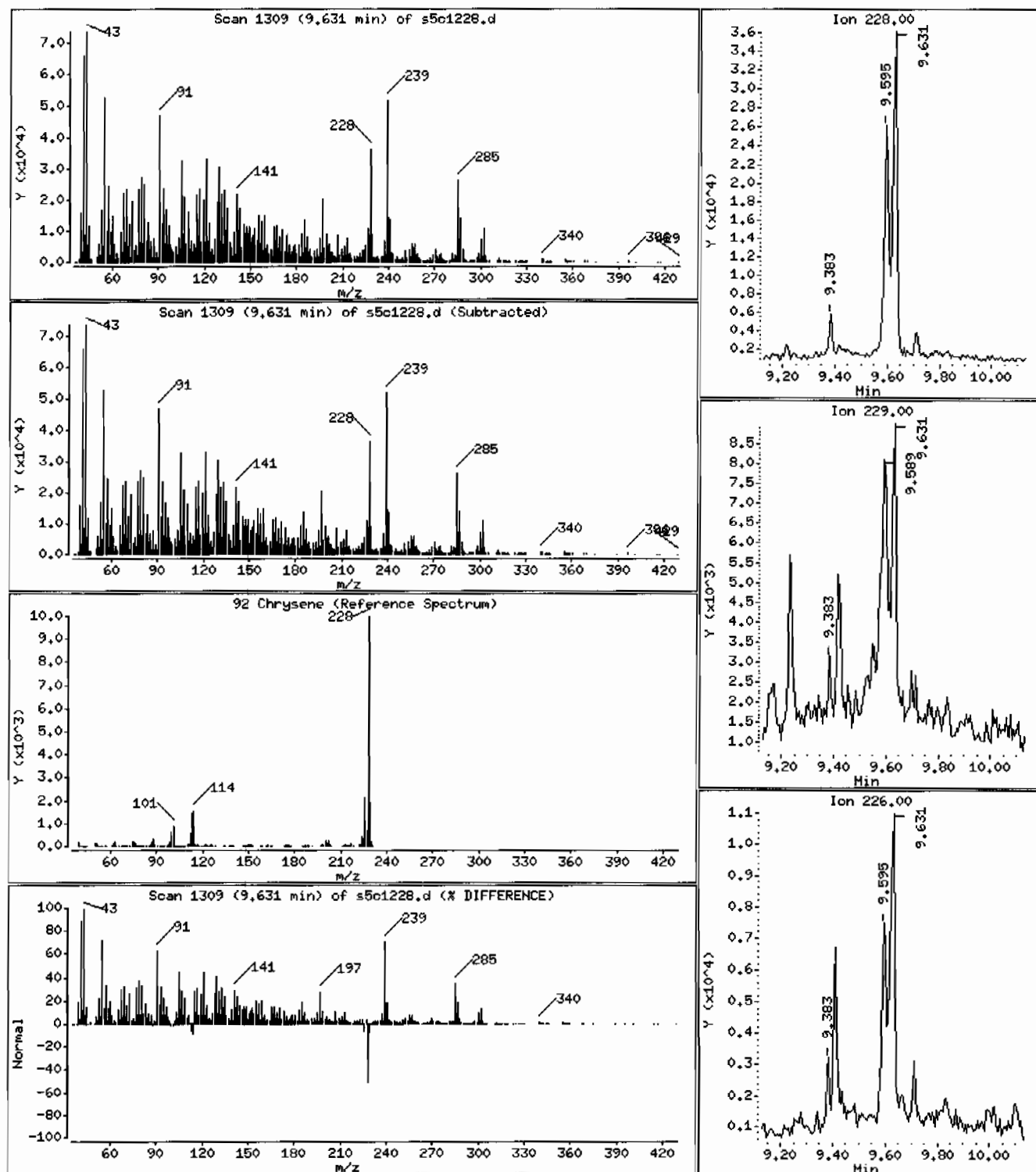
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 89.9 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVM11ILANL

Volume Injected (uL): 0.5

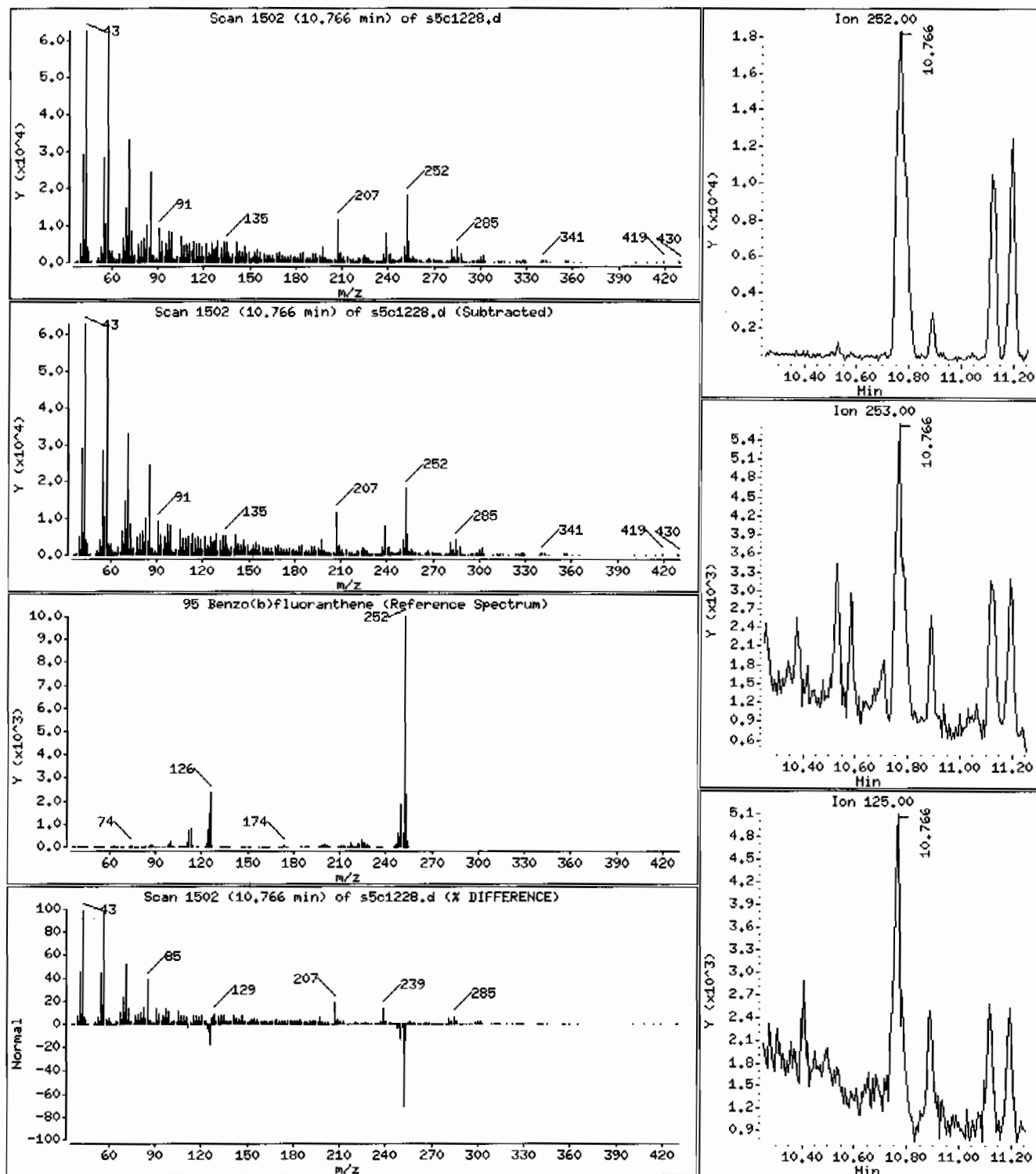
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 148 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVMI1ILANL

Volume Injected (uL): 0.5

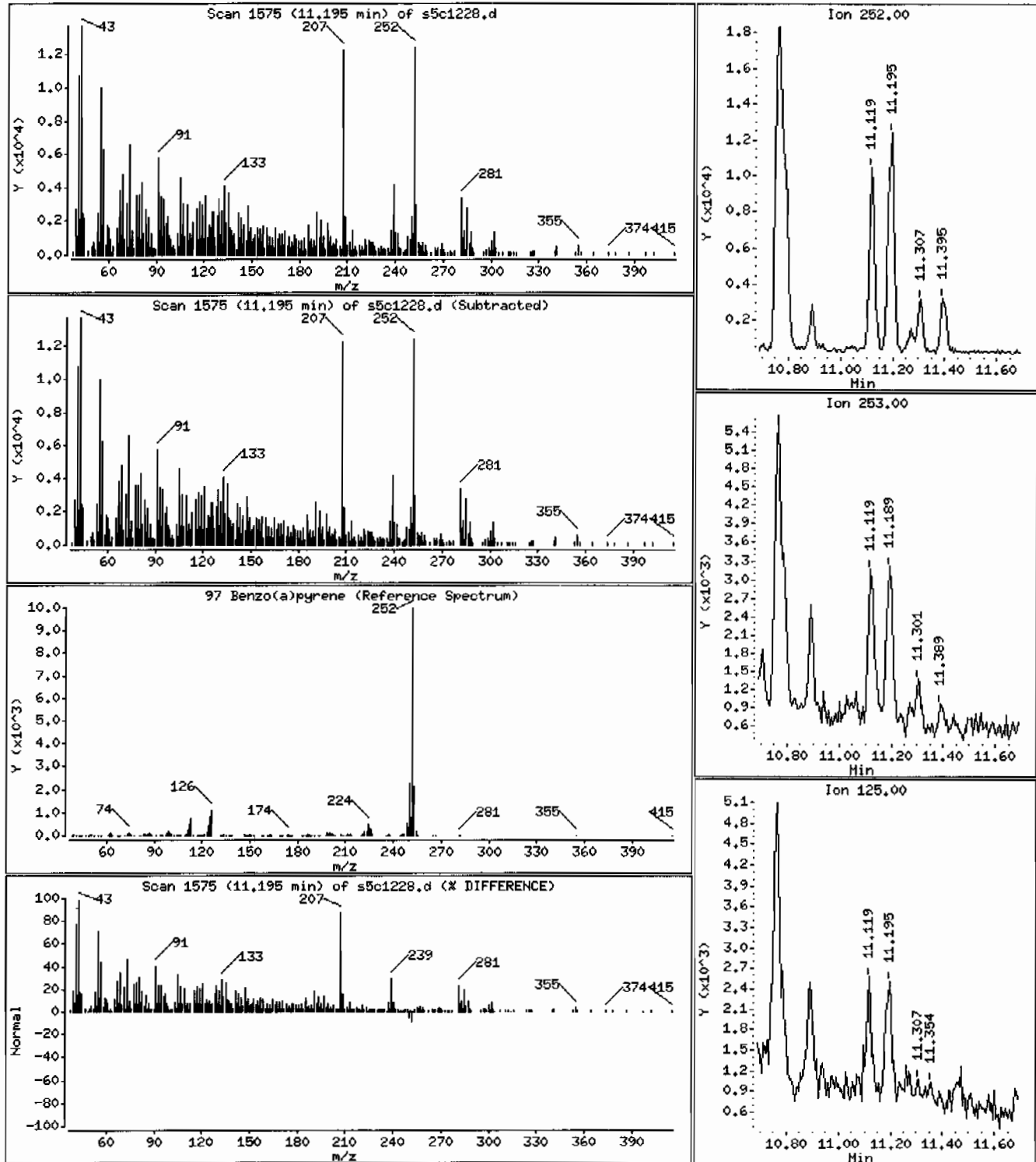
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 74.1 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVM11LANL

Volume Injected (uL): 0.5

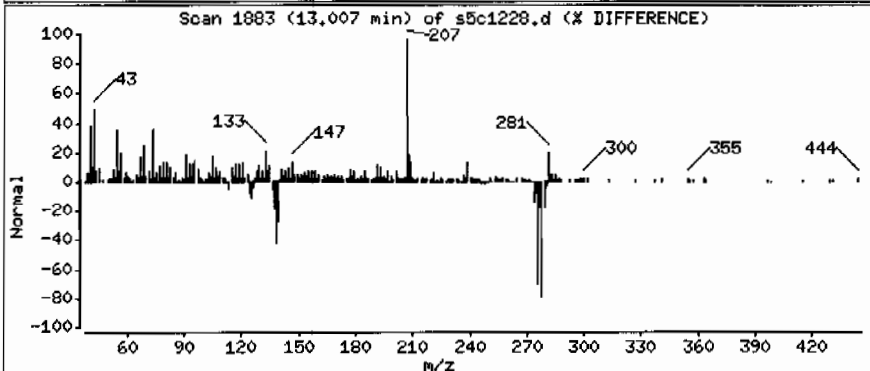
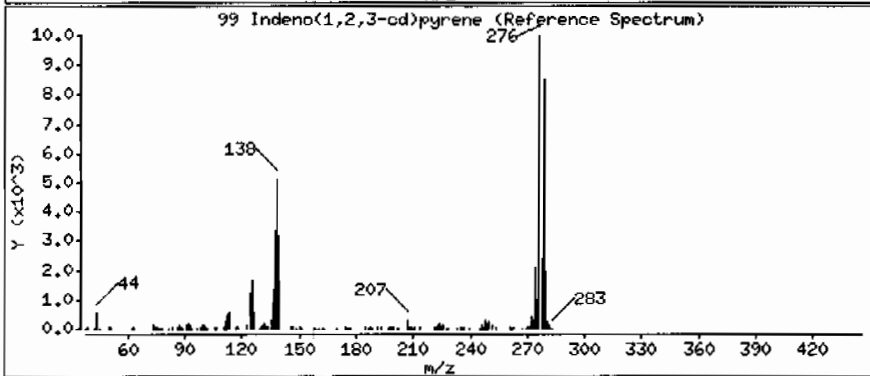
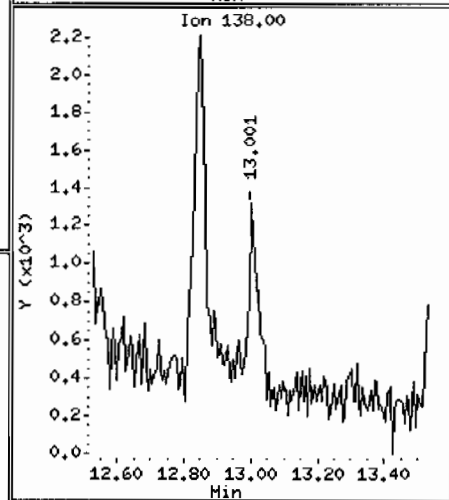
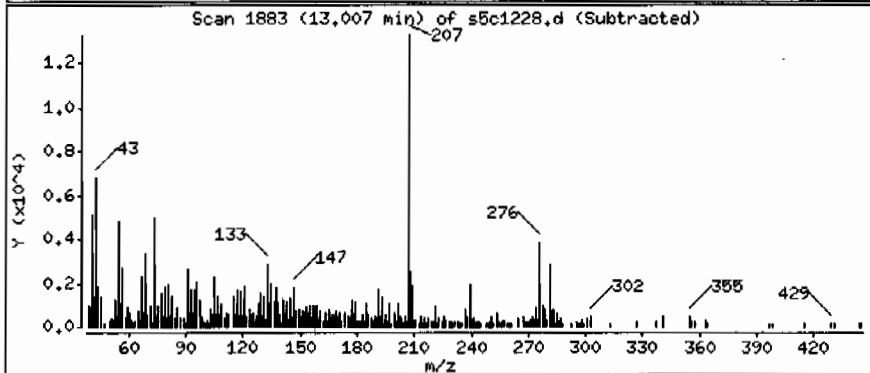
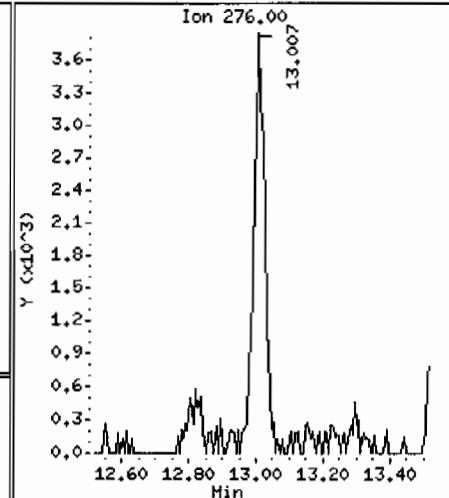
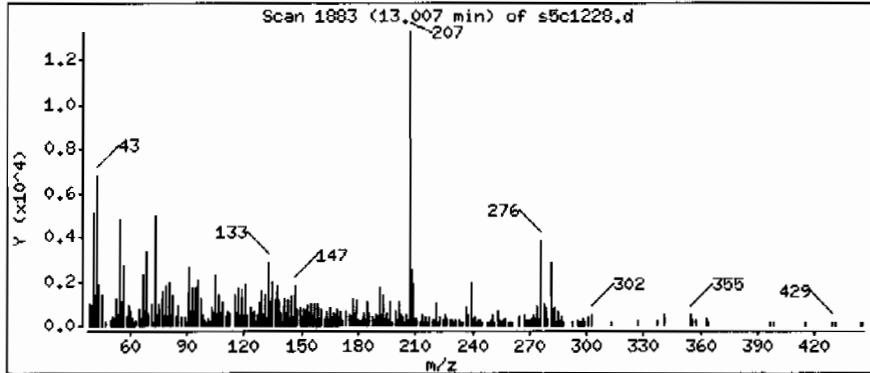
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 42.0 ug/Kg



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVMI1ILANL

Volume Injected (uL): 0.5

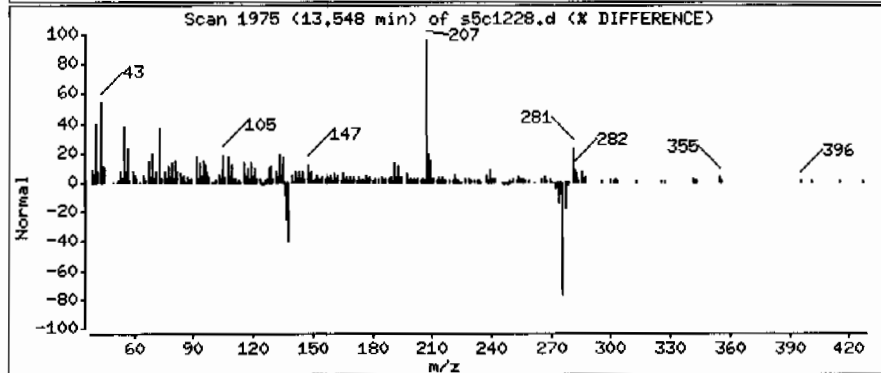
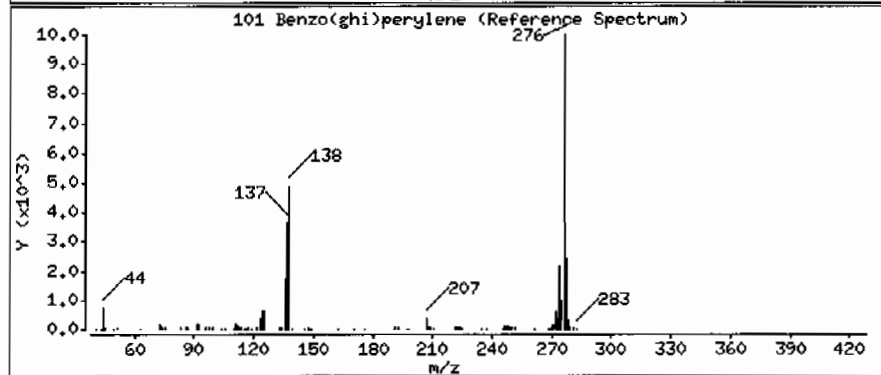
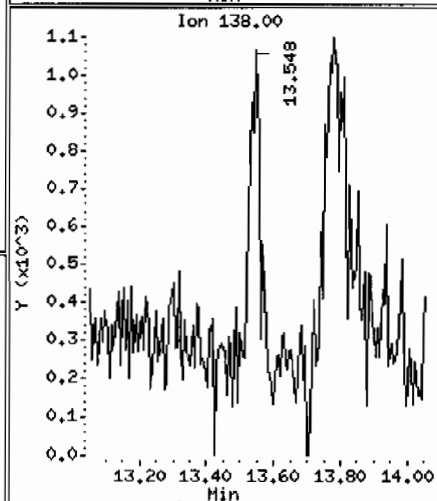
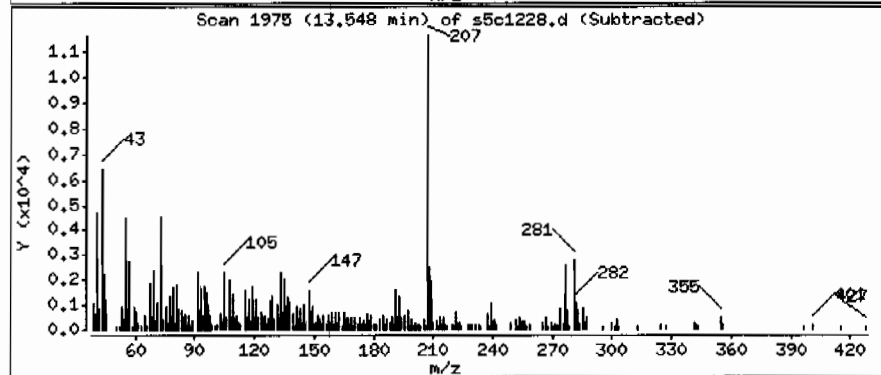
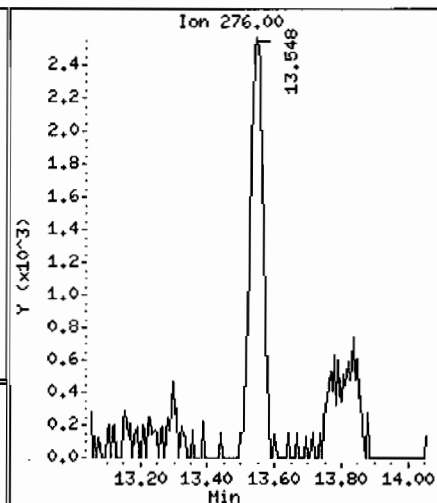
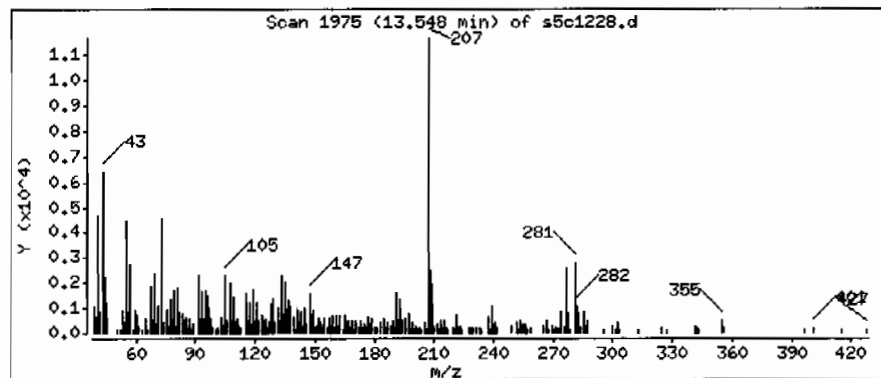
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 39.0 ug/Kg



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911|SVMI1|LANL

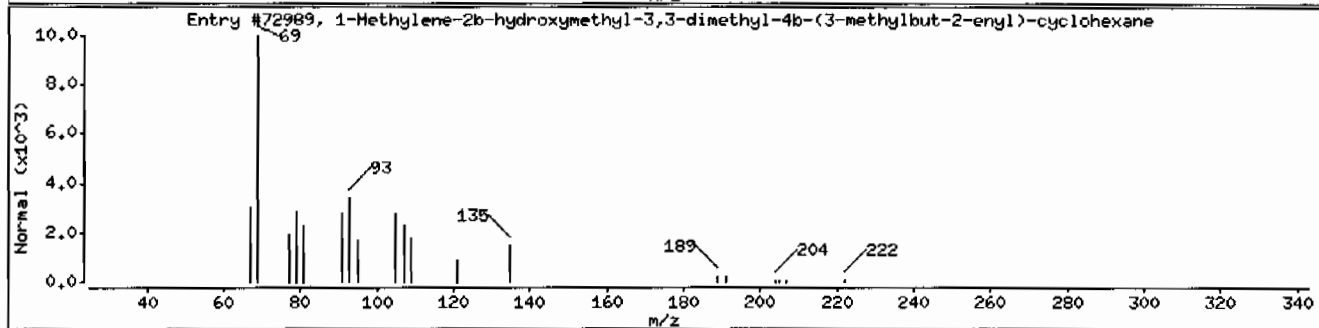
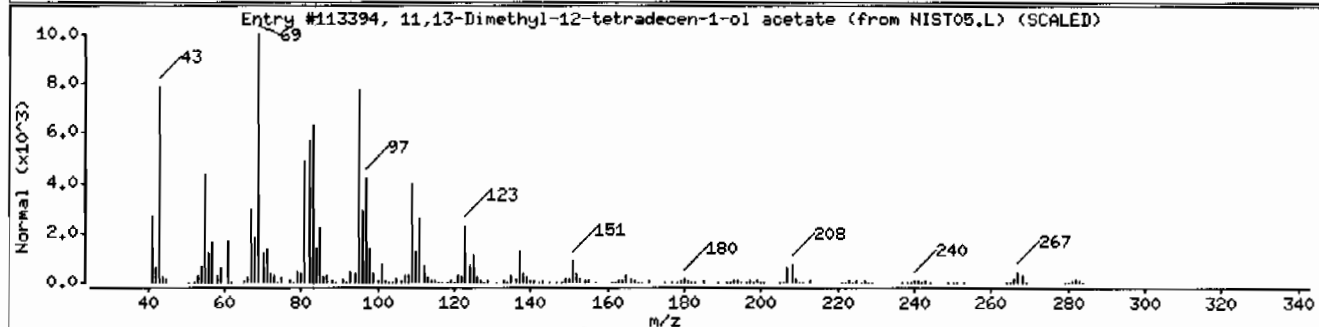
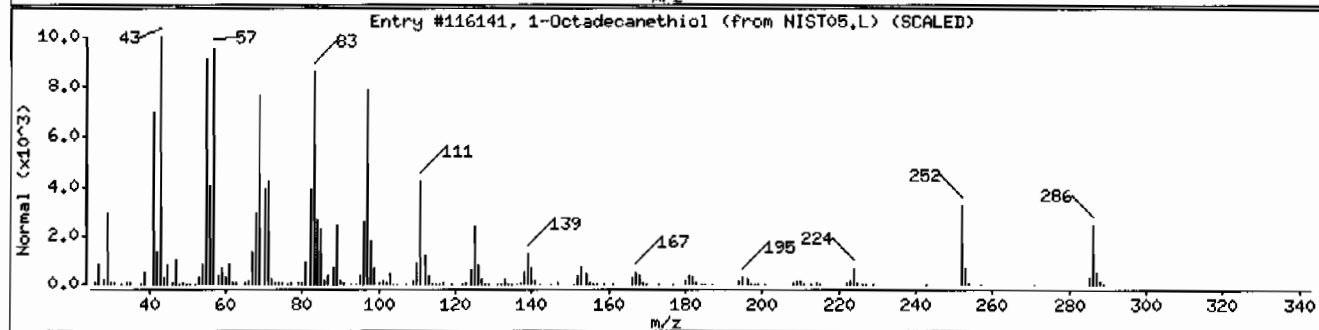
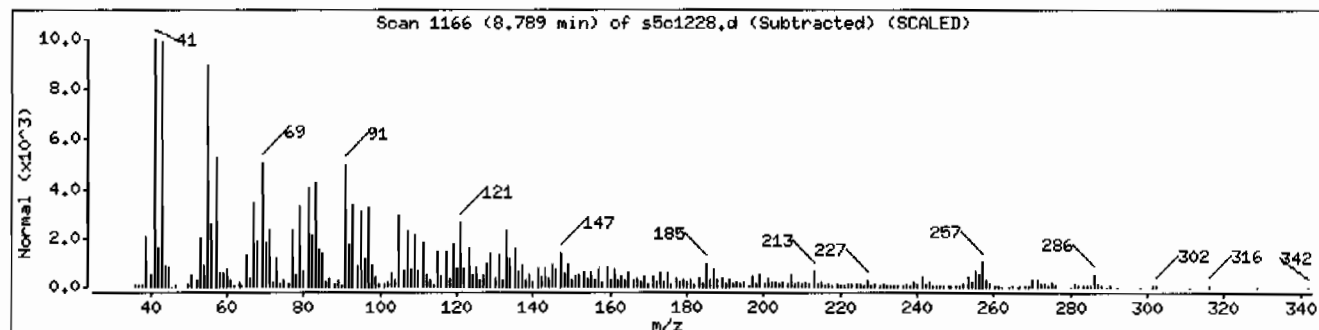
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Octadecanethiol	2885-00-9	NIST05.L	116141	72	C18H38S	286
11,13-Dimethyl-12-tetradecen-1-ol acetat	1000130-81-0	NIST05.L	113394	56	C18H34O2	282
1-Methylene-2b-hydroxymethyl-3,3-dimethyl	1000144-10-6	NIST05.L	72989	45	C15H26O	222



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVH11ILANL

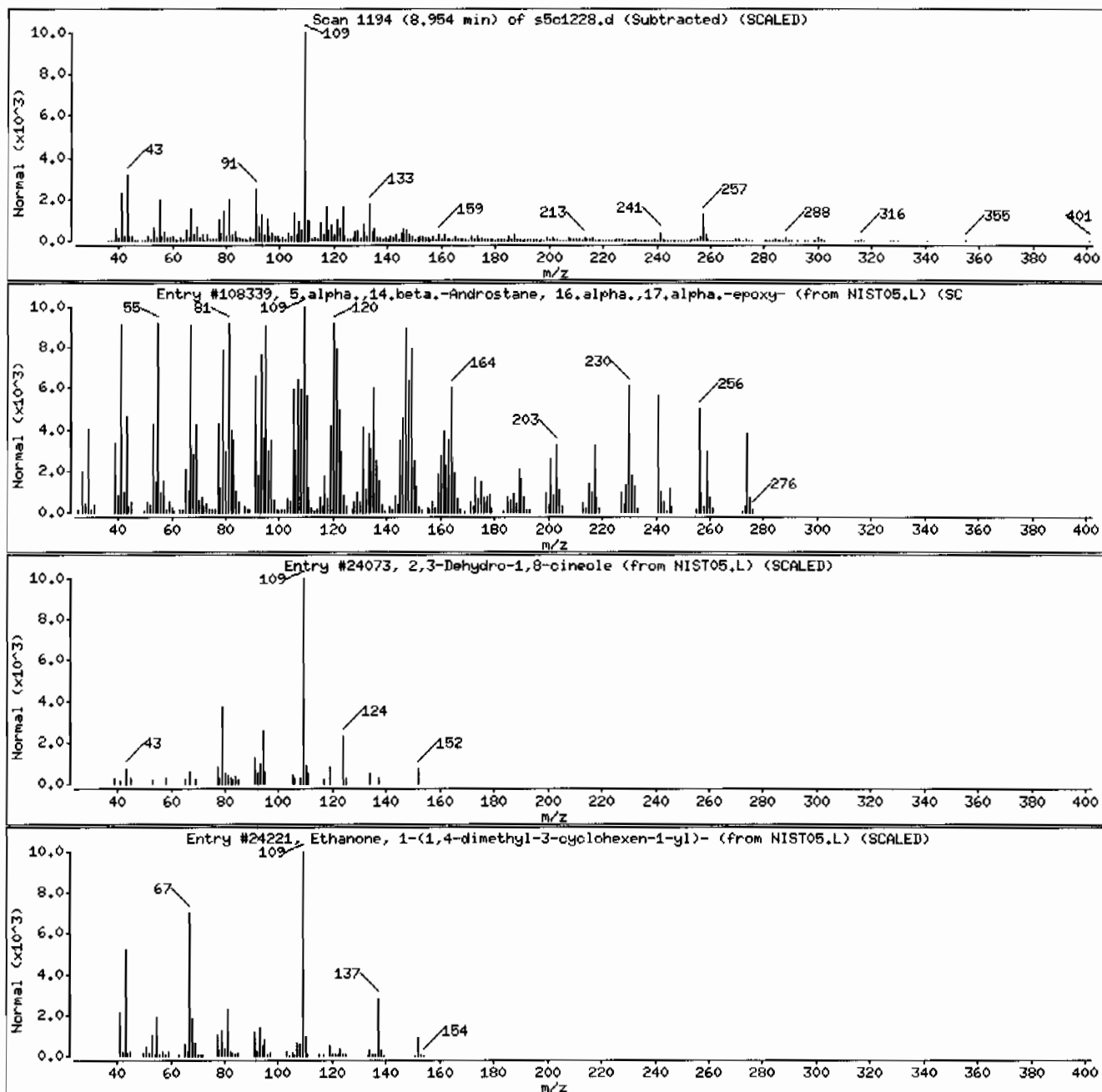
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.,14.beta.-Androstane, 16.alpha.,	24174-25-2	NIST05.L	108339	56	C19H30O	274
2,3-Dehydro-1,8-cineole	92760-25-3	NIST05.L	24073	50	C10H16O	152
Ethanone, 1-(1,4-dimethyl-3-cyclohexen-1	43219-68-7	NIST05.L	24221	50	C10H16O	152



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVH11ILANL

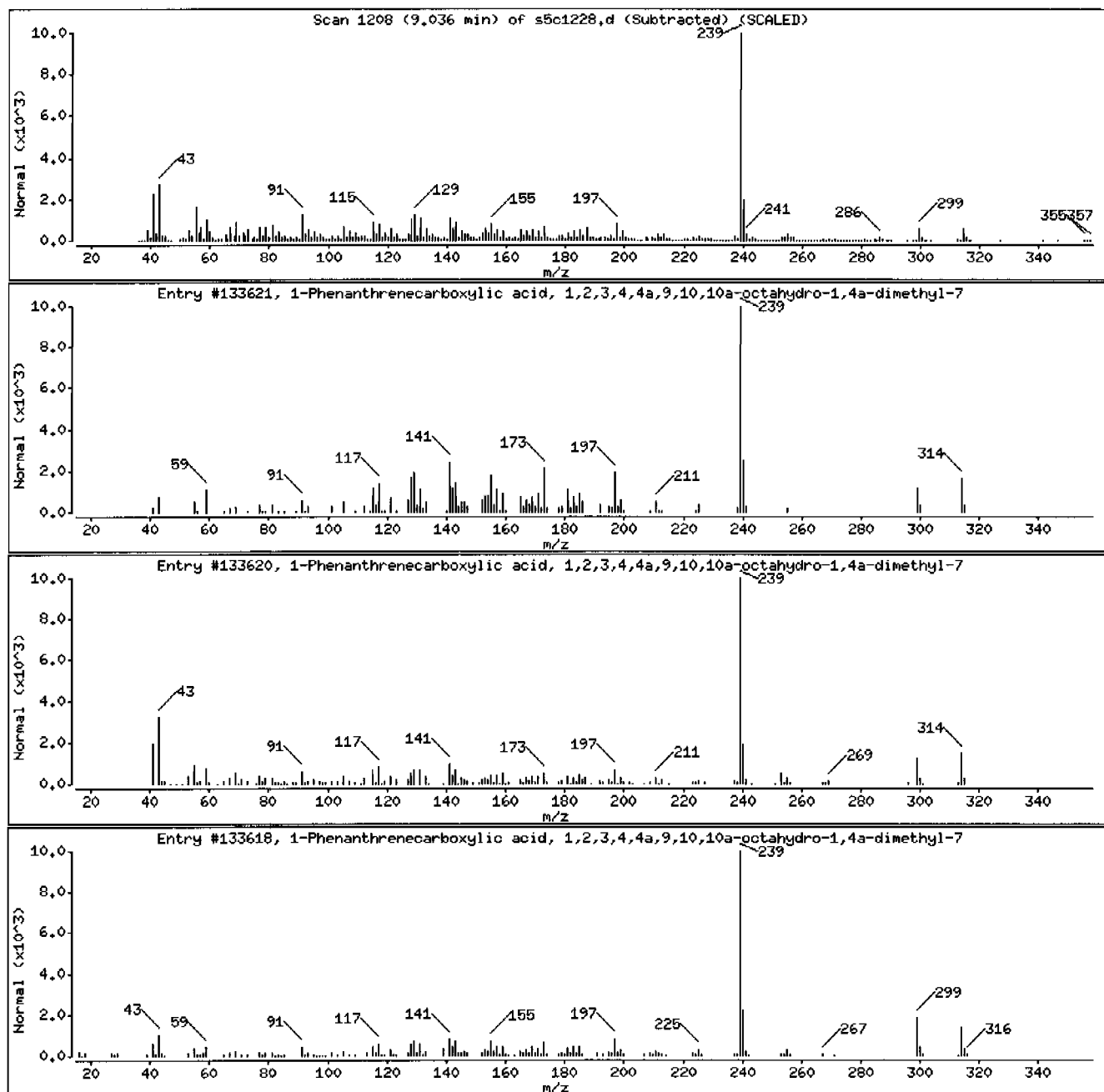
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	53	C21H30O2	314



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVH111LANL

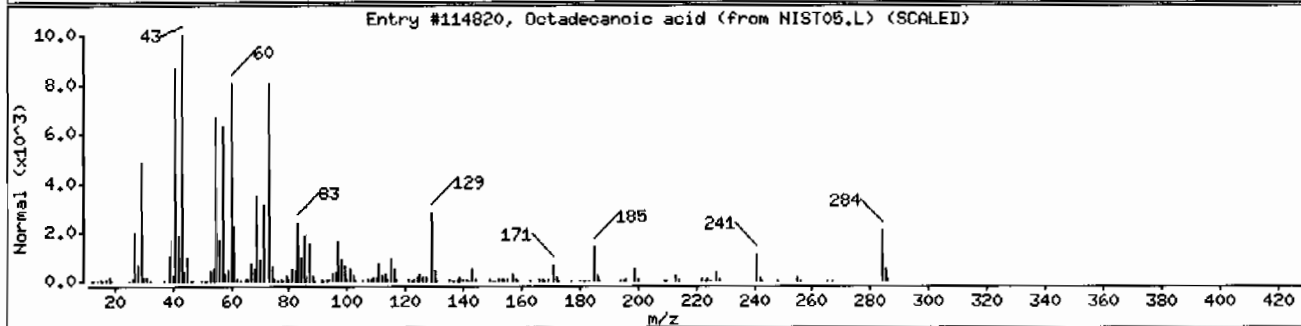
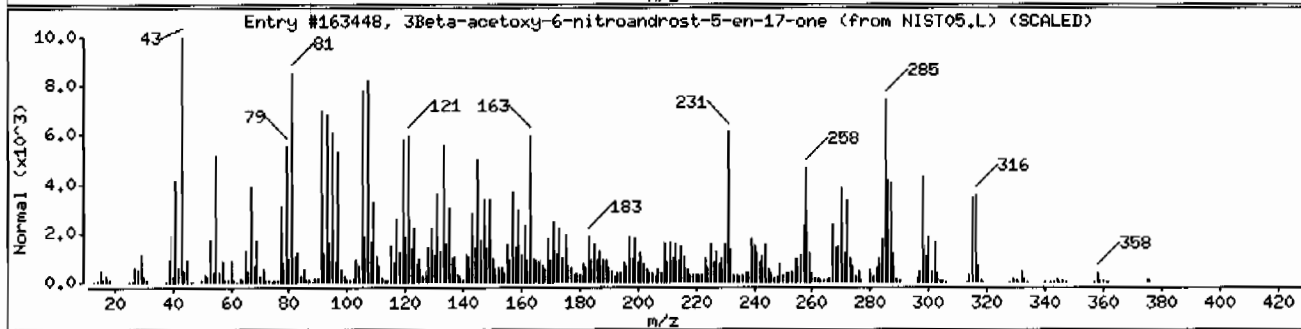
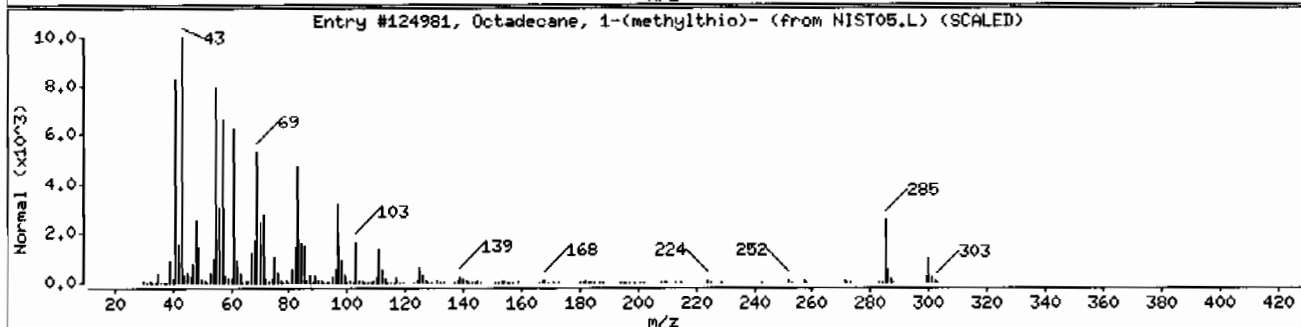
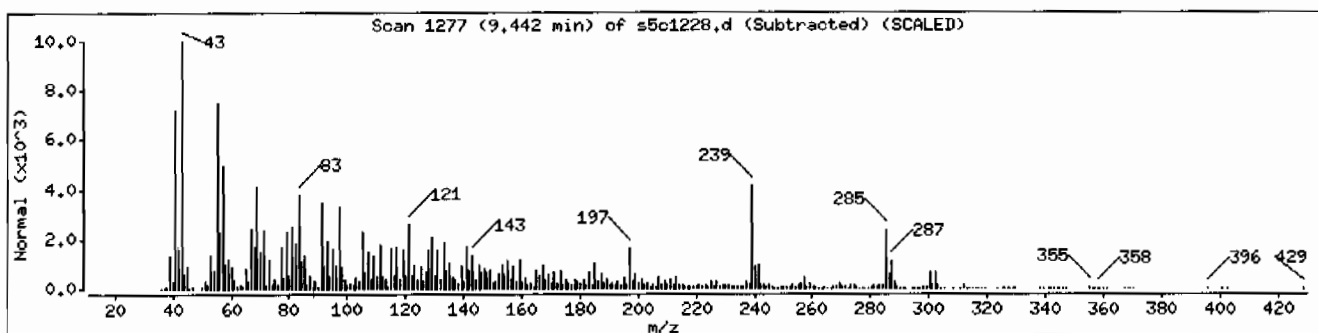
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octadecane, 1-(methylthio)-	40289-98-3	NIST05.L	124981	44	C ₁₉ H ₄₀ S	300
3Beta-acetoxy-6-nitroandrost-5-en-17-one	31559-86-1	NIST05.L	163448	18	C ₂₁ H ₂₉ NO ₅	375
Octadecanoic acid	57-11-4	NIST05.L	114820	18	C ₁₈ H ₃₆ O ₂	284



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: HSD5.i

Sample Info: 1248240008196065911SVMI11LANL

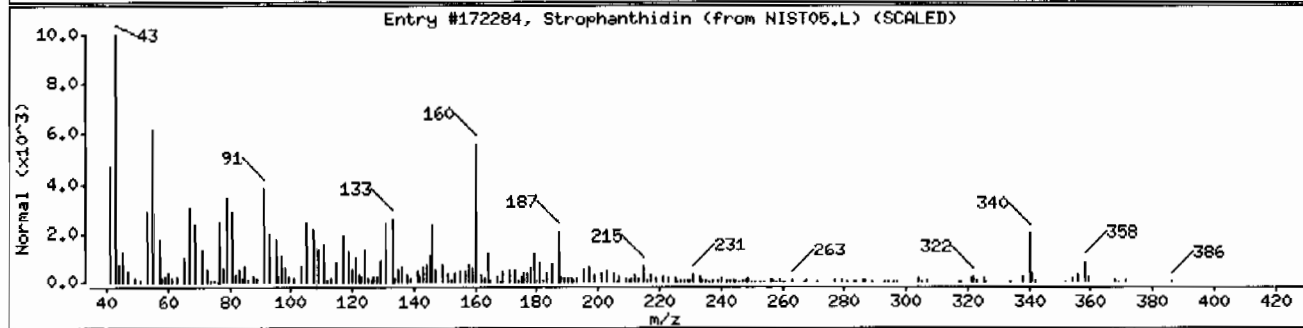
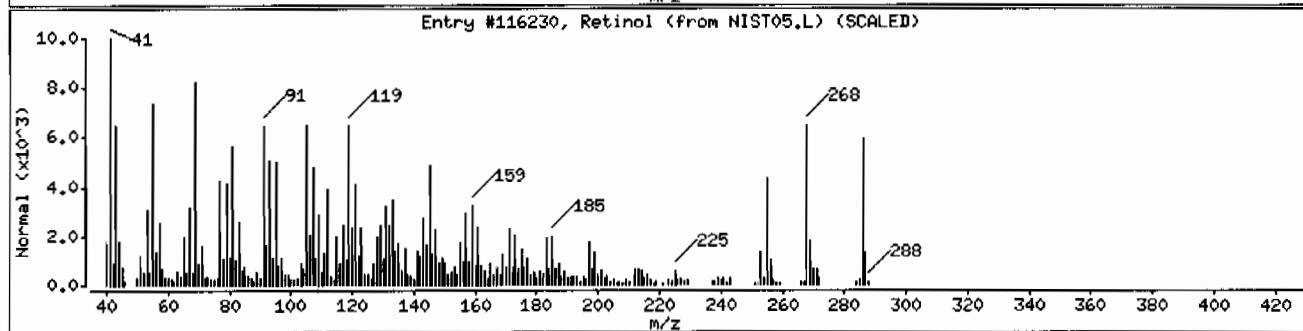
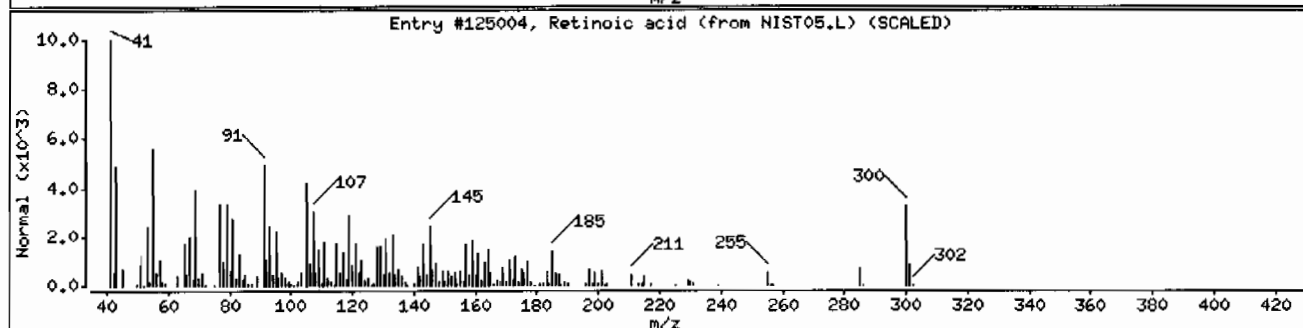
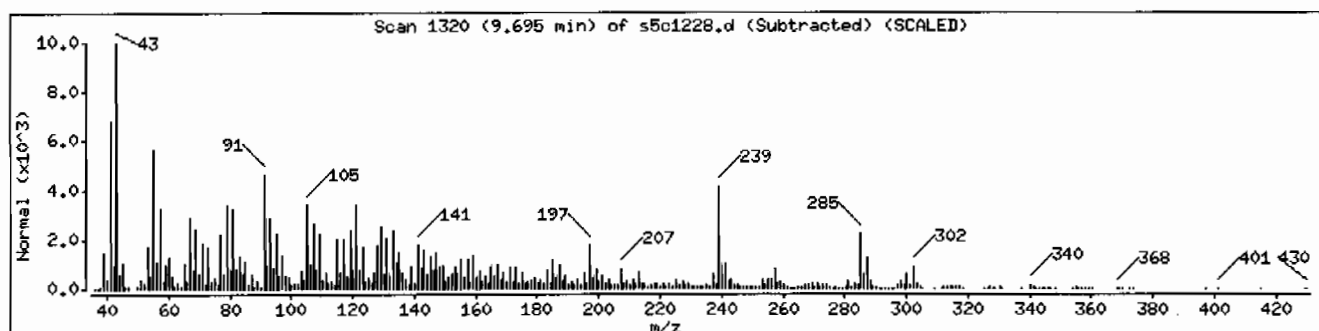
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	25	C ₂₀ H ₂₈ O ₂	300
Retinol	68-26-8	NIST05.L	116230	25	C ₂₀ H ₃₀ O	286
Strophanthidin	66-28-4	NIST05.L	172284	17	C ₂₃ H ₃₂ O ₆	404



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: I248240008196065911SVMI1ILANL

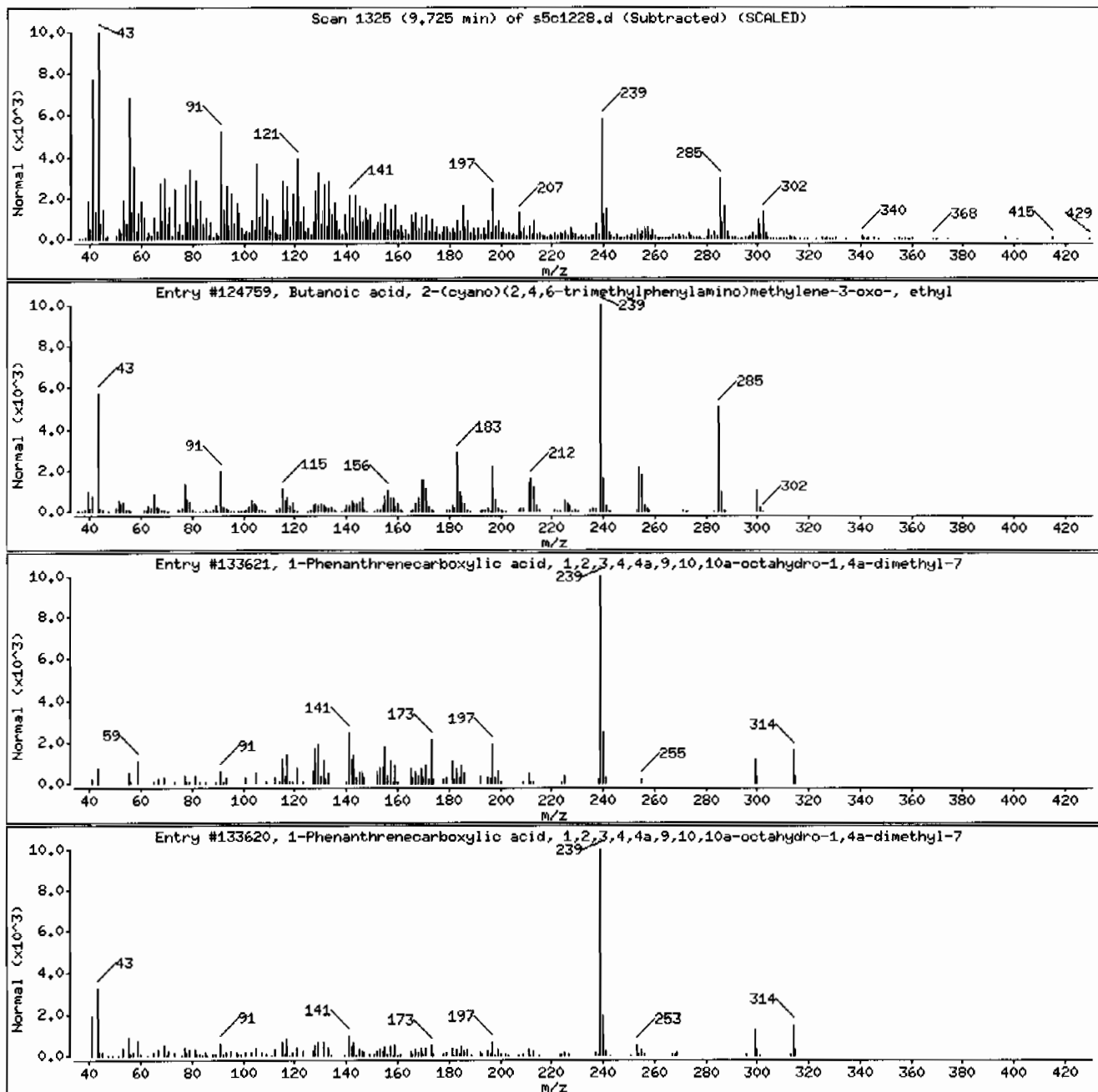
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	45	C17H20N2O3	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	43	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	42	C21H30O2	314



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 12482400081960659111SVMI11LANL

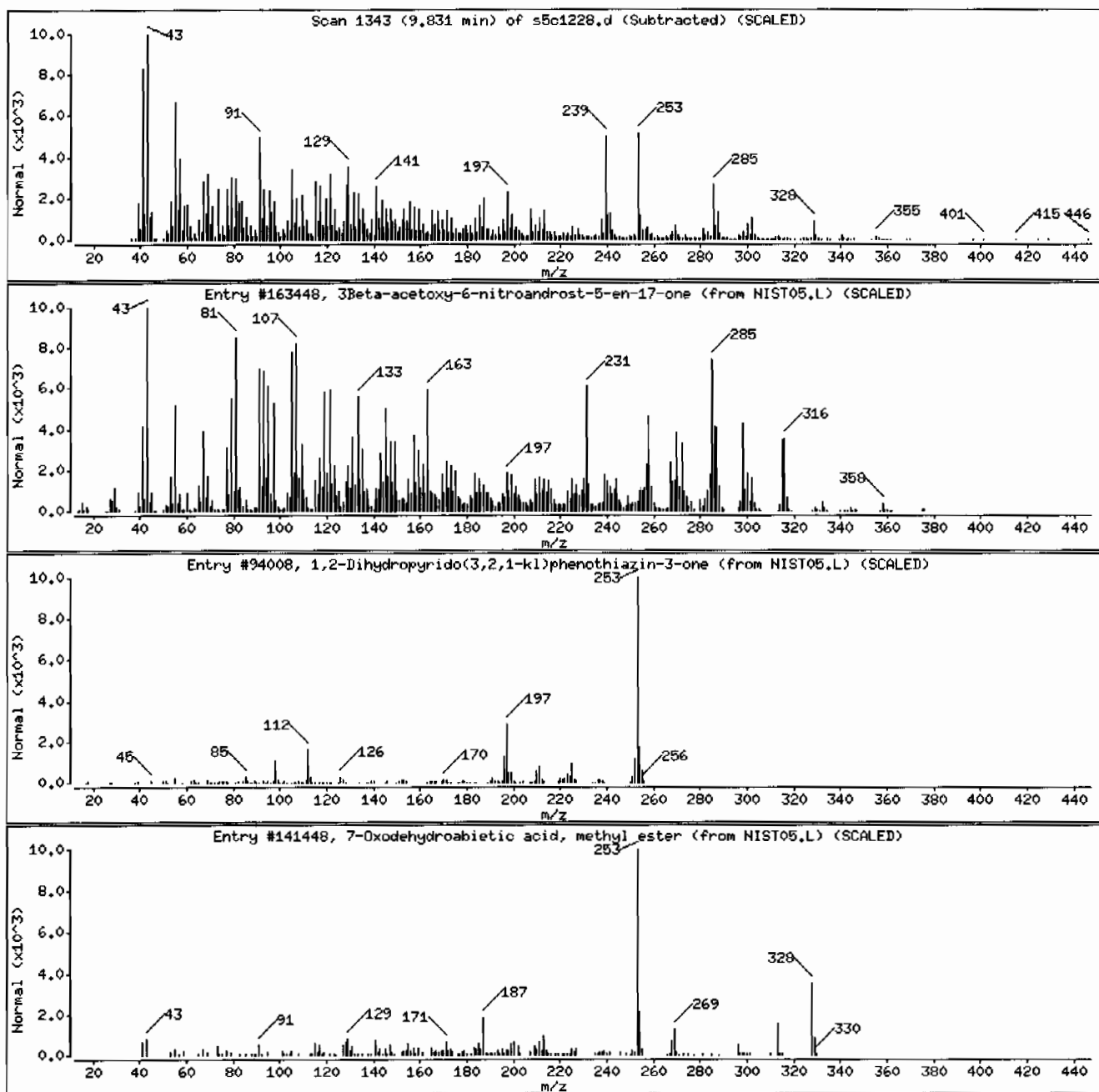
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3Beta-acetoxy-6-nitroandrost-5-en-17-one	31559-86-1	NIST05.L	163448	90	C ₂₁ H ₂₉ N ₀ O ₅	375
1,2-Dihydropyrido(3,2,1-kl)phenothiazin-	69513-42-4	NIST05.L	94008	50	C ₁₅ H ₁₁ N ₀ S	253
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	49	C ₂₁ H ₂₈ O ₃	328



Date : 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911SVH111LANL

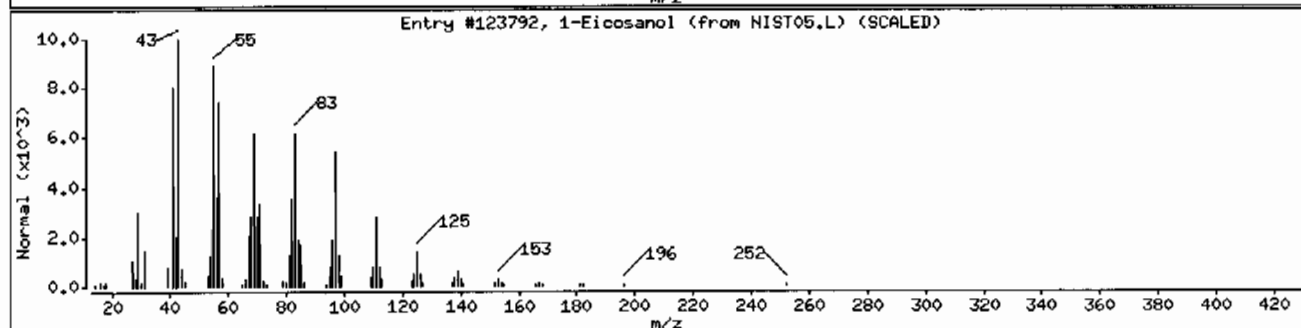
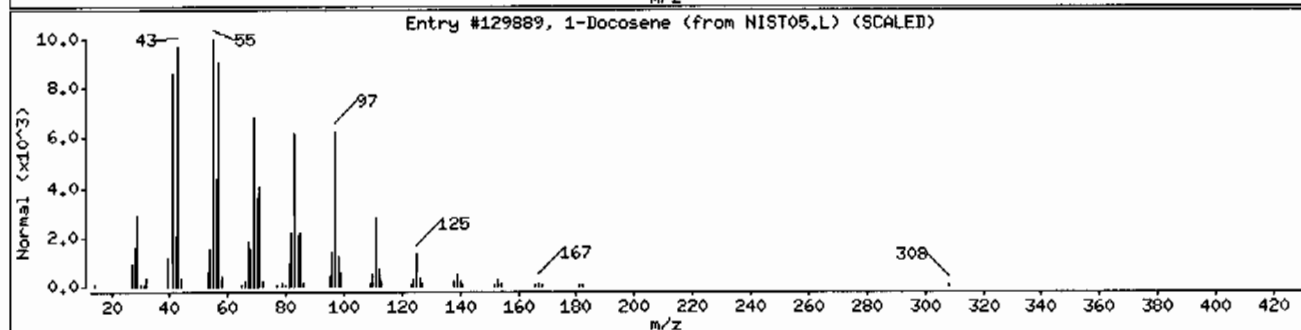
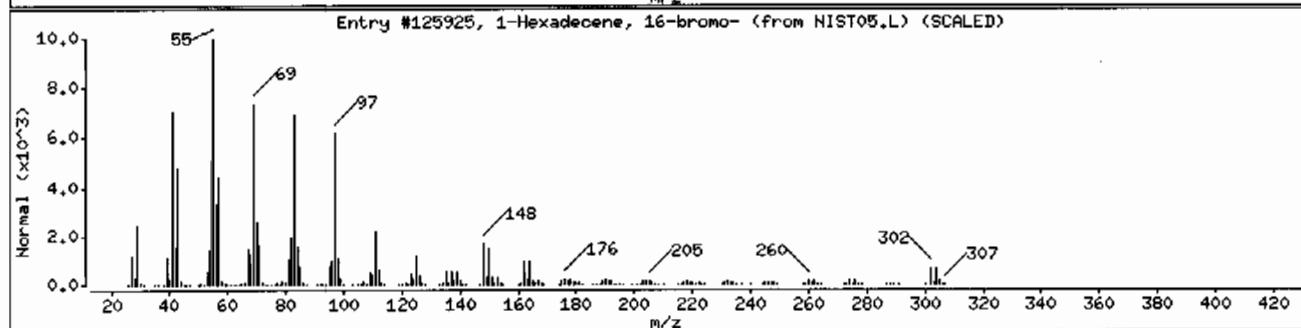
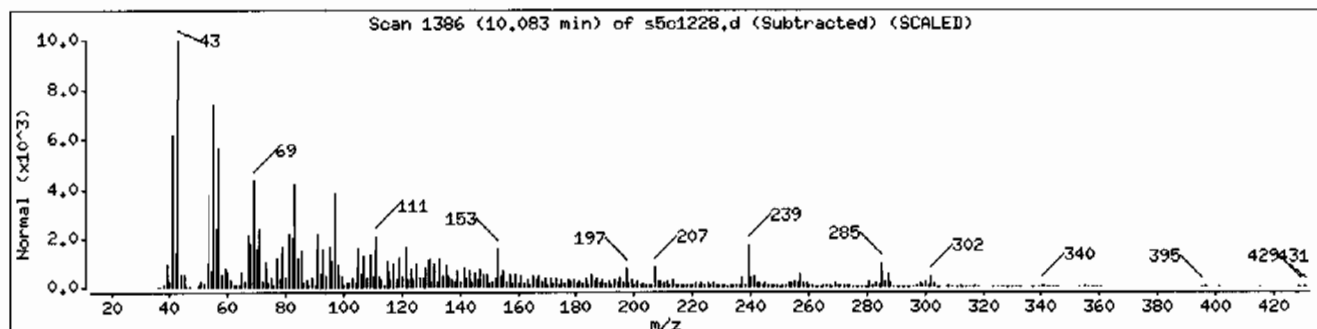
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexadecene, 16-bromo-	118625-56-2	NIST05.L	125925	89	C16H31Br	302
1-Docosene	1599-67-3	NIST05.L	129889	74	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	60	C20H42O	298



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 1248240008196065911ISVM11ILANL

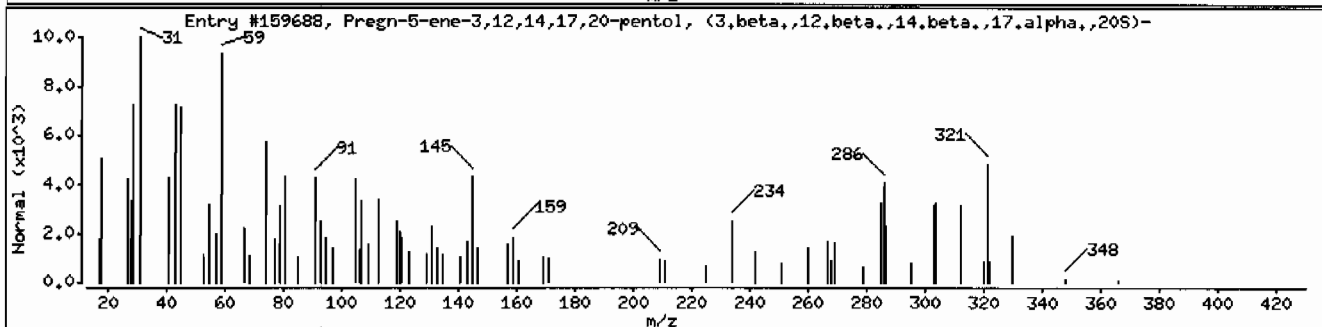
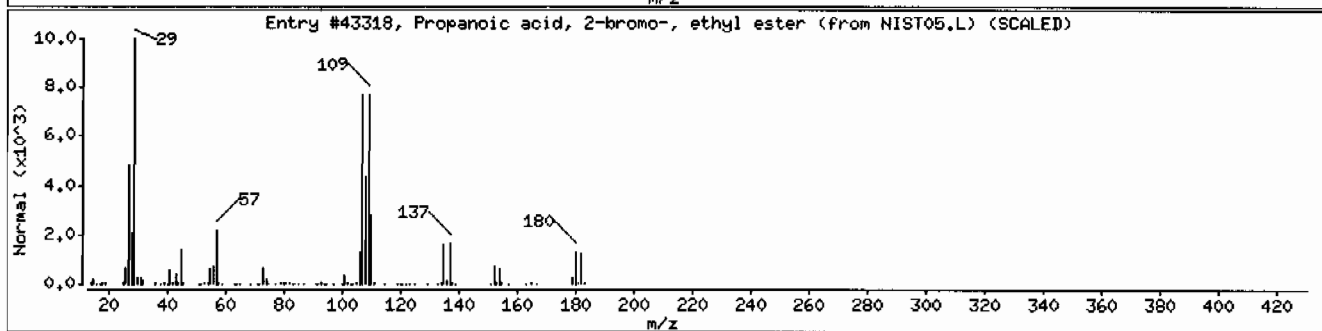
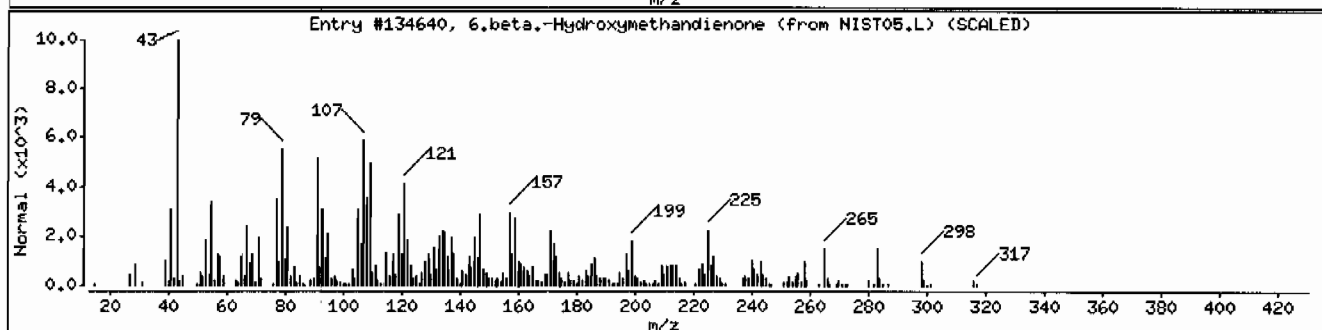
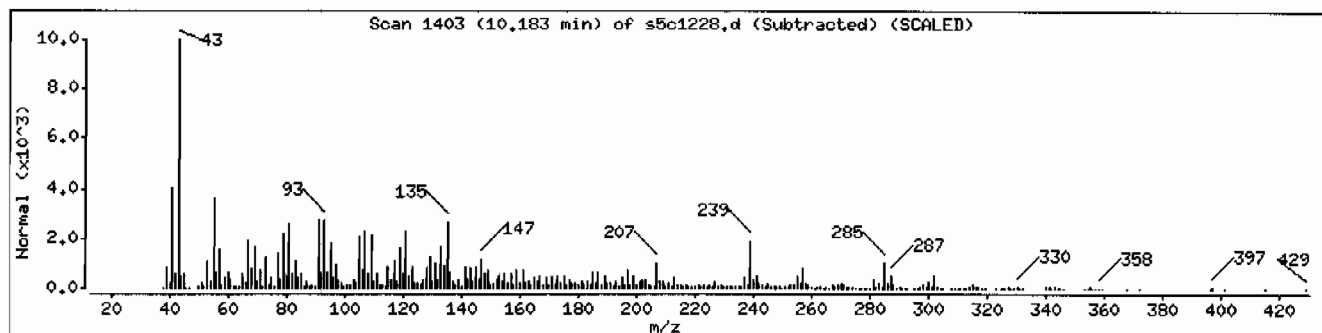
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6,beta.-Hydroxymethandienone	33526-41-9	NIST05.L	134640	30	C20H28O3	316
Propanoic acid, 2-bromo-, ethyl ester	535-11-5	NIST05.L	43318	16	C5H9BrO2	180
Pregn-5-ene-3,12,14,17,20-pentol, (3,beta	28417-32-5	NIST05.L	159688	15	C21H34O5	366



Date: 12-MAR-2010 20:57

Client ID: RE36-10-7457

Instrument: MSD5.i

Sample Info: 12482400081960659111SVH111LANL

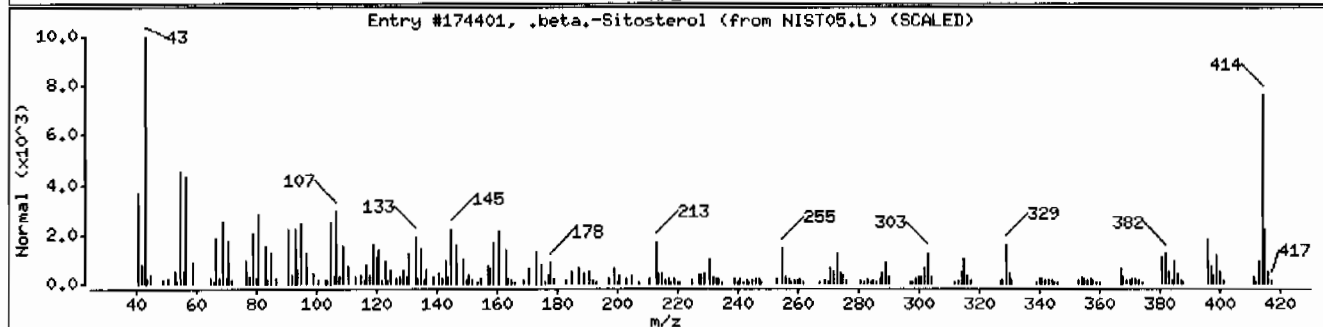
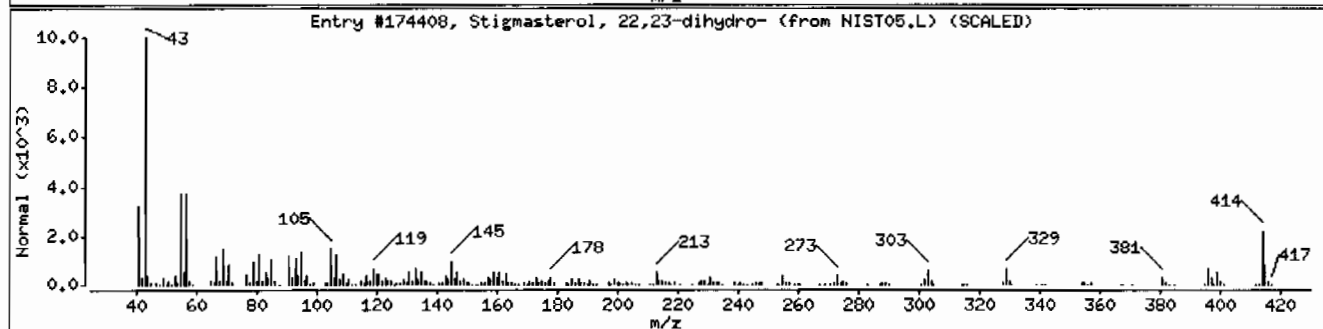
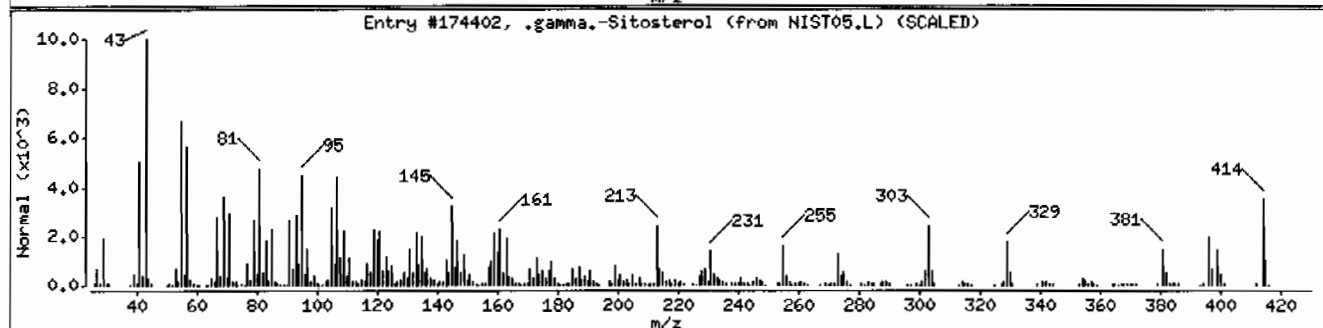
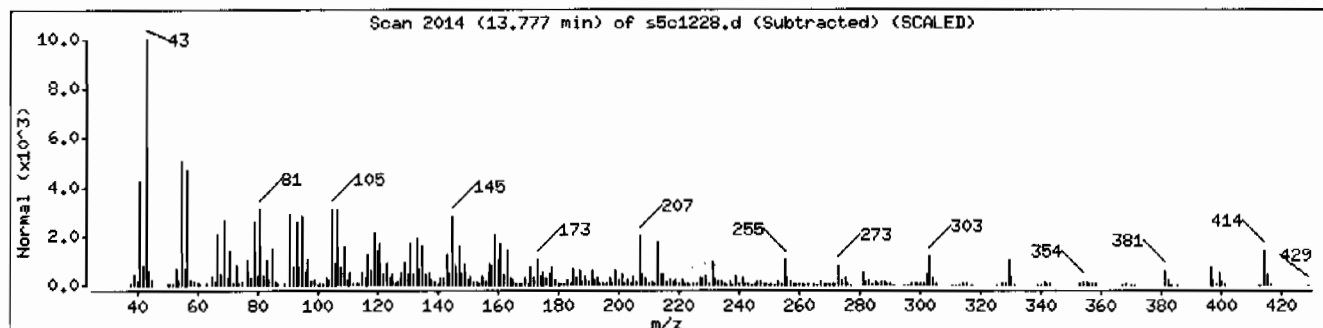
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	96	C29H50O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	89	C29H50O	414



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

SDG Number: 10-2134
Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 14.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene		42.7	ug/kg	11.7	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388
62-53-3	Aniline	U	388	ug/kg	117	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	117	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	117	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	J	568	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.7	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	388	ug/kg	77.7	388

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

SDG Number: 10-2134
Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.7	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.7	38.8
51-28-5	2,4-Dinitrophenol	U	777	ug/kg	148	777
132-64-9	Dibenzofuran	U	388	ug/kg	77.7	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.7	388
86-73-7	Fluorene	U	38.8	ug/kg	11.7	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388
100-01-6	4-Nitroaniline	U	388	ug/kg	117	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.7	388
122-66-7	Azobenzene	U	388	ug/kg	77.7	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.7	388
85-01-8	Phenanthrene	J	34.4	ug/kg	11.7	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.77	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.7	388
206-44-0	Fluoranthene		52.7	ug/kg	11.7	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.7	388
56-55-3	Benzo(a)anthracene	J	26.7	ug/kg	11.7	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	117	388
218-01-9	Chrysene	J	26.4	ug/kg	11.7	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.7	388
205-99-2	Benzo(b)fluoranthene	J	30.1	ug/kg	11.7	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.7	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.7	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.7	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.7	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.7	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1940	ug/kg	99	NJ
	Unknown	8.81	376	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 3 of 3

SDG Number: 10-2134
Lab Sample ID: 248240001

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.9	463	ug/kg	98	NJ
	Unknown	8.94	738	ug/kg		J
	Unknown	9.08	496	ug/kg		J
	Unknown	9.18	408	ug/kg		J
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	9.26	1530	ug/kg	97	NJ
	Unknown	9.3	449	ug/kg		J
	Unknown	9.37	412	ug/kg		J
	Unknown	9.51	581	ug/kg		J
	Unknown	9.54	569	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	9.58	746	ug/kg	91	NJ
	Unknown	9.67	847	ug/kg		J
	Unknown	9.73	555	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.87	526	ug/kg	95	NJ
1599-67-3	1-Docosene	9.9	1160	ug/kg	99	NJ
	Unknown	10.01	497	ug/kg		J
	Unknown	10.08	631	ug/kg		J
	Unknown	10.21	519	ug/kg		J
106-28-5	2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	10.3	670	ug/kg	90	NJ
	Unknown	11.09	849	ug/kg		J
	Unknown	11.79	670	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.52	966	ug/kg	92	NJ
83-47-6	.gamma.-Sitosterol	13.35	2810	ug/kg	99	NJ
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	13.68	747	ug/kg	91	NJ
	Unknown	13.87	1040	ug/kg		J
	Unknown	14.26	609	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1031.d
 Lab Smp Id: 248240001 Client Smp ID: RE36-10-7458
 Inj Date : 10-MAR-2010 21:11
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240001|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 31
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	14.17340	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.784	3.791	(1.000)	250591	40.0000	(H)
* 29 Naphthalene-d8		136	4.648	4.653	(1.000)	940492	40.0000	
* 46 Acenaphthene-d10		164	5.895	5.905	(1.000)	554149	40.0000	
* 67 Phenanthrene-d10		188	7.054	7.060	(1.000)	972857	40.0000	
* 91 Chrysene-d12		240	9.454	9.458	(1.000)	833420	40.0000	
* 98 Perylene-d12		264	11.036	11.033	(1.000)	675945	40.0000	
\$ 3 2-Fluorophenol		112	2.984	2.977	(0.789)	425005	67.9204	2640
\$ 5 Phenol-d5		99	3.507	3.507	(0.927)	490856	65.2664	2530
\$ 20 Nitrobenzene-d5		82	4.143	4.152	(0.891)	251121	35.9335	1400
\$ 39 2-Fluorobiphenyl		172	5.389	5.394	(0.914)	457985	33.0895	1280
\$ 60 2,4,6-Tribromophenol		329	6.489	6.492	(1.101)	139776	67.1559	2610
\$ 81 p-Terphenyl-d14		244	8.425	8.428	(0.891)	493267	35.5809	1380

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
79 Pyrene		202	8.319	8.322	(0.880)	25310	1.09905	42.7
27 Benzoic acid		105	4.395	4.426	(0.946)	21551	14.6195	568 (a)
68 Phenanthrene		178	7.072	7.079	(1.002)	18233	0.88533	34.4 (a)
76 Fluoranthene		202	8.101	8.110	(1.148)	29130	1.35594	52.7
89 Benzo(a)anthracene		228	9.442	9.444	(0.999)	12792	0.68633	26.6 (a)
92 Chrysene		228	9.472	9.482	(1.002)	11794	0.67908	26.4 (a)
95 Benzo(b)fluoranthene		252	10.542	10.551	(0.955)	12502	0.77433	30.1 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s5c1031.d

Report Date: 03/11/2010 07:22

Lab. ID: 248240001

SampleType: SAMPLE

Injection Date: 10-MAR-2010 21:11

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240001|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	30080	3.51	3.57	80-120	100	(T)
93	46085	3.55	3.57	220-280	153	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	31019	4.14	4.03	80-120	100	(T)
42	24895	4.14	4.03	57-117	80	(T)

22 Isophorone		CAS#: 78-59-1				
82	245575	4.14	4.32	80-120	100	(T)
138	145	4.21	4.32	0- 49	0	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	21551	4.40	4.43	80-120	100	()
122	17968	4.40	4.43	45-105	83	()
77	13178	4.40	4.43	40-100	61	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	28033	5.63	5.50	80-120	100	(T)
164	1695	5.63	5.50	3- 63	6	(T)
127	3099	5.63	5.50	10- 70	11	(T)

42 o-Nitroaniline		CAS#: 88-74-4				
65	43977	5.63	5.56	80-120	100	(T)
92	48354	5.63	5.56	31- 91	110	(QT)
138	3173	5.63	5.56	70-130	7	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	99830	5.90	5.67	80-120	100	(T)
164	553832	5.90	5.67	0- 40	555	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	72661	5.90	5.73	80-120	100	(T)
63	1068	5.90	5.72	62-122	1	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	72661	5.90	6.02	80-120	100	(T)
89	1569	5.90	6.02	50-110	2	(QT)
63	1066	5.90	6.02	24- 84	1	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	364	5.95	5.94	80-120	100	()
109	544	5.97	5.94	50-110	149	(Q)
65	1749	5.96	5.94	82-142	480	(Q)

53 Fluorene				CAS#: 86-73-7		
166	7327	6.48	6.31	80-120	100	(T)
165	7337	6.48	6.31	61-121	100	(T)
167	2233	6.48	6.31	0- 44	30	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	479	6.49	6.32	80-120	100	(T)
105	1363	6.48	6.32	12- 72	285	(QT)
51	2552	6.48	6.32	36- 96	533	(QT)

56 p-Nitroaniline				CAS#: 100-01-6		
138	7022	6.42	6.30	80-120	100	(T)
108	2148	6.42	6.30	66-126	31	(QT)
92	1536	6.41	6.30	25- 85	22	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	18233	7.07	7.08	80-120	100	()
179	2916	7.07	7.08	0- 46	16	()
176	3599	7.07	7.08	0- 49	20	()

69 Anthracene				CAS#: 120-12-7		
178	18083	7.07	7.12	80-120	100	()
179	2916	7.07	7.12	0- 46	16	()
176	3599	7.07	7.12	0- 48	20	()

76 Fluoranthene				CAS#: 206-44-0		
202	29130	8.10	8.11	80-120	100	()
203	4842	8.10	8.11	0- 48	17	()
101	3666	8.10	8.11	0- 42	13	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
79 Pyrene		CAS#: 129-00-0				
202	25310	8.32	8.32	80-120	100	()
200	5559	8.32	8.32	0- 51	22	()
101	3921	8.32	8.32	0- 44	15	()

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	45163	8.94	8.86	80-120	100	(T)
91	63589	8.94	8.86	45-105	141	(QT)
206	1196	8.87	8.86	0- 50	3	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	12792	9.44	9.44	80-120	100	()
226	3564	9.44	9.44	0- 56	28	()
229	4492	9.44	9.44	0- 50	35	()

92 Chrysene		CAS#: 218-01-9				
228	11794	9.47	9.48	80-120	100	()
229	3177	9.47	9.48	0- 51	27	()
226	3994	9.47	9.48	0- 60	34	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	12502	10.54	10.55	80-120	100	()
253	2150	10.54	10.55	0- 52	17	()
125	2430	10.54	10.55	0- 41	19	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	5120	10.58	10.58	80-120	100	()
253	2019	10.57	10.58	0- 52	39	()
125	1414	10.58	10.58	0- 42	28	()

97 Benzo(a)pyrene		CAS#: 50-32-8				
252	7700	10.95	10.96	80-120	100	()
253	2429	10.95	10.96	0- 52	32	()
125	1629	10.95	10.96	0- 30	21	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	4089	12.66	12.67	80-120	100	()
138	2212	12.71	12.68	0- 59	54	()

101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	3882	13.17	13.18	80-120	100	()
138	2016	13.17	13.18	0- 30	52	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD5.i/s031010.b/s5c1031.d
Report Date: 11-Mar-2010 07:55

Page 3

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1031.d
Lab Smp Id: 248240001 Client Smp ID: RE36-10-7458
Inj Date : 10-MAR-2010 21:11
Operator : RMB Inst ID: MSD5.i
Smp Info : |248240001|960659|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	14.17340	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	5.895	2393997	40.000
* 91 Chrysene-d12	9.454	3975215	40.000
* 98 Perylene-d12	11.036	2507287	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	
=====	=====	=====	=====	=====	=====	=====	=====
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.631	2994709	50.0369535	1940	99	NIST05.L	60020	46
Unknown					CAS #:		
8.807	962318	9.68317931	376	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.895	1183801	11.9118170	463	98	NIST05.L	133618	91
Unknown					CAS #:		
8.936	1887317	18.9908427	738	0		0	91
Unknown					CAS #:		
9.077	1268416	12.7632396	496	0		0	91
Unknown					CAS #:		
9.177	1043585	10.5009137	408	0		0	91
Cyclohexadecane, 1,2-diethyl-					CAS #: 1000155-85-3		
9.260	3921244	39.4569181	1530	97	NIST05.L	112113	91
Unknown					CAS #:		
9.301	1148251	11.5541016	449	0		0	91
Unknown					CAS #:		
9.372	1055080	10.6165845	412	0		0	91
Unknown					CAS #:		
9.513	1486396	14.9566329	581	0		0	91
Unknown					CAS #:		
9.542	1456012	14.6509031	569	0		0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
9.577	1909180	19.2108351	746	91	NIST05.L	101019	91
Unknown					CAS #:		
9.672	2168235	21.8175382	847	0		0	91
Unknown					CAS #:		
9.730	1419679	14.2853006	555	0		0	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
9.866	1346526	13.5492081	526	95	NIST05.L	117264	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
1-Docosene					CAS #: 1599-67-3		
9.895	2960497	29.7895482	1160	99	NIST05.L	129888	91
Unknown					CAS #:		
10.007	1270566	12.7848727	496	0		0	91
Unknown					CAS #:		
10.077	1613863	16.2392519	631	0		0	91
Unknown					CAS #:		
10.207	1329225	13.3751220	519	0		0	91
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy					CAS #: 106-28-5		
10.295	1081614	17.2555251	670	90	NIST05.L	72944	98
Unknown					CAS #:		
11.089	1369812	21.8532974	849	0		0	98
Unknown					CAS #:		
11.789	1081120	17.2476370	670	0		0	98
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
12.524	1558776	24.8679246	966	92	NIST05.L	112295	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.348	4542203	72.4640085	2810	99	NIST05.L	174402	98
N-(4-Methoxyphenyl)-2-hydroxyimino-aceta					CAS #: 1000143-61-3		
13.683	1206381	19.2459928	747	91	NIST05.L	53297	98
Unknown					CAS #:		
13.871	1676880	26.7520949	1040	0		0	98
Unknown					CAS #:		
14.259	983369	15.6881799	609	0		0	98

Data File: /chem/HSD5.i/s031010.b/s5c1031.d

Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Sample Info: 1248240001|96065911|SM11|LRL

Volume Injected (uL): 0.5

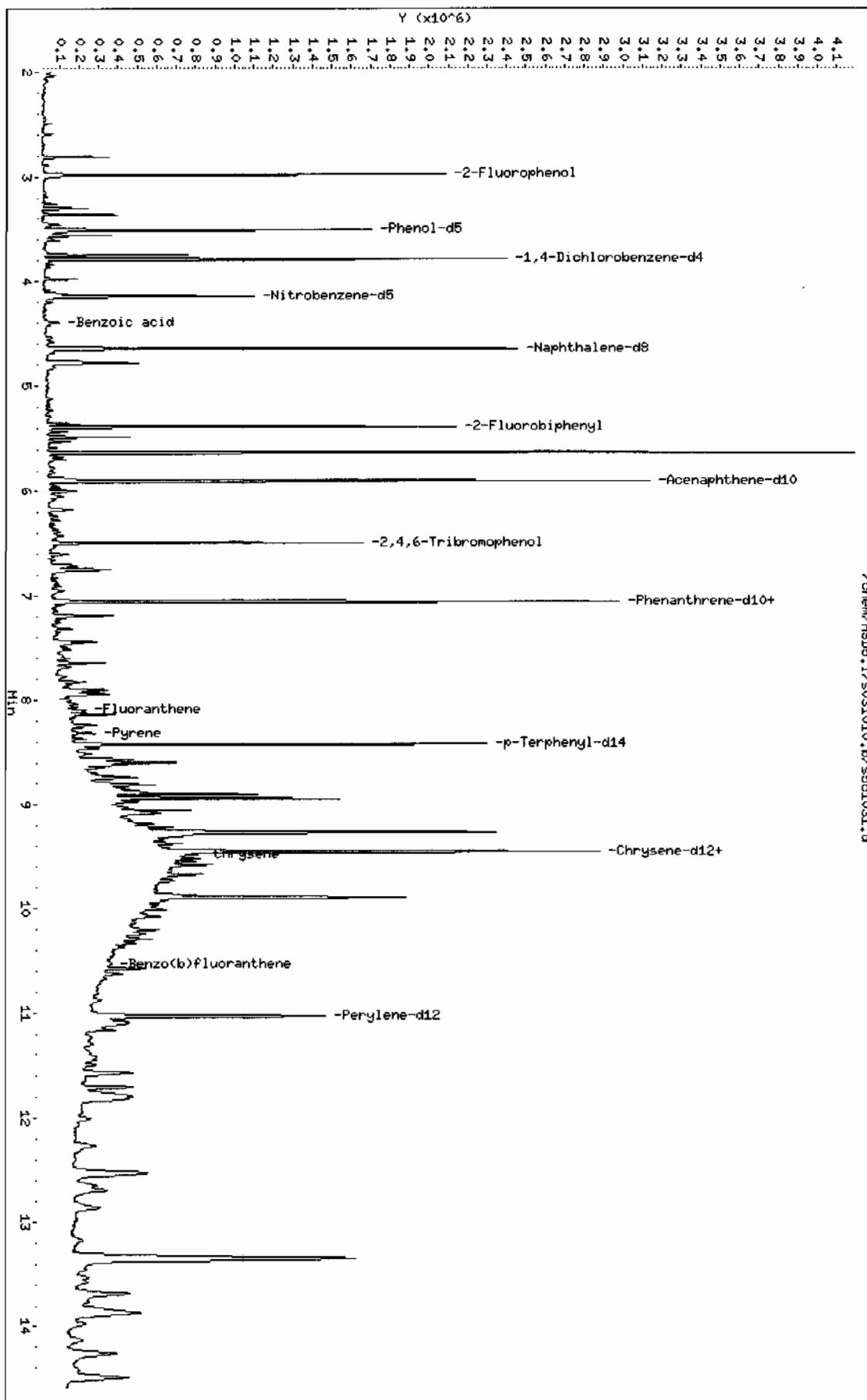
Column phase: J&W DB-SMS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

Page 1



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: I2482400011960659111SVMI11LANL

Volume Injected (uL): 0.5

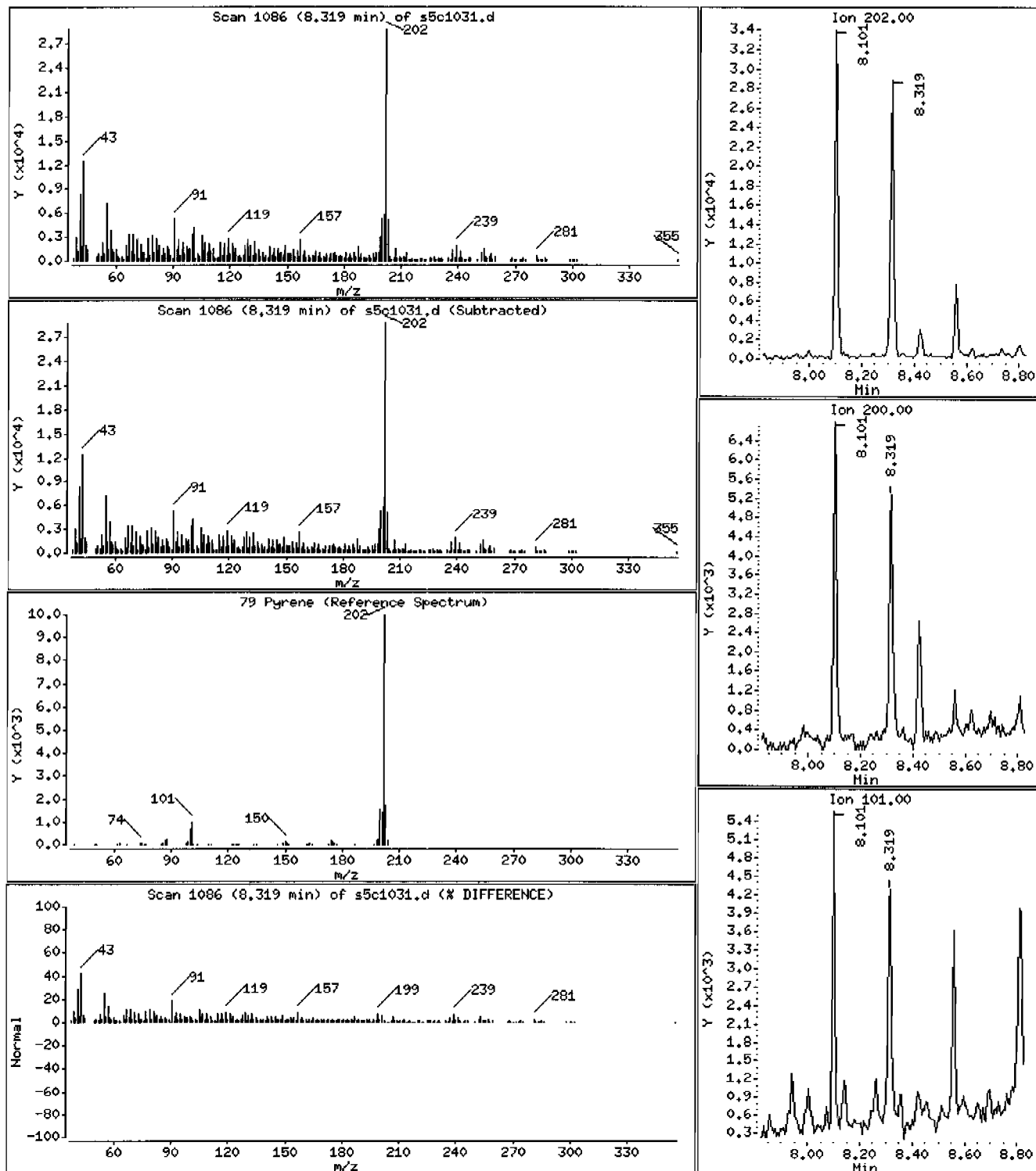
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 42.7 ug/Kg



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 1248240001196065911SVH111LANL

Volume Injected (uL): 0.5

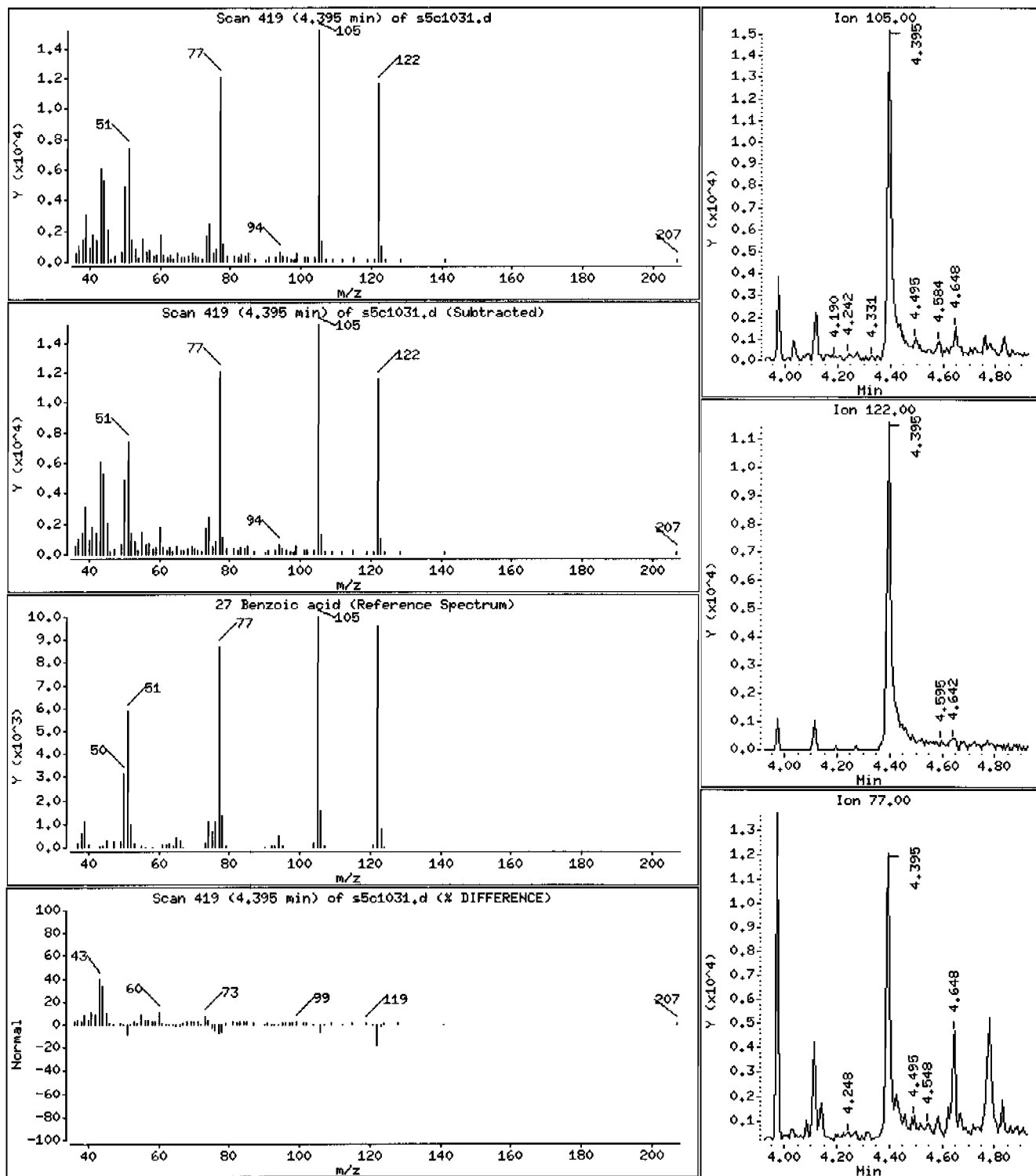
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 568 ug/Kg



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVH111LANL

Volume Injected (uL): 0.5

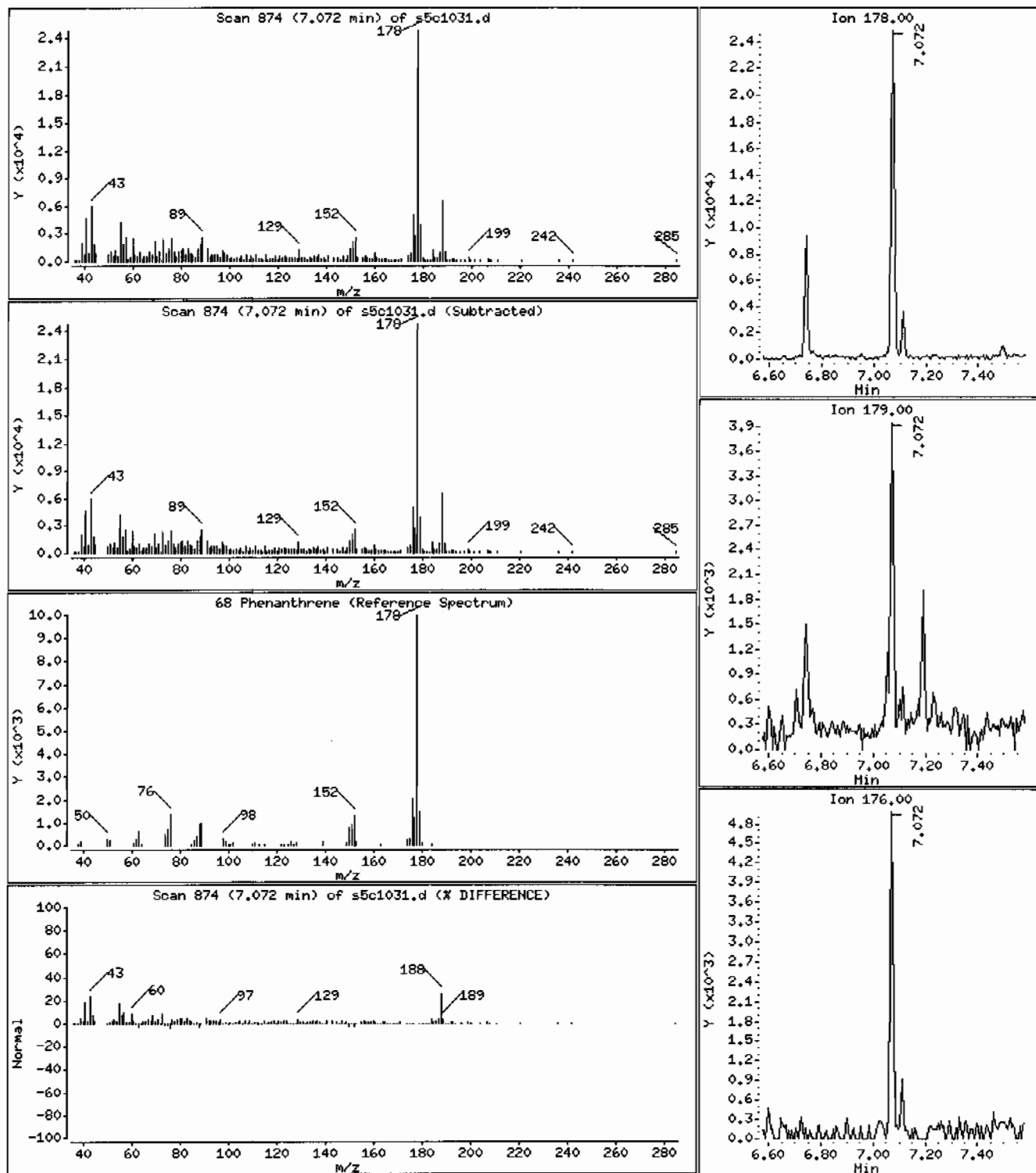
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 34.4 ug/Kg



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 1248240001196065911ISVH11ILANL

Volume Injected (uL): 0.5

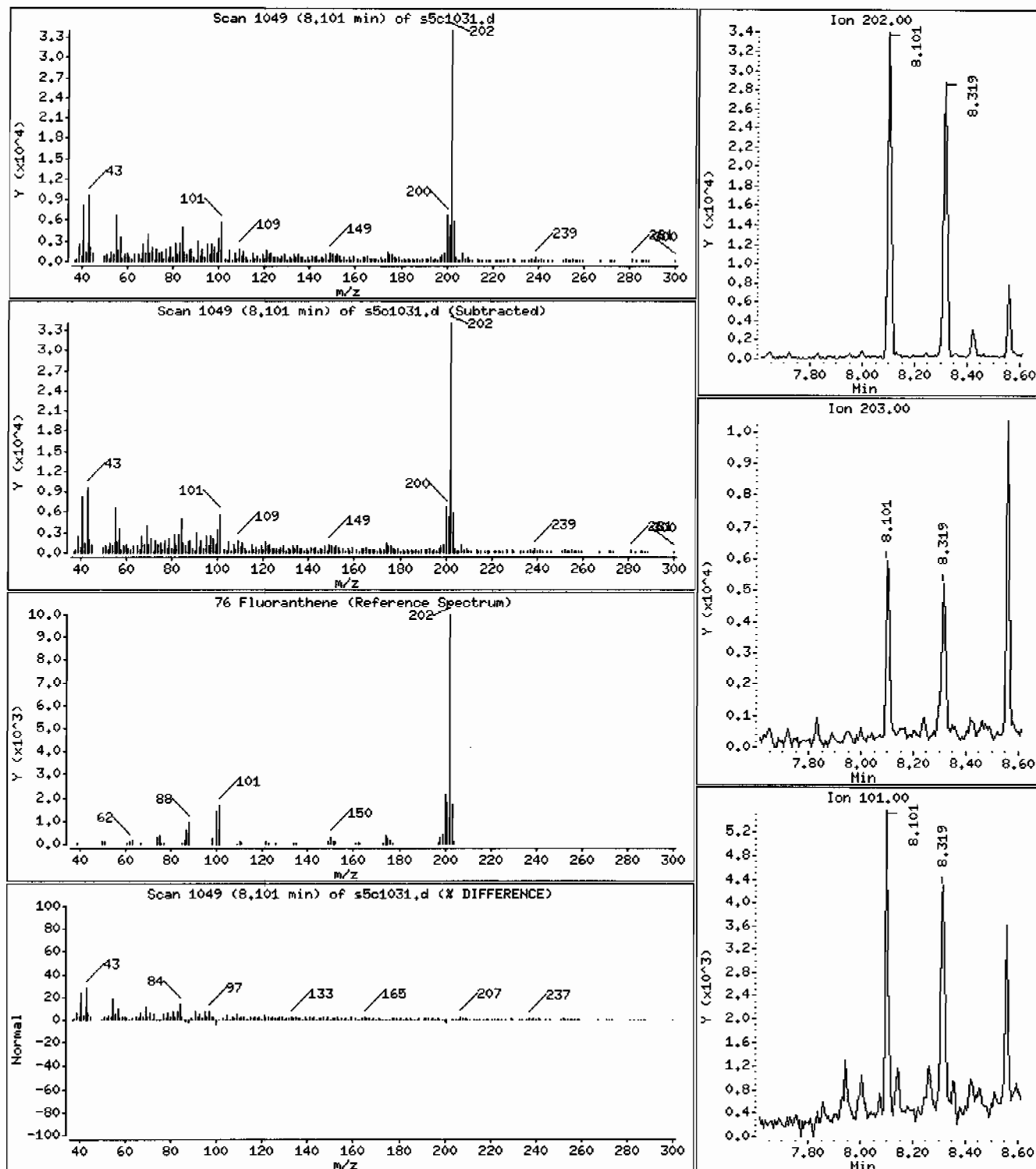
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 52.7 ug/Kg



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911ISVM11ILANL

Volume Injected (uL): 0.5

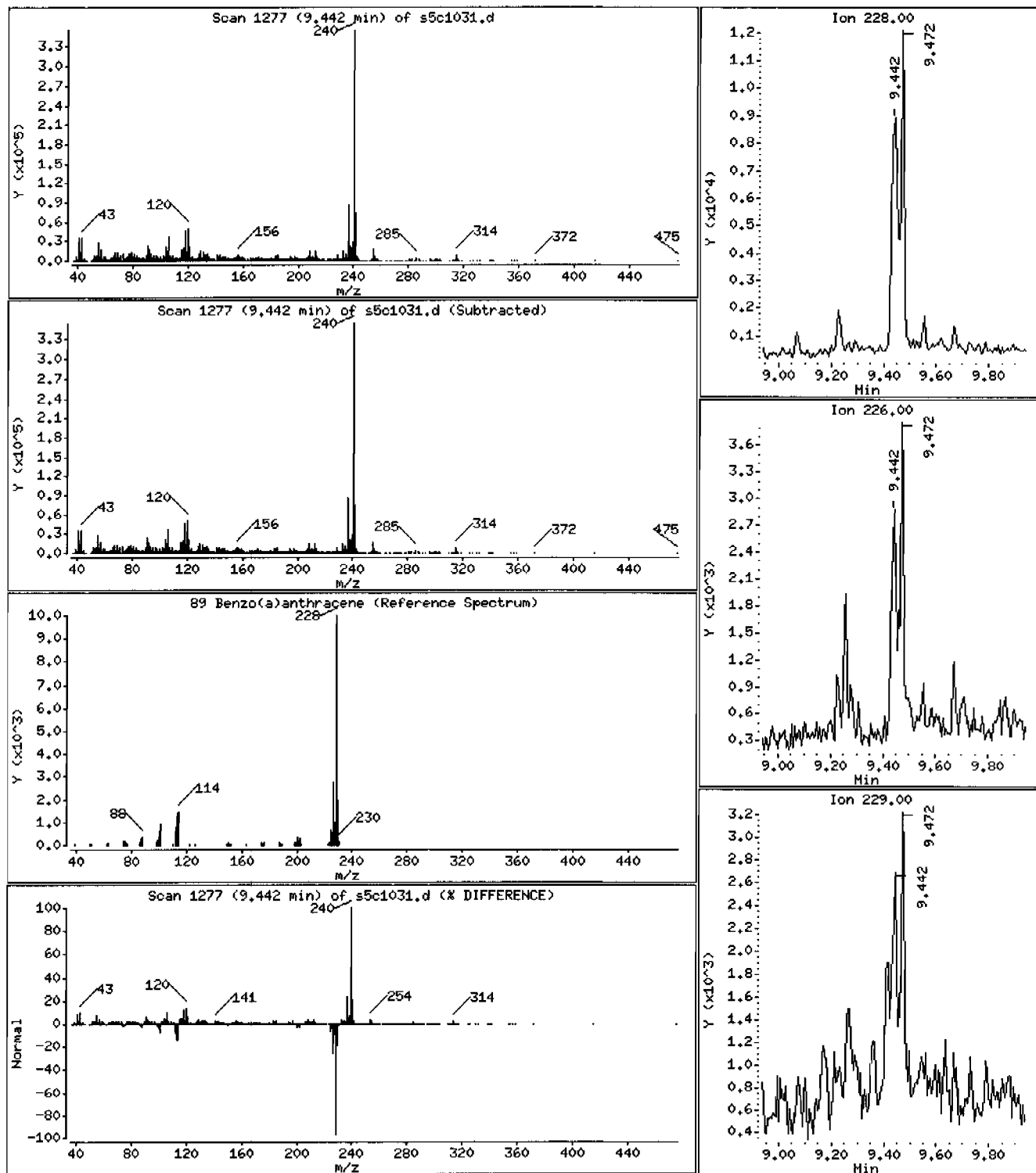
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 26.6 ug/Kg



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911ISVH111LANL

Volume Injected (uL): 0.5

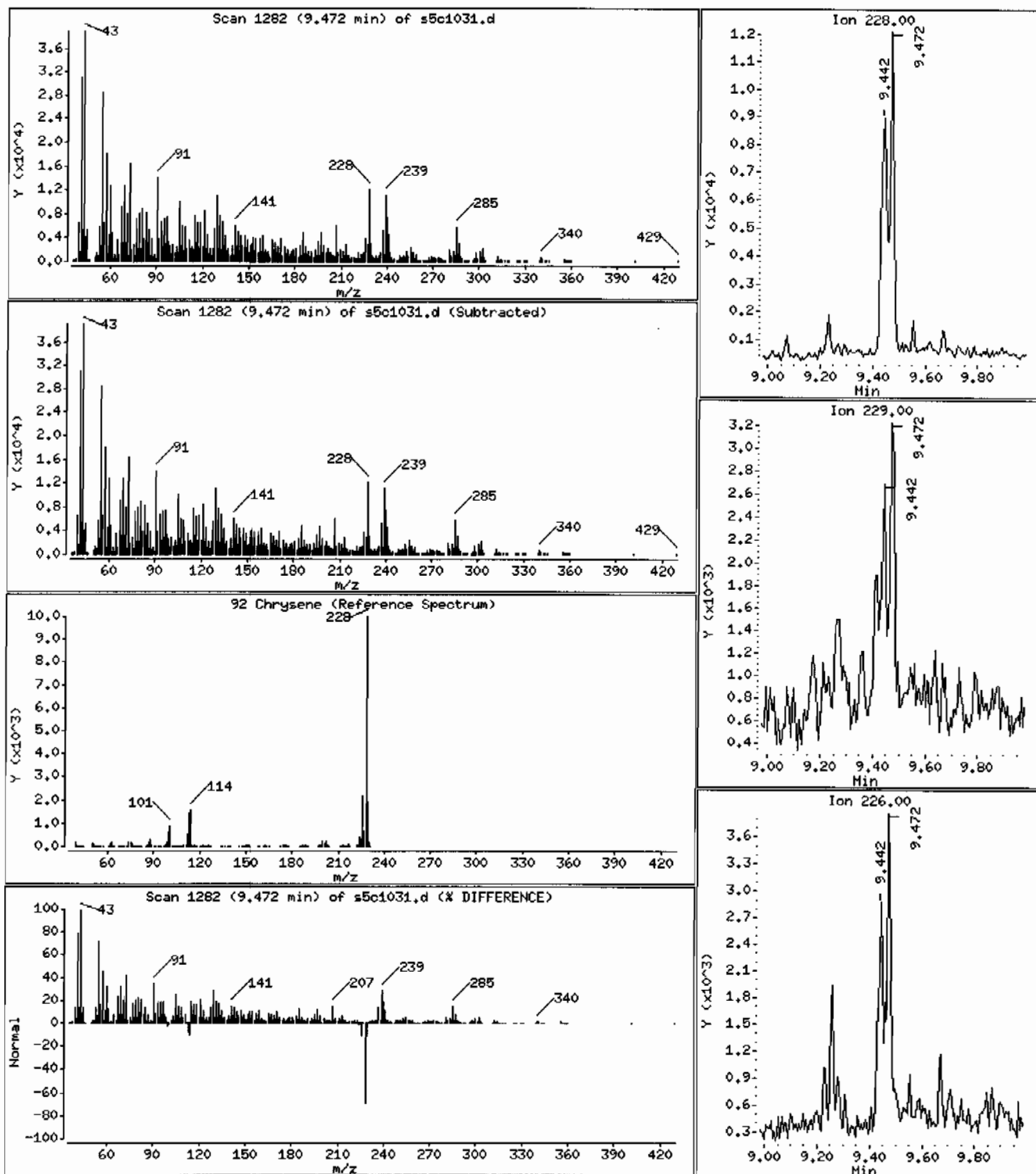
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 26.4 ug/Kg



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 12482400011960659111SVMI11LANL

Volume Injected (uL): 0.5

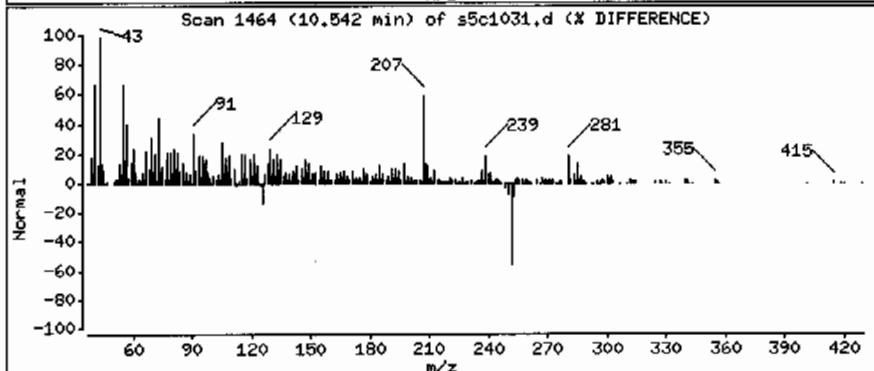
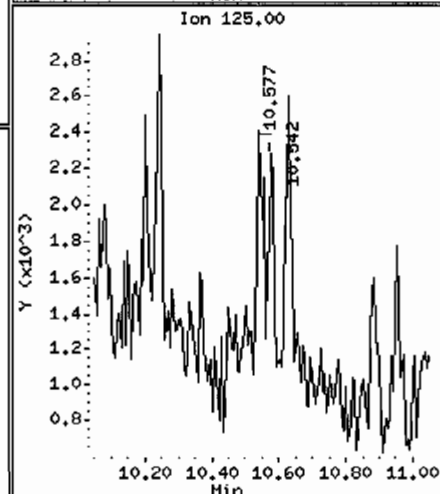
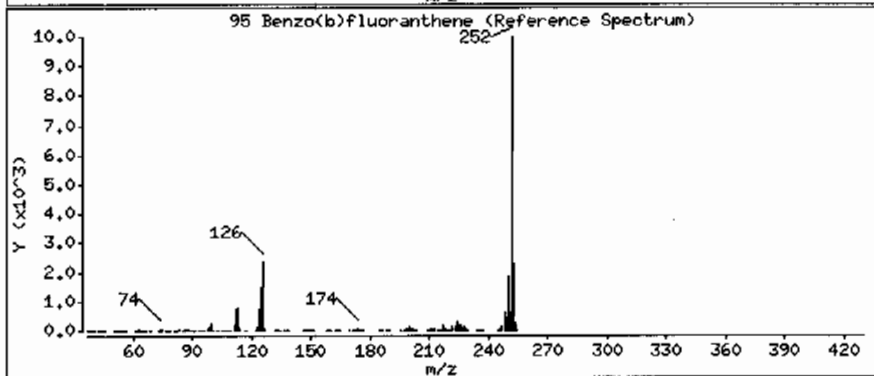
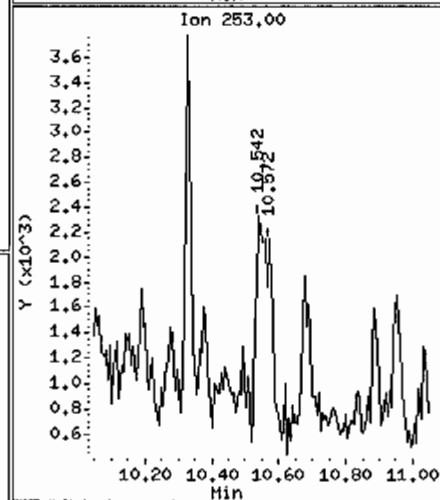
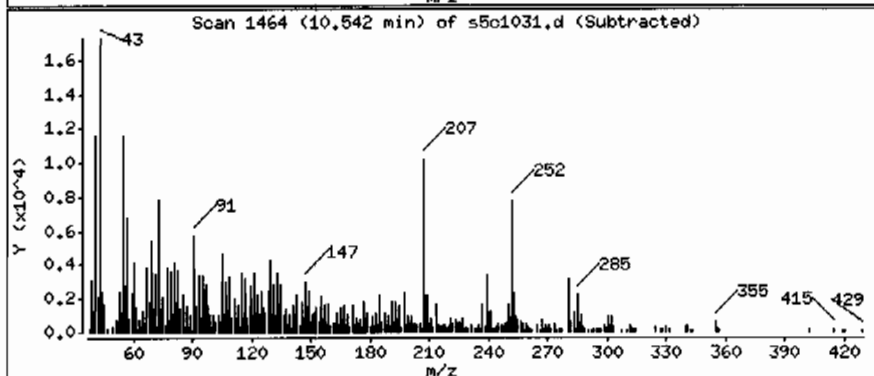
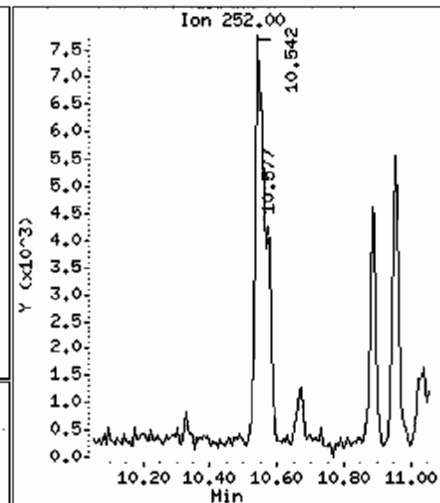
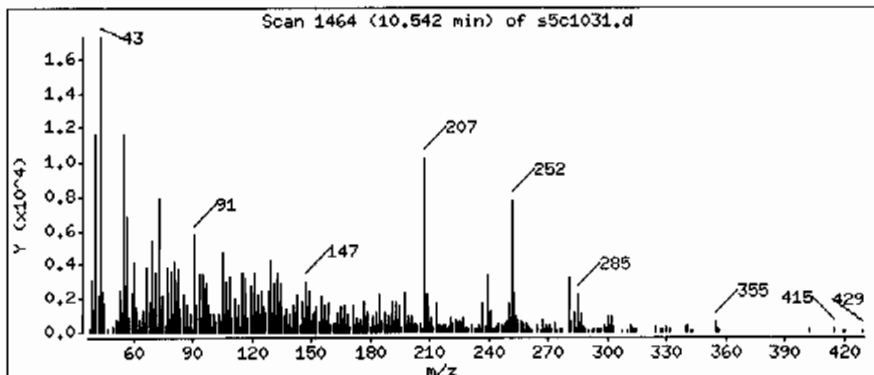
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 30.1 ug/Kg



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: I248240001196065911SVMI11LANL

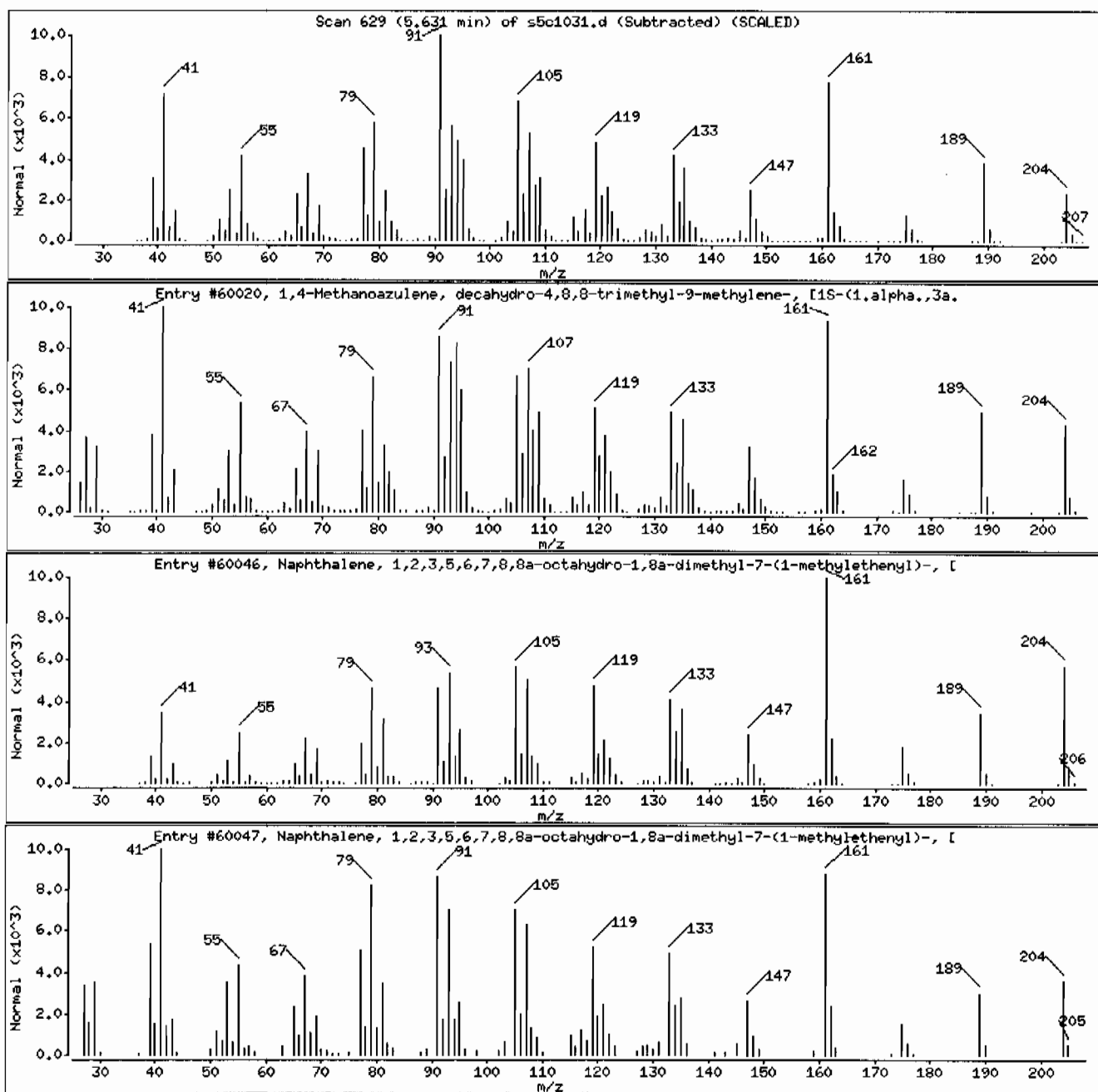
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	95	C15H24	204



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911ISVH11ILANL

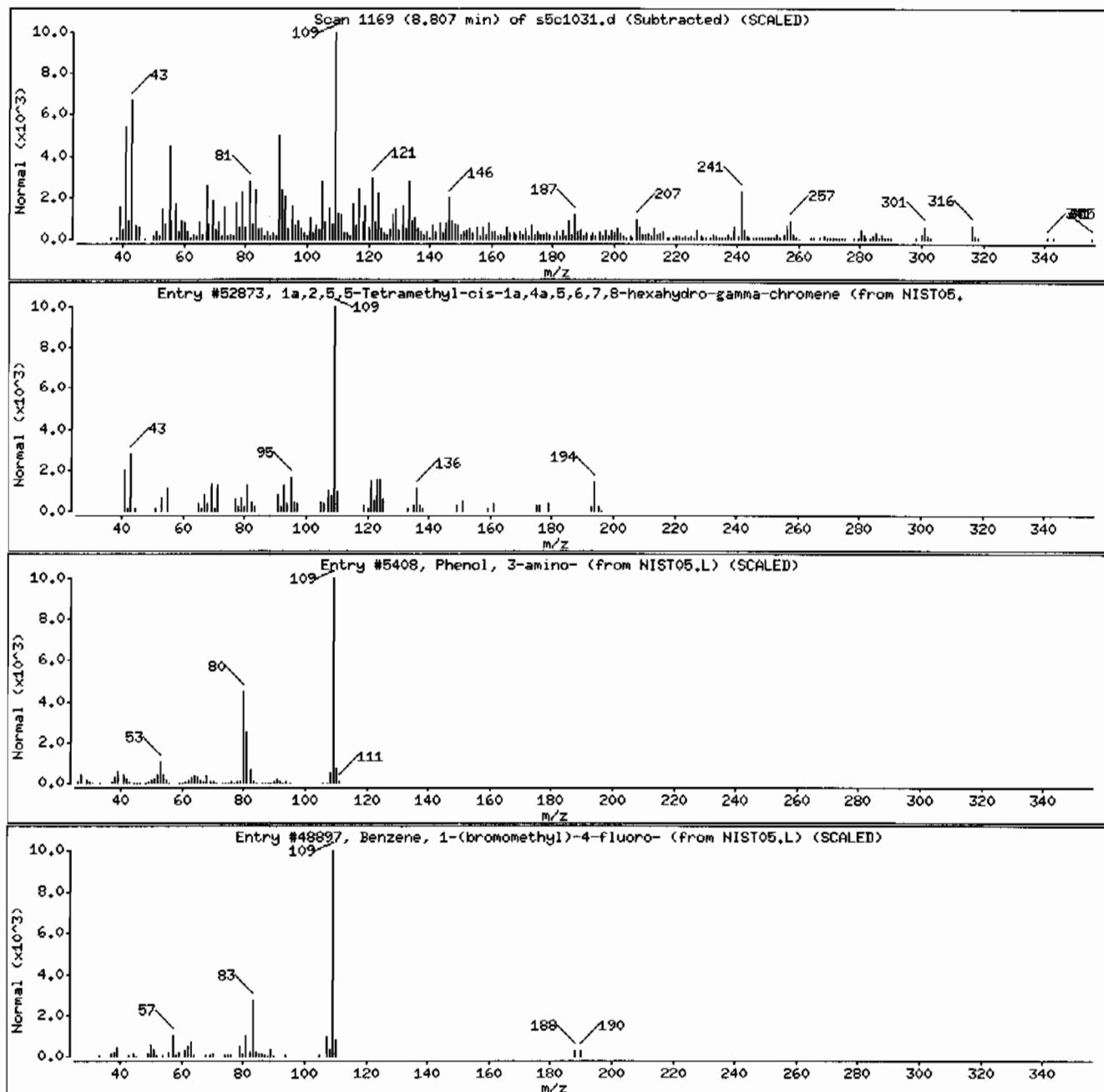
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	27	C13H22O	194
Phenol, 3-amino-	591-27-5	NIST05.L	5408	25	C6H7NO	109
Benzene, 1-(bromomethyl)-4-fluoro-	459-46-1	NIST05.L	48897	25	C7H6BrF	188



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: I248240001196065911ISVM11ILANL

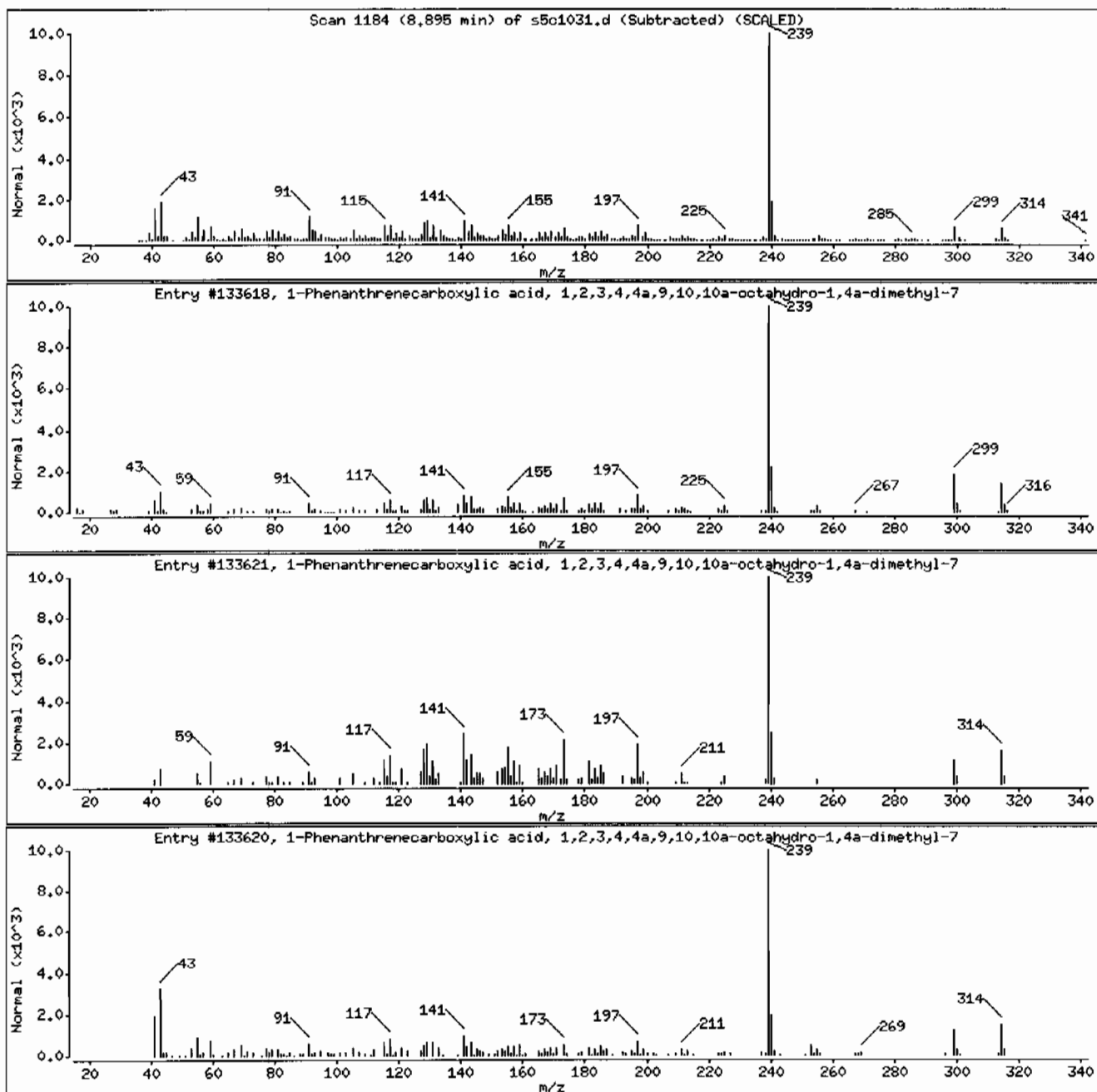
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVMI1ILANL

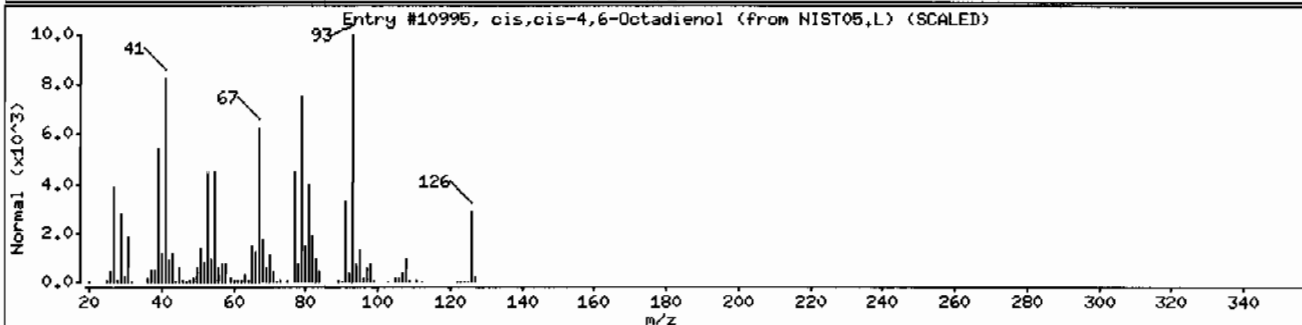
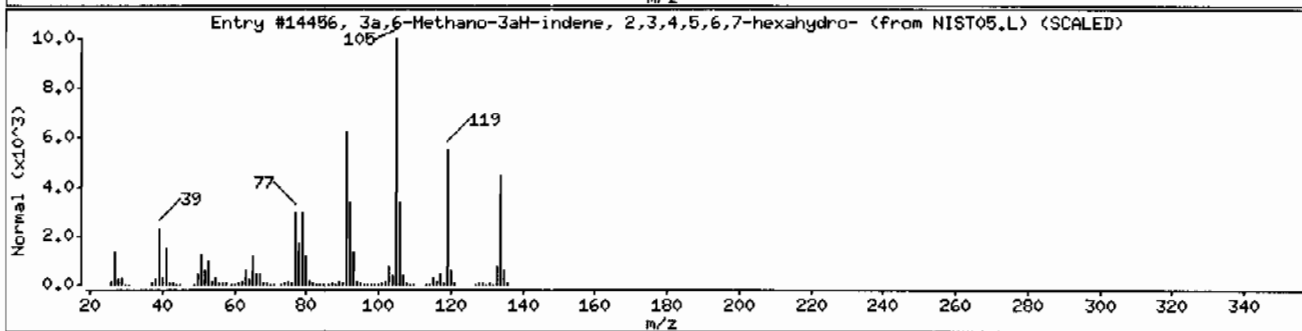
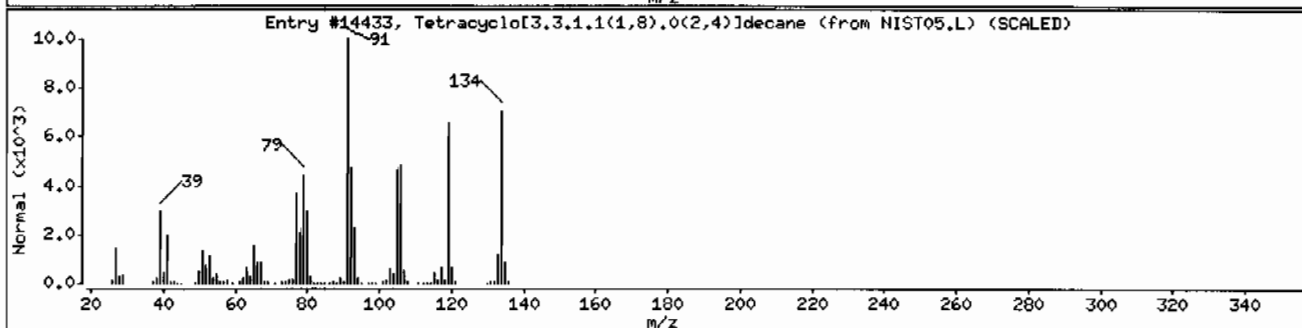
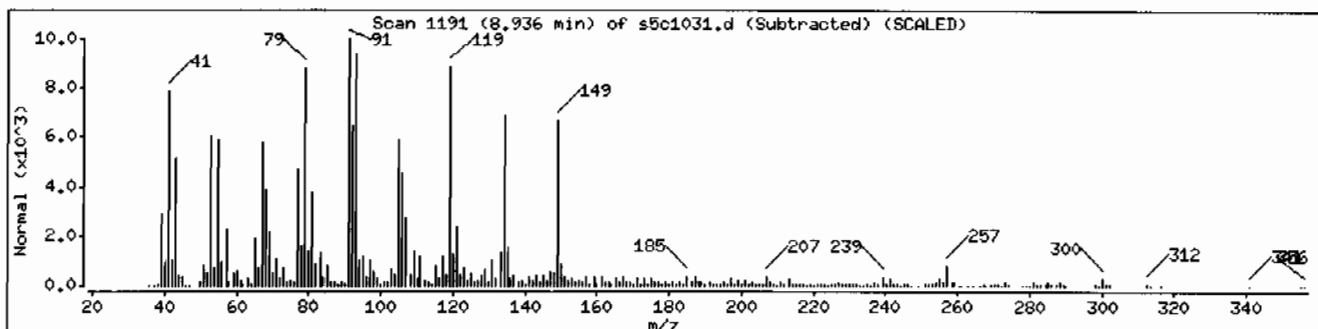
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracyclo[3.3.1.1(1,8).0(2,4)]decane	1000185-58-7	NIST05.L	14433	64	C10H14	134
3a,6-Methano-3aH-indene, 2,3,4,5,6,7-hex	98640-10-9	NIST05.L	14456	46	C10H14	134
cis,cis-4,6-Octadienol	80106-30-5	NIST05.L	10995	30	C8H14O	126



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 1248240001|960659|1|SVMI1|LANL

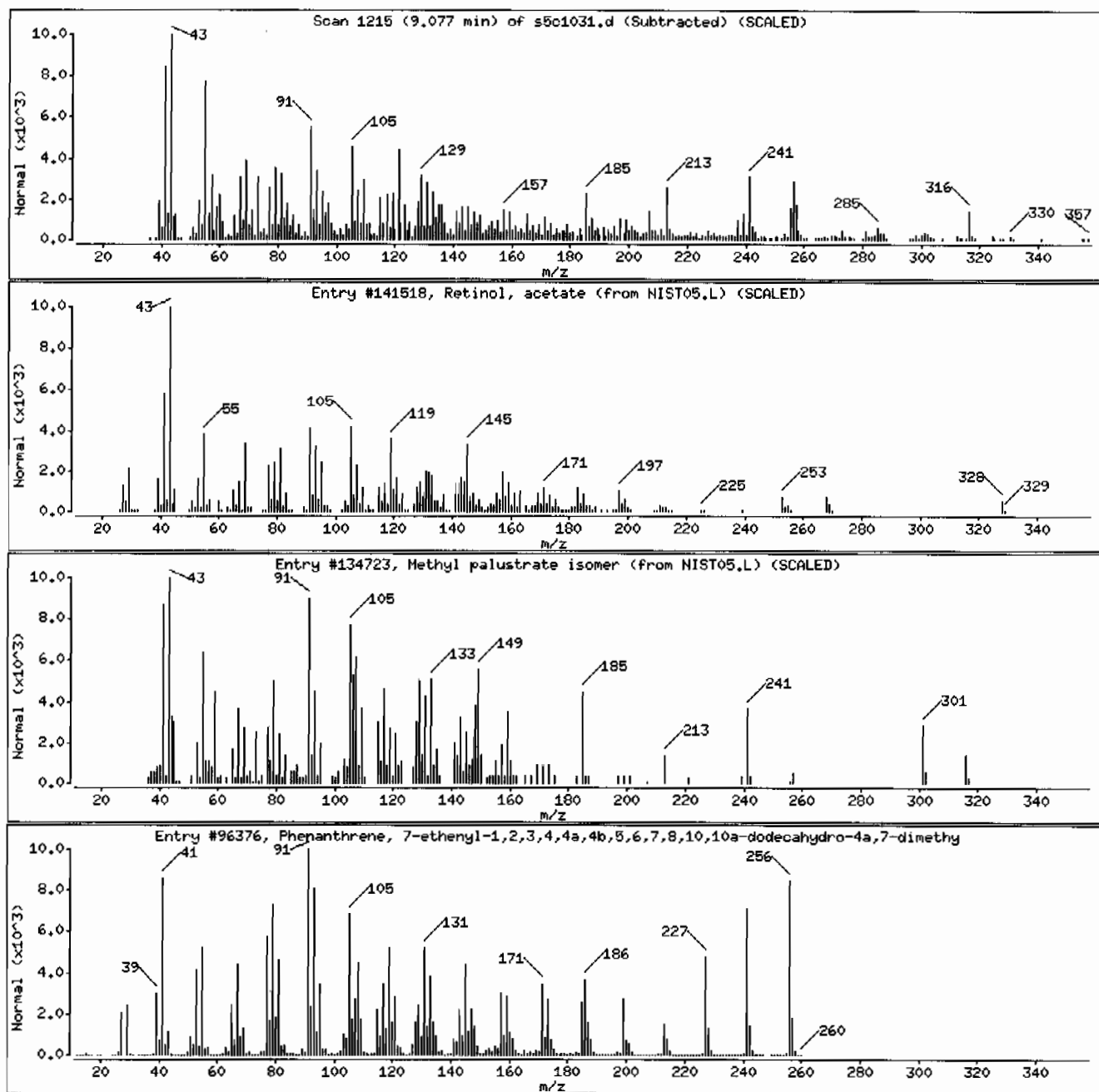
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinol, acetate	127-47-9	NIST05.L	141518	45	C22H32O2	328
Methyl palustrate isomer	3310-94-9	NIST05.L	134723	43	C21H32O2	316
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	41	C19H28	256



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVMI11LANL

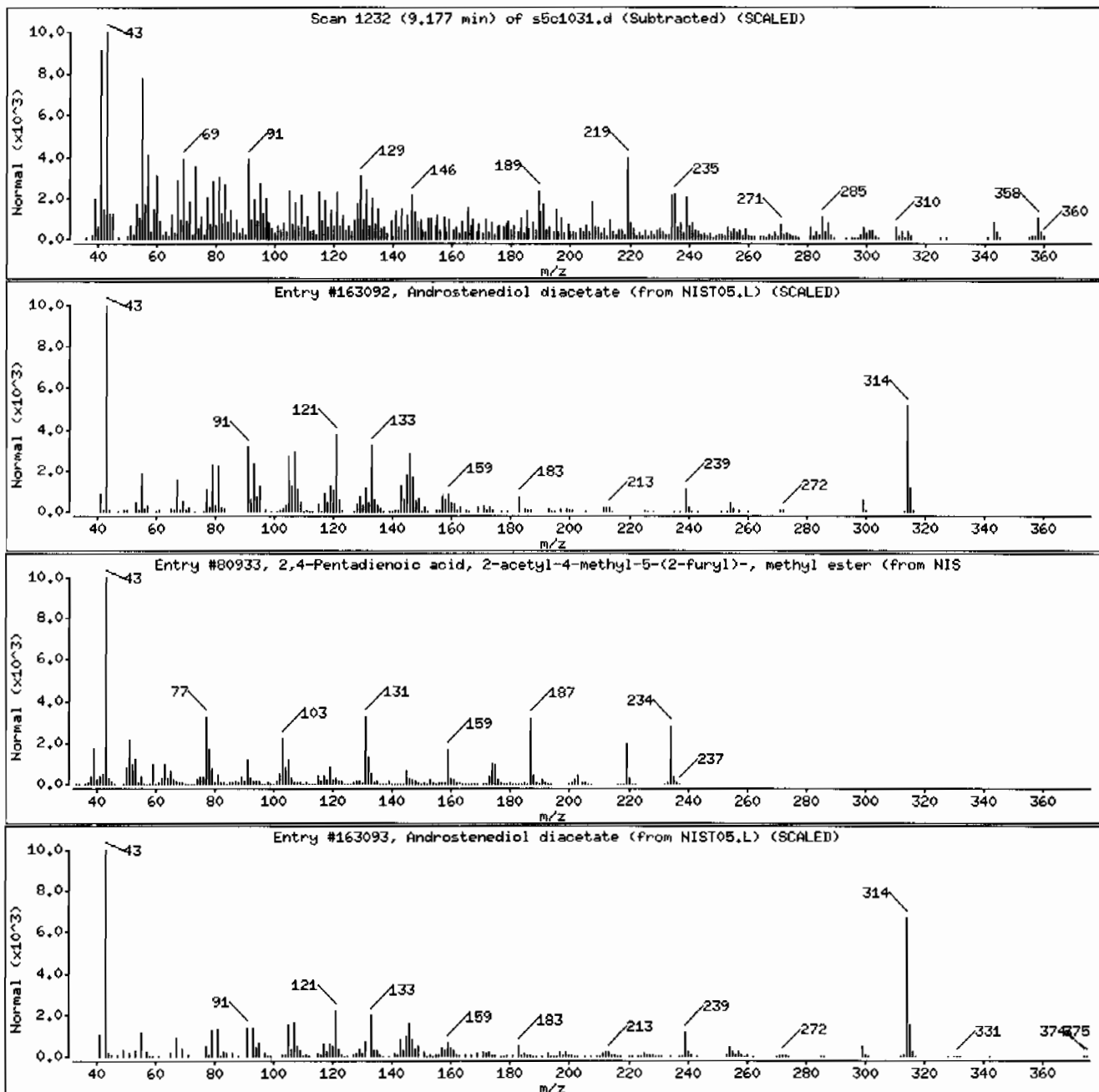
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androstenediol diacetate	116262-99-8	NIST05.L	163092	15	C23H34O4	374
2,4-Pentadienoic acid, 2-acetyl-4-methyl	349496-09-9	NIST05.L	80933	10	C13H14O4	234
Androstenediol diacetate	116262-99-8	NIST05.L	163093	10	C23H34O4	374



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVMI11LANL

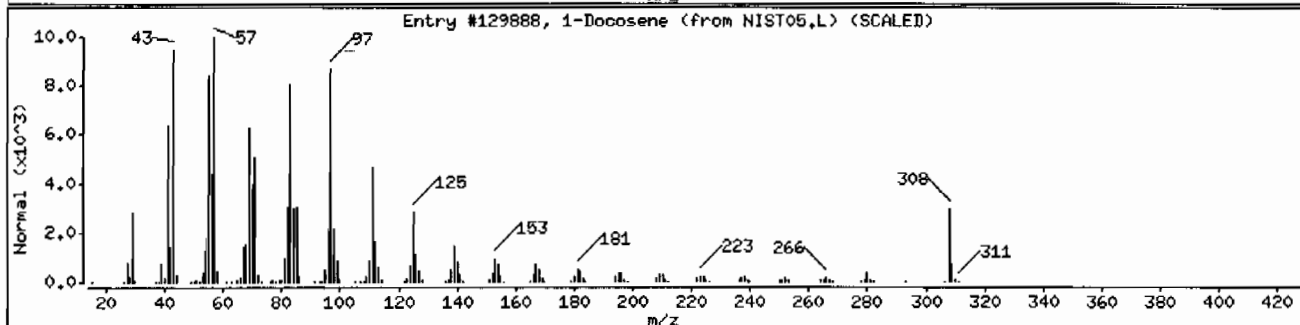
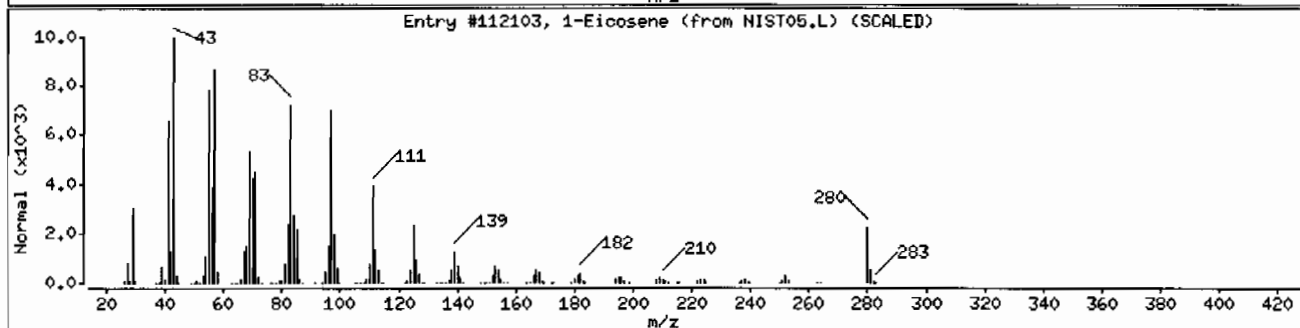
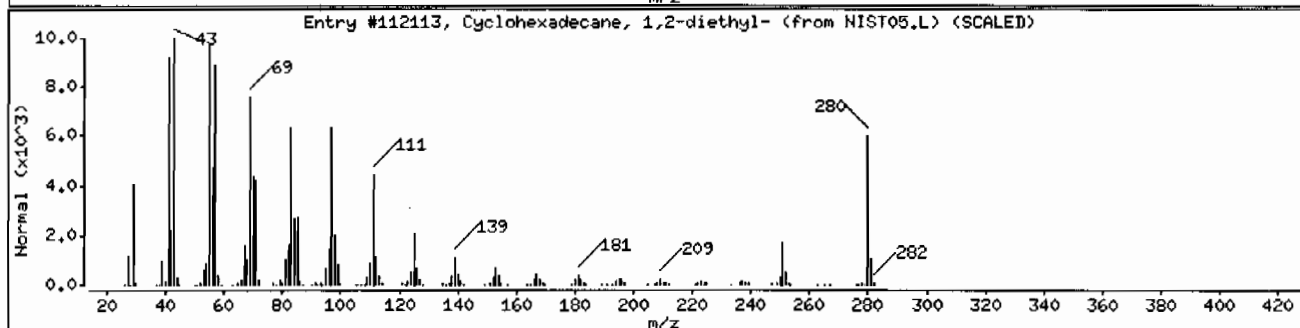
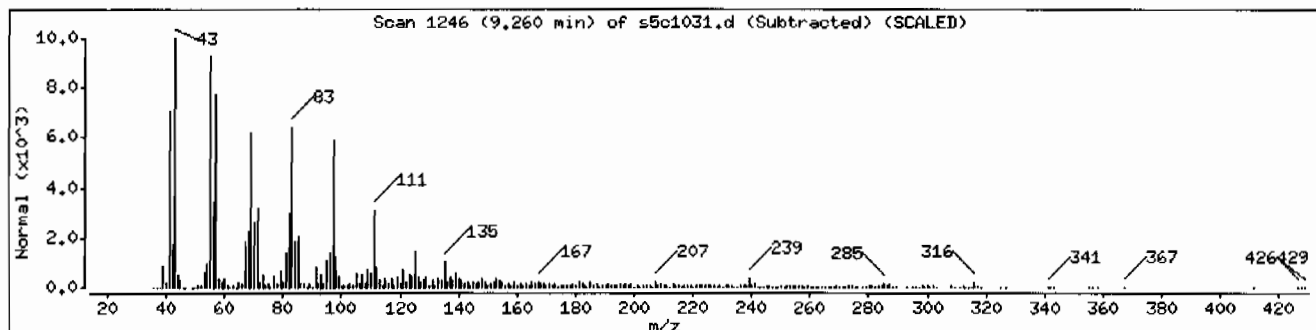
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexadecane, 1,2-diethyl-	1000155-85-3	NIST05.L	112113	97	C ₂₀ H ₄₀	280
1-Eicosene	3452-07-1	NIST05.L	112103	96	C ₂₀ H ₄₀	280
1-Docosene	1599-67-3	NIST05.L	129888	95	C ₂₂ H ₄₄	308



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVH111LANL

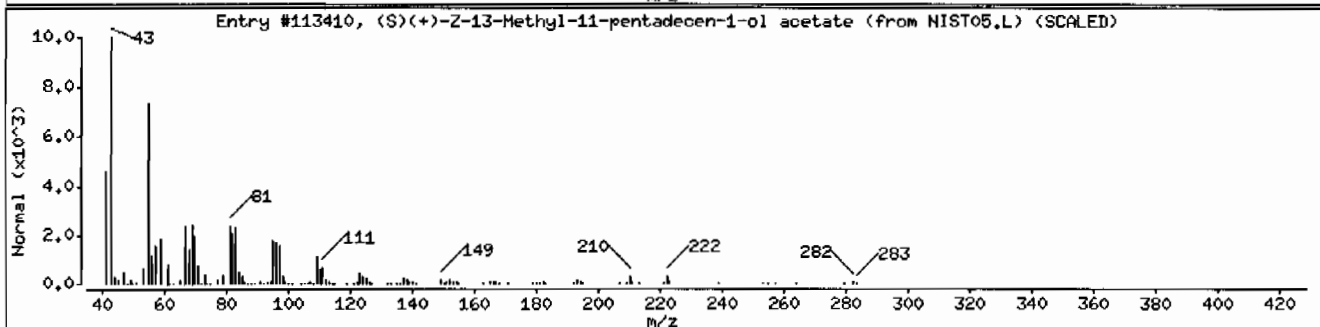
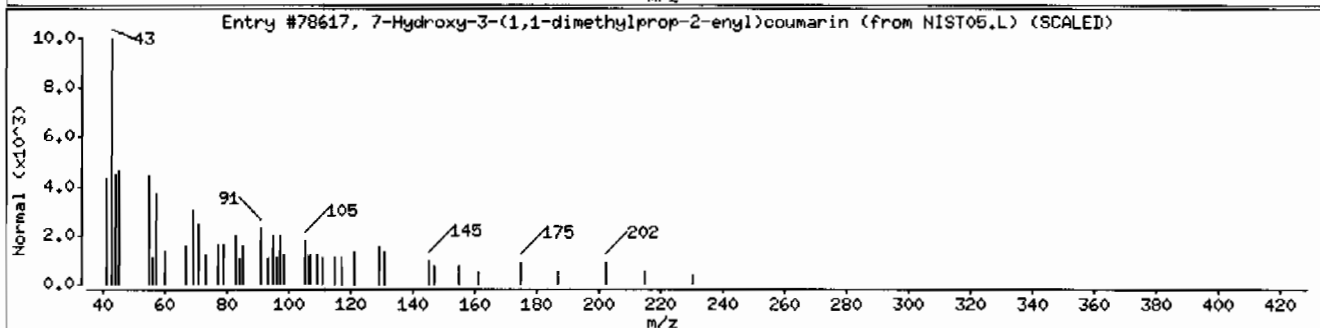
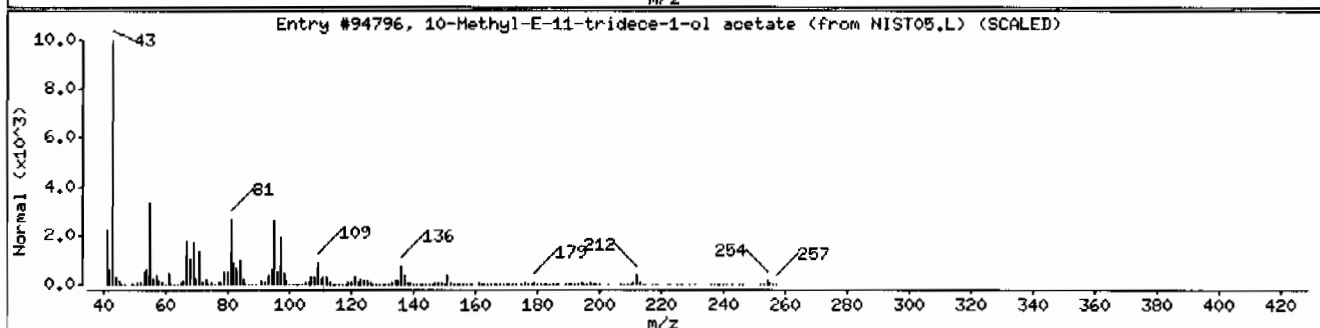
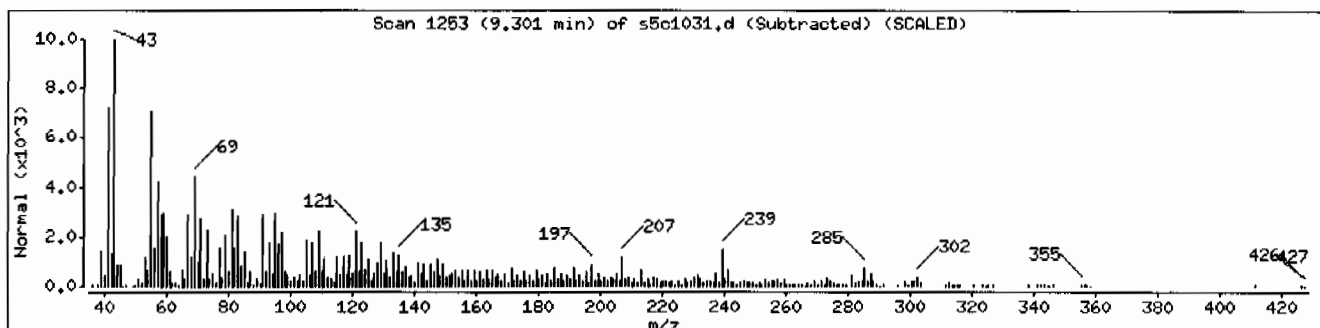
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
10-Methyl-E-11-tridece-1-ol acetate	1000130-97-3	NIST05.L	94796	47	C16H30O2	254
7-Hydroxy-3-(1,1-dimethylprop-2-enyl)cou	56881-08-4	NIST05.L	78617	44	C14H14O3	230
(S)(+)-2-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	42	C18H34O2	282



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 124824000196065911SVH11ILANL

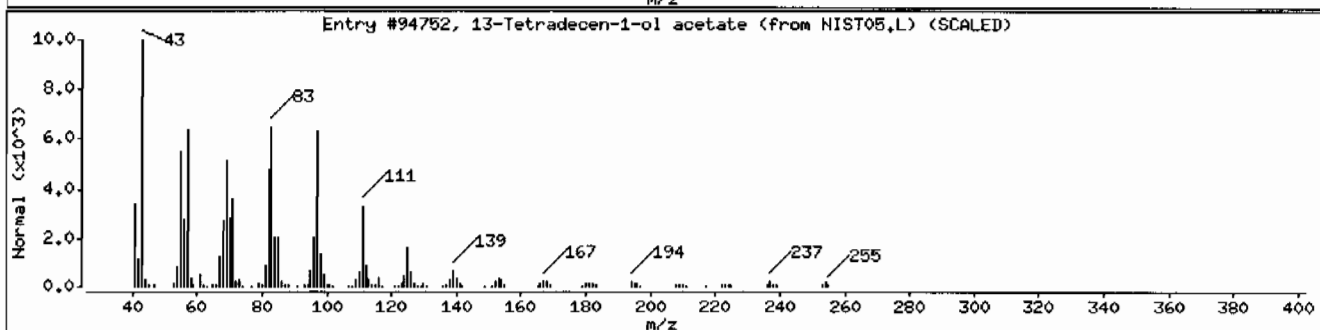
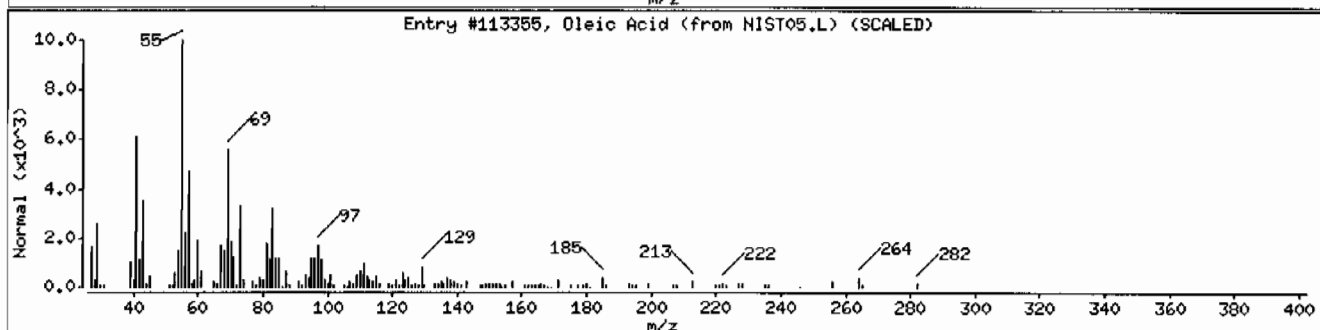
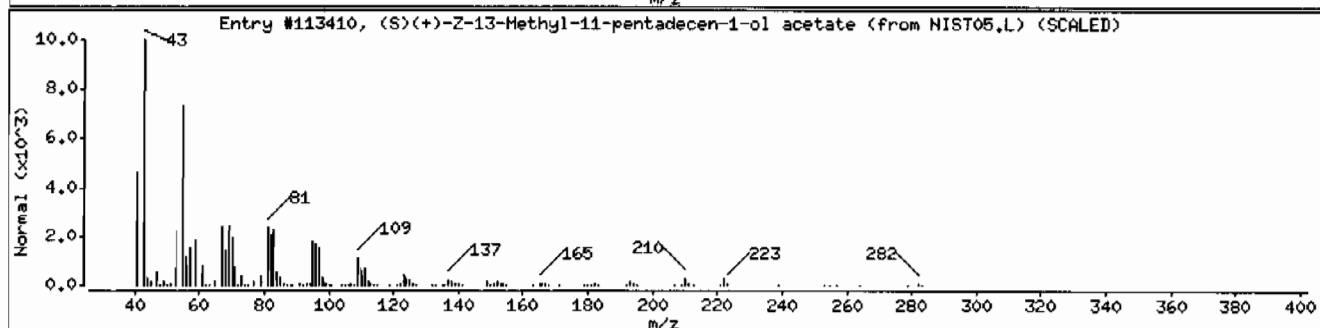
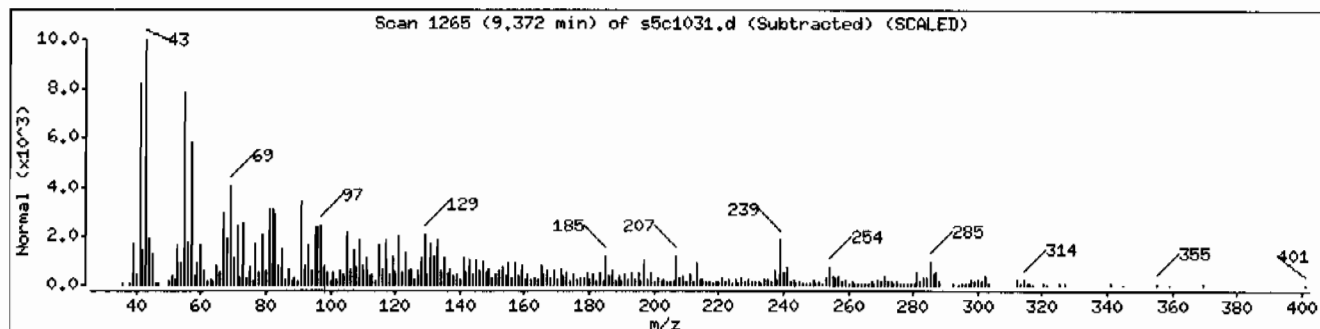
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(S)(+)-2-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	64	C18H34O2	282
Oleic Acid	112-80-1	NIST05.L	113355	51	C18H34O2	282
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	46	C16H30O2	254



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911ISVH11ILANL

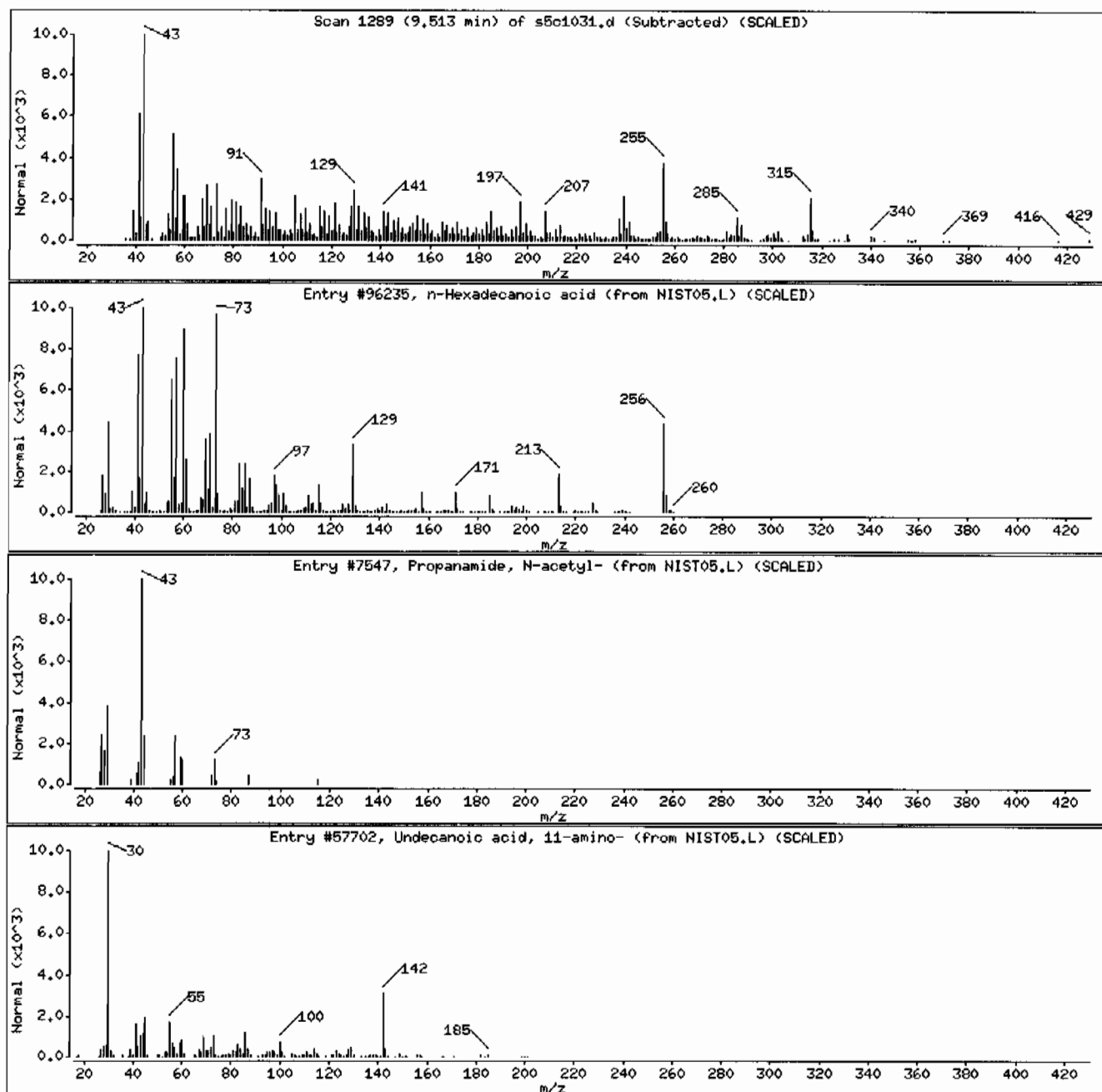
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	15	C16H32O2	256
Propanamide, N-acetyl-	19264-34-7	NIST05.L	7547	14	C5H9NO2	115
Undecanoic acid, 11-amino-	2432-99-7	NIST05.L	57702	12	C11H23NO2	201



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 1248240001196065911ISVM11LANL

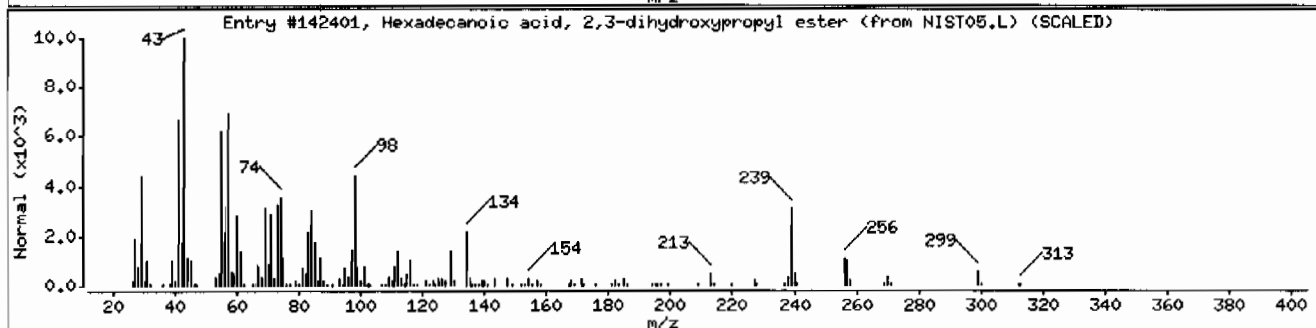
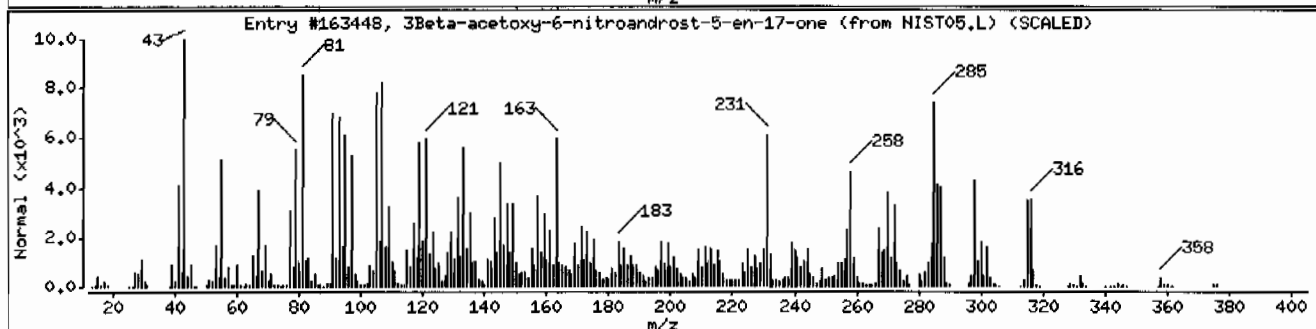
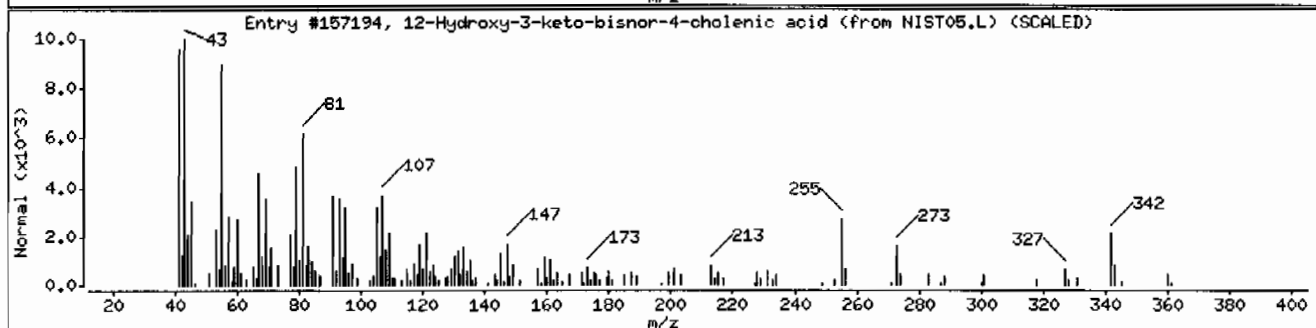
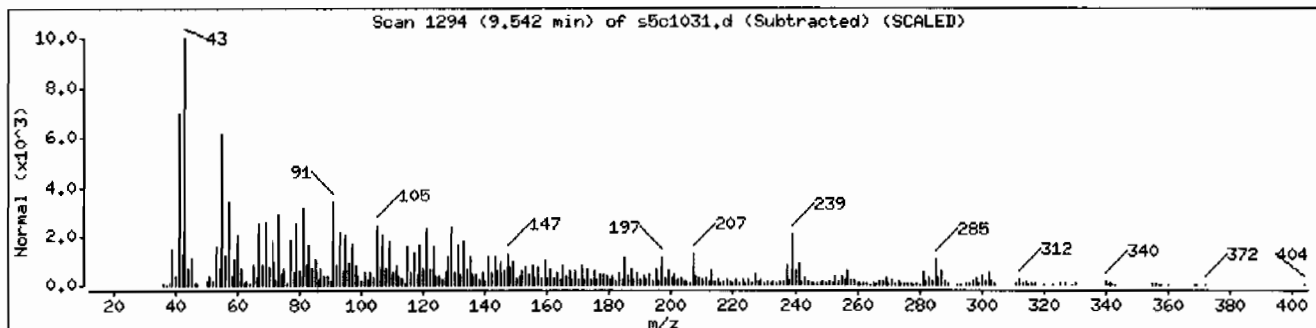
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
12-Hydroxy-3-keto-bisnor-4-cholenic acid	1000252-01-5	NIST05.L	157194	42	C22H32O4	360
3Beta-acetoxy-6-nitroandrost-5-en-17-one	31559-86-1	NIST05.L	163448	38	C21H29NO5	376
Hexadecanoic acid, 2,3-dihydroxypropyl e	542-44-9	NIST05.L	142401	25	C19H38O4	330



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.1

Sample Info: 1248240001196065911SVMI11LANL

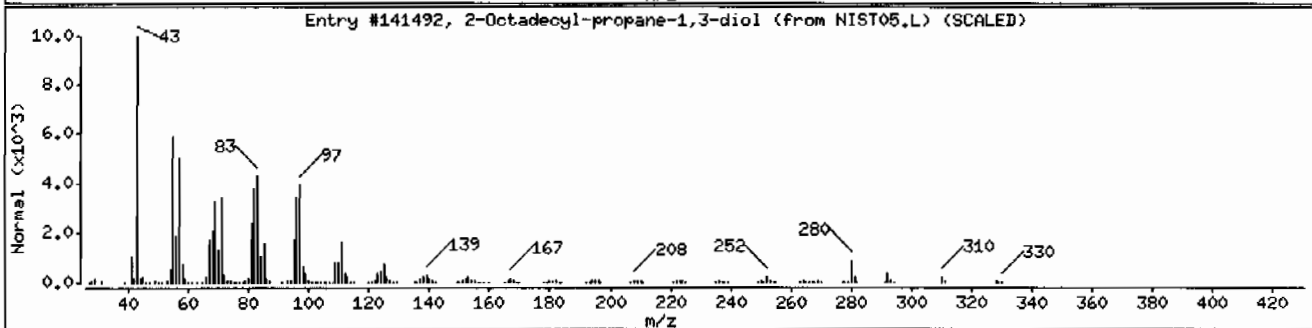
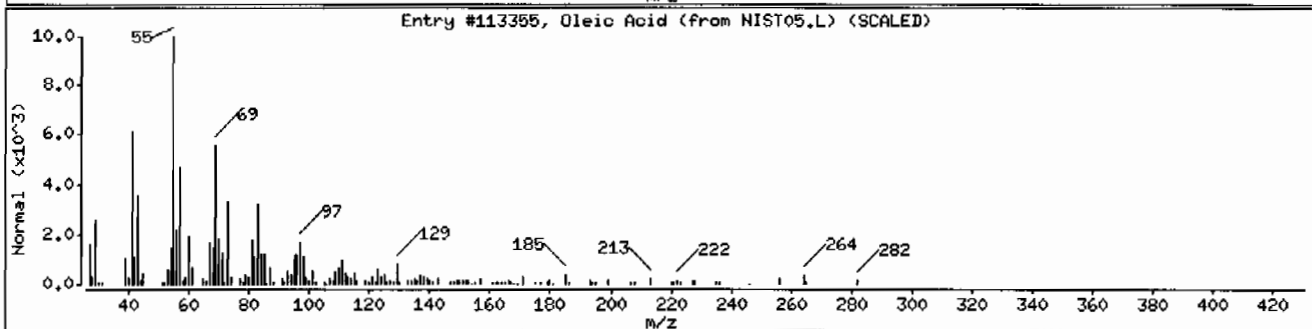
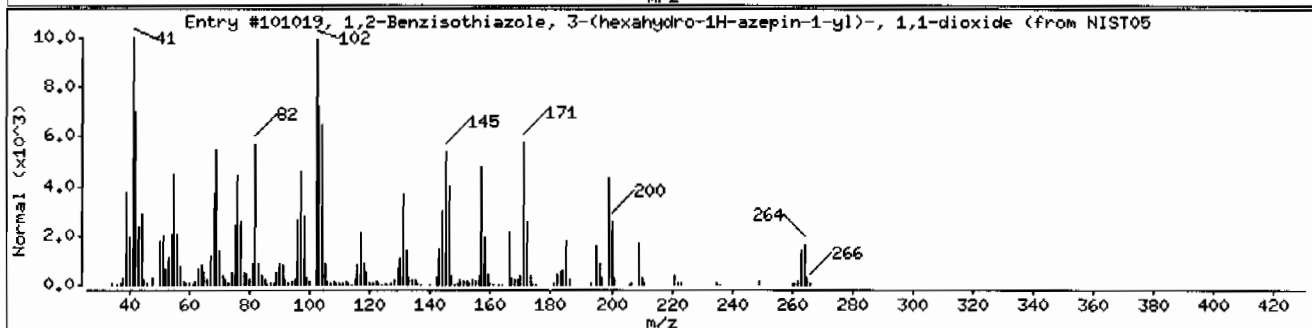
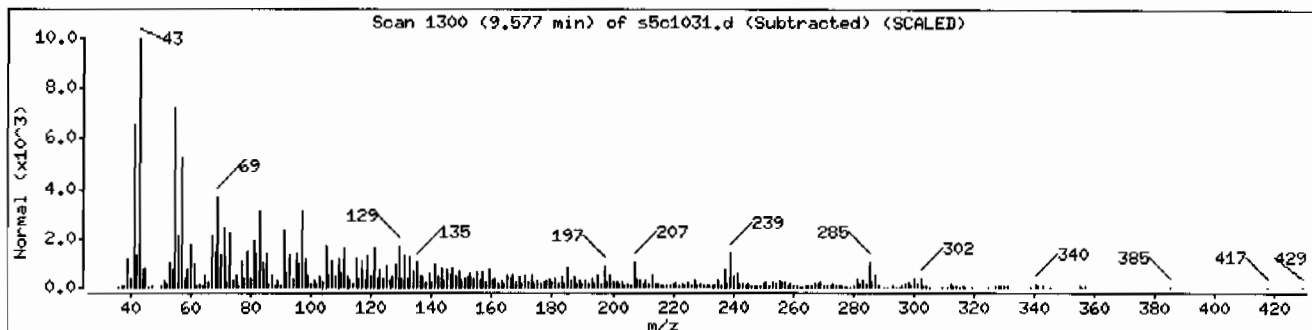
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-aze	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
Oleic Acid	112-80-1	NIST05.L	113355	62	C18H34O2	282
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	55	C21H44O2	328



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 1248240001196065911SVH111LANL

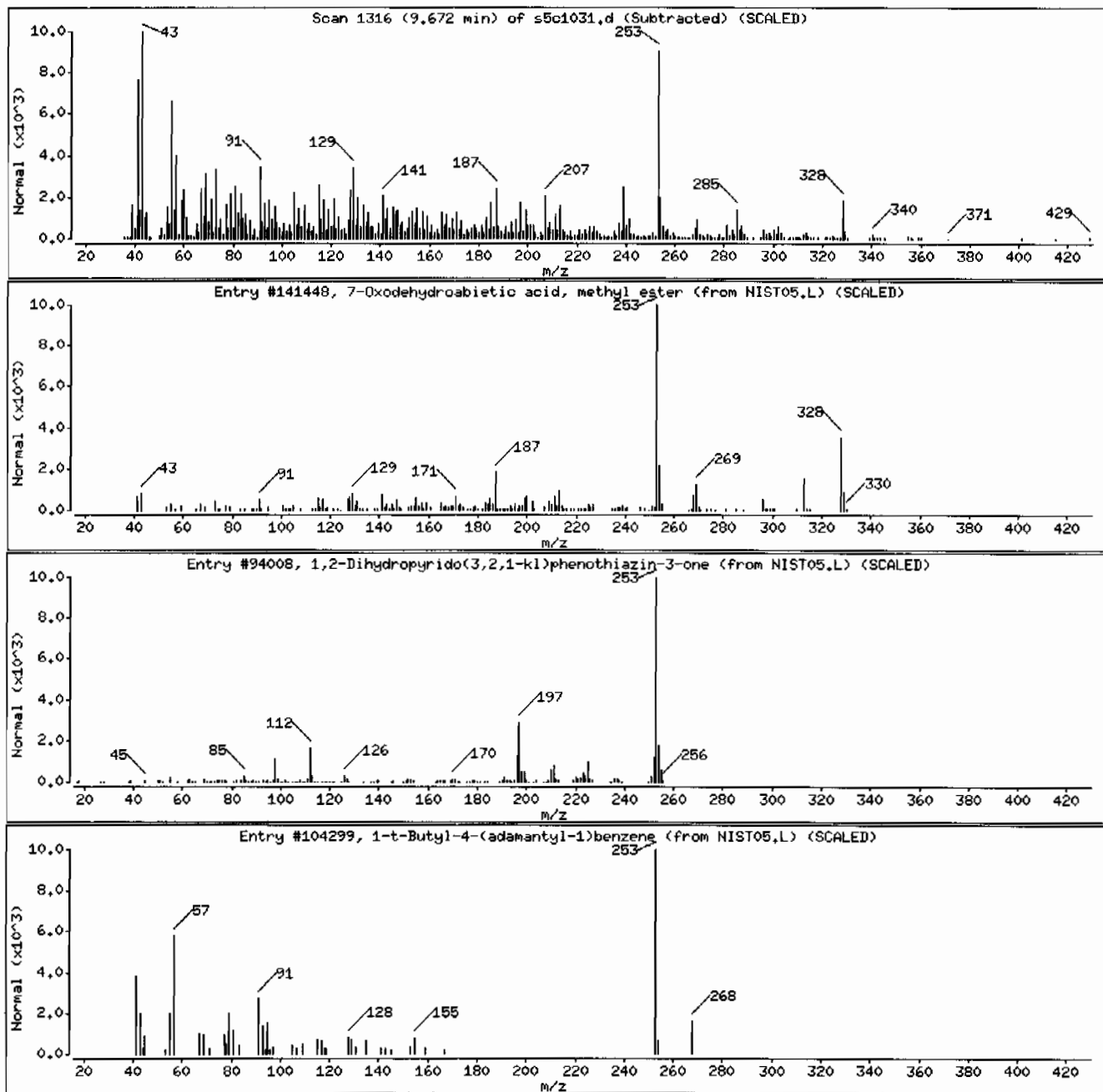
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	64	C ₂₁ H ₂₈ O ₃	328
1,2-Dihydropyrido(3,2,1-k)phenothiazin-	69513-42-4	NIST05.L	94008	55	C ₁₅ H ₁₁ NOS	253
1-t-Butyl-4-(adamantyl-1)benzene	59974-45-7	NIST05.L	104299	38	C ₂₀ H ₂₈	268



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: I248240001196065911SVH111LANL

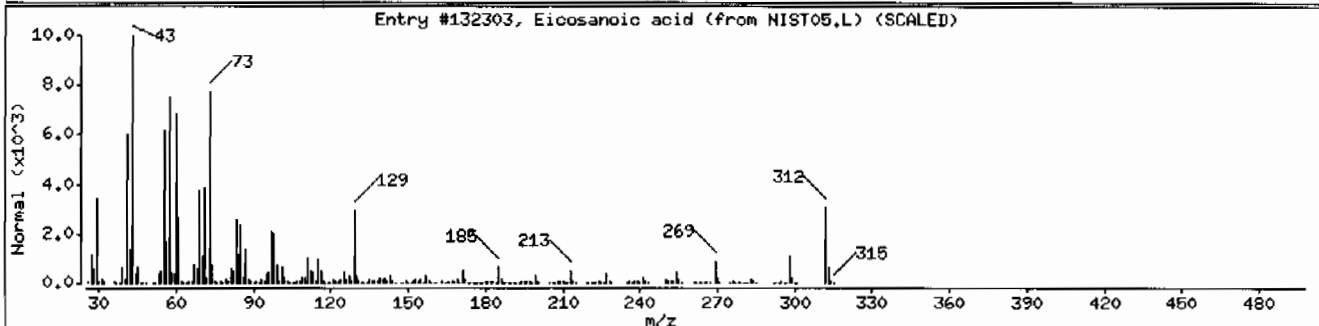
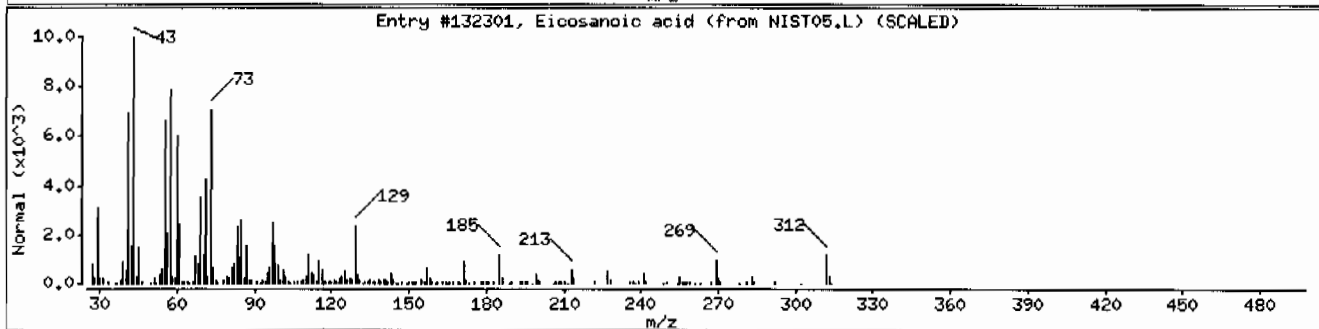
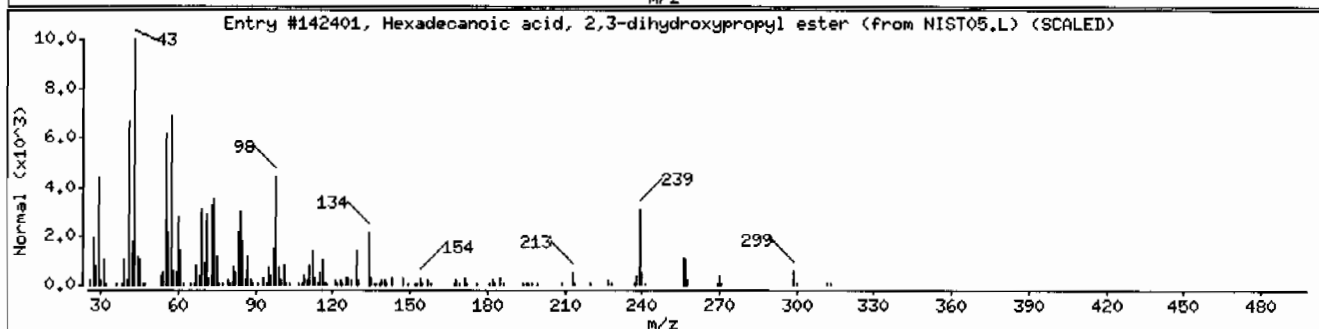
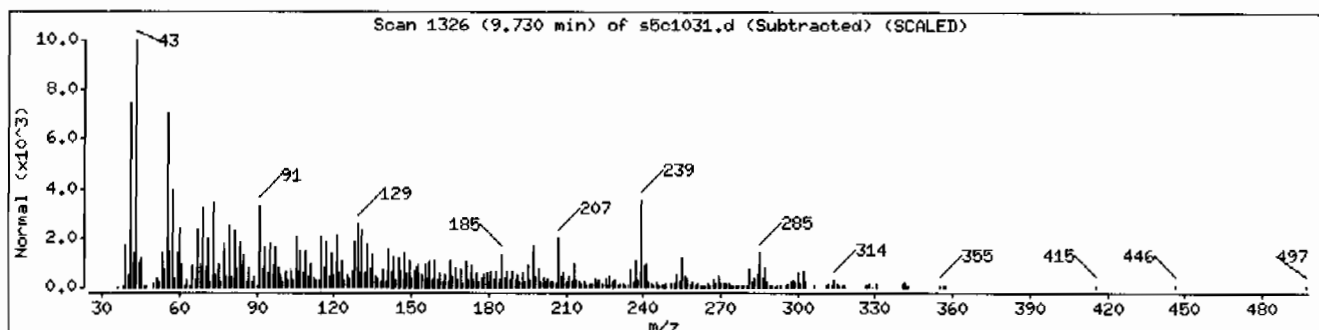
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexadecanoic acid, 2,3-dihydroxypropyl e	542-44-9	NIST05.L	142401	35	C19H38O4	330
Eicosanoic acid	506-30-9	NIST05.L	132301	22	C20H40O2	312
Eicosanoic acid	506-30-9	NIST05.L	132303	22	C20H40O2	312



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: I248240001196065911SVH111LANL

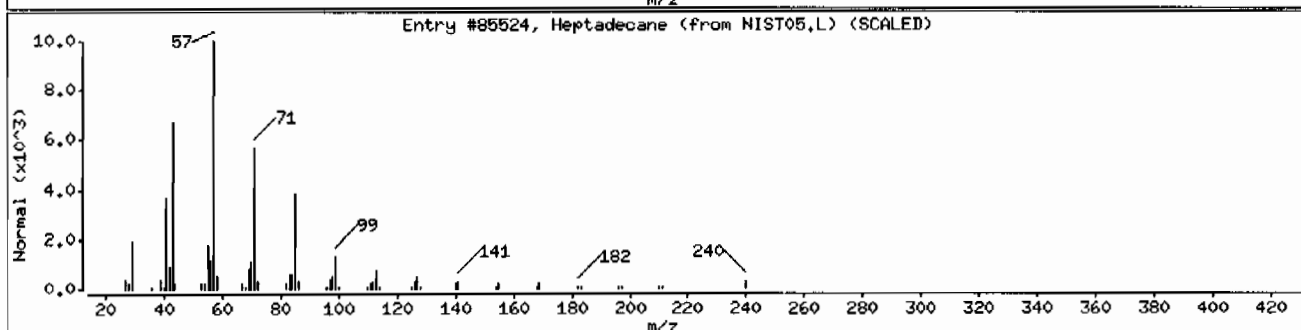
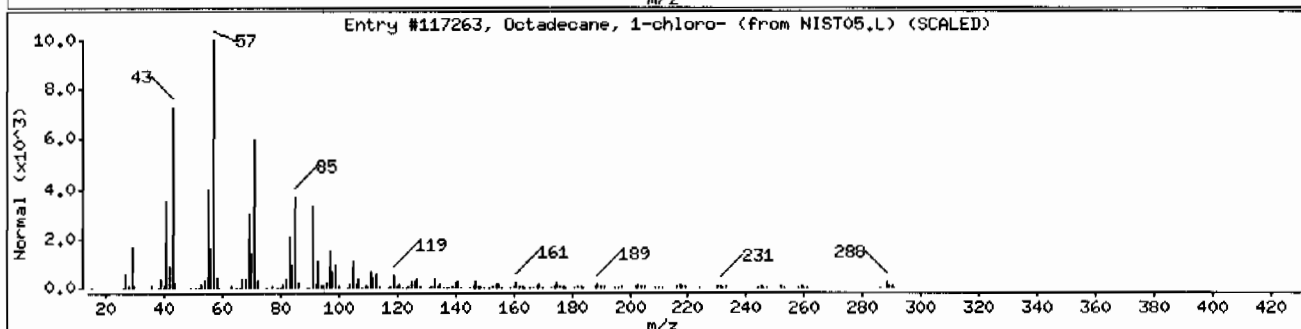
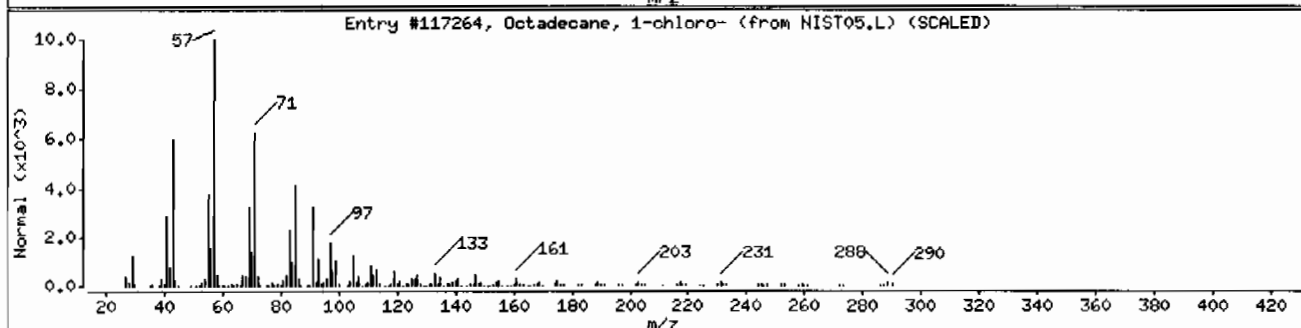
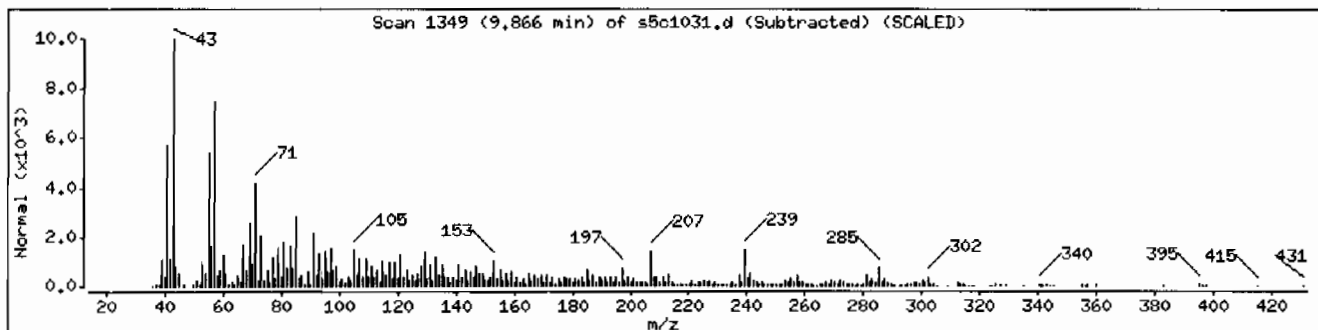
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	95	C18H37Cl	288
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	94	C18H37Cl	288
Heptadecane	629-78-7	NIST05.L	85524	94	C17H36	240



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: HSD5.i

Sample Info: 12482400011960659111SVH111LANL

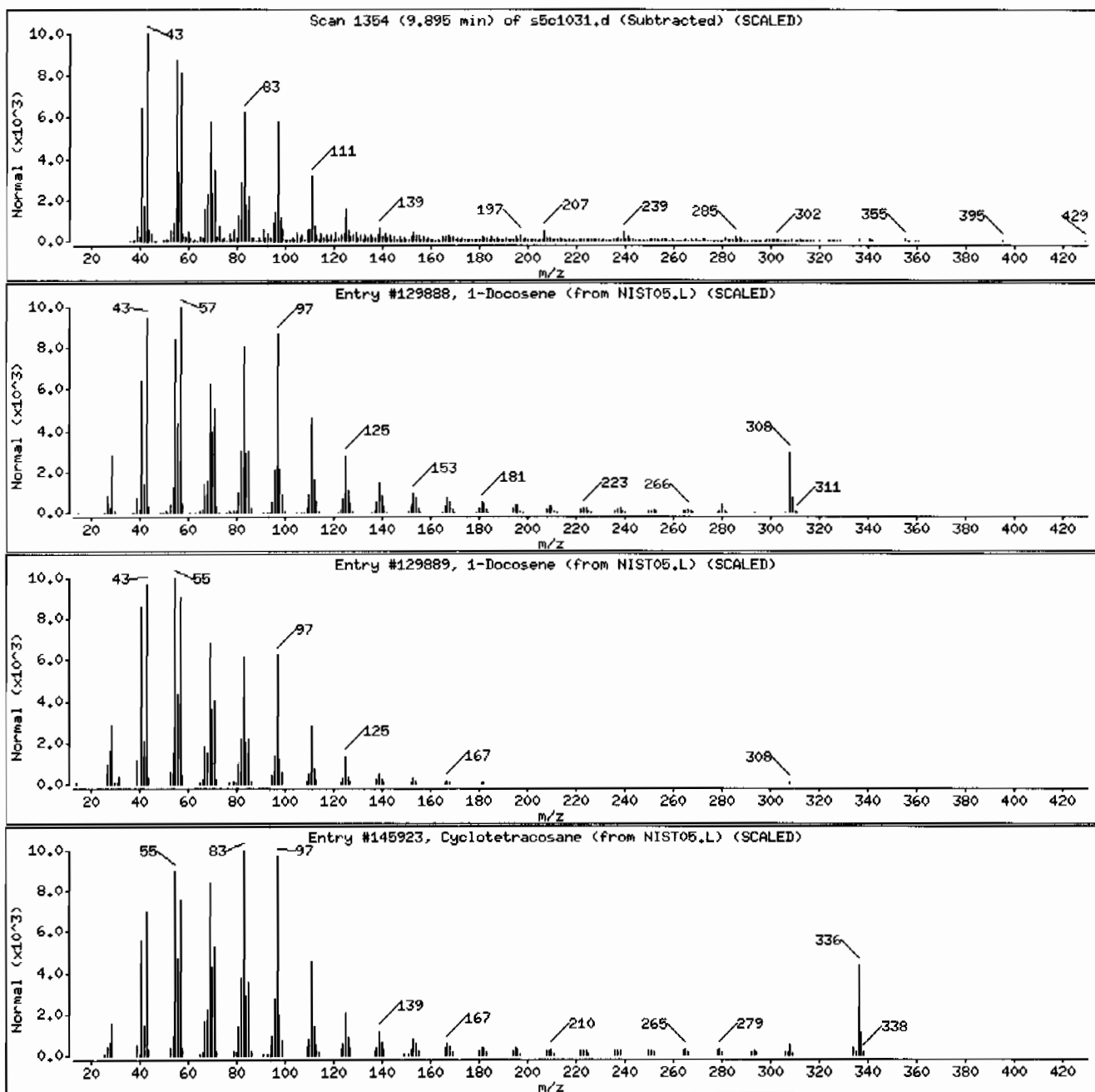
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
Cyclotetracosane	297-03-0	NIST05.L	145923	94	C24H48	336



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVMI11LANL

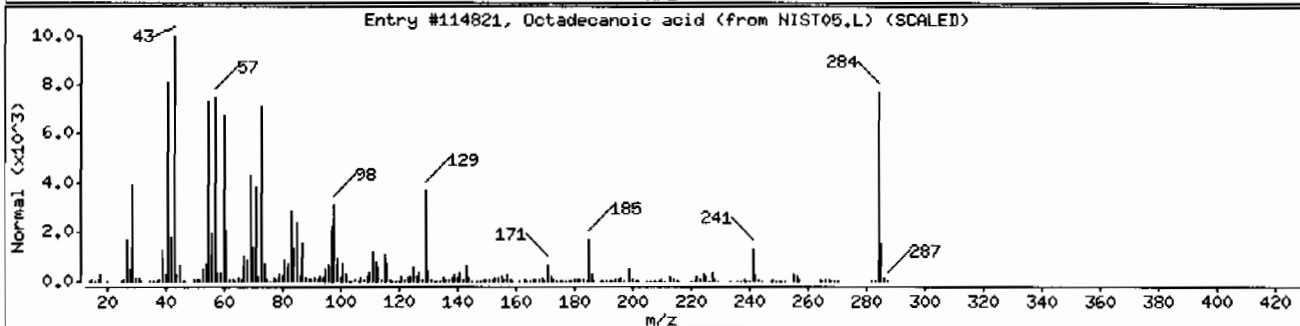
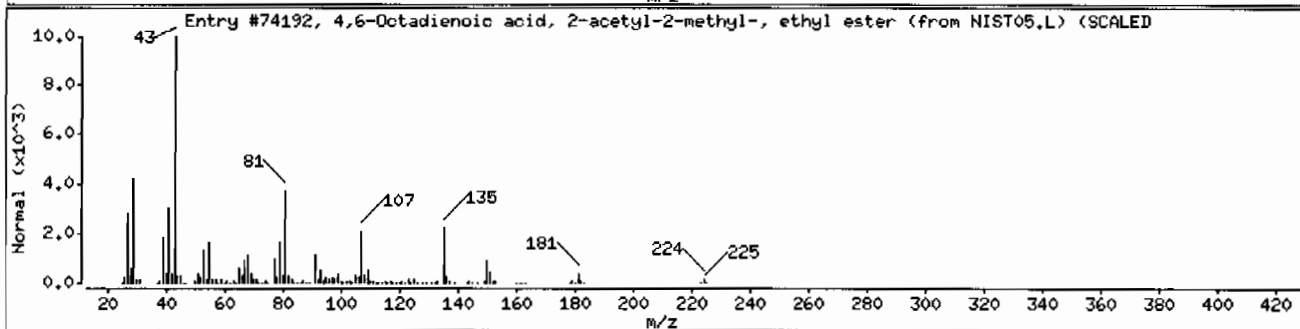
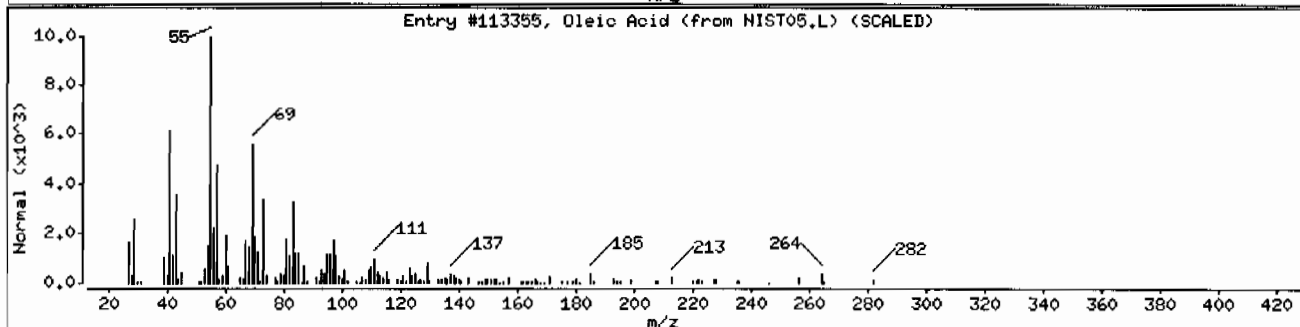
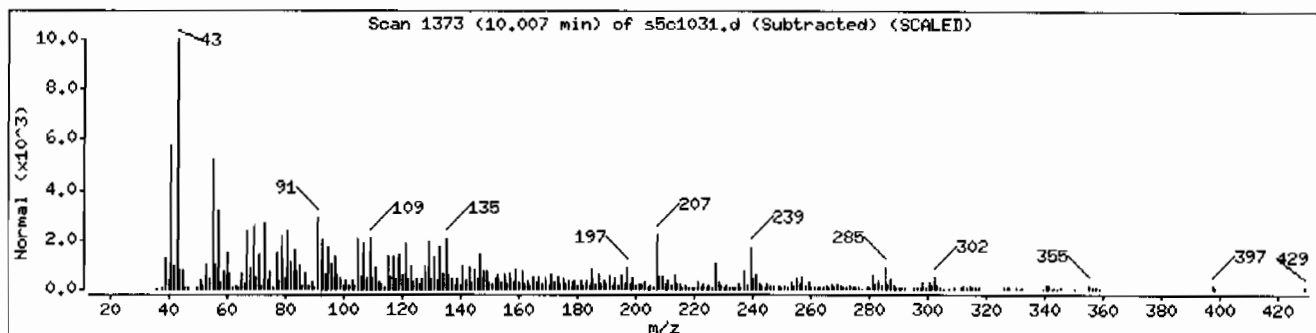
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Oleic Acid	112-80-1	NIST05.L	113355	15	C18H34O2	282
4,6-Octadienoic acid, 2-acetyl-2-methyl-	1000159-11-7	NIST05.L	74192	15	C13H20O3	224
Octadecanoic acid	57-11-4	NIST05.L	114821	10	C18H36O2	284



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVMI11LANL

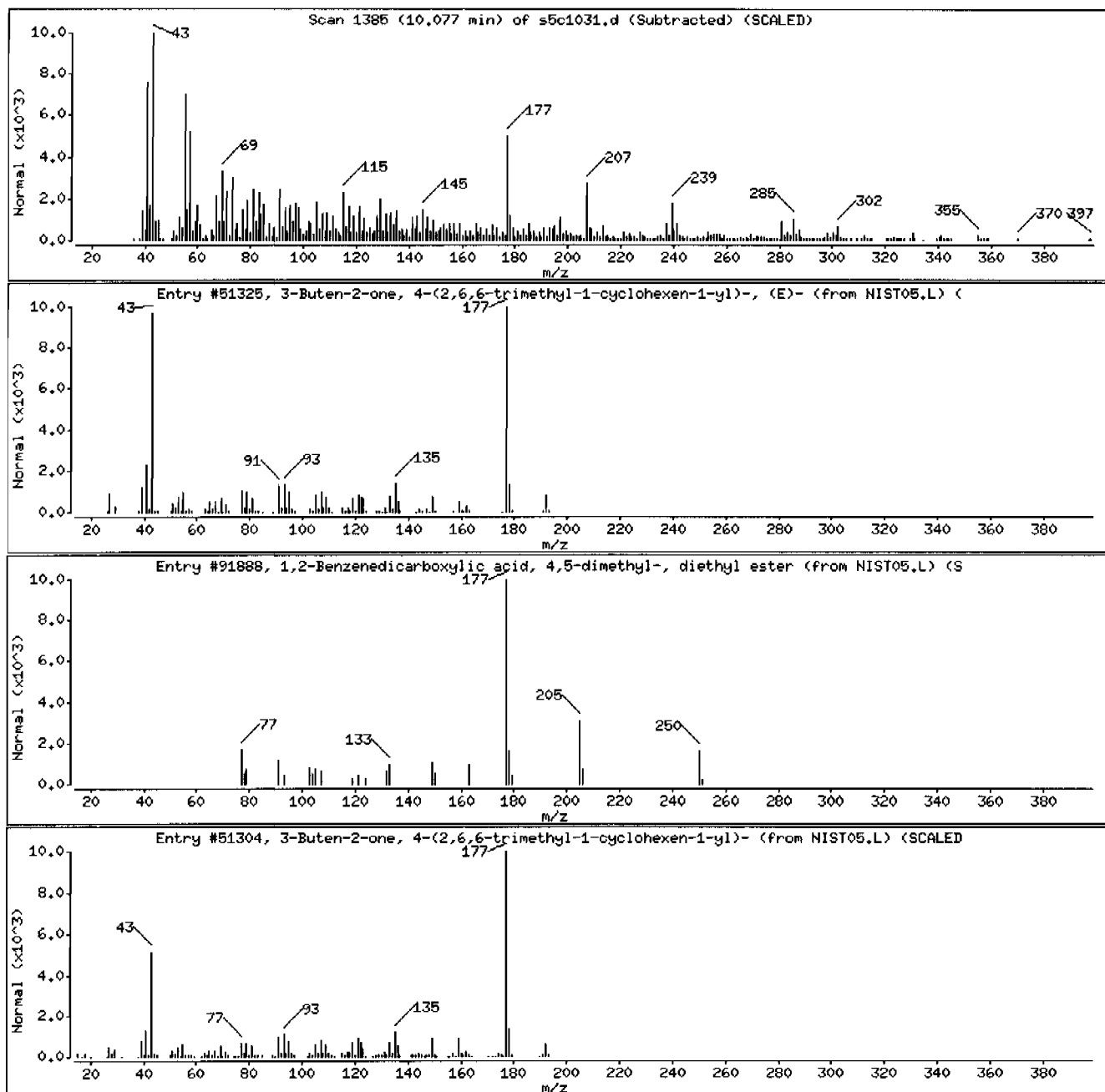
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Buten-2-one, 4-(2,6,6-trimethyl-1-cycl	79-77-6	NIST05.L	51325	35	C13H20O	192
1,2-Benzenedicarboxylic acid, 4,5-dimeth	69094-40-2	NIST05.L	91888	22	C14H18O4	250
3-Buten-2-one, 4-(2,6,6-trimethyl-1-cycl	14901-07-6	NIST05.L	51304	20	C13H20O	192



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVH111LANL

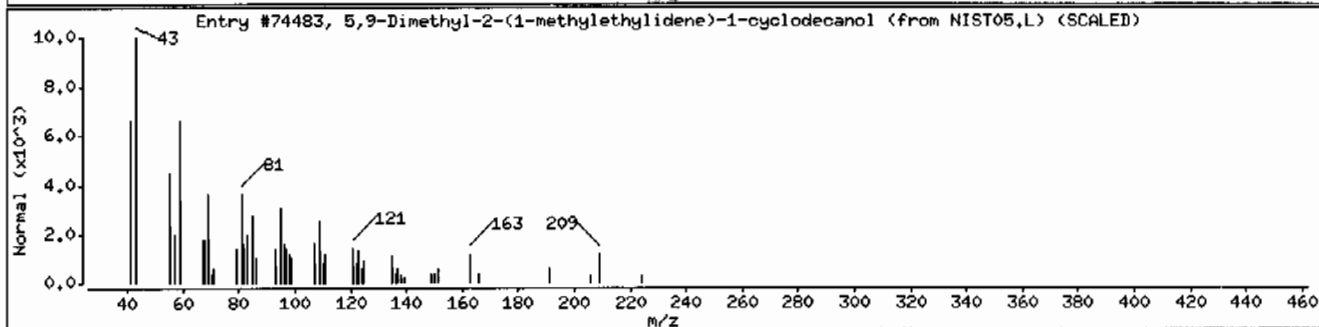
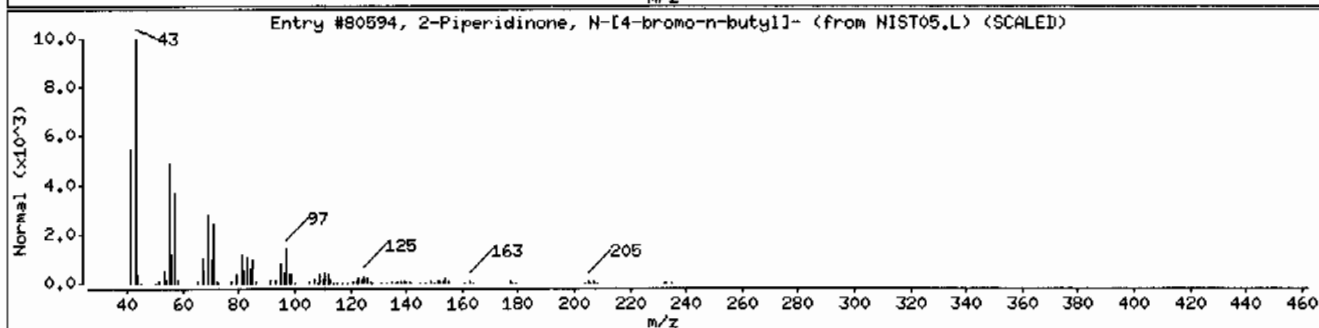
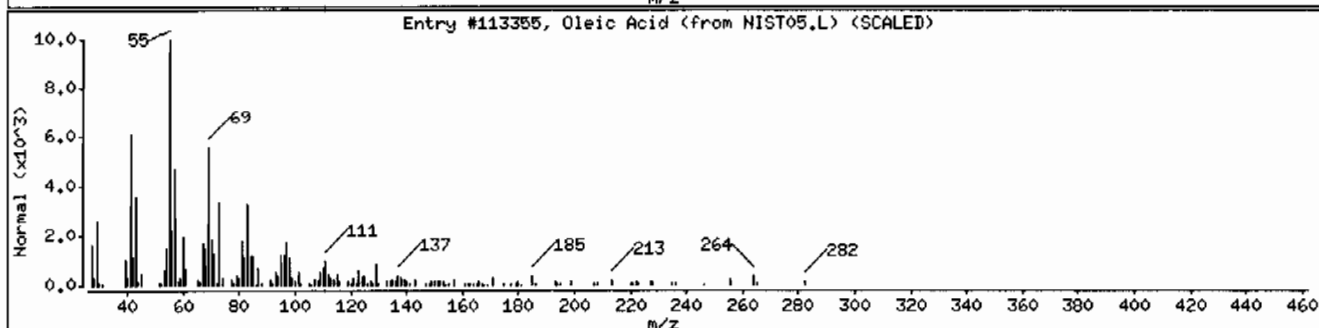
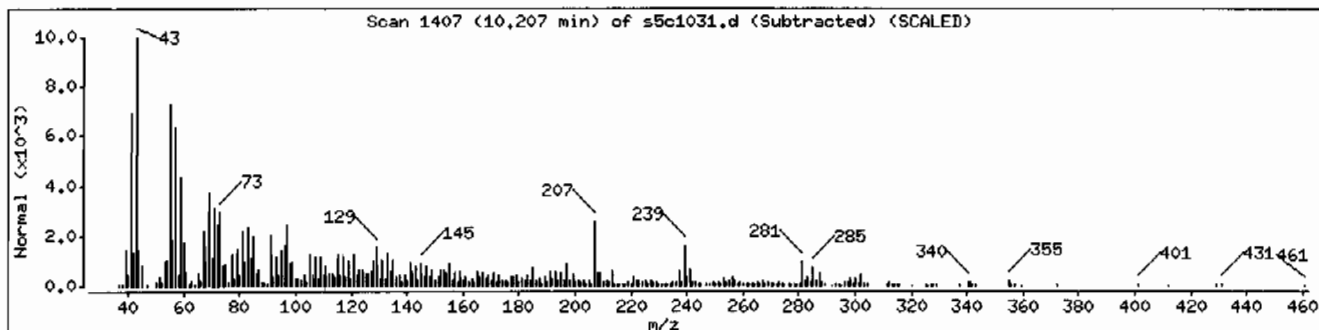
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Oleic Acid	112-80-1	NIST05.L	113355	55	C18H34O2	282
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	45	C9H16BrNO	233
5,9-Dimethyl-2-(1-methylethylidene)-1-cy	69239-72-1	NIST05.L	74483	35	C15H28O	224



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVH111LANL

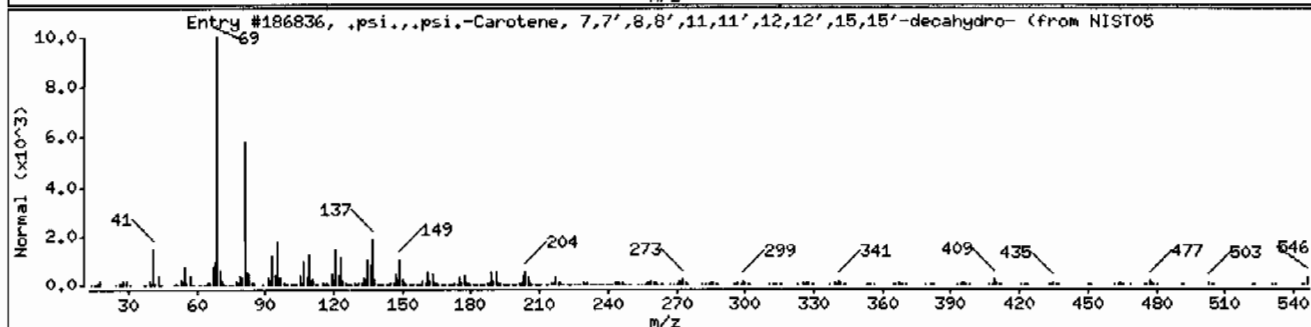
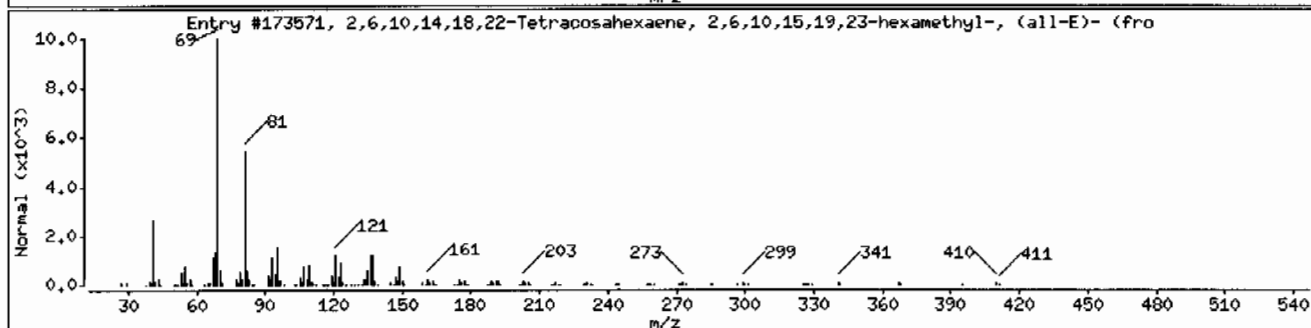
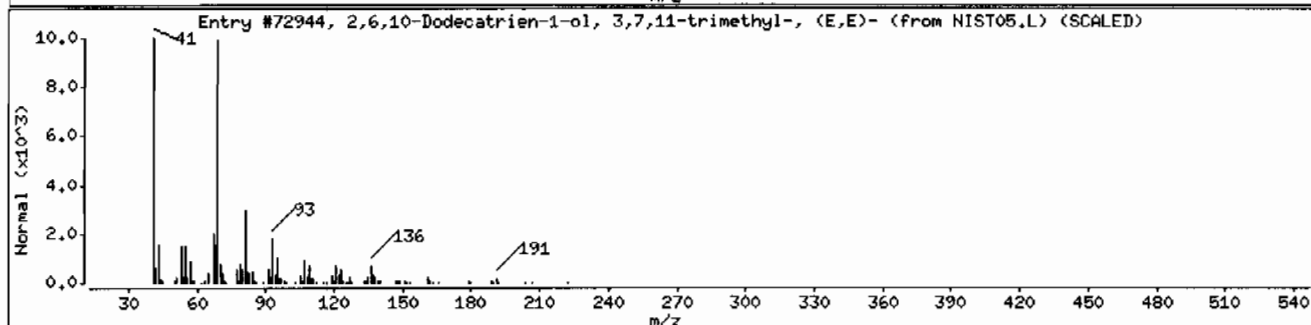
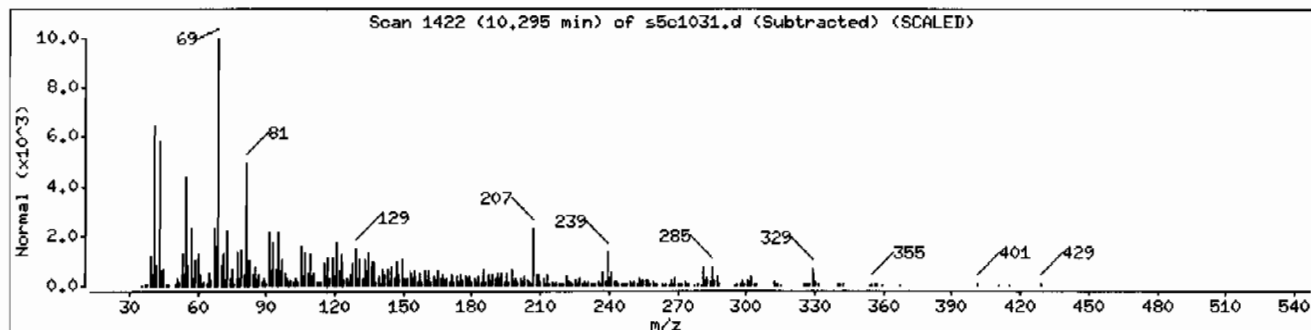
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethyl	106-28-5	NIST05.L	72944	90	C15H26O	222
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	86	C30H50	410
.psi.,.psi.-Carotene, 7,7',8,8',11,11',1	502-62-5	NIST05.L	186836	49	C40H66	547



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: I248240001196065911SVMI1ILANL

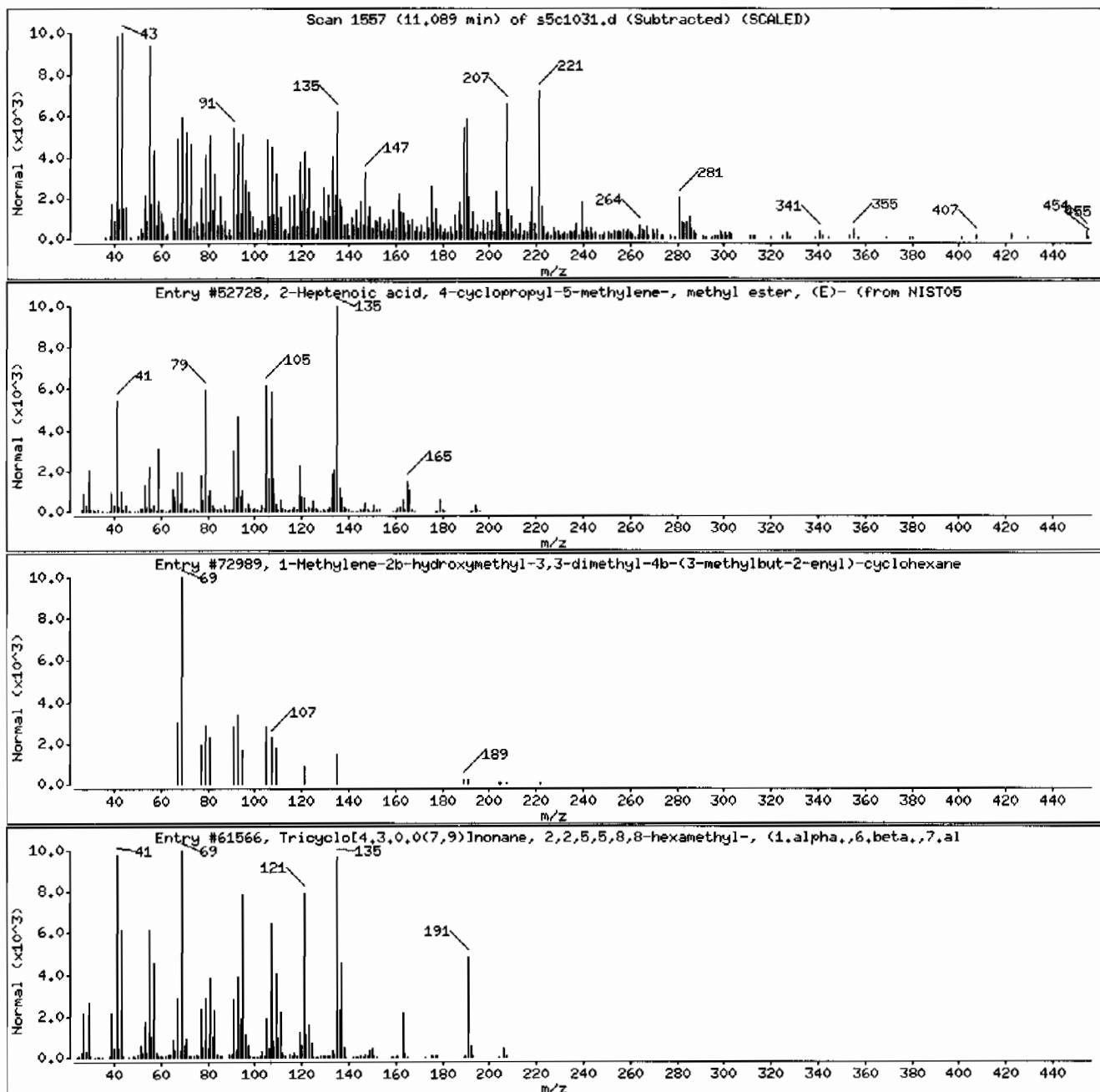
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	53	C12H18O2	194
1-Methylene-2b-hydroxymethyl-3,3-dimethyl	1000144-10-6	NIST05.L	72989	48	C15H26O	222
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5,5,8,8-	54832-82-5	NIST05.L	61566	47	C15H26	206



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: I249240001196065911SVH111LANL

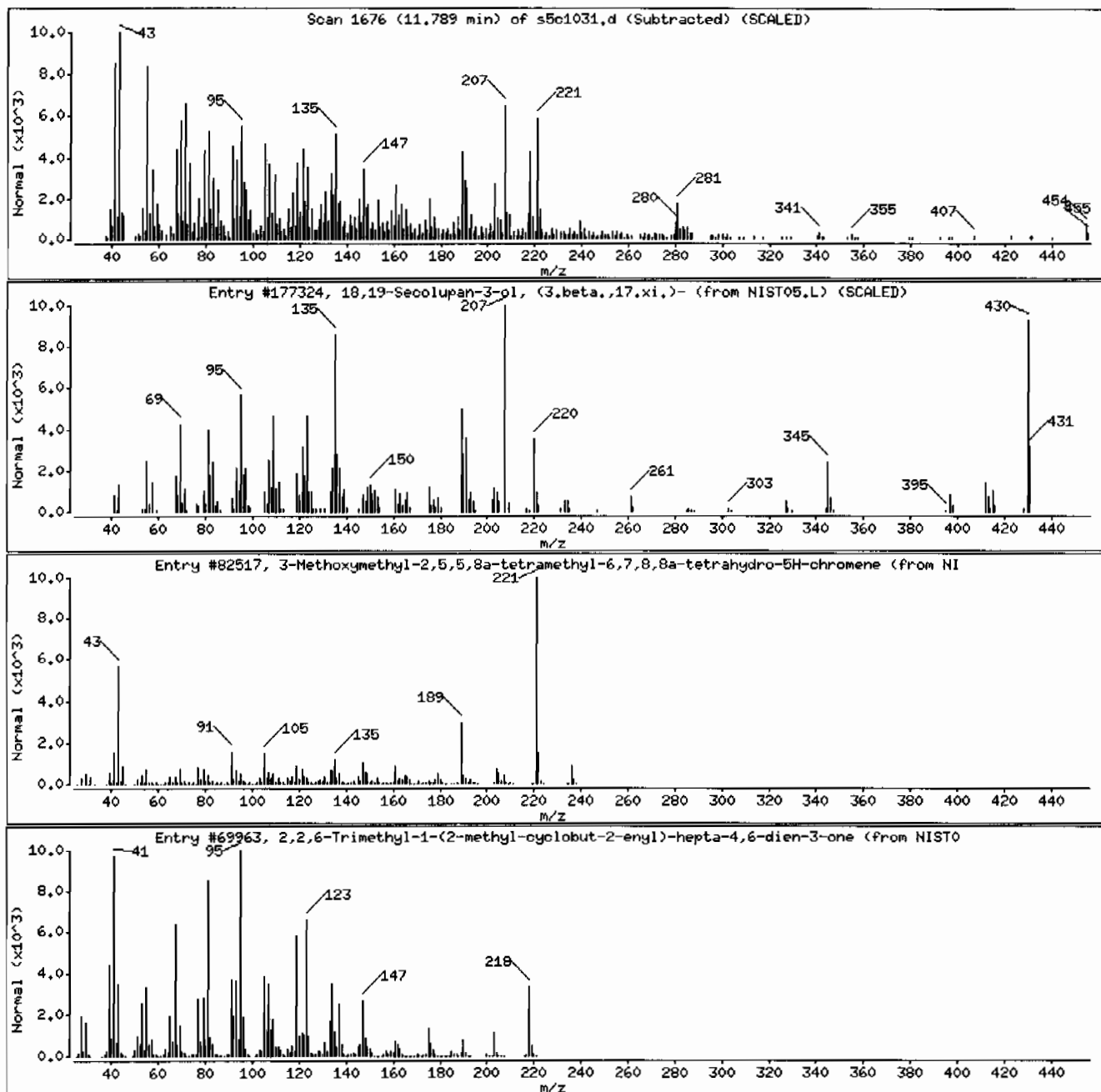
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
18,19-Secolupan-3-ol, (3.beta.,17.xi.)-	30211-96-2	NIST05.L	177324	64	C30H54O	430
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	46	C15H24O2	236
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl	1000188-72-8	NIST05.L	69963	35	C15H22O	218



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVMI1ILANL

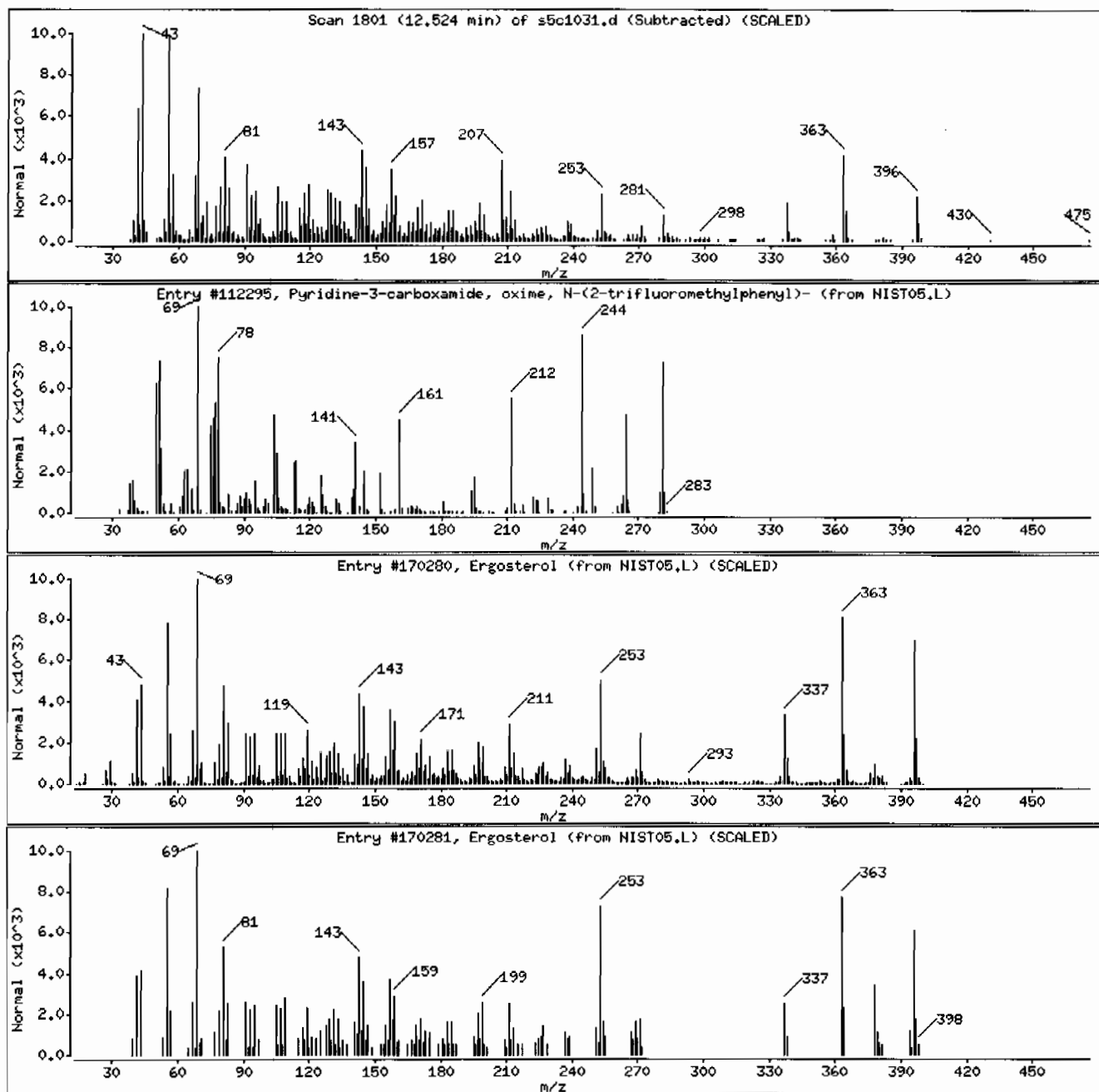
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	92	C13H10F3N3O	281
Ergosterol	57-87-4	NIST05.L	170280	89	C28H44O	396
Ergosterol	57-87-4	NIST05.L	170281	68	C28H44O	396



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.1

Sample Info: 1248240001196065911SVH111LANL

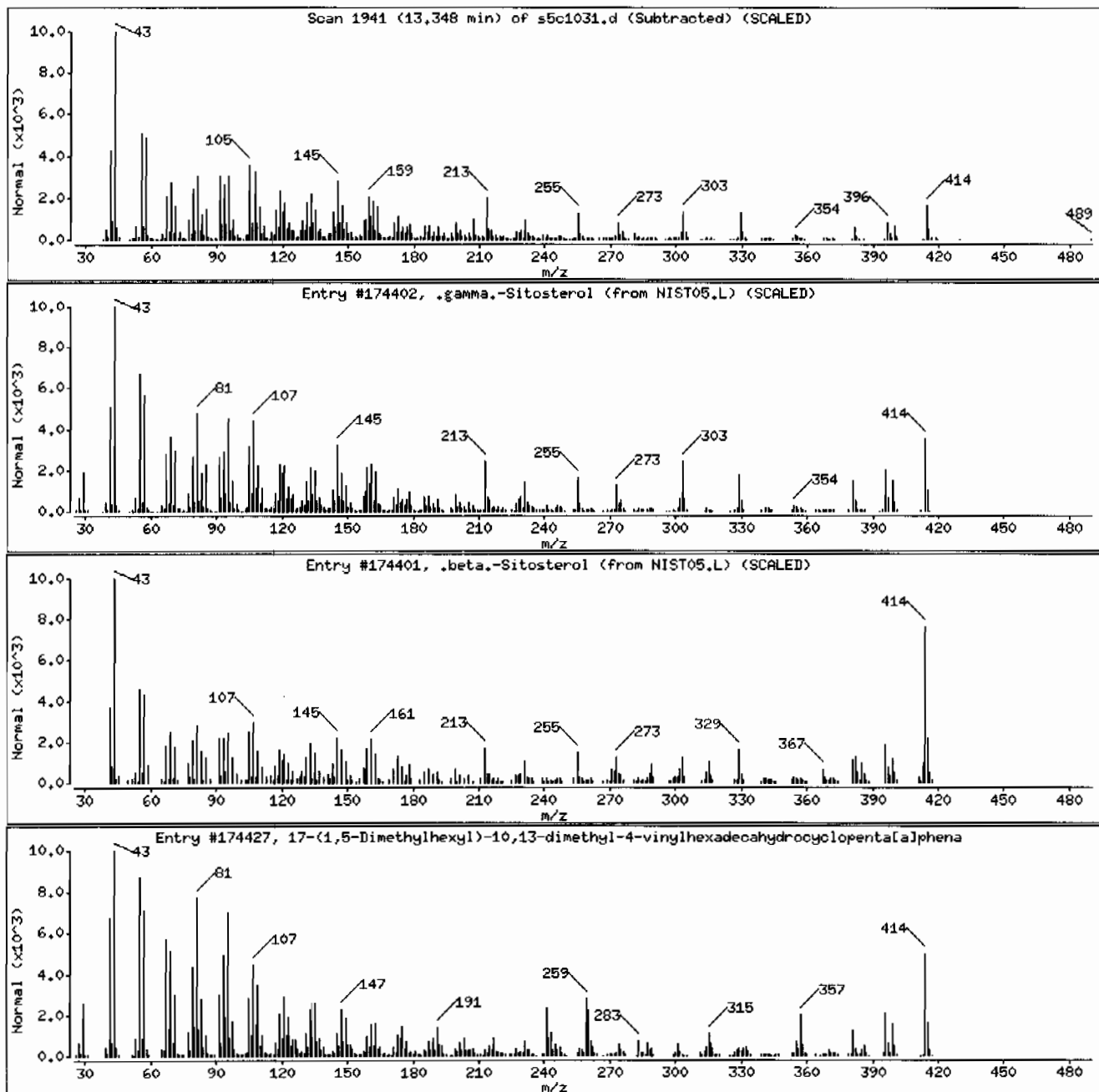
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	99	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	90	C ₂₉ H ₅₀ O	414
17-(1,5-Dimethylhexyl)-10,13-dimethyl-4-	1000210-86-9	NIST05.L	174427	90	C ₂₉ H ₅₀ O	414



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 12482400011960659111SVMI11LANL

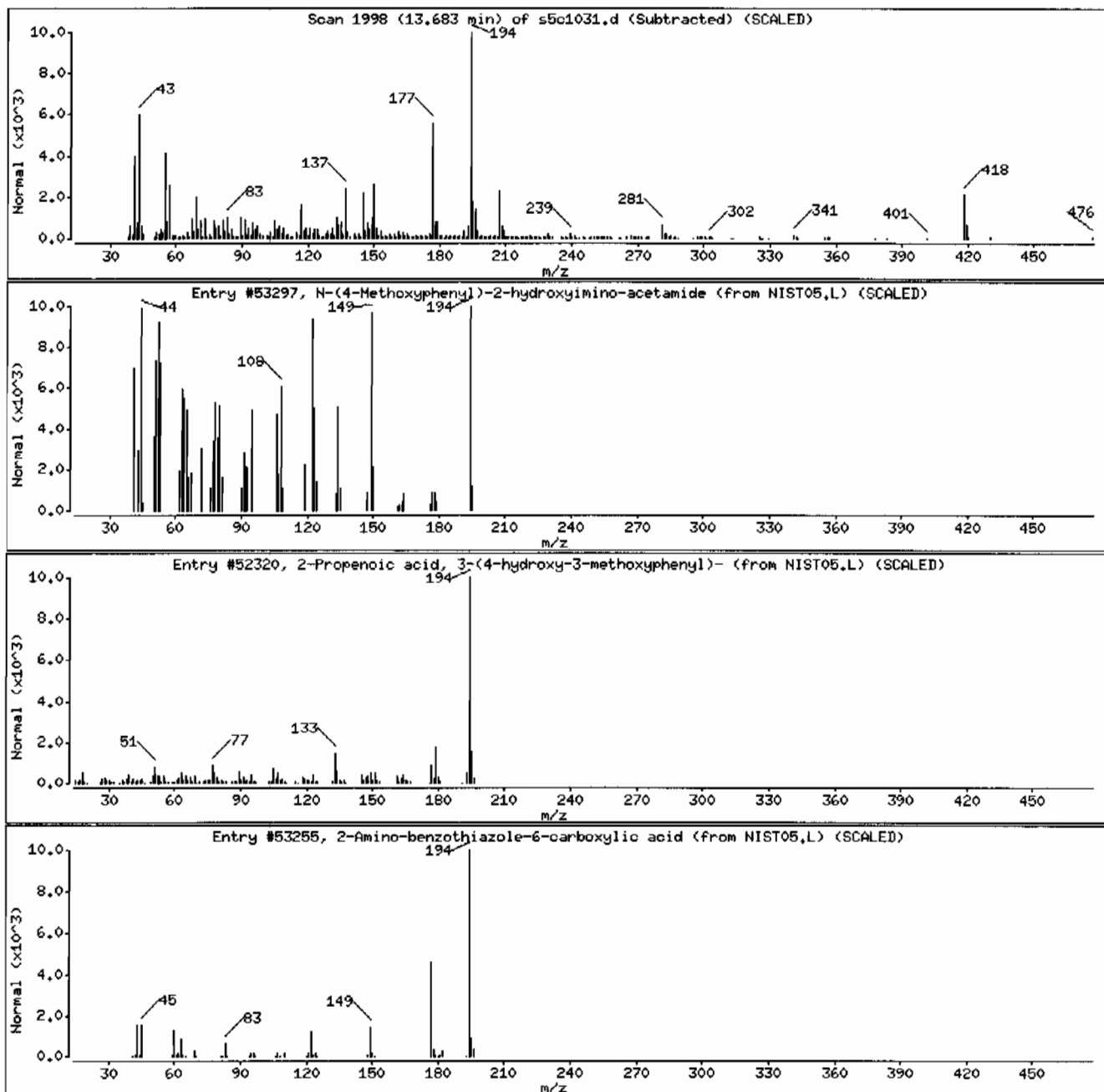
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	1000143-61-3	NIST05.L	53297	91	C9H10N2O3	194
2-Propenoic acid, 3-(4-hydroxy-3-methoxy	1135-24-6	NIST05.L	52320	38	C10H10O4	194
2-Amino-benzothiazole-6-carboxylic acid	1000318-48-6	NIST05.L	53255	38	C8H6N2O2S	194



Date: 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVH111LANL

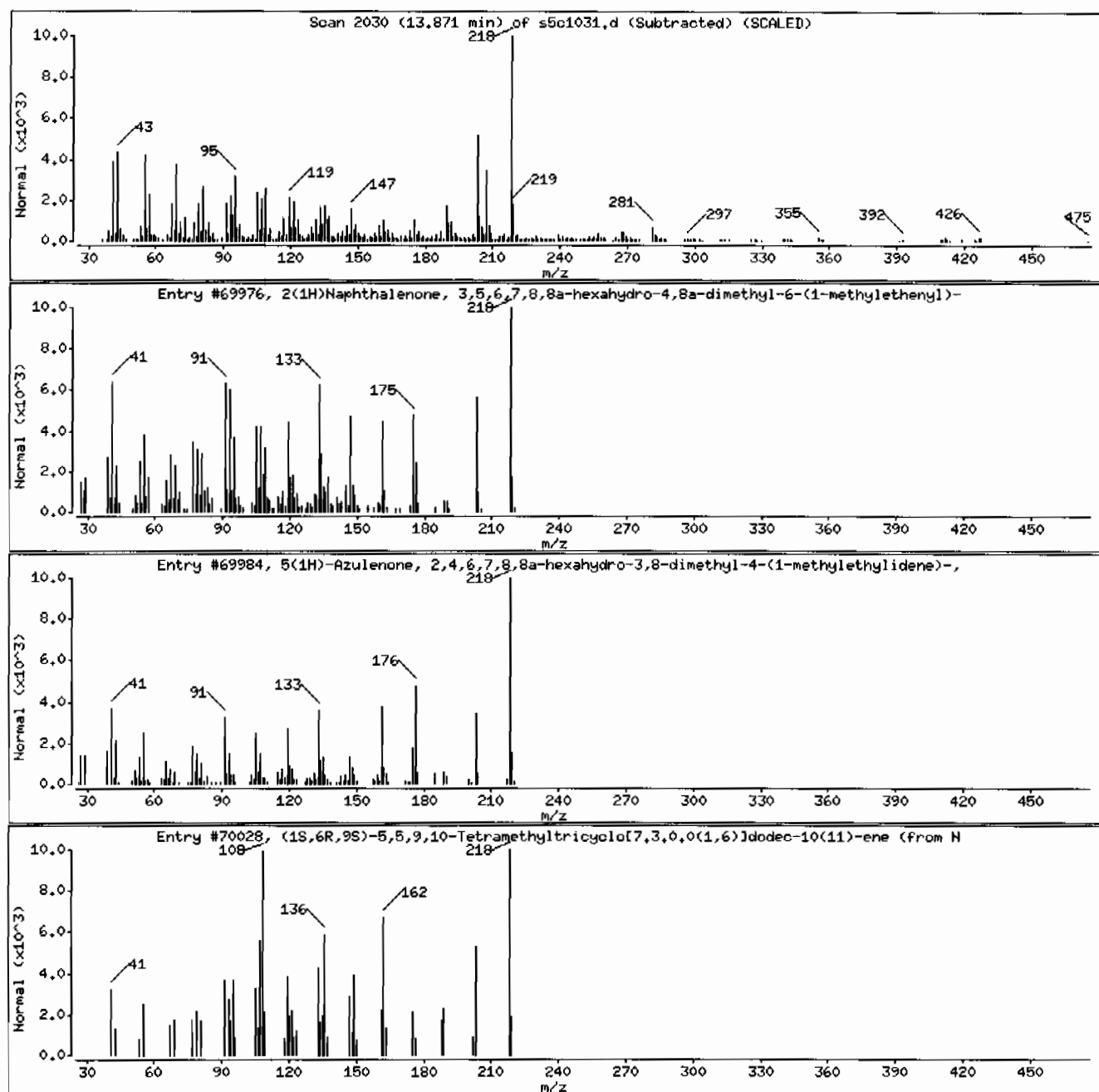
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)-Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	58	C15H22O	218
5(1H)-Azulenone, 2,4,6,7,8,8a-hexahydro-	6754-66-1	NIST05.L	69984	55	C15H22O	218
(1S,6R,9S)-5,5,9,10-Tetramethyltricyclo[	1000298-97-8	NIST05.L	70028	53	C16H26	218



Date : 10-MAR-2010 21:11

Client ID: RE36-10-7458

Instrument: MSD5.i

Sample Info: 1248240001196065911SVH111LANL

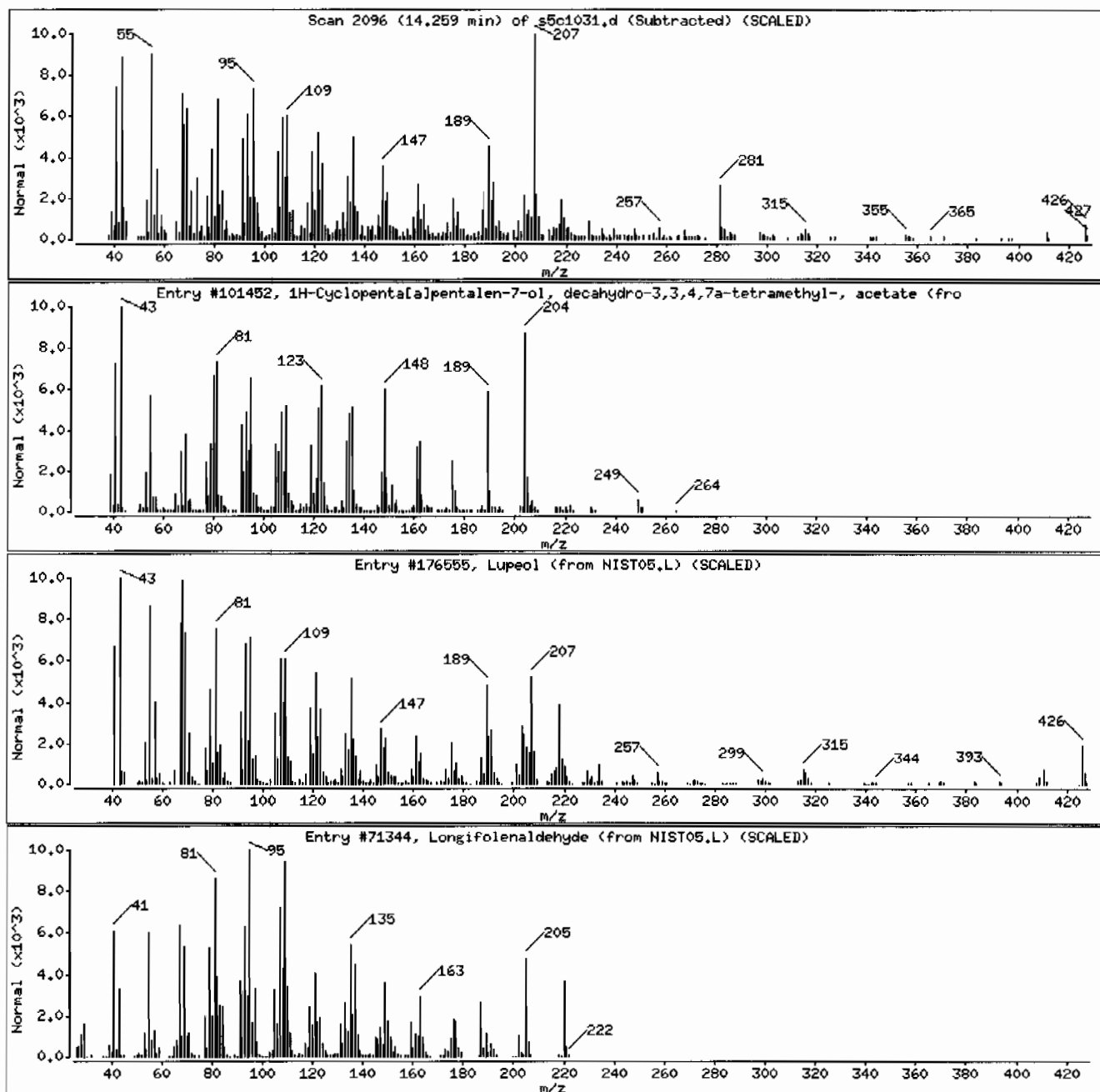
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopenta[a]pentalen-7-ol, decahydro	57984-03-9	NIST05.L	101452	64	C17H28O2	264
Lupeol	545-47-1	NIST05.L	176555	53	C30H50O	426
Longifolinaldehyde	19890-84-7	NIST05.L	71344	51	C15H24O	220



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

SDG Number: 10-2134
Lab Sample ID: 248240007

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7459
Batch ID: 960659
Run Date: 03/11/2010 19:25
Prep Date: 03/04/2010 10:53
Data File: s5c1124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene		51.7	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	J	552	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	410	ug/kg	82.0	410

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
Client ID: RE36-10-7459	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/11/2010 19:25	Inst: MSD5.1	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1124.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	J	36.9	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene		63.4	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	J	27.8	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	J	36.8	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene		43.9	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	J	24.7	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	230	ug/kg		JA
13466-78-9	3-Carene	3.87	349	ug/kg	97	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240007	Date Received: 02/27/2010 09:10	%Moisture: 18.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7459	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/11/2010 19:25	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s5c1124.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/L.O.Q
---------	----------	-----------	--------	-------	---------	-----------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
103-82-2	Benzeneacetic acid	4.9	249	ug/kg	91	NJ
3386-33-2	Octadecane, 1-chloro-	8.74	182	ug/kg	96	NJ
	Unknown	8.96	199	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	237	ug/kg	93	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.04	243	ug/kg	98	NJ
	Unknown	9.08	332	ug/kg		J
1599-67-3	1-Docosene	9.4	561	ug/kg	99	NJ
	Unknown	9.83	166	ug/kg		J
	Unknown	9.9	208	ug/kg		J
	Unknown	10.05	553	ug/kg		J
	Unknown	10.16	190	ug/kg		J
	Unknown	10.38	241	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	10.48	319	ug/kg	89	NJ
	Unknown	10.82	268	ug/kg		J
112-95-8	Eicosane	11.75	197	ug/kg	95	NJ
55030-21-2	Cyclohexane, 1,1'-(2-propyl-1,3-propaned	11.82	774	ug/kg	91	NJ
	Unknown	11.99	215	ug/kg		J
	Unknown	12.09	274	ug/kg		J
	Unknown	12.58	435	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.86	405	ug/kg	93	NJ
	Unknown	13.22	246	ug/kg		J
83-47-6	gamma.-Sitosterol	13.73	1390	ug/kg	96	NJ

Data File: /chem/MSD5.i/s031110.b/s5c1124.d
 Report Date: 12-Mar-2010 10:01

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1124.d
 Lab Smp Id: 248240007 Client Smp ID: RE36-10-7459
 Inj Date : 11-MAR-2010 19:25
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240007|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
 Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 24
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	18.75310	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	=====	152	3.913	3.916	(1.000)	260431	40.0000	
* 29 Naphthalene-d8	=====	136	4.772	4.778	(1.000)	984814	40.0000	
* 46 Acenaphthene-d10	=====	164	6.025	6.035	(1.000)	565629	40.0000	
* 67 Phenanthrene-d10	=====	188	7.195	7.205	(1.000)	1008268	40.0000	
* 91 Chrysene-d12	=====	240	9.607	9.617	(1.000)	895169	40.0000	
* 98 Perylene-d12	=====	264	11.277	11.283	(1.000)	680007	40.0000	
\$ 3 2-Fluorophenol	=====	112	3.107	3.107	(0.794)	421736	64.8515	2660
\$ 5 Phenol-d5	=====	99	3.625	3.627	(0.926)	494836	63.3096	2600
\$ 20 Nitrobenzene-d5	=====	82	4.266	4.277	(0.894)	260652	35.6187	1460
\$ 39 2-Fluorobiphenyl	=====	172	5.513	5.519	(0.915)	477292	33.7846	1380
\$ 60 2,4,6-Tribromophenol	=====	329	6.625	6.627	(1.100)	144267	67.9069	2780
\$ 81 p-Terphenyl-d14	=====	244	8.578	8.582	(0.893)	521226	35.0041	1440

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	8.472	8.481	(0.882)	31205	1.26156	51.7
27 Benzoic acid	105	4.513	4.547	(0.946)	17980	13.4656	552 (a)
68 Phenanthrene	178	7.213	7.224	(1.002)	19190	0.89908	36.9 (a)
76 Fluoranthene	202	8.254	8.264	(1.147)	34438	1.54671	63.4
89 Benzo(a)anthracene	228	9.595	9.603	(0.999)	13561	0.67740	27.8 (a)
92 Chrysene	228	9.630	9.641	(1.002)	16760	0.89844	36.8 (a)
95 Benzo(b)fluoranthene	252	10.754	10.768	(0.954)	17406	1.07163	43.9
97 Benzo(a)pyrene	252	11.195	11.206	(0.993)	8234	0.60344	24.7 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5c1124.d

Report Date: 03/12/2010 07:36

Lab. ID: 248240007

SampleType: SAMPLE

Injection Date: 11-MAR-2010 19:25

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240007|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	32534	3.62	3.70	80-120	100	(T)
93	6360	3.68	3.70	269-329	20	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	37930	4.27	4.15	80-120	100	(T)
42	24483	4.27	4.15	56-116	65	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	17980	4.51	4.55	80-120	100	()
122	13509	4.51	4.55	59-119	75	()
77	13254	4.51	4.55	47-107	74	()

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	11270	5.75	5.63	80-120	100	(T)
164	703	5.75	5.63	3- 63	6	(T)
127	1239	5.75	5.63	10- 70	11	(T)

42	o-Nitroaniline	CAS#: 88-74-4				
65	16720	5.75	5.68	80-120	100	(T)
92	19359	5.75	5.68	31- 91	116	(QT)
138	1139	5.76	5.68	70-130	7	(QT)

43	Dimethylphthalate	CAS#: 131-11-3				
163	103271	6.02	5.79	80-120	100	(T)
164	565629	6.02	5.79	0- 40	548	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	75358	6.02	5.85	80-120	100	(T)
63	1227	6.02	5.85	62-122	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	75358	6.02	6.15	80-120	100	(T)
89	1398	6.02	6.15	49-109	2	(QT)
63	1227	6.02	6.15	24- 84	2	(QT)

52	4-Nitrophenol			CAS#: 100-02-7		
139	422	6.17	6.07	80-120	100	(T)
109	1117	6.21	6.07	48-108	264	(QT)
65	947	6.15	6.07	79-139	224	(QT)

53	Fluorene			CAS#: 86-73-7		
166	6802	6.62	6.44	80-120	100	(T)
165	6913	6.62	6.44	62-122	102	(T)
167	2859	6.62	6.44	0- 44	42	(T)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	644	6.62	6.46	80-120	100	(T)
105	2319	6.62	6.46	13- 73	360	(QT)
51	1455	6.62	6.46	32- 92	226	(QT)

65	Pentachlorophenol			CAS#: 87-86-5		
266	465	7.02	7.03	80-120	100	()
264	232	7.02	7.03	33- 93	50	()
268	228	7.02	7.03	35- 95	49	()

68	Phenanthrene			CAS#: 85-01-8		
178	19190	7.21	7.22	80-120	100	()
179	3383	7.21	7.22	0- 46	18	()
176	3627	7.21	7.22	0- 49	19	()

69	Anthracene			CAS#: 120-12-7		
178	19160	7.21	7.27	80-120	100	()
179	3383	7.21	7.27	0- 46	18	()
176	3627	7.21	7.27	0- 48	19	()

76	Fluoranthene			CAS#: 206-44-0		
202	34438	8.25	8.26	80-120	100	()
203	5733	8.26	8.26	0- 48	17	()
101	4880	8.25	8.26	0- 41	14	()

79	Pyrene			CAS#: 129-00-0		
202	31205	8.47	8.48	80-120	100	()
200	7553	8.47	8.48	0- 51	24	()
101	5284	8.47	8.48	0- 43	17	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	13561	9.60	9.60	80-120	100	()
226	3175	9.59	9.60	0- 56	23	()
229	5486	9.60	9.60	0- 50	40	()

92 Chrysene				CAS#: 218-01-9		
228	16760	9.63	9.64	80-120	100	()
229	3932	9.63	9.64	0- 50	23	()
226	5192	9.63	9.64	0- 59	31	()

95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	17406	10.75	10.77	80-120	100	()
253	3562	10.75	10.77	0- 52	20	()
125	4006	10.75	10.76	0- 41	23	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	5254	10.79	10.80	80-120	100	()
253	1514	10.78	10.80	0- 52	29	()
125	4031	10.75	10.80	0- 41	77	(Q)

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	8234	11.20	11.21	80-120	100	()
253	2233	11.19	11.21	0- 52	27	()
125	1809	11.20	11.20	0- 30	22	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	5286	13.01	13.04	80-120	100	()
138	1199	13.02	13.05	0- 58	23	()

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	4616	13.55	13.58	80-120	100	()
138	2464	13.55	13.58	0- 30	53	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD5.i/s031110.b/s5c1124.d
Report Date: 12-Mar-2010 10:01

Page 3

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1124.d
Lab Smp Id: 248240007 Client Smp ID: RE36-10-7459
Inj Date : 11-MAR-2010 19:25
Operator : RMB Inst ID: MSD5.i
Smp Info : |248240007|960659|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	18.75310	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.913	1773853	40.000
* 29 Naphthalene-d8	4.772	2200946	40.000
* 91 Chrysene-d12	9.607	2896216	40.000
* 98 Perylene-d12	11.277	2106605	40.000

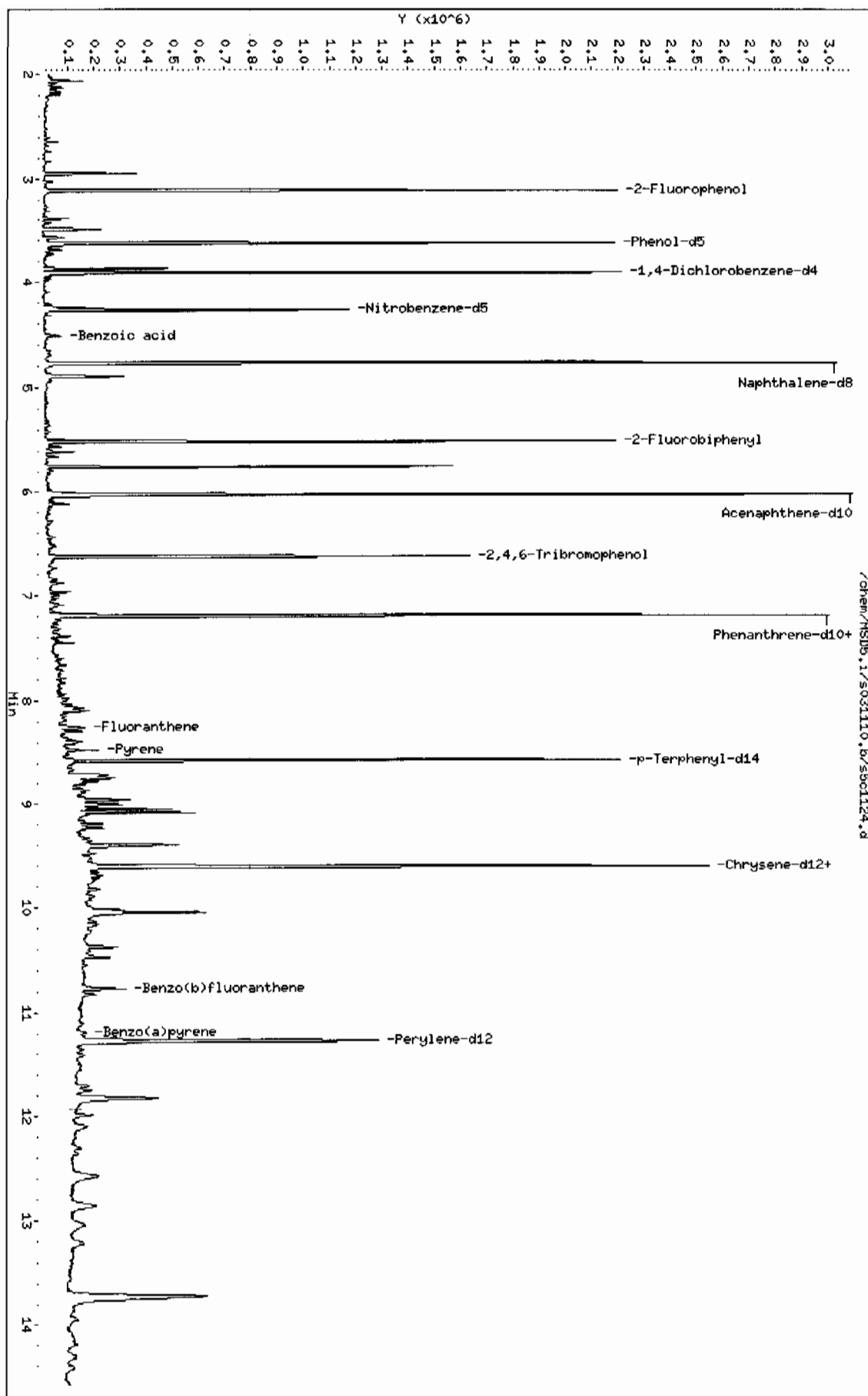
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
-----	-----	-----	-----	-----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.948	248626	5.60645283	230	0		0	10
3-Carene					CAS #: 13466-78-9		
3.866	377037	8.50209325	348	97	NIST05.L	15151	10
Benzeneacetic acid					CAS #: 103-82-2		
4.895	334415	6.07764849	249	91	NIST05.L	15740	29
Octadecane, 1-chloro-					CAS #: 3386-33-2		
8.742	321911	4.44594875	182	96	NIST05.L	117264	91
Unknown					CAS #:		
8.960	350956	4.84710033	199	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
9.007	418719	5.78297922	237	93	NIST05.L	112656	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.042	429035	5.92546095	243	98	NIST05.L	133618	91
Unknown					CAS #:		
9.083	586076	8.09437217	332	0		0	91
1-Docosene					CAS #: 1599-67-3		
9.395	991180	13.6893025	561	99	NIST05.L	129889	91
Unknown					CAS #:		
9.830	292955	4.04603795	166	0		0	91
Unknown					CAS #:		
9.895	366957	5.06808145	208	0		0	91
Unknown					CAS #:		
10.048	976147	13.4816826	553	0		0	91
Unknown					CAS #:		
10.160	334740	4.62314004	190	0		0	91
Unknown					CAS #:		
10.377	425270	5.87345483	241	0		0	91
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei					CAS #: 75581-03-2		
10.477	410397	7.79256747	319	89	NIST05.L	149004	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
10.824	343994	6.53172025	268	0		0	98
Eicosane					CAS #: 112-95-8		
11.748	252893	4.80190073	197	95	NIST05.L	113489	98
Cyclohexane, 1,1'-(2-propyl-1,3-propaned					CAS #: 55030-21-2		
11.824	993700	18.8682717	774	91	NIST05.L	92245	98
Unknown					CAS #:		
11.989	275744	5.23580210	215	0		0	98
Unknown					CAS #:		
12.095	351865	6.68116902	274	0		0	98
Unknown					CAS #:		
12.577	558557	10.6058280	435	0		0	98
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
12.860	520778	9.88846940	405	93	NIST05.L	112295	98
Unknown					CAS #:		
13.218	316114	6.00233544	246	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.730	1785035	33.8940519	1390	96	NIST05.L	174402	98

Data File: /chem/HSD5.i/s031110.b/s0c1124.d
 Date : 11-MAR-2010 13:25
 Client ID: RE36-10-7459
 Sample Info: 12482400071960659115VH11LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: HSD5.i
 Operator: RMB
 Column diameter: 0.20



Data File: /chem/MSD5.i/s031110.b/s5c1124.d

Page 2

Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVH11ILANL

Volume Injected (uL): 0.5

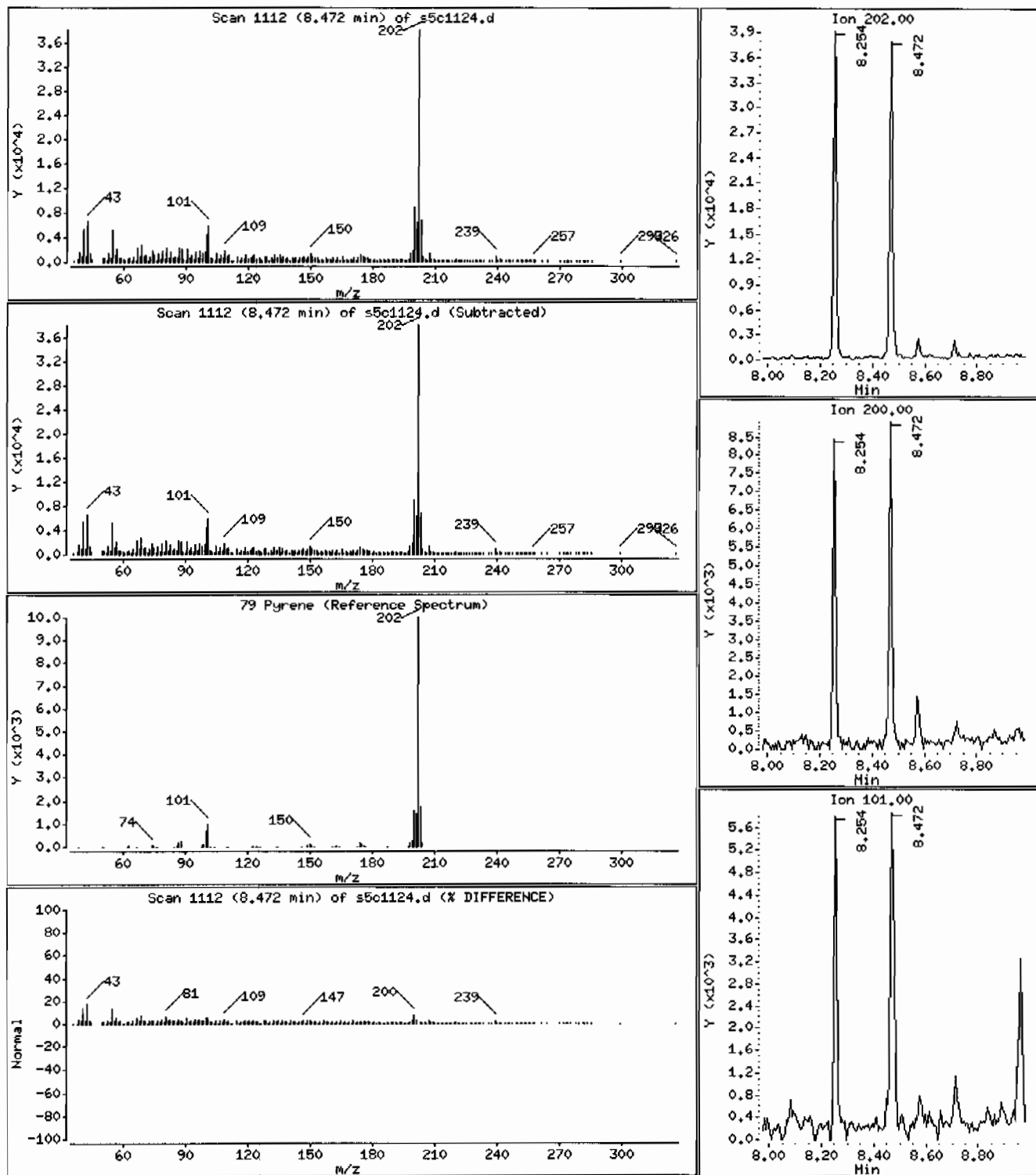
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 51.7 ug/Kg



Data File: /chem/HSD5.i/s031110.b/s5c1124.d

Page 3

Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH11LANL

Volume Injected (uL): 0.5

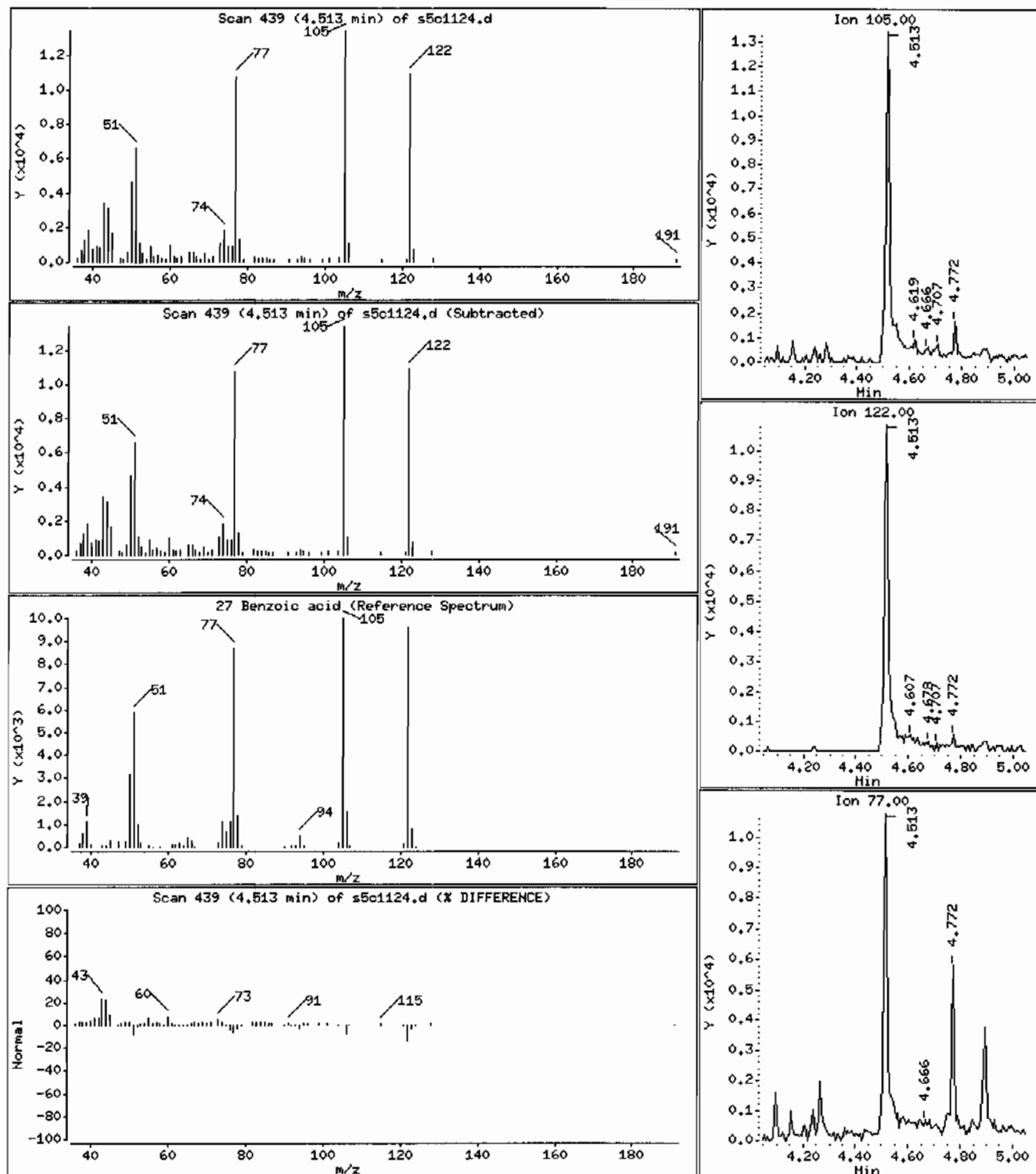
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 552 ug/Kg



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

Volume Injected (uL): 0.5

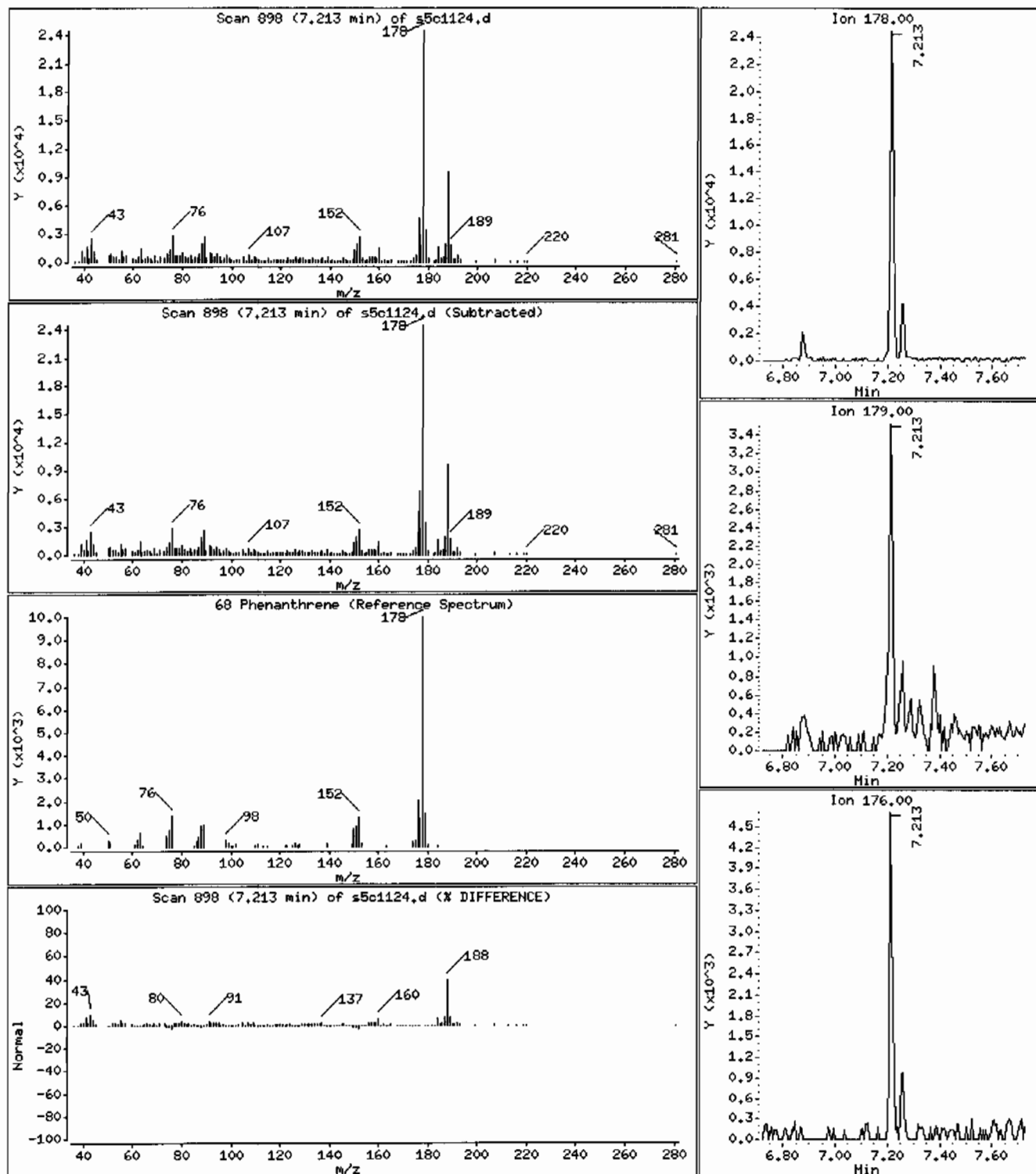
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 36.9 ug/Kg



Data File: /chem/MSD5.i/s031110.b/s5c1124.d

Page 5

Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVH11ILANL

Volume Injected (uL): 0.5

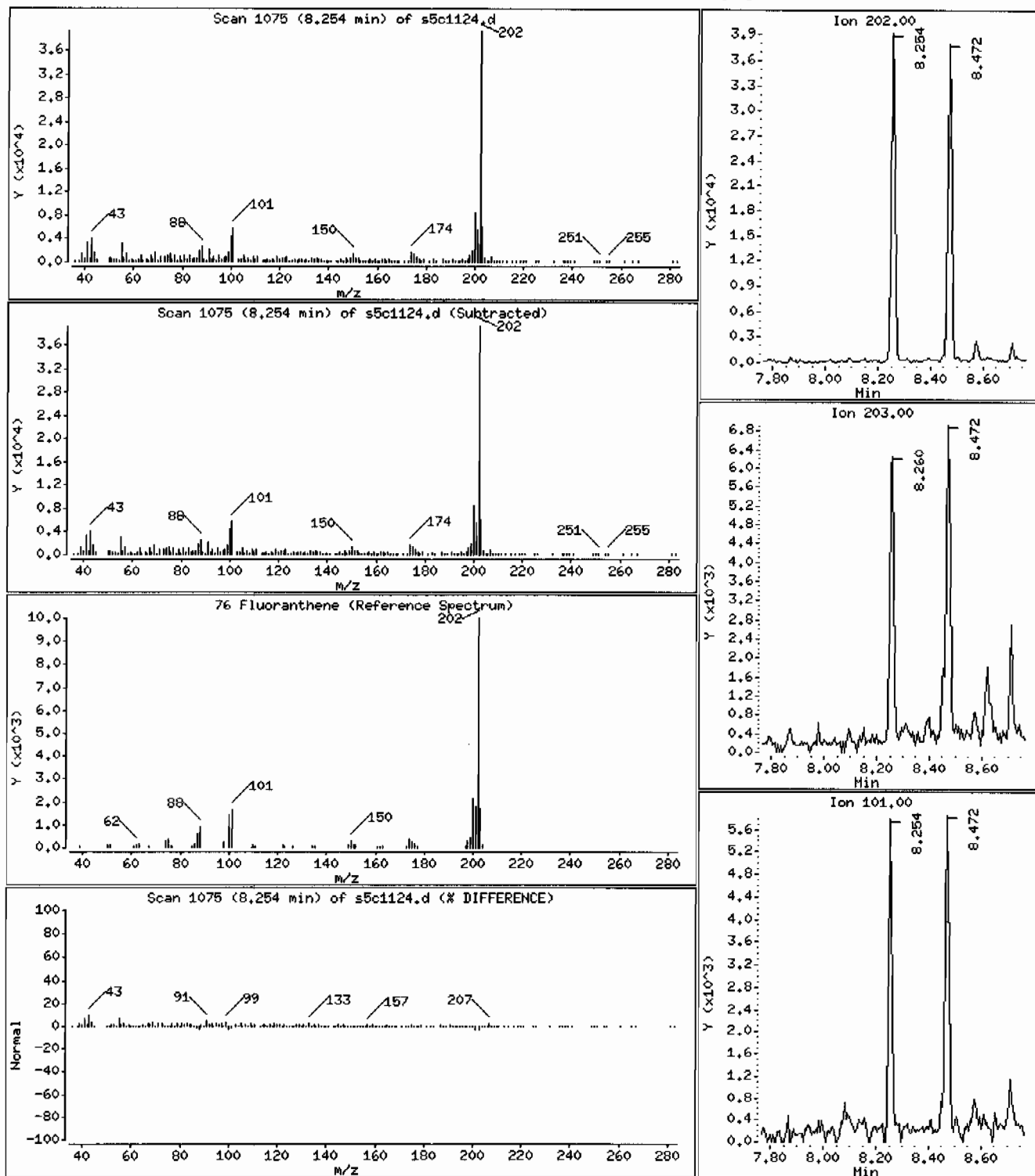
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 63.4 ug/Kg



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911ISVM11ILANL

Volume Injected (uL): 0.5

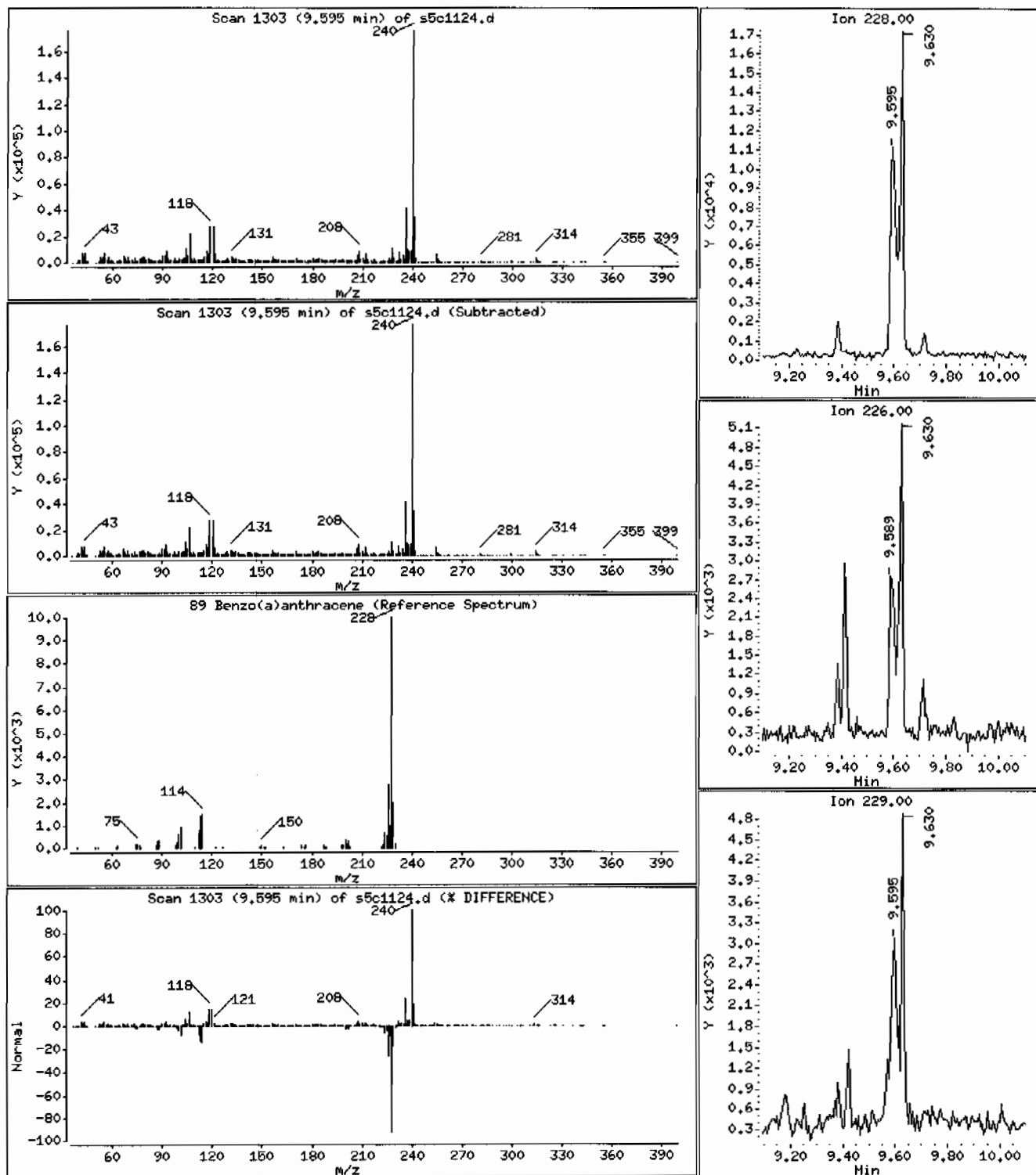
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 27.8 ug/Kg



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 12482400071960659111SVMI11LANL

Volume Injected (uL): 0.5

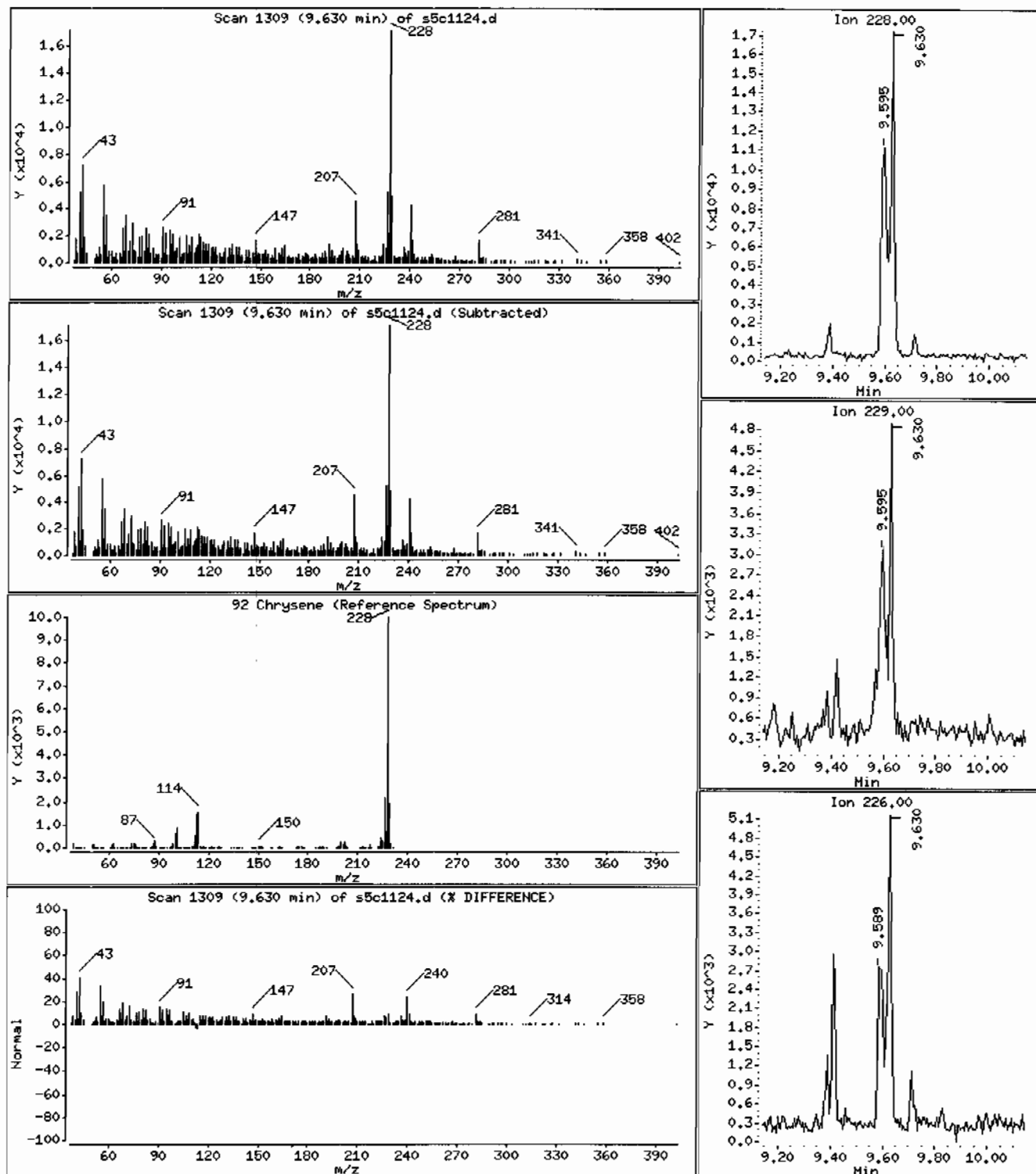
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 36.8 ug/Kg



Data File: /chem/HSD5,i/s031110.b/s5c1124.d

Page 8

Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH11ILANL

Volume Injected (uL): 0.5

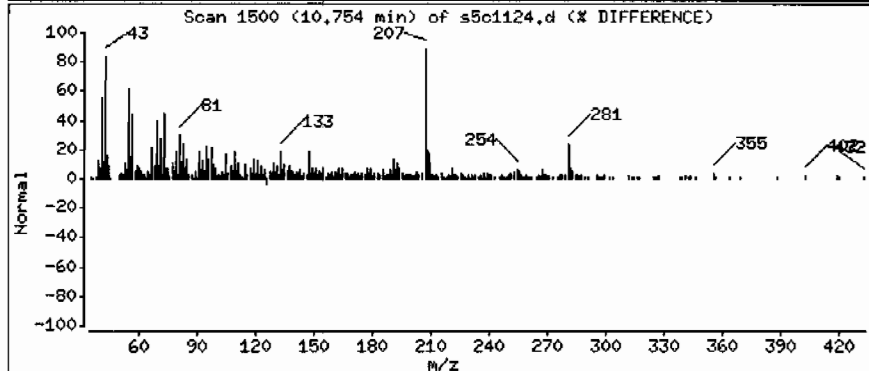
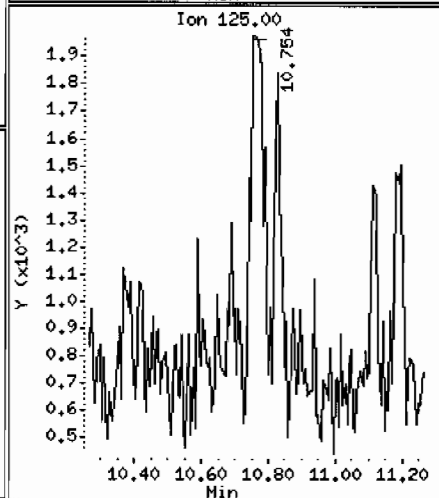
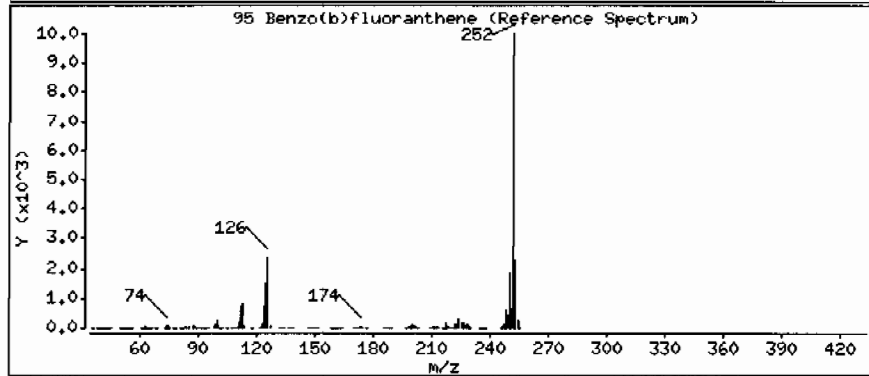
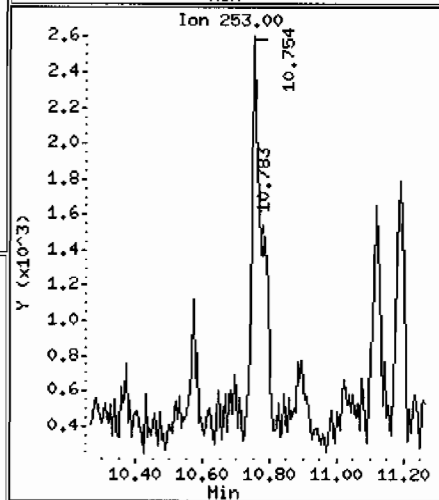
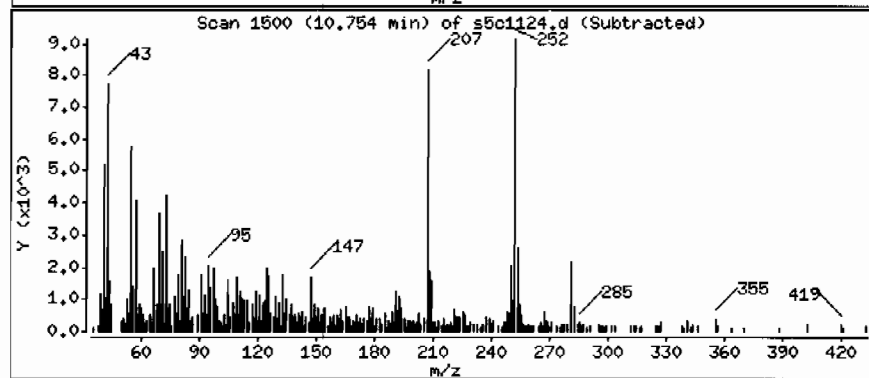
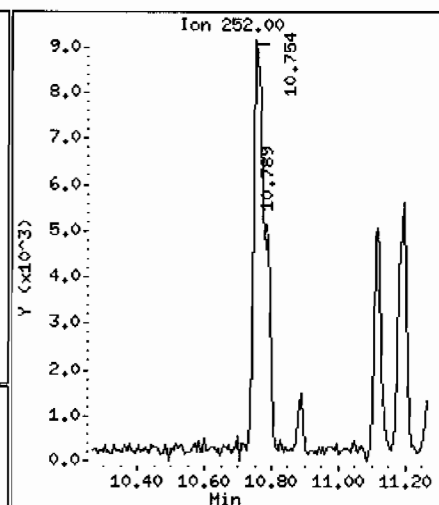
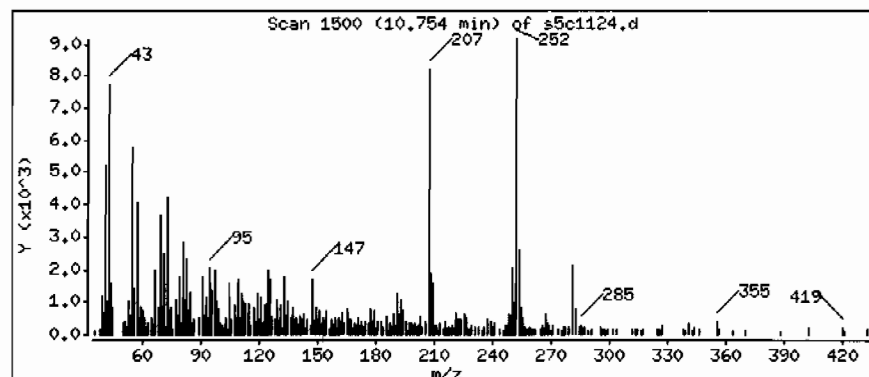
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 43.9 ug/Kg



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH11ILANL

Volume Injected (uL): 0.5

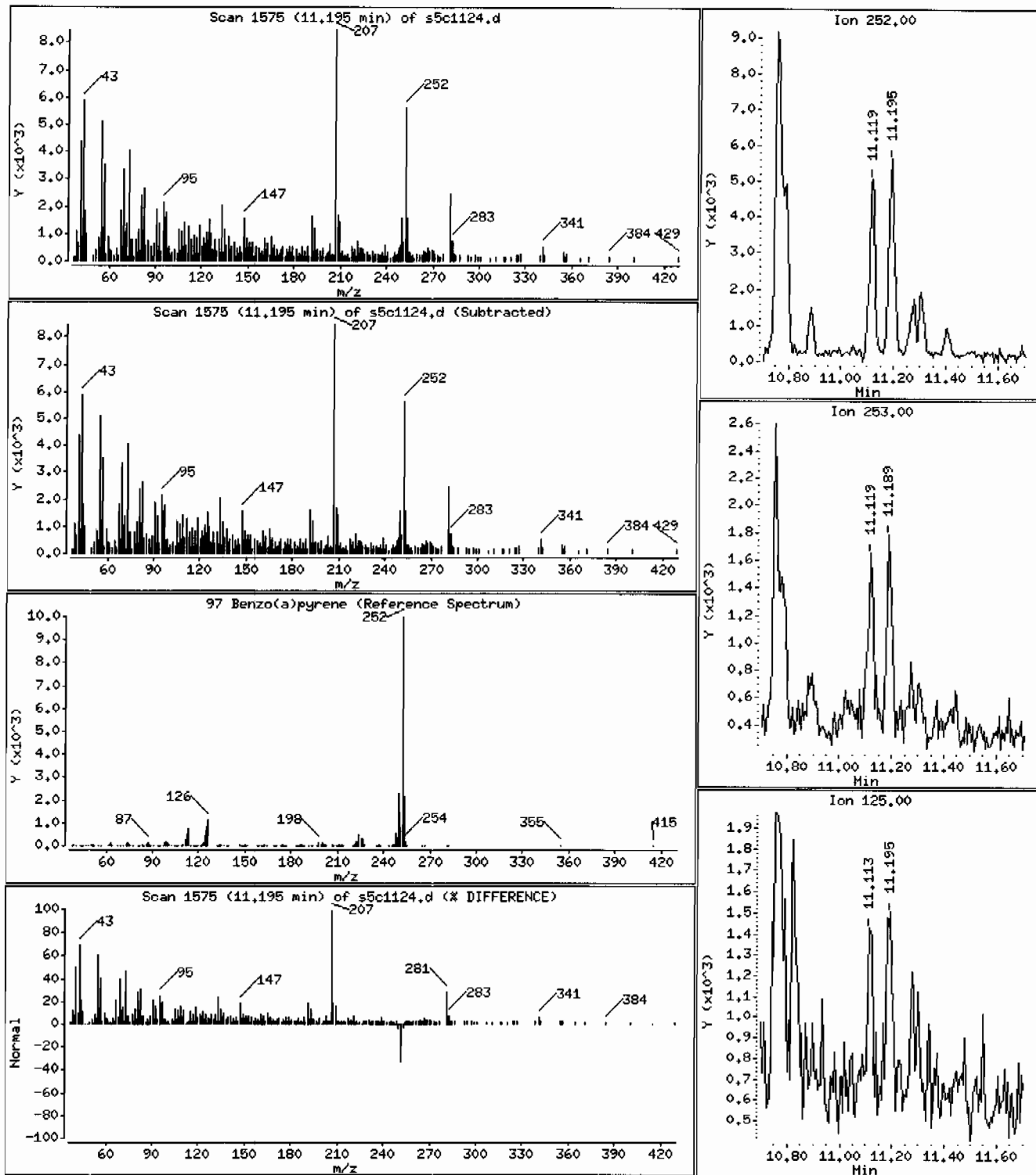
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 24.7 ug/Kg



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 12482400071960659111SVMI11LANL

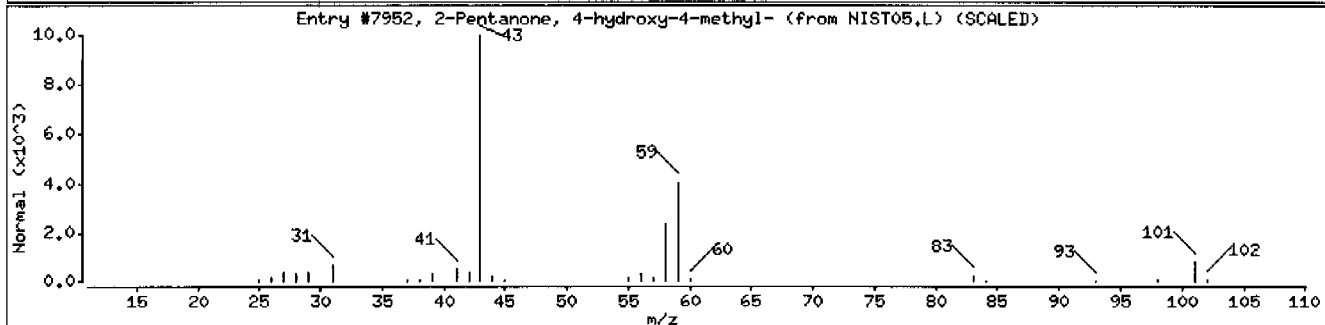
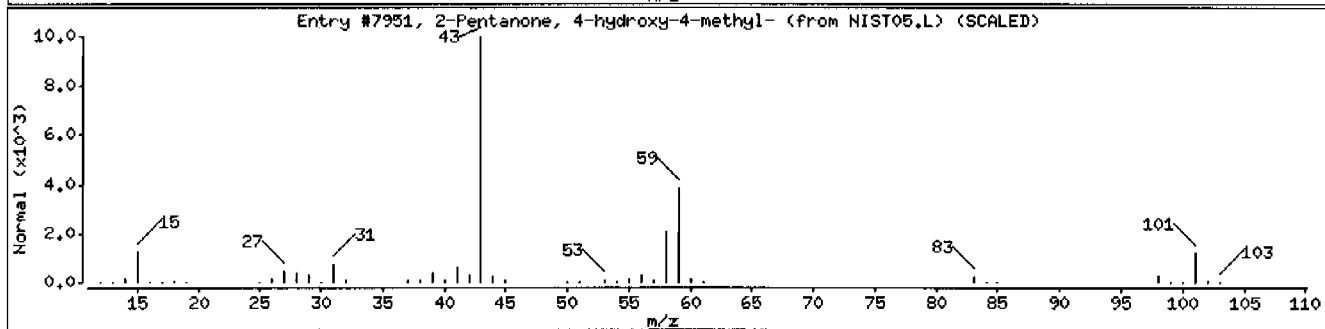
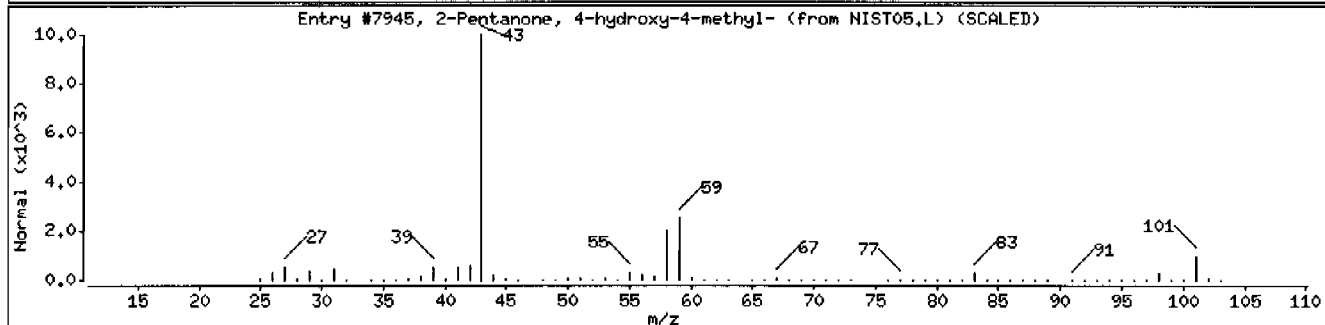
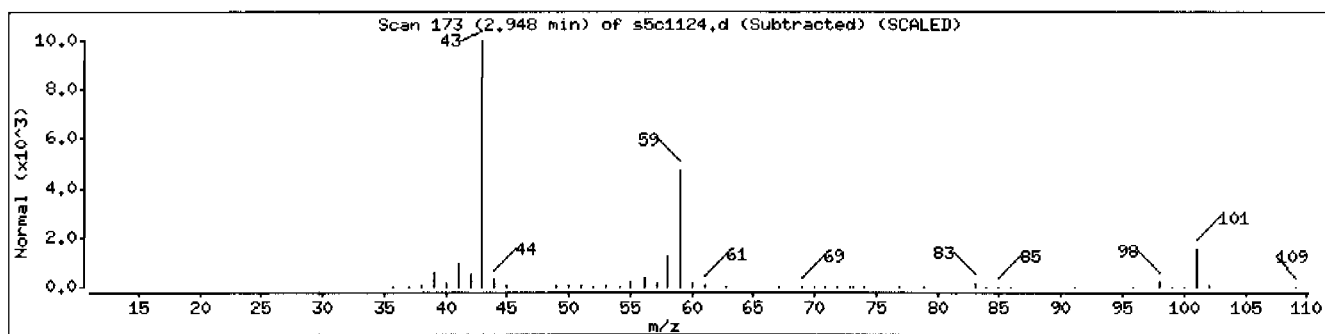
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH111LANL

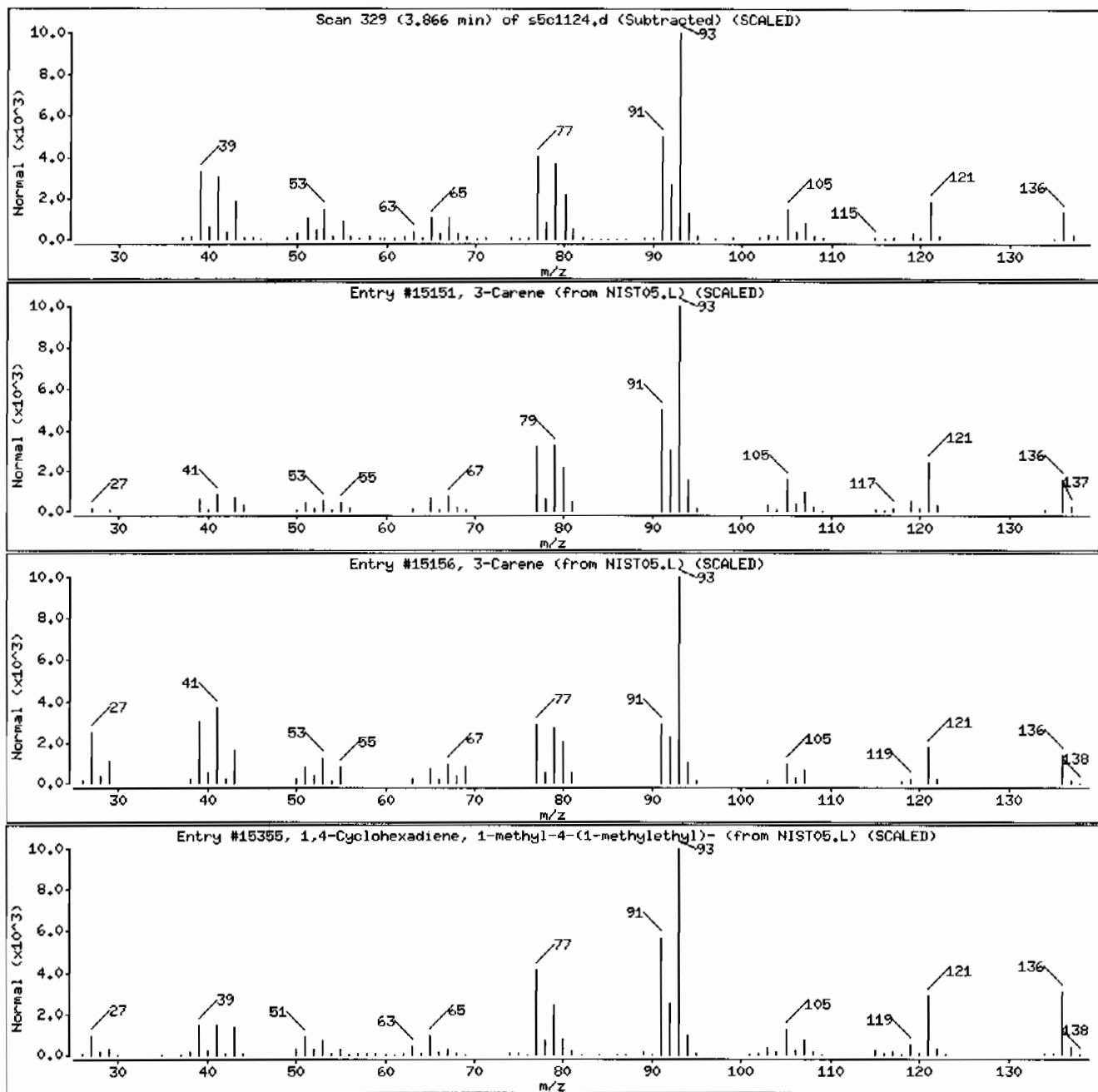
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15151	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	94	C10H16	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15355	93	C10H16	136



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH111LANL

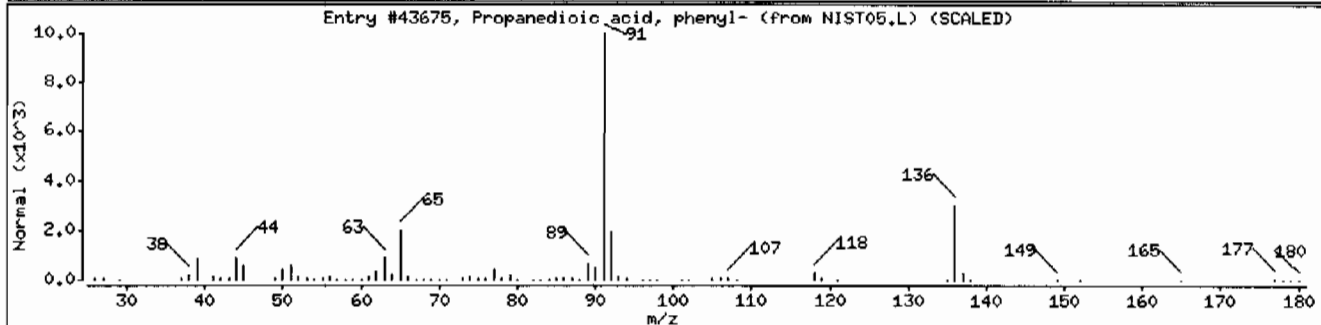
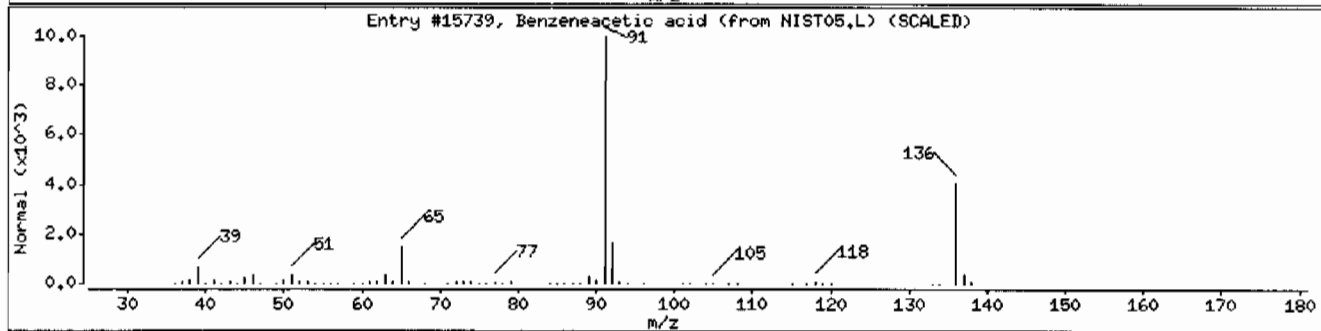
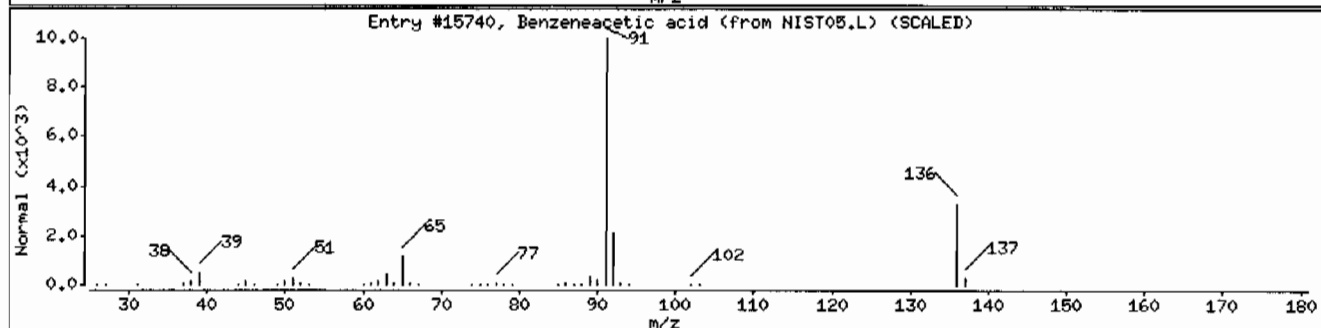
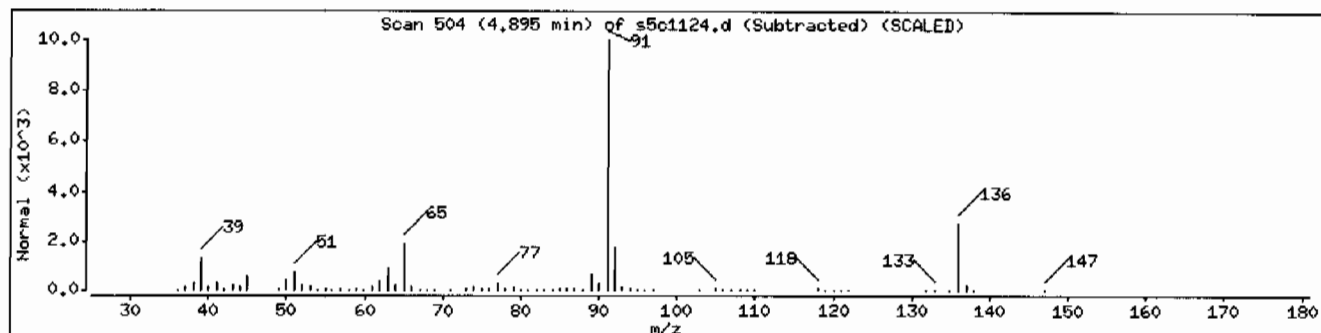
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzeneacetic acid	103-82-2	NIST05.L	15740	91	C8H8O2	136
Benzeneacetic acid	103-82-2	NIST05.L	15739	91	C8H8O2	136
Propanedioic acid, phenyl-	2613-89-0	NIST05.L	43675	90	C9H8O4	180



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: I248240007196065911ISVM11ILANL

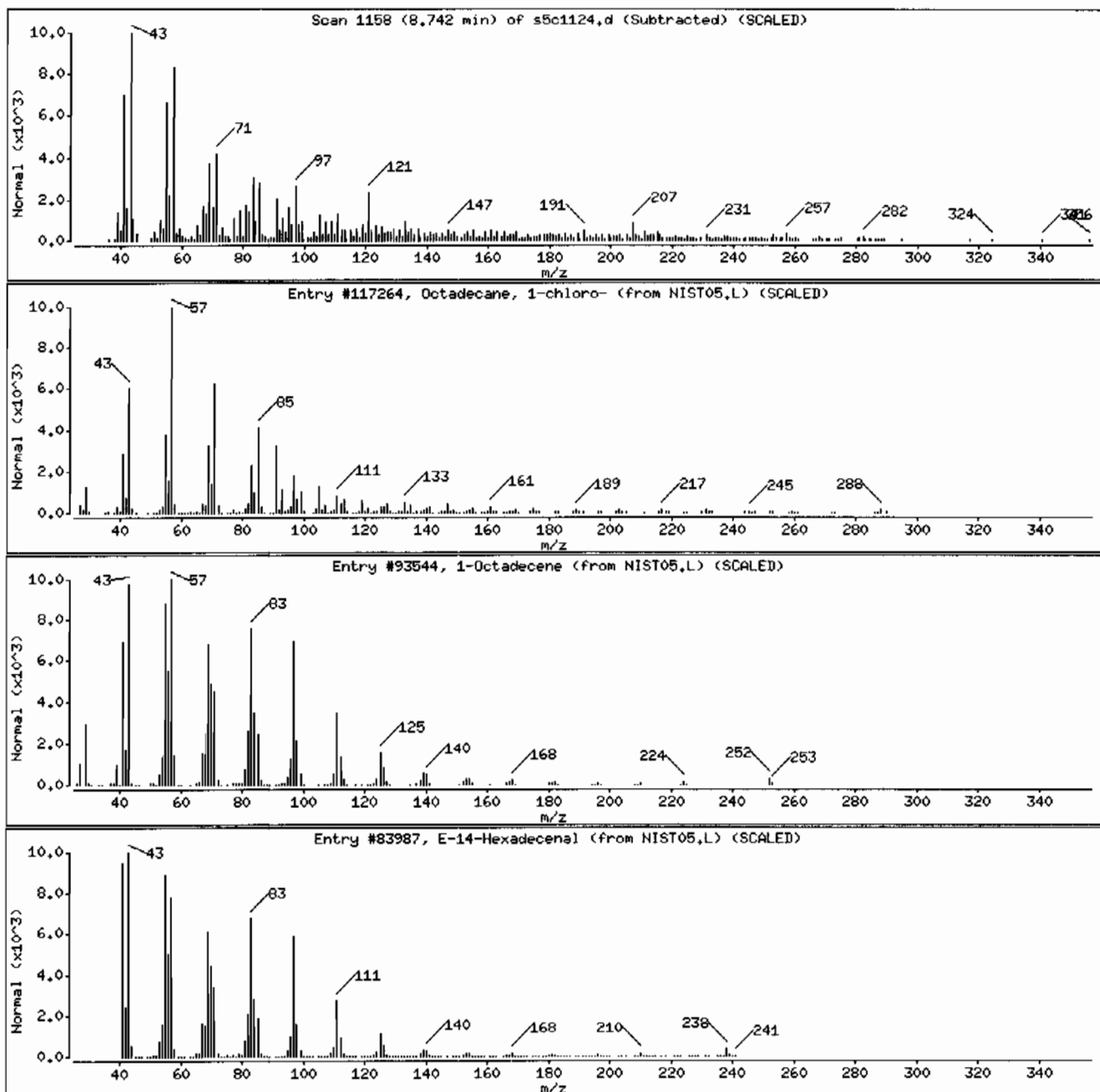
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	96	C18H37Cl	288
1-Octadecene	112-88-9	NIST05.L	93544	94	C18H36	252
E-14-Hexadecenal	330207-53-9	NIST05.L	83987	89	C16H30O	238



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: I248240007196065911SVMI1ILANL

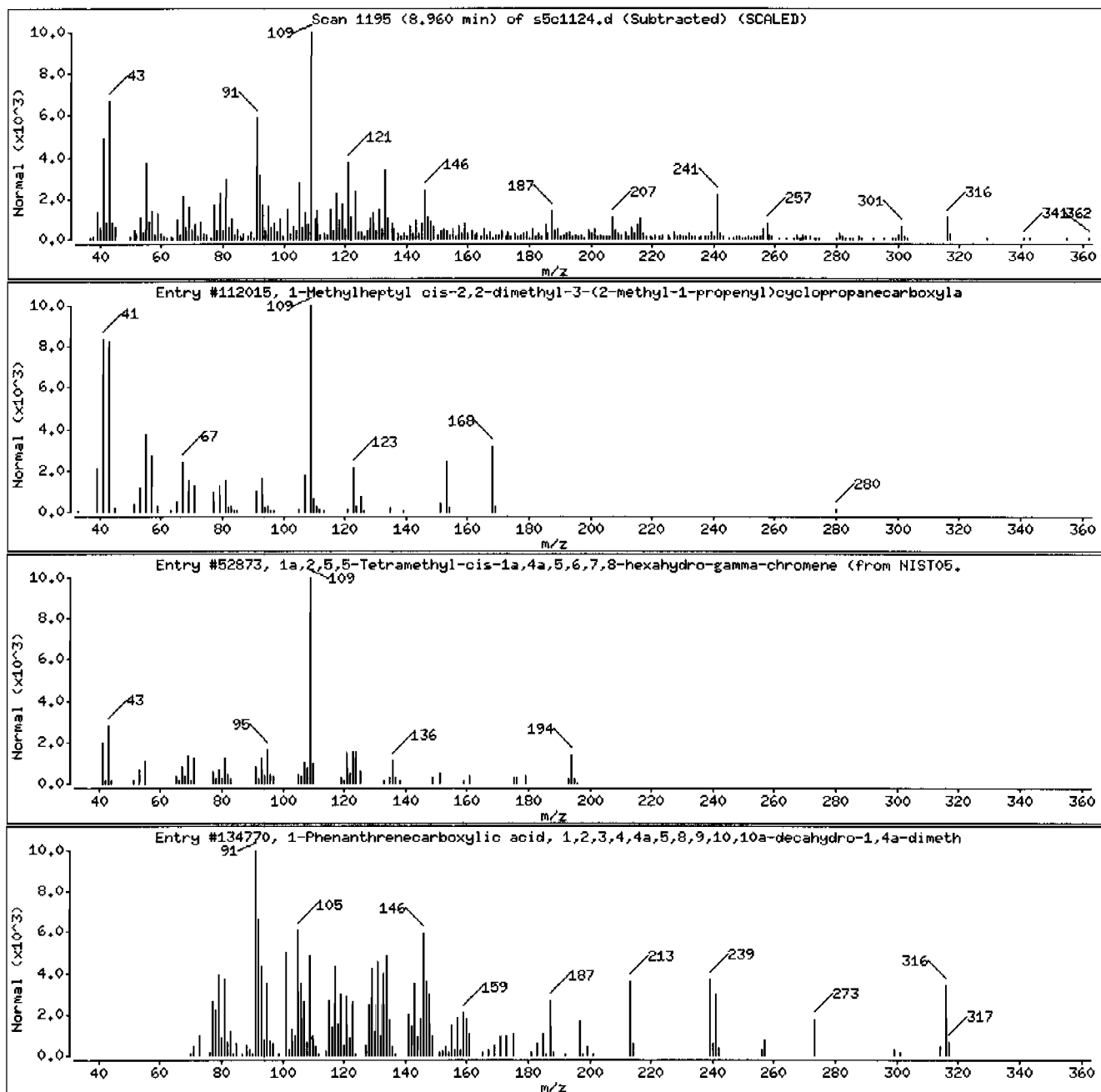
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Methylheptyl cis-2,2-dimethyl-3-(2-met	1000223-35-3	NIST05.L	112015	53	C18H32O2	280
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	46	C13H22O	194
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	33892-22-7	NIST05.L	134770	41	C21H32O2	316



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

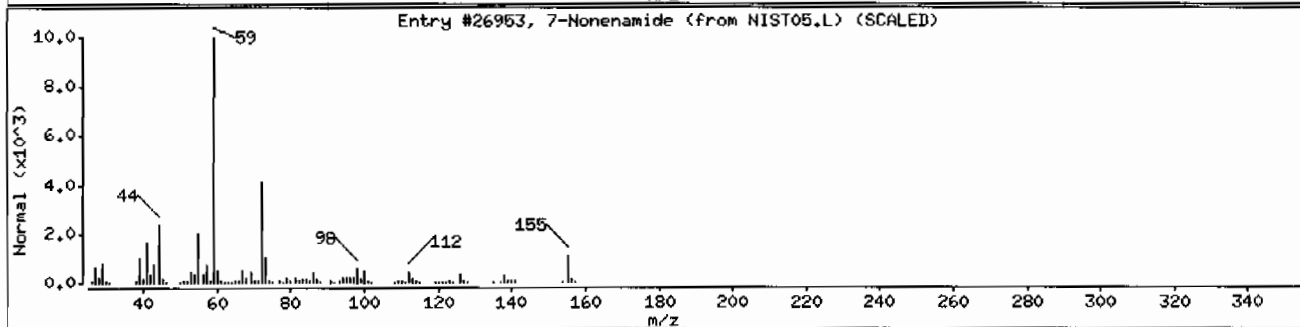
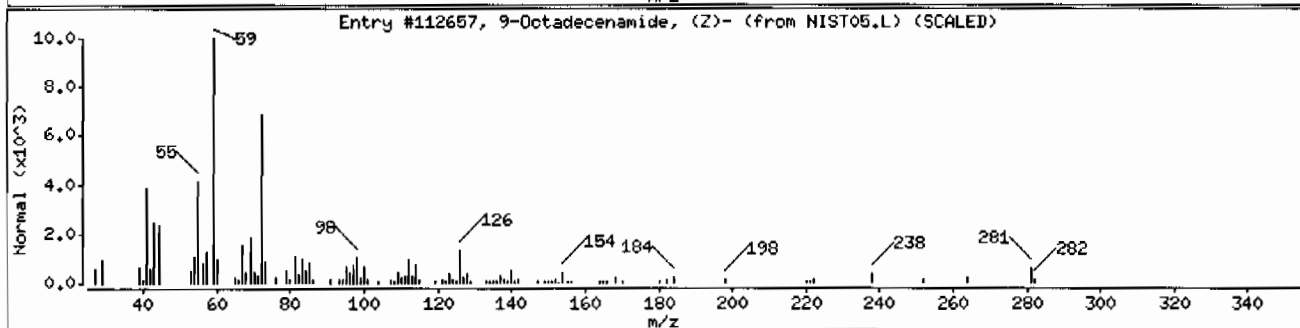
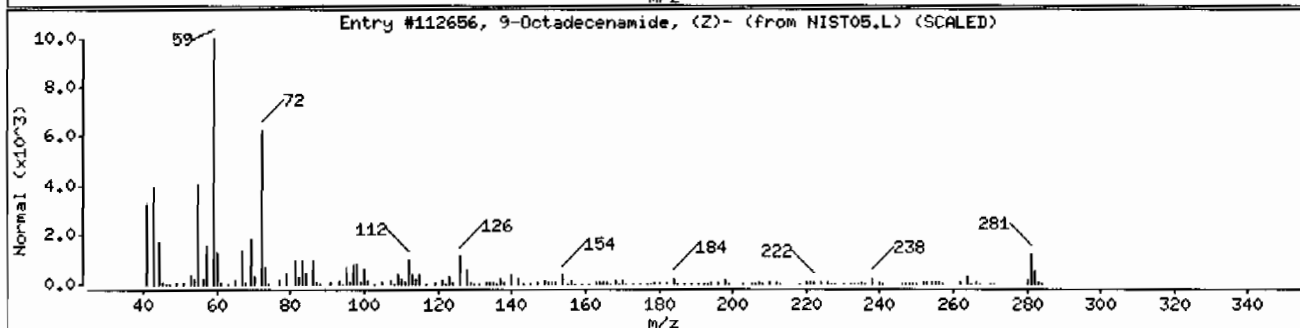
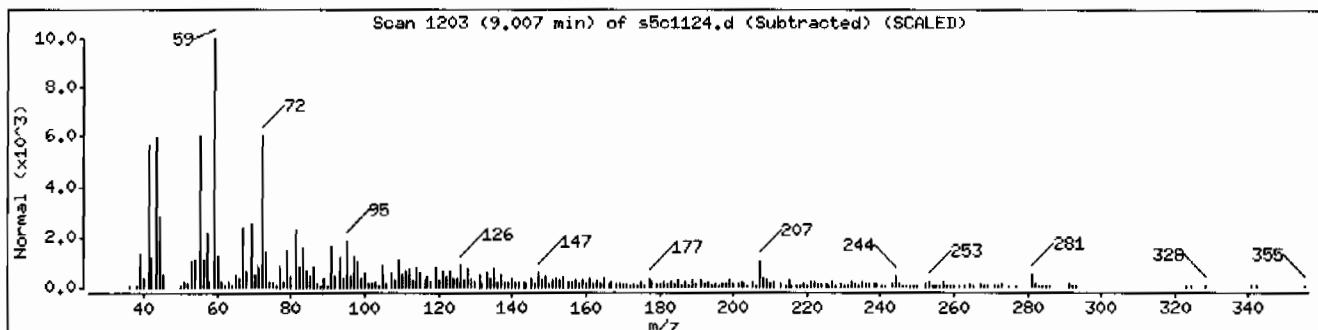
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	93	C18H35NO	281
7-Nonenamide	90949-53-4	NIST05.L	26953	59	C9H17NO	155



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5,i

Sample Info: 12482400071960659111SVMI11LANL

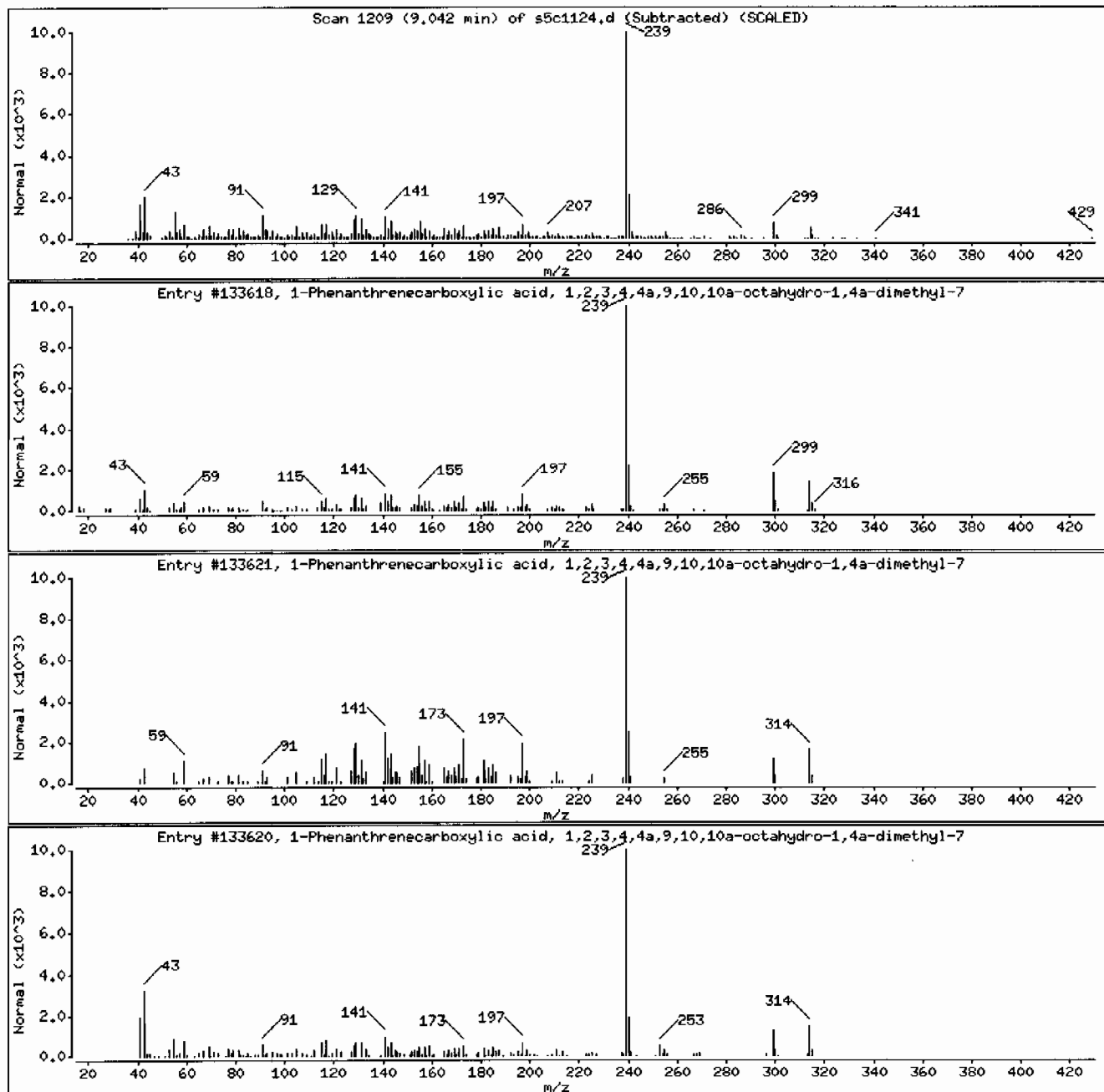
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	94	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 12482400071960659111SVH111LANL

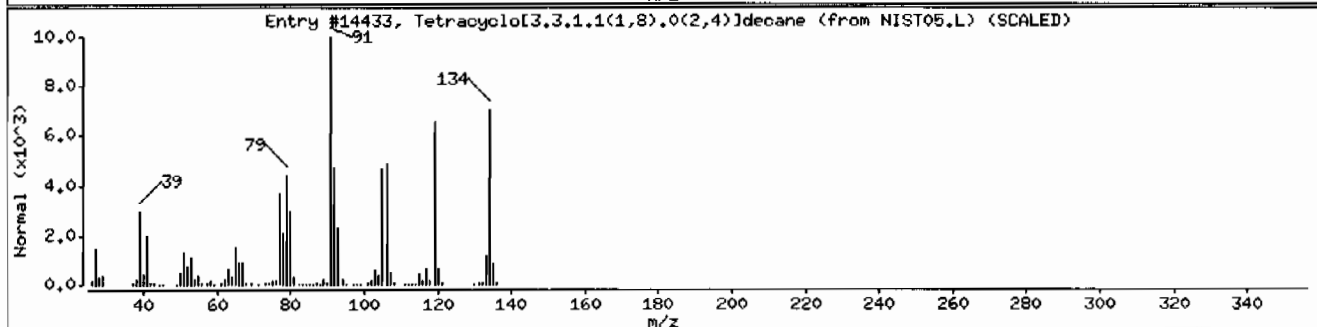
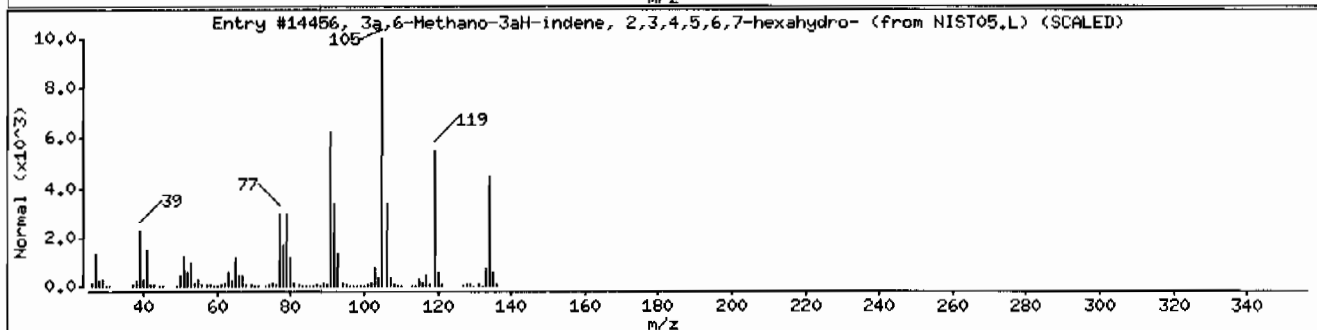
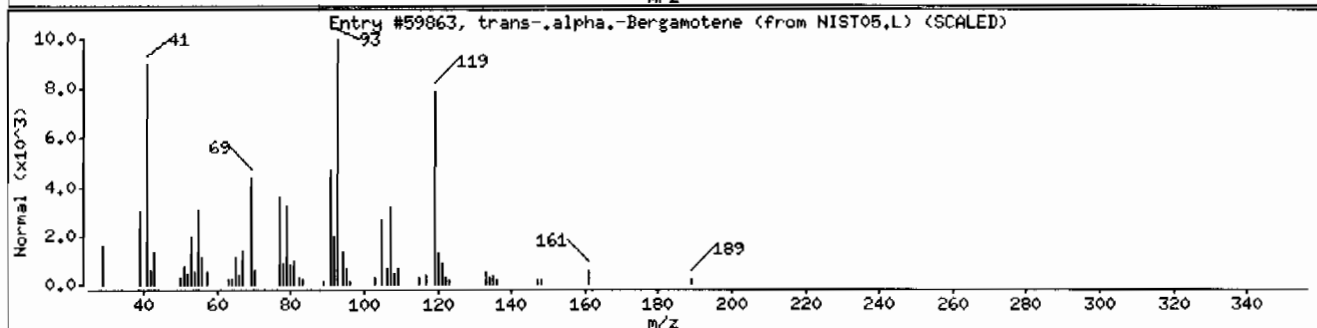
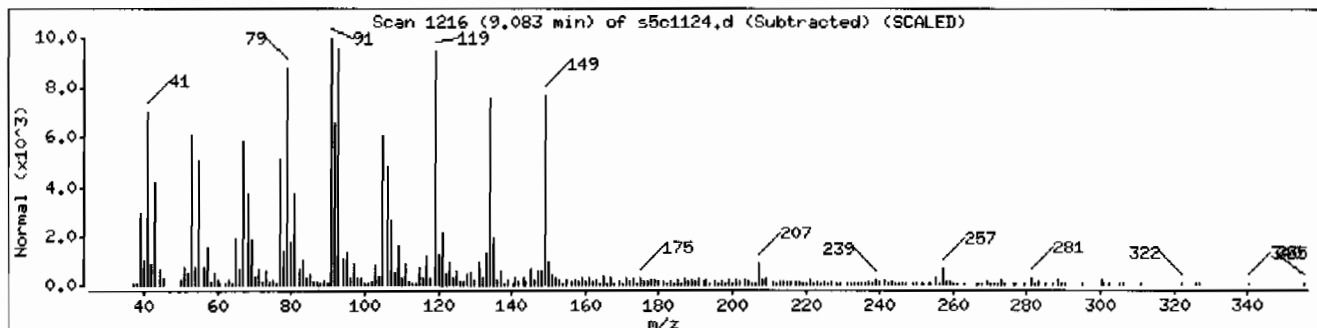
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-.alpha.-Bergamotene	1000293-01-5	NIST05.L	59863	47	C15H24	204
3a,6-Methano-3aH-indene, 2,3,4,5,6,7-hex	98640-10-9	NIST05.L	14456	46	C10H14	134
Tetracyclo[3,3,1,1(1,8),0(2,4)]decane	1000185-58-7	NIST05.L	14433	45	C10H14	134



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

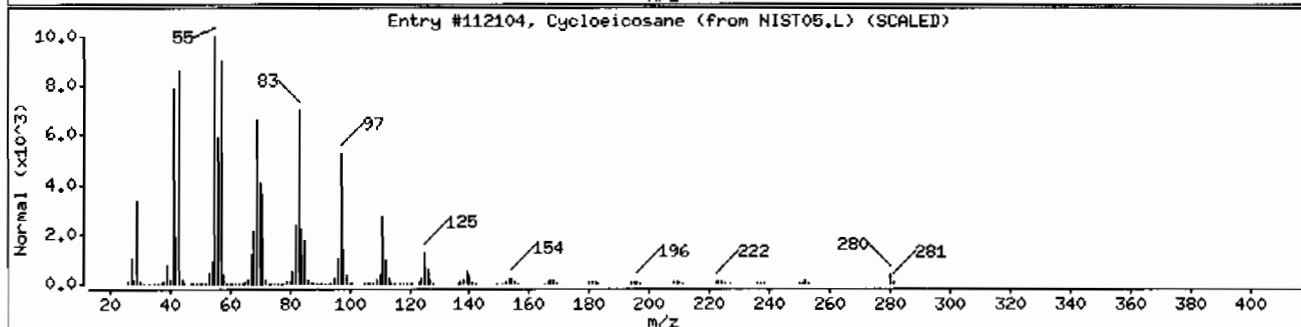
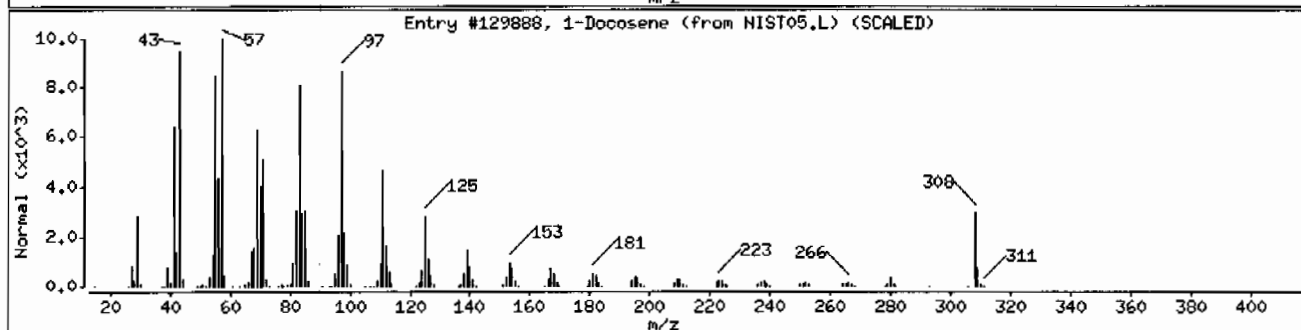
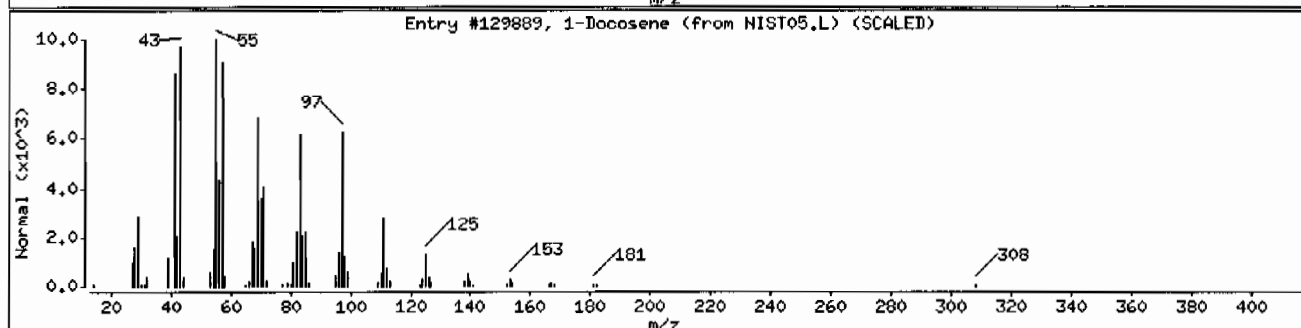
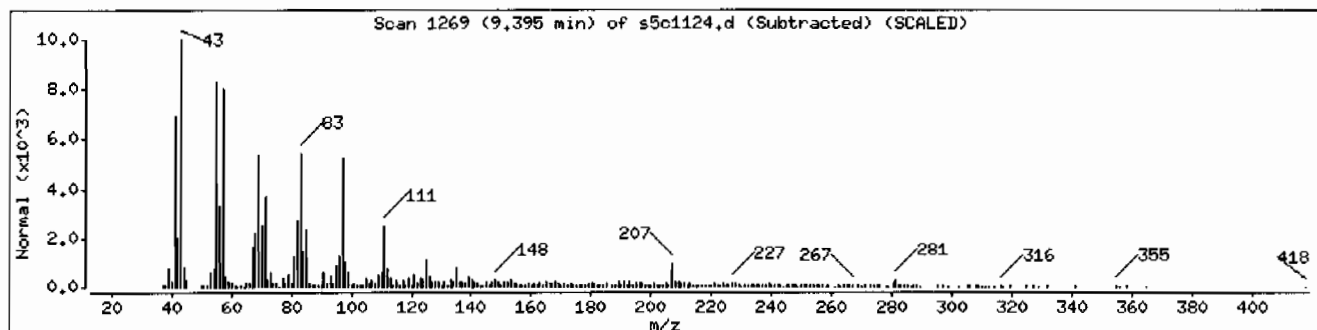
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129888	98	C22H44	308
Cycloeicosane	296-56-0	NIST05.L	112104	95	C20H40	280



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: I248240007196065911SVH111LANL

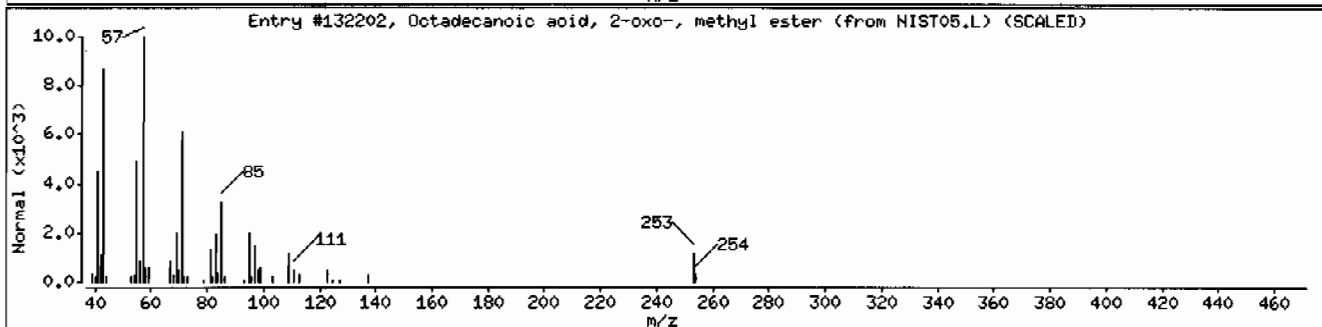
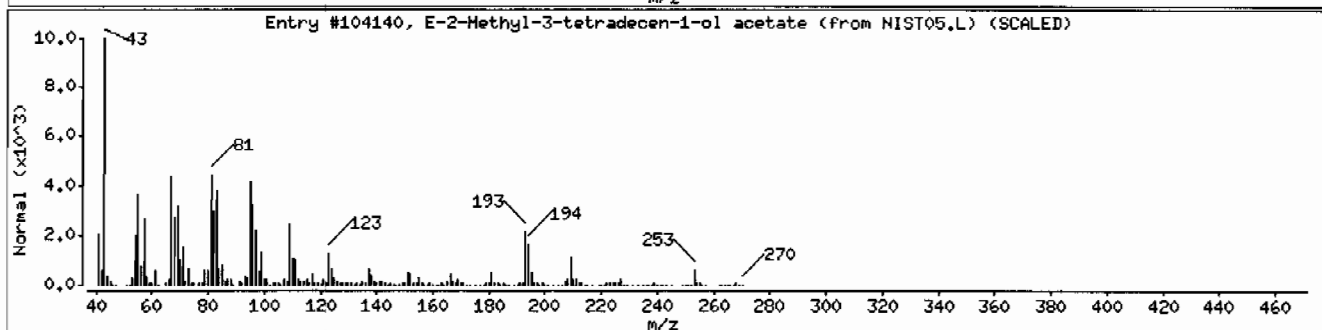
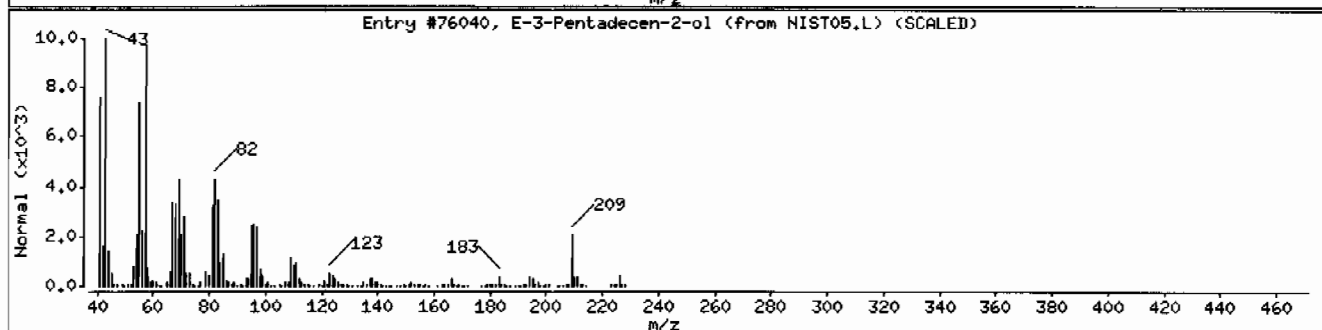
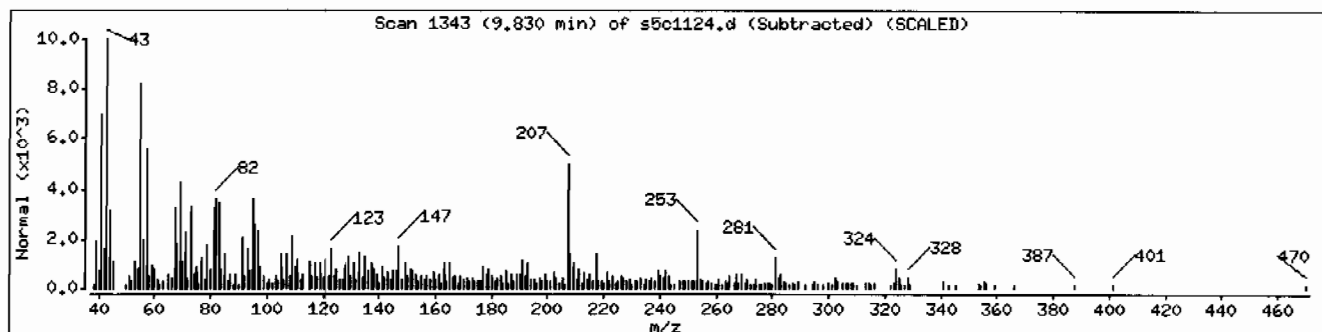
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
E-3-Pentadecen-2-ol	1000130-83-8	NIST05.L	76040	38	C15H30O	226
E-2-Methyl-3-tetradecen-1-ol acetate	1000130-81-2	NIST05.L	104140	38	C17H32O2	268
Octadecanoic acid, 2-oxo-, methyl ester	2380-18-9	NIST05.L	132202	30	C19H36O3	312



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVH11LANL

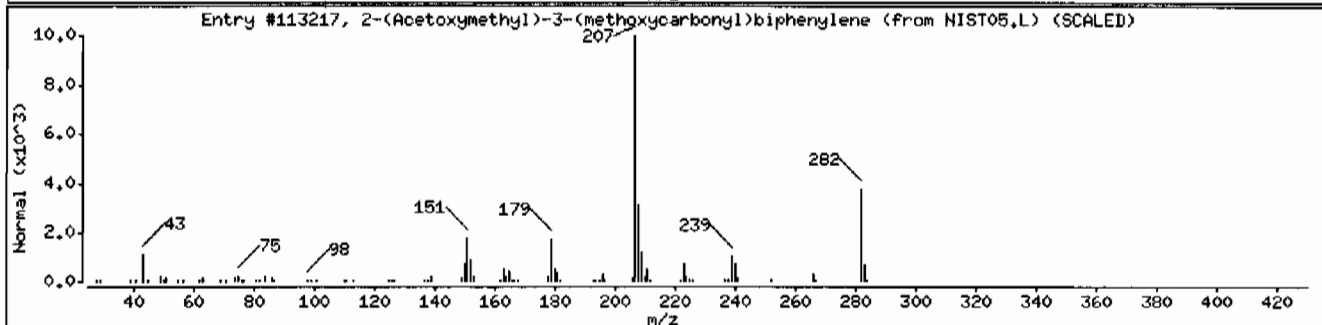
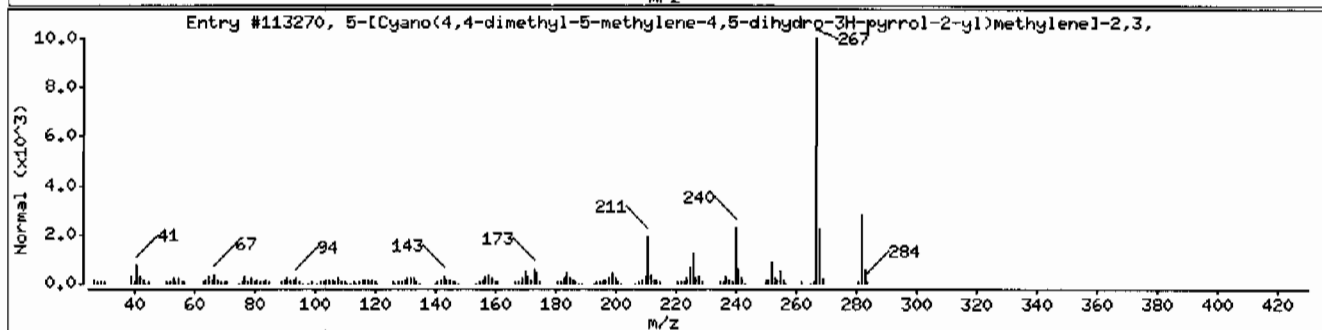
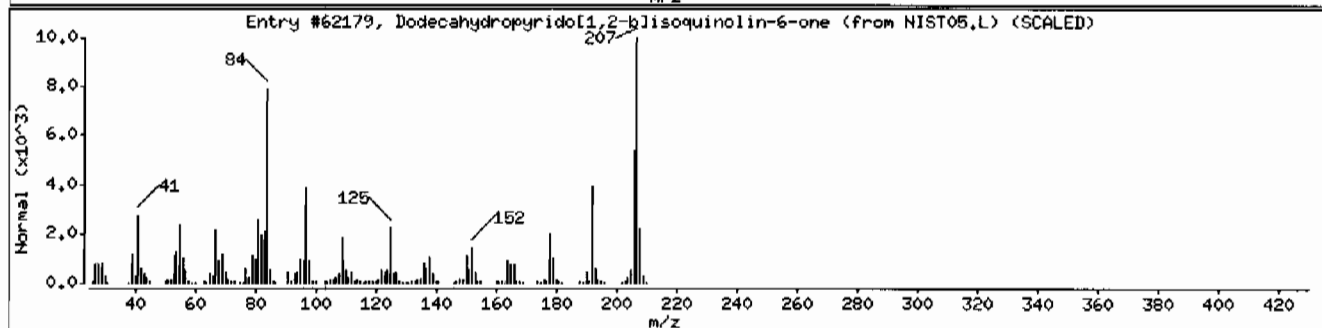
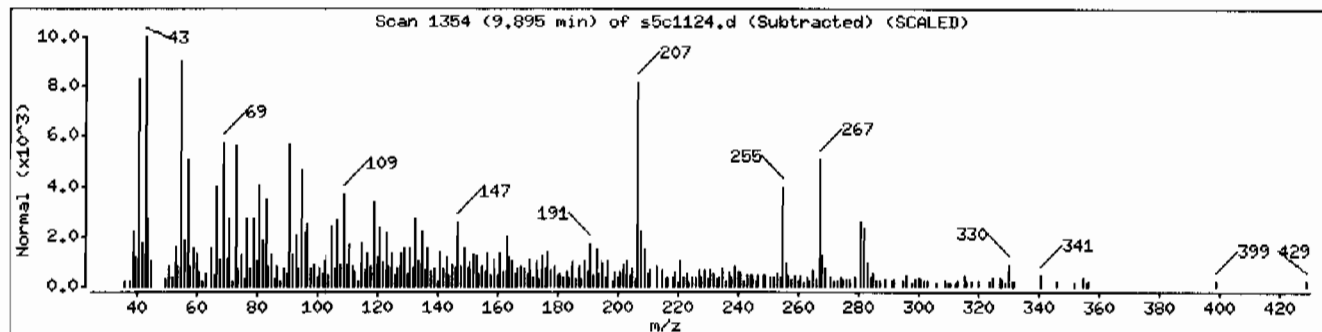
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dodecahydropyrido[1,2-b]isoquinolin-6-one	108873-36-5	NIST05.L	62179	35	C13H21NO	207
5-[Ciano(4,4-dimethyl-5-methylene-4,5-di	1000192-90-5	NIST05.L	113270	25	C17H22N4	282
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	25	C17H14O4	282



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: 1248240007196065911SVH111LANL

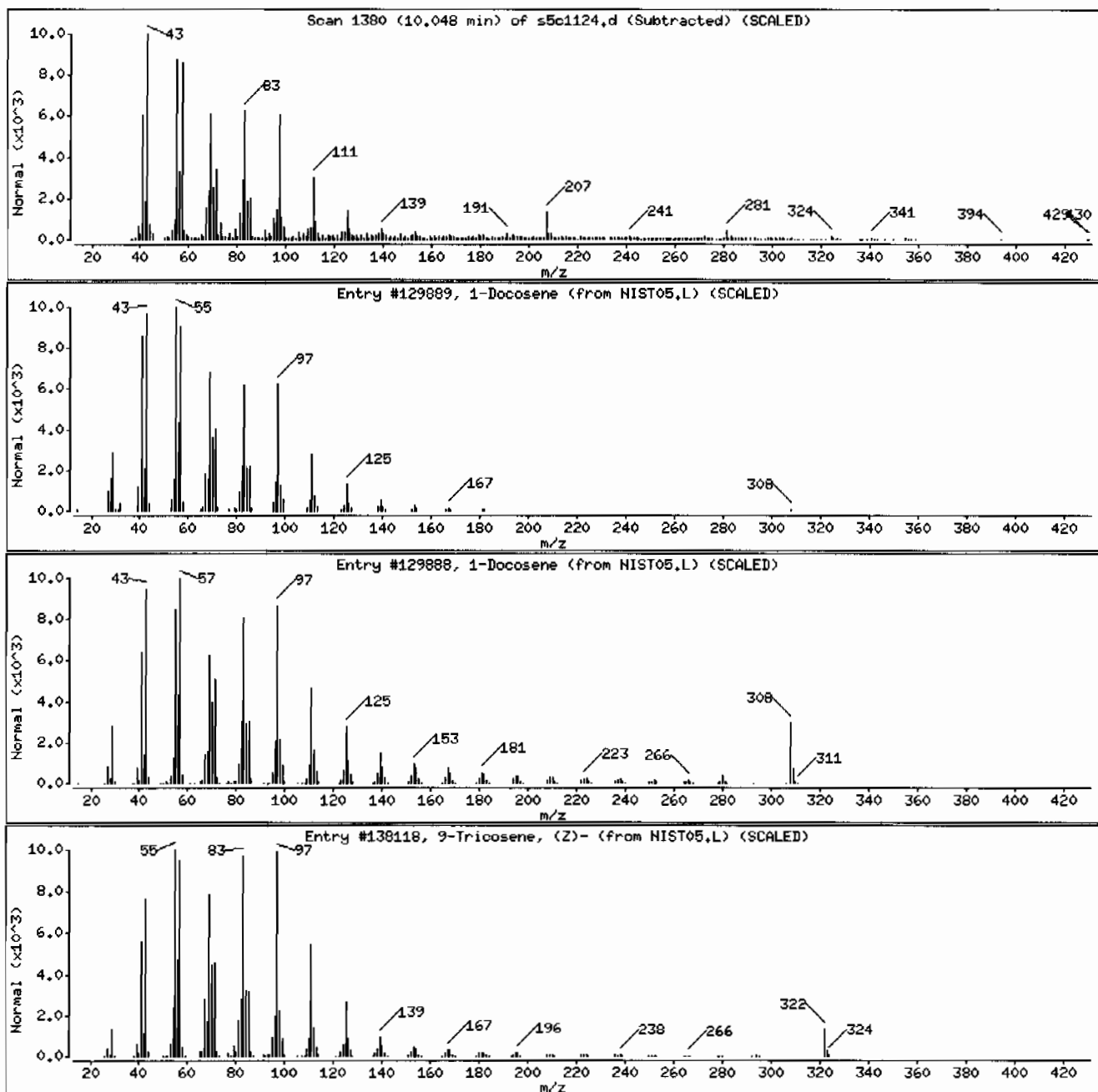
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129888	95	C22H44	308
9-Tricosene, (Z)-	27519-02-4	NIST05.L	138118	90	C23H46	322



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVH111LANL

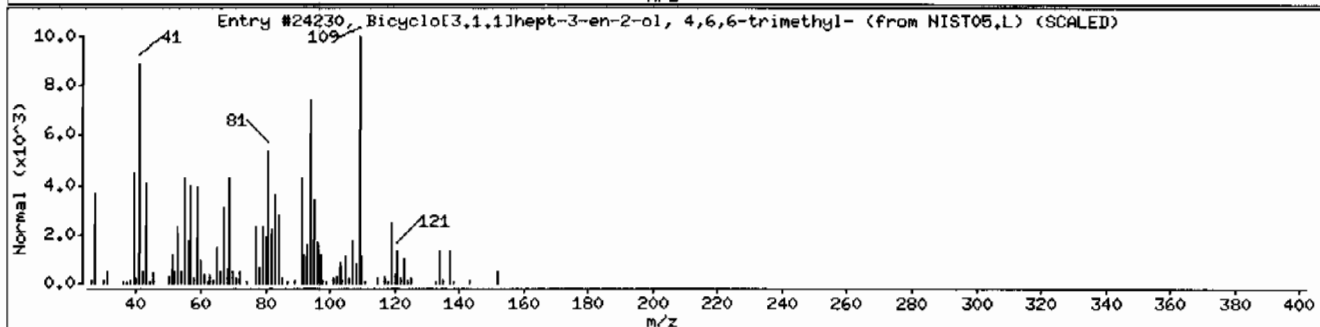
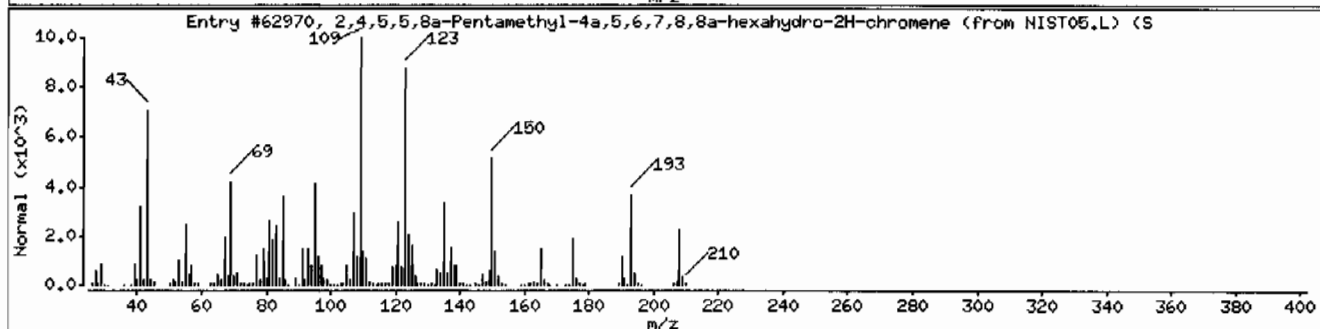
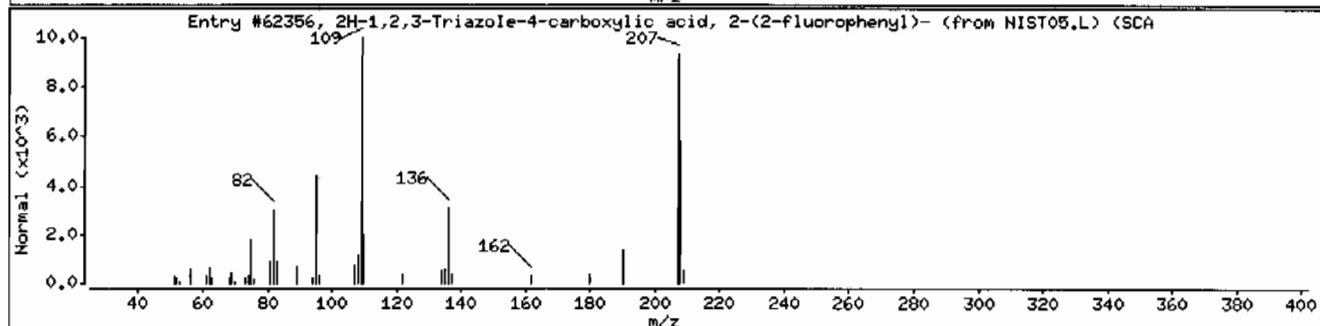
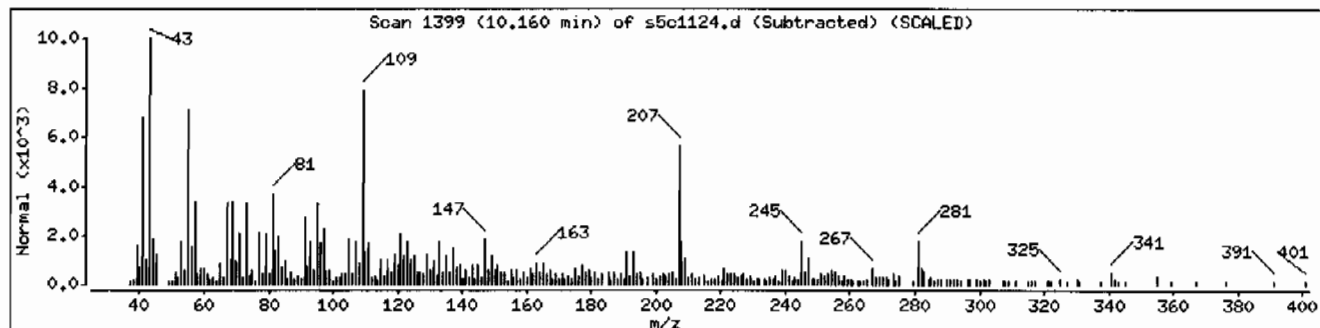
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-1,2,3-Triazole-4-carboxylic acid, 2-(	51306-44-6	NIST05.L	62356	49	C9H6FN3O2	207
2,4,5,5,8a-Pentamethyl-4a,5,6,7,8,8a-hex	1000195-30-1	NIST05.L	62970	43	C14H24O	208
Bicyclo[3.1.1]hept-3-en-2-ol, 4,6,6-trim	473-67-6	NIST05.L	24230	43	C10H16O	152



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911ISVH11ILANL

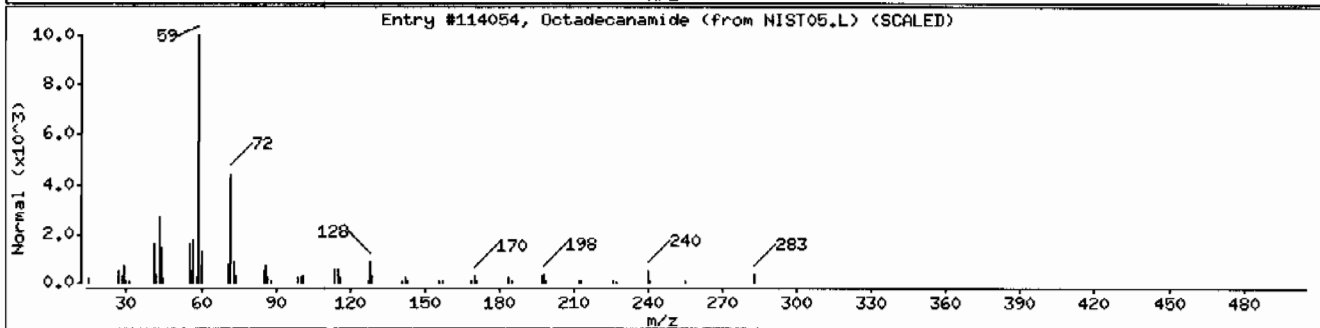
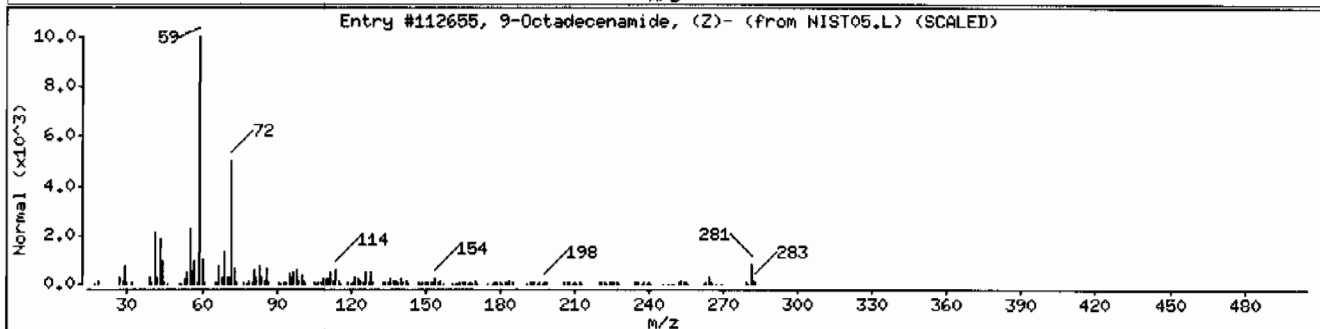
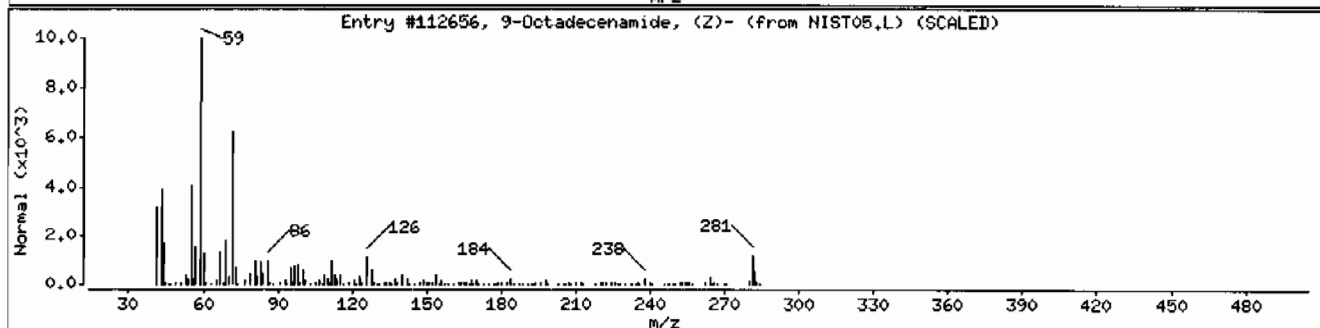
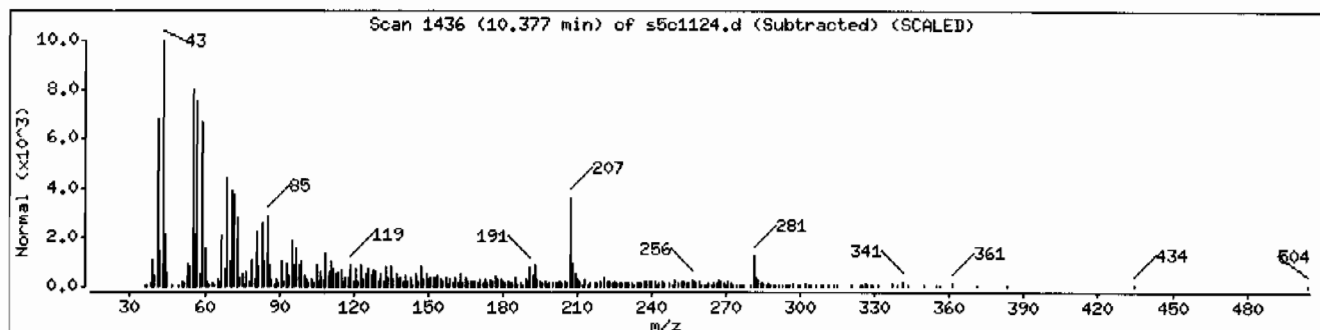
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	80	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	55	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114054	52	C18H37NO	283



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: I248240007196065911ISVH111LANL

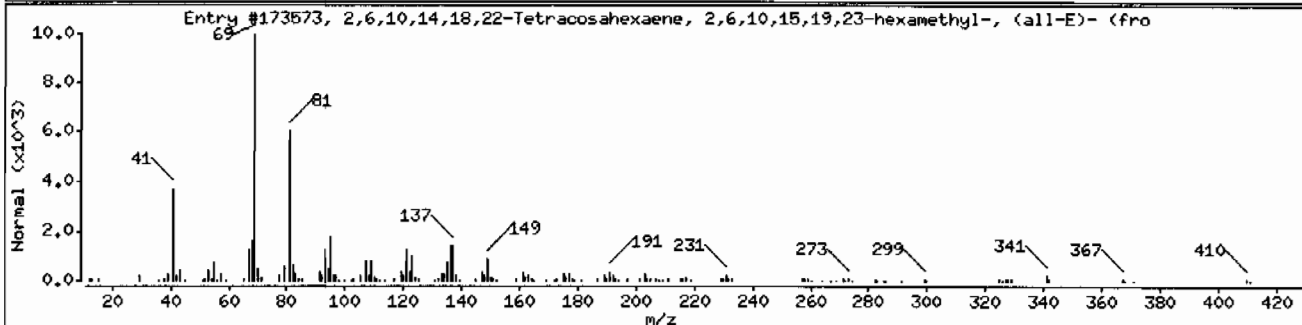
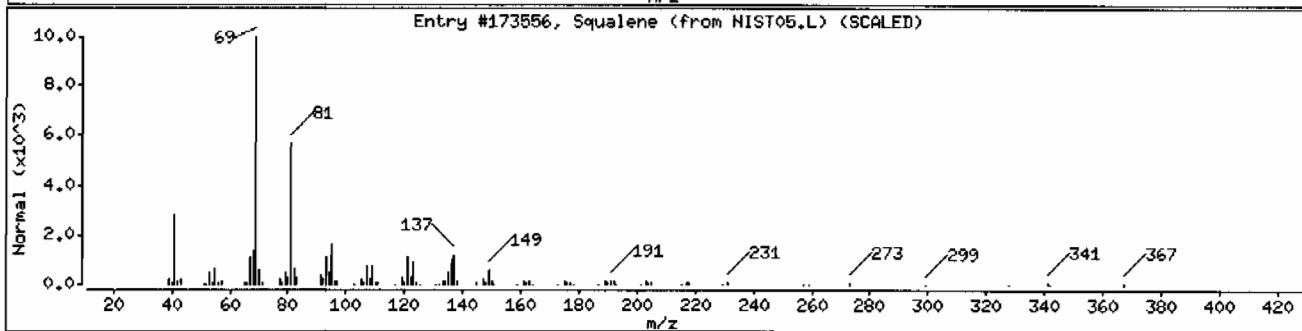
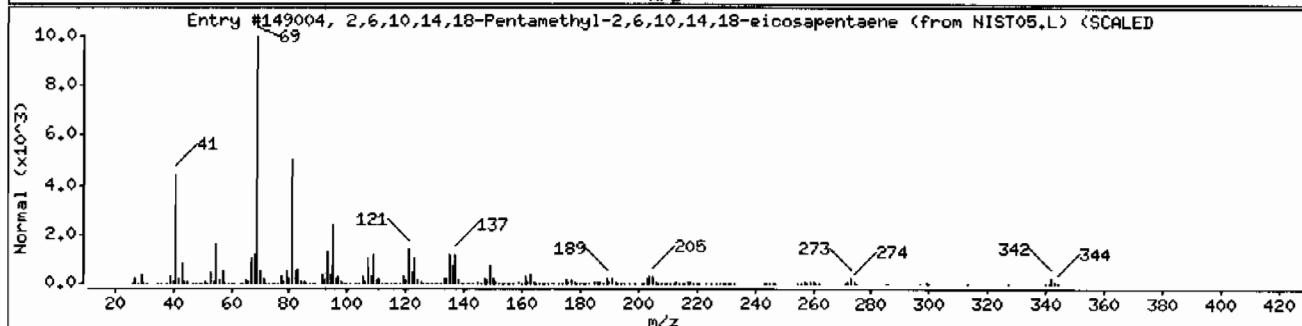
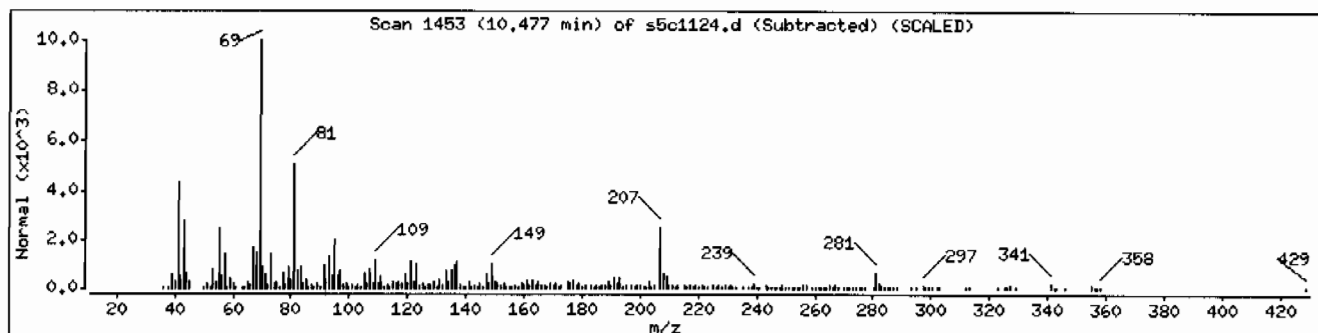
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	75581-03-2	NIST05.L	149004	89	C25H42	342
Squalene	7683-64-9	NIST05.L	173556	81	C30H50	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173573	76	C30H50	410



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5.i

Sample Info: I2482400071960659111SVH111LANL

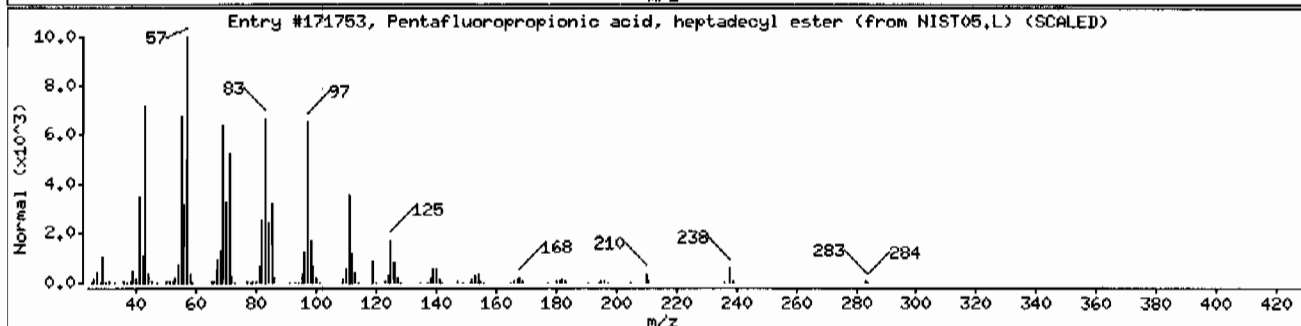
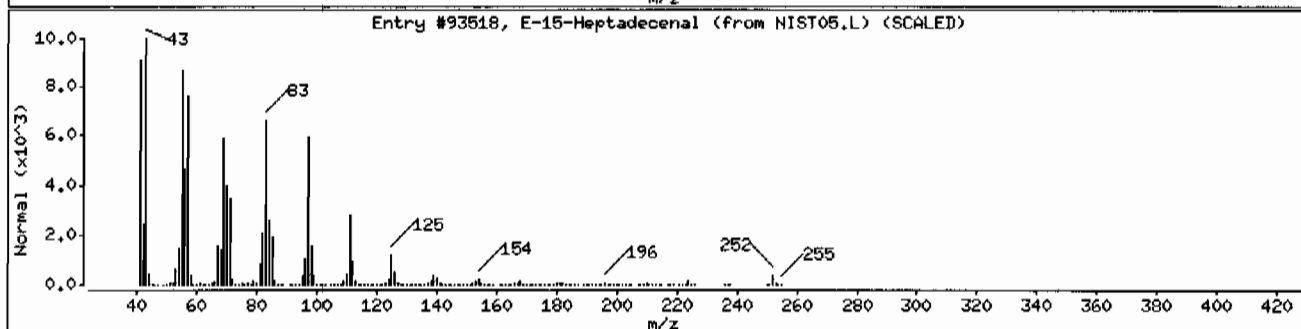
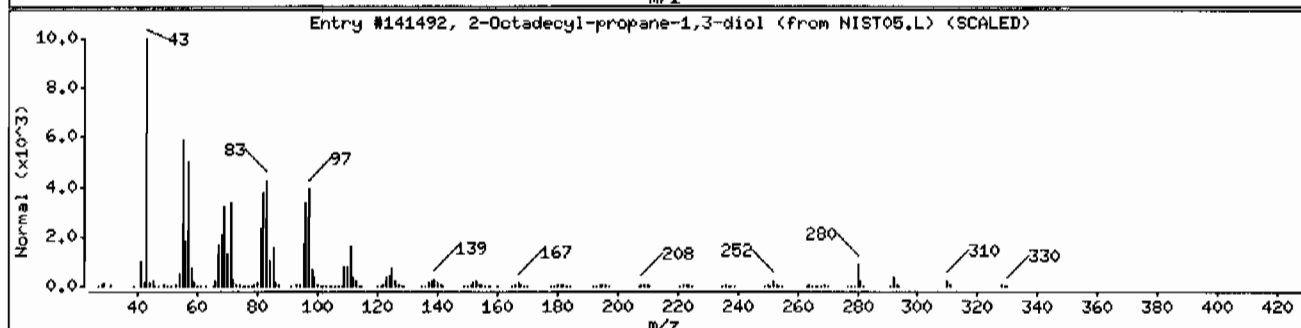
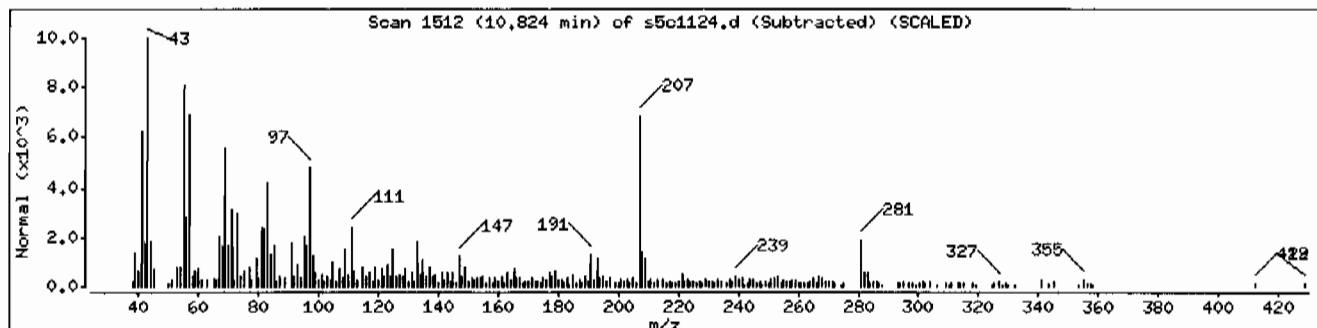
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	70	C21H44O2	328
E-15-Heptadecenal	1000130-97-9	NIST05.L	93518	53	C17H32O	252
Pentafluoropropionic acid, heptadecyl es	1000283-04-2	NIST05.L	171753	46	C20H35F5O2	402



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

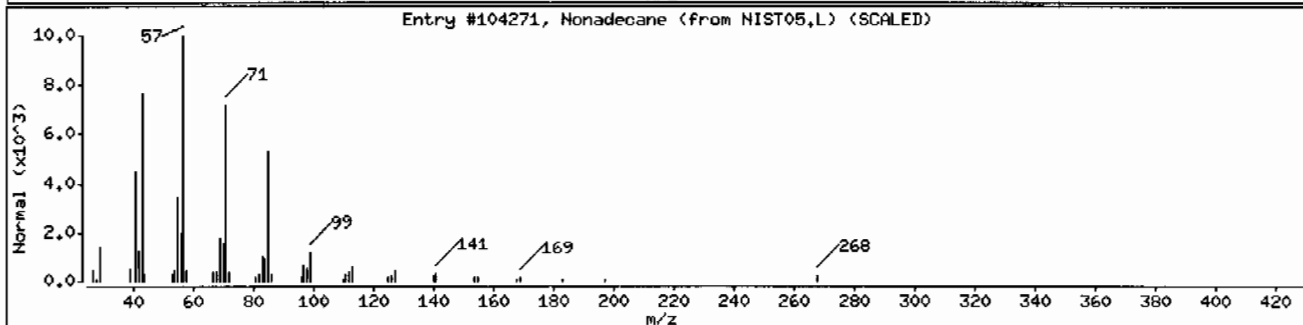
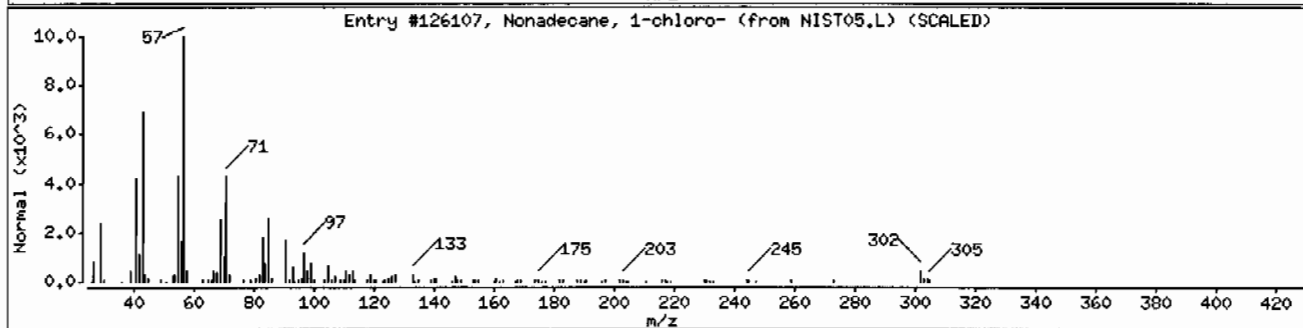
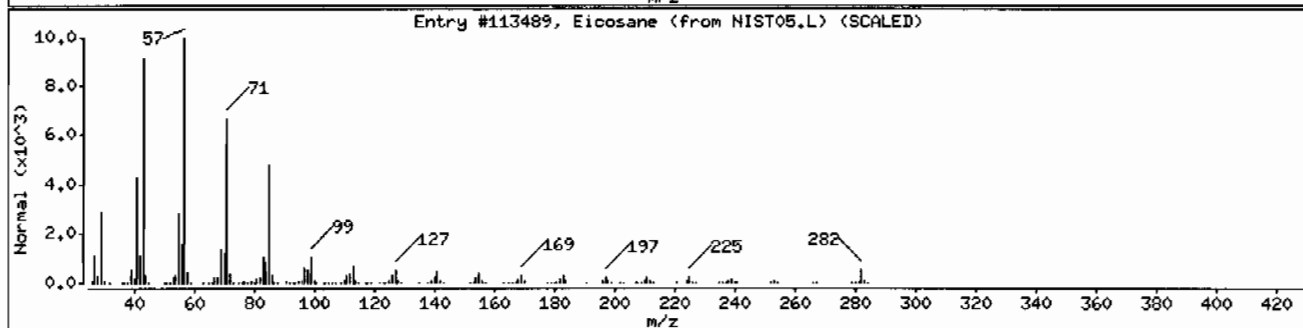
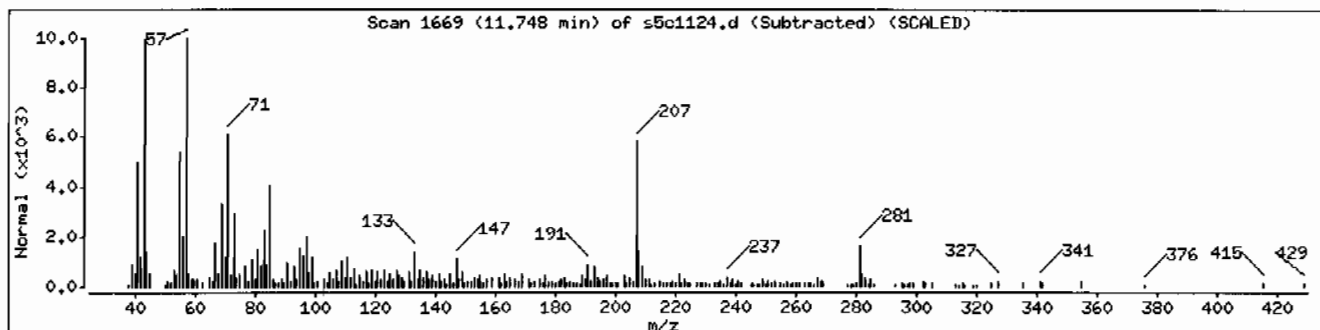
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	95	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	95	C19H39Cl	302
Nonadecane	629-92-5	NIST05.L	104271	94	C19H40	268



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

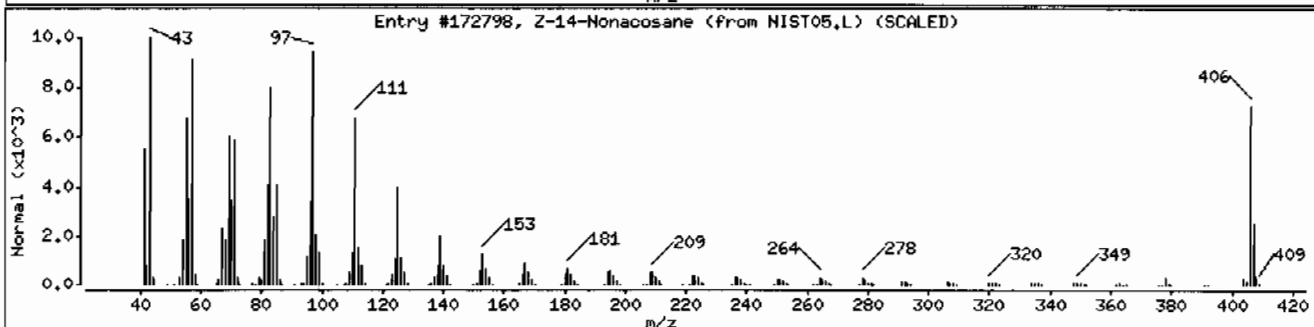
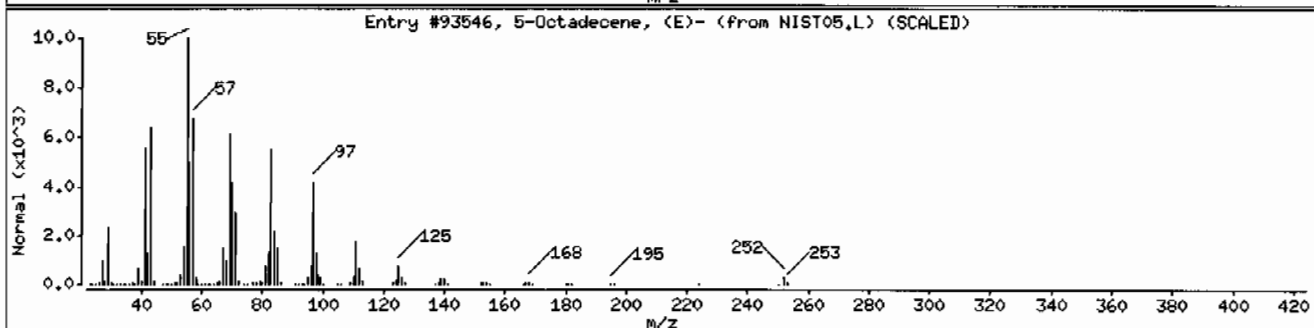
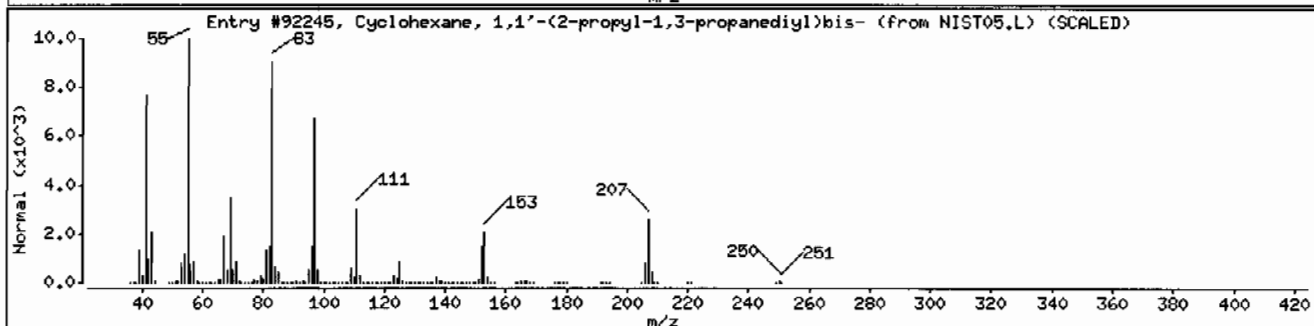
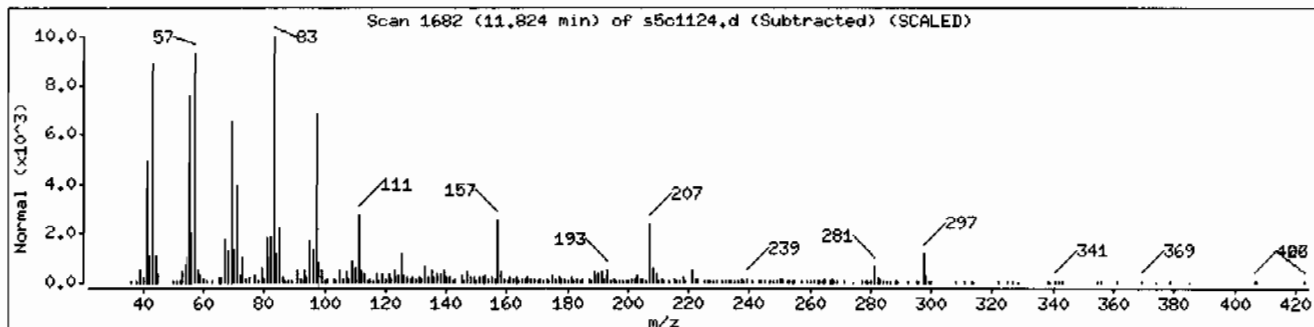
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-propyl-1,3-propanediol)bis-	55030-21-2	NIST05.L	92245	91	C18H34	250
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	89	C18H36	252
Z-14-Nonacosane	1000131-18-9	NIST05.L	172798	86	C29H58	406



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911ISVH11LANL

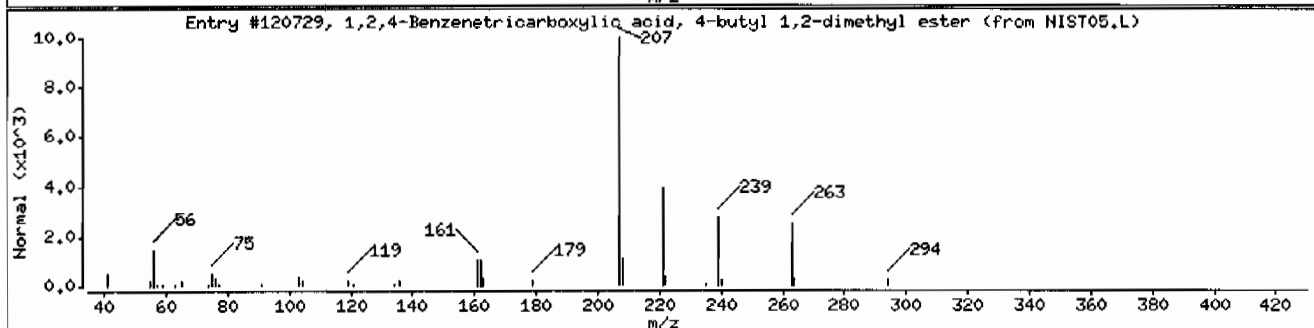
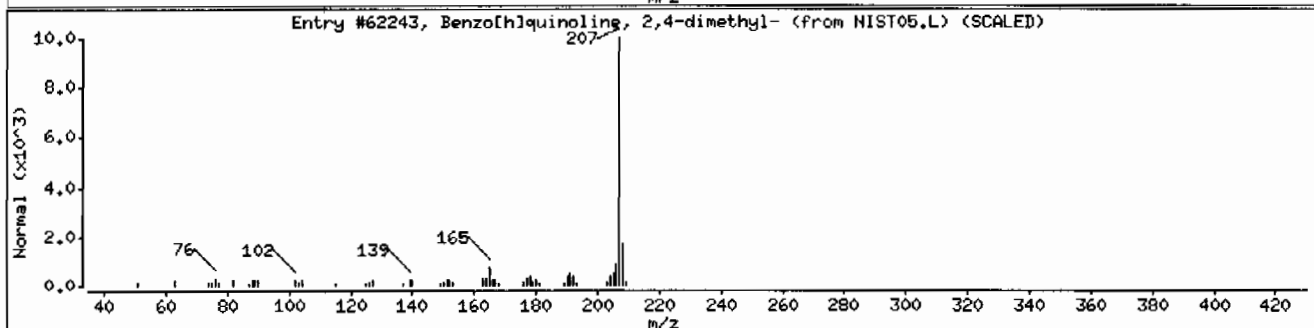
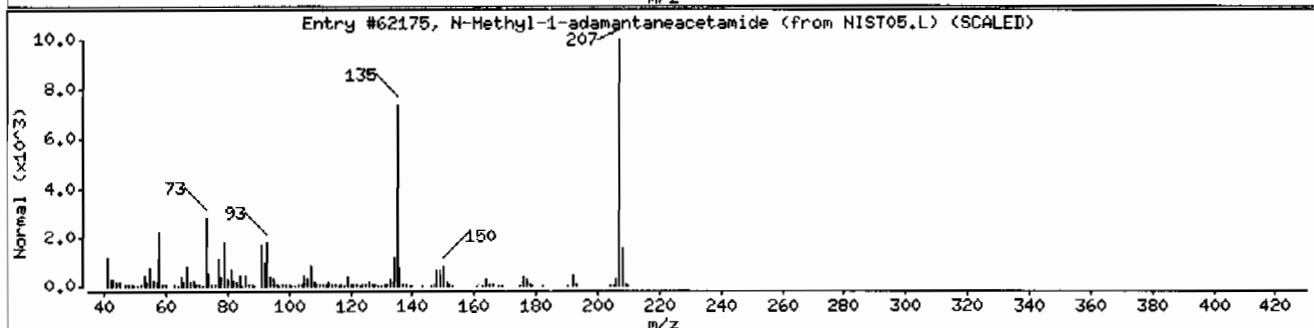
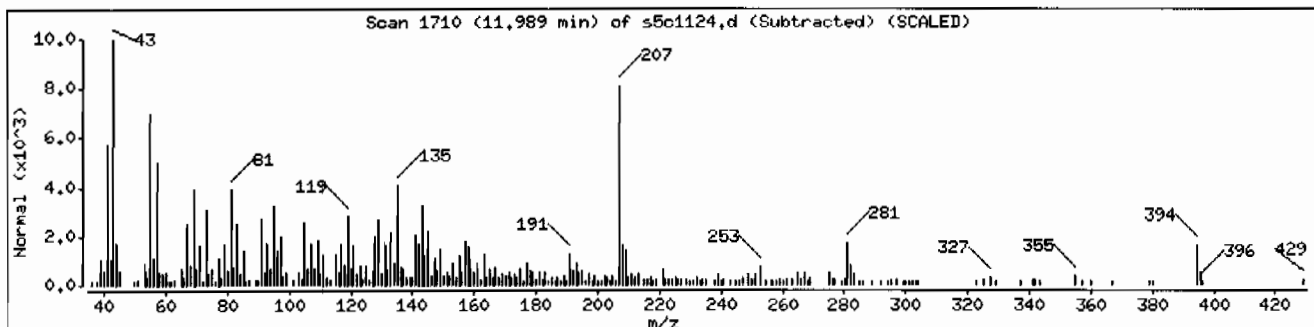
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	43	C13H21NO	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207
1,2,4-Benzenetricarboxylic acid, 4-butyl	43049-07-6	NIST05.L	120729	30	C15H18O6	294



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: HSD5,i

Sample Info: 1248240007196065911SVMI11LANL

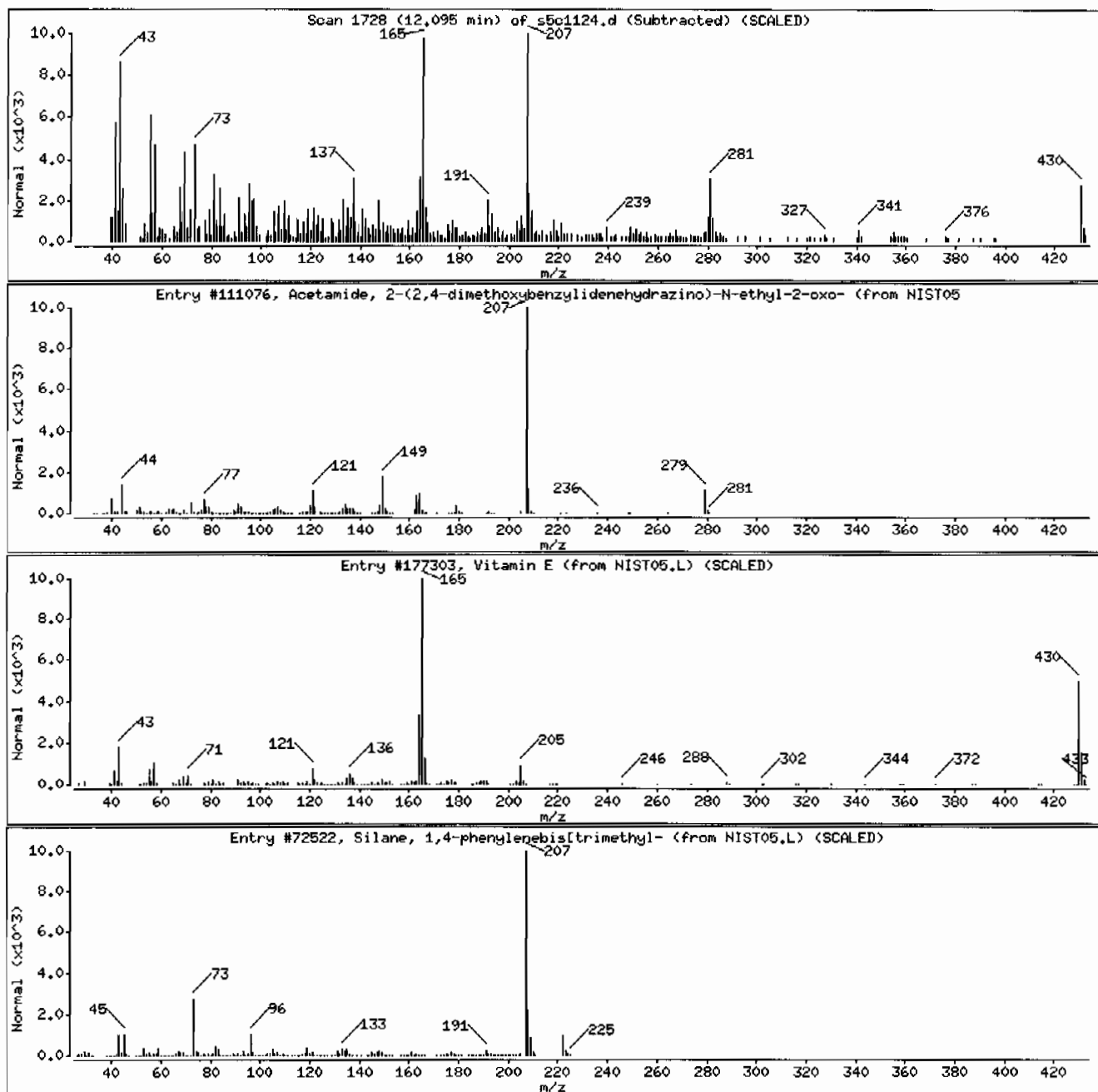
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, 2-(2,4-dimethoxybenzylidenehy	1000272-50-0	NIST05.L	111076	38	C13H17N3O4	279
Vitamin E	59-02-9	NIST05.L	177303	30	C29H50O2	430
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	30	C12H22Si2	222



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVH111LANL

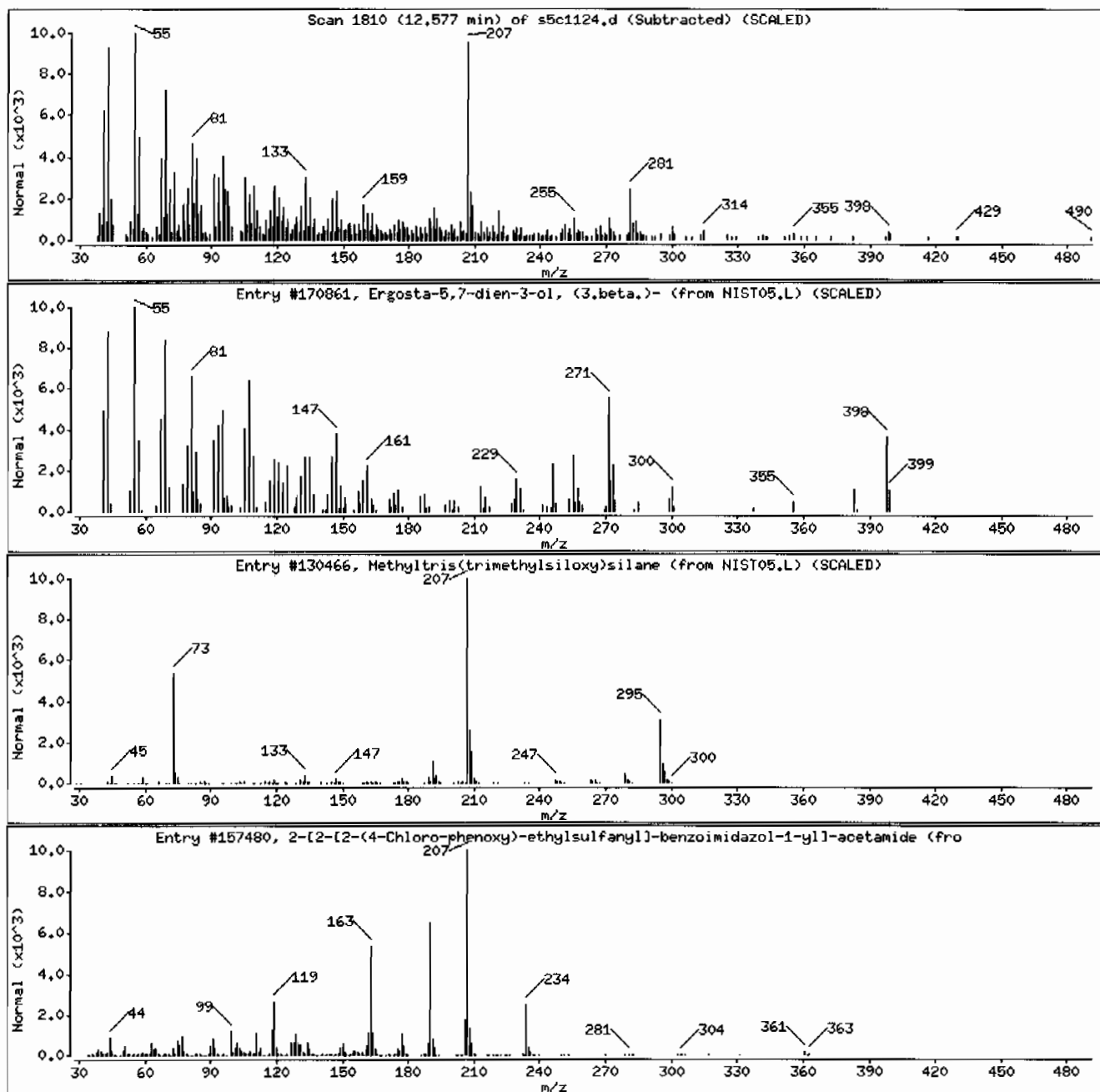
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ergosta-5,7-dien-3-ol, (3 β .)-	516-79-0	NIST05.L	170861	58	C28H46O	398
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	35	C10H30O3Si4	310
2-[2-[2-(4-Chloro-phenoxy)-ethylsulfanyl]	1000296-99-3	NIST05.L	157480	30	C17H16ClN3O2S6	



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911ISVH11ILANL

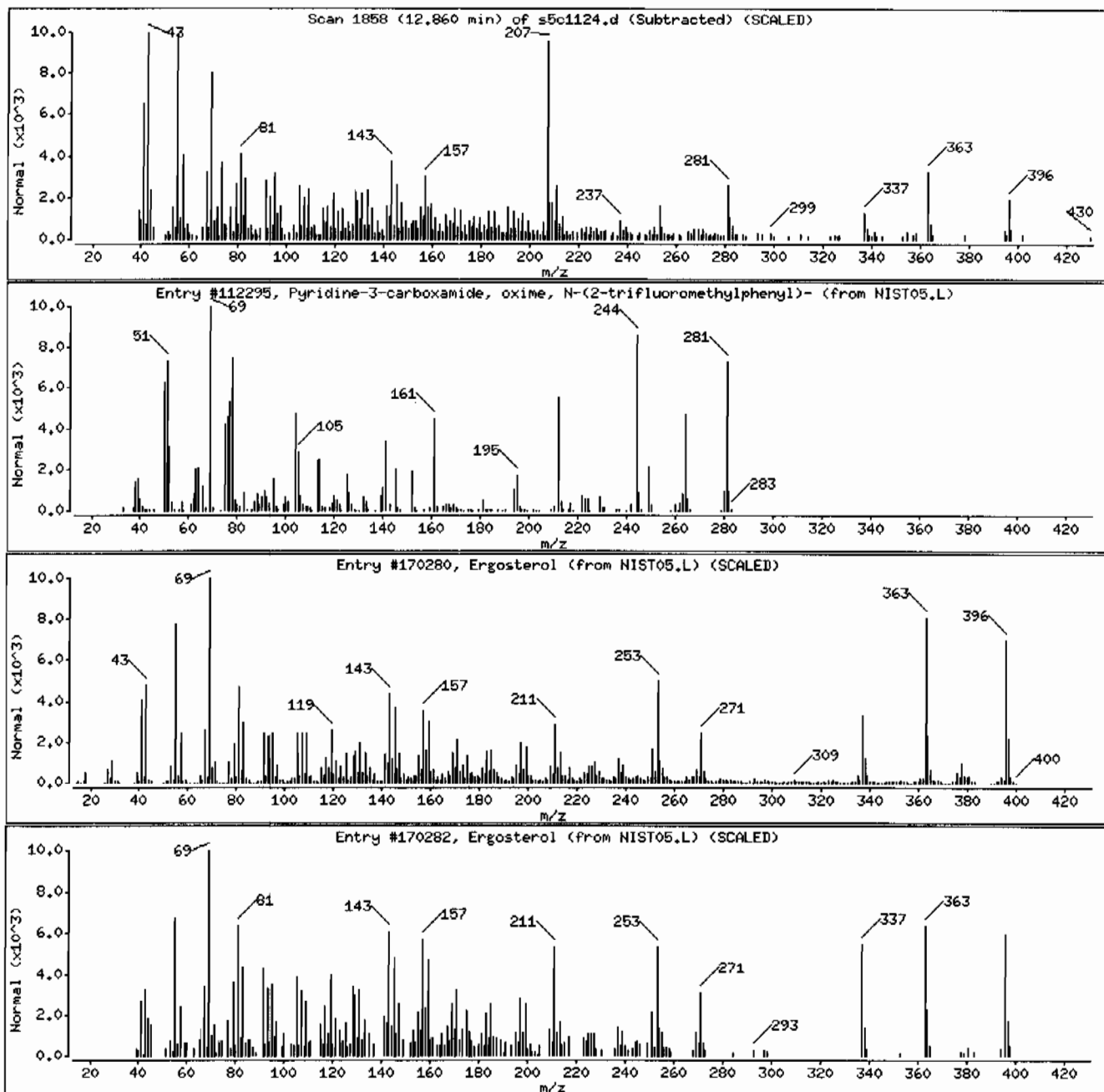
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	93	C13H10F3N3O	281
Ergosterol	57-87-4	NIST05.L	170280	64	C28H44O	396
Ergosterol	57-87-4	NIST05.L	170282	55	C28H44O	396



Date: 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911ISVH11ILANL

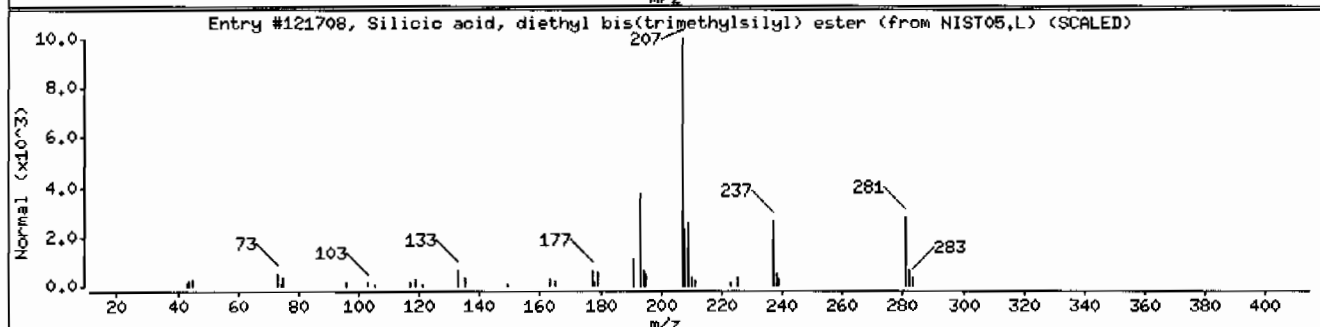
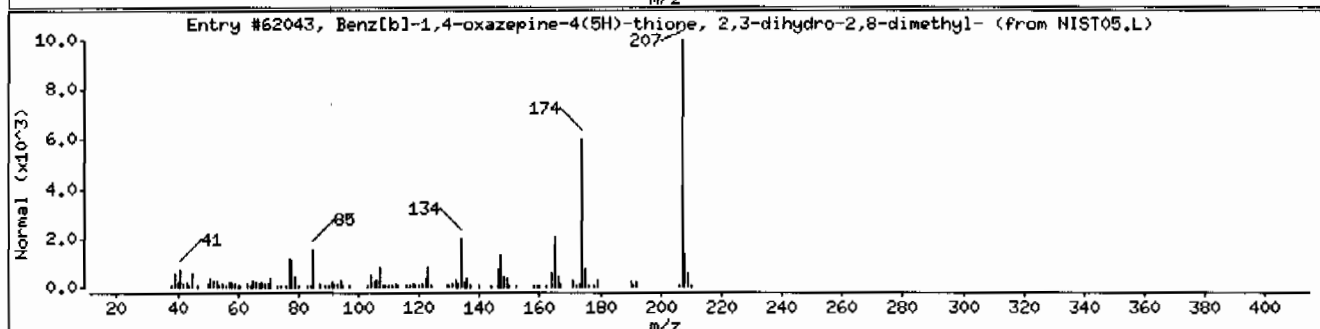
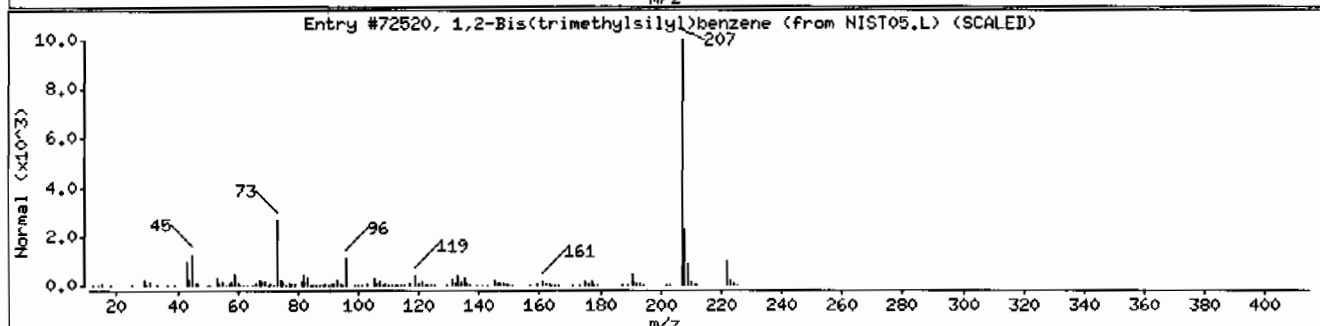
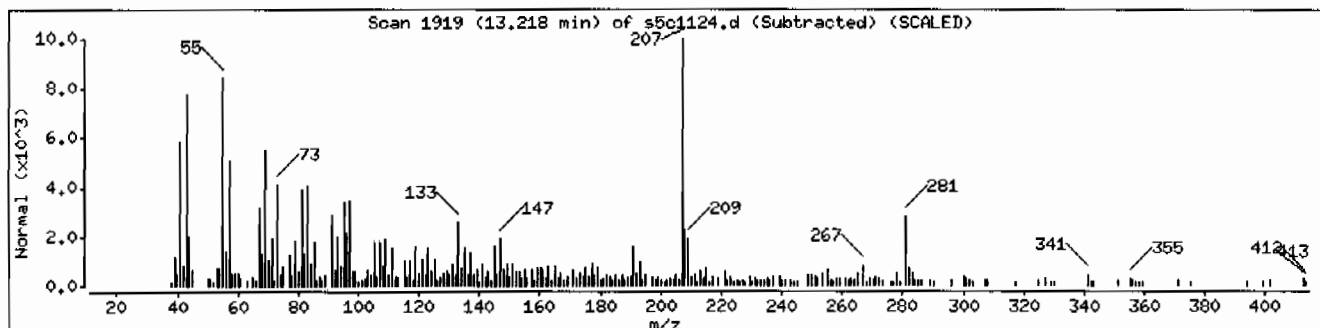
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C ₁₂ H ₂₂ Si ₂	222
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	38	C ₁₁ H ₁₃ NOS	207
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	35	C ₁₀ H ₂₈ O ₄ Si ₃	296



Date : 11-MAR-2010 19:25

Client ID: RE36-10-7459

Instrument: MSD5.i

Sample Info: 1248240007196065911SVMI11LANL

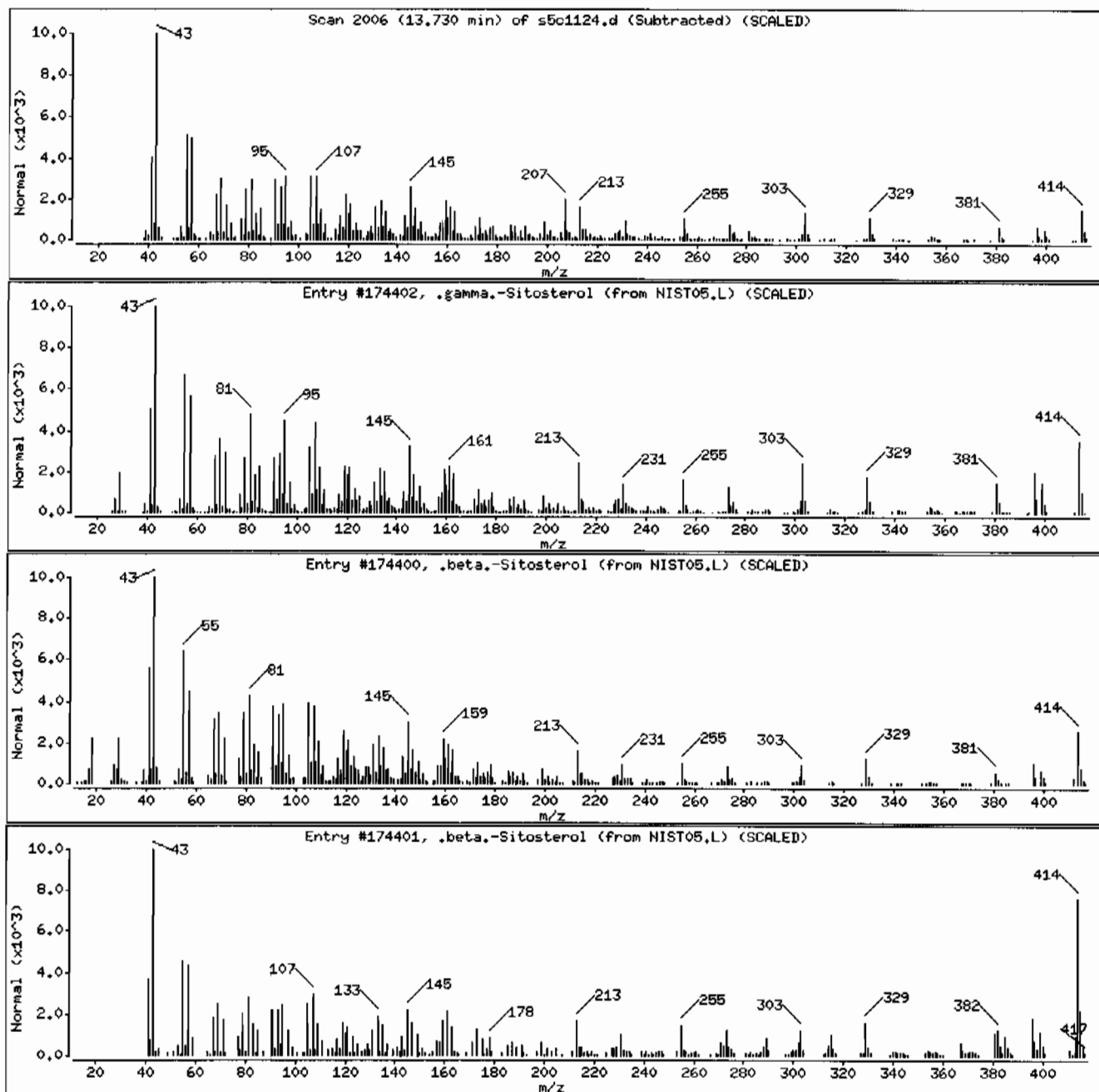
Volume Injected (UL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	96	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	89	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	87	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7460
Batch ID: 960659
Run Date: 03/10/2010 22:21
Prep Date: 03/04/2010 10:53
Data File: s5c1034.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl) ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	184	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367

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

Page 2 of 3

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Accnaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	140	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	232	ug/kg	99	NJ

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

SDG Number: 10-2134
Lab Sample ID: 248240004

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.5
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
1599-67-3	1-Docosene	9.27	346	ug/kg	93	NJ
112-95-8	Eicosane	9.87	181	ug/kg	98	NJ
629-96-9	1-Eicosanol	9.89	1310	ug/kg	94	NJ
	Unknown	10.2	212	ug/kg		J
	Unknown	10.29	161	ug/kg		J
638-66-4	Octadecanal	10.37	209	ug/kg	91	NJ
	Unknown	10.58	374	ug/kg		J
7320-37-8	Oxirane, tetradecyl-	11.23	318	ug/kg	89	NJ
	Unknown	11.49	151	ug/kg		J
	Unknown	11.57	279	ug/kg		J
83-46-5	.beta.-Sitosterol	13.34	608	ug/kg	97	NJ
	Unknown	14.27	195	ug/kg		J
	Unknown	14.47	164	ug/kg		J

Data File: /chem/MSD5.i/s031010.b/s5c1034.d
 Report Date: 11-Mar-2010 07:56

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1034.d
 Lab Smp Id: 248240004 Client Smp ID: RE36-10-7460
 Inj Date : 10-MAR-2010 22:21
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240004|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_\$|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 34
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	9.49400	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791 (1.000)	273880	40.0000	
* 29 Naphthalene-d8	136	4.649	4.653 (1.000)	1031258	40.0000	
* 46 Acenaphthene-d10	164	5.896	5.905 (1.000)	606664	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060 (1.000)	1055711	40.0000	
* 91 Chrysene-d12	240	9.448	9.458 (1.000)	870993	40.0000	
* 98 Perylene-d12	264	11.025	11.033 (1.000)	622287	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977 (0.789)	486923	71.1986	2610
\$ 5 Phenol-d5	99	3.507	3.507 (0.927)	597862	72.7347	2670
\$ 20 Nitrobenzenc-d5	82	4.143	4.152 (0.891)	300515	39.2166	1440
\$ 39 2-Fluorobiphenyl	172	5.390	5.394 (0.914)	539900	35.6312	1310
\$ 60 2,4,6-Tribromophenol	329	6.490	6.492 (1.101)	164170	72.0483	2640
\$ 81 p-Terphenyl-d14	244	8.425	8.428 (0.892)	628687	43.3928	1590

ION RATIO REPORT

SV REPORT

Data file: s5c1034.d

Report Date: 03/11/2010 07:23

Lab. ID: 248240004

SampleType: SAMPLE

Injection Date: 10-MAR-2010 22:21

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240004|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	35817	3.51	3.57	80-120	100	(T)
93	1577	3.55	3.57	220-280	4	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	37745	4.14	4.03	80-120	100	(T)
42	29817	4.14	4.03	57-117	79	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	1314	4.42	4.43	80-120	100	()
122	850	4.41	4.43	45-105	65	()
77	1411	4.41	4.43	40-100	107	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	111459	5.90	5.67	80-120	100	(T)
164	606664	5.90	5.67	0- 40	544	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	78913	5.90	5.73	80-120	100	(T)
63	1168	5.90	5.72	62-122	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	78913	5.90	6.02	80-120	100	(T)
89	1517	5.90	6.02	50-110	2	(QT)
63	1168	5.90	6.02	24- 84	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	8109	6.49	6.31	80-120	100	(T)
165	8734	6.48	6.31	61-121	108	(T)
167	2803	6.49	6.31	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	720	6.48	6.32	80-120	100	(T)
105	1815	6.48	6.32	12- 72	252	(QT)
51	1274	6.48	6.32	36- 96	177	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	10578	6.49	6.67	80-120	100	(T)
141	84160	6.48	6.67	50-110	796	(QT)
250	21175	6.49	6.67	69-129	200	(QT)

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	7677	9.45	9.44	80-120	100	()
226	1014	9.44	9.44	0- 56	13	()
229	1440	9.44	9.44	0- 50	19	()

92 Chrysene		CAS#: 218-01-9				
228	5457	9.45	9.48	80-120	100	()
229	815	9.45	9.48	0- 51	15	()
226	1013	9.44	9.48	0- 60	19	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1034.d
 Lab Smp Id: 248240004 Client Smp ID: RE36-10-7460
 Inj Date : 10-MAR-2010 22:21
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240004|960659|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 34
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	9.49400	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.784	1838694	40.000
* 46 Acenaphthene-d10	5.896	2588533	40.000
* 91 Chrysene-d12	9.448	2492966	40.000
* 98 Perylene-d12	11.025	1821604	40.000

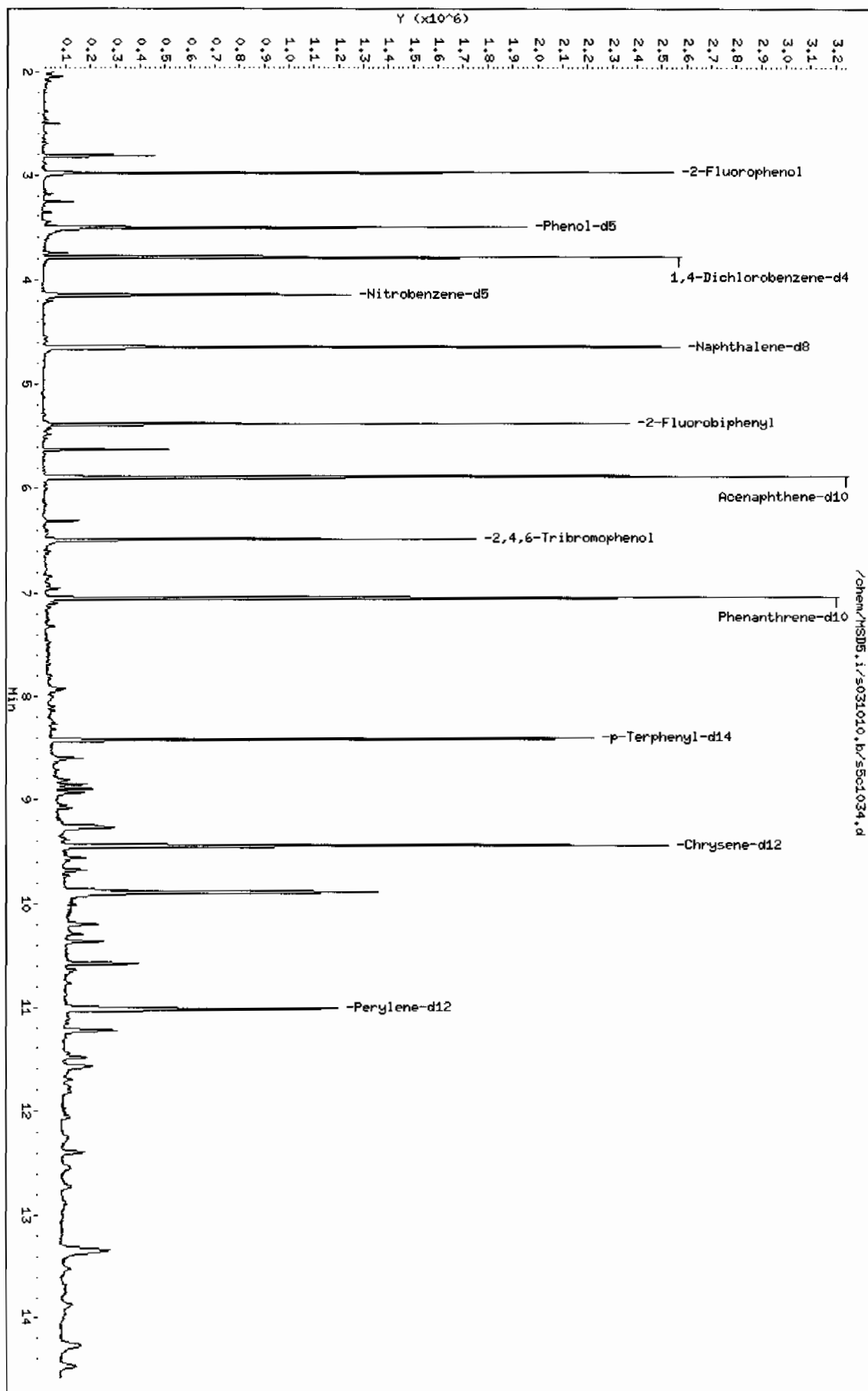
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.813	342964	7.46102938	274	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.631	408262	6.30878245	232	99	NIST05.L	60018	46
1-Docosene					CAS #: 1599-67-3		
9.266	587680	9.42941567	346	93	NIST05.L	129889	91
Eicosane					CAS #: 112-95-8		
9.866	307629	4.93594319	181	98	NIST05.L	113488	91
1-Eicosanol					CAS #: 629-96-9		
9.889	2217090	35.5735160	1310	94	NIST05.L	123792	91
Unknown					CAS #:		
10.195	360191	5.77930867	212	0		0	91
Unknown					CAS #:		
10.289	199811	4.38757868	161	0		0	98
Octadecanal					CAS #: 638-66-4		
10.366	258860	5.68422415	209	91	NIST05.L	104241	98
Unknown					CAS #:		
10.578	463296	10.1733542	374	0		0	98
Oxirane, tetradecyl-					CAS #: 7320-37-8		
11.230	394086	8.65358875	318	89	NIST05.L	85503	98
Unknown					CAS #:		
11.489	187791	4.12362787	151	0		0	98
Unknown					CAS #:		
11.572	345612	7.58917864	279	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.342	753913	16.5549104	608	97	NIST05.L	174400	98
Unknown					CAS #:		
14.271	241700	5.30741314	195	0		0	98
Unknown					CAS #:		
14.471	203233	4.46271412	164	0		0	98

Data File: /chem/HSD5.i/s031010.b/s501034.d
Date: 10-MAR-2010 22:21
Client ID: RE36-10-7460
Sample Info: 1248240004196065911SVH11LNL
Volume Injected (uL): 0.5
Column phase: JSM DB-SMS

Instrument: HSD5.i
Operator: RMB
Column diameter: 0.20

Page 1



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVH111LANL

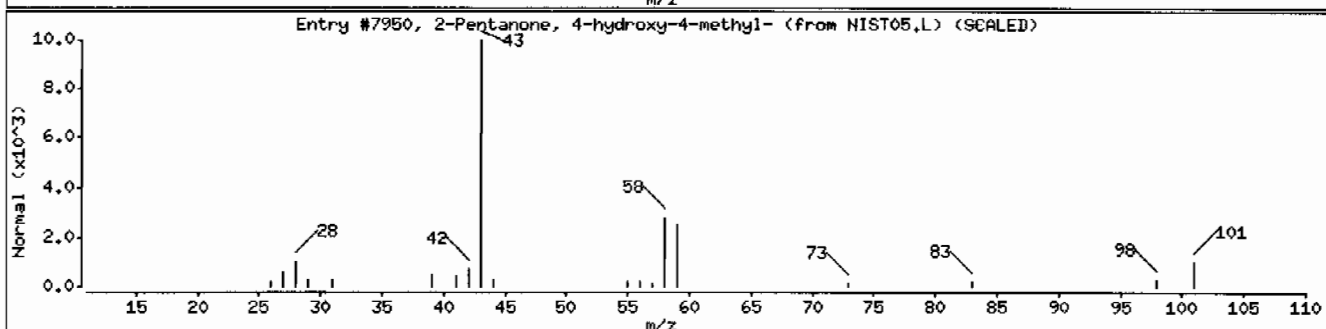
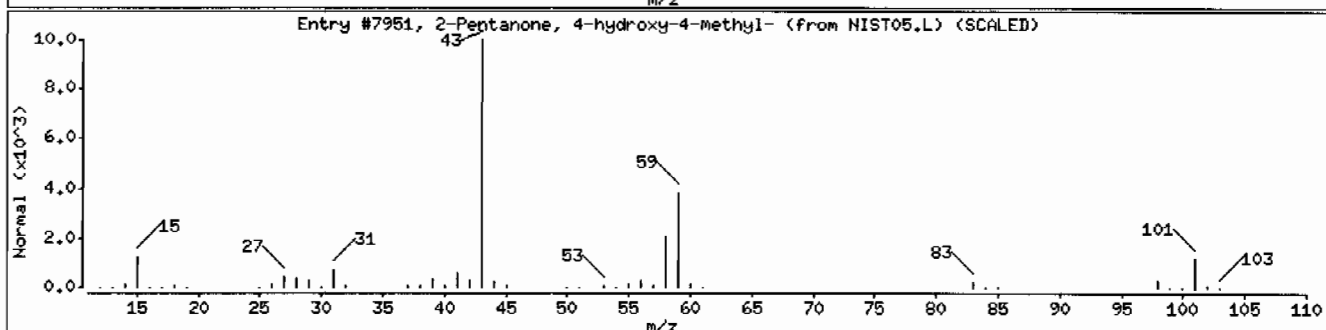
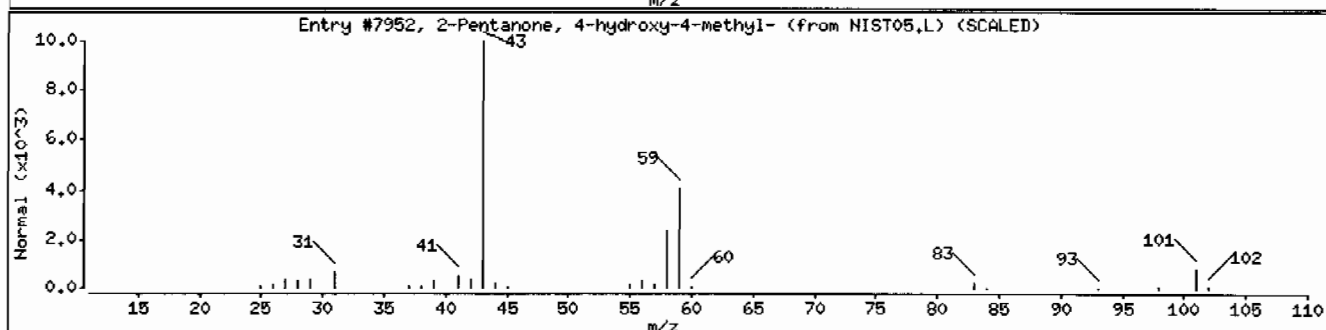
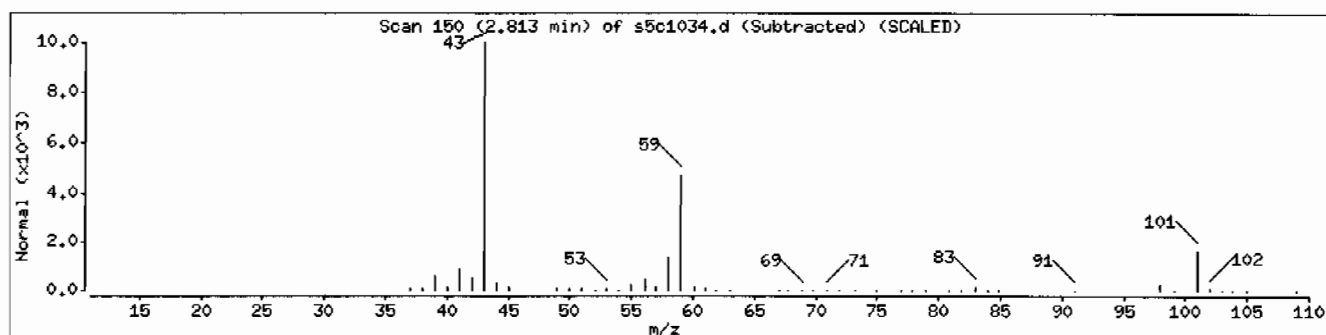
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	23	C6H12O2	116



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVMI11LANL

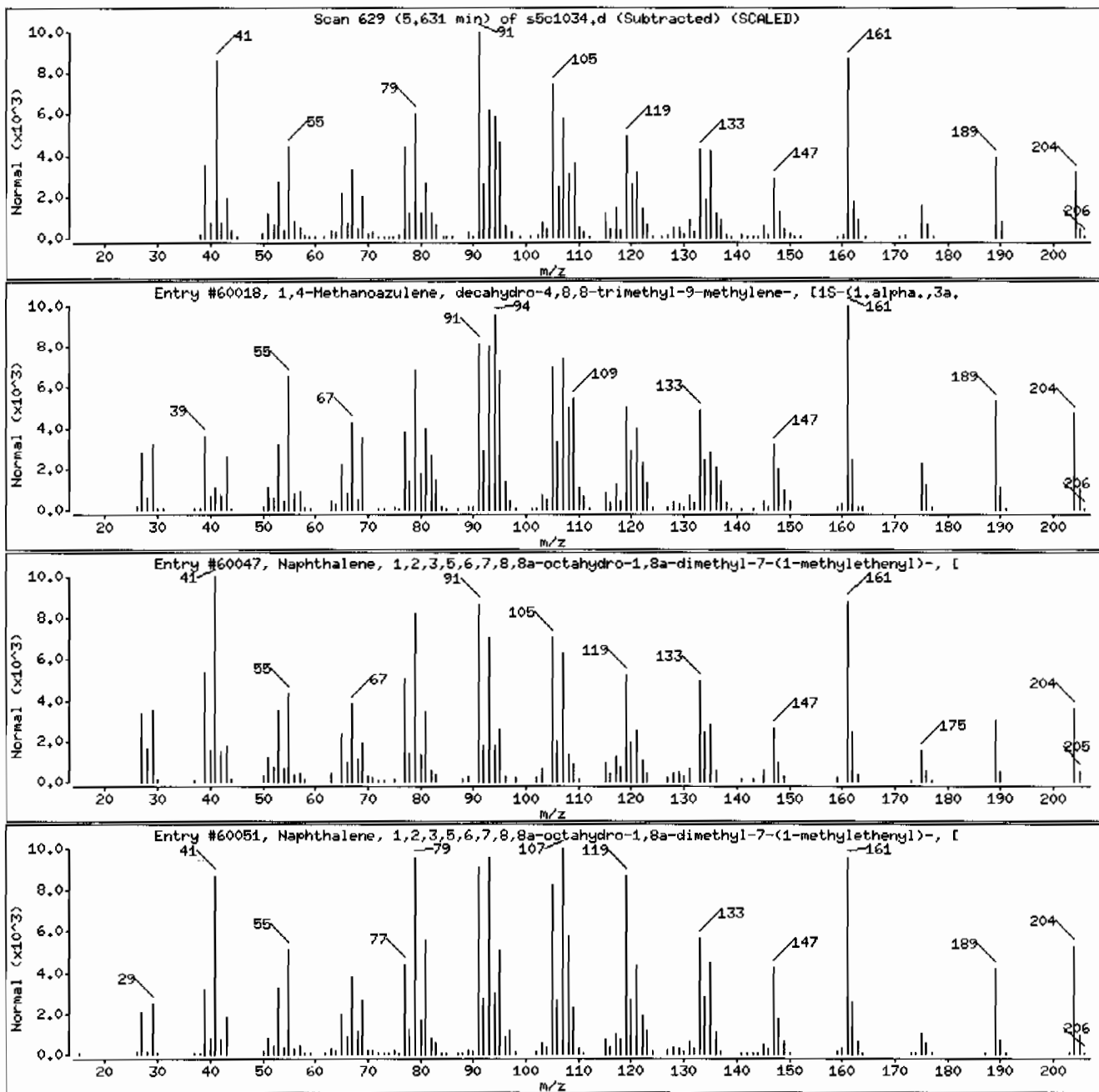
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60051	97	C15H24	204



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 12482400041960659111SVMI11LANL

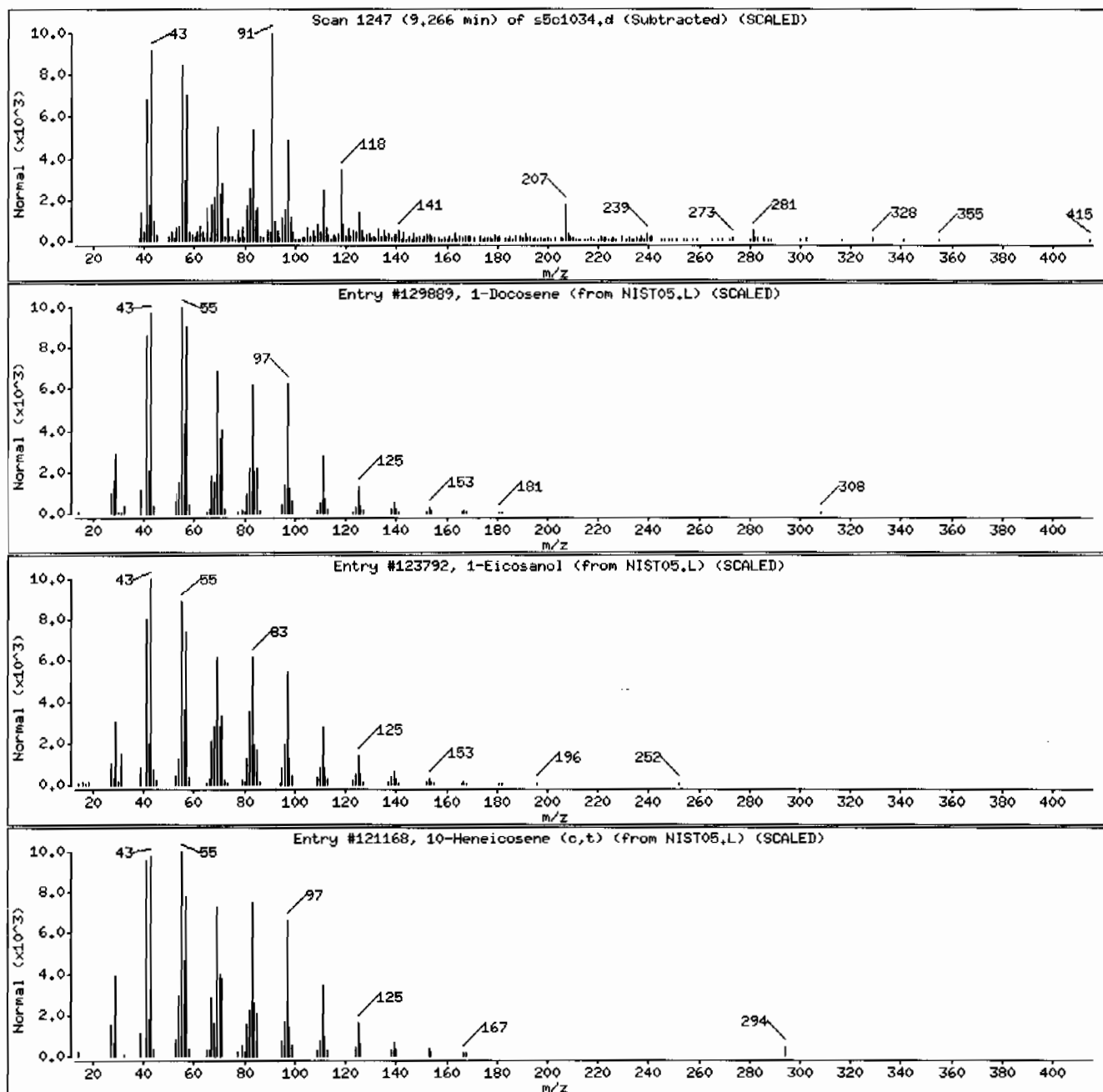
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	93	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	89	C20H42O	298
10-Heneicosene (c,t)	95008-11-0	NIST05.L	121168	76	C21H42	294



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVH111LANL

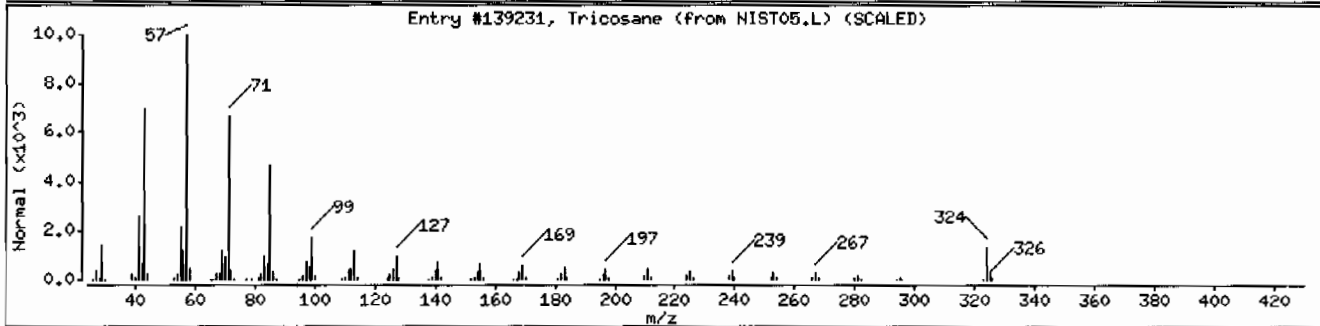
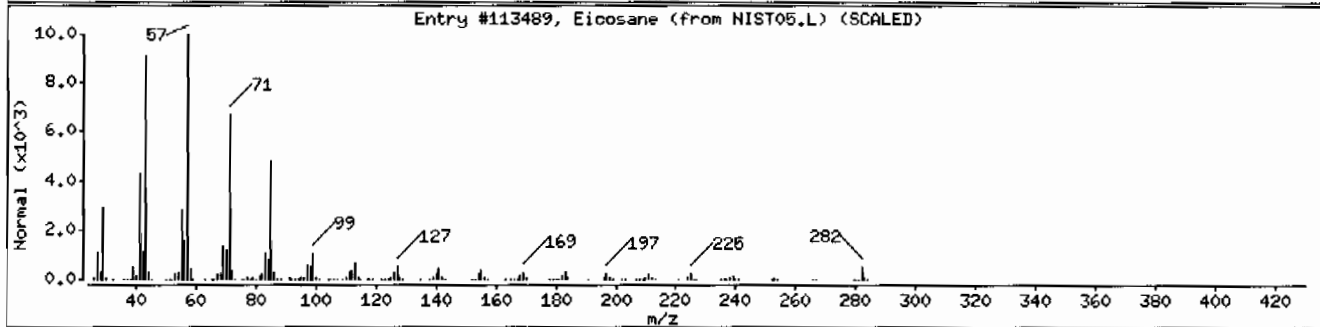
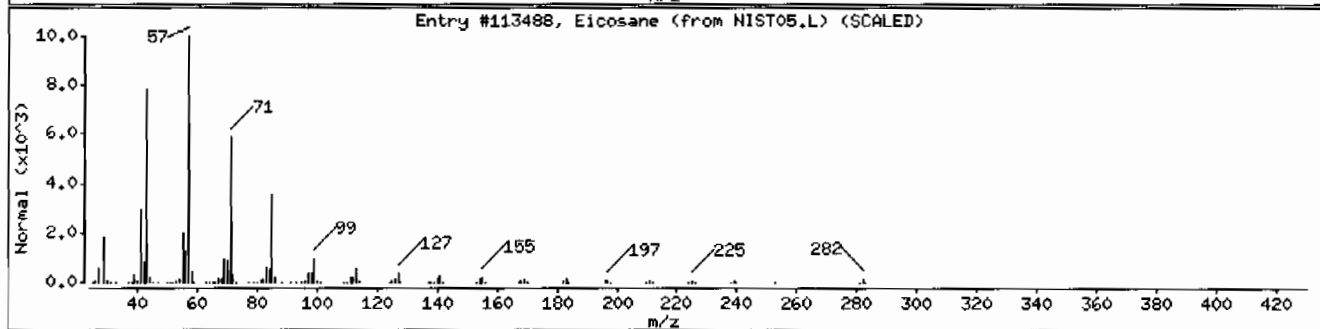
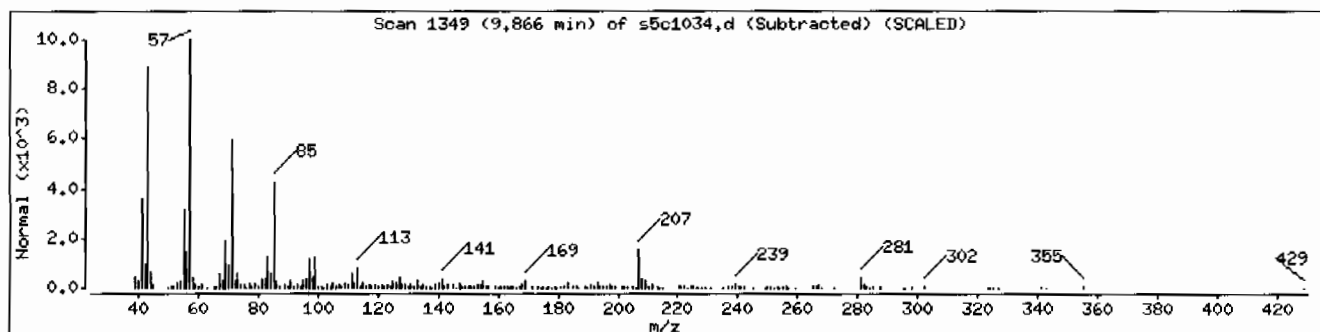
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Tricosane	638-67-5	NIST05.L	139231	93	C ₂₃ H ₄₈	324



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVMI11LANL

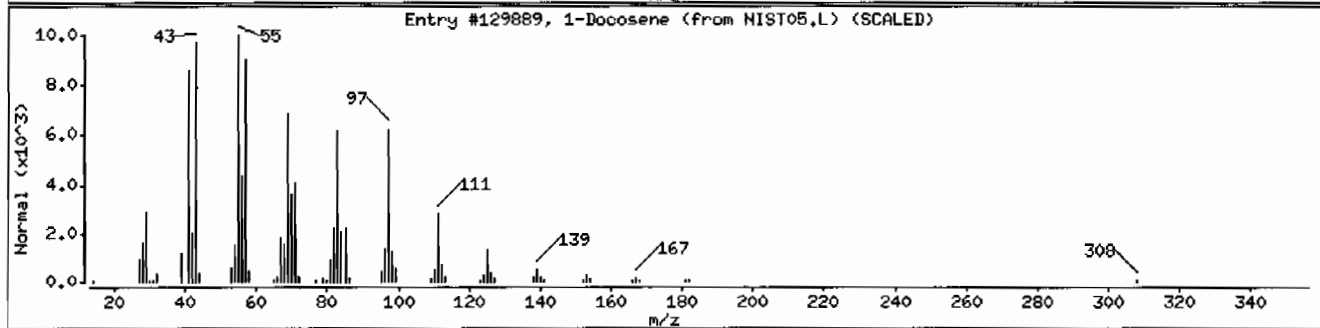
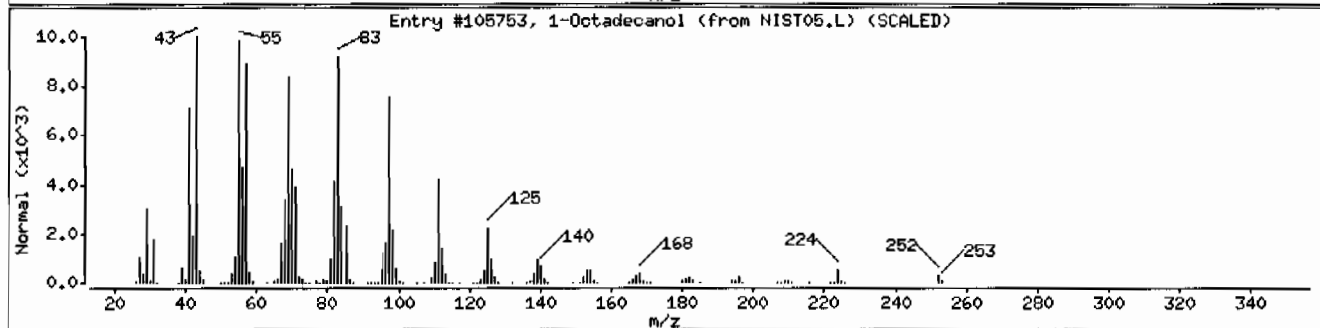
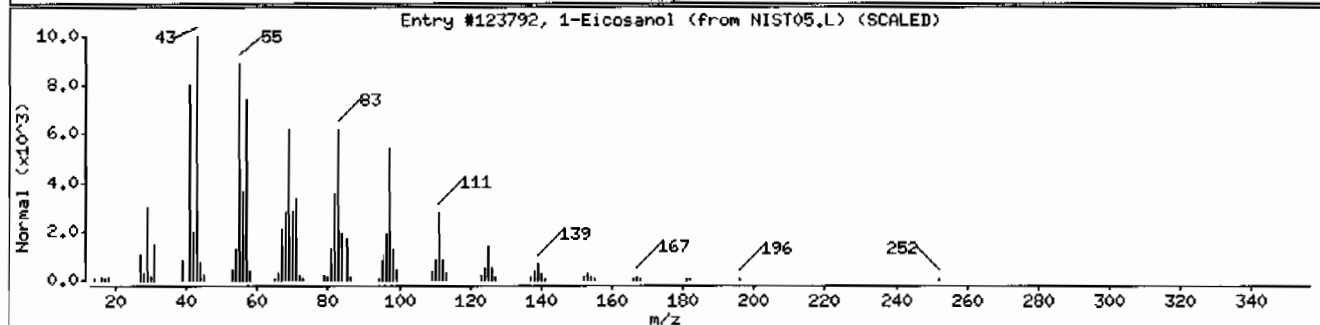
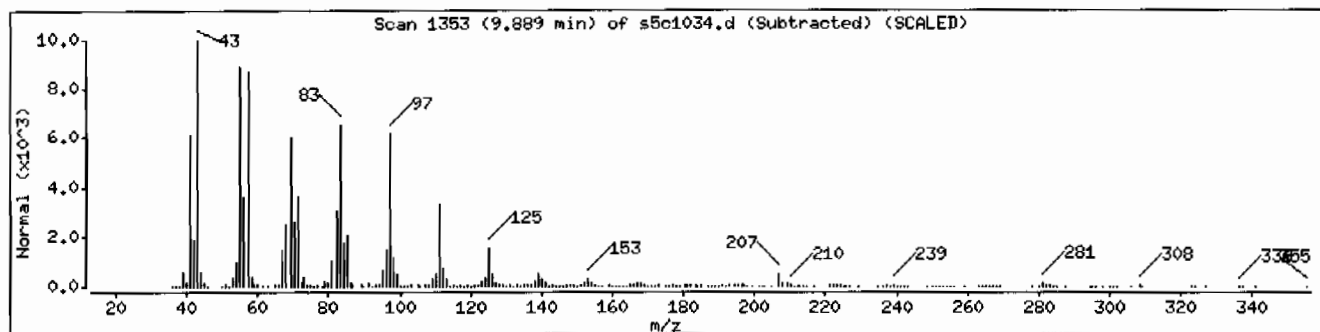
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Eicosanol	629-96-9	NIST05.L	123792	94	C20H42O	298
1-Octadecanol	112-92-5	NIST05.L	105753	91	C18H38O	270
1-Docosene	1599-67-3	NIST05.L	129889	91	C22H44	308



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 1248240004196065911SVH11LANL

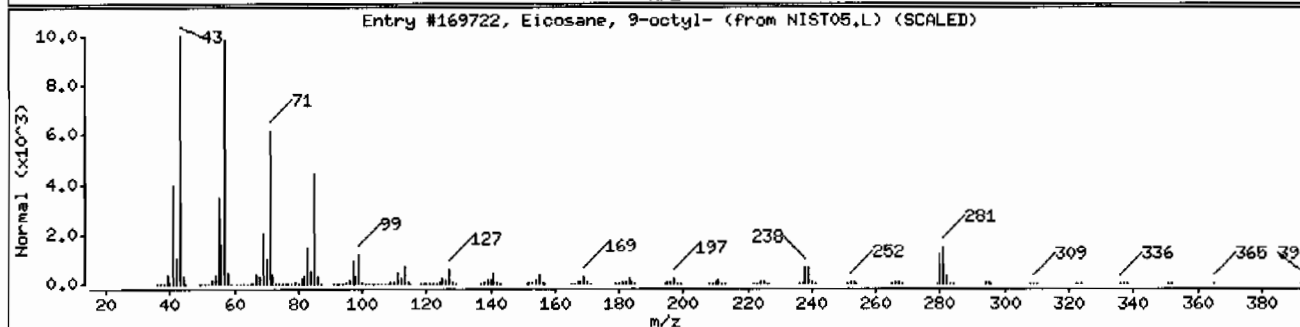
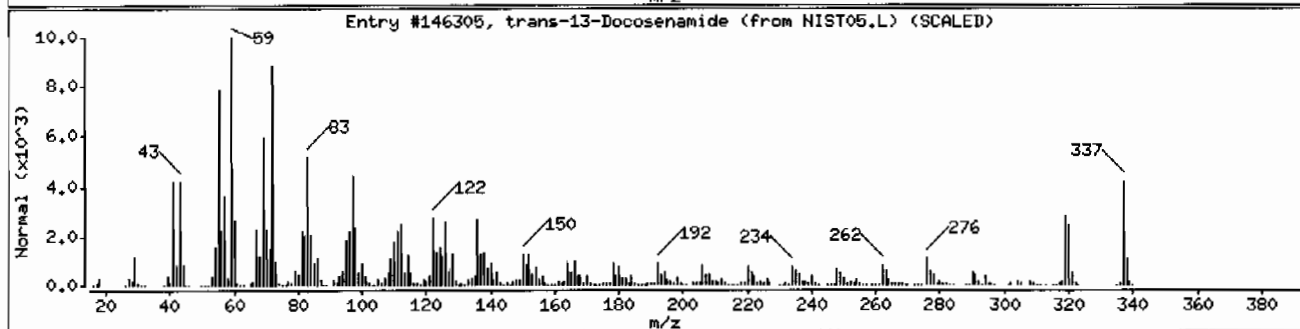
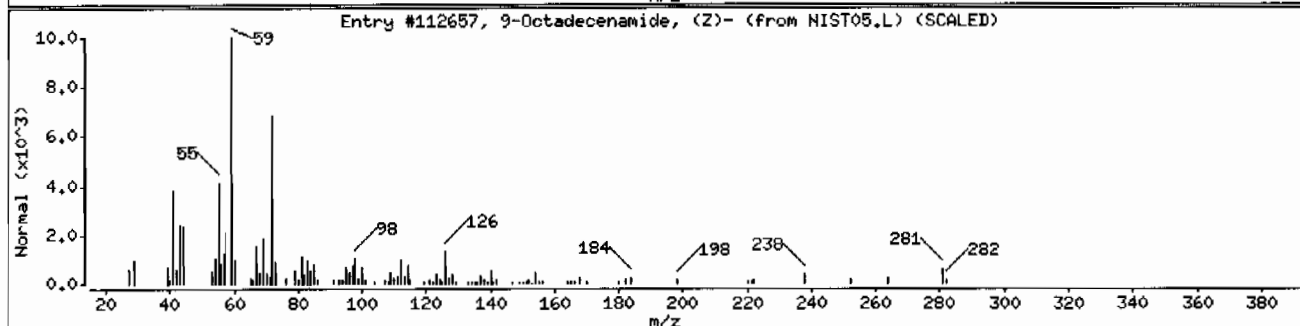
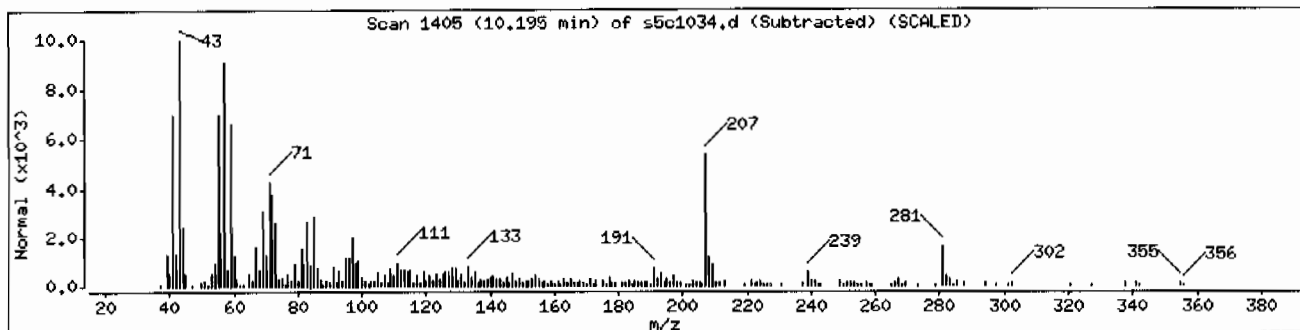
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	45	C18H35NO	281
trans-13-Docosenamide	10436-09-6	NIST05.L	146305	38	C22H43NO	337
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	25	C28H58	394



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVH111LANL

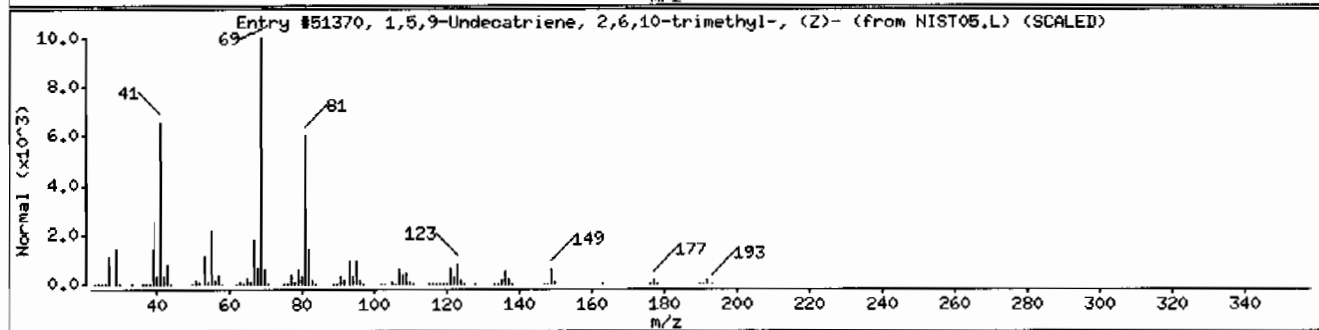
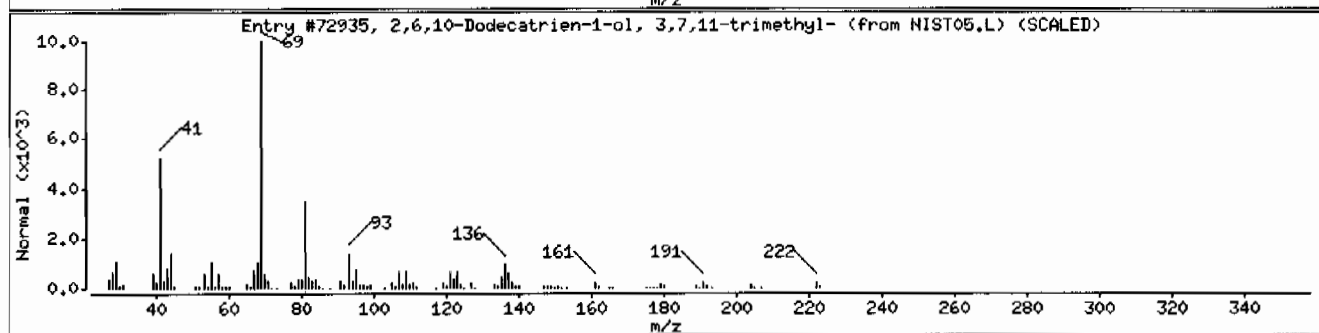
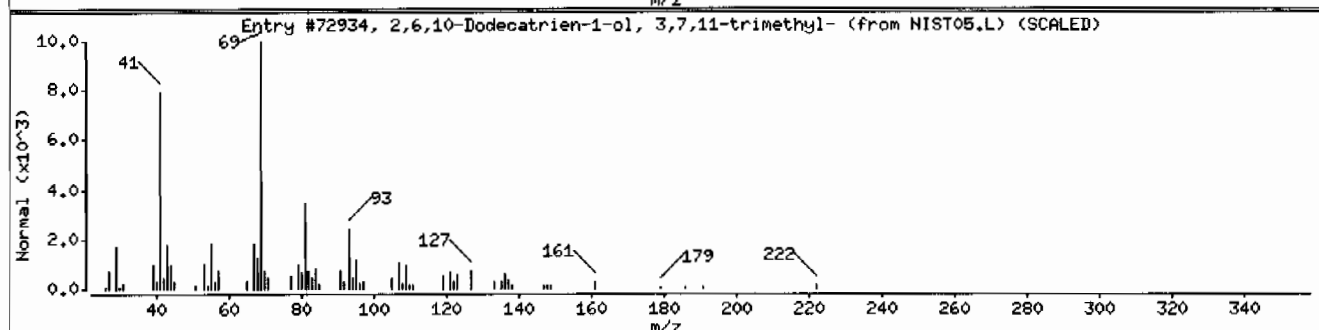
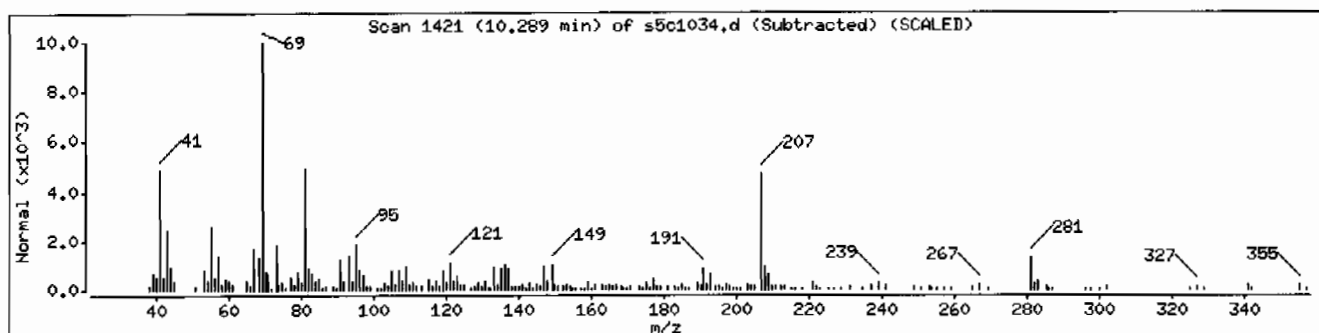
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	4602-84-0	NIST05.L	72934	64	C15H26O	222
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	4602-84-0	NIST05.L	72935	50	C15H26O	222
1,5,9-Undecatriene, 2,6,10-trimethyl-, (	62951-96-6	NIST05.L	51370	49	C14H24	192



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 1248240004196065911SVMI11LANL

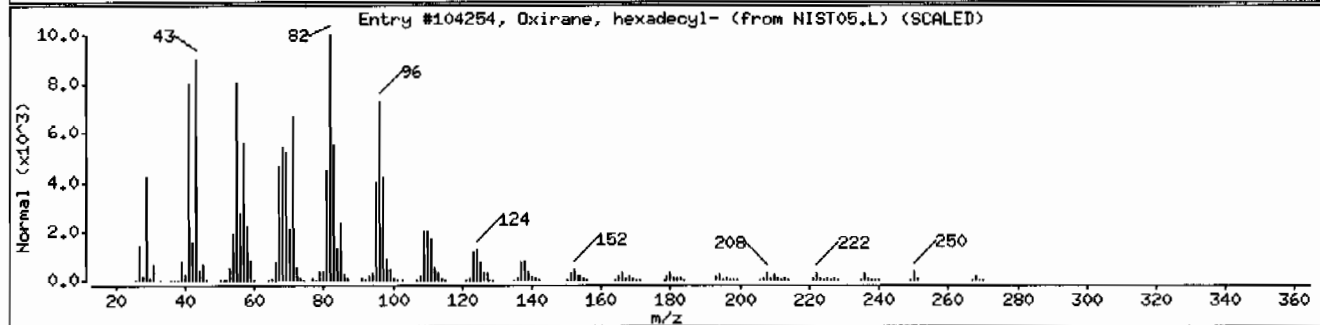
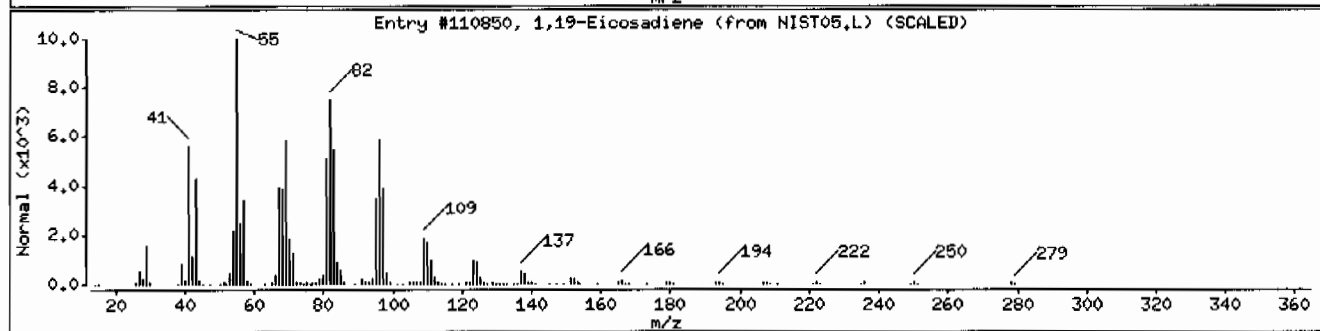
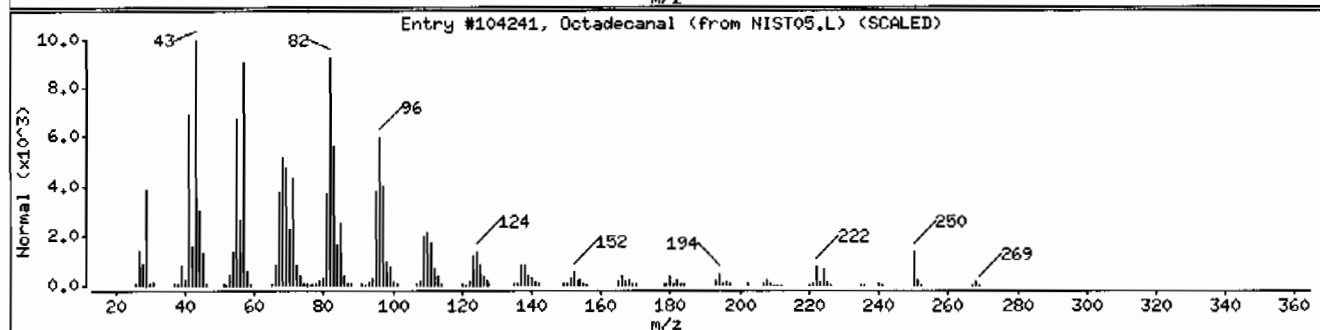
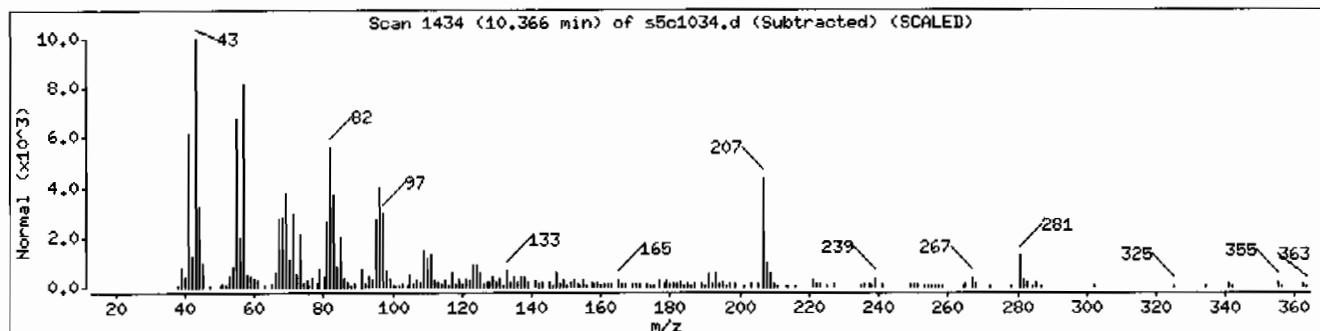
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanal	638-66-4	NIST05.L	104241	91	C18H36O	268
1,19-Eicosadiene	14811-95-1	NIST05.L	110850	90	C20H38	278
Oxirane, hexadecyl-	7390-81-0	NIST05.L	104254	87	C18H36O	268



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 1248240004196065911SVH11/LANL

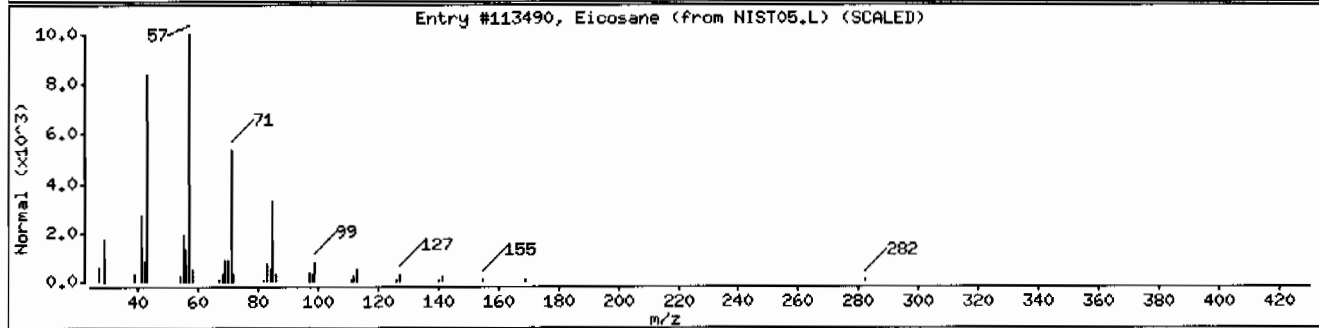
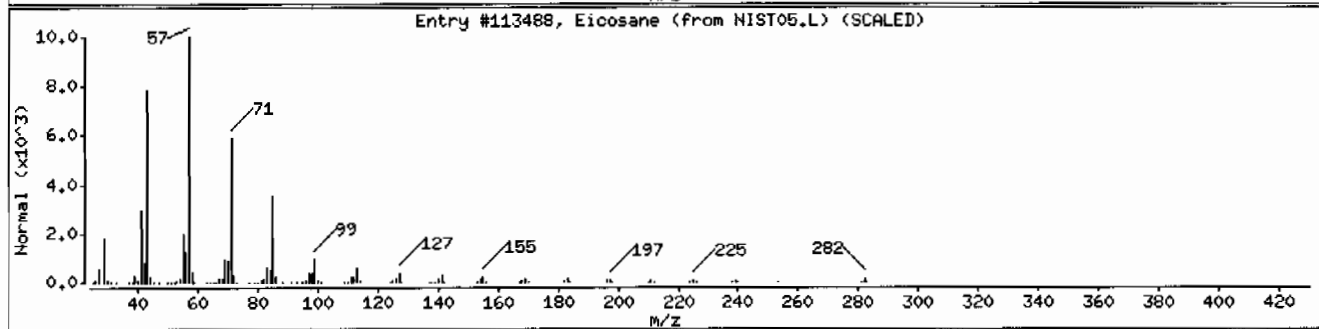
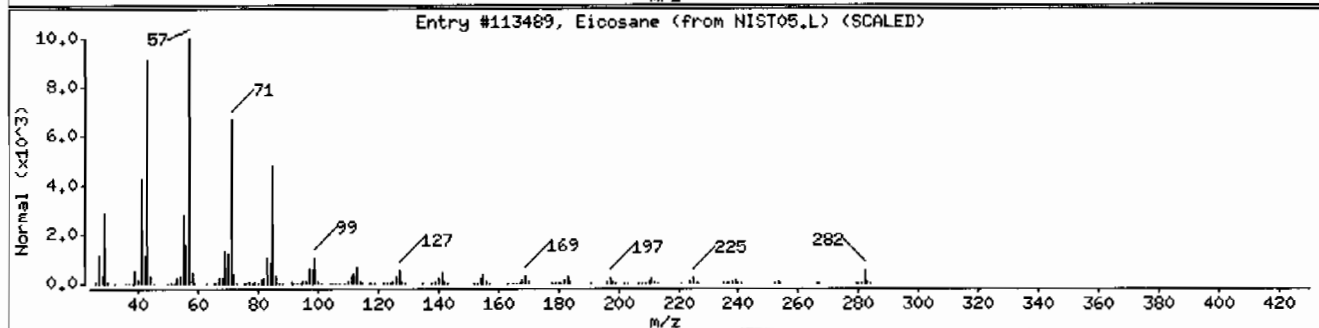
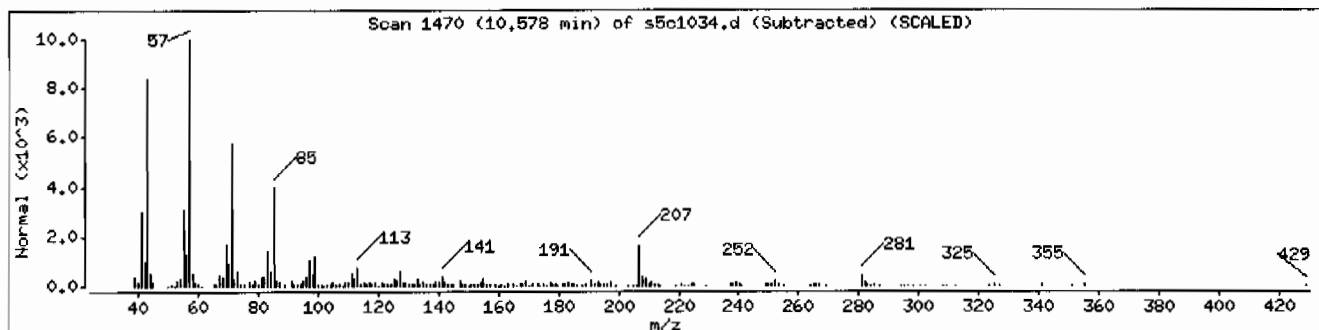
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 1248240004196065911SVH111LANL

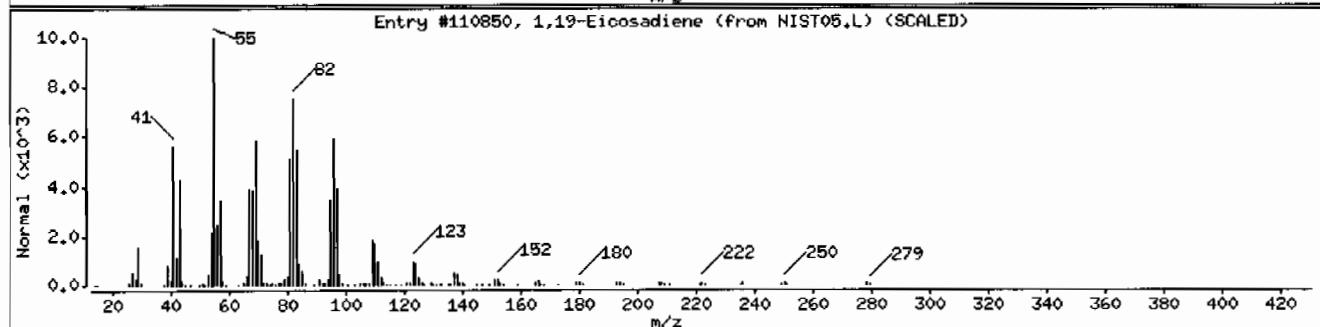
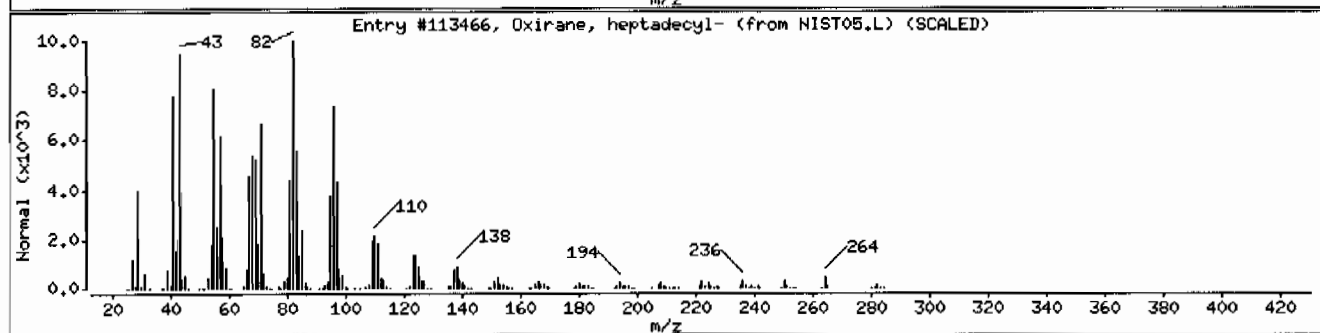
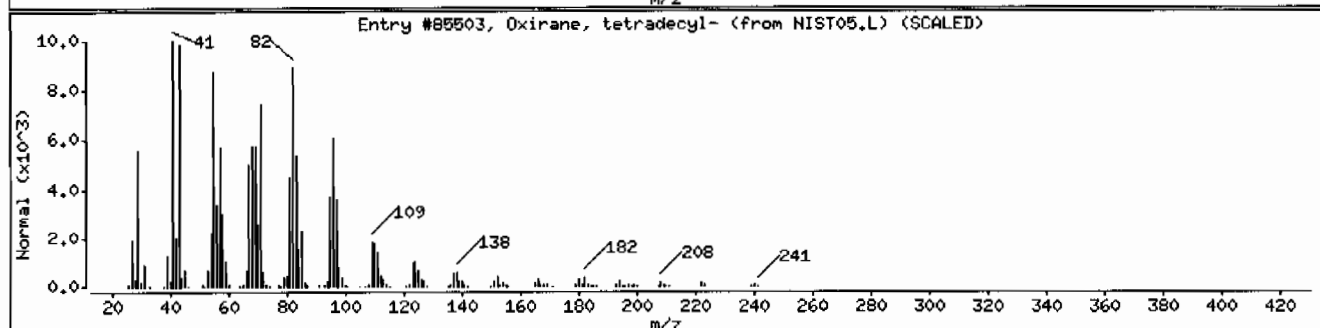
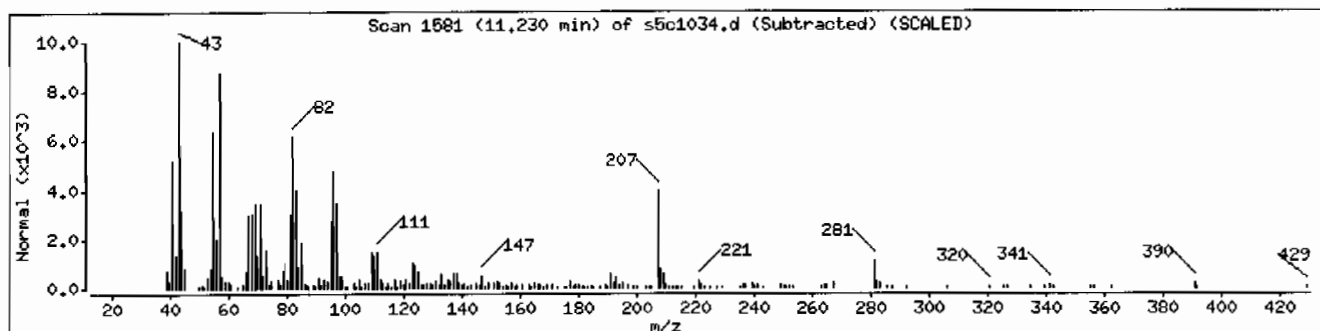
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oxirane, tetradecyl-	7320-37-8	NIST05.L	85503	89	C16H32O	240
Oxirane, heptadecyl-	67860-04-2	NIST05.L	113466	76	C19H38O	282
1,19-Eicosadiene	14811-95-1	NIST05.L	110850	76	C20H38	278



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 1248240004196065911SVH11ILANL

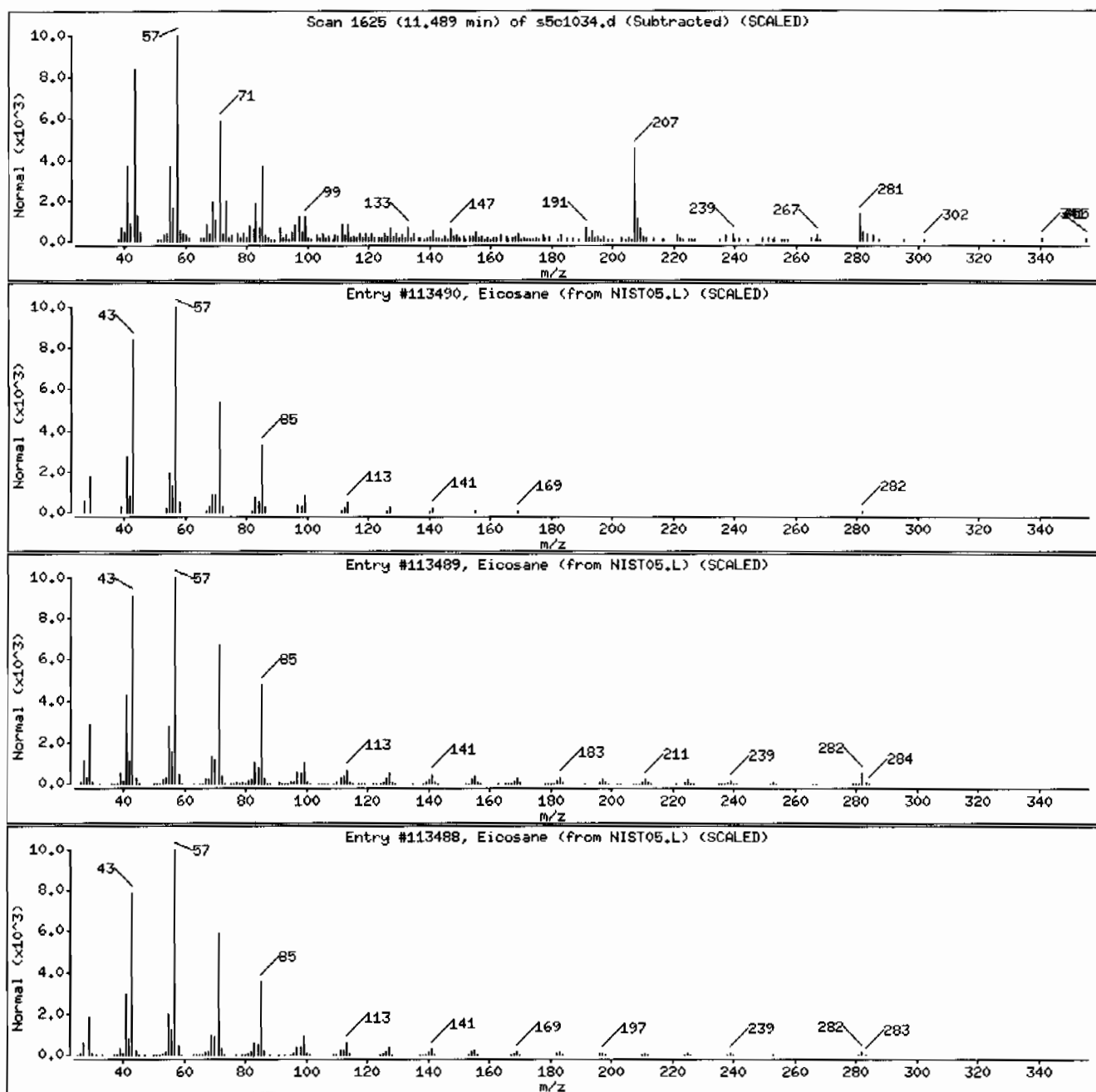
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	95	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	95	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	90	C ₂₀ H ₄₂	282



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: MSD5.i

Sample Info: 12482400041960659111SVMI11LANL

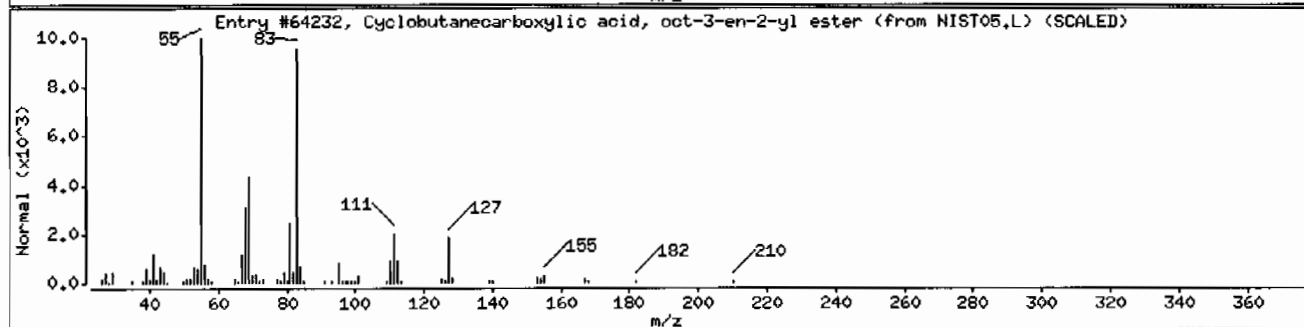
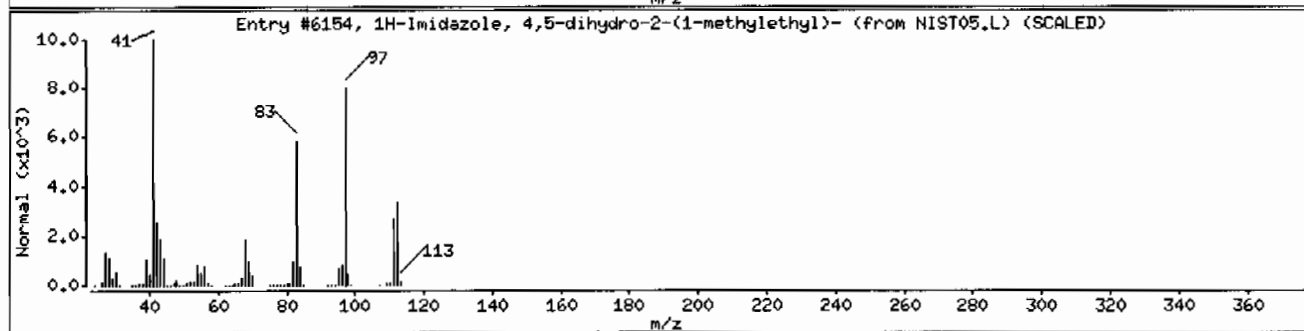
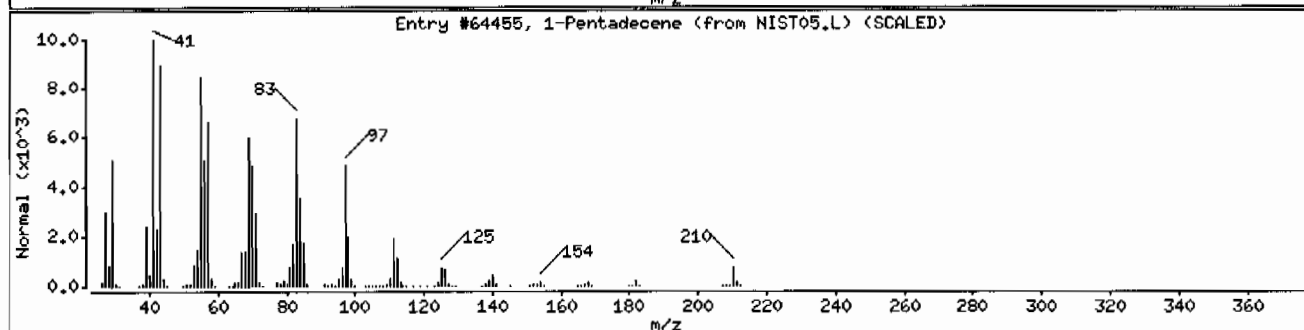
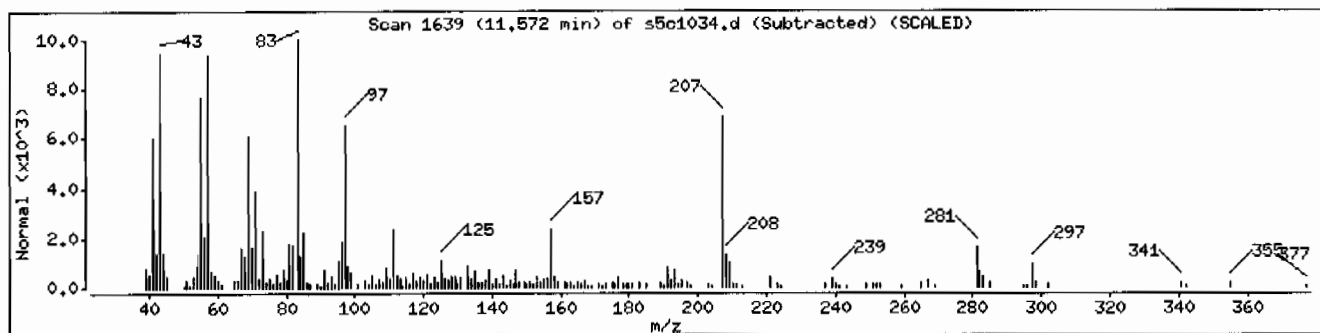
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Pentadecene	13360-61-7	NIST05.L	64455	49	C15H30	210
1H-Imidazole, 4,5-dihydro-2-(1-methylethyl)-	40029-86-5	NIST05.L	6154	41	C6H12N2	112
Cyclobutanecarboxylic acid, oct-3-en-2-yl	1000299-13-2	NIST05.L	64232	38	C13H22O2	210



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 1248240004196065911SVMI11LANL

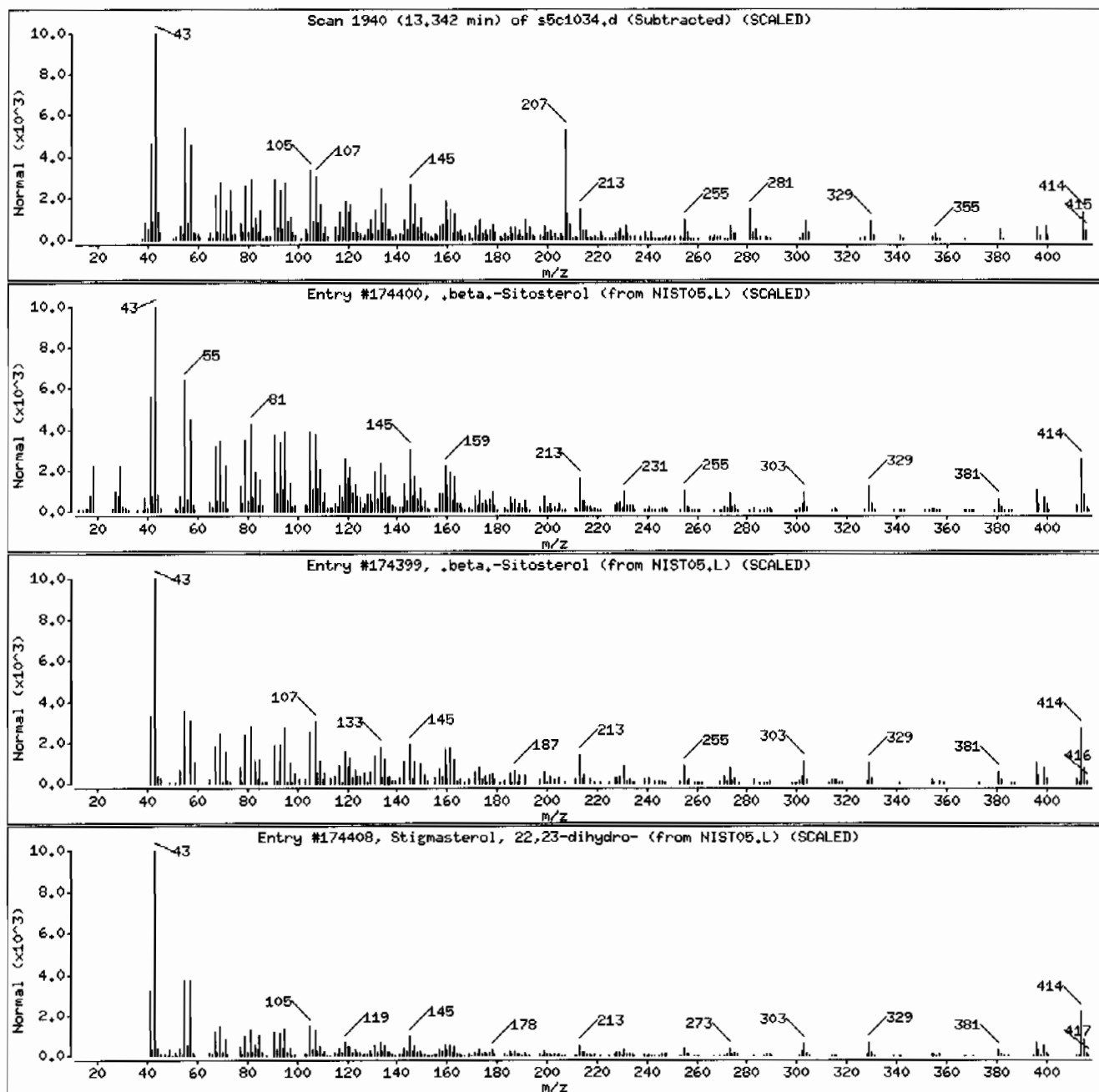
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	97	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	91	C ₂₉ H ₅₀ O	414



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 12482400041960659111SVH111LANL

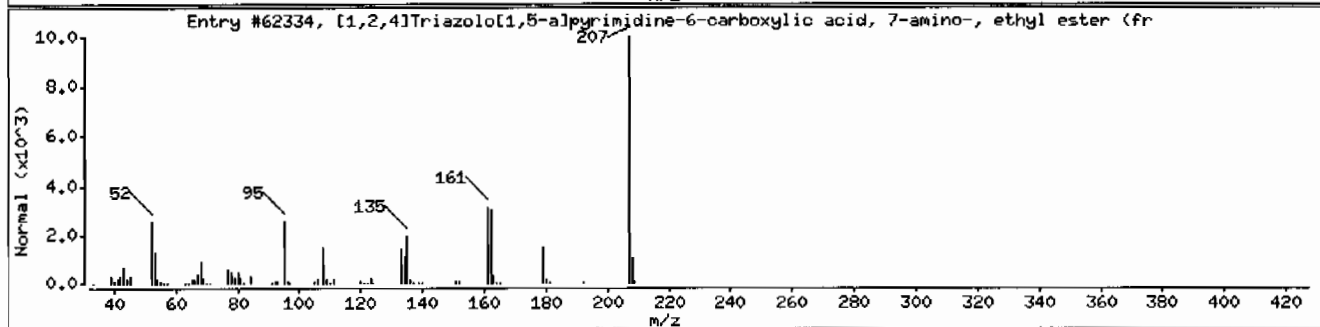
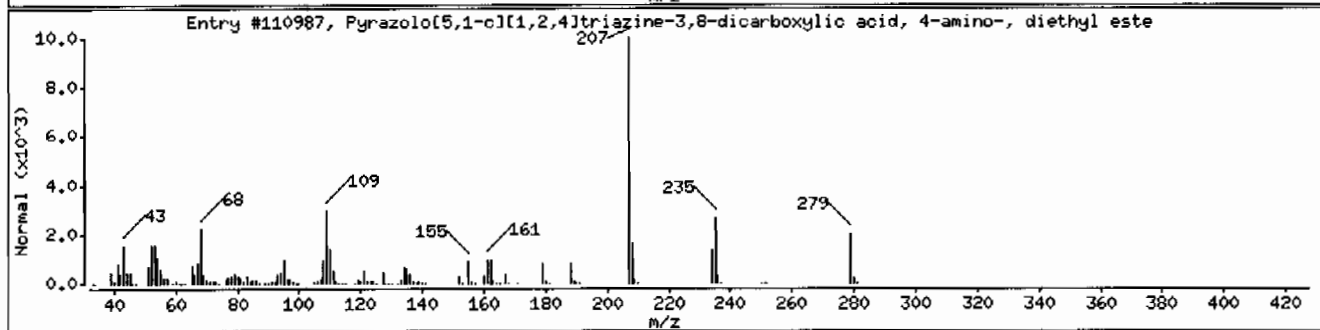
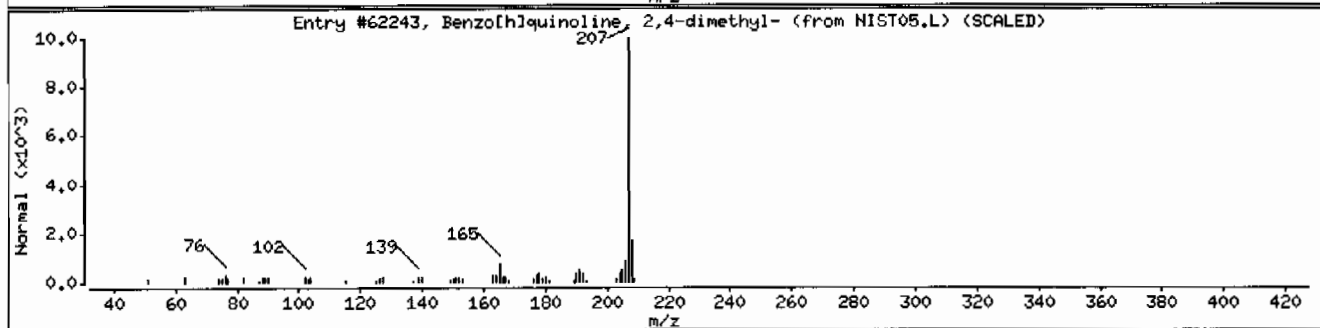
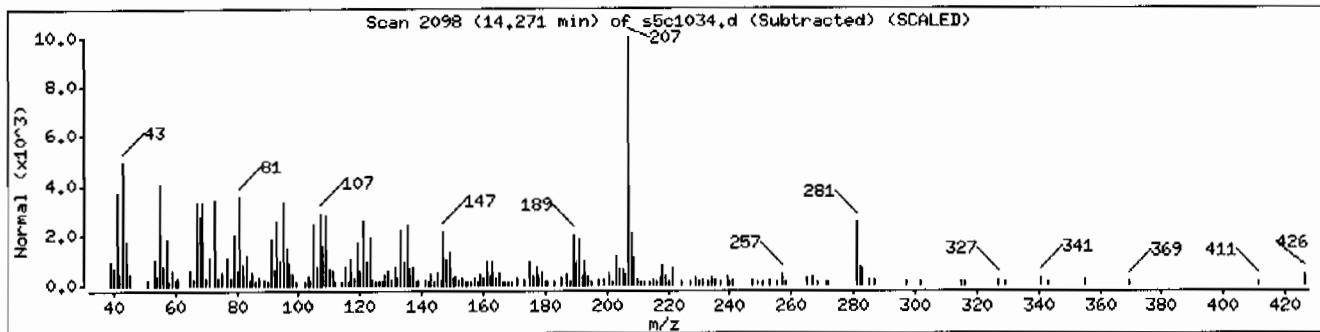
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207
Pyrazolo[5,1-c][1,2,4]triazine-3,8-dicar	1000302-77-3	NIST05.L	110987	38	C11H13N5O4	279
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	CBH9N5O2	207



Date: 10-MAR-2010 22:21

Client ID: RE36-10-7460

Instrument: HSD5.i

Sample Info: 12482400041960659111SVH111LANL

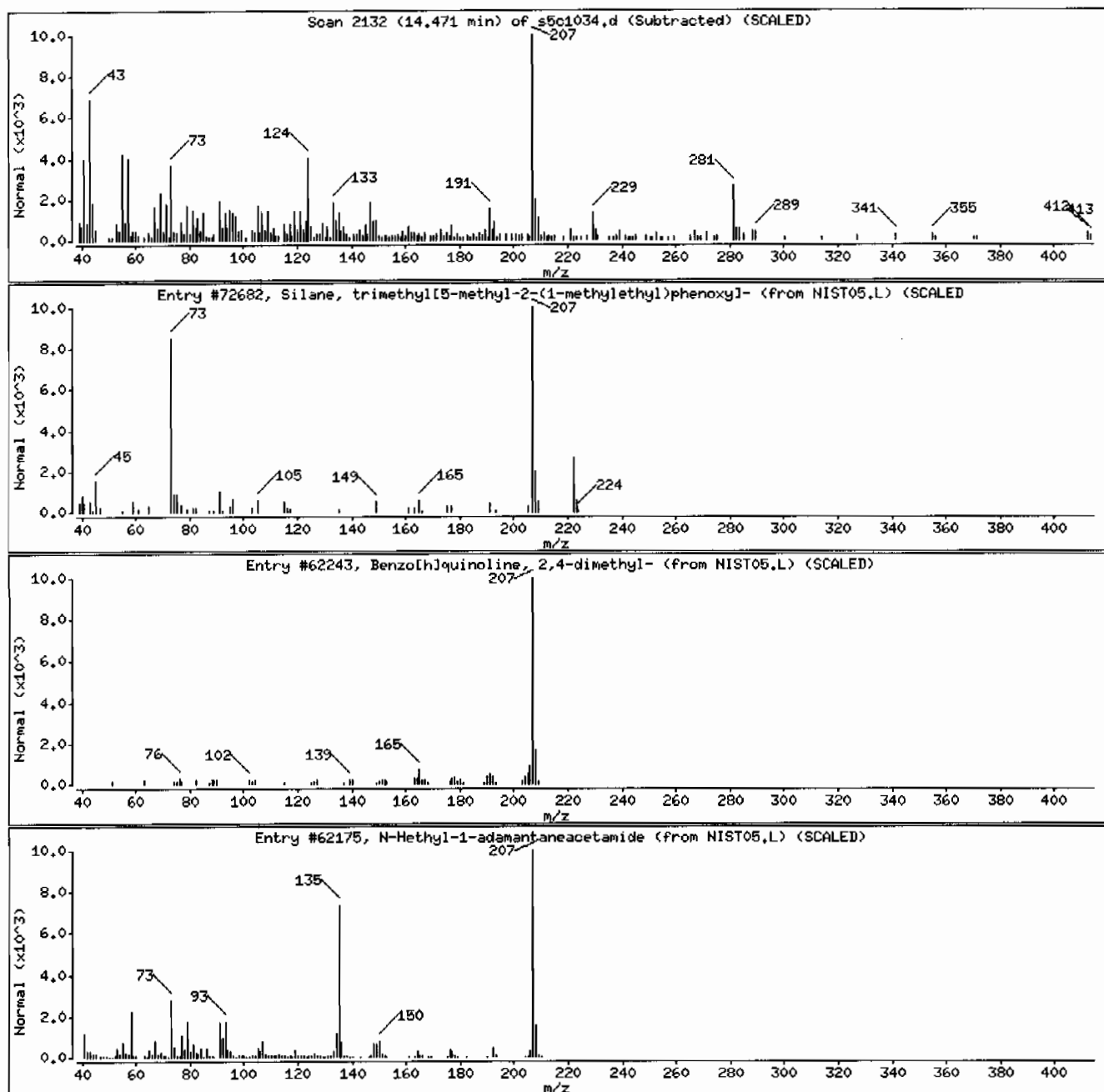
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72682	47	C13H22OSi	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	43	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	43	C13H21NO	207



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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
Client ID: RE36-10-7519	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/11/2010 20:33	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1127.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	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		45.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid		854	ug/kg	211	844
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	422	ug/kg	84.4	422

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
Client ID: RE36-10-7519	Client: LANL010	Project: LANL01004
Batch ID: 960659	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/11/2010 20:33	Inst: MSD5.I	Dilution: 1
Prep Date: 03/04/2010 10:53	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5c1127.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	J	295	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene		892	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	844	ug/kg	160	844
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	J	34.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene		54.5	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	J	26.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	J	32.8	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	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	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	430	ug/kg		JA
103-82-2	Benzeneacetic acid	4.91	467	ug/kg	90	NJ

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

SDG Number: 10-2134	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248240010	Date Received: 02/27/2010 09:10	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7519	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/11/2010 20:33	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1127.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
483-65-8	Phenanthrene, 1-methyl-7-(1-methylethyl)	8.71	187	ug/kg	93	NJ
295-48-7	Cyclopentadecane	8.73	274	ug/kg	96	NJ
	Unknown	8.96	296	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	9.01	280	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	239	ug/kg	97	NJ
	Unknown	9.08	393	ug/kg		J
1599-67-3	1-Docosene	9.4	587	ug/kg	99	NJ
	Unknown	9.7	786	ug/kg		J
	Unknown	9.94	2270	ug/kg		J
	Unknown	10.05	964	ug/kg		J
	Unknown	10.38	295	ug/kg		J
75581-03-2	2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	10.48	447	ug/kg	95	NJ
930-02-9	Octadecane, 1-(ethenylloxy)-	10.82	332	ug/kg	93	NJ
54833-34-0	Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	11.82	866	ug/kg	89	NJ
	Unknown	12	282	ug/kg		J
	Unknown	12.11	283	ug/kg		J
	Unknown	12.58	500	ug/kg		J
	Unknown	12.86	314	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.74	1230	ug/kg	93	NJ

Data File: /chem/MSD5.i/s031110.b/s5c1127.d
 Report Date: 12-Mar-2010 10:01

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1127.d
 Lab Smp Id: 248240010 Client Smp ID: RE36-10-7519
 Inj Date : 11-MAR-2010 20:33
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240010|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
 Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 27
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	21.01460	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.913	3.916	(1.000)	255110	40.0000	
* 29 Naphthalene-d8		136	4.772	4.778	(1.000)	955862	40.0000	
* 46 Acenaphthene-d10		164	6.031	6.035	(1.000)	544101	40.0000	
* 67 Phenanthrene-d10		188	7.201	7.205	(1.000)	944635	40.0000	
* 91 Chrysene-d12		240	9.613	9.617	(1.000)	798313	40.0000	
* 98 Perylene-d12		264	11.283	11.283	(1.000)	629685	40.0000	
\$ 3 2-Fluorophenol		112	3.113	3.107	(0.796)	389376	61.1242	2580
\$ 5 Phenol-d5		99	3.625	3.627	(0.926)	451417	58.9592	2490
\$ 20 Nitrobenzene-d5		82	4.266	4.277	(0.894)	239900	33.7759	1420
\$ 39 2-Fluorobiphenyl		172	5.513	5.519	(0.914)	447445	32.9250	1390
\$ 60 2,4,6-Tribromophenol		329	6.625	6.627	(1.099)	145349	71.1231	3000
\$ 81 p-Terphenyl-d14		244	8.578	8.582	(0.892)	516824	38.9195	1640

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	8.478	8.481	(0.882)	23602	1.06995	45.2
27 Benzoic acid	105	4.525	4.547	(0.948)	43569	20.2351	854
43 Dimethylphthalate	163	6.031	5.794	(1.000)	99835	6.98144	295(aQ)
44 2,6-Dinitrotoluene	165	6.031	5.852	(1.000)	73046	21.1455	892(Q)
68 Phenanthrene	178	7.219	7.224	(1.002)	16202	0.81022	34.2(a)
76 Fluoranthene	202	8.260	8.264	(1.147)	26941	1.29151	54.5
89 Benzo(a)anthracene	228	9.595	9.603	(0.998)	11098	0.62163	26.2(a)
92 Chrysene	228	9.630	9.641	(1.002)	12945	0.77813	32.8(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s5c1127.d

Report Date: 03/12/2010 07:38

Lab. ID: 248240010

SampleType: SAMPLE

Injection Date: 11-MAR-2010 20:33

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240010|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	24194	2.18	2.43	80-120	100	(T)
42	5339	2.18	2.43	88-148	22	(QT)
43	28454	2.19	2.43	19- 79	118	(QT)

4 Aniline				CAS#: 62-53-3		
66	28248	3.62	3.70	80-120	100	(T)
93	3305	3.68	3.70	269-329	12	(Q)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	34932	4.27	4.15	80-120	100	(T)
42	25040	4.27	4.15	56-116	72	(T)

21 Nitrobenzene				CAS#: 98-95-3		
77	33255	4.52	4.29	80-120	100	(T)
65	1335	4.52	4.29	0- 46	4	(T)
123	2692	4.52	4.29	16- 76	8	(QT)

24 2,4-Dimethylphenol				CAS#: 105-67-9		
122	32559	4.52	4.49	80-120	100	()
107	380	4.51	4.49	90-150	1	(Q)
121	431	4.52	4.49	26- 86	1	(Q)

27 Benzoic acid				CAS#: 65-85-0		
105	43569	4.52	4.55	80-120	100	()
122	32244	4.52	4.55	59-119	74	()
77	31699	4.52	4.55	47-107	73	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	4246	5.75	5.63	80-120	100	(T)
164	412	5.76	5.63	3- 63	10	(T)
127	690	5.75	5.63	10- 70	16	(T)
<hr/>						
43	Dimethylphthalate			CAS#: 131-11-3		
163	99835	6.03	5.79	80-120	100	(T)
164	544101	6.03	5.79	0- 40	545	(QT)
<hr/>						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	73046	6.03	5.85	80-120	100	(T)
63	745	6.02	5.85	62-122	1	(QT)
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	73046	6.03	6.15	80-120	100	(T)
89	3121	6.02	6.15	49-109	4	(QT)
63	745	6.02	6.15	24- 84	1	(QT)
<hr/>						
52	4-Nitrophenol			CAS#: 100-02-7		
139	222	6.04	6.07	80-120	100	()
109	1435	6.02	6.07	48-108	645	(Q)
65	2469	6.02	6.07	79-139	1110	(Q)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	7054	6.62	6.44	80-120	100	(T)
165	7284	6.62	6.44	62-122	103	(T)
167	2026	6.62	6.44	0- 44	29	(T)
<hr/>						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	638	6.62	6.46	80-120	100	(T)
105	1894	6.62	6.46	13- 73	296	(QT)
51	1215	6.62	6.46	32- 92	190	(QT)
<hr/>						
65	Pentachlorophenol			CAS#: 87-86-5		
266	283	7.03	7.03	80-120	100	()
264	137	7.02	7.03	33- 93	49	()
268	239	7.02	7.03	35- 95	84	()
<hr/>						
68	Phenanthrene			CAS#: 85-01-8		
178	16202	7.22	7.22	80-120	100	()
179	3112	7.21	7.22	0- 46	19	()
176	3389	7.22	7.22	0- 49	21	()
<hr/>						
69	Anthracene			CAS#: 120-12-7		
178	16205	7.22	7.27	80-120	100	()
179	3112	7.21	7.27	0- 46	19	()
176	3389	7.22	7.27	0- 48	21	()
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene		CAS#: 206-44-0				
202	26941	8.26	8.26	80-120	100	()
203	4600	8.26	8.26	0- 48	17	()
101	3702	8.26	8.26	0- 41	14	()

79 Pyrene		CAS#: 129-00-0				
202	23602	8.48	8.48	80-120	100	()
200	4841	8.48	8.48	0- 51	21	()
101	3836	8.47	8.48	0- 43	16	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	11098	9.60	9.60	80-120	100	()
226	2730	9.60	9.60	0- 56	25	()
229	3706	9.60	9.60	0- 50	33	()

92 Chrysene		CAS#: 218-01-9				
228	12945	9.63	9.64	80-120	100	()
229	2606	9.63	9.64	0- 50	20	()
226	3624	9.63	9.64	0- 59	28	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	16933	10.76	10.77	80-120	100	()
253	2315	10.77	10.77	0- 52	14	()
125	659	10.74	10.76	0- 41	4	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	16933	10.76	10.80	80-120	100	()
253	2417	10.77	10.80	0- 52	14	()
125	1721	10.78	10.80	0- 41	10	()

97 Benzo(a)pyrene		CAS#: 50-32-8				
252	7242	11.20	11.21	80-120	100	()
253	1842	11.20	11.21	0- 52	25	()
125	1158	11.19	11.20	0- 30	16	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	4121	13.03	13.04	80-120	100	()
138	1739	13.03	13.05	0- 58	42	()

101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	3891	13.56	13.58	80-120	100	()
138	1121	13.56	13.58	0- 30	29	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1127.d
 Lab Smp Id: 248240010 Client Smp ID: RE36-10-7519
 Inj Date : 11-MAR-2010 20:33
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240010|960659|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
 Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 27
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	21.01460	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.913	1736720	40.000
* 29 Naphthalene-d8	4.772	2138922	40.000
* 91 Chrysene-d12	9.613	2620382	40.000
* 98 Perylene-d12	11.283	2034395	40.000

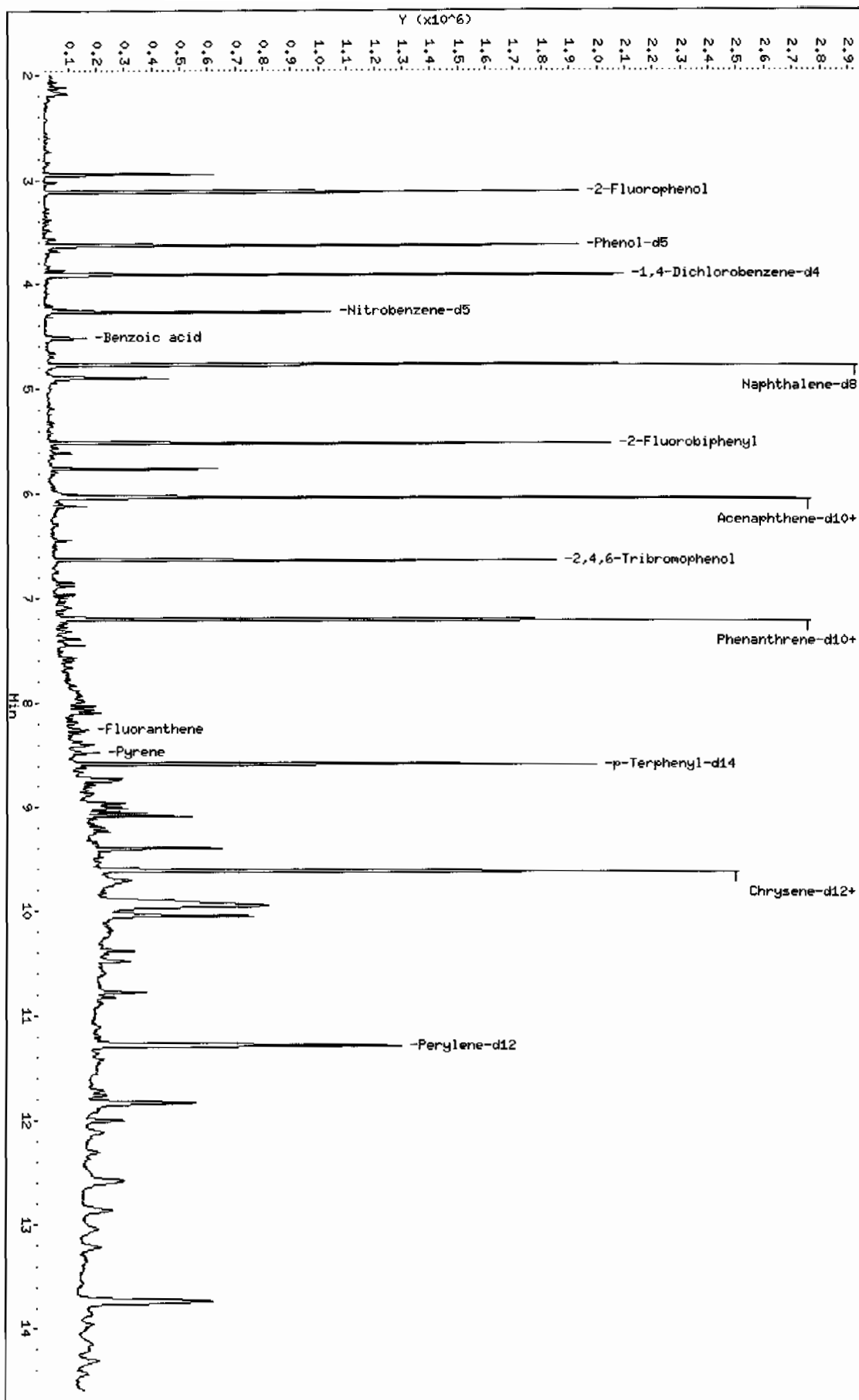
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS		QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate				CAS #:		
2.949	442885	10.2004839	430	0	0	10
Benzeneacetic acid				CAS #: 103-82-2		
4.907	592309	11.0767703	467	90	NIST05.L 15739	29
Phenanthrene, 1-methyl-7-(1-methylethyl)				CAS #: 483-65-8		
8.713	290883	4.44030664	187	93	NIST05.L 81278	91
Cyclopentadecane				CAS #: 295-48-7		
8.731	425862	6.50075795	274	96	NIST05.L 64458	91
Unknown				CAS #:		
8.960	459709	7.01742800	296	0	0	91
9-Octadecenamide, (Z)-				CAS #: 301-02-0		
9.007	434656	6.63500457	280	86	NIST05.L 112656	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1235-74-1		
9.048	370637	5.65775659	239	97	NIST05.L 133618	91
Unknown				CAS #:		
9.083	610788	9.32364169	393	0	0	91
1-Docosene				CAS #: 1599-67-3		
9.395	911864	13.9195475	587	99	NIST05.L 129888	91
Unknown				CAS #:		
9.701	1220146	18.6254543	786	0	0	91
Unknown				CAS #:		
9.942	3526882	53.8376520	2270	0	0	91
Unknown				CAS #:		
10.048	1496218	22.8396891	964	0	0	91
Unknown				CAS #:		
10.383	457830	6.98874463	295	0	0	91
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei				CAS #: 75581-03-2		
10.477	538964	10.5970423	447	95	NIST05.L 149004	98
Octadecane, 1-(ethenyl)-				CAS #: 930-02-9		
10.825	400099	7.86669850	332	93	NIST05.L 122415	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi					CAS #: 54833-34-0		
11.824	1043149	20.5102513	866	89	NIST05.L	82661	98
Unknown					CAS #:		
11.995	339976	6.68456084	282	0		0	98
Unknown					CAS #:		
12.107	340739	6.69956761	283	0		0	98
Unknown					CAS #:		
12.577	602502	11.8463134	500	0		0	98
Unknown					CAS #:		
12.860	378711	7.44616314	314	0		0	98
Stigmasterol, 22,23-dihydro-					CAS #: 1000214-20-7		
13.736	1478896	29.0778493	1230	93	NIST05.L	174408	98

Data File: /chem/MSDS.i/s031110.b/s01127.d
Date: 11-MAR-2010 20:33
Client ID: RE36-10-7519
Sample Info: 124824001019605911/SW111.LNL
Volume Injected (uL): 0.5
Column phase: 3uM DB-SHS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.1

Sample Info: 1248240010196065911SVMI11LANL

Volume Injected (uL): 0.5

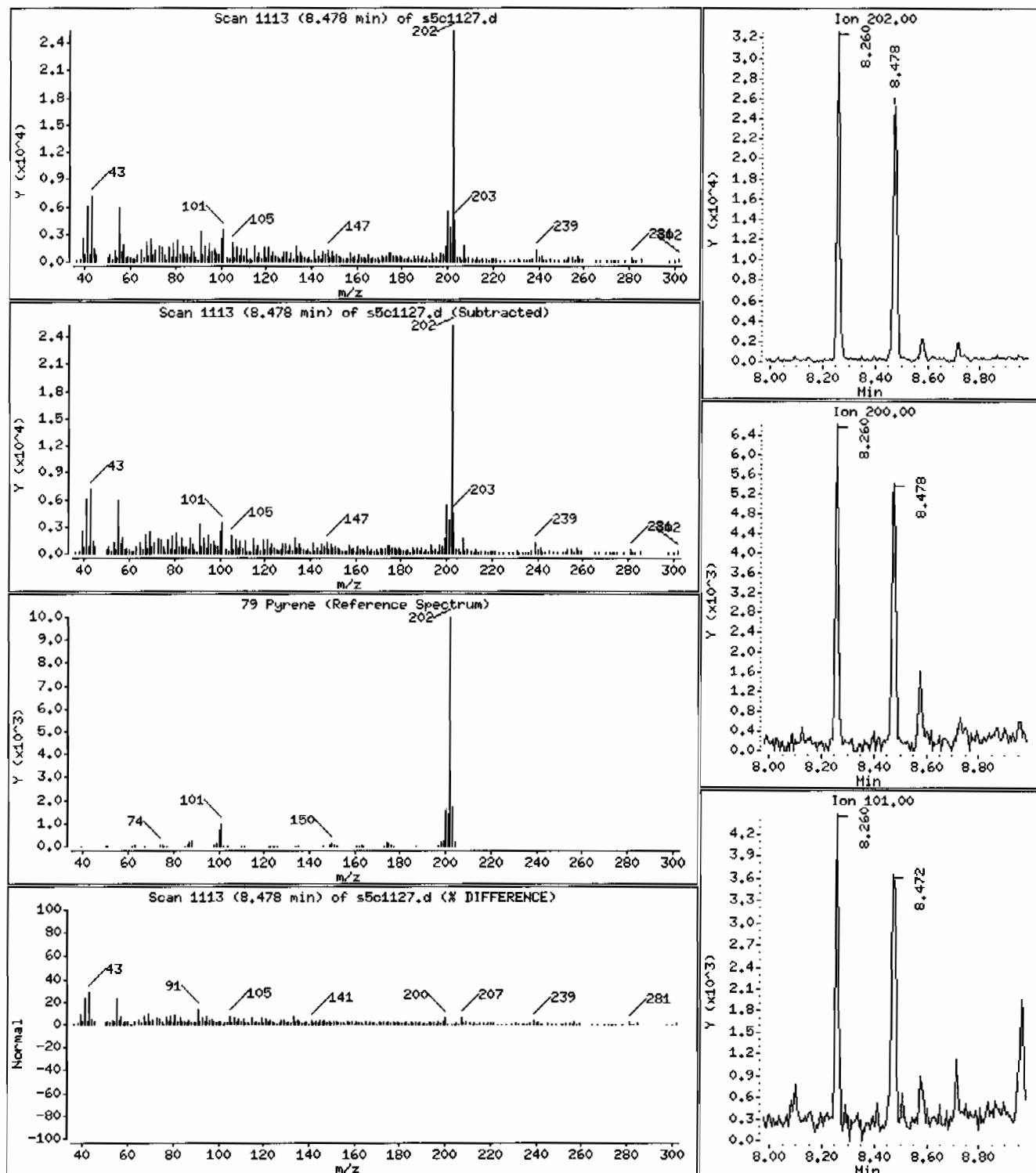
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 45.2 ug/Kg



Data File: /chem/MSD5.i/s031110.b/s5c1127.d

Page 3

Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVH11ILANL

Volume Injected (uL): 0.5

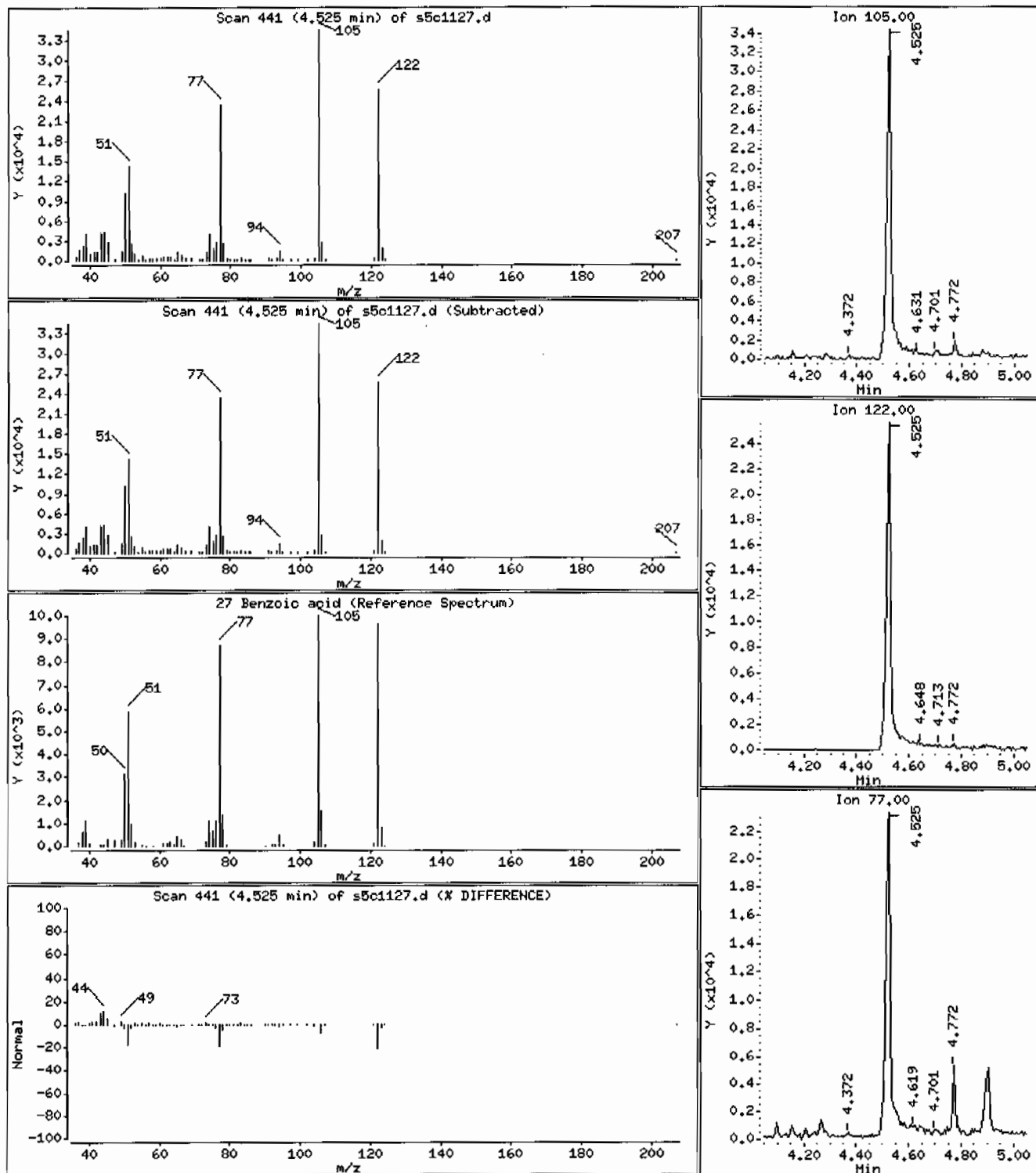
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 854 ug/Kg



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911ISVH11ILANL

Volume Injected (uL): 0.5

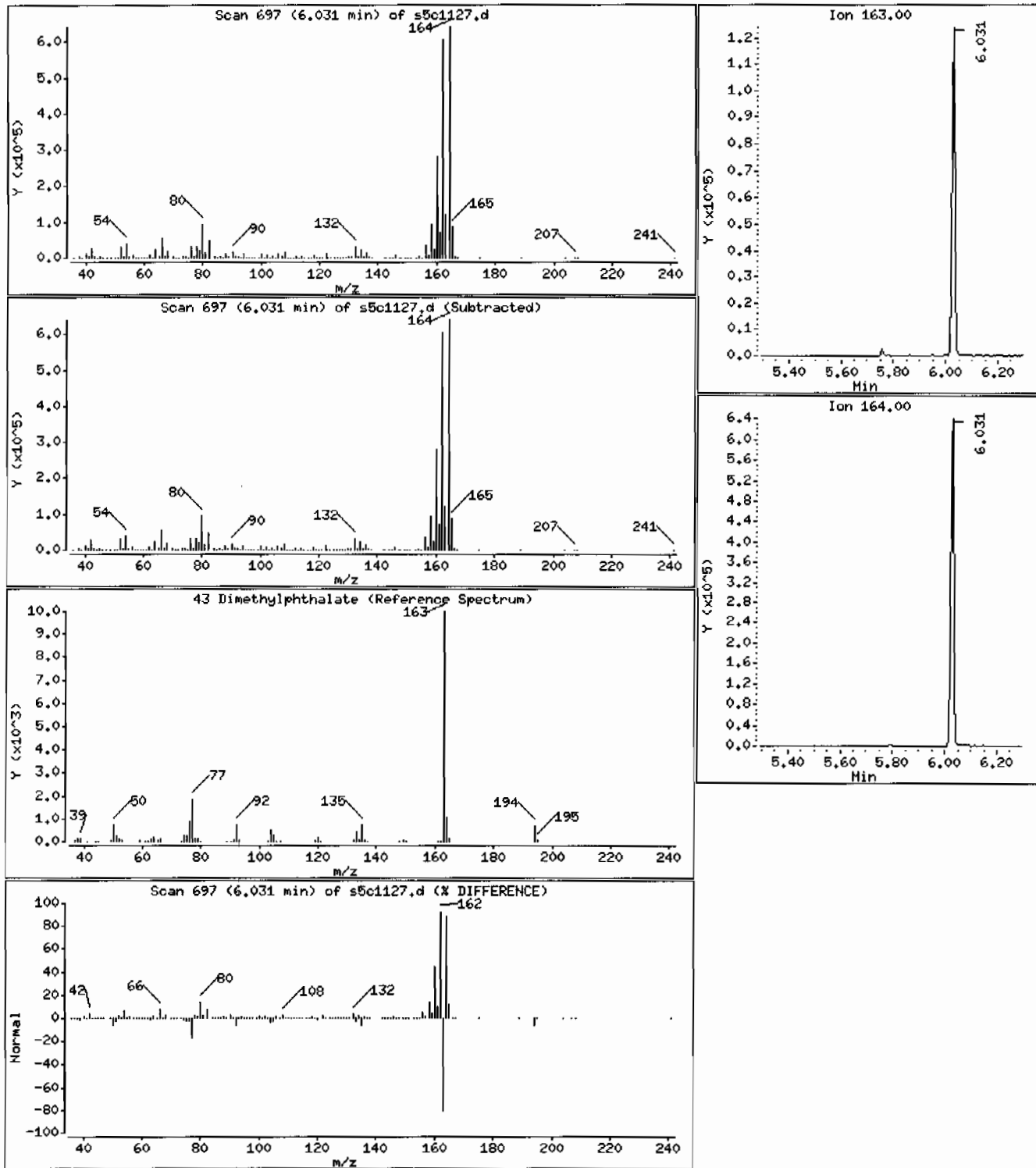
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

43 Dimethylphthalate

Concentration: 295 ug/Kg



Data File: /chem/HSD5.i/s031110.b/s5c1127.d

Page 5

Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 1248240010196065911SVMI11LANL

Volume Injected (uL): 0.5

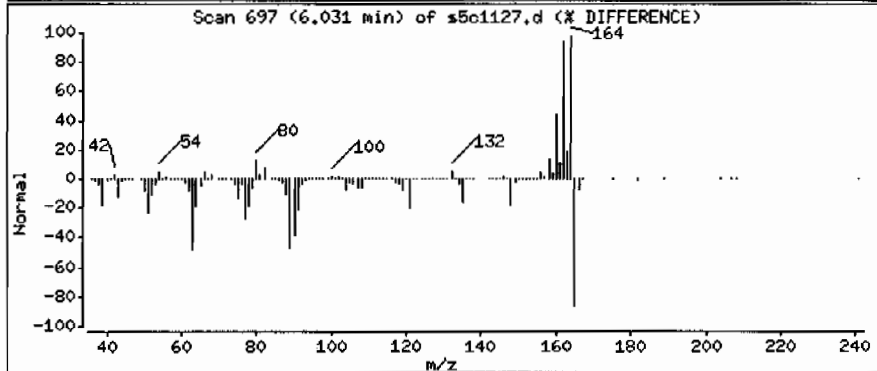
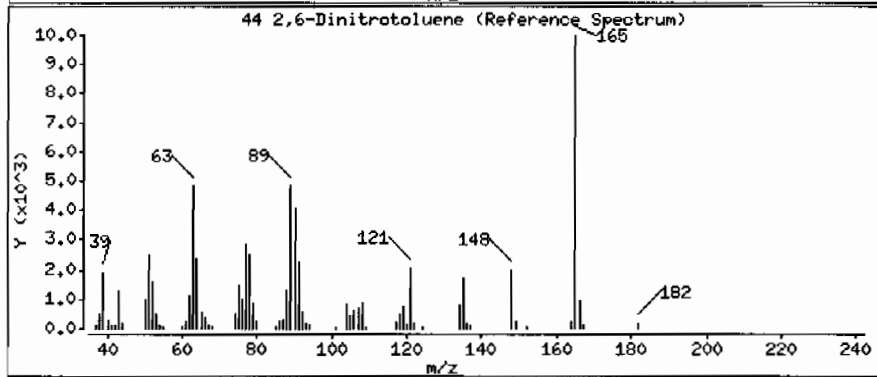
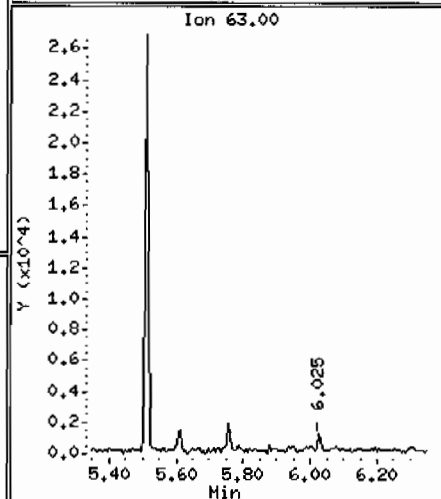
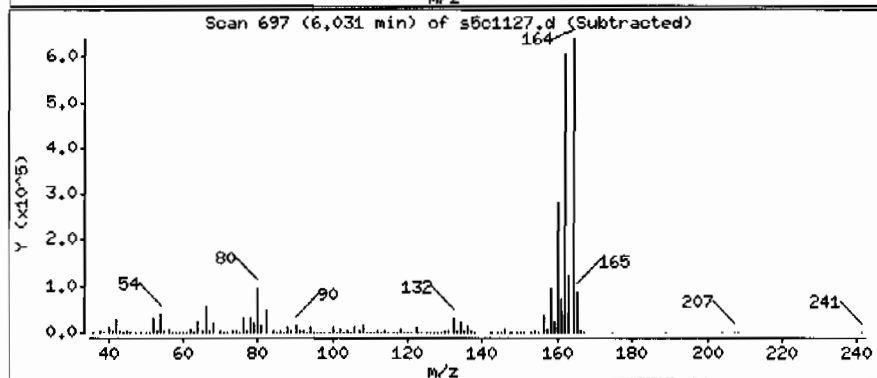
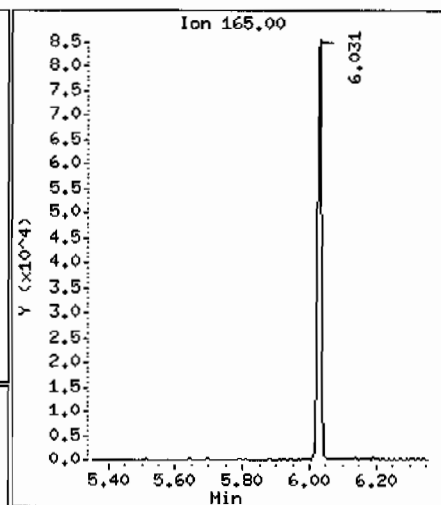
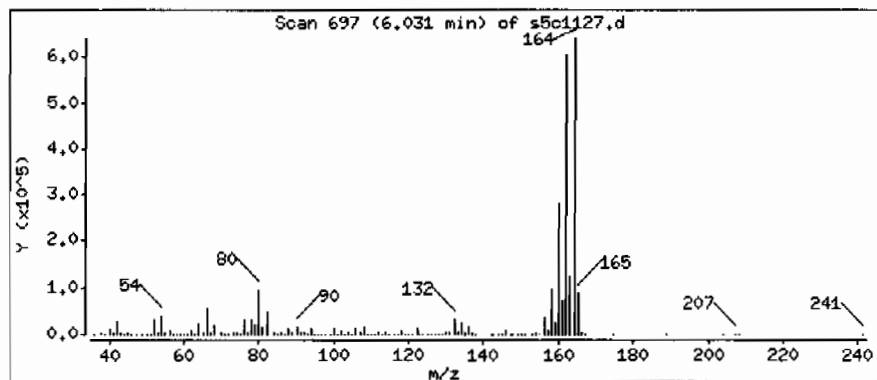
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

44 2,6-Dinitrotoluene

Concentration: 892 ug/Kg



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 1248240010196065911SVMI1ILANL

Volume Injected (uL): 0.5

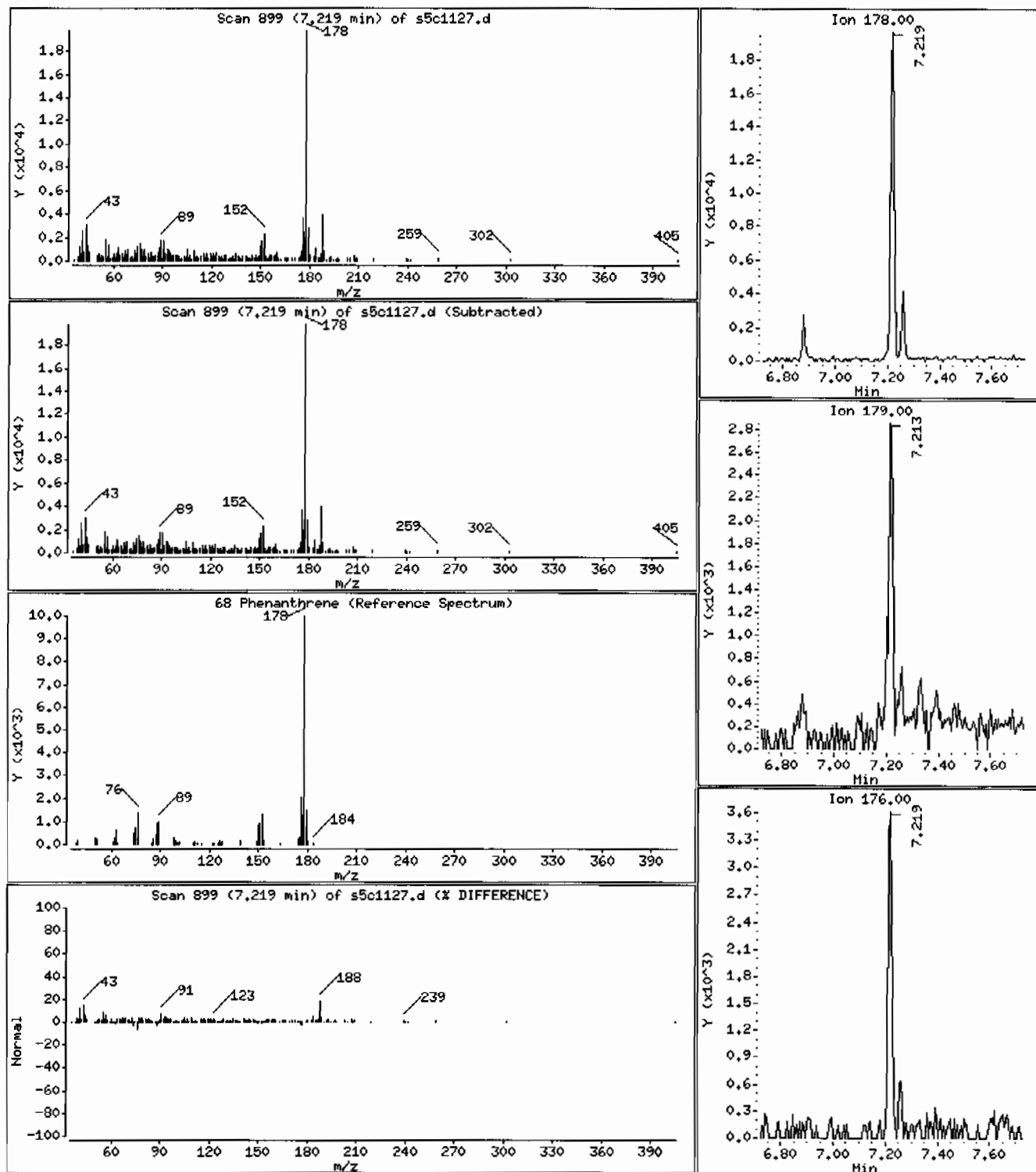
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 34.2 ug/Kg



Data File: /chem/MSD5.i/s031110.b/s5c1127.d

Page 7

Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: I248240010196065911SVH111LANL

Volume Injected (uL): 0.5

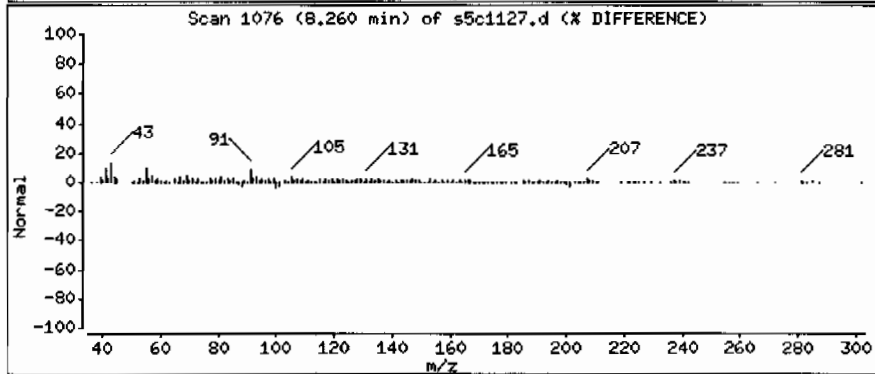
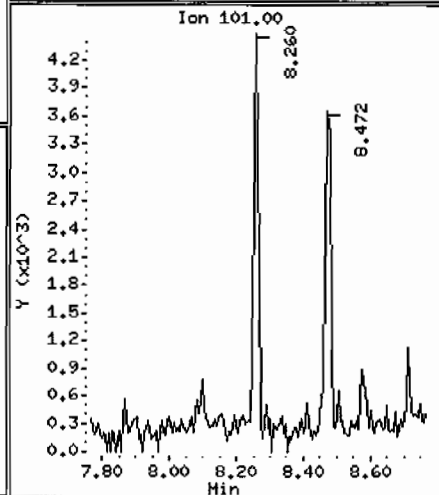
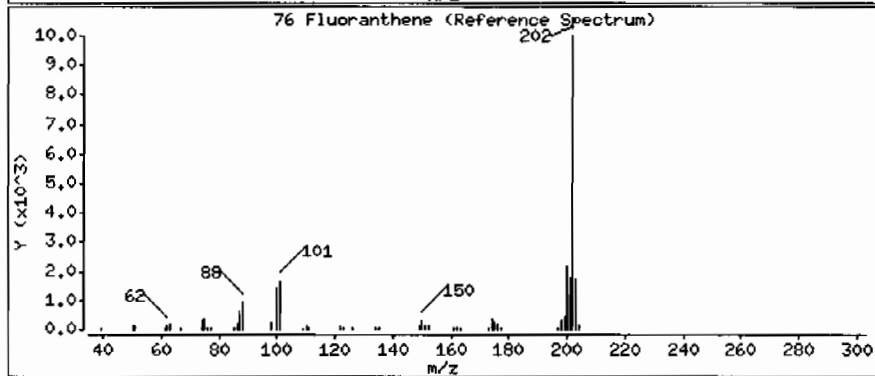
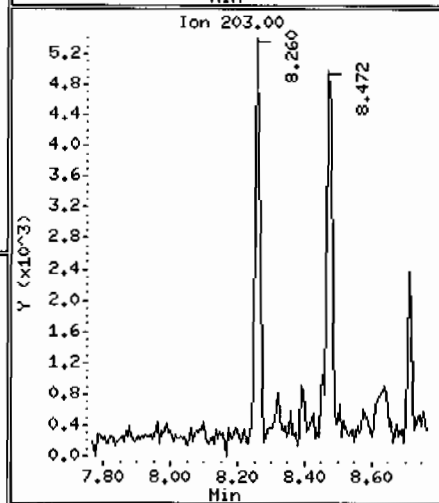
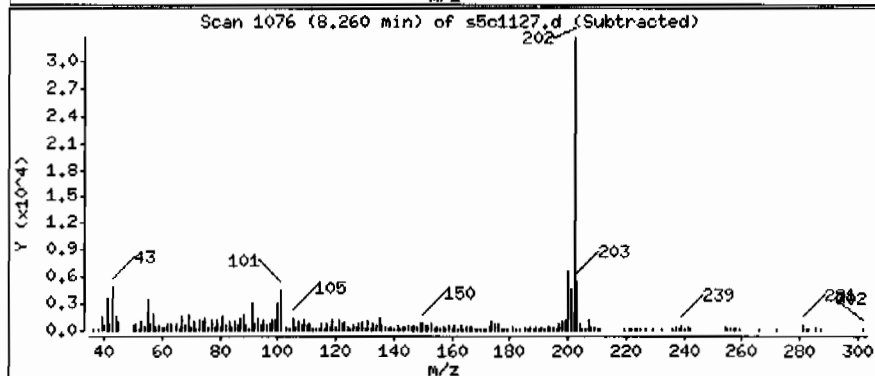
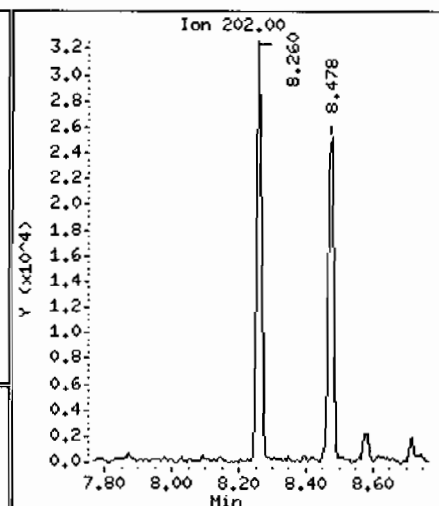
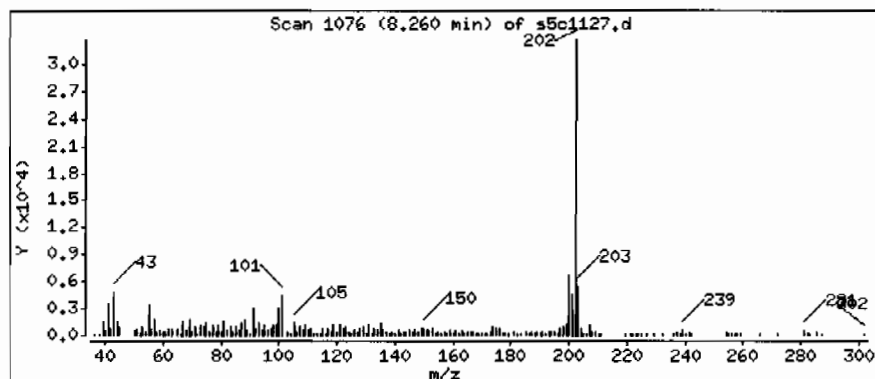
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 54.5 ug/Kg



Data File: /chem/MSD5.i/s031110.b/s5c1127.d

Page 8

Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: I248240010196065911ISVH111LANL

Volume Injected (uL): 0.5

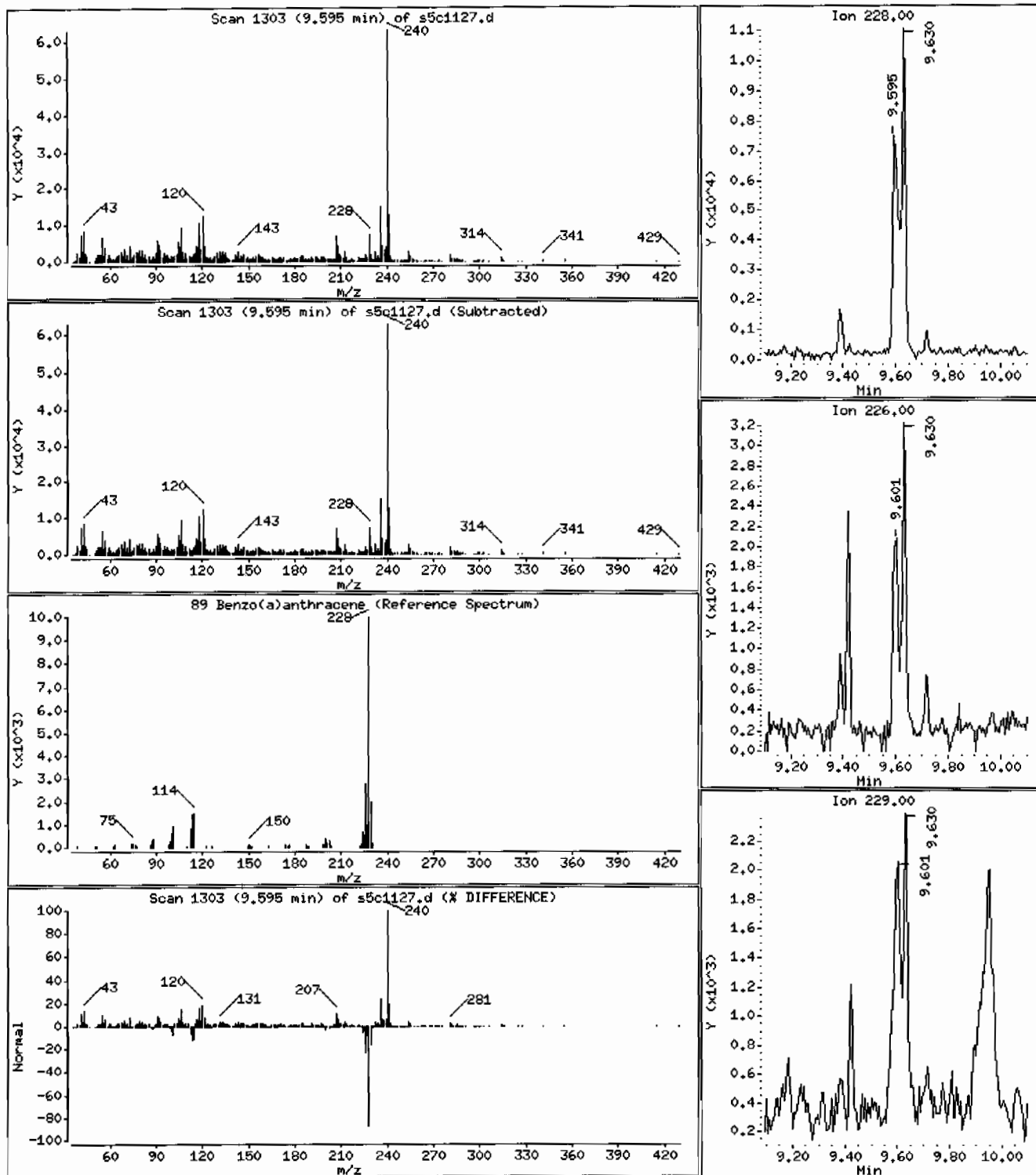
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 26.2 ug/Kg



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911|SVH11|LANL

Volume Injected (uL): 0.5

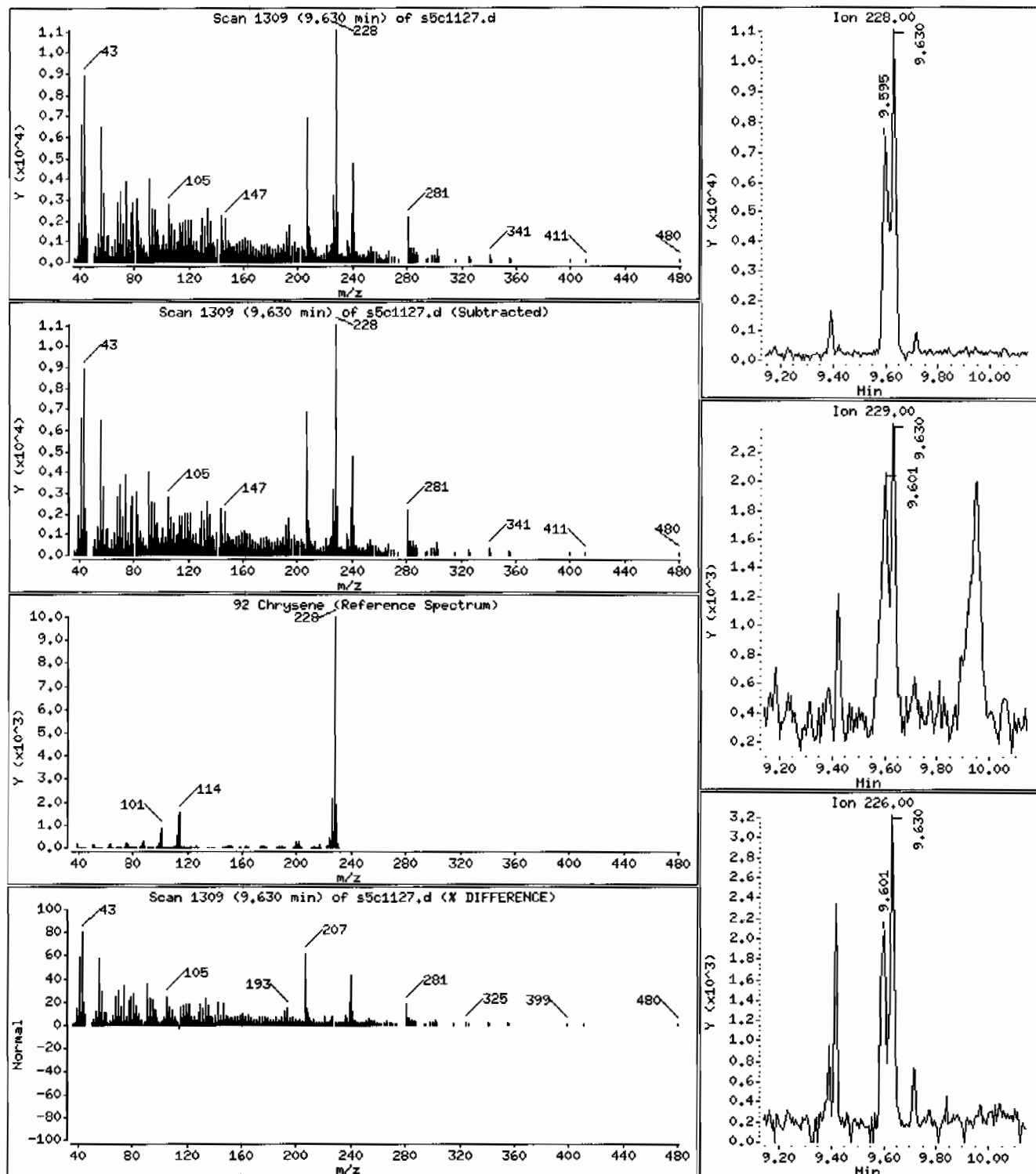
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 32.8 ug/Kg



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 12482400101960659111SVH111LANL

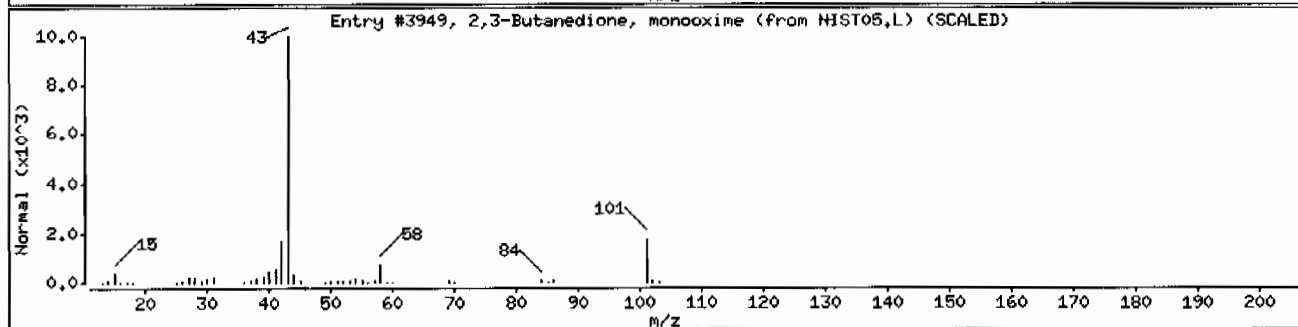
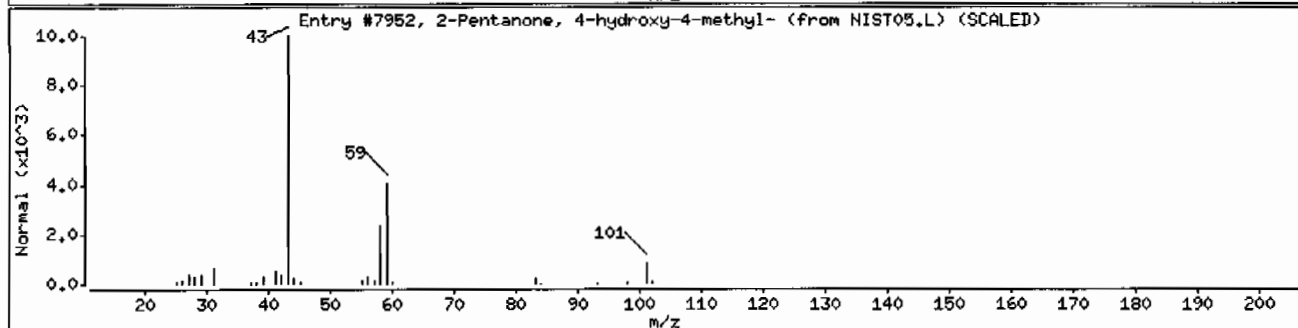
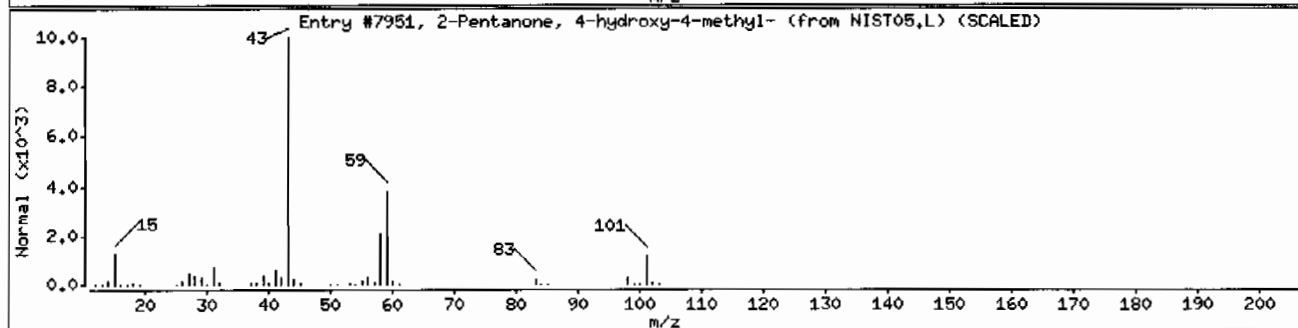
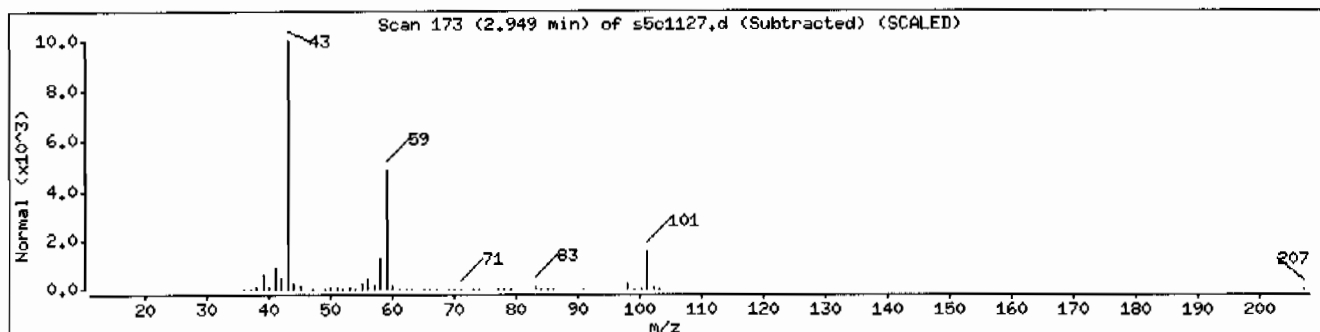
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 1248240010196065911ISVH11ILANL

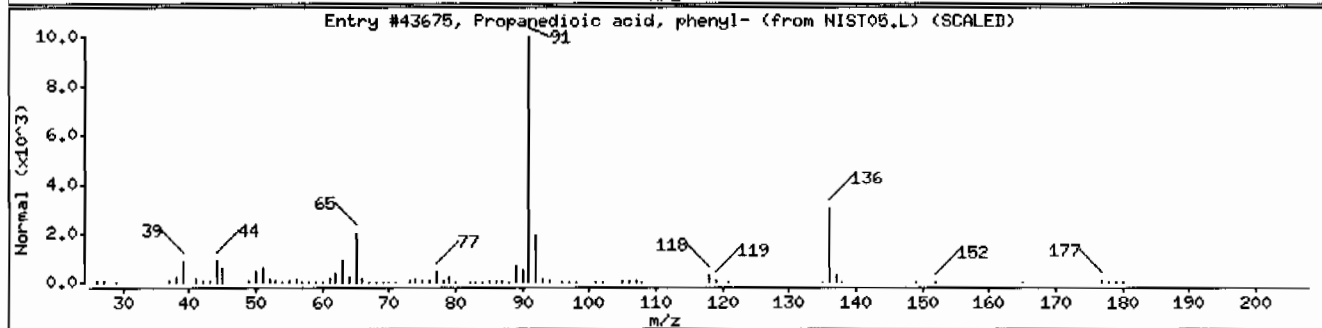
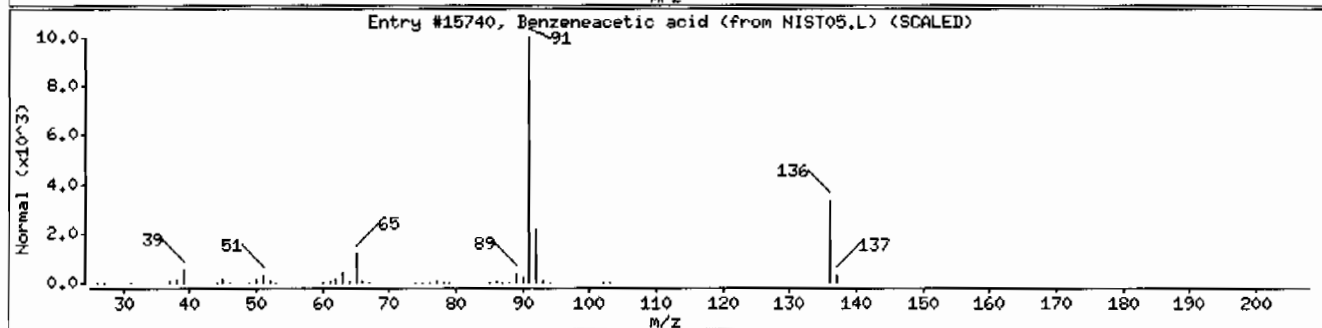
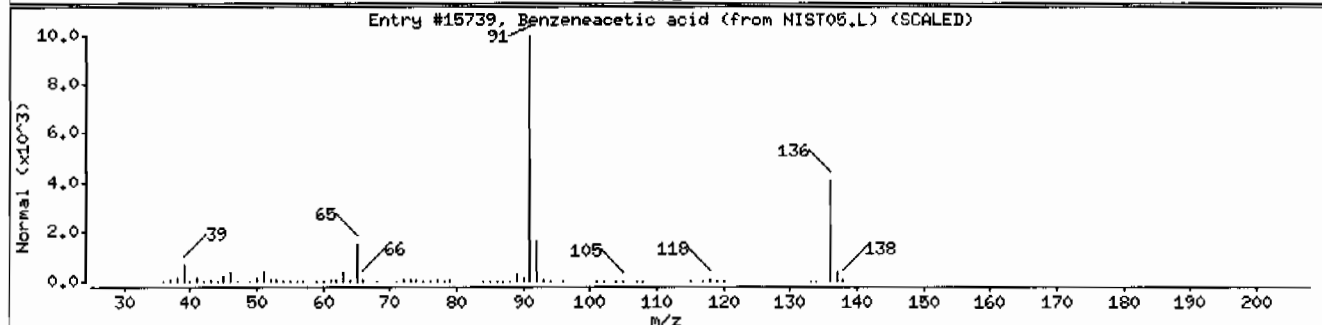
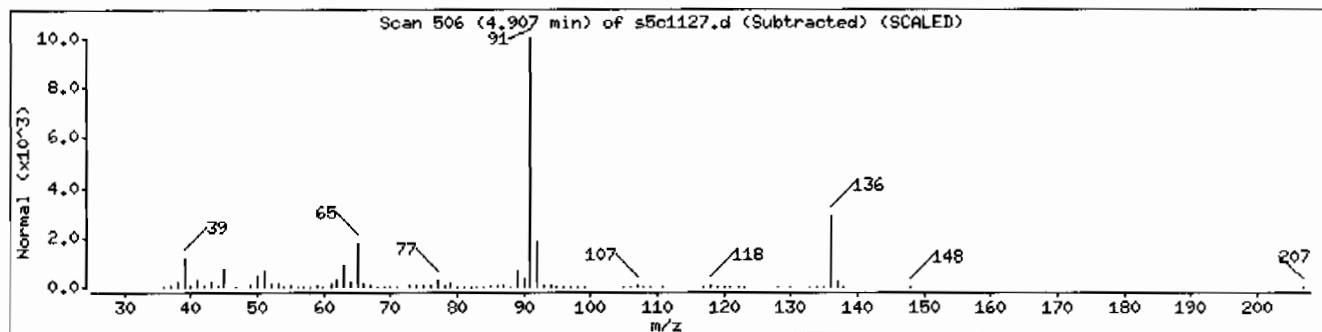
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzeneacetic acid	103-82-2	NIST05.L	15739	90	C8H8O2	136
Benzeneacetic acid	103-82-2	NIST05.L	15740	90	C8H8O2	136
Propanedioic acid, phenyl-	2613-89-0	NIST05.L	43675	80	C9H8O4	180



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 12482400101960659111SVMI11LANL

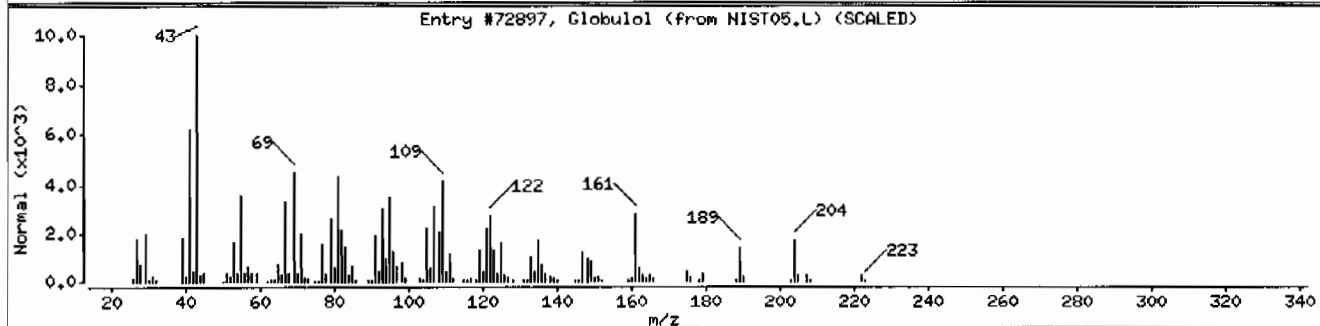
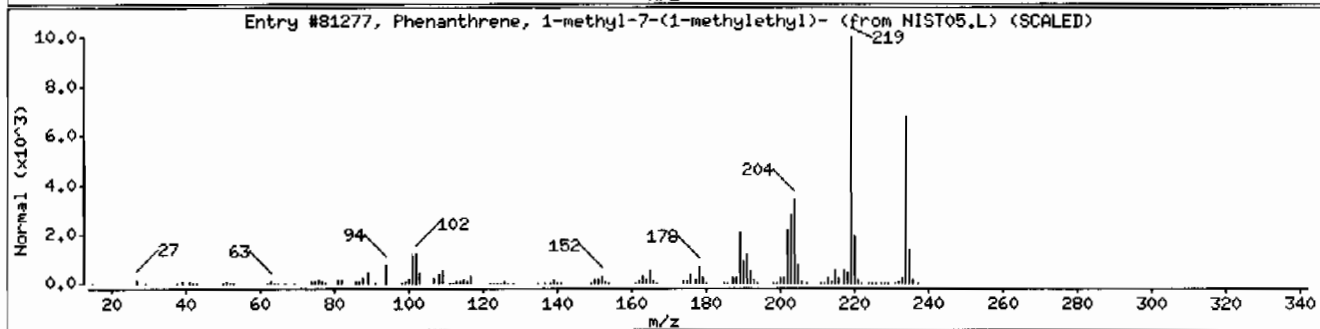
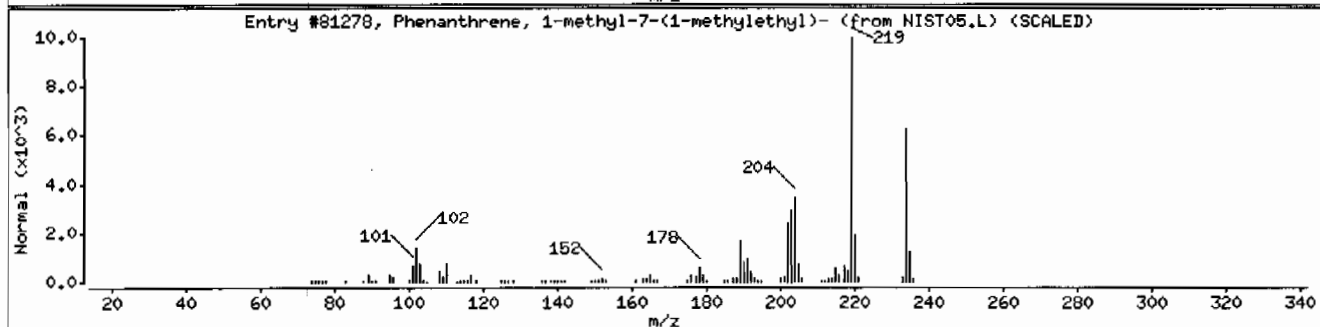
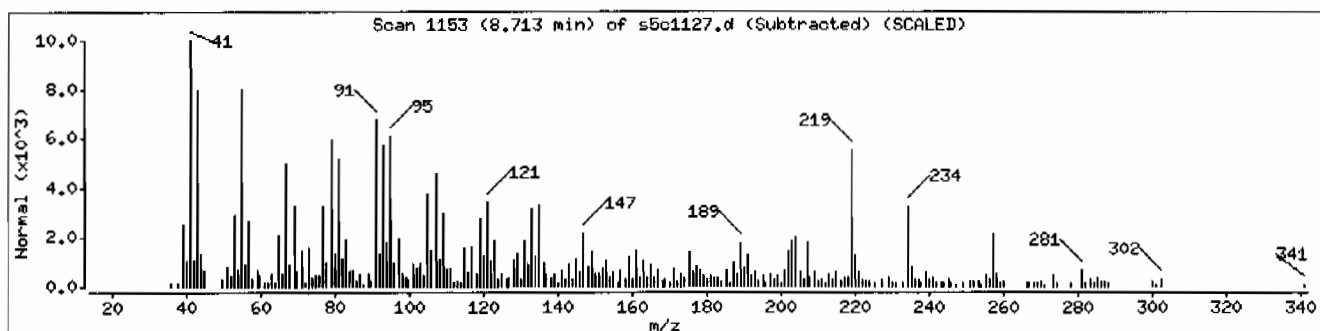
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenanthrene, 1-methyl-7-(1-methylethyl)	483-65-8	NIST05.L	81278	93	C18H18	234
Phenanthrene, 1-methyl-7-(1-methylethyl)	483-65-8	NIST05.L	81277	92	C18H18	234
Globulol	51371-47-2	NIST05.L	72897	60	C15H26O	222



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVH11/LANL

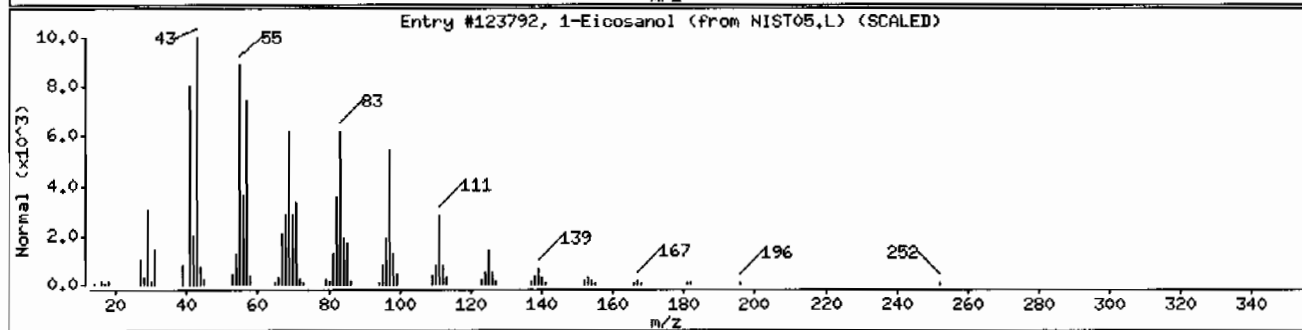
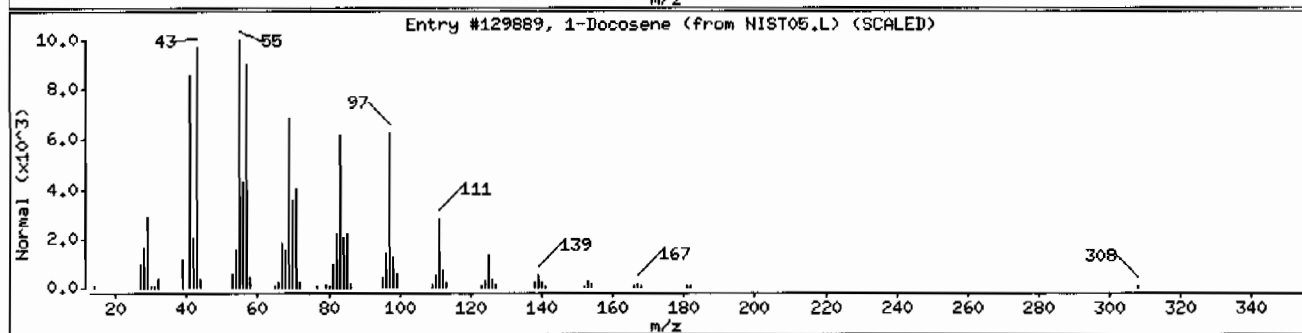
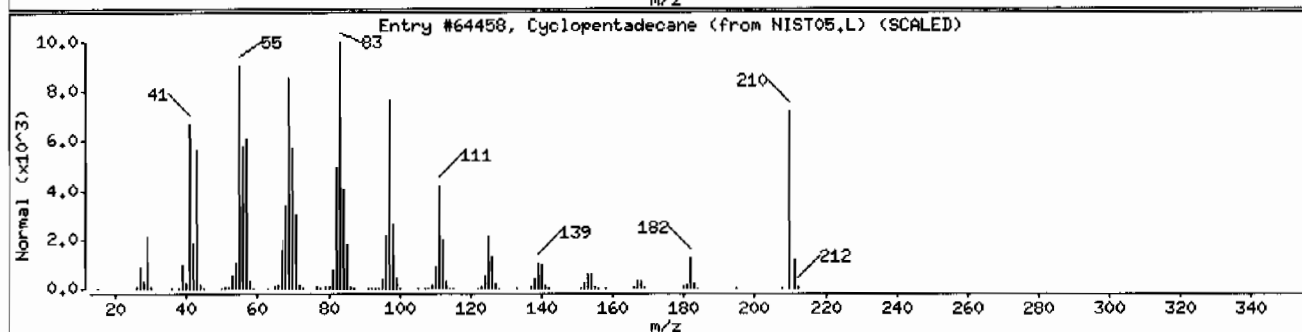
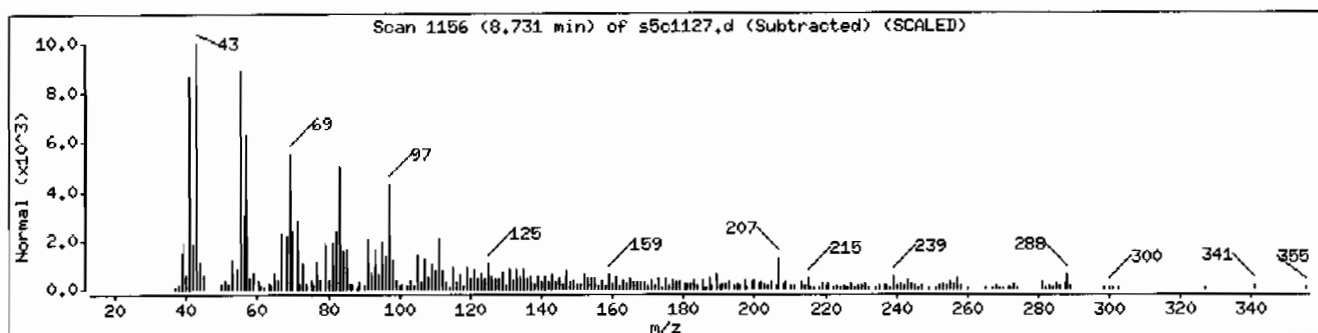
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentadecane	295-48-7	NIST05.L	64458	96	C15H30	210
1-Docosene	1599-67-3	NIST05.L	129889	92	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	91	C20H42O	298



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911ISVMI1ILANL

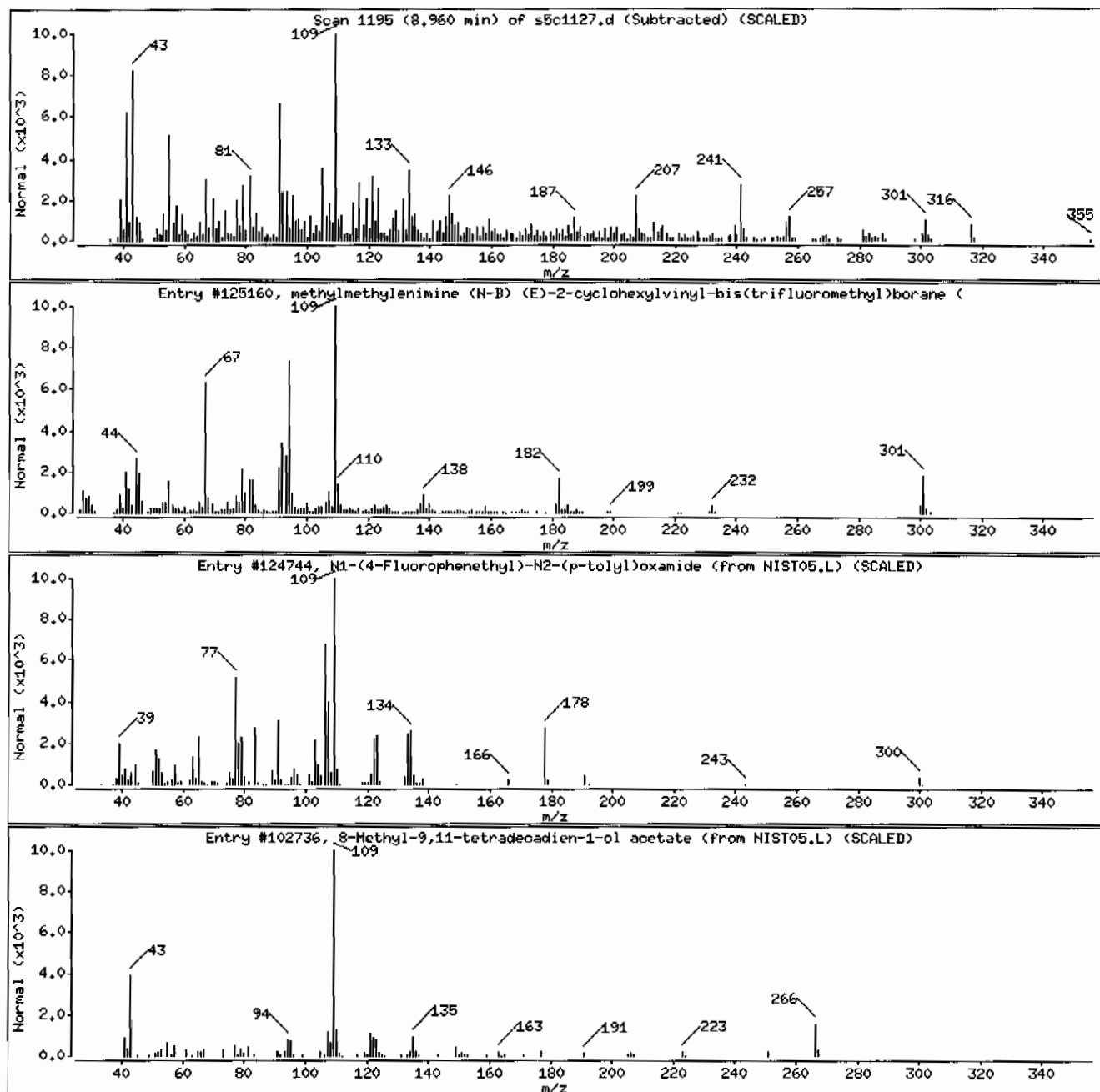
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
methylmethylenimine (N-B) (E)-2-cyclohex	1000160-02-7	NIST05.L	125160	38	C12H18BF6N	301
N1-(4-Fluorophenethyl)-N2-(p-tolyl)oxami	339239-52-0	NIST05.L	124744	38	C17H17FN2O2	300
8-Methyl-9,11-tetradecadien-1-ol acetate	1000130-98-8	NIST05.L	102736	35	C17H30O2	266



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911|SVMI1|LANL

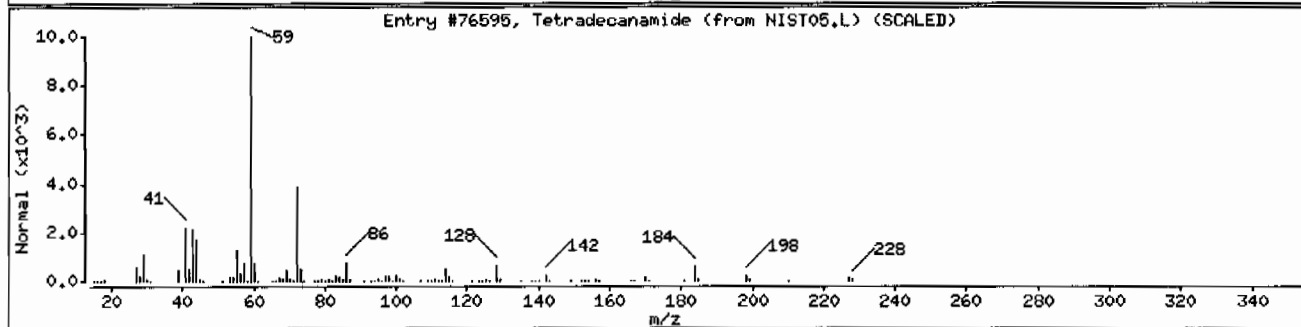
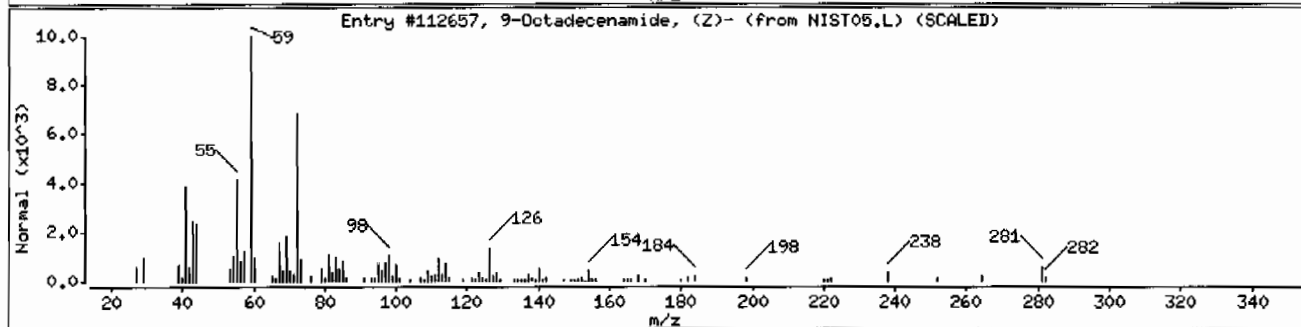
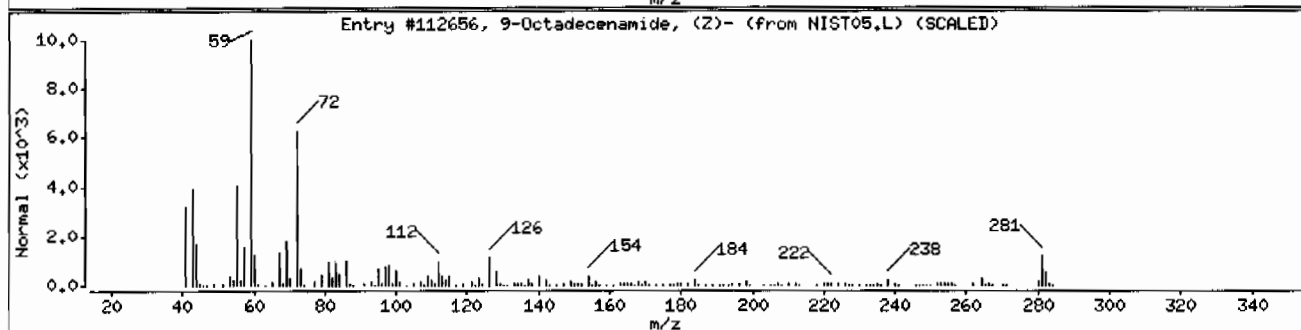
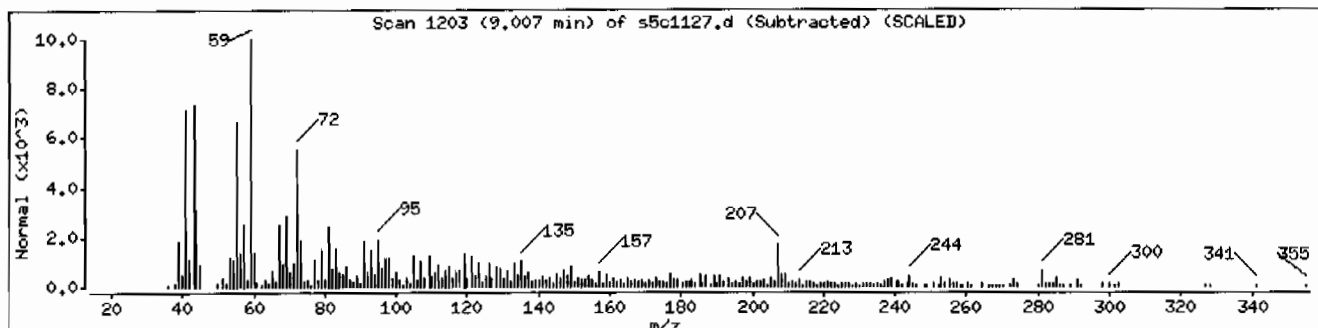
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	86	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	58	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76595	43	C14H29NO	227



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVMI11LANL

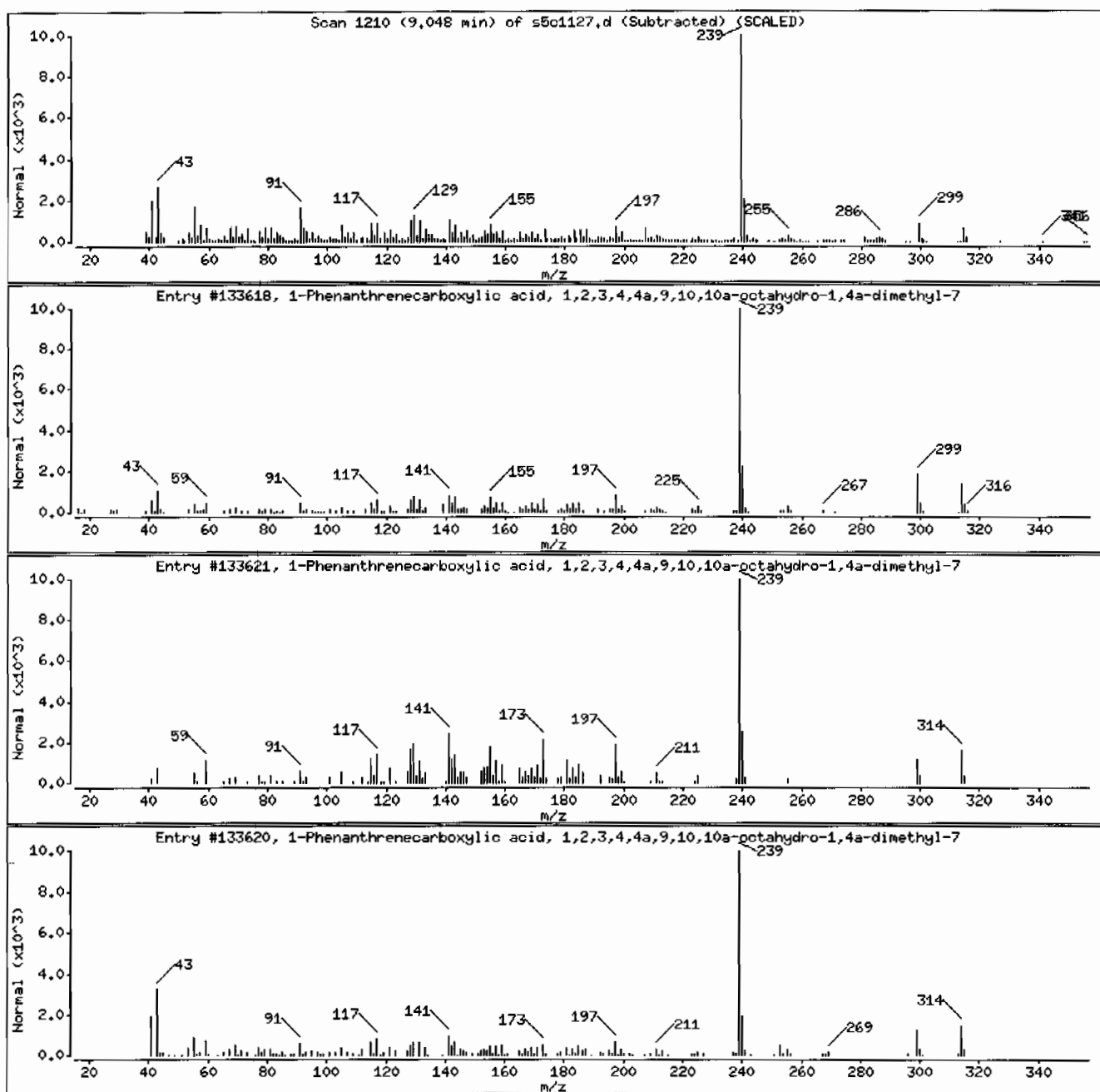
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	97	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911|SVM11|LANL

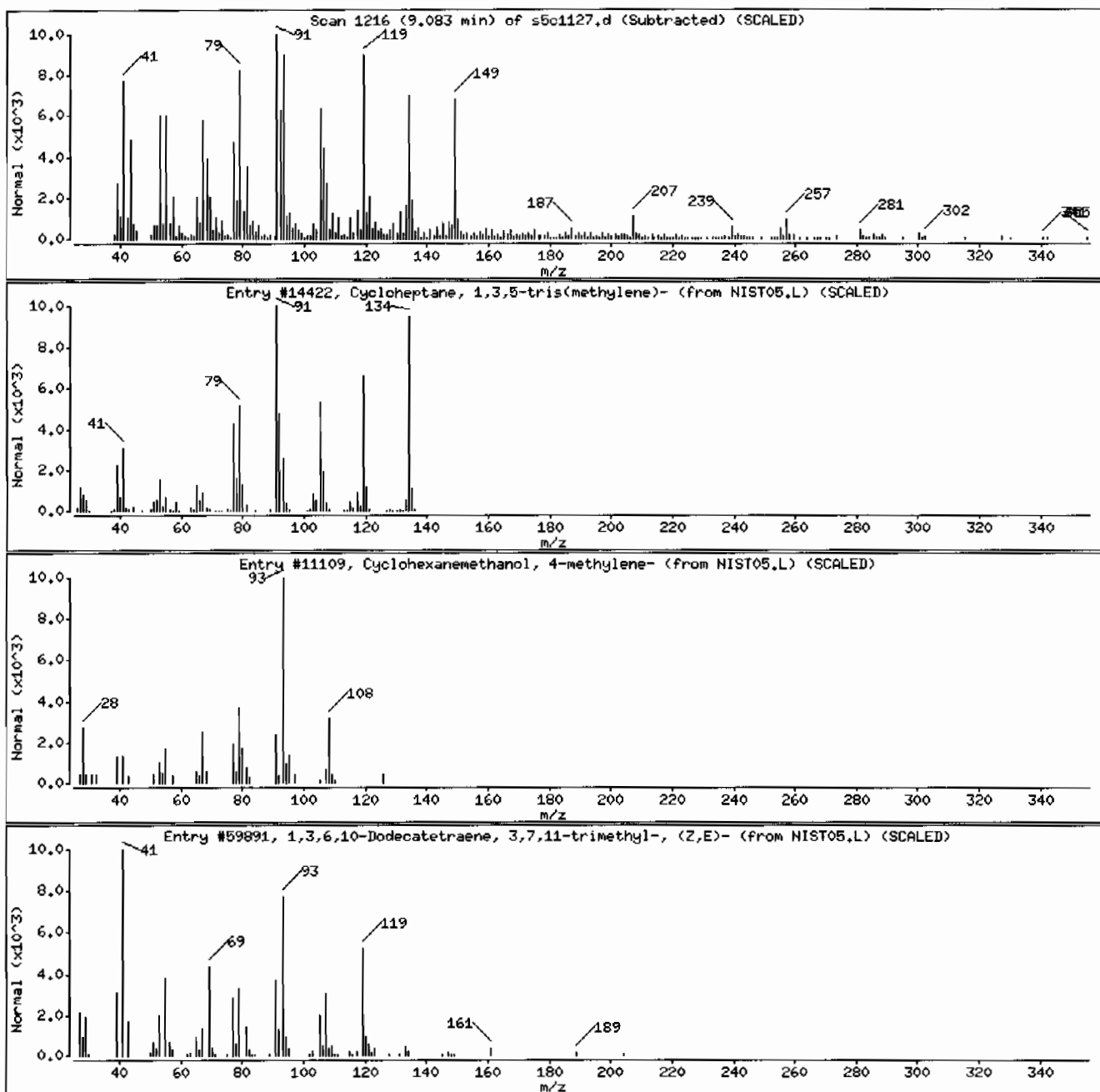
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	50	C10H14	134
Cyclohexanemethanol, 4-methylene-	1004-24-6	NIST05.L	11109	46	C8H14O	126
1,3,6,10-Dodecatetraene, 3,7,11-trimethyl-	26560-14-5	NIST05.L	59891	38	C15H24	204



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVH111LANL

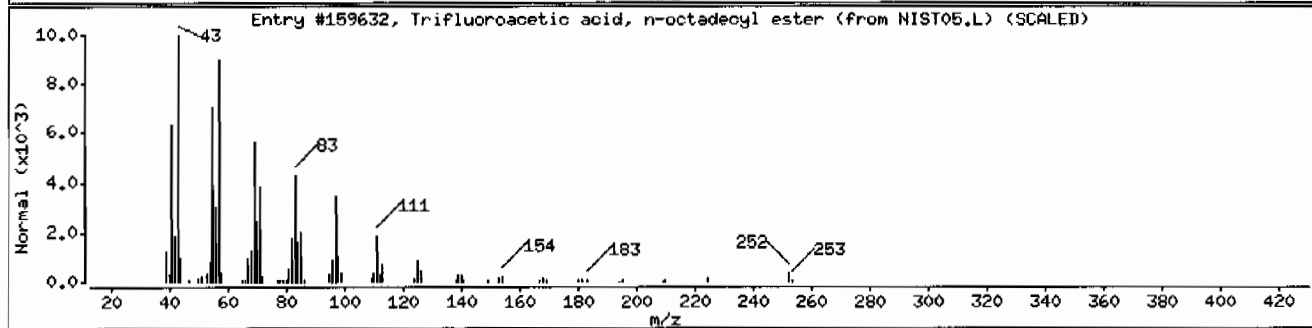
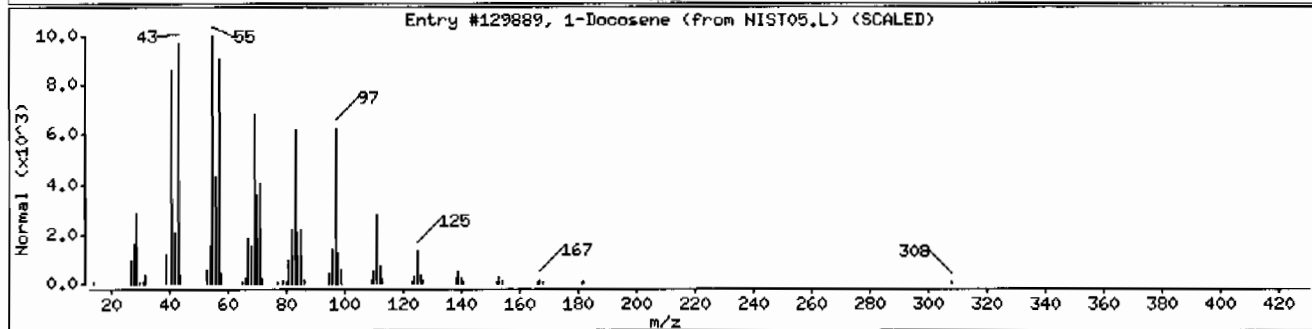
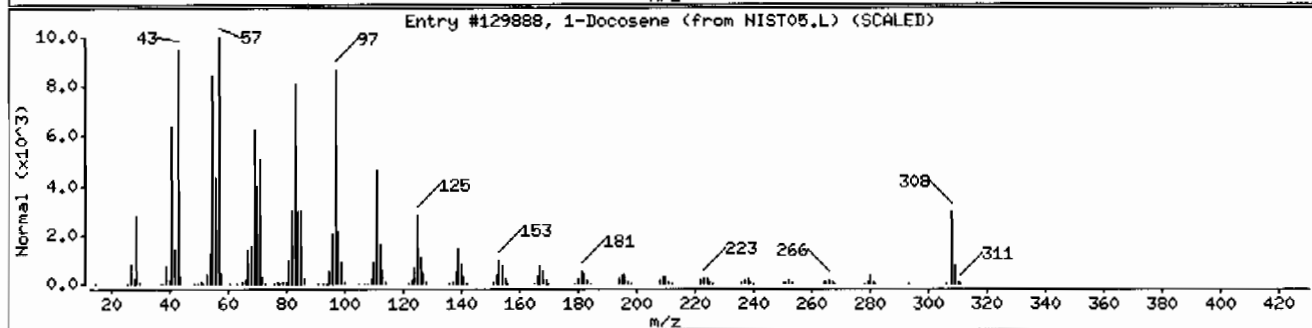
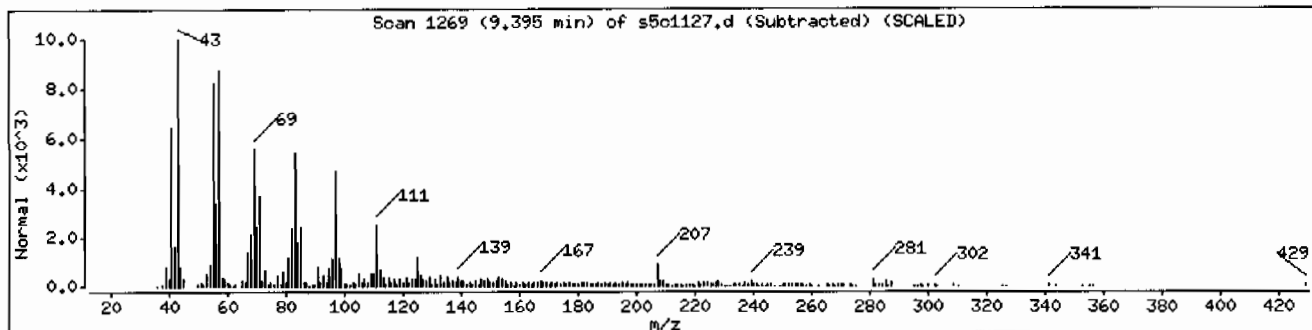
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129889	94	C22H44	308
Trifluoroacetic acid, n-octadecyl ester	79392-43-1	NIST05.L	159632	94	C20H37F3O2	366



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911|SVMI|LANL

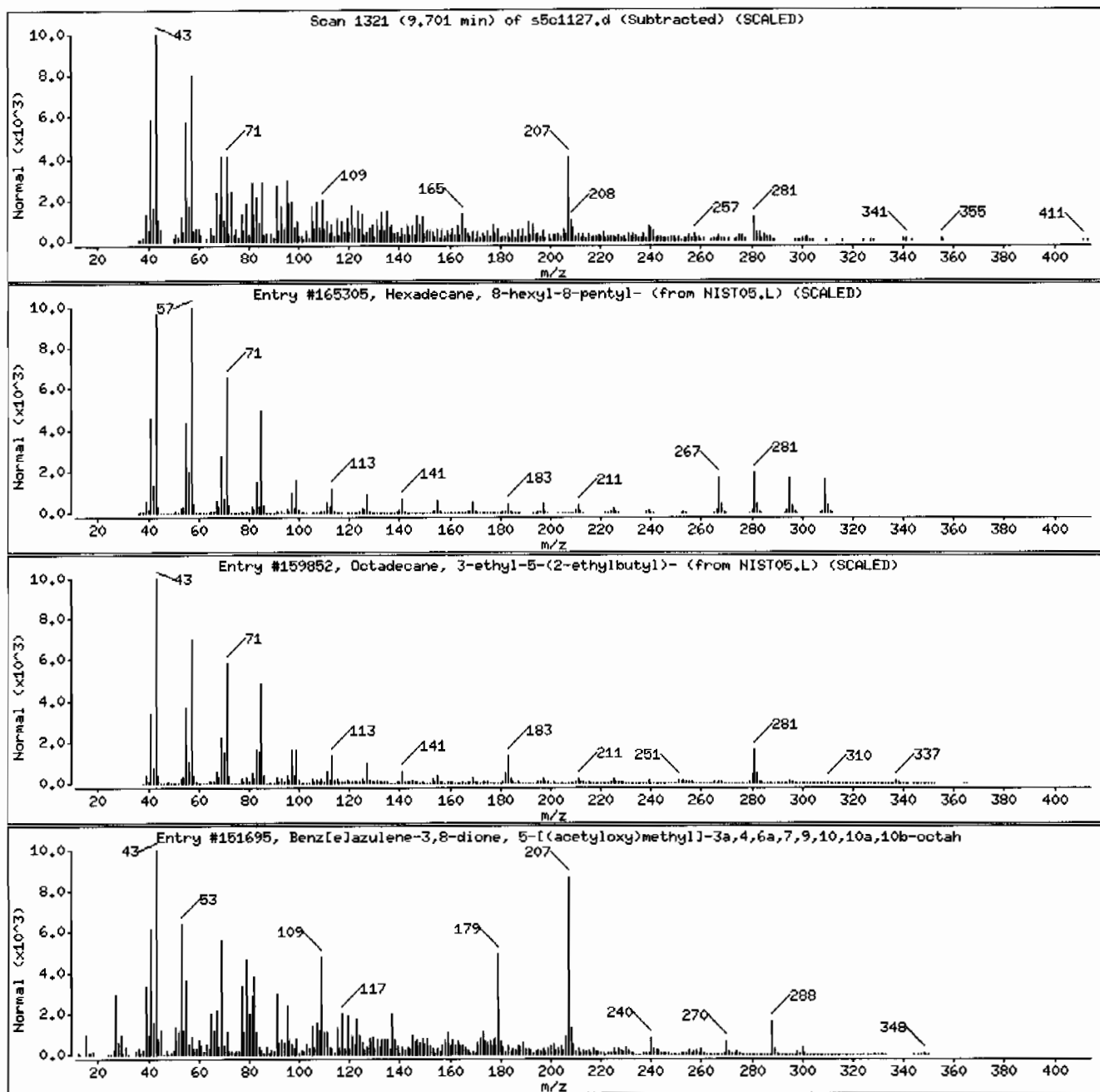
Volume Injected (uL): 0,5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0,20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexadecane, 8-hexyl-8-pentyl-	55282-29-6	NIST05.L	165305	30	C27H56	380
Octadecane, 3-ethyl-5-(2-ethylbutyl)-	55282-12-7	NIST05.L	159852	27	C26H54	366
Benz[e]azulene-3,8-dione, 5-[(acetyloxy)	25536-74-7	NIST05.L	151695	25	C19H24O6	348



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 12482400101960659111SVMI1|LANL

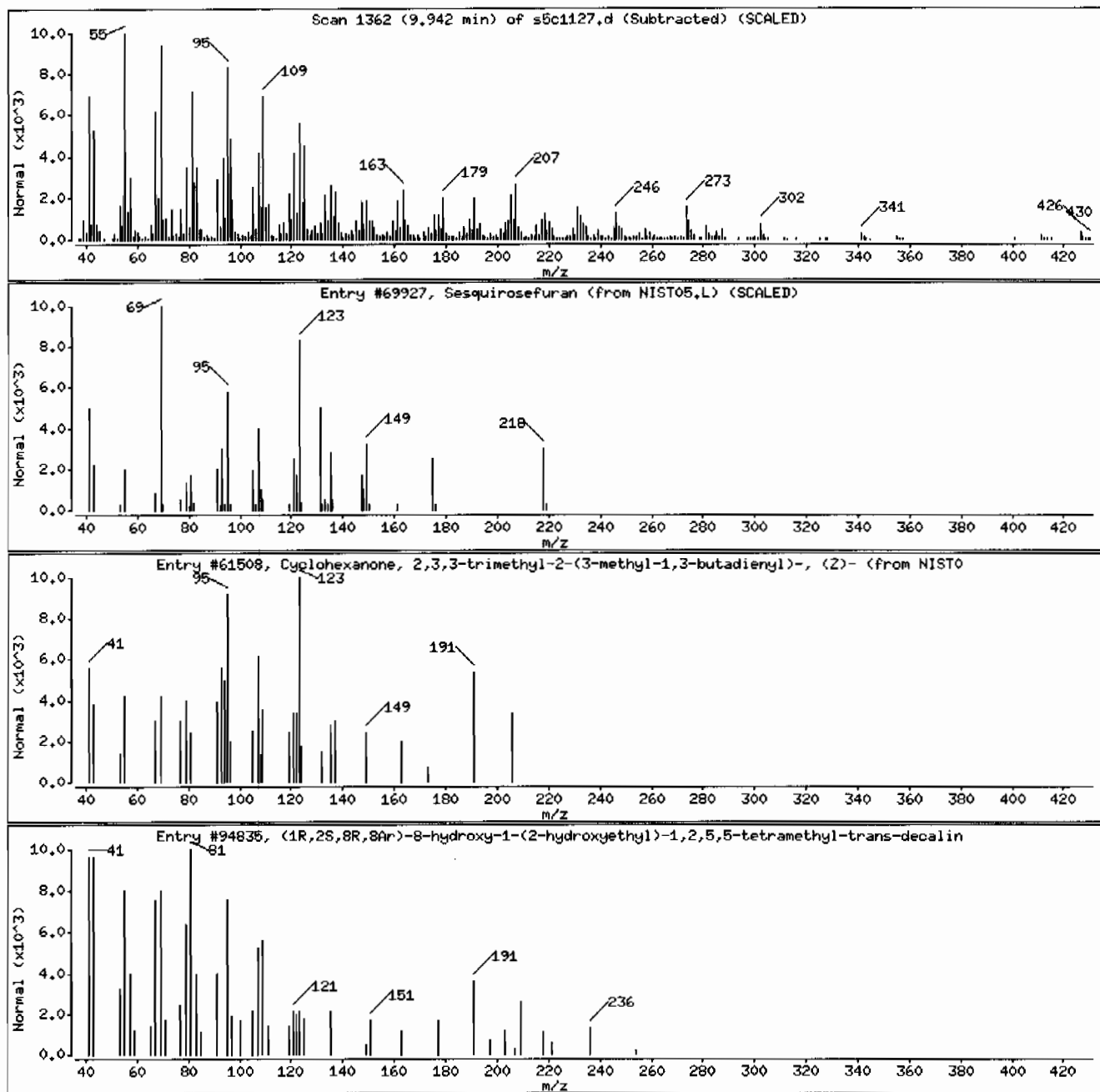
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Sesquirosefuran	39007-93-7	NIST05.L	69927	50	C15H22O	218
Cyclohexanone, 2,3,3-trimethyl-2-(3-meth	69296-90-8	NIST05.L	61508	50	C14H22O	206
(1R,2S,8R,8Ar)-8-hydroxy-1-(2-hydroxyeth	1000298-98-3	NIST05.L	94835	47	C16H30O2	254



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 12482400101960659111SVHI11LANL

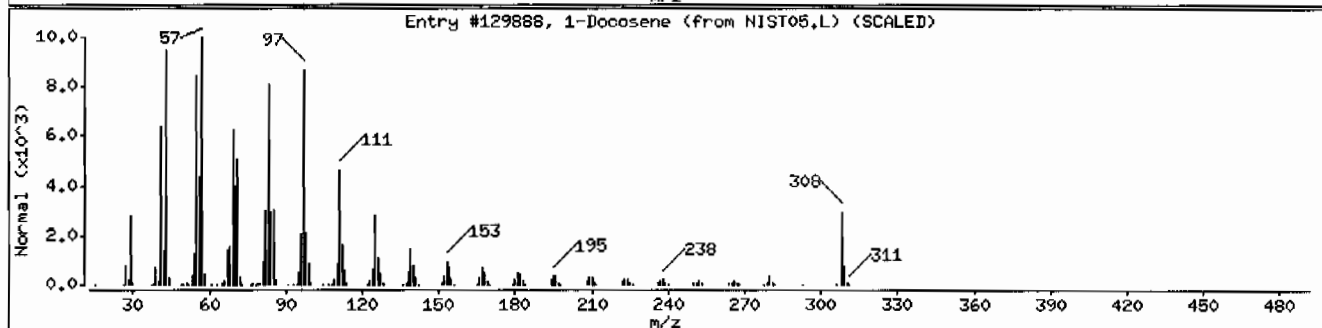
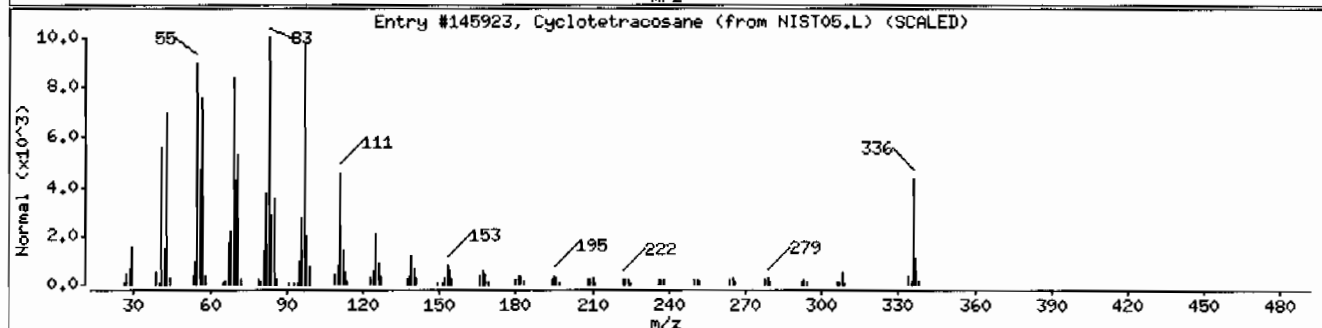
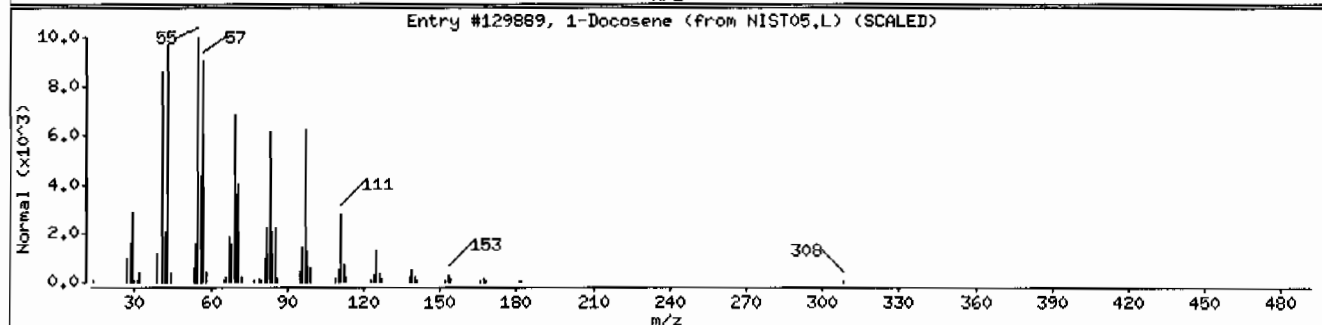
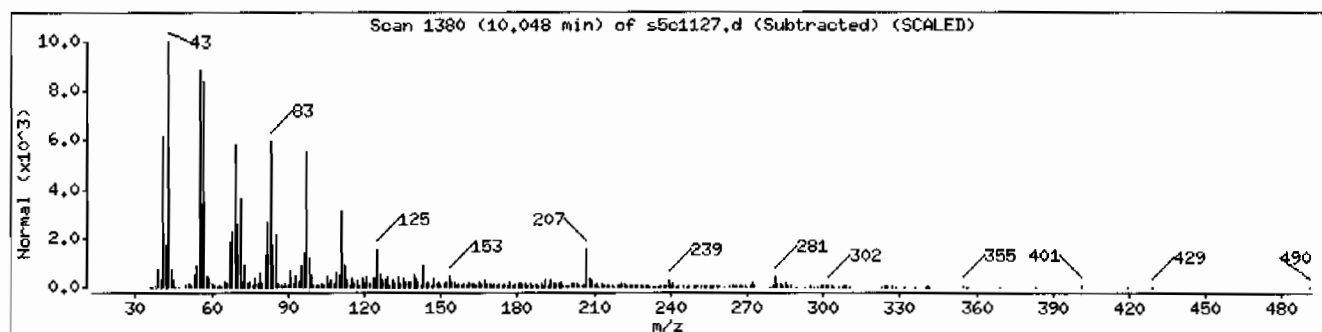
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
Cyclotetracosane	297-03-0	NIST05.L	145923	98	C24H48	336
1-Docosene	1599-67-3	NIST05.L	129888	97	C22H44	308



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVH111LANL

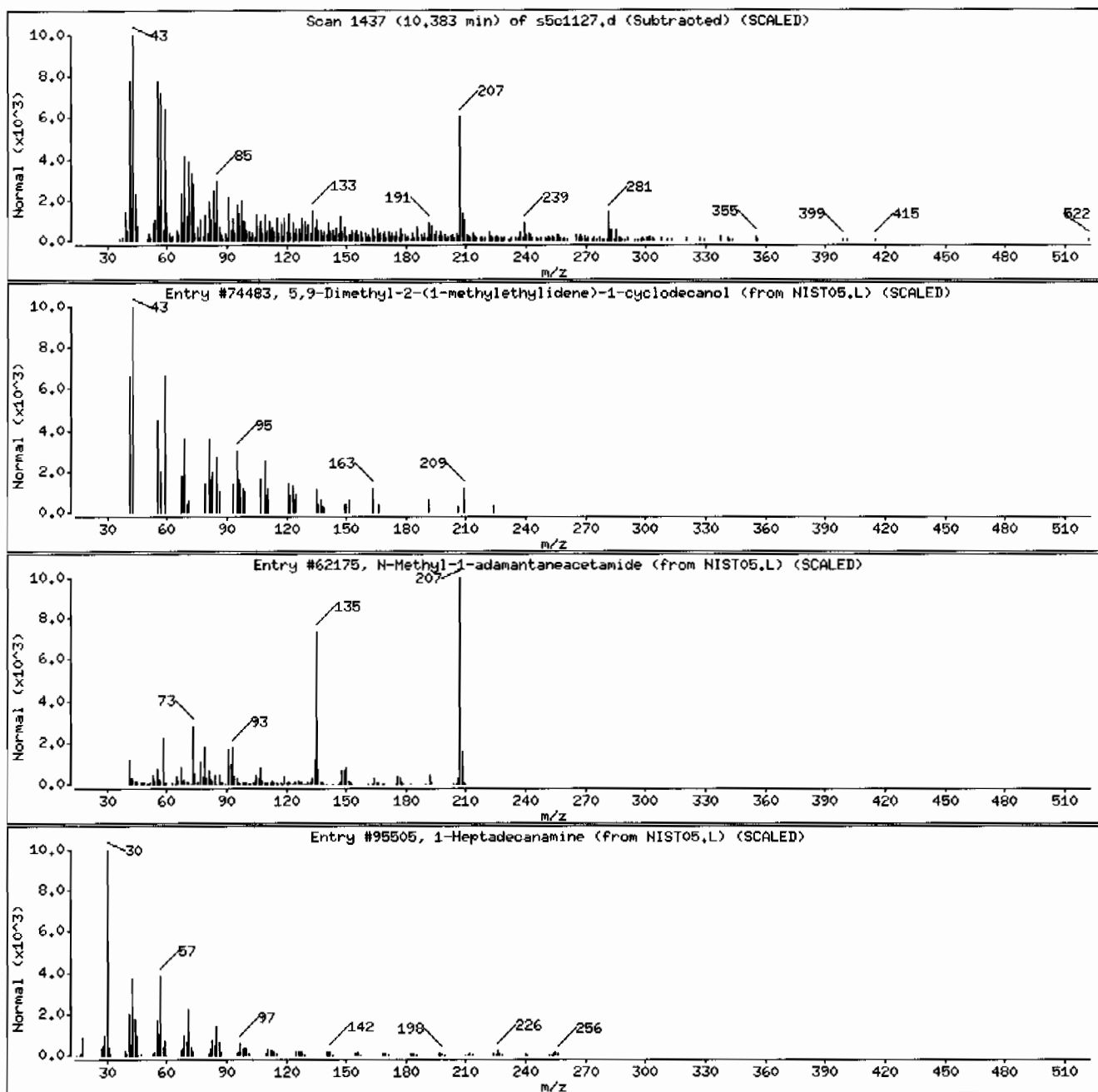
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5,9-Dimethyl-2-(1-methylethylidene)-1-cy	69239-72-1	NIST05.L	74483	58	C15H28O	224
N-Methyl-1-Adamantaneacetamide	31897-93-5	NIST05.L	62175	44	C13H21NO	207
1-Heptadecanamine	4200-95-7	NIST05.L	95505	38	C17H37N	255



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: I248240010196065911SVMI11LANL

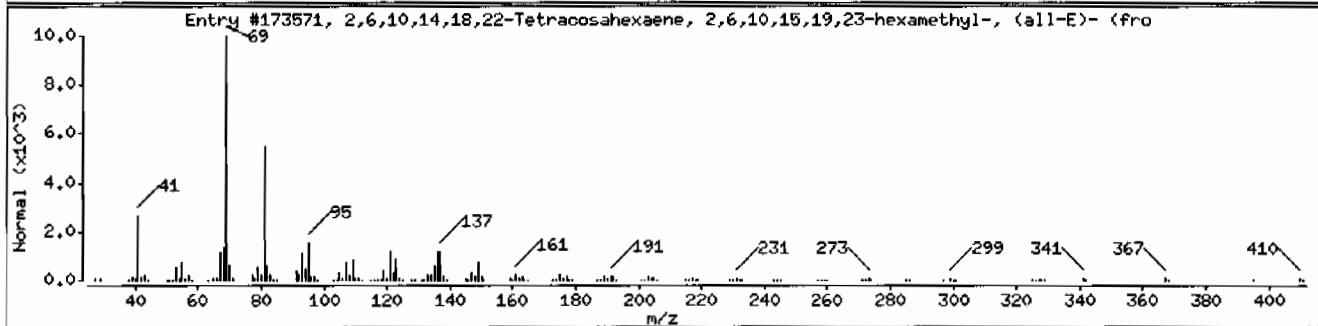
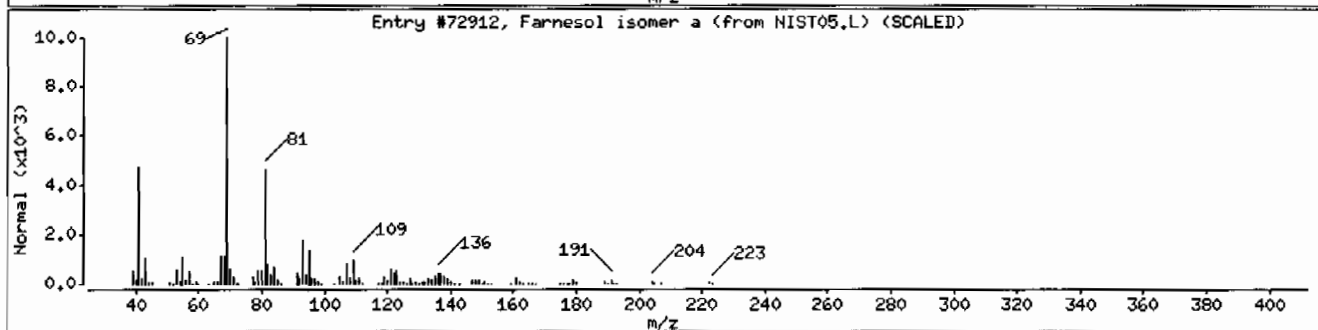
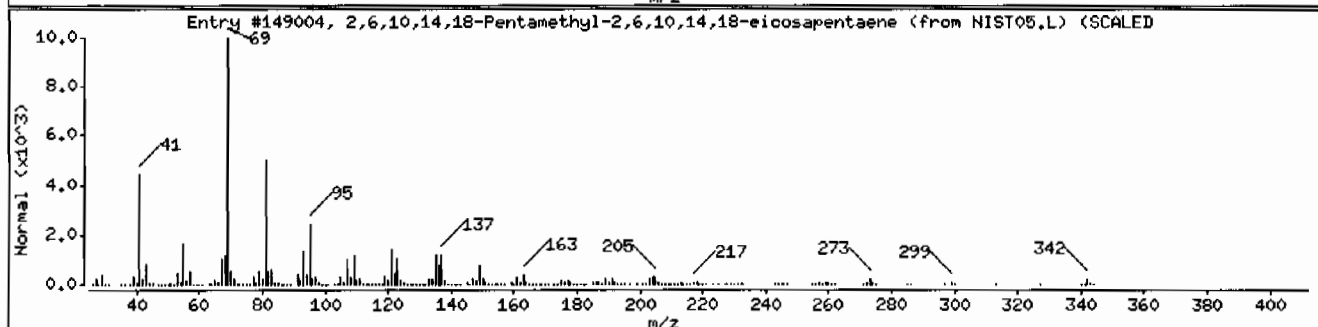
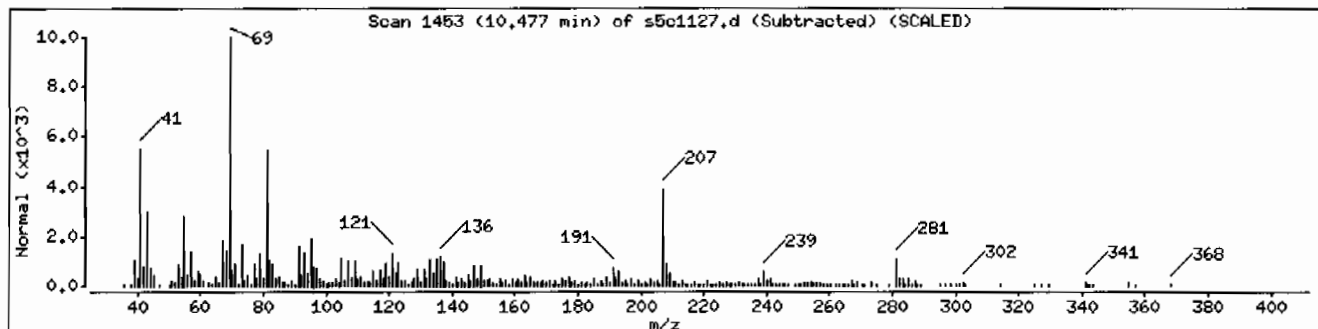
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	75581-03-2	NIST05.L	149004	95	C25H42	342
Farnesol isomer a	1000108-92-4	NIST05.L	72912	55	C15H26O	222
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	53	C30H50	410



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 1248240010196065911SVH11/LANL

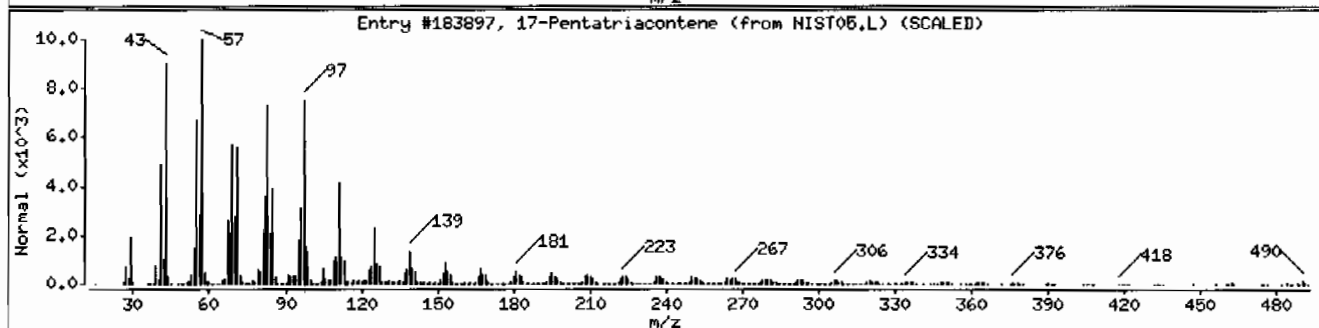
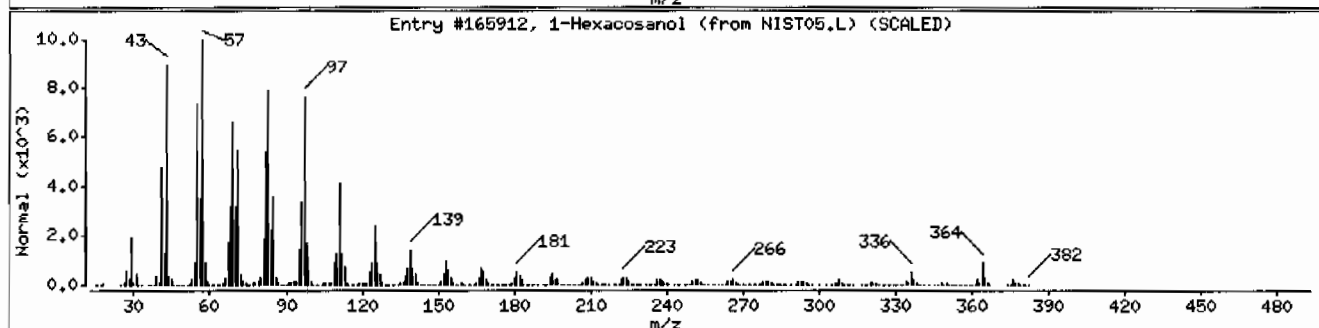
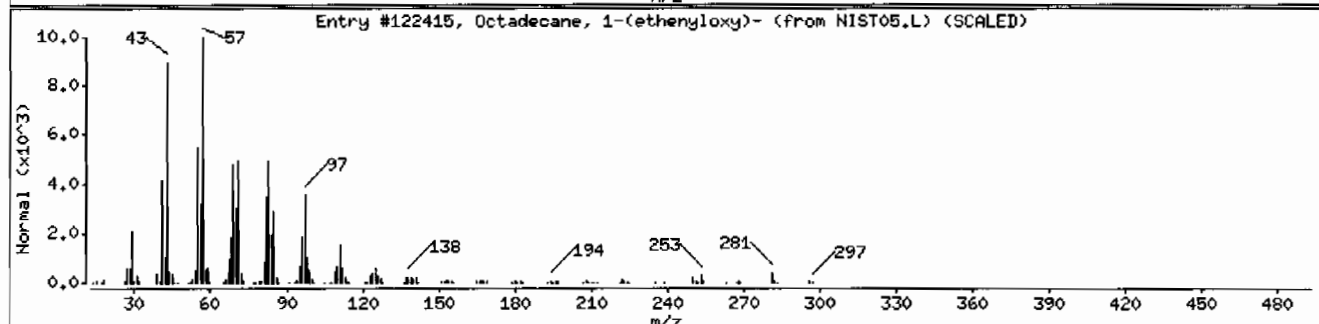
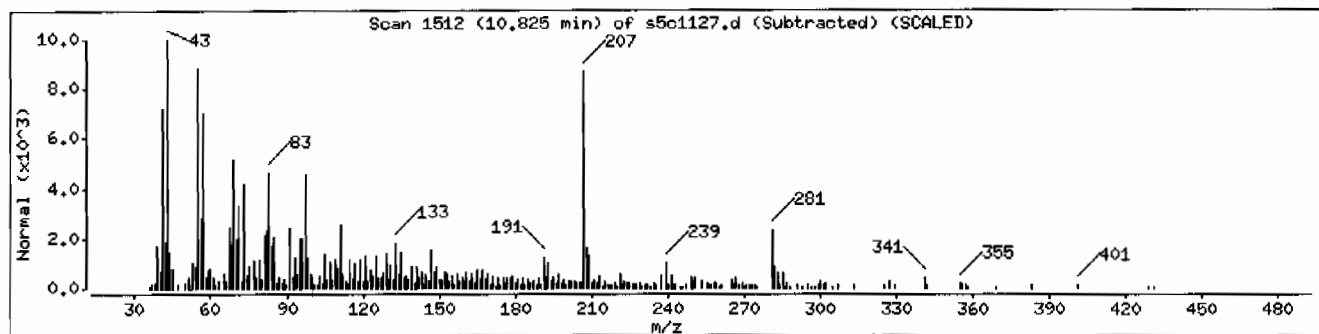
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-(ethenyloxy)-	930-02-9	NIST05.L	122415	93	C20H40O	296
1-Hexacosanol	506-52-5	NIST05.L	165912	50	C26H54O	382
17-Pentatriacontene	6971-40-0	NIST05.L	183897	49	C35H70	491



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911ISVM11LANL

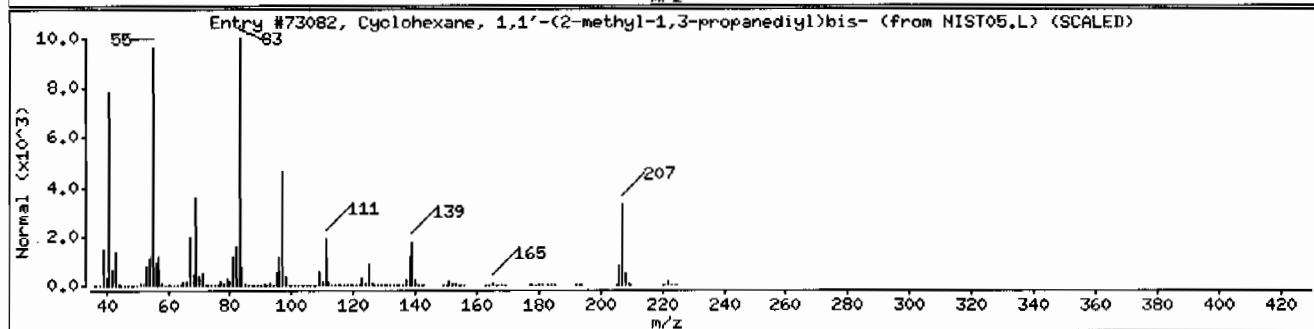
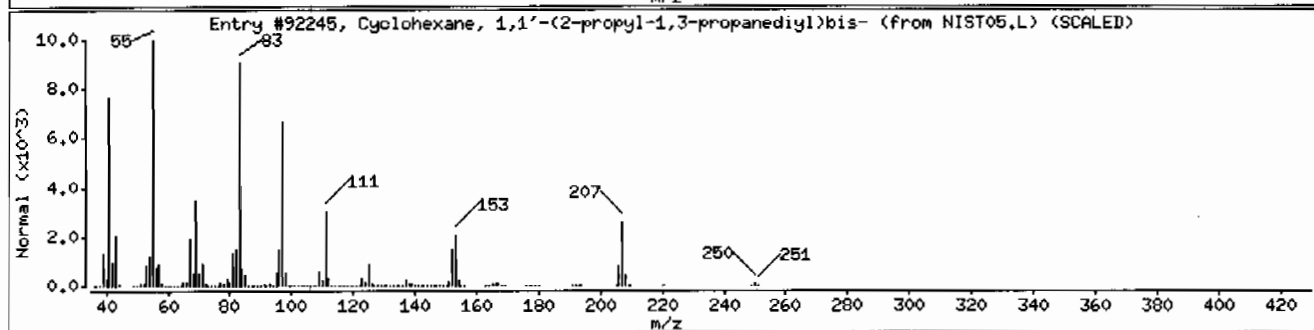
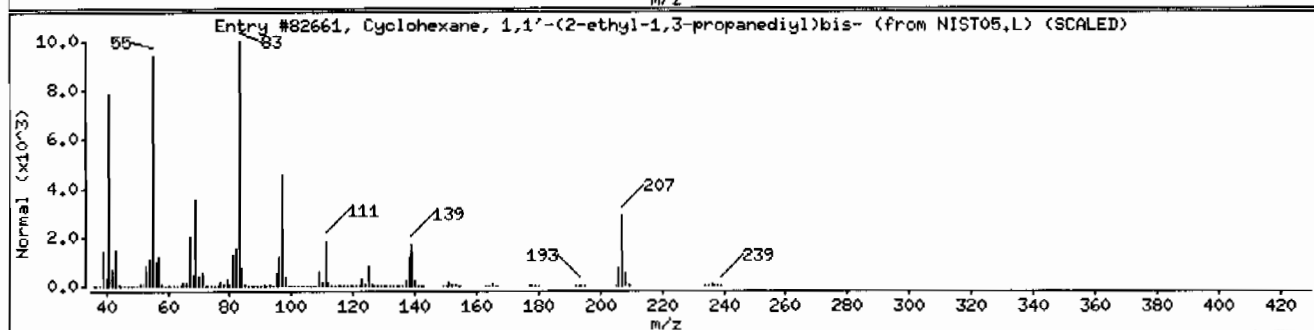
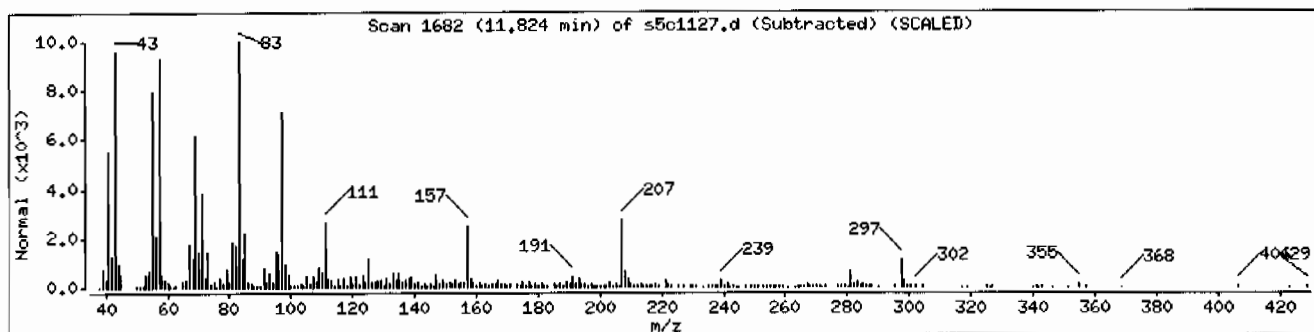
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	89	C17H32	236
Cyclohexane, 1,1'-(2-propyl-1,3-propanedi	55030-21-2	NIST05.L	92245	89	C18H34	250
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	86	C16H30	222



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 12482400101960659111SVH11ILANL

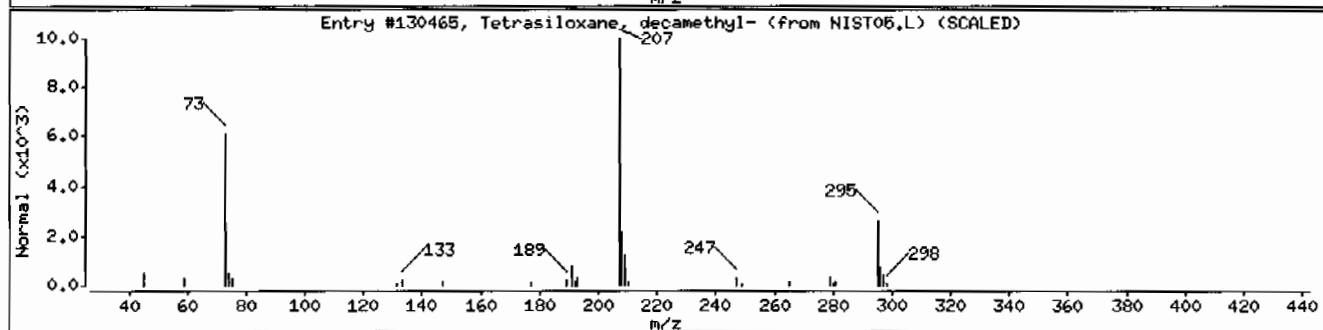
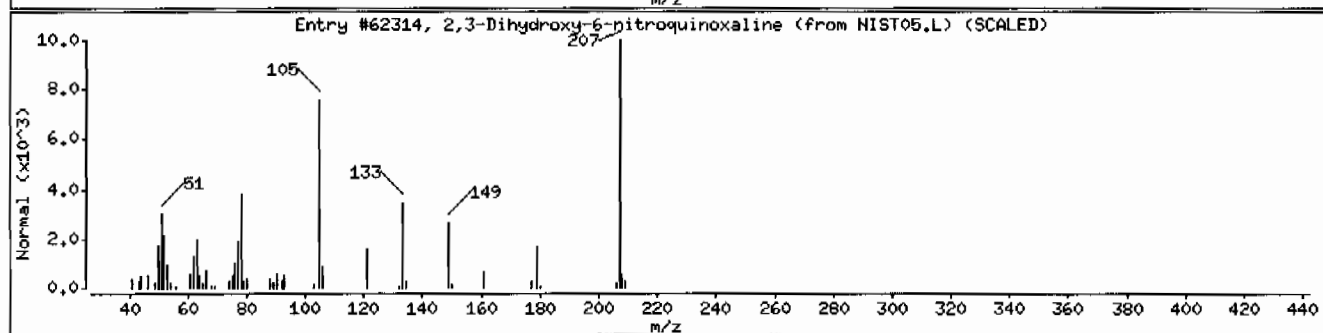
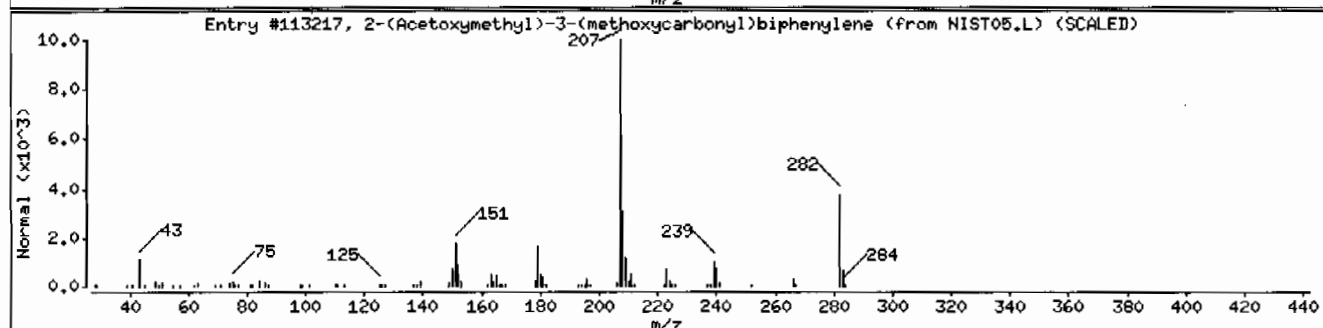
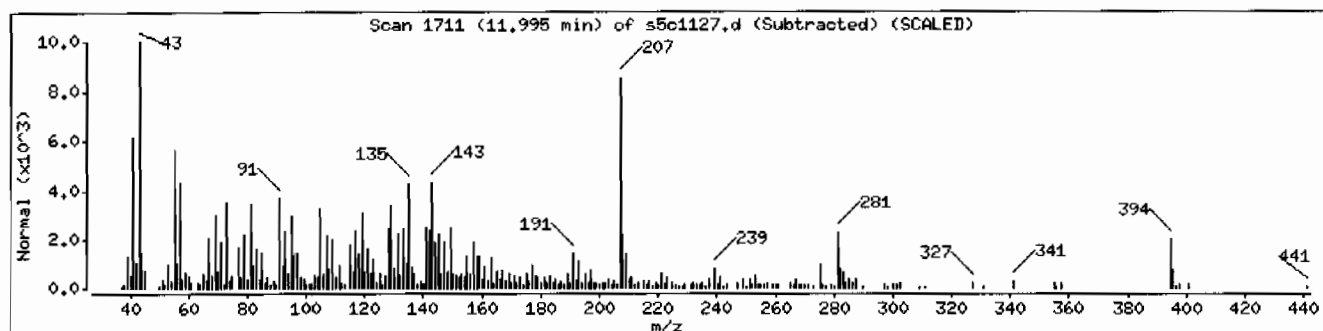
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	30	C17H14O4	282
2,3-Dihydroxy-6-nitroquinoxaline	2379-56-8	NIST05.L	62314	25	C8H5N3O4	207
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	22	C10H30O3Si4	310



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVH11ILANL

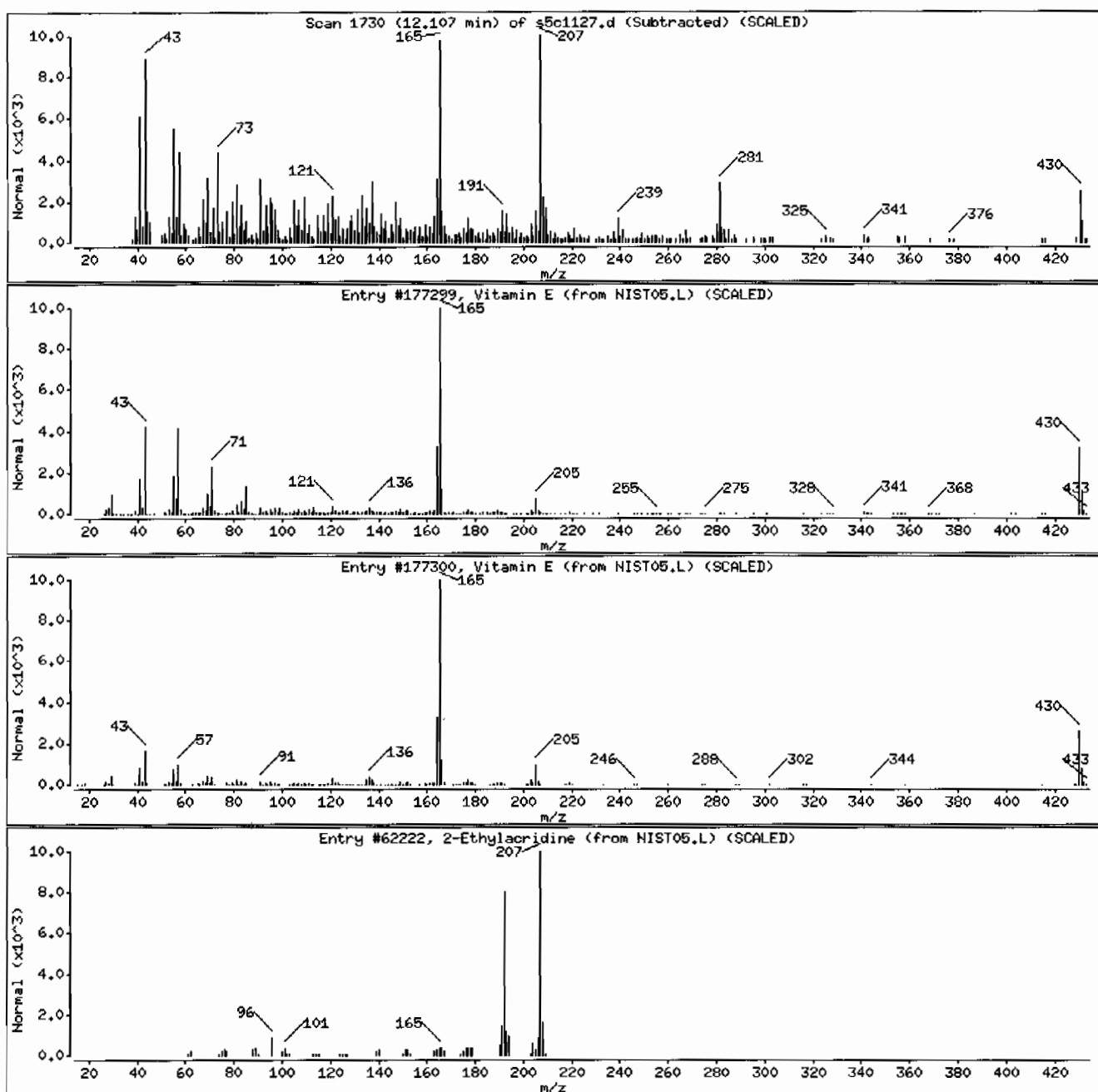
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Vitamin E	59-02-9	NIST05.L	177299	42	C ₂₉ H ₅₀ O ₂	430
Vitamin E	10191-41-0	NIST05.L	177300	38	C ₂₉ H ₅₀ O ₂	430
2-Ethylacridine	55751-83-2	NIST05.L	62222	35	C ₁₅ H ₁₃ N	207



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 12482400101960659111SVH111LANL

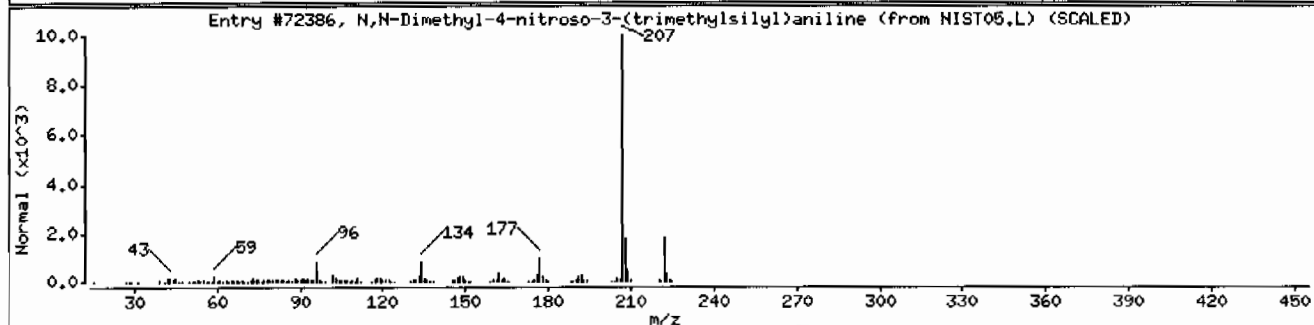
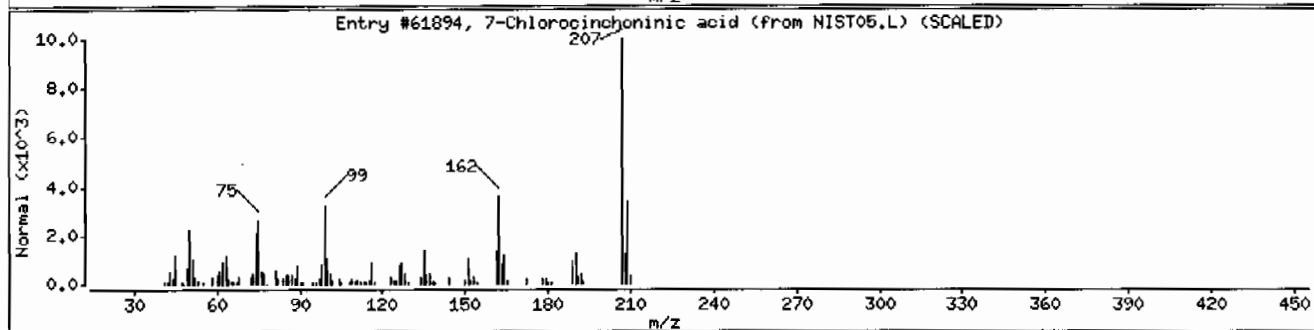
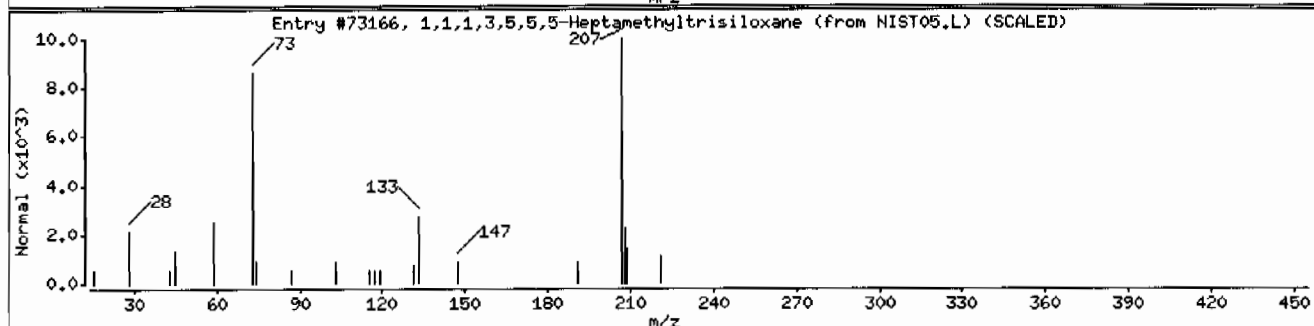
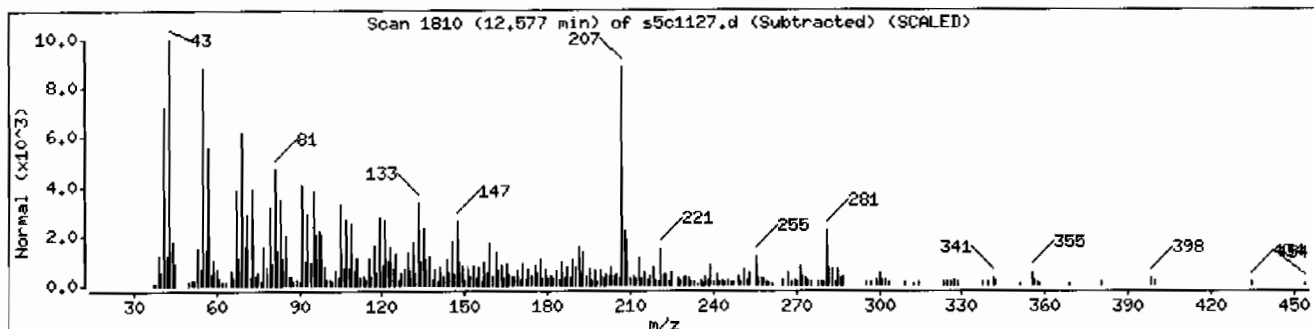
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	35	C7H22O2Si3	222
7-Chlorocinchoninic acid	13337-66-1	NIST05.L	61894	30	C10H6ClNO2	207
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	27	C11H18N2OSi	222



Date : 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: MSD5.i

Sample Info: 1248240010196065911SVMI11LANL

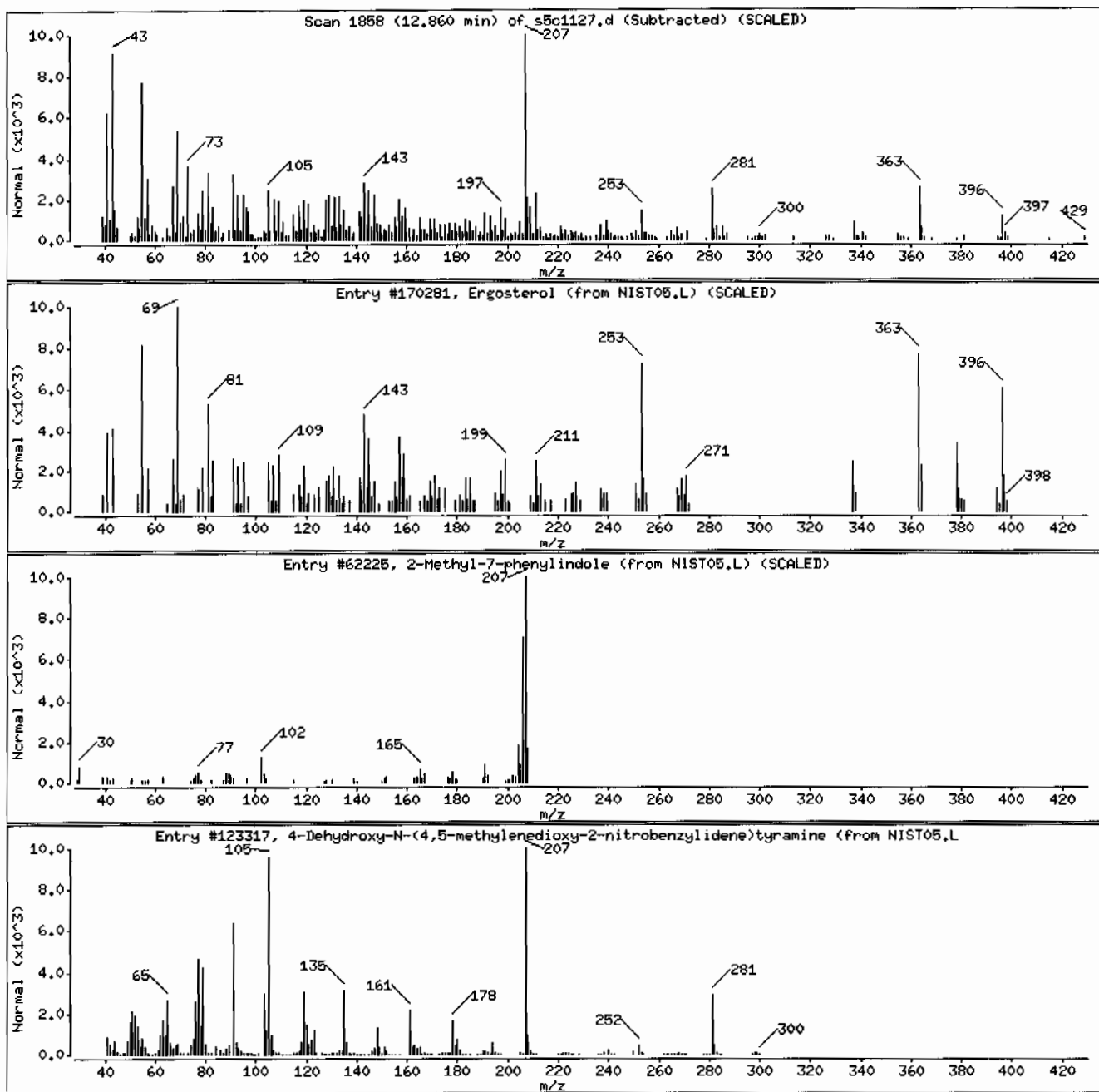
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ergosterol	57-87-4	NIST05.L	170281	47	C ₂₈ H ₄₄ O	386
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	42	C ₁₅ H ₁₃ N	207
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitro	1000111-66-9	NIST05.L	123317	42	C ₁₆ H ₁₄ N ₂ O ₄	298



Date: 11-MAR-2010 20:33

Client ID: RE36-10-7519

Instrument: HSD5.i

Sample Info: 1248240010196065911ISVH111LANL

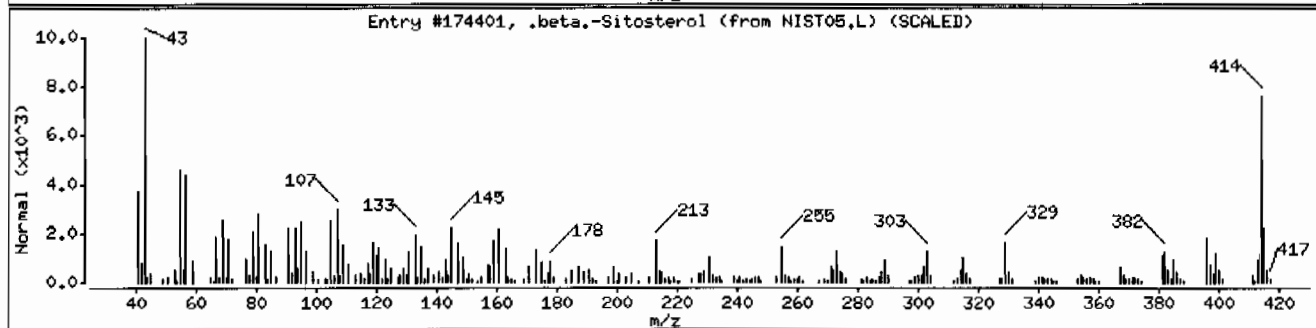
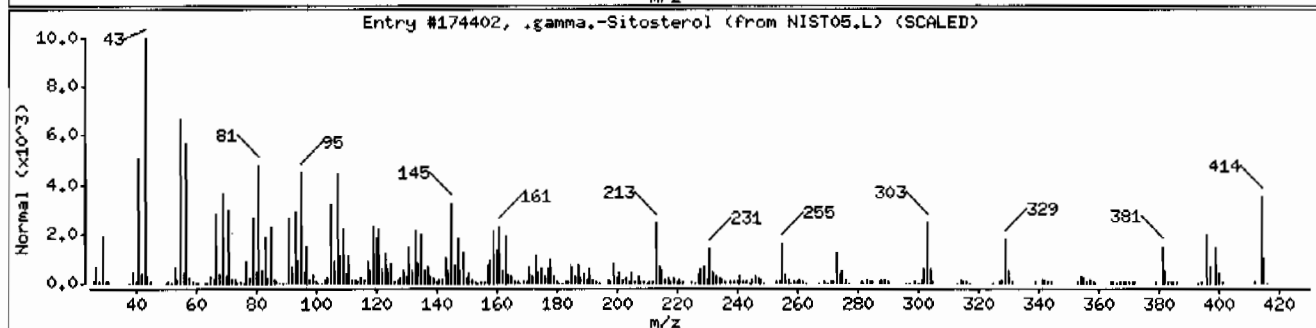
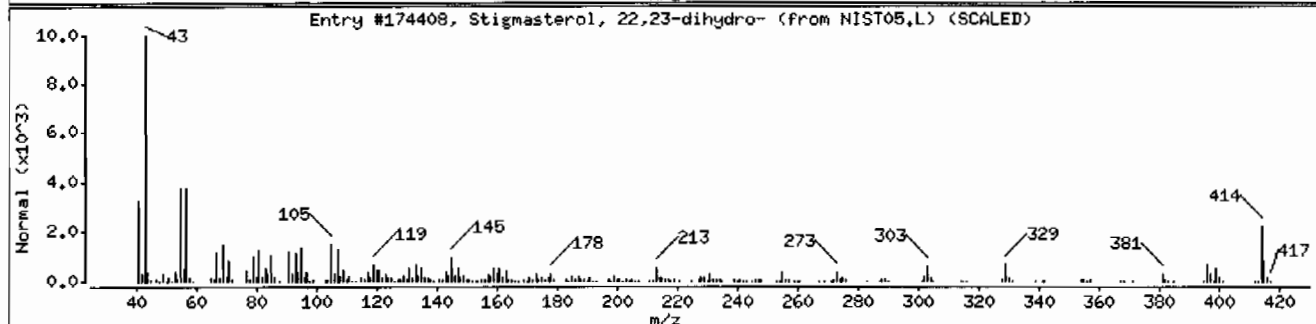
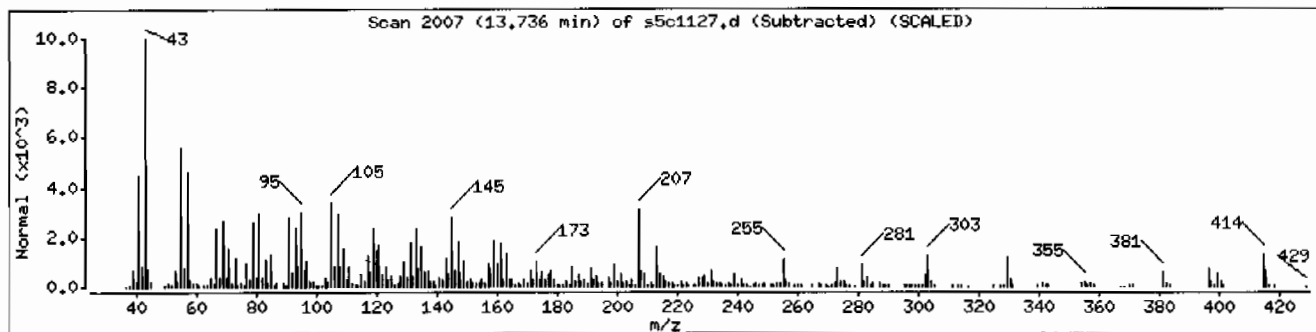
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	93	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	91	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7520
Batch ID: 960659
Run Date: 03/12/2010 21:20
Prep Date: 03/04/2010 10:53
Data File: s5c1229.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	575	ug/kg	115	575
108-95-2	Phenol	U	575	ug/kg	115	575
95-57-8	2-Chlorophenol	U	575	ug/kg	115	575
106-46-7	1,4-Dichlorobenzene	U	575	ug/kg	115	575
621-64-7	N-Nitrosodipropylamine	U	575	ug/kg	115	575
59-50-7	4-Chloro-3-methylphenol	U	575	ug/kg	115	575
83-32-9	Acenaphthene	U	57.5	ug/kg	19.0	57.5
121-14-2	2,4-Dinitrotoluene	U	575	ug/kg	57.5	575
100-02-7	4-Nitrophenol	U	575	ug/kg	190	575
87-86-5	Pentachlorophenol	U	575	ug/kg	144	575
129-00-0	Pyrene		101	ug/kg	17.3	57.5
110-86-1	Pyridine	U	575	ug/kg	115	575
62-53-3	Aniline	U	575	ug/kg	173	575
111-44-4	bis(2-Chloroethyl) ether	U	575	ug/kg	115	575
541-73-1	1,3-Dichlorobenzene	U	575	ug/kg	115	575
100-51-6	Benzyl alcohol	U	575	ug/kg	173	575
95-50-1	1,2-Dichlorobenzene	U	575	ug/kg	115	575
108-60-1	bis(2-Chloroisopropyl)ether	U	575	ug/kg	115	575
95-48-7	o-Cresol	U	575	ug/kg	115	575
65794-96-9	m,p-Cresols	U	575	ug/kg	173	575
67-72-1	Hexachloroethane	U	575	ug/kg	115	575
98-95-3	Nitrobenzene	U	575	ug/kg	115	575
78-59-1	Isophorone	U	575	ug/kg	115	575
88-75-5	2-Nitrophenol	U	575	ug/kg	115	575
105-67-9	2,4-Dimethylphenol	U	575	ug/kg	201	575
111-91-1	bis(2-Chloroethoxy)methane	U	575	ug/kg	115	575
120-83-2	2,4-Dichlorophenol	U	575	ug/kg	115	575
65-85-0	Benzoic acid	U	1150	ug/kg	288	1150
91-20-3	Naphthalene	U	57.5	ug/kg	17.3	57.5
106-47-8	4-Chloroaniline	U	575	ug/kg	115	575
87-68-3	Hexachlorobutadiene	U	575	ug/kg	115	575
91-57-6	2-Methylnaphthalene	U	57.5	ug/kg	11.5	57.5
77-47-4	Hexachlorocyclopentadiene	U	575	ug/kg	115	575
88-06-2	2,4,6-Trichlorophenol	U	575	ug/kg	115	575
95-95-4	2,4,5-Trichlorophenol	U	575	ug/kg	115	575
91-58-7	2-Chloronaphthalene	U	57.5	ug/kg	19.0	57.5
88-74-4	2-Nitroaniline	U	575	ug/kg	115	575
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	575	ug/kg	115	575

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7520
Batch ID: 960659
Run Date: 03/12/2010 21:20
Prep Date: 03/04/2010 10:53
Data File: s5c1229.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	575	ug/kg	115	575
606-20-2	2,6-Dinitrotoluene	U	575	ug/kg	57.5	575
208-96-8	Acenaphthylene	U	57.5	ug/kg	17.3	57.5
51-28-5	2,4-Dinitrophenol	U	1150	ug/kg	219	1150
132-64-9	Dibenzofuran	U	575	ug/kg	115	575
84-66-2	Diethylphthalate	U	575	ug/kg	115	575
86-73-7	Fluorene	U	57.5	ug/kg	17.3	57.5
7005-72-3	4-Chlorophenylphenylether	U	575	ug/kg	115	575
534-52-1	2-Methyl-4,6-dinitrophenol	U	575	ug/kg	115	575
100-01-6	4-Nitroaniline	U	575	ug/kg	173	575
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	575	ug/kg	115	575
122-66-7	Azobenzene	U	575	ug/kg	115	575
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	575	ug/kg	115	575
118-74-1	Hexachlorobenzene	U	575	ug/kg	115	575
85-01-8	Phenanthrene		86.0	ug/kg	17.3	57.5
120-12-7	Anthracene	U	57.5	ug/kg	11.5	57.5
84-74-2	Di-n-butylphthalate	U	575	ug/kg	115	575
206-44-0	Fluoranthene		131	ug/kg	17.3	57.5
85-68-7	Butylbenzylphthalate	U	575	ug/kg	115	575
56-55-3	Benzo(a)anthracene	J	49.0	ug/kg	17.3	57.5
91-94-1	3,3'-Dichlorobenzidine	U	575	ug/kg	173	575
218-01-9	Chrysene	J	52.3	ug/kg	17.3	57.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	575	ug/kg	115	575
117-84-0	Di-n-octylphthalate	U	575	ug/kg	115	575
205-99-2	Benzo(b)fluoranthene		67.1	ug/kg	17.3	57.5
207-08-9	Benzo(k)fluoranthene	J	29.2	ug/kg	17.3	57.5
50-32-8	Benzo(a)pyrene	J	43.3	ug/kg	17.3	57.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	26.0	ug/kg	17.3	57.5
53-70-3	Dibenzo(a,h)anthracene	U	57.5	ug/kg	17.3	57.5
191-24-2	Benzo(ghi)perylene	J	26.7	ug/kg	17.3	57.5
120-82-1	1,2,4-Trichlorobenzene	U	575	ug/kg	115	575

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	754	ug/kg		JA
	Unknown	3.18	1460	ug/kg		J

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

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.19	328	ug/kg		J
112-95-8	Eicosane	9.38	252	ug/kg	96	NJ
1599-67-3	1-Docosene	9.42	667	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	9.68	291	ug/kg	95	NJ
559-74-0	Friedelan-3-one	9.9	3840	ug/kg	99	NJ
	Unknown	10.01	479	ug/kg		J
	Unknown	10.07	1740	ug/kg		J
629-78-7	Heptadecane	10.36	394	ug/kg	91	NJ
	Unknown	11.72	690	ug/kg		J
	Unknown	11.8	2180	ug/kg		J
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)	11.84	1500	ug/kg	83	NJ
	Unknown	11.96	558	ug/kg		J
	Unknown	12.1	891	ug/kg		J
	Unknown	12.57	5360	ug/kg		J
	Unknown	12.91	383	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1090	ug/kg	94	NJ
	Unknown	14.38	742	ug/kg		J

Data File: /chem/MSD5.i/s031210.b/s5c1229.d
 Report Date: 13-Mar-2010 16:53

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1229.d
 Lab Smp Id: 248240009 Client Smp ID: RE36-10-7520
 Inj Date : 12-MAR-2010 21:20
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240009|960659|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 29
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	42.24940	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.907	3.911	(1.000)	275565	40.0000		
* 29 Naphthalene-d8	136	4.766	4.773	(1.000)	1047163	40.0000		
* 46 Acenaphthene-d10	164	6.019	6.030	(1.000)	600811	40.0000		
* 67 Phenanthrene-d10	188	7.189	7.195	(1.000)	1035579	40.0000		
* 91 Chrysene-d12	240	9.595	9.608	(1.000)	914625	40.0000		
* 98 Perylene-d12	264	11.254	11.269	(1.000)	663583	40.0000		
\$ 3 2-Fluorophenol	112	3.107	3.107	(0.795)	434856	63.1965	3640	
\$ 5 Phenol-d5	99	3.625	3.627	(0.928)	520093	62.8866	3620	
\$ 20 Nitrobenzene-d5	82	4.260	4.272	(0.894)	241422	31.0266	1780	
\$ 39 2-Fluorobiphenyl	172	5.507	5.515	(0.915)	434133	28.9302	1660	
\$ 60 2,4,6-Tribromophenol	329	6.619	6.622	(1.100)	154520	68.4739	3940	
\$ 81 p-Terphenyl-d14	244	8.566	8.572	(0.893)	532929	35.0287	2020	

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	8.460	8.471	(0.882)	44307	1.75315	101
68 Phenanthrene	178	7.207	7.214	(1.002)	32753	1.49405	86.0
76 Fluoranthene	202	8.248	8.254	(1.147)	52131	2.27961	131
89 Benzo(a)anthracene	228	9.583	9.593	(0.999)	17419	0.85161	49.0(a)
92 Chrysene	228	9.619	9.632	(1.002)	17323	0.90887	52.3(a)
95 Benzo(b)fluoranthene	252	10.736	10.754	(0.954)	18490	1.16654	67.1
96 Benzo(k)fluoranthene	252	10.772	10.792	(0.957)	7820	0.50677	29.2(aQ)
97 Benzo(a)pyrene	252	11.172	11.192	(0.993)	10023	0.75273	43.3(a)
99 Indeno(1,2,3-cd)pyrene	276	12.989	13.017	(1.154)	4965	0.45217	26.0(aQ)
101 Benzo(ghi)perylene	276	13.518	13.556	(1.201)	4261	0.46441	26.7(aQ)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s5c1229.d

Report Date: 03/13/2010 09:28

Lab. ID: 248240009

SampleType: SAMPLE

Injection Date: 12-MAR-2010 21:20

Operator: RMB

Instrument: MSD5.i

Sample Info: |248240009|960659|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100227-01

Comment:

Method used: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2134

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	33694	3.62	3.69	80-120	100	(T)
93	1751	3.58	3.69	234-294	5	(QT)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	34921	4.26	4.15	80-120	100	(T)
42	25580	4.26	4.15	57-117	73	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	1262	4.52	4.54	80-120	100	()
122	917	4.52	4.54	57-117	73	()
77	2363	4.58	4.54	55-115	187	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	108538	6.02	5.79	80-120	100	(T)
164	600811	6.02	5.79	0- 40	554	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	80453	6.02	5.85	80-120	100	(T)
63	1246	6.02	5.85	66-126	2	(QT)

48	2,4-Dinitrophenol	CAS#: 51-28-5				
184	1614	6.30	6.05	80-120	100	(T)
154	3874	6.02	6.05	1081-1141	240	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	80199	6.02	6.15	80-120	100	(T)
89	1586	6.02	6.15	50-110	2	(QT)
63	1246	6.02	6.14	26- 86	2	(QT)

52 4-Nitrophenol		CAS#: 100-02-7				
139	949	6.17	6.07	80-120	100	(T)
109	466	6.20	6.07	56-116	49	(QT)
65	1681	6.15	6.07	90-150	177	(QT)

53 Fluorene		CAS#: 86-73-7				
166	7012	6.61	6.44	80-120	100	(T)
165	7745	6.62	6.44	62-122	110	(T)
167	2785	6.62	6.44	0- 44	40	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	166	6.55	6.45	80-120	100	(T)
105	997	6.51	6.45	14- 74	597	(Q)
51	1382	6.61	6.45	38- 98	828	(QT)

68 Phenanthrene		CAS#: 85-01-8				
178	32753	7.21	7.21	80-120	100	()
179	5996	7.21	7.21	0- 46	18	()
176	5877	7.21	7.21	0- 49	18	()

69 Anthracene		CAS#: 120-12-7				
178	32753	7.21	7.26	80-120	100	()
179	6024	7.21	7.26	0- 46	18	()
176	5877	7.21	7.26	0- 48	18	()

76 Fluoranthene		CAS#: 206-44-0				
202	52131	8.25	8.25	80-120	100	()
203	8925	8.25	8.25	0- 48	17	()
101	6751	8.25	8.25	0- 41	13	()

79 Pyrene		CAS#: 129-00-0				
202	44307	8.46	8.47	80-120	100	()
200	8504	8.46	8.47	0- 51	19	()
101	6851	8.46	8.47	0- 43	15	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	17419	9.58	9.59	80-120	100	()
226	4476	9.58	9.59	0- 56	26	()
229	5842	9.58	9.59	0- 50	34	()

92 Chrysene		CAS#: 218-01-9				
228	17323	9.62	9.63	80-120	100	()
229	3986	9.62	9.63	0- 50	23	()
226	6407	9.62	9.63	0- 60	37	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	18490	10.74	10.75	80-120	100	()
253	4649	10.74	10.75	0- 52	25	()
125	2738	10.73	10.75	0- 41	15	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	7820	10.77	10.79	80-120	100	()
253	2226	10.77	10.79	0- 52	28	()
125	5558	10.75	10.79	0- 40	71	(Q)

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	10023	11.17	11.19	80-120	100	()
253	2544	11.17	11.19	0- 52	25	()
125	1756	11.17	11.19	0- 30	18	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	4965	12.99	13.02	80-120	100	()
138	3423	12.99	13.03	0- 58	69	(Q)

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	4261	13.52	13.56	80-120	100	()
138	2033	13.52	13.56	0- 30	48	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD5.i/s031210.b/s5c1229.d
 Report Date: 13-Mar-2010 16:53

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1229.d
 Lab Smp Id: 248240009 Client Smp ID: RE36-10-7520
 Inj Date : 12-MAR-2010 21:20
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |248240009|960659|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 29
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	42.24940	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.907	1907952	40.000
* 91 Chrysene-d12	9.595	2917403	40.000
* 98 Perylene-d12	11.254	1920873	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

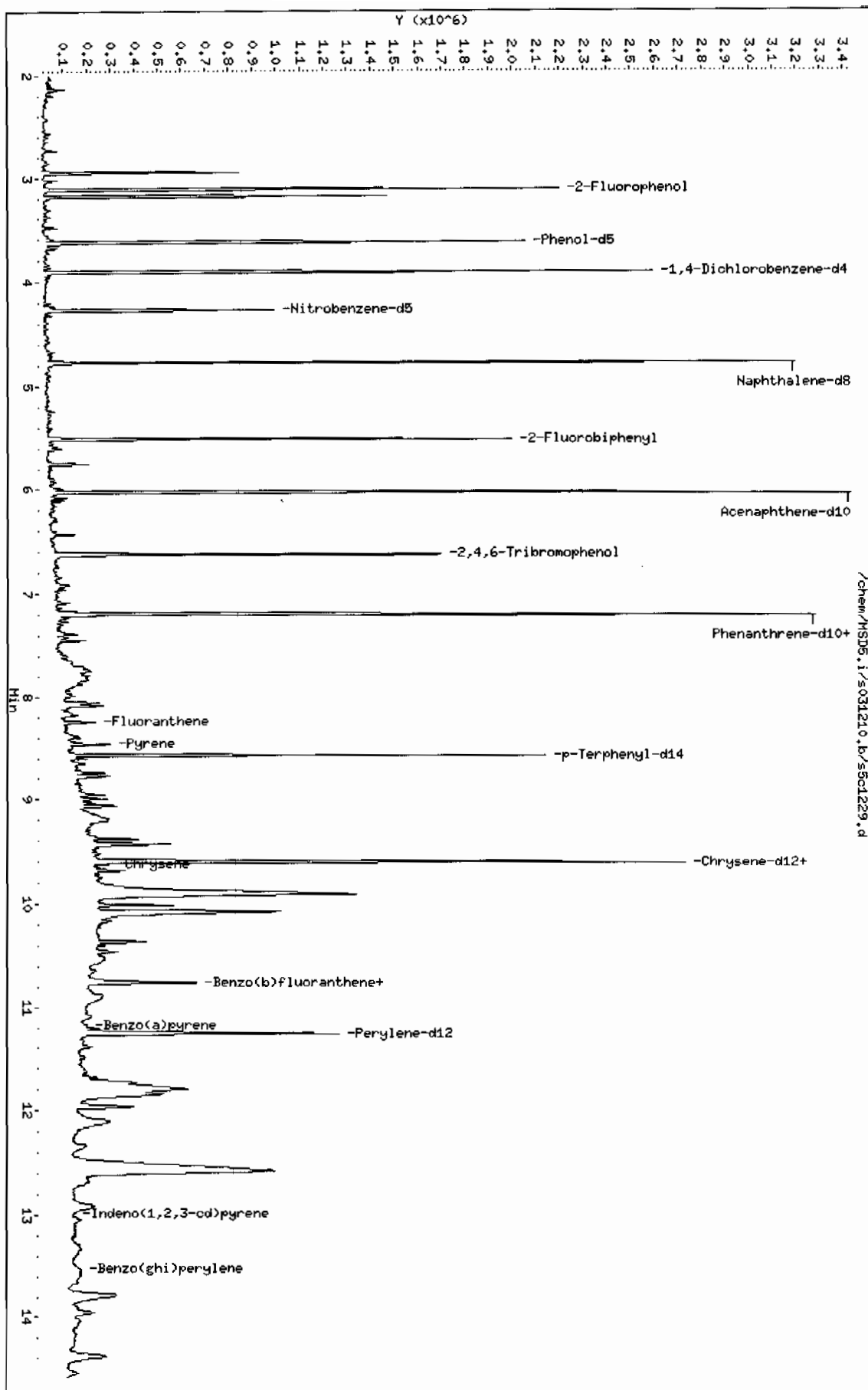
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
----	----	-----	-----	----	-----	-----	-----
Unknown Aldol Condensate					CAS #:		
2.949	625243	13.1081534	754	0		0	10
Unknown					CAS #:		
3.184	1207054	25.3057338	1460	0		0	10
Unknown					CAS #:		
9.189	415410	5.69560659	328	0		0	91
Eicosane					CAS #: 112-95-8		
9.378	319771	4.38431716	252	96	NIST05.L	113490	91
1-Docosene					CAS #: 1599-67-3		
9.425	845569	11.5934496	667	96	NIST05.L	129888	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
9.683	369205	5.06210009	291	95	NIST05.L	117264	91
Friedelan-3-one					CAS #: 559-74-0		
9.901	4862014	66.6622199	3840	99	NIST05.L	176566	91
Unknown					CAS #:		
10.007	607467	8.32887940	479	0		0	91
Unknown					CAS #:		
10.072	2201915	30.1900679	1740	0		0	91
Heptadecane					CAS #: 629-78-7		
10.360	499667	6.85084501	394	91	NIST05.L	85523	91
Unknown					CAS #:		
11.724	576069	11.9959869	690	0		0	98
Unknown					CAS #:		
11.795	1820392	37.9075949	2180	0		0	98
Cyclohexane, 1,1'-(2-methyl-1,3-propaned					CAS #: 2883-08-1		
11.842	1255425	26.1428036	1500	83	NIST05.L	73082	98
Unknown					CAS #:		
11.960	465528	9.69409385	558	0		0	98
Unknown					CAS #:		
12.095	743502	15.4825879	891	0		0	98

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
12.571	4472770	93.1403360	5360	0		0	98
Unknown					CAS #:		
12.913	319337	6.64982944	383	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.783	909355	18.9362806	1090	94	NIST05.L	174402	98
Unknown					CAS #:		
14.377	619128	12.8926283	742	0		0	98

Data File: /chem/MSD5.i/s031210.b/s01229.d
 Date: 12-MAR-2010 21:20
 Client ID: REC6-10-7520
 Sample Info: 1248240009196066911SVH11LANL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20

Page 1



Data File: /chem/MSD5.i/s031210.b/s5c1229.d

Page 2

Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911ISVM11ILANL

Volume Injected (uL): 0.5

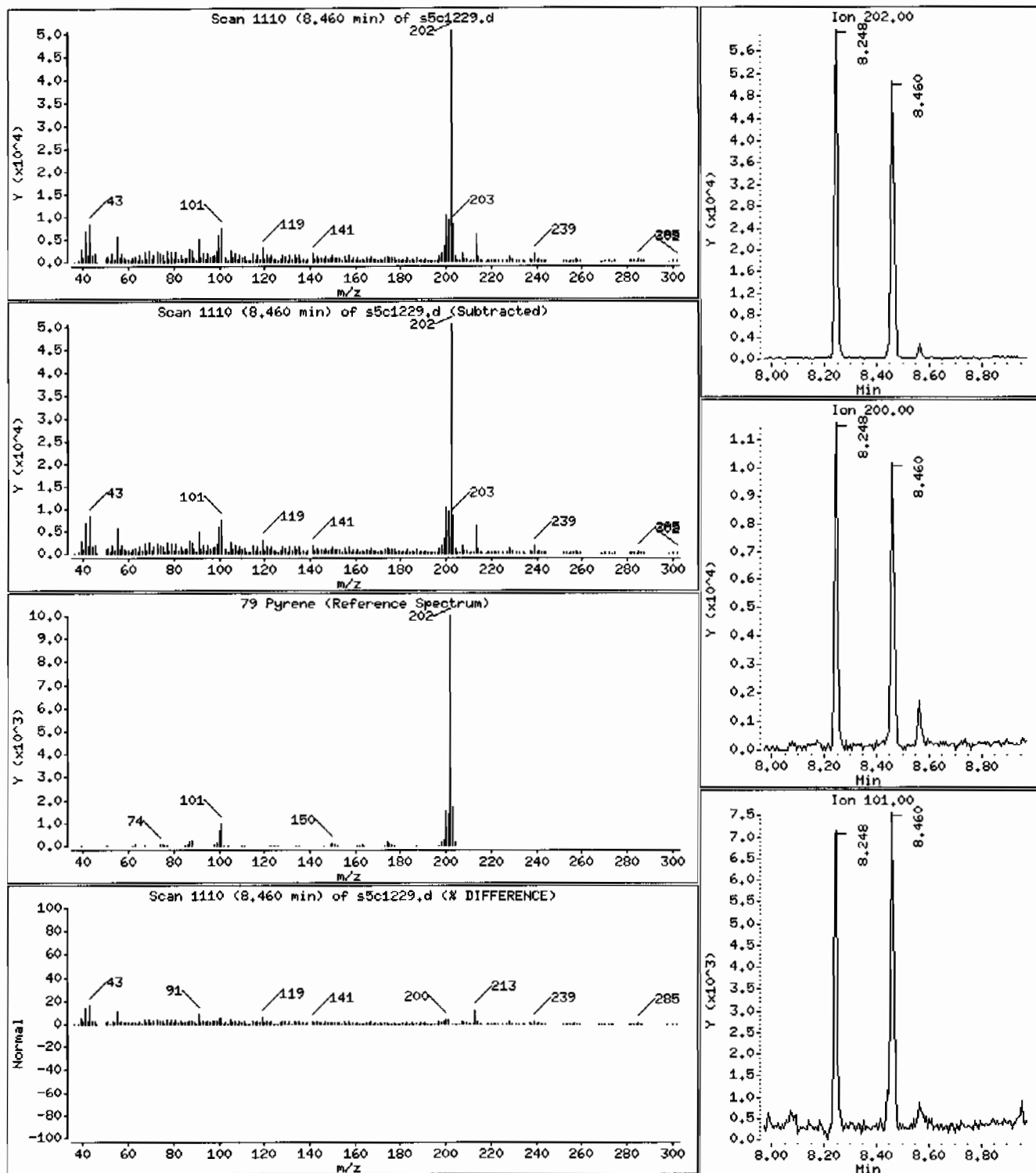
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 101 ug/Kg



Data File: /chem/MSD5.i/s031210.b/s5c1229.d

Page 3

Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 12482400091960659111SVH111LANL

Volume Injected (uL): 0.5

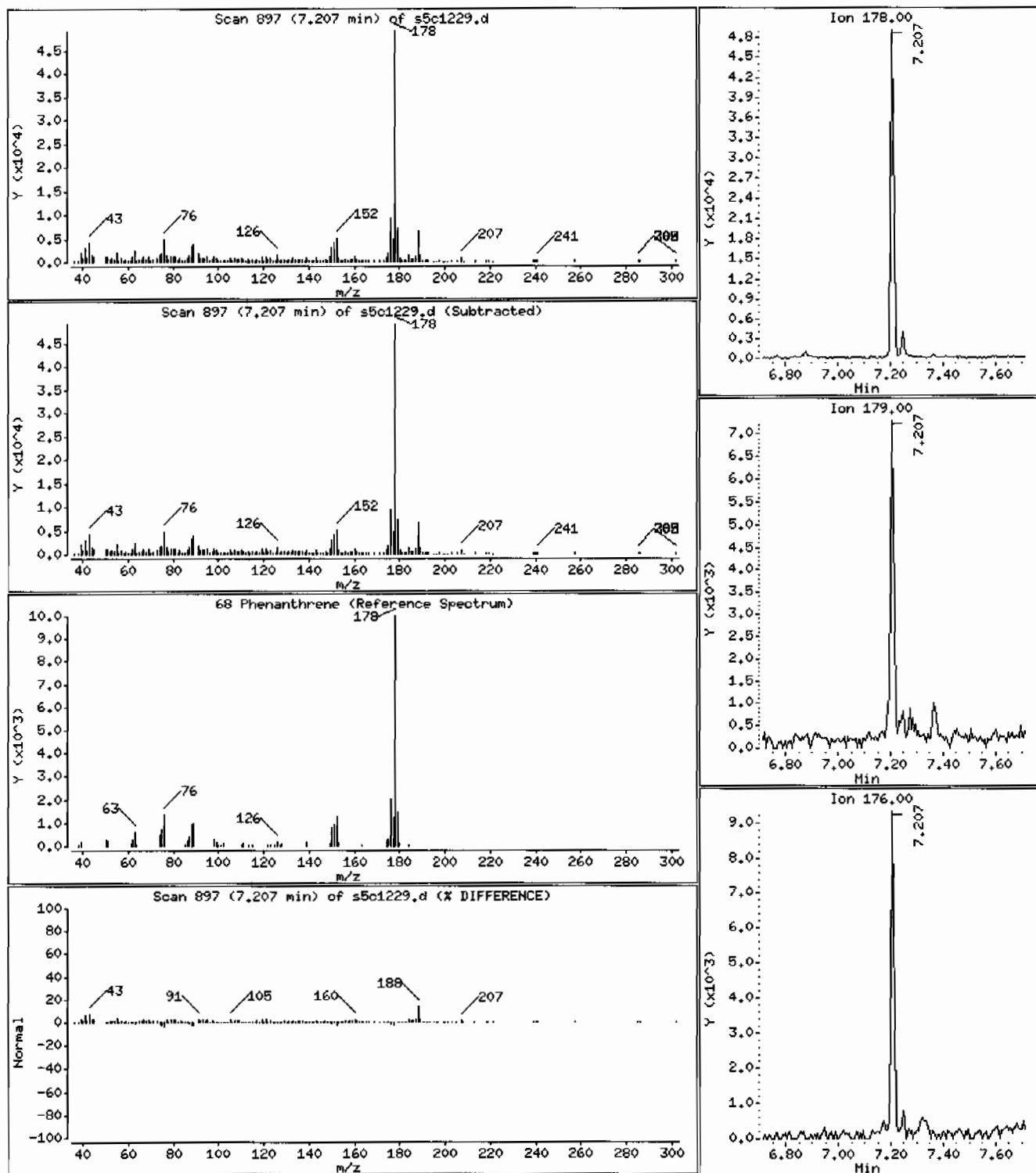
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 86.0 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH11LANL

Volume Injected (uL): 0.5

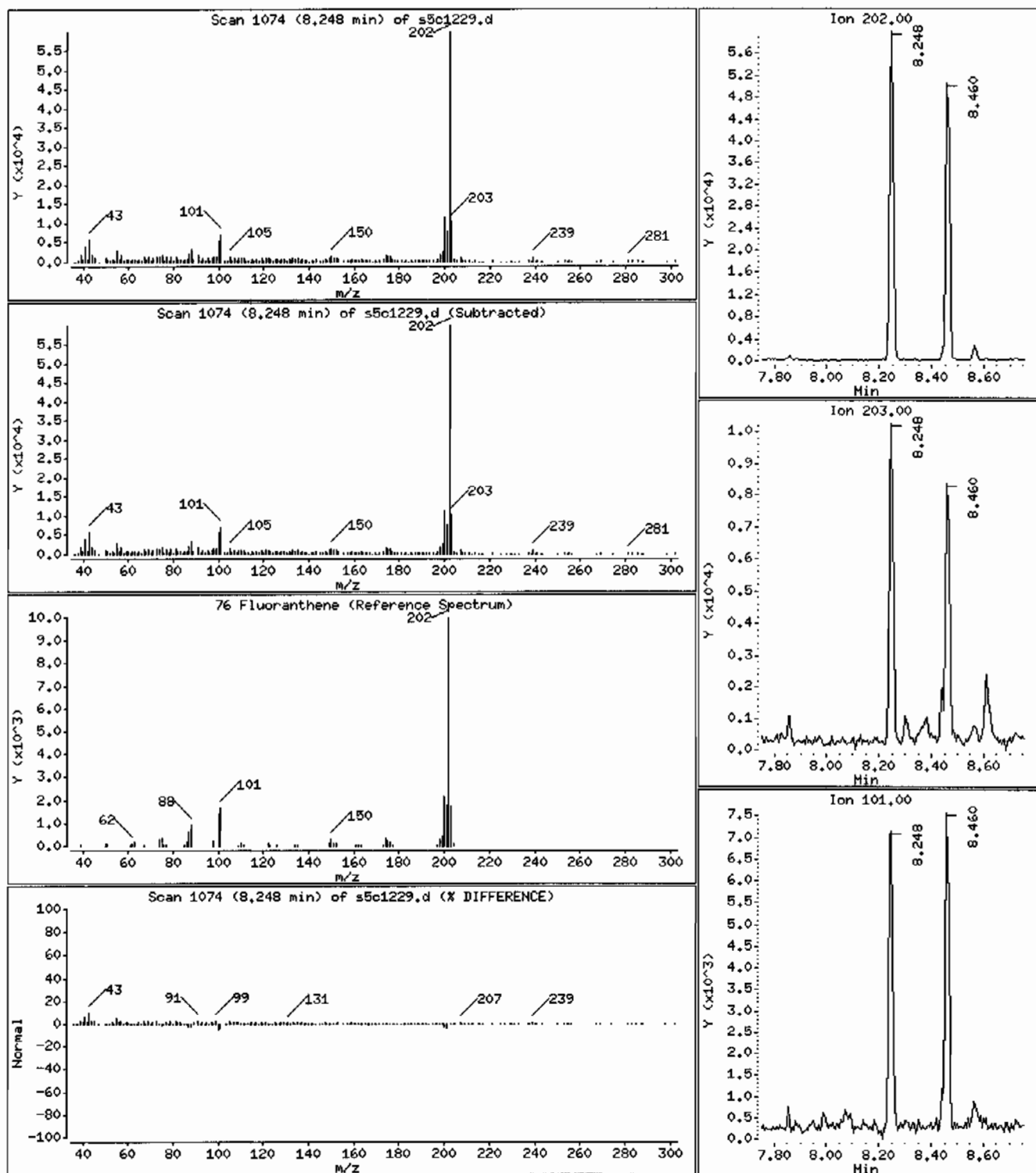
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 131 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: HSD5.i

Sample Info: 1248240009196065911SVH111LANL

Volume Injected (uL): 0.5

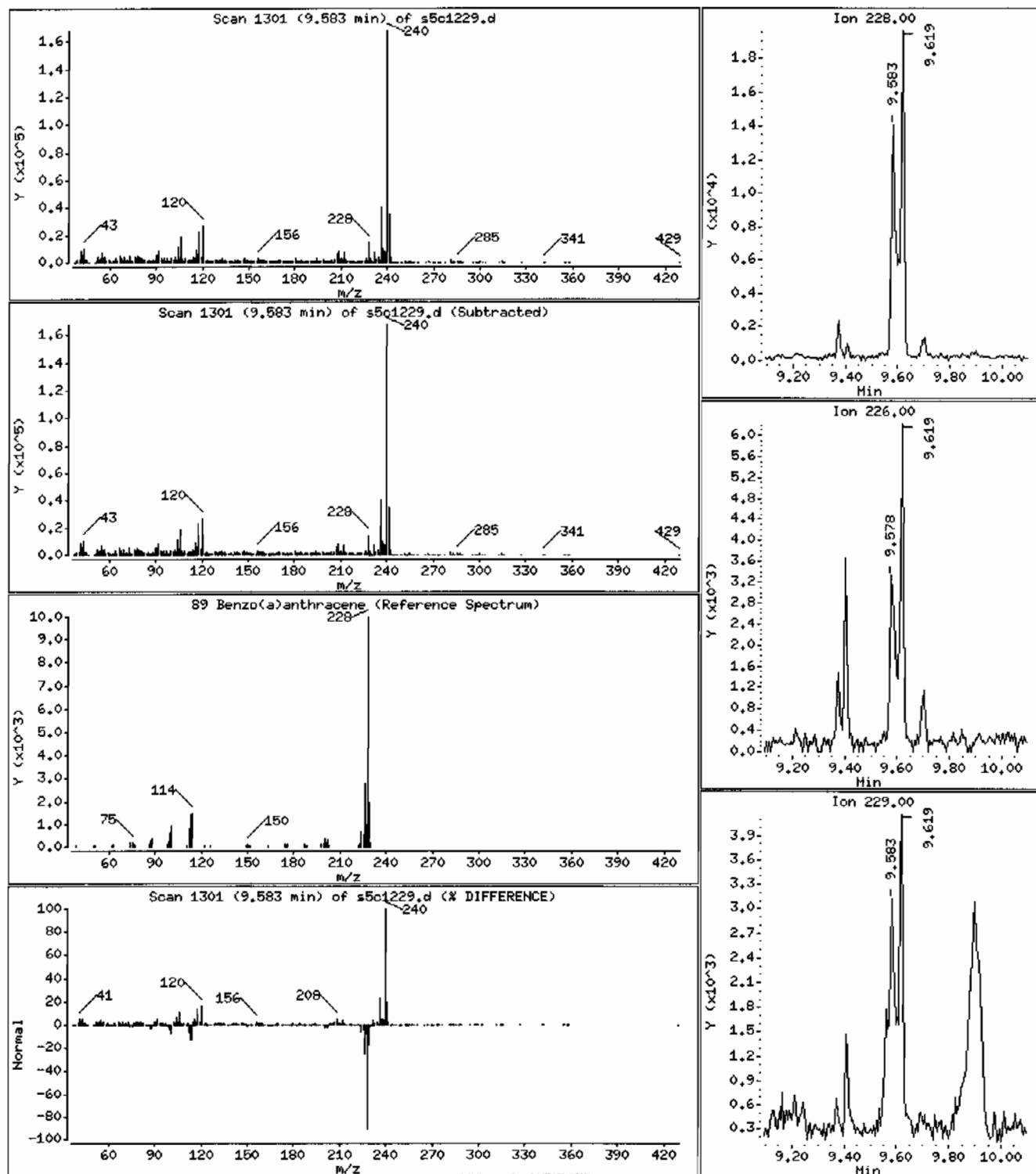
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 49.0 ug/Kg



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH111LANL

Volume Injected (uL): 0.5

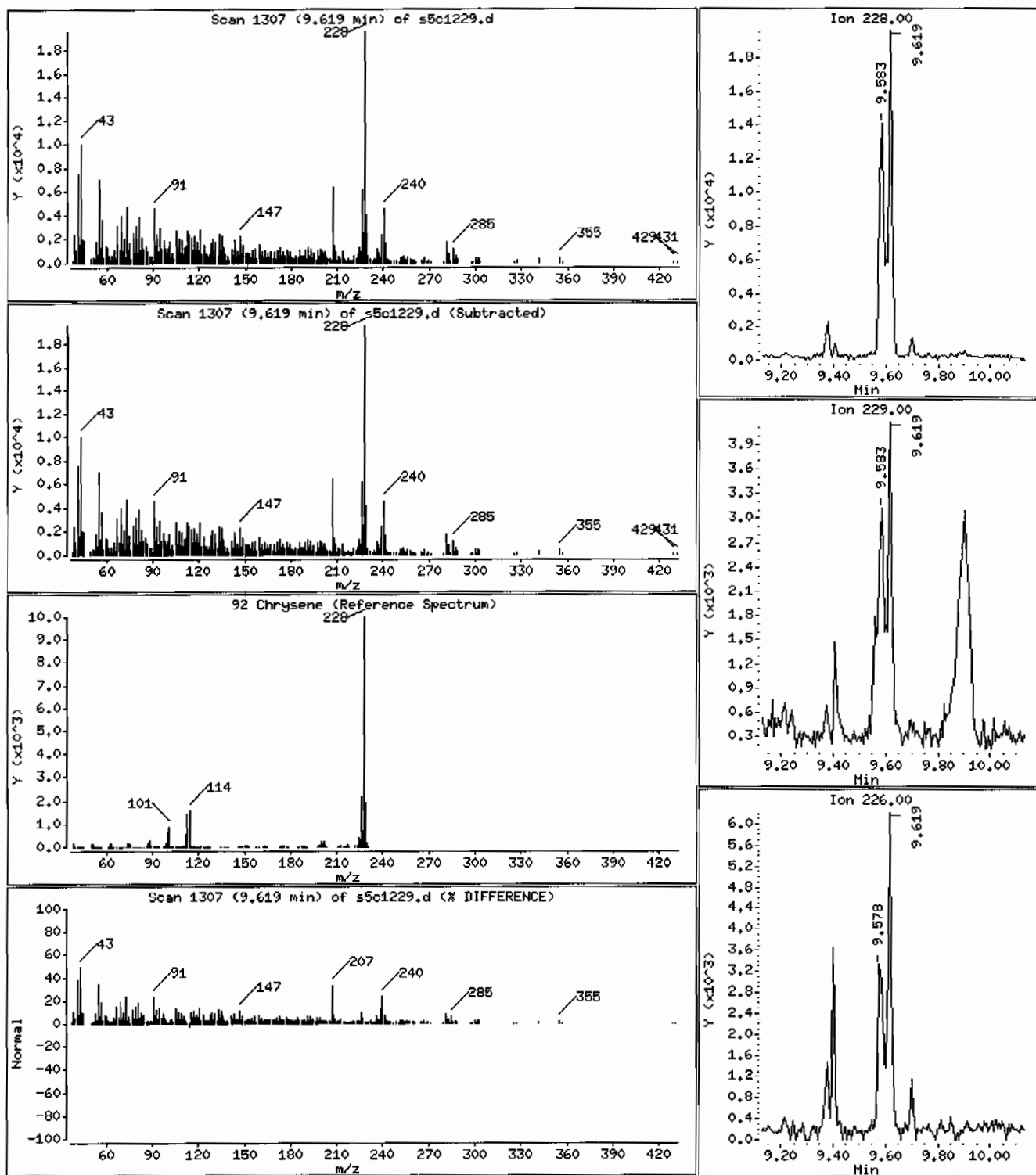
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 52.3 ug/Kg



Data File: /chem/HSD5.i/s031210.b/s5c1229.d

Page 7

Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: HSD5.i

Sample Info: 12482400091960659111SVH111LANL

Volume Injected (uL): 0.5

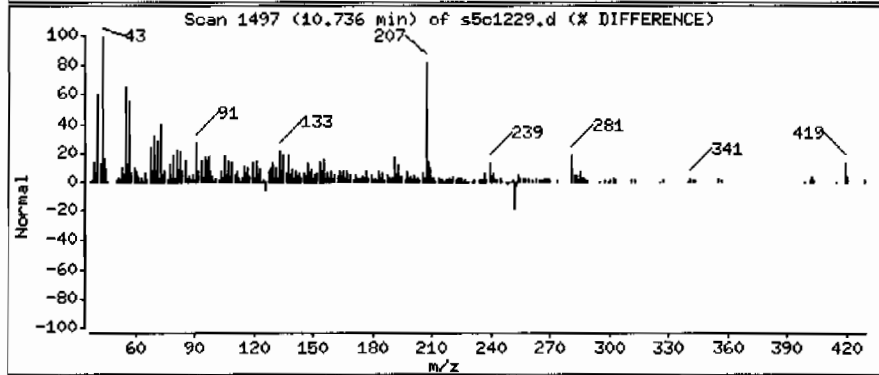
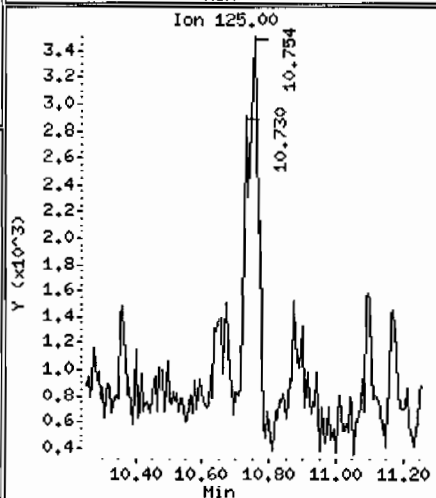
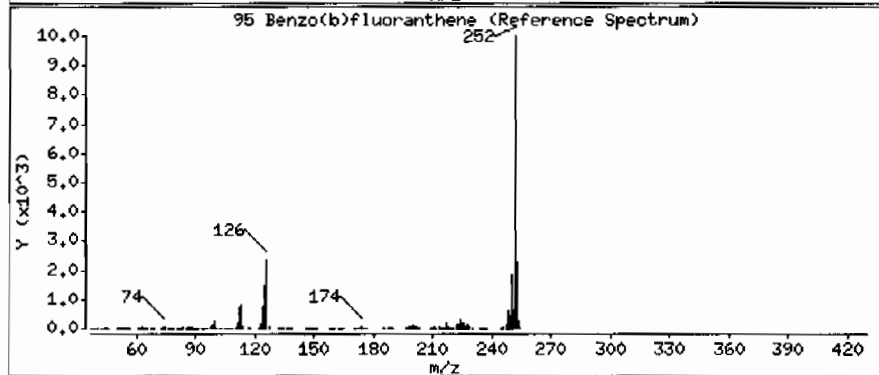
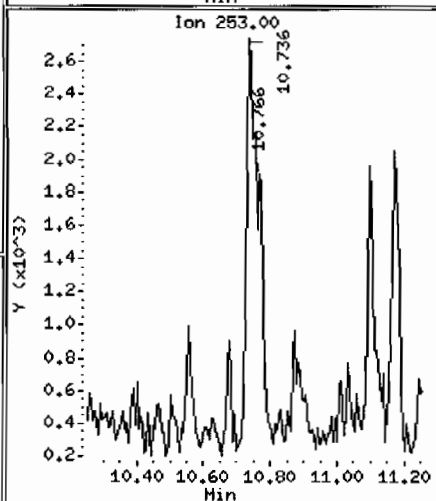
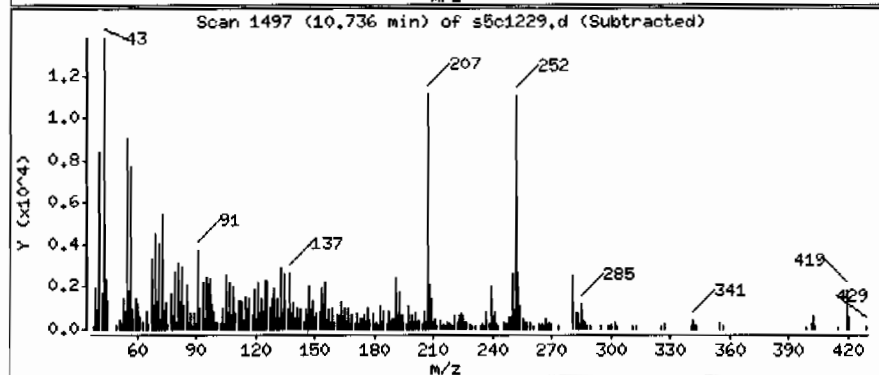
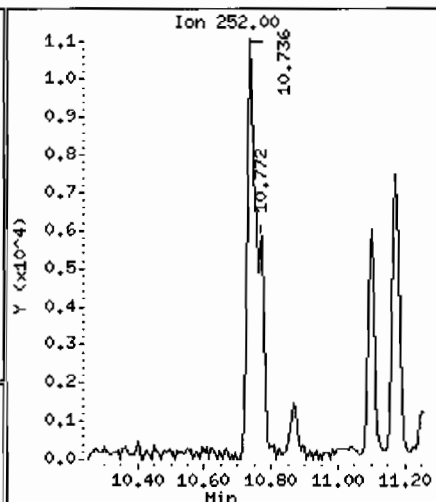
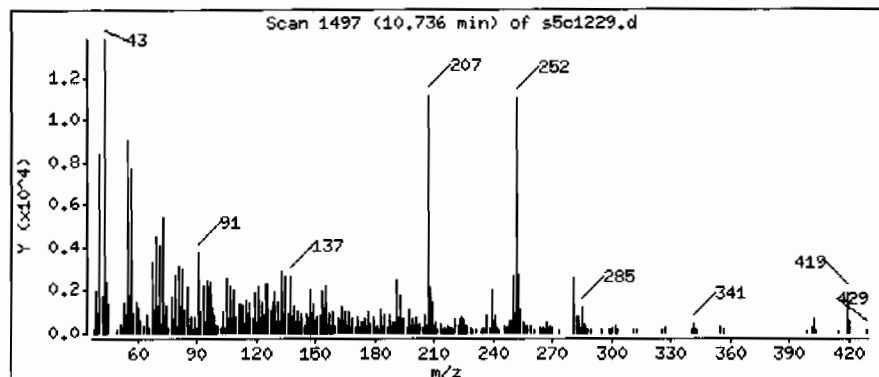
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 67.1 ug/Kg



Data File: /chem/MSD5,i/s031210,b/s5c1229,d

Page 8

Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911|SVMI1|LANL

Volume Injected (uL): 0.5

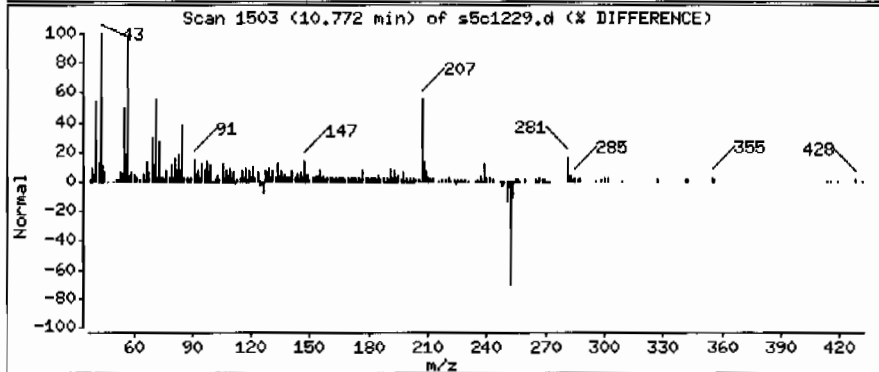
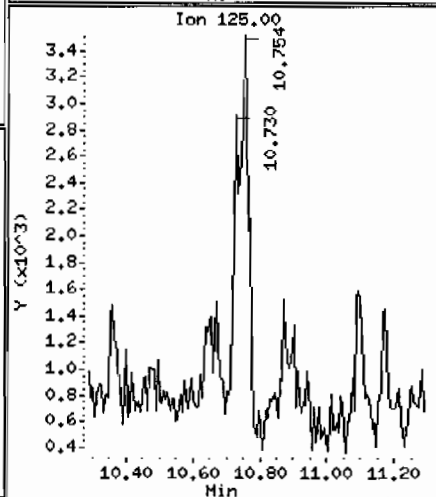
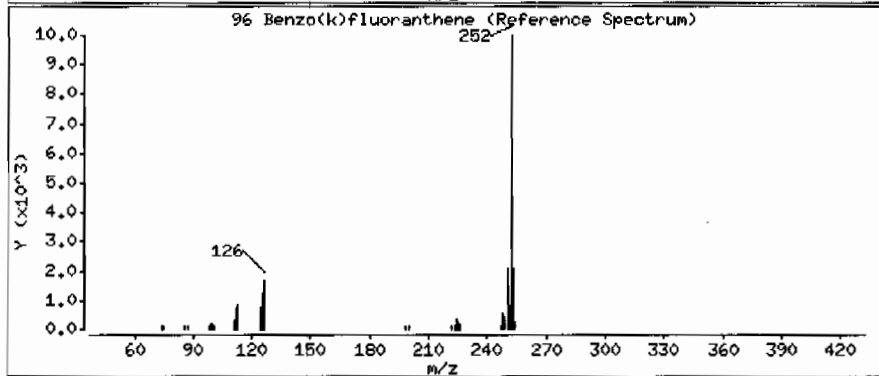
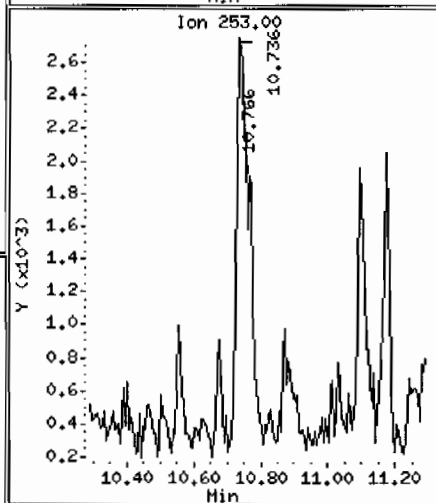
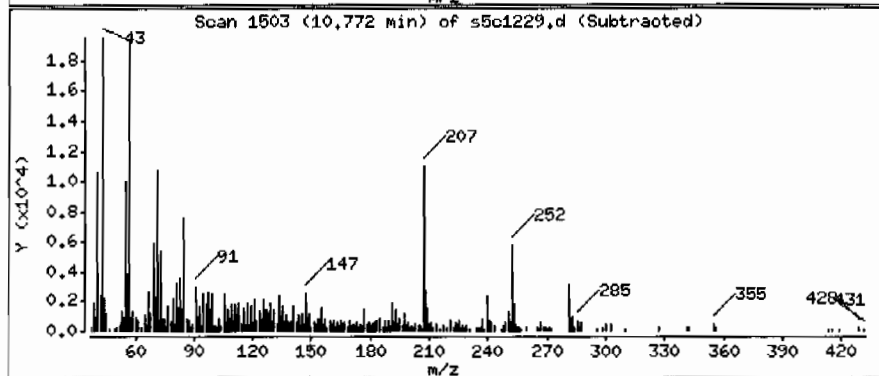
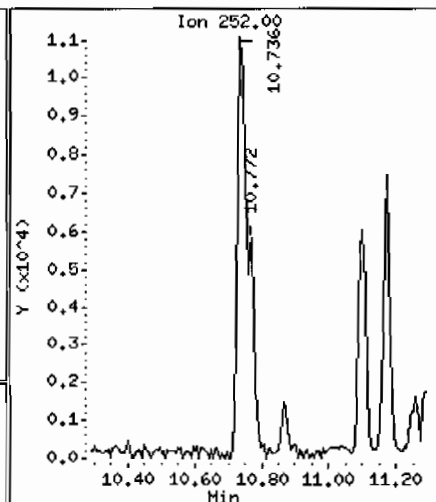
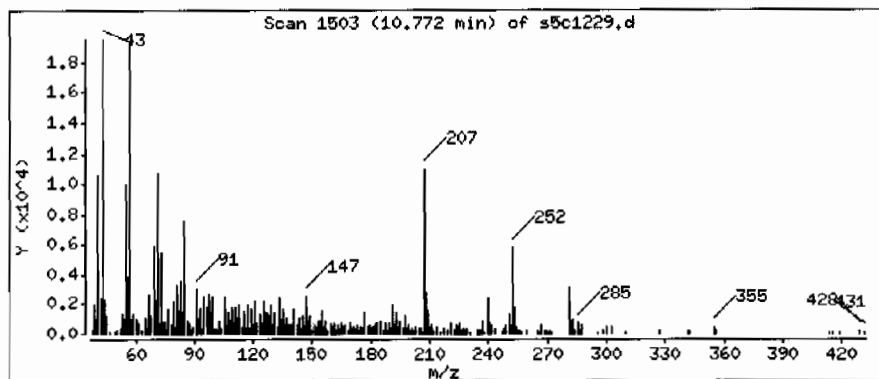
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 29.2 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: HSD5.i

Sample Info: 1248240009196065911SVH111LANL

Volume Injected (uL): 0.5

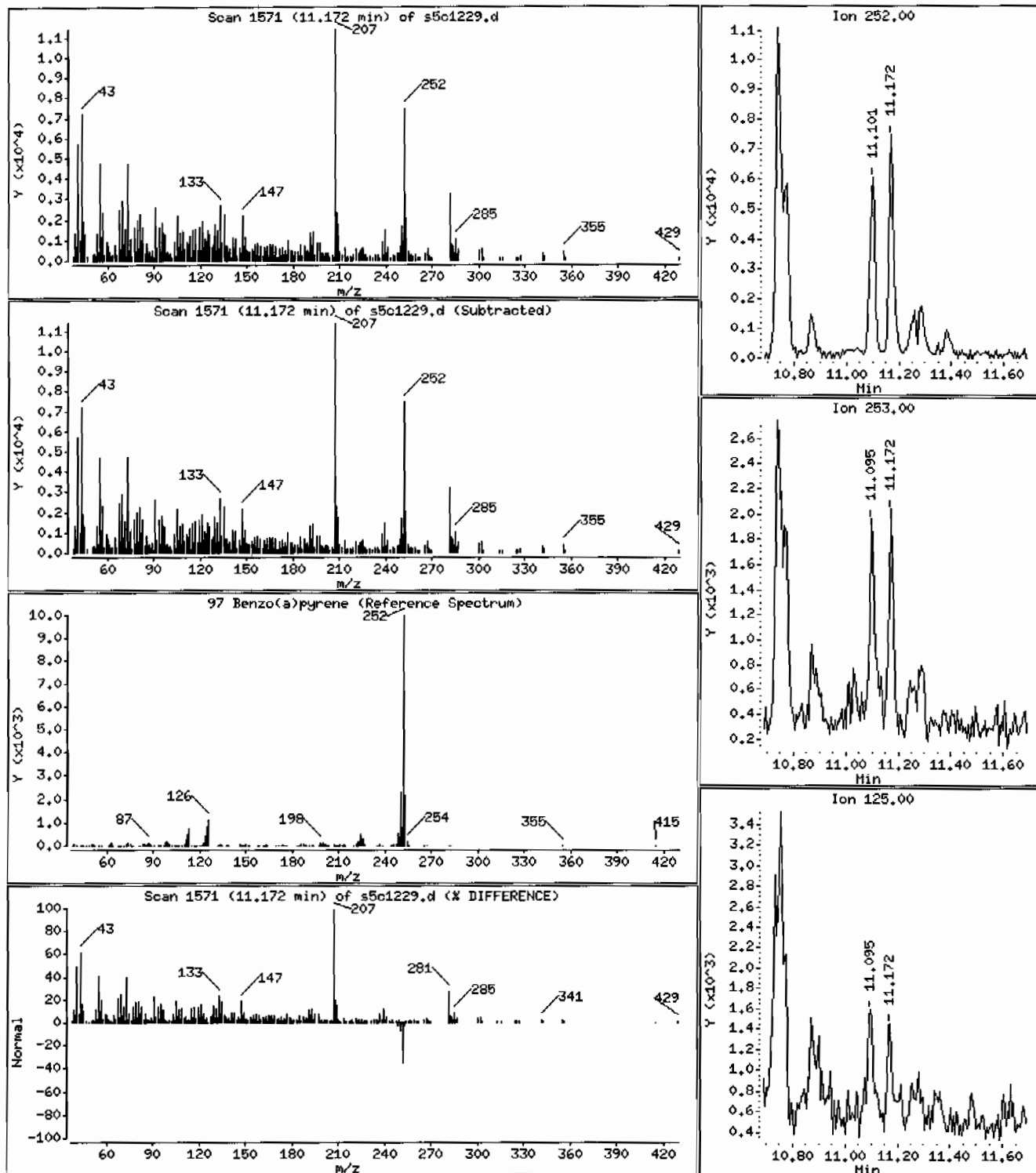
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 43.3 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH111LANL

Volume Injected (uL): 0.5

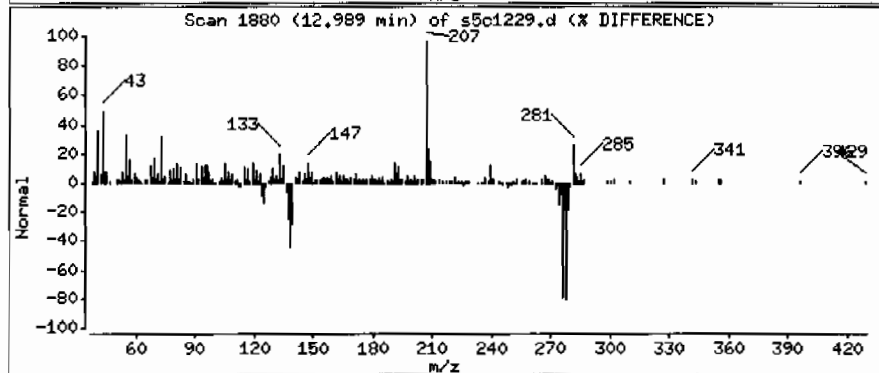
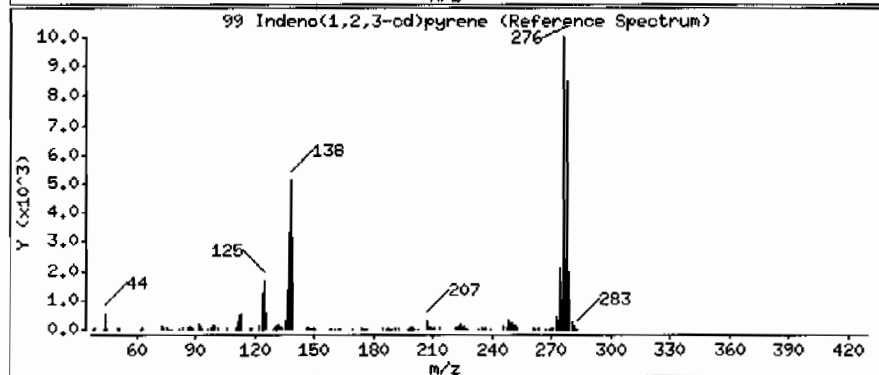
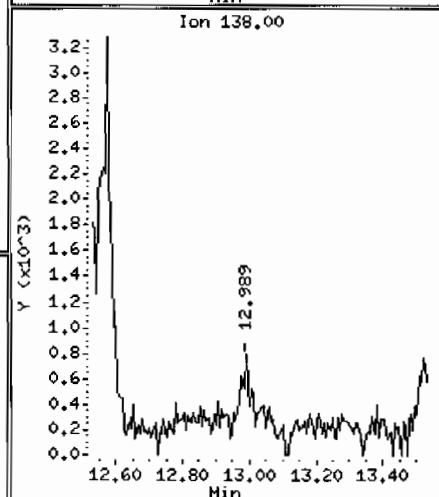
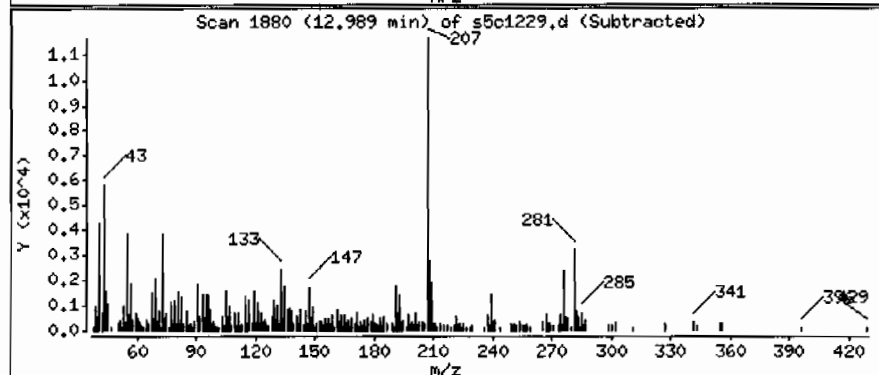
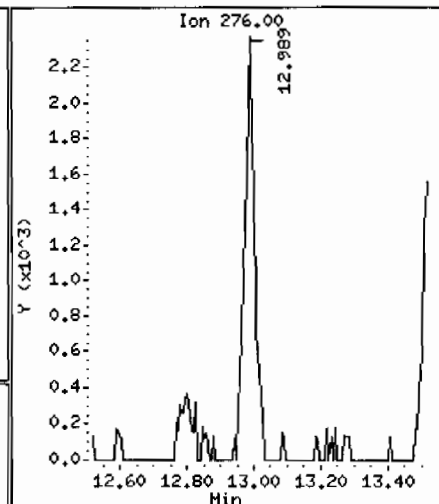
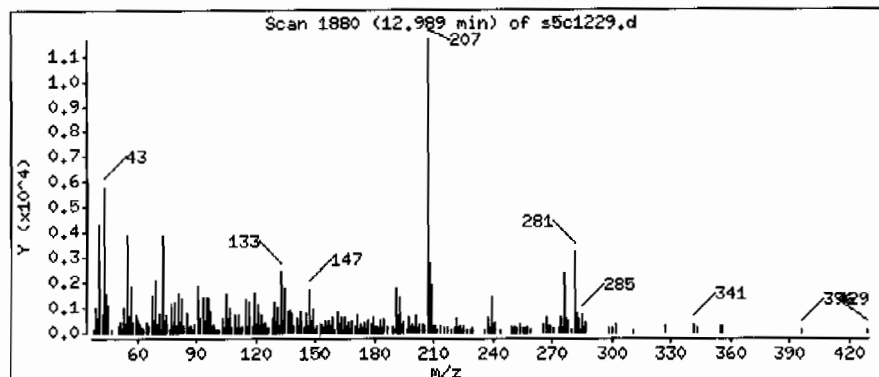
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 26.0 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: I248240009196065911ISVMI1ILANL

Volume Injected (uL): 0.5

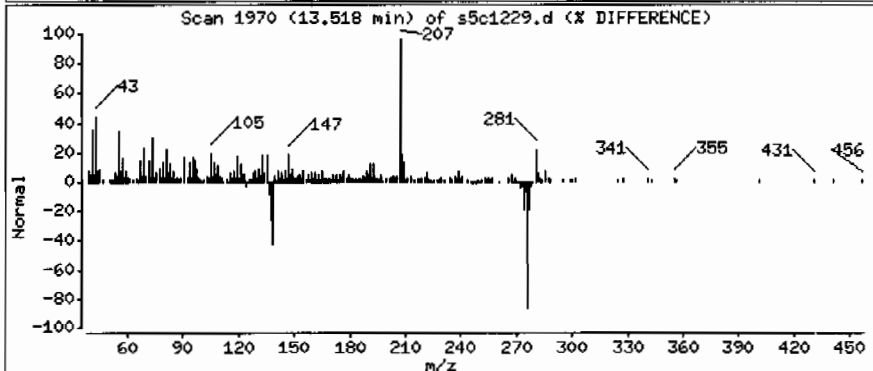
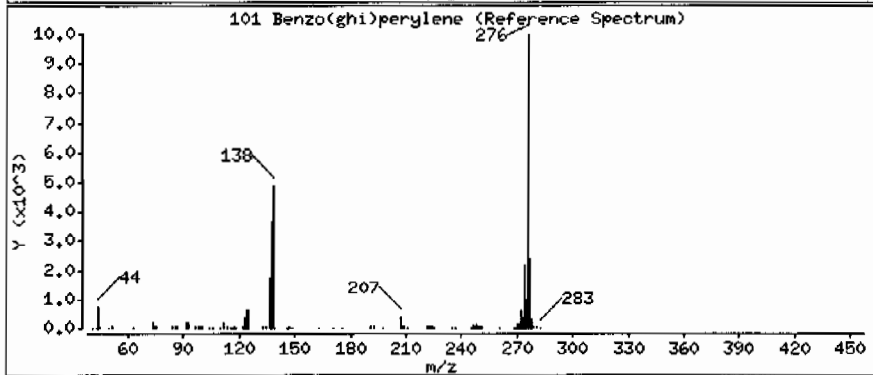
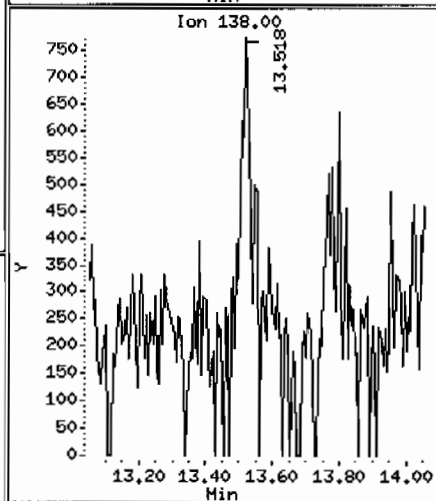
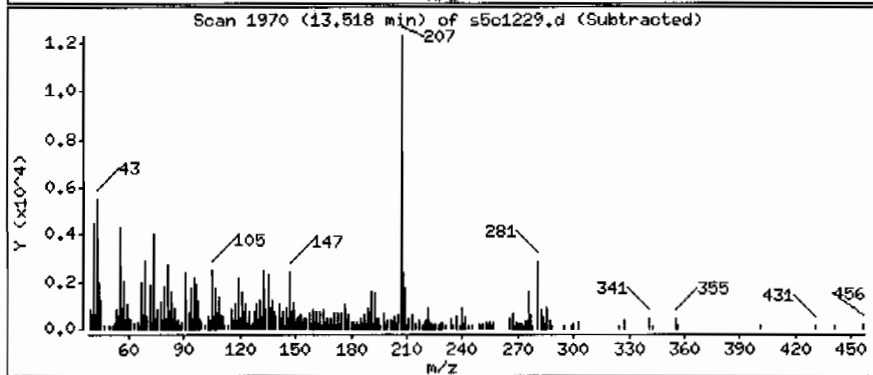
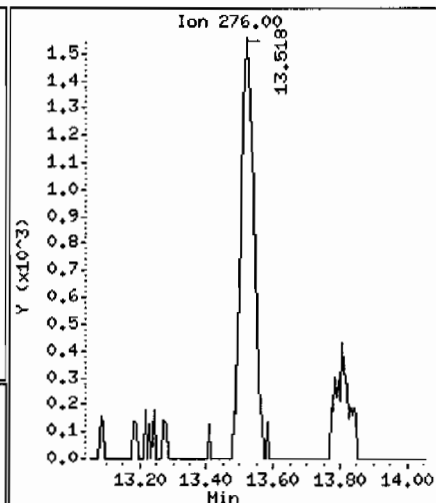
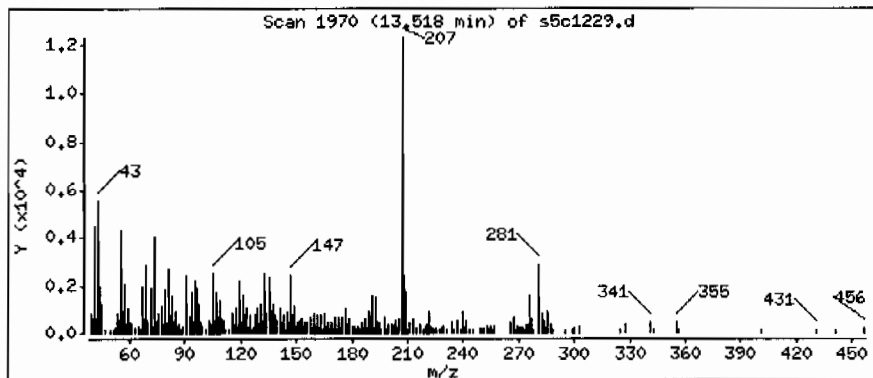
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 26.7 ug/Kg



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911ISVMI11LANL

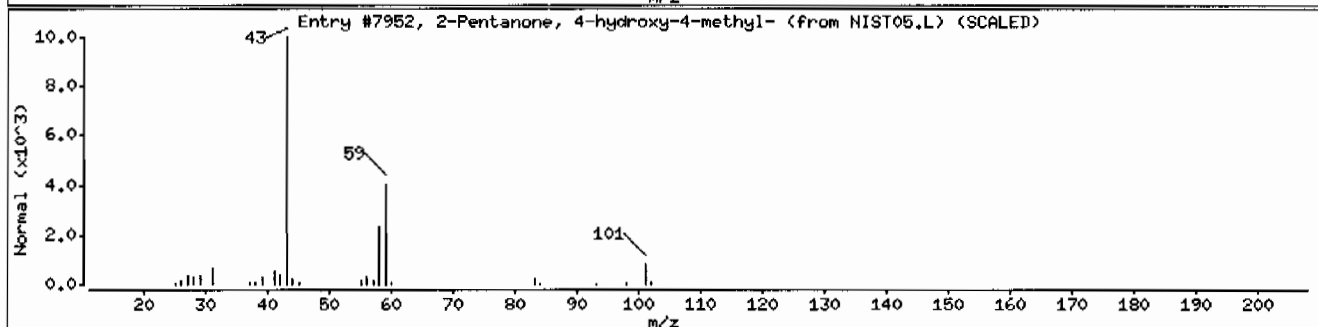
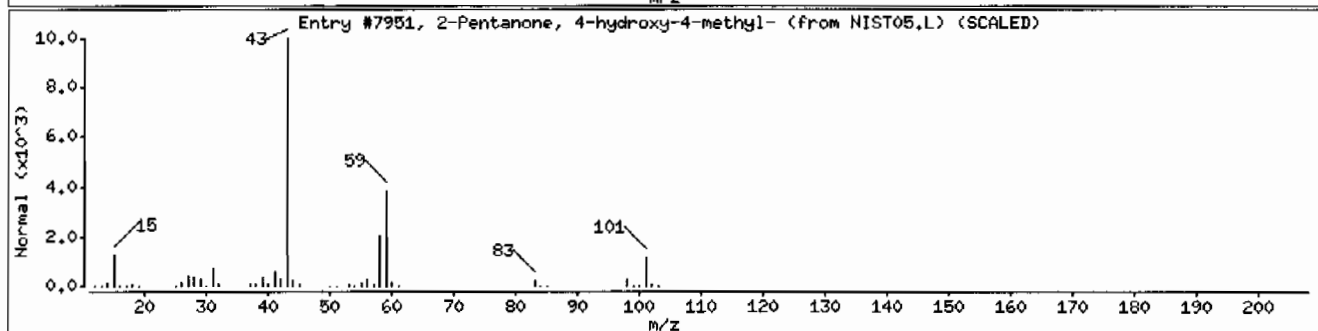
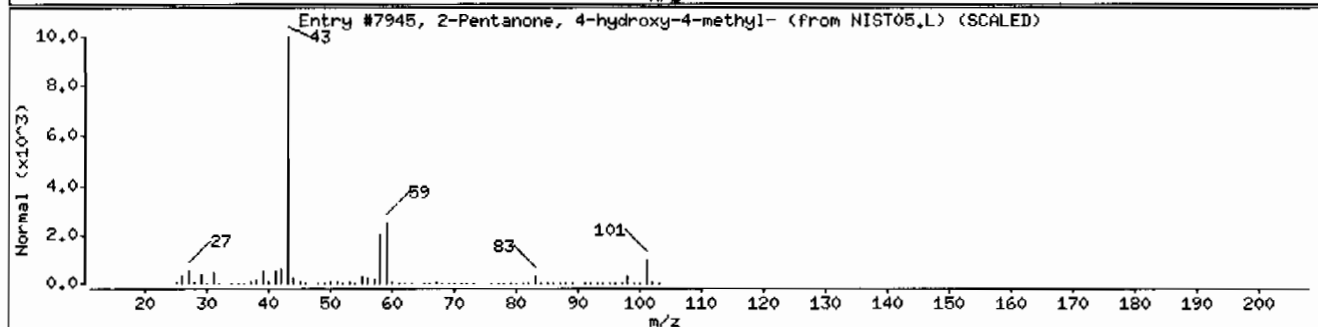
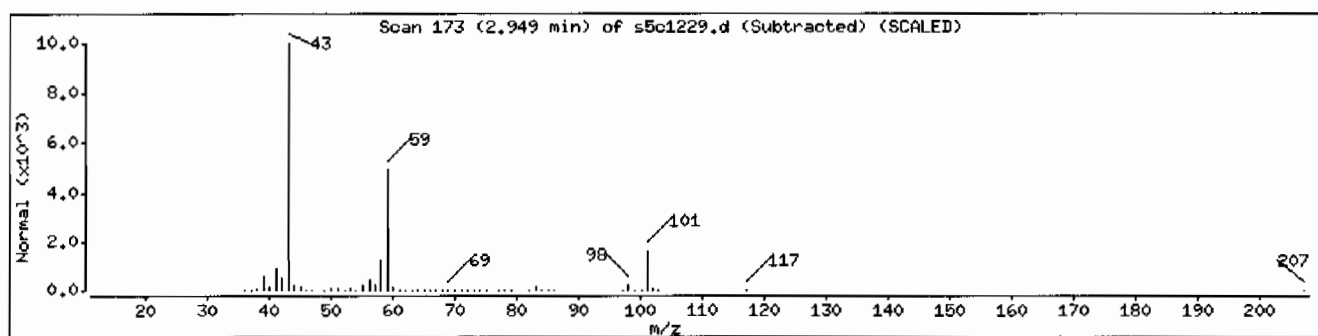
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5,i

Sample Info: 12482400091960659111SVH111LANL

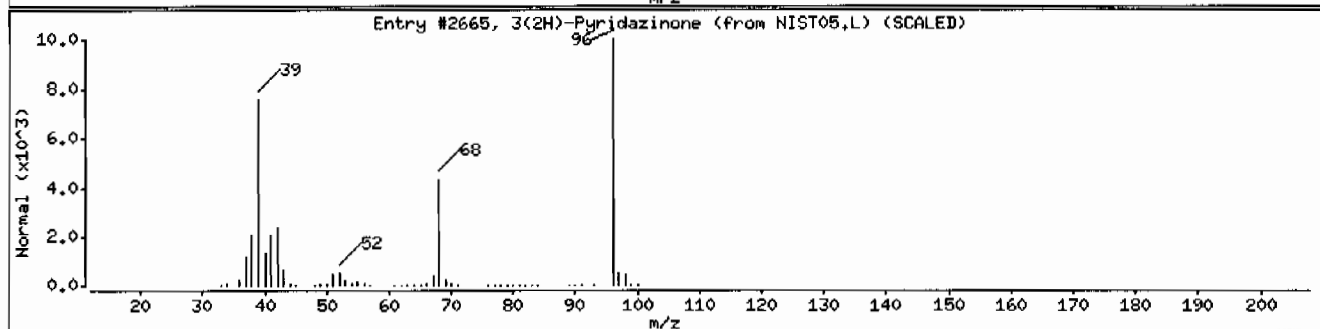
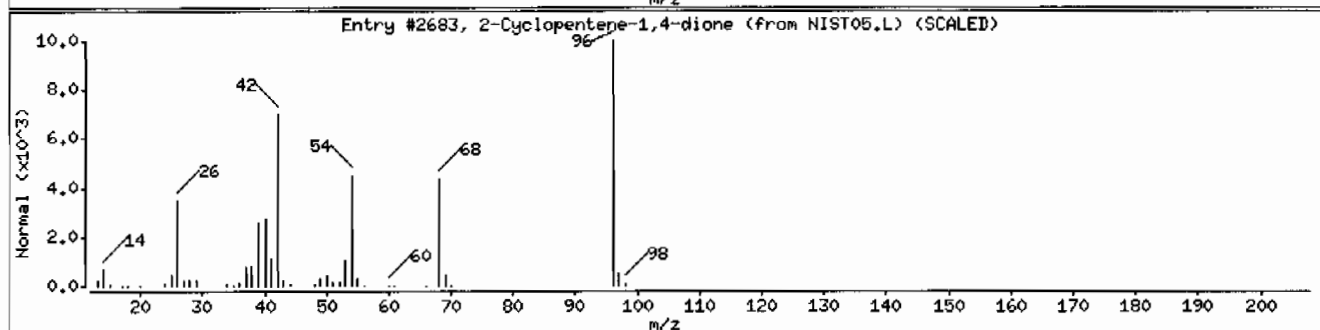
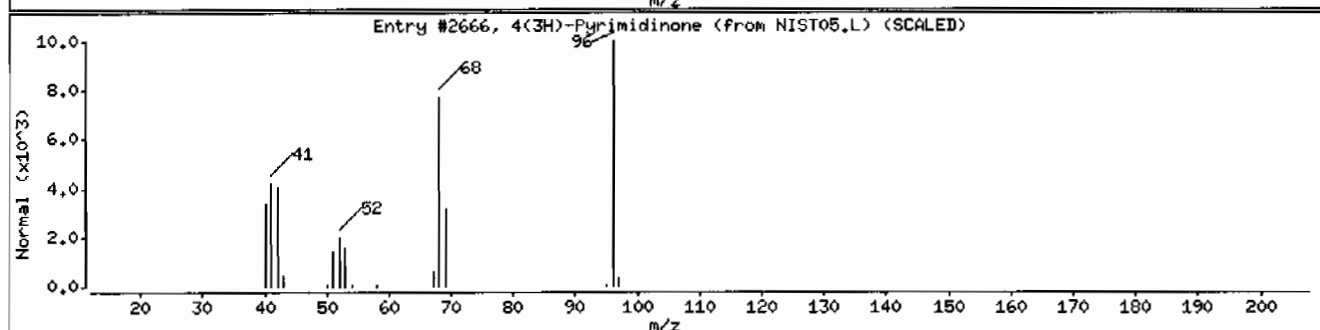
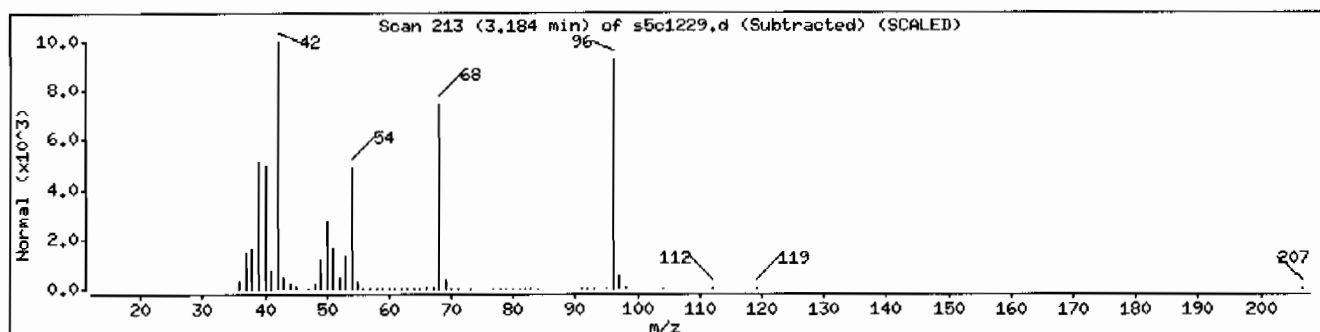
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4(3H)-Pyrimidinone	51953-17-4	NIST05.L	2666	52	C4H4N2O	96
2-Cyclopentene-1,4-dione	930-60-9	NIST05.L	2683	43	C5H4O2	96
3(2H)-Pyridazinone	504-30-3	NIST05.L	2665	43	C4H4N2O	96



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVMI11LANL

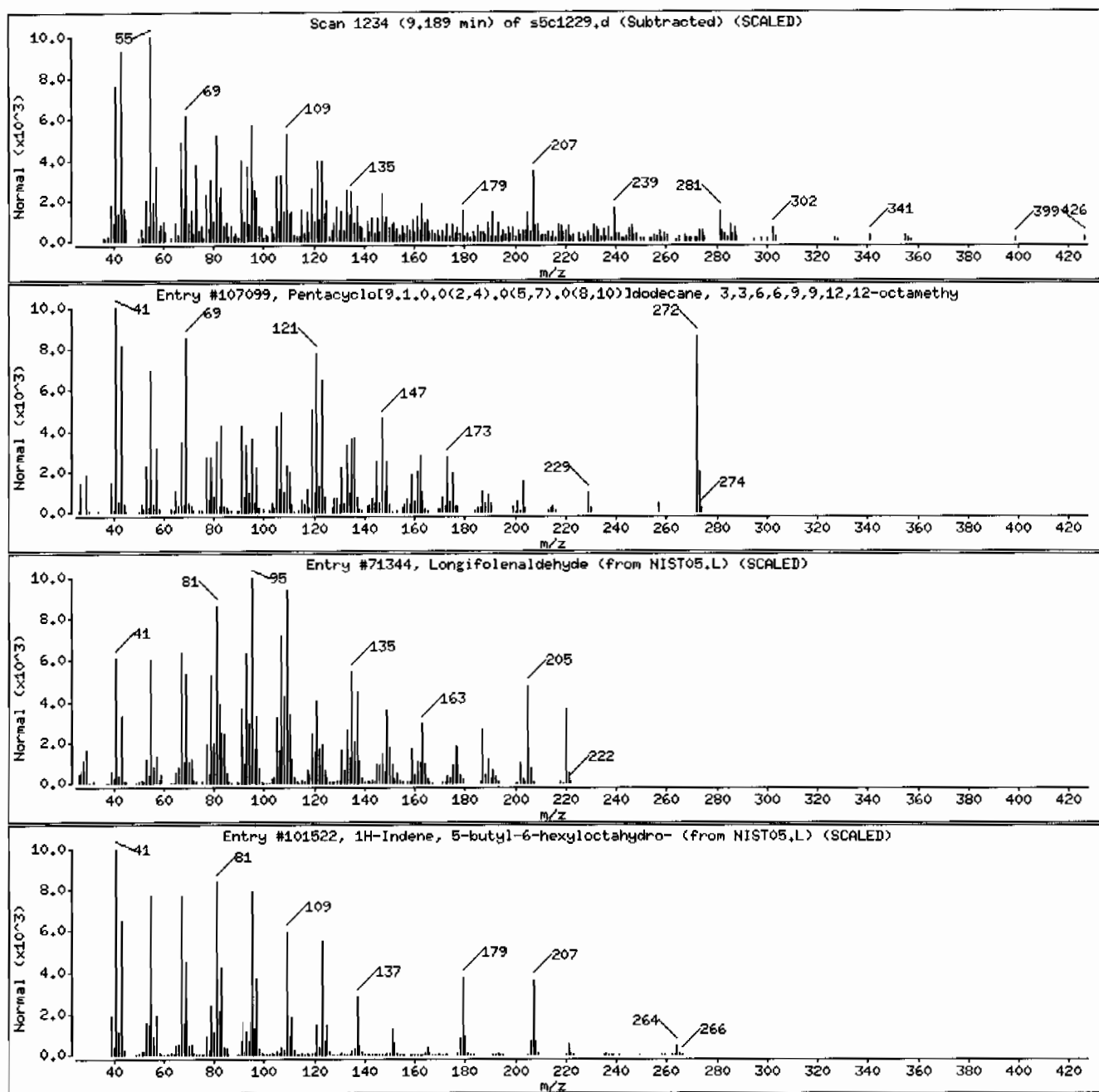
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	1000152-38-2	NIST05.L	107099	55	C20H32	272
Longifolenealdehyde	19890-84-7	NIST05.L	71344	46	C15H24O	220
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	45	C19H36	264



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH11ILANL

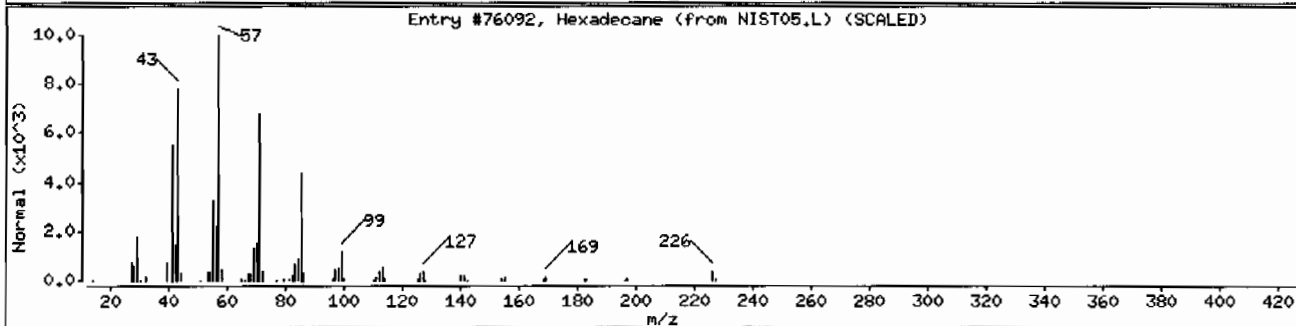
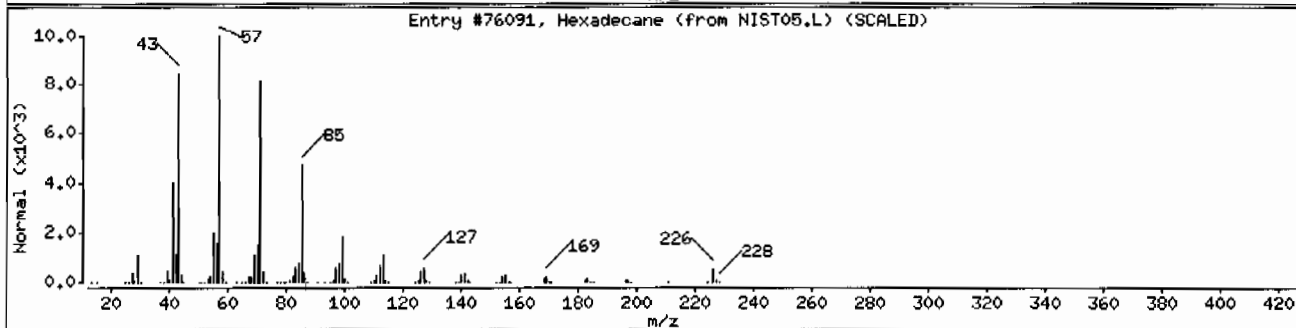
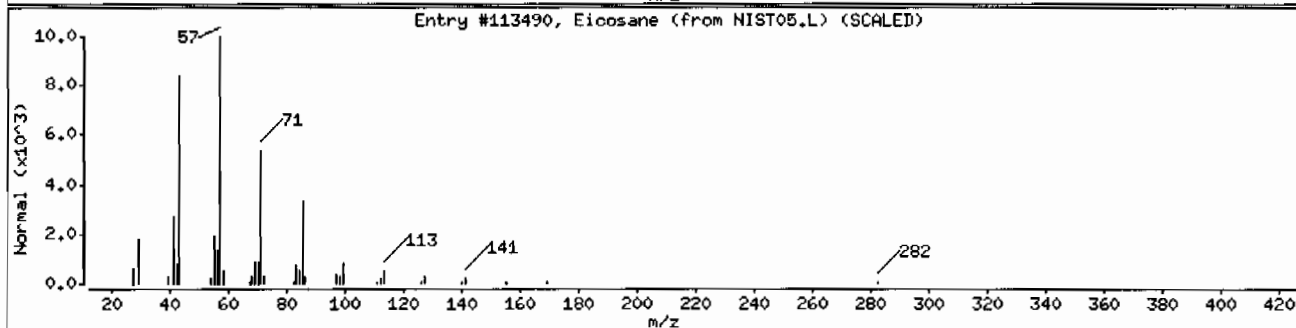
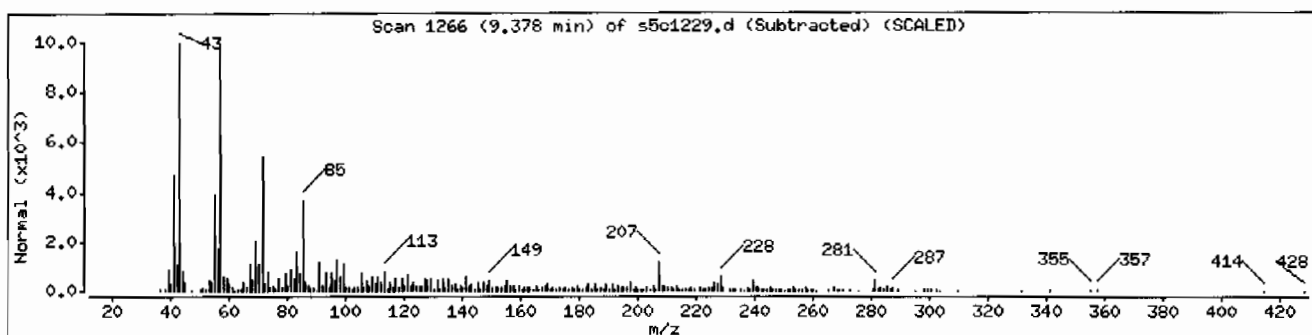
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Hexadecane	544-76-3	NIST05.L	76091	96	C16H34	226
Hexadecane	544-76-3	NIST05.L	76092	96	C16H34	226



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH11ILANL

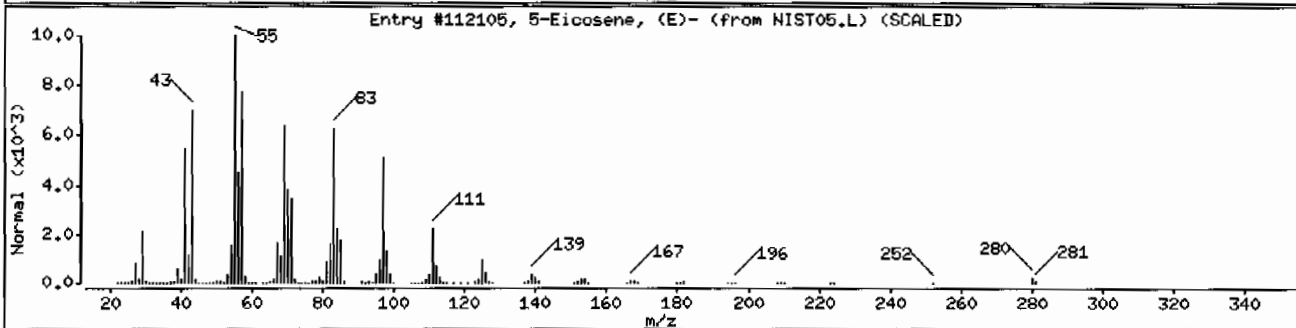
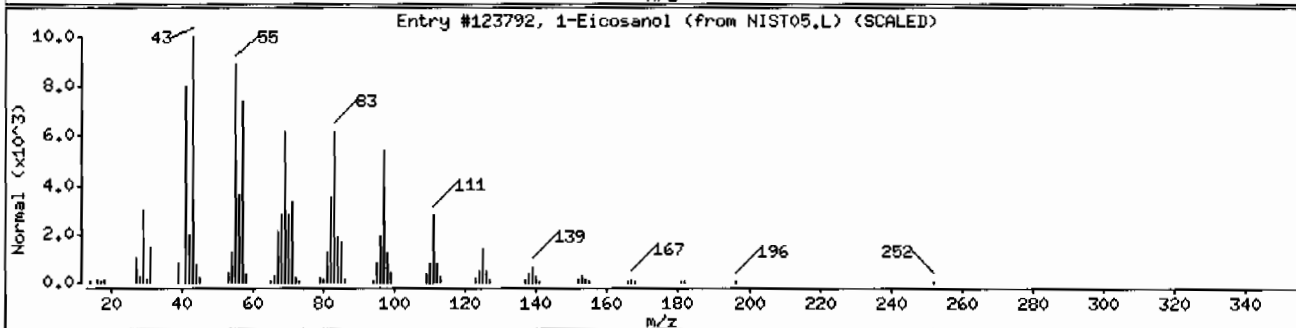
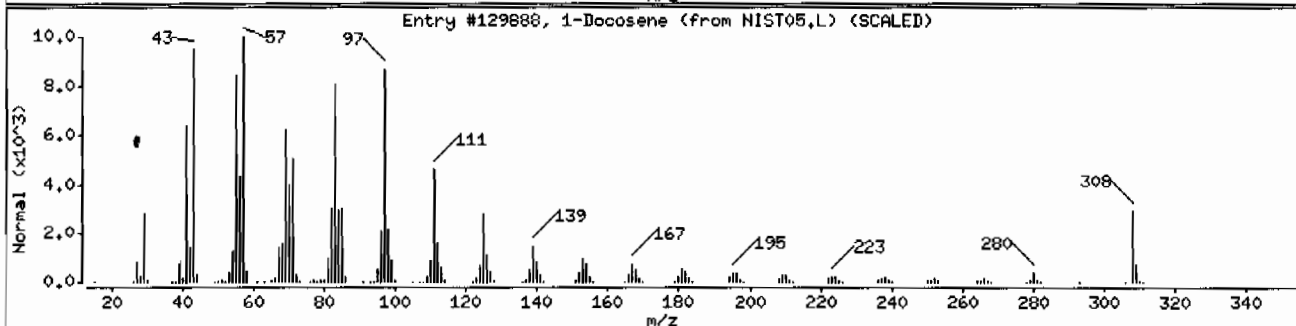
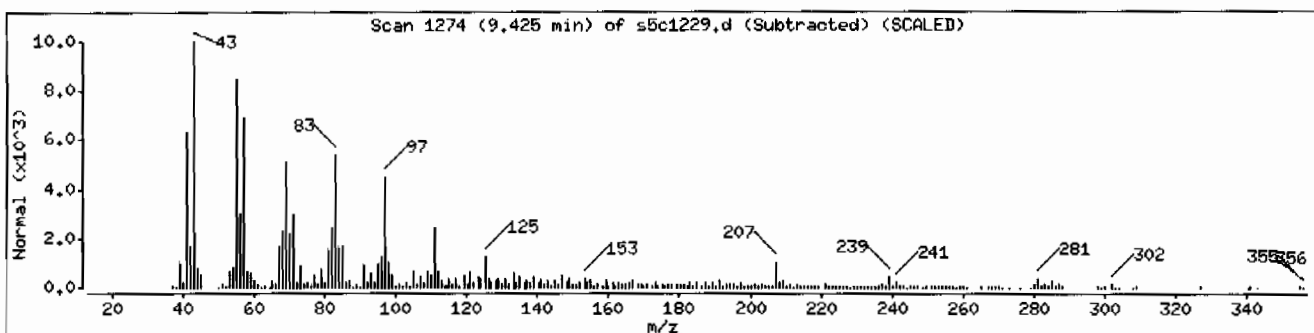
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	96	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	93	C20H42O	298
5-Eicosene, (E)-	74685-30-6	NIST05.L	112105	93	C20H40	280



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911ISVM111LANL

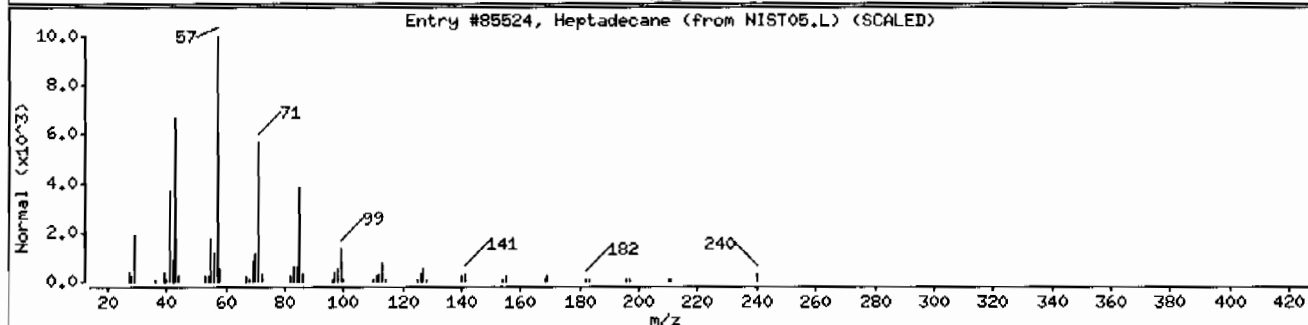
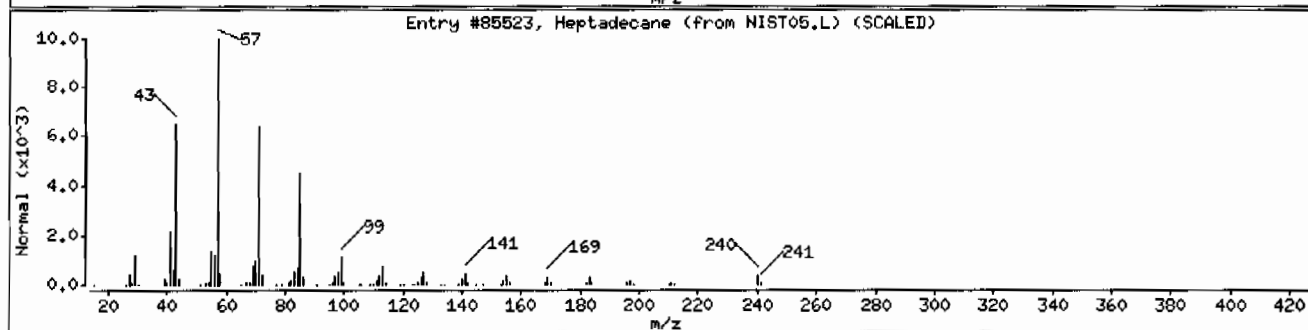
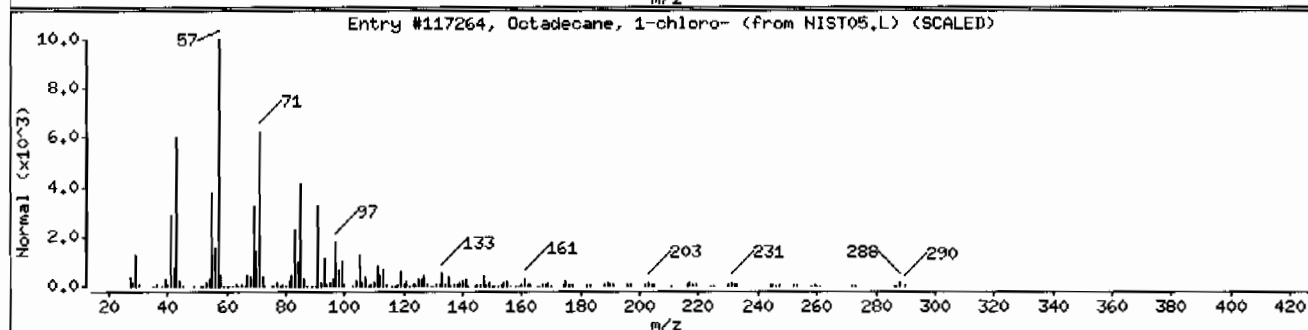
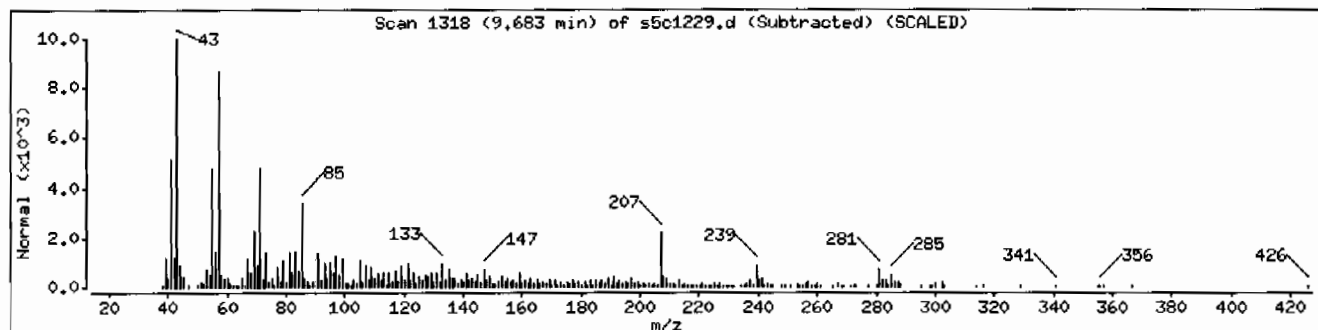
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	95	C ₁₈ H ₃₇ Cl	288
Heptadecane	629-78-7	NIST05.L	85523	95	C ₁₇ H ₃₆	240
Heptadecane	629-78-7	NIST05.L	85524	95	C ₁₇ H ₃₆	240



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: HSD5.i

Sample Info: 1248240009196065911SVH111LANL

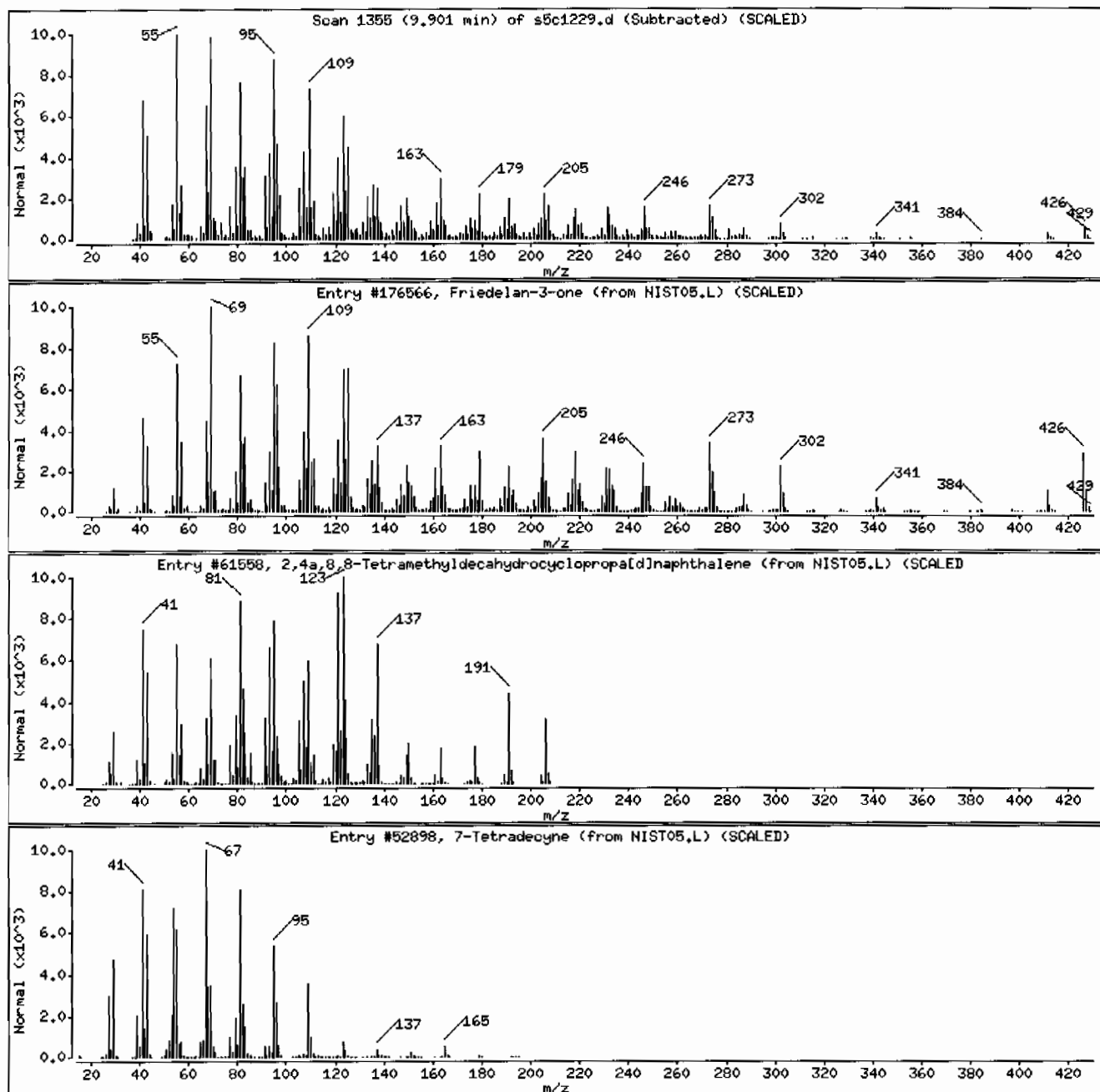
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	99	C30H50O	426
2,4a,8,8-Tetramethyldecahydrocyclopropa[	74022-04-1	NIST05.L	61558	81	C15H26	206
7-Tetradecyne	35216-11-6	NIST05.L	52898	49	C14H26	194



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVMI1ILANL

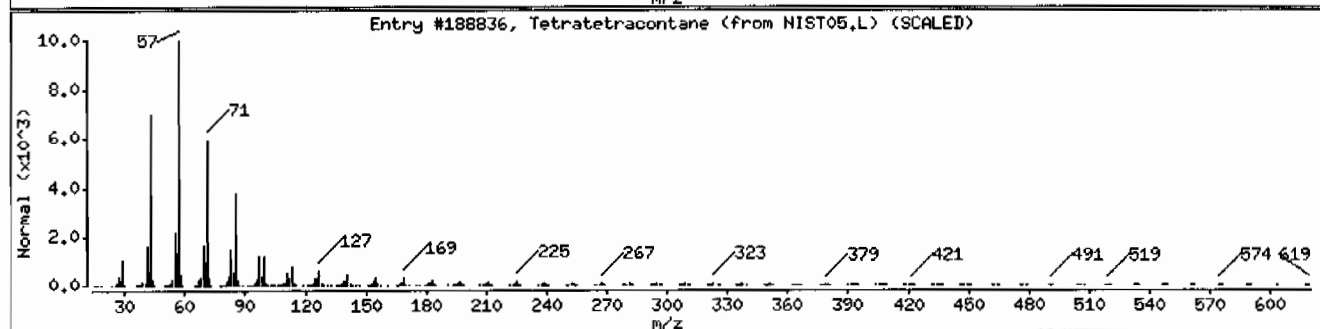
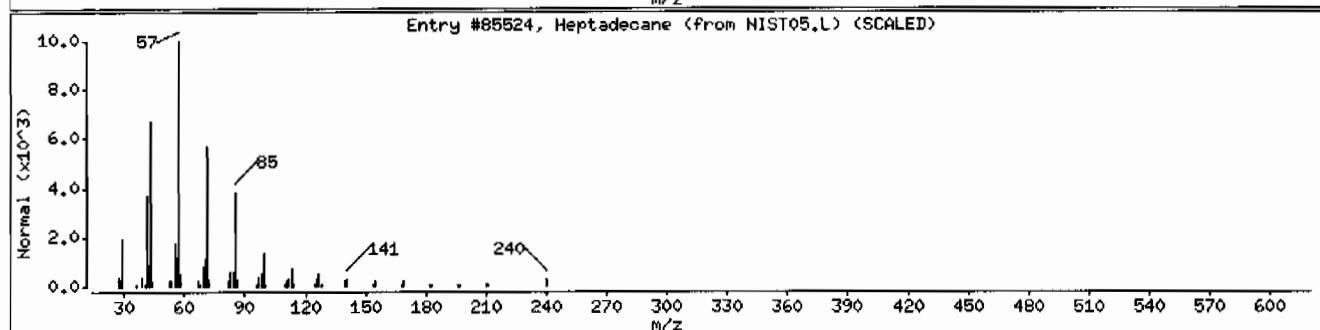
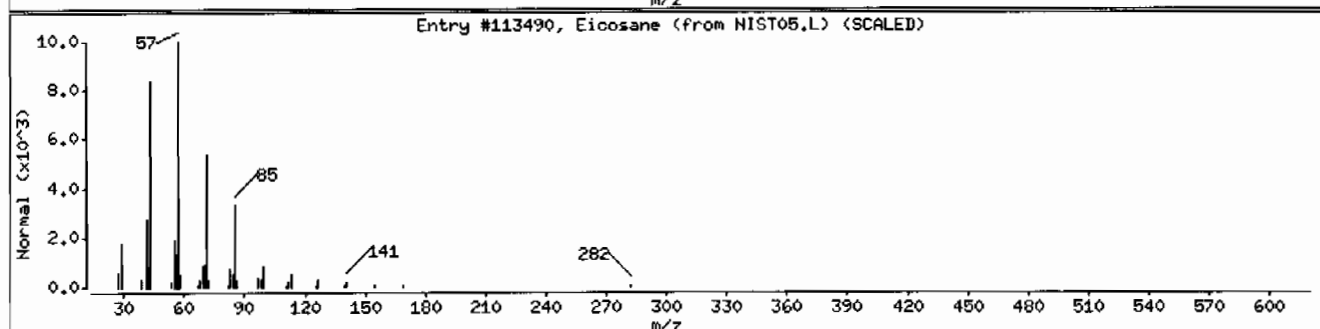
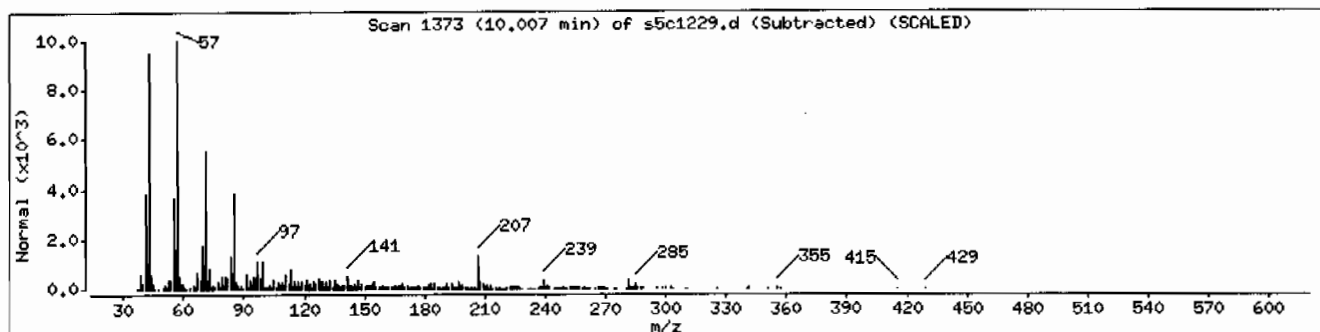
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	98	C20H42	282
Heptadecane	629-78-7	NIST05.L	85524	91	C17H36	240
Tetratetracontane	7098-22-8	NIST05.L	188836	87	C44H90	619



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVMI11LANL

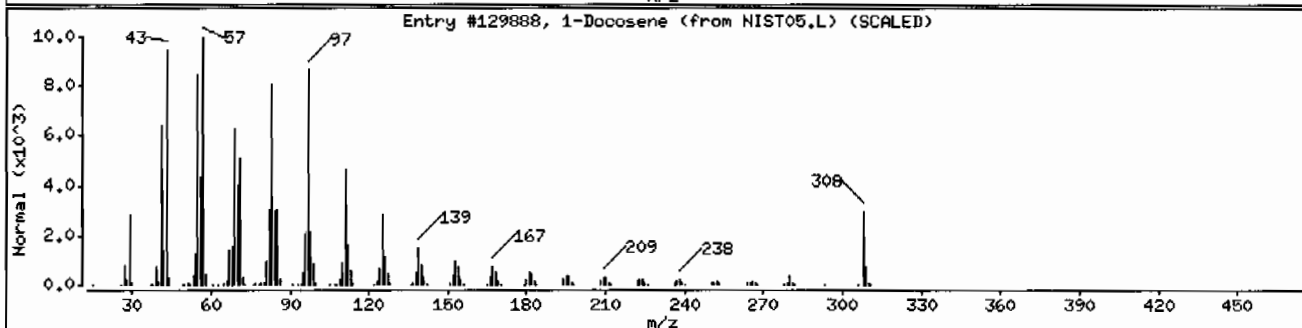
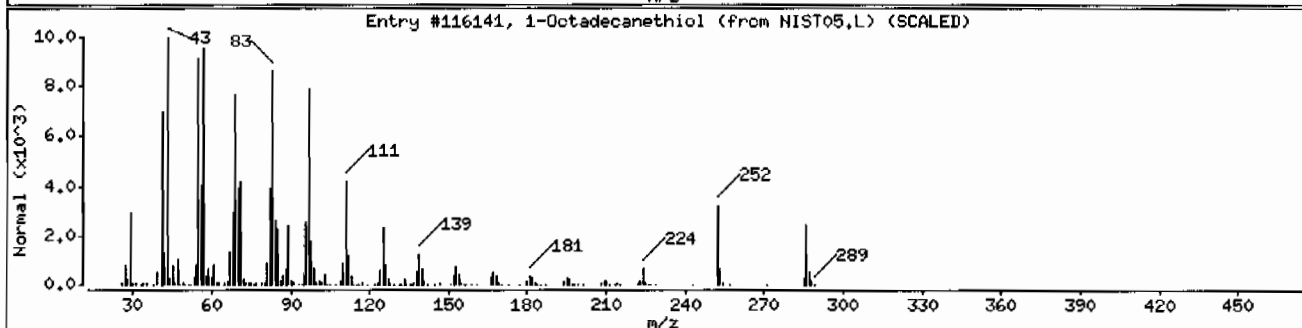
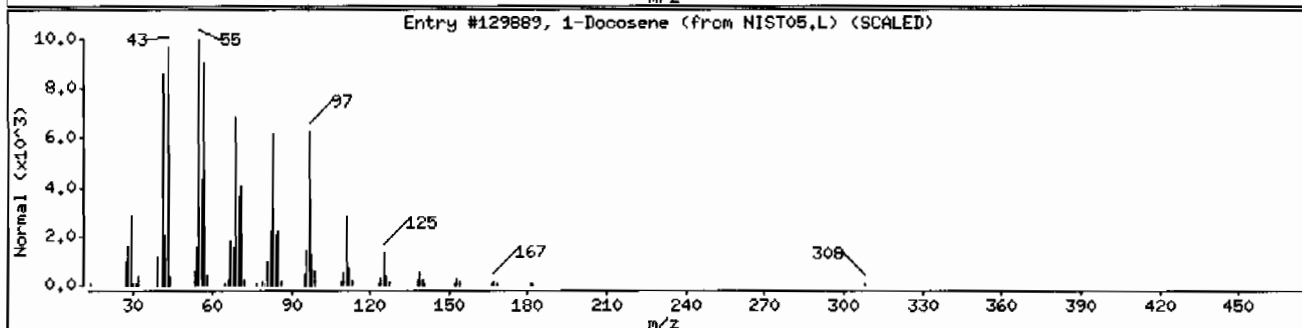
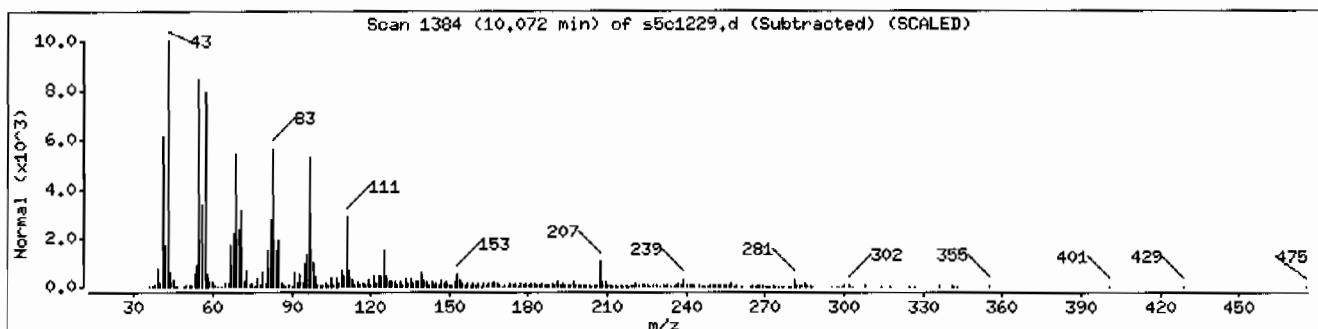
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Docosene	1599-67-3	NIST05.L	129889	98	C22H44	308
1-Octadecanethiol	2885-00-9	NIST05.L	116141	92	C18H38S	286
1-Docosene	1599-67-3	NIST05.L	129888	91	C22H44	308



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH111LANL

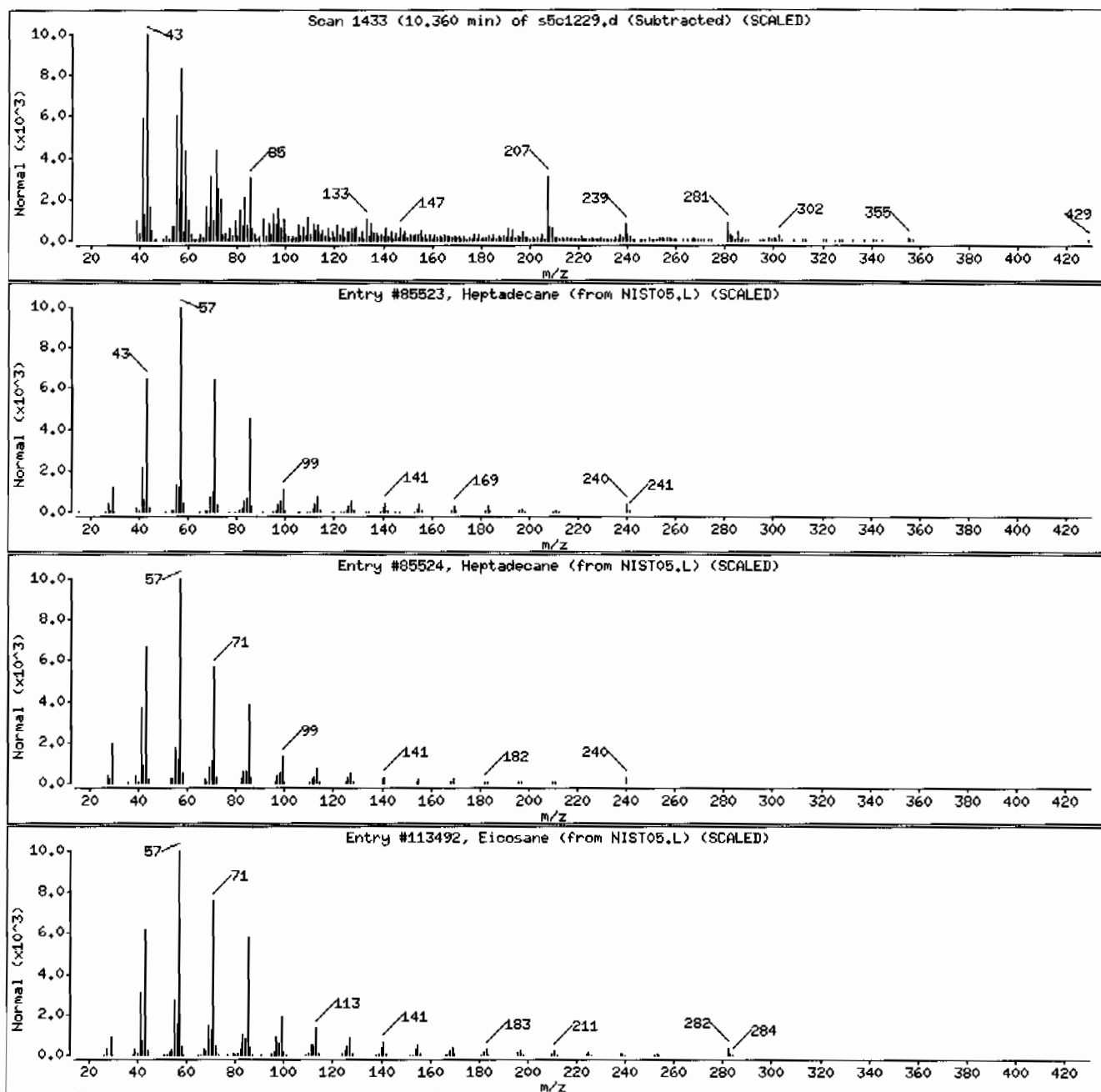
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NIST05.L	85523	91	C17H36	240
Heptadecane	629-78-7	NIST05.L	85524	91	C17H36	240
Eicosane	112-95-8	NIST05.L	113492	91	C20H42	282



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVMI11LANL

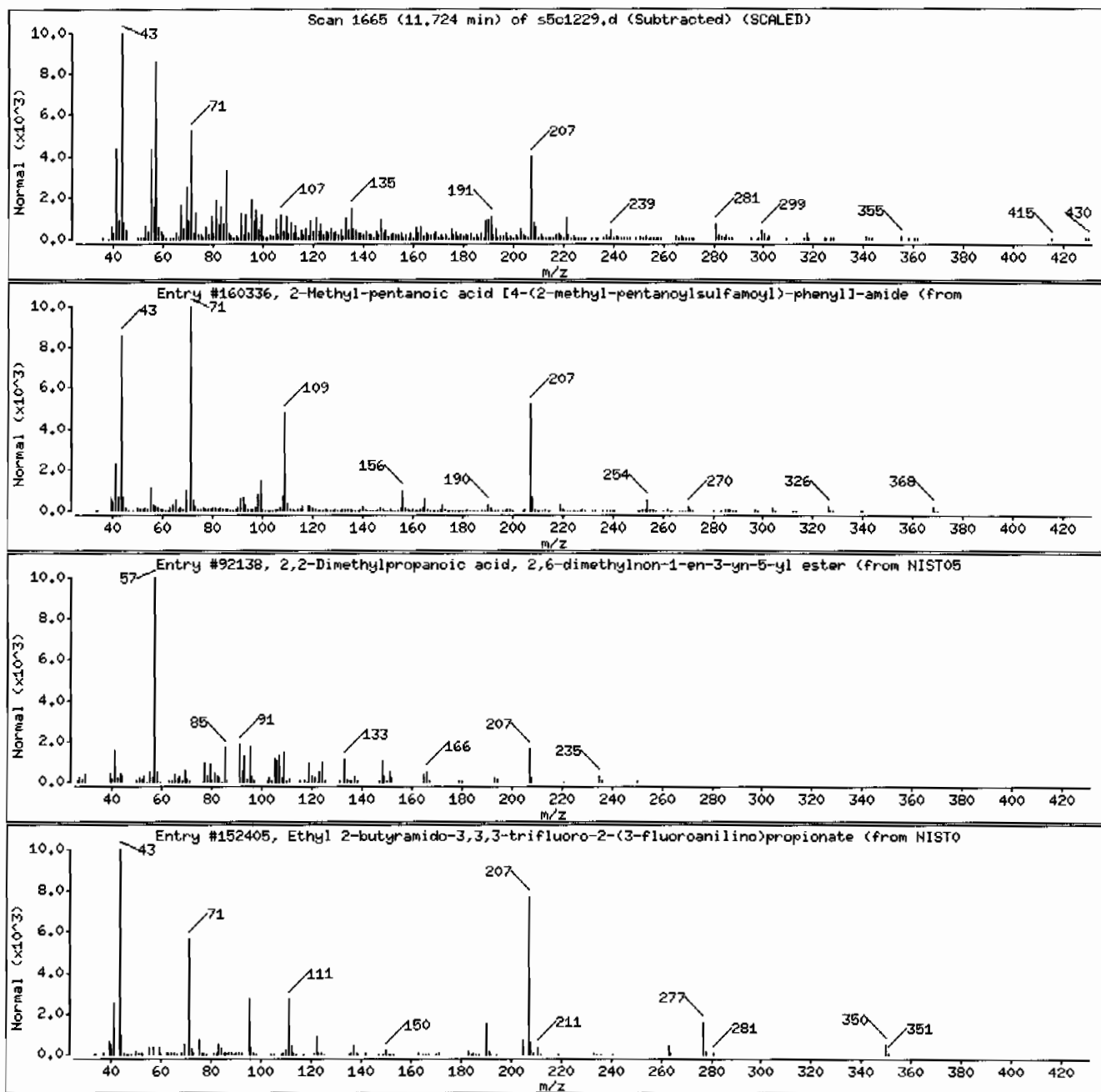
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-pentanoic acid [4-(2-methyl-pen	1000296-31-0	NIST05.L	160336	32	C18H28N2O4S	368
2,2-Dimethylpropanoic acid, 2,6-dimethyl	1000299-33-6	NIST05.L	92138	25	C16H26O2	250
Ethyl 2-butyramido-3,3,3-trifluoro-2-(3-	1000224-16-1	NIST05.L	152405	25	C15H18F4N2O3	350



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH111LANL

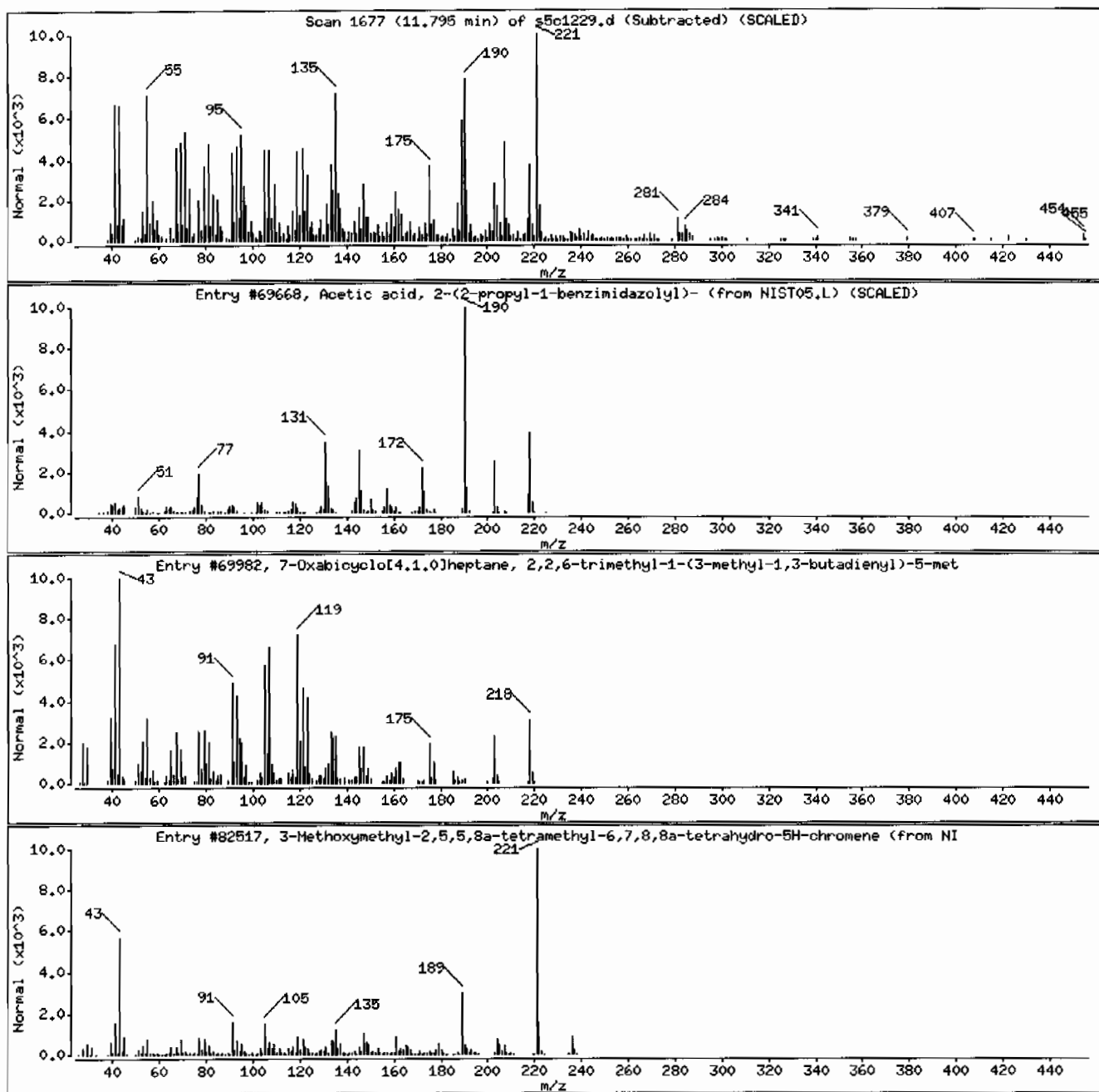
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazolyl	331736-92-6	NIST05.L	69668	46	C12H14N2O2	218
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	40	C15H22O	218
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	38	C15H24O2	236



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911SVH111LANL

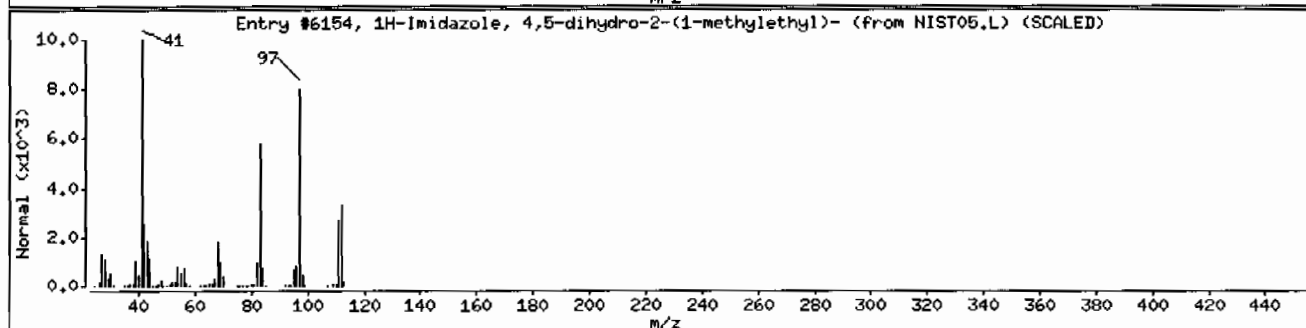
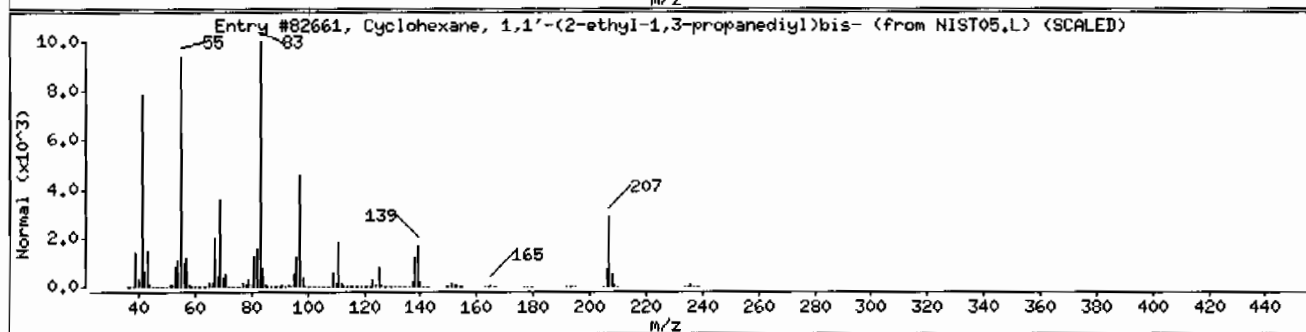
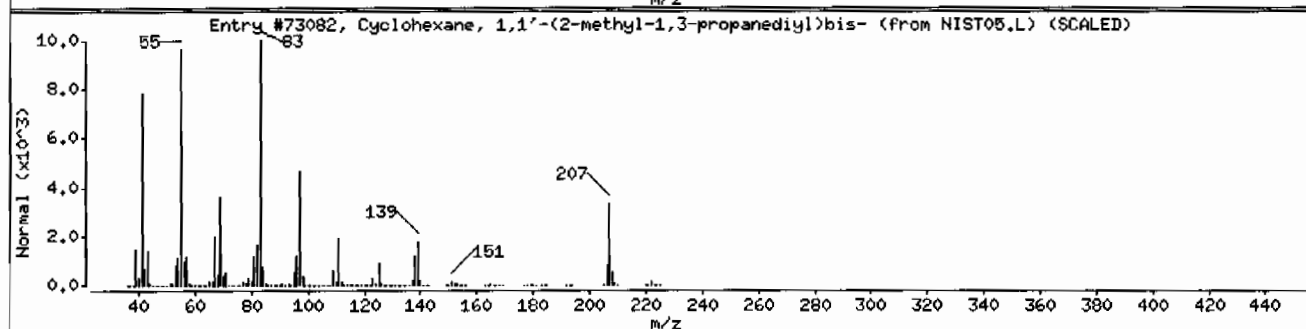
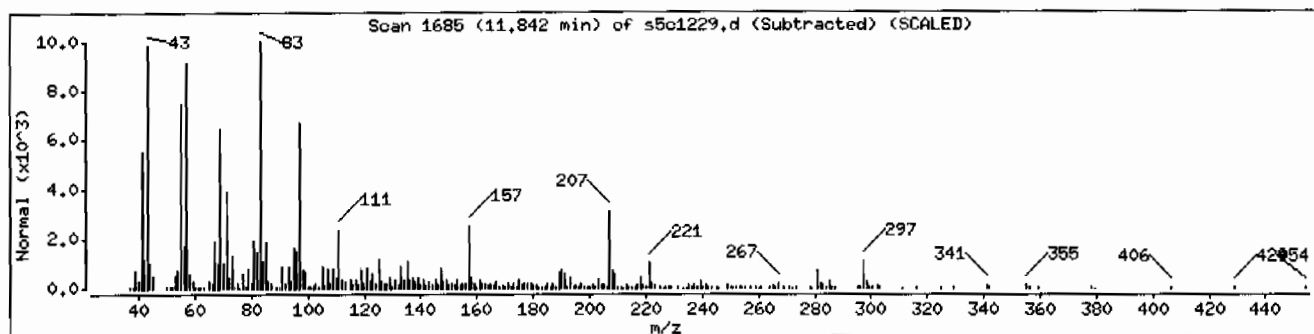
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	83	C16H30	222
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	83	C17H32	236
1H-Imidazole, 4,5-dihydro-2-(1-methyleth	40029-86-5	NIST05.L	6154	50	C6H12N2	112



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 1248240009196065911ISVM11ILANL

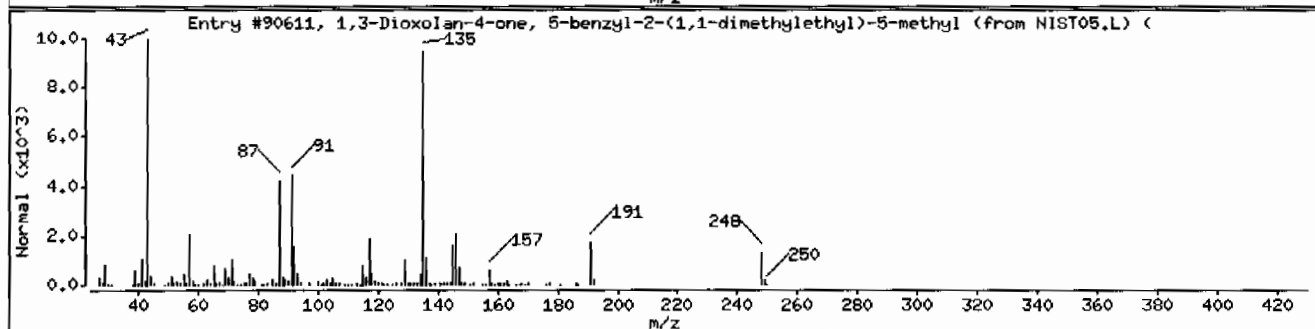
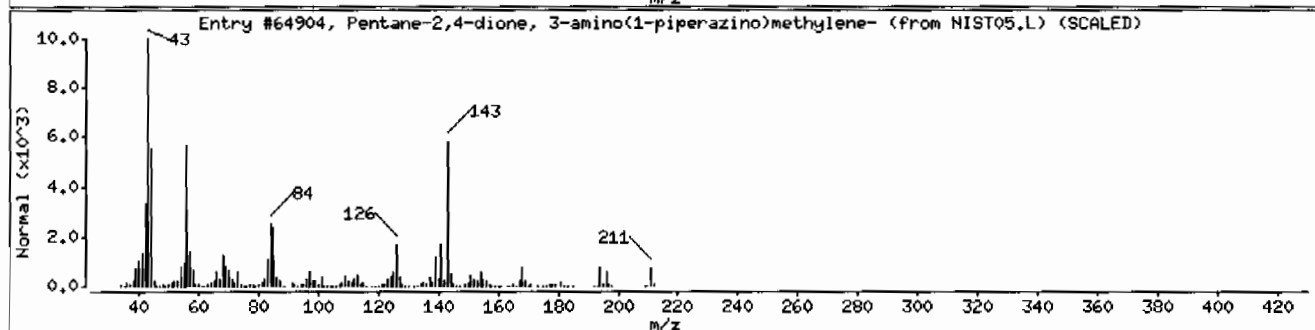
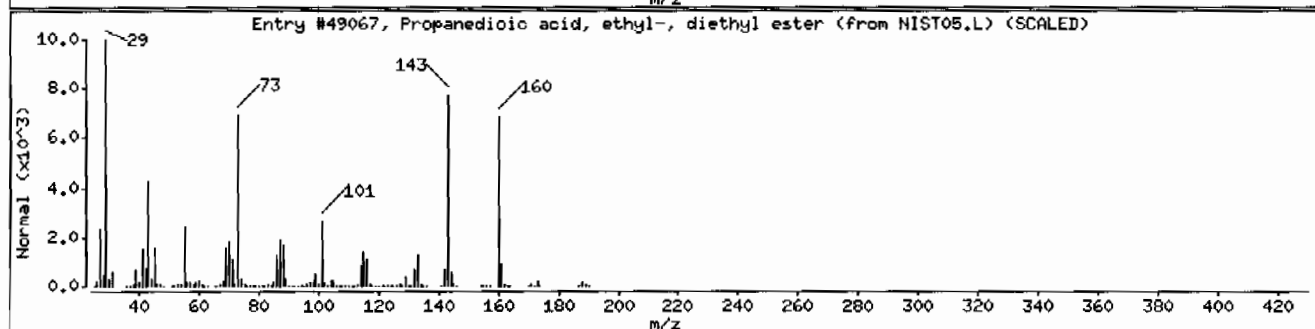
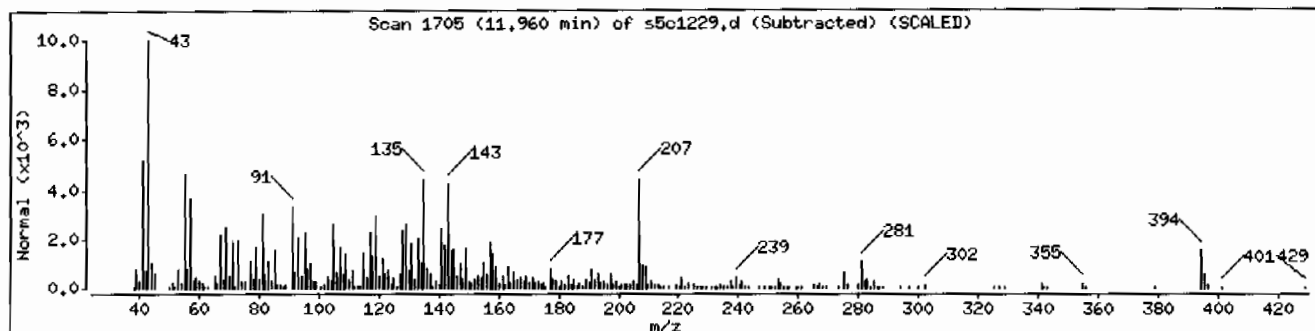
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanedioic acid, ethyl-, diethyl ester	133-13-1	NIST05.L	49067	9	C9H16O4	188
Pentane-2,4-dione, 3-amino(1-piperazino)	1000260-69-5	NIST05.L	64904	9	C10H17N3O2	211
1,3-Dioxolan-4-one, 5-benzyl-2-(1,1-dime	1000197-89-5	NIST05.L	90611	9	C15H20O3	248



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.1

Sample Info: 1248240009196065911SVH111LANL

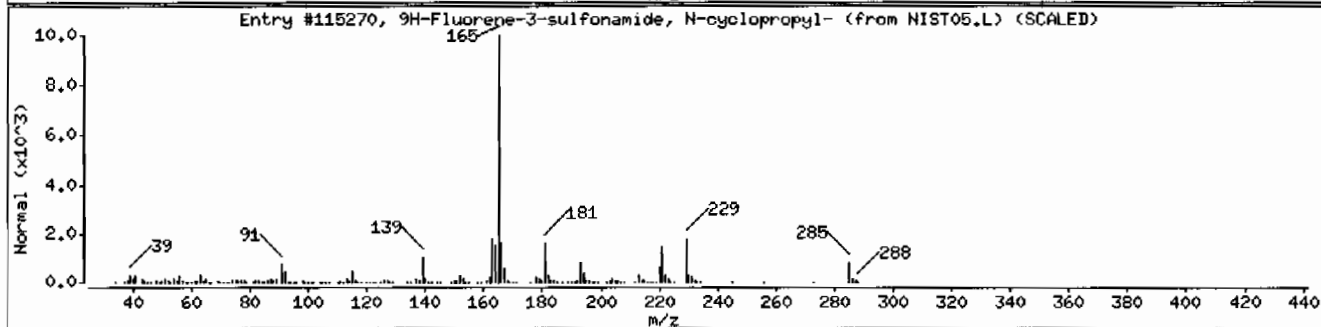
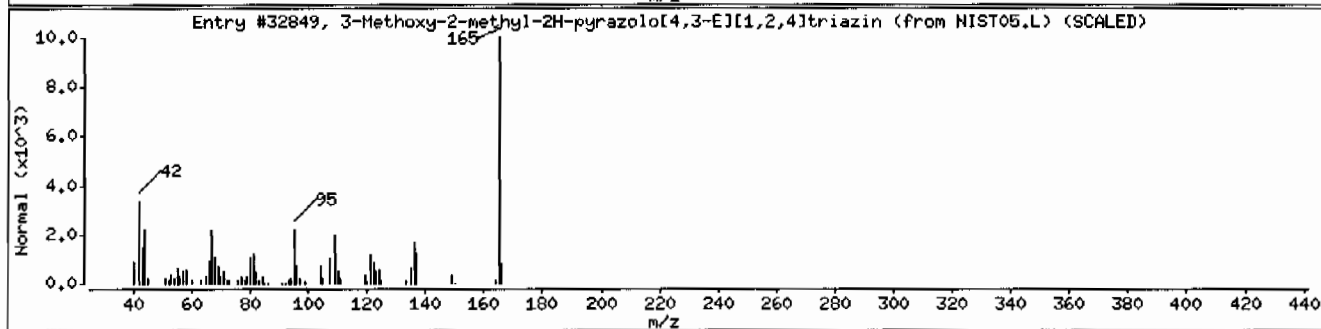
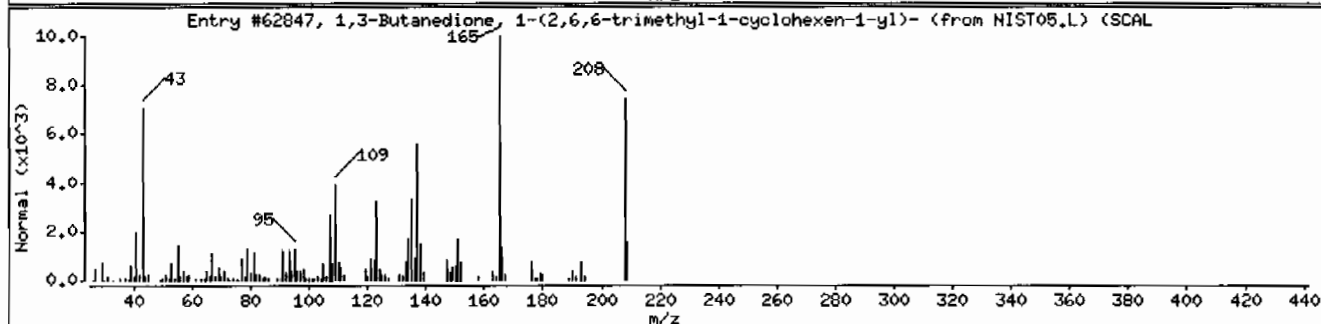
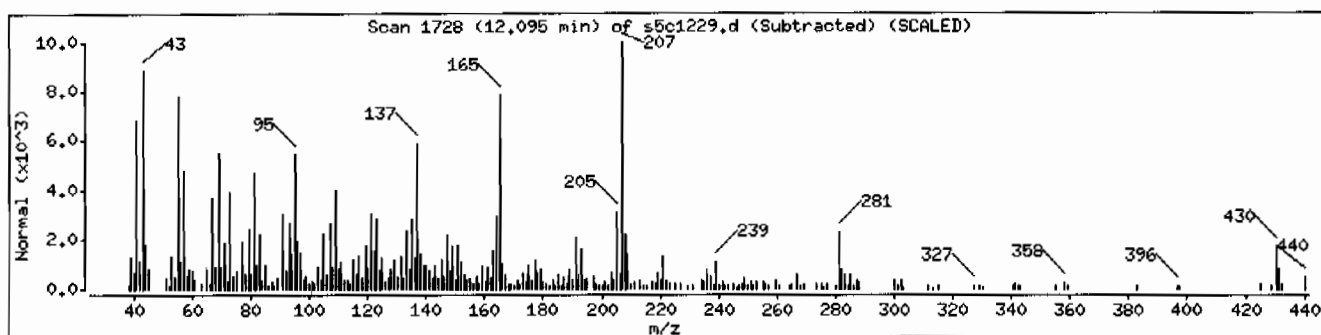
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Butanedione, 1-(2,6,6-trimethyl-1-cy	39900-12-4	NIST05.L	62847	70	C13H20O2	208
3-Methoxy-2-methyl-2H-pyrazolo[4,3-E][1,	37531-53-6	NIST05.L	32849	50	C6H7N5O	165
9H-Fluorene-3-sulfonamide, N-cyclopropyl	1000271-30-1	NIST05.L	115270	44	C16H15NO2S	285



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 12482400091960659111SVMI11LANL

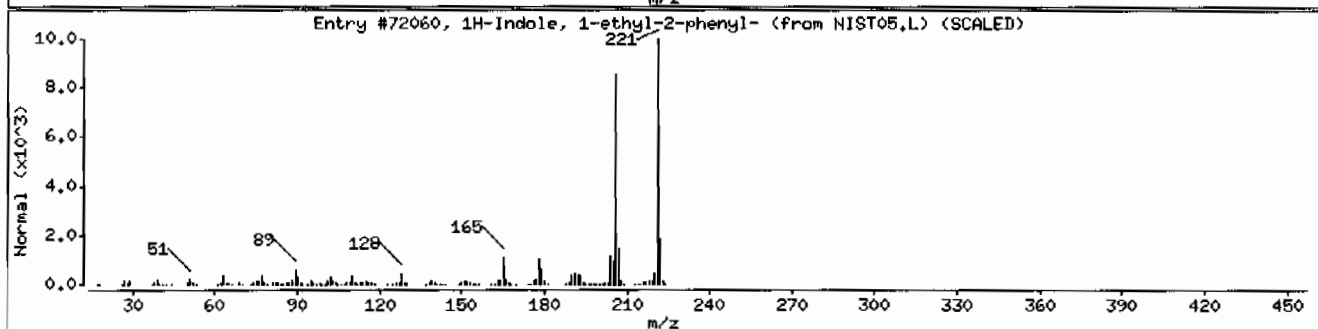
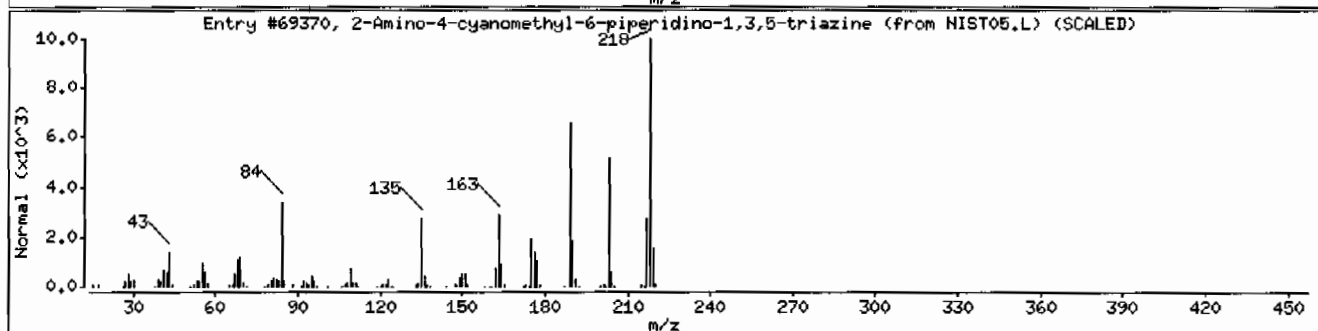
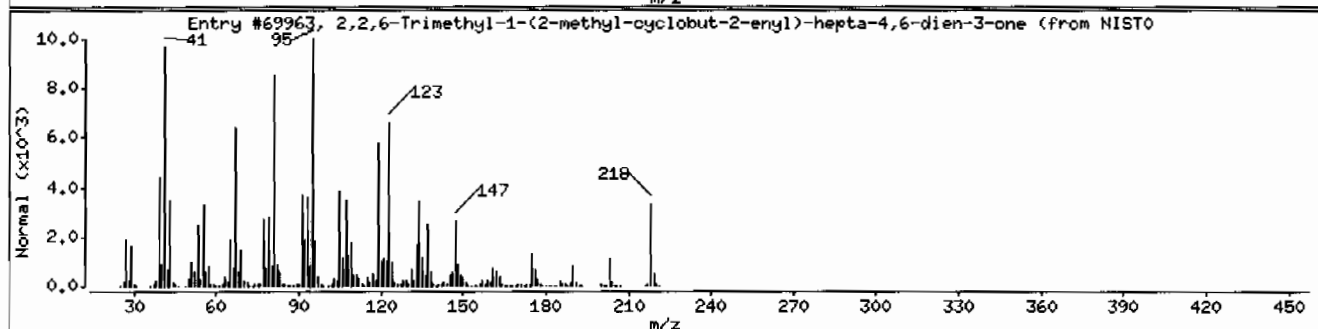
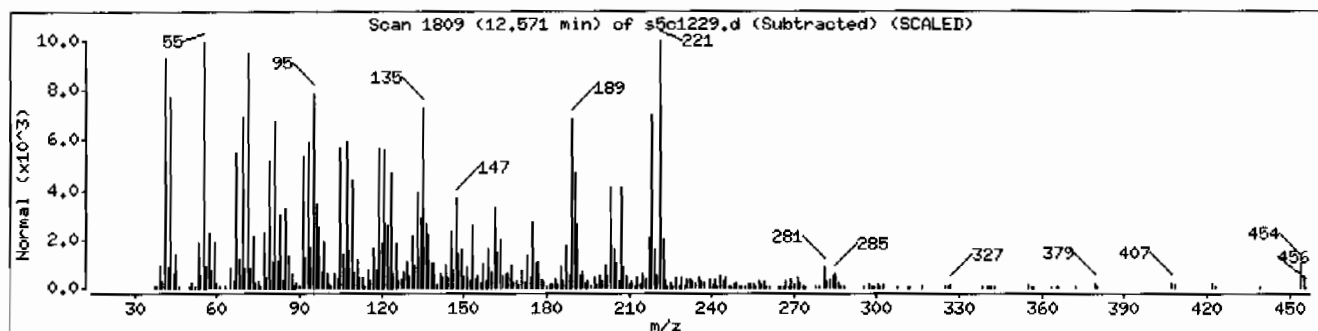
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	76	C ₁₅ H ₂₂ O	218
2-Amino-4-cyanomethyl-6-piperidino-1,3,5-triazine	1000241-05-9	NIST05.L	69370	35	C ₁₀ H ₁₄ N ₆	218
1H-Indole, 1-ethyl-2-phenyl-	13228-39-2	NIST05.L	72060	25	C ₁₆ H ₁₅ N	221



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5,i

Sample Info: 1248240009196065911SVH11ILANL

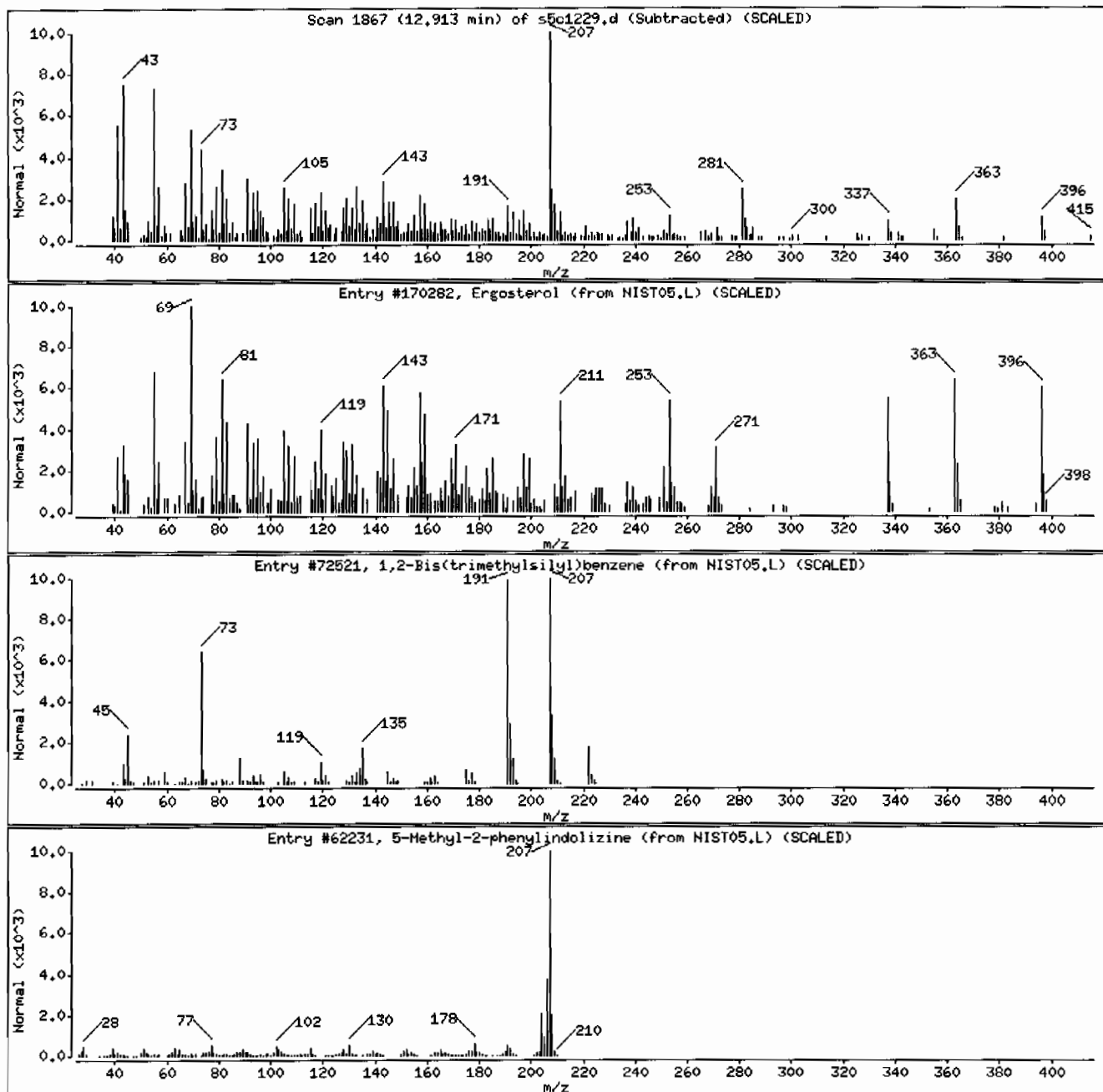
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ergosterol	57-87-4	NIST05,L	170282	53	C ₂₈ H ₄₄ O	386
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05,L	72521	35	C ₁₂ H ₂₂ Si ₂	222
5-Methyl-2-phenylindolizine	36944-99-7	NIST05,L	62231	30	C ₁₅ H ₁₃ N	207



Date: 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: MSD5.i

Sample Info: 12482400091960659111SVH111LANL

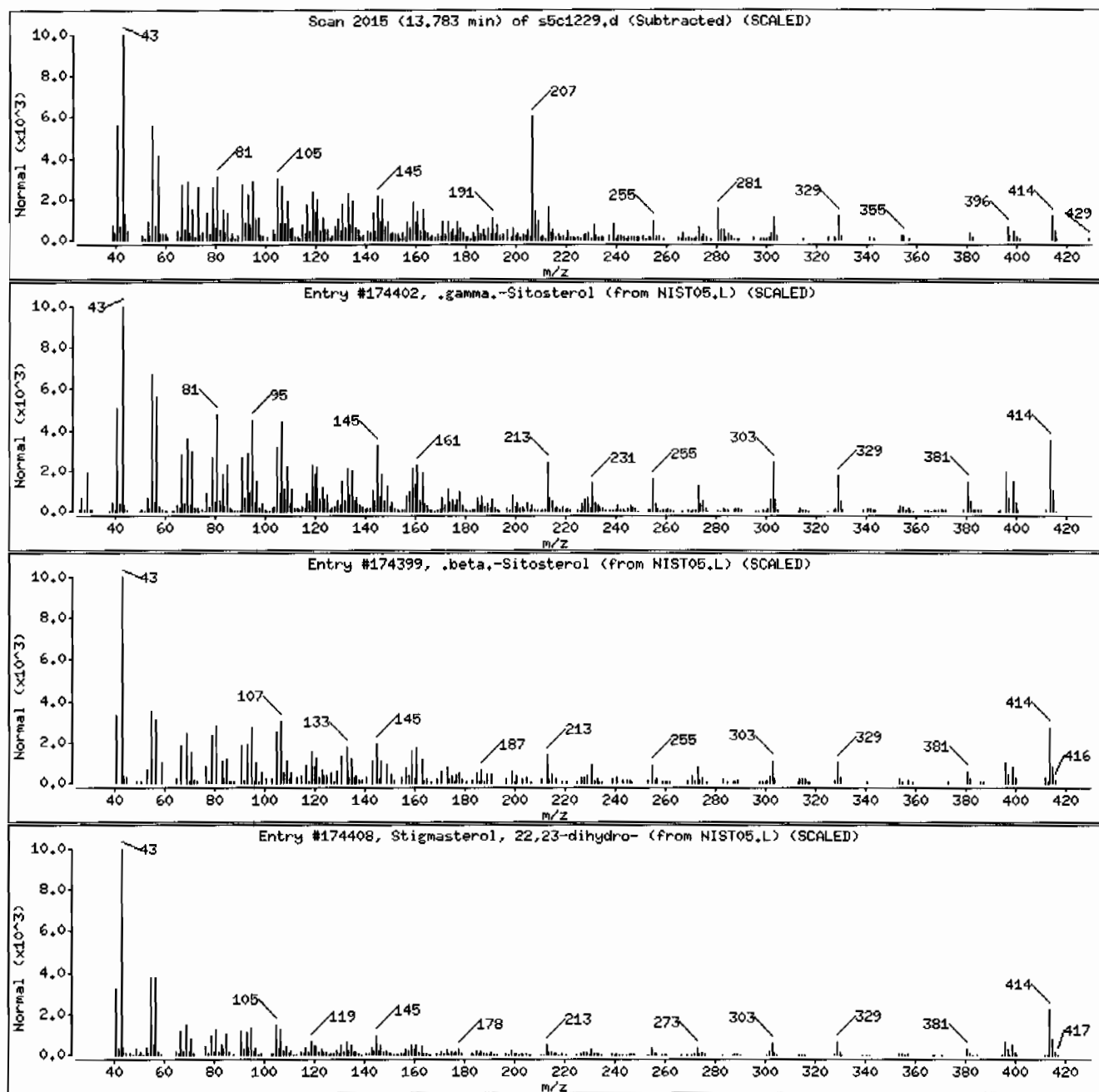
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	94	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	94	C ₂₉ H ₅₀ O	414



Date : 12-MAR-2010 21:20

Client ID: RE36-10-7520

Instrument: HSD5.i

Sample Info: 1248240009196065911SVH111LANL

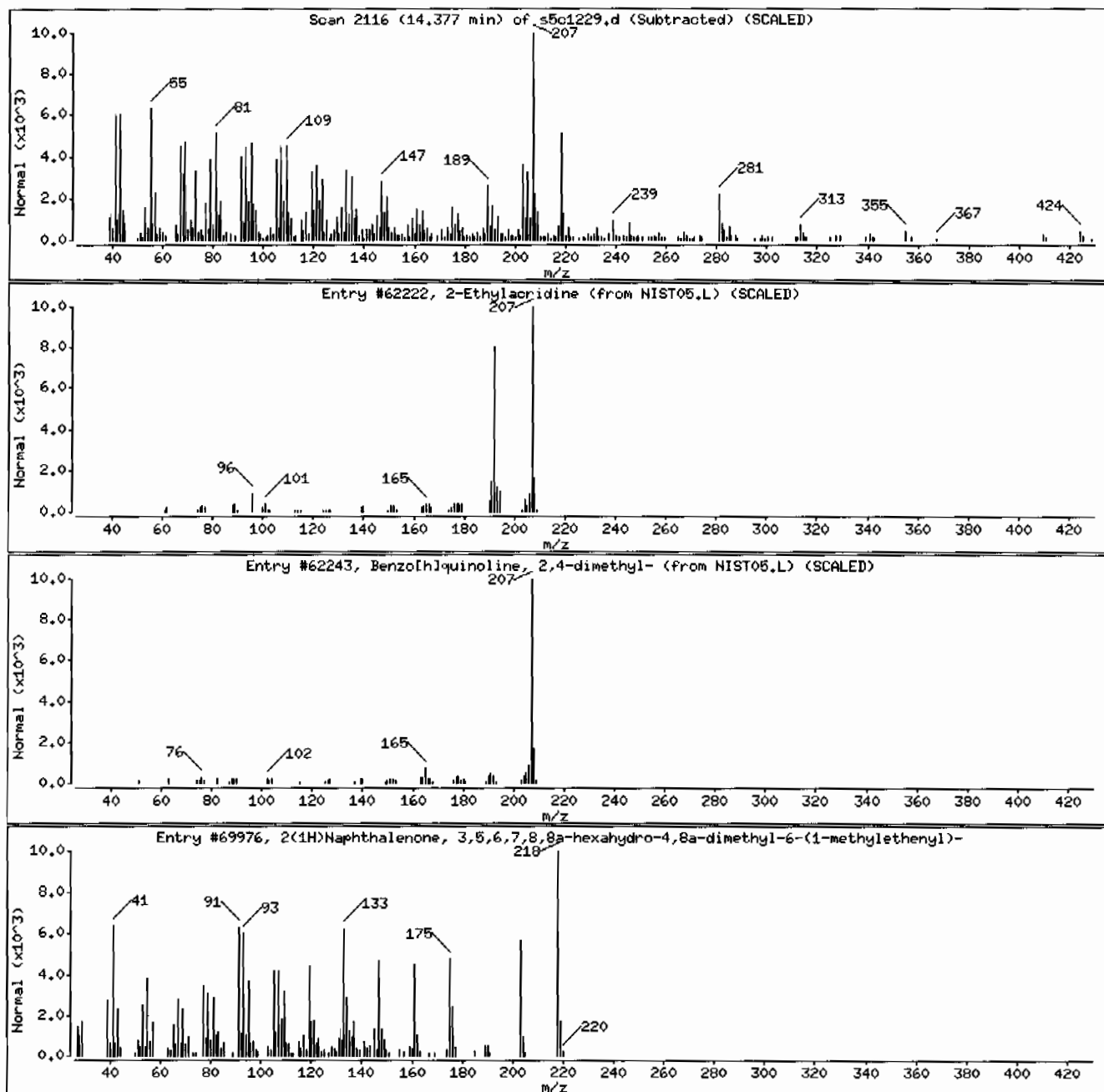
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	52	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	25	C15H13N	207
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	25	C15H22O	218



Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-Dichlorobenzidine	10	20	40	50	80	100	120	
1,4-Dioxane	10	20	40	50	80	100	120	
Methyl methacrylate	10	20	40	50	80	100	120	
Ethyl methacrylate	10	20	40	50	80	100	120	
2-Picoline	10	20	40	50	80	100	120	
N-Nitrosomethylethylamine	10	20	40	50	80	100	120	
Methyl methanesulfonate	10	20	40	50	80	100	120	
N-Nitrosodiethylamine	10	20	40	50	80	100	120	
Ethyl methanesulfonate	10	20	40	50	80	100	120	
Pentachloroethane	10	20	40	50	80	100	120	
N-Nitrosopyrrolidine	10	20	40	50	80	100	120	
N-Nitrosomorpholine	10	20	40	50	80	100	120	
o-Toluidine	10	20	40	50	80	100	120	
N-Nitrosopiperidine	10	20	40	50	80	100	120	
a,a-Dimethylphenethylamine	10	20	40	50	80	100	120	
2,6-Dichlorophenol	10	20	40	50	80	100	120	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene	10	20	40	50	80	100	120	
p-Phenylenediamine	10	20	40	50	80	100	120	
N-Nitrosodi-n-butylamine	10	20	40	50	80	100	120	
Safrole	10	20	40	50	80	100	120	
1,2,4,5-Tetrachlorobenzene	10	20	40	50	80	100	120	
Isosafrole	10	20	40	50	80	100	120	
1,4-Naphthoquinone	10	20	40	50	80	100	120	
Pentachlorobenzene	10	20	40	50	80	100	120	
1-Naphthylamine	10	20	40	50	80	100	120	
2-Naphthylamine	10	20	40	50	80	100	120	
5-Nitro-o-toluidine	10	20	40	50	80	100	120	
1,3,5-Trinitrobenzene	10	20	40	50	80	100	120	
Phenacetin	10	20	40	50	80	100	120	
Diallate	10	20	40	50	80	100	120	
cis-Diallate	1.5	3	6	7.5	12	15	18	
trans-Diallate	8.5	17	34	42	68	85	102	
4-Aminobiphenyl	10	20	40	50	80	100	120	

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
----------------------------	--	----	----	----	----	----	-----	-----

SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(j)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.

Indicates the calibration verification concentration level used

* Usual calibration levels using SCAN methodology

** This analyte included in this level at special client request.

(0210/Full list)

Report Date: 09-Mar-2010 10:03

Calibration History

Method : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
Start Cal Date: 17-FEB-2010 19:16
End Cal Date : 02-MAR-2010 14:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
18-FEB-2010 09:42	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1729.d
Cal Level: 2 , Cal Amount: 10.00000		
02-MAR-2010 11:50	BJCO	/chem/MSD5.i/s030210.b/s5c0203.d
18-FEB-2010 17:05	hex	/chem/MSD5.i/s021710.b/s5b1746.d
18-FEB-2010 14:22	pest	/chem/MSD5.i/s021710.b/s5b1739.d
18-FEB-2010 10:10	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1730.d
17-FEB-2010 22:47	nev	/chem/MSD5.i/s021710.b/s5b1720.d
17-FEB-2010 19:16	ap12	/chem/MSD5.i/s021710.b/s5b1711.d
Cal Level: 3 , Cal Amount: 20.00000		
02-MAR-2010 12:19	BJCO	/chem/MSD5.i/s030210.b/s5c0204.d
18-FEB-2010 17:28	hex	/chem/MSD5.i/s021710.b/s5b1747.d
18-FEB-2010 14:45	pest	/chem/MSD5.i/s021710.b/s5b1740.d
18-FEB-2010 10:39	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1731.d
17-FEB-2010 23:10	nev	/chem/MSD5.i/s021710.b/s5b1721.d
17-FEB-2010 19:38	ap12	/chem/MSD5.i/s021710.b/s5b1712.d
Cal Level: 4 , Cal Amount: 40.00000		
02-MAR-2010 12:48	BJCO	/chem/MSD5.i/s030210.b/s5c0205.d
18-FEB-2010 17:51	hex	/chem/MSD5.i/s021710.b/s5b1748.d
18-FEB-2010 15:08	pest	/chem/MSD5.i/s021710.b/s5b1741.d
18-FEB-2010 11:08	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1732.d
17-FEB-2010 23:33	nev	/chem/MSD5.i/s021710.b/s5b1722.d
17-FEB-2010 20:01	ap12	/chem/MSD5.i/s021710.b/s5b1713.d
Cal Level: 5 , Cal Amount: 50.00000		
02-MAR-2010 13:16	BJCO	/chem/MSD5.i/s030210.b/s5c0206.d
18-FEB-2010 18:14	hex	/chem/MSD5.i/s021710.b/s5b1749.d
18-FEB-2010 15:32	pest	/chem/MSD5.i/s021710.b/s5b1742.d
18-FEB-2010 11:35	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1733.d
17-FEB-2010 23:55	nev	/chem/MSD5.i/s021710.b/s5b1723.d
17-FEB-2010 20:24	ap12	/chem/MSD5.i/s021710.b/s5b1714.d
Cal Level: 6 , Cal Amount: 80.00000		
02-MAR-2010 13:45	BJCO	/chem/MSD5.i/s030210.b/s5c0207.d
18-FEB-2010 18:38	hex	/chem/MSD5.i/s021710.b/s5b1750.d
18-FEB-2010 15:55	pest	/chem/MSD5.i/s021710.b/s5b1743.d
18-FEB-2010 12:04	MEGAIIICARE	/chem/MSD5.i/s021710.b/s5b1734.d
18-FEB-2010 00:18	nev	/chem/MSD5.i/s021710.b/s5b1724.d
17-FEB-2010 20:47	ap12	/chem/MSD5.i/s021710.b/s5b1715.d

Cal Level: 7 , Cal Amount: 100.00000			
02-MAR-2010 14:14	BJCO	/chem/MSD5.i/s030210.b/s5c0208.d	
18-FEB-2010 19:01	hex	/chem/MSD5.i/s021710.b/s5b1751.d	
18-FEB-2010 16:18	pest	/chem/MSD5.i/s021710.b/s5b1744.d	
18-FEB-2010 12:32	MEGAIICARE	/chem/MSD5.i/s021710.b/s5b1735.d	
18-FEB-2010 00:41	nev	/chem/MSD5.i/s021710.b/s5b1725.d	
17-FEB-2010 21:10	ap12	/chem/MSD5.i/s021710.b/s5b1716.d	

Cal Level: 8 , Cal Amount: 120.00000			
02-MAR-2010 14:42	BJCO	/chem/MSD5.i/s030210.b/s5c0209.d	
18-FEB-2010 16:41	pest	/chem/MSD5.i/s021710.b/s5b1745.d	
18-FEB-2010 13:01	MEGAIICARE	/chem/MSD5.i/s021710.b/s5b1736.d	
18-FEB-2010 01:04	nev	/chem/MSD5.i/s021710.b/s5b1726.d	
17-FEB-2010 21:33	ap12	/chem/MSD5.i/s021710.b/s5b1717.d	

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0			
09-MAR-2010 09:41	MEGAIICARE	/chem/MSD5.i/s030910.b/s5c0904.d	

Ccal Level: 4 , Ccal Amount: 40.0			
09-MAR-2010 07:58	MEGAIICARE	/chem/MSD5.i/s030910.b/s5c0902.d	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Calibration File Names:

Level 1: /chem/MSD5.i/s021710.b/s5b1729.d
 Level 2: /chem/MSD5.i/s030210.b/s5c0203.d
 Level 3: /chem/MSD5.i/s030210.b/s5c0204.d
 Level 4: /chem/MSD5.i/s030210.b/s5c0205.d
 Level 5: /chem/MSD5.i/s030210.b/s5c0206.d
 Level 6: /chem/MSD5.i/s030210.b/s5c0207.d
 Level 7: /chem/MSD5.i/s030210.b/s5c0208.d
 Level 8: /chem/MSD5.i/s030210.b/s5c0209.d

Compound	1	10	20	40	50	80	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	b	m1	m2
1 N-Methyl-N-nitrosomethylamine	++++ 0.56244	0.59945 0.56241	0.61836	0.62622	0.59239	0.58779		0.59272	4.18088
2 Pyridine	++++ 0.94371	0.97900 0.97066	0.99919	1.00952	0.97693	0.97715		0.97945	2.14999
4 Aniline	++++ 0.49739	0.56051 0.49455	0.56662	0.54511	0.52141	0.51233		0.52827	5.56458
209 Benzaldehyde	++++ 0.66102	0.90936 0.64279	0.88744	0.79590	0.79839	0.73229		0.77531	13.31818
6 Phenol	++++ 1.09598	1.29344 1.08137	1.31938	1.25020	1.20884	1.15023		1.19992	7.82898

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
	0.98957	0.93125	0.96558	0.92563	0.87779	0.82397					
	0.77969	0.76010					AVRG		0.88170		9.73737
8 2-Chlorophenol	++++	1.09193	1.11961	1.39723	1.05357	1.02645					
	0.98738	0.98406					AVRG		1.05146		5.15906
203 n-Decane	++++	1.58515	1.51386	1.36367	1.25989	1.11391					
	++++						AVRG		1.36730		13.91032
9 1,3-Dichlorobenzene	++++	1.28299	1.28392	1.23427	1.18282	1.11711					
	1.05710	1.04657					AVRG		1.17211		8.58735
11 1,4-Dichlorobenzene	++++	1.26606	1.25547	1.21887	1.15347	1.09402					
	1.03612	1.02524					AVRG		1.14989		8.76979
12 Benzyl alcohol	++++	0.60872	0.68479	0.70465	0.67931	0.67333					
	0.65001	0.65345					AVRG		0.66489		4.66173
13 1,2-Dichlorobenzene	++++	1.18253	1.17614	1.08894	1.02410	0.94823					
	0.88992	0.86722					AVRG		1.02530		12.64047
14 bis(2-Chloroisopropyl) ether	++++	2.10319	2.07736	1.94656	1.83034	1.67304					
	1.56634	1.51052					AVRG		1.81534		13.19242
15 o-Cresol	++++	0.85334	0.84015	0.80044	0.75785	0.67928					
	0.63969	0.63281					AVRG		0.74336		12.52414

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
16 Acetophenone	++++ 1.02277	1.22361 1.00529	1.21775	1.15182	1.13380	1.06449	AVRG		1.11708		7.93364
17 N-Nitrosodipropylamine	0.64681 0.59175	0.66596 0.58007	0.68351	0.68572	0.63714	0.62720	AVRG		0.63977		6.13804
18 m,p-Cresols	++++ 1.03631	1.06638 1.04387	1.13041	1.12762	1.07581	1.07106	AVRG		1.07878		3.44666
19 Hexachloroethane	++++ 0.44100	0.51307 0.43691	0.52517	0.49977	0.48303	0.46443	AVRG		0.48048		7.18566
21 Nitrobenzene	++++ 0.24759	0.30969 0.23610	0.31291	0.29029	0.27691	0.26247	AVRG		0.27657		10.72895
22 Isophorone	++++ 0.48199	0.60897 0.47508	0.59692	0.55644	0.52883	0.50947	AVRG		0.53681		9.86673
23 2-Nitrophenol	++++ 0.12219	0.14882 0.11649	0.15959	0.14317	0.13722	0.13174	AVRG		0.13846		12.82860
24 2,4-Dimethylphenol	++++ 0.21155	0.30140 0.20374	0.28426	0.26340	0.24585	0.22745	AVRG		0.24823		14.81647
25 bis(2-Chloroethoxy)methane	++++ 0.27114	0.38101 0.26203	0.36874	0.33526	0.31553	0.28712	AVRG		0.31726		14.74275

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
26 2,4-Dichlorophenol	++++ 0.20243	0.23134 0.19931	0.24292	0.23142	0.22207	0.21443	AVRG		0.22056		7.29649
27 Benzoic acid	++++ 561491	++++ 665375	57100	189937	263000	465509	LLINR	0.22356	0.16145		0.99749
28 1,2,4-Trichlorobenzene	++++ 0.23122	0.31533 0.22323	0.30807	0.28116	0.26808	0.24718	AVRG		0.26776		13.47392
30 Naphthalene	+.03974 ++++	0.93353 ++++	0.90657	0.80747	0.76164	++++	AVRG		0.88979		12.29606
204 alpha-Terpineol	++++ ++++	0.27393 ++++	0.27282	0.23711	0.22436	0.20208	AVRG		0.24206		12.89632
31 4-Chloroaniline	++++ 0.34065	0.41366 0.32977	0.39788	0.40075	0.39557	0.36352	AVRG		0.37597		8.51097
189 Caprolactam	++++ 0.08422	0.08914 0.08577	0.09307	0.09020	0.09302	0.08829	AVRG		0.08910		3.77568
32 Hexachlorobutadiene	++++ 0.14217	0.17587 0.13711	0.17867	0.16753	0.15901	0.15057	AVRG		0.15870		10.21703
33 4-Chloro-3-methylphenol	++++ 0.20219	0.22864 0.19639	0.24218	0.23654	0.22587	0.21439	AVRG		0.22089		7.78780

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
34 2-Methylnaphthalene	0.64179 0.43365 ++++	0.60265 ++++	0.59281	0.53488	0.50844	0.46218	AVRG		0.53949		14.24998
35 1-Methylnaphthalene	0.64642 ++++	0.59012 ++++	0.58094	0.51918	0.49726	0.44454	AVRG		0.54641		13.35847
36 Hexachlorocyclopentadiene	0.22271 0.22750 0.20192	0.22750 0.20192	0.24706	0.25523	0.24198	0.23549	AVRG		0.23313		7.59472
208 1,1'-Biphenyl	0.96367 1.29150 0.92841	1.29150 0.92841	1.25365	1.17846	1.14624	1.04088	AVRG		1.11469		12.61216
205 2,3-Dichloroaniline	0.43848 0.42115	0.56357 0.42115	0.56788	0.52893	0.50212	0.46383	AVRG		0.49799		11.81508
37 2,4,6-Trichlorophenol	0.24611 0.26372 0.24339	0.26372 0.24339	0.28273	0.28657	0.27825	0.25927	AVRG		0.26572		6.53598
38 2,4,5-Trichlorophenol	0.29583 1.10695 0.76959	0.26856 1.03123 0.75032	0.32638	0.33637	0.32336	0.30373	AVRG		0.30847		7.37804
40 2-Chloronaphthalene	0.27237 0.28765 0.26549	0.28765 0.26549	0.30422	0.30163	0.28863	0.28057	AVRG		0.92129		14.36453
42 o-Nitroaniline							AVRG		0.28579		4.99263

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
100	100	120									
Level 7	Level 8										
52 4-Nitrophenol	++++ 328243	17961 381256	51634 124782	160536 269176			LINEAR	0.10119	0.06272		0.99946
53 Fluorene	1.20287 0.88125	1.17429 0.85129	1.17310 1.07446	1.02426 0.92906			AVRG		0.03882		13.45814
54 4-Chlorophenylphenylether	++++ 0.47237	0.61080 0.45994	0.60349 0.56200	0.53199 0.49869			AVRG		0.53418		11.34718
55 2-Methyl-4,6-dinitrophenol	++++ 307034	8972 365964	31615 96759	13144 243993			LINEAR	0.24749	0.09188		0.99845
56 p-Nitroaniline	++++ 0.15153	0.17989 0.14633	0.15092 0.14228	0.13371 0.15595			AVRG		0.15152		9.54260
133 Diphenylamine	++++ 0.42025	0.53894 0.41771	0.53217 0.49646	0.47285 0.44949			AVRG		0.47541		10.42970
58 1,2-Diphenylhydrazine	++++ 0.49024	0.66896 0.47712	0.66488 0.61335	0.57709 0.53565			AVRG		0.57531		13.58954
59 Tributylphosphate	++++ 0.95326	1.33679 0.89335	1.23118 0.9851	1.11572 0.18359			AVRG		1.09618		14.26600
61 4-Bromophenylphenylether	++++ 0.17296	0.20707 0.17052	0.19851 0.19084				AVRG		0.19084		8.29836

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

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									
63 Hexachlorobenzene	++++	0.22071	0.21984	0.20683	0.19854	0.19192	AVRG		0.19982		8.42486
207 Atrazine	++++	0.04350	0.04346	0.03555	0.02894	0.02158	AVRG		0.03043		36.05585
	0.02535	0.01465									
65 Pentachlorophenol	++++	18593	55668	136644	183861	304627	LINR	0.10812	0.10397		0.99822
	361316	430620									
206 n-Octadecane	++++	0.48133	0.46114	0.38787	0.36659	0.30912	AVRG		0.36396		23.59467
	0.27775	0.26392									
68 Phenanthrene	1.03413	0.93921	0.94077	0.86339	0.82340	0.77005	AVRG		0.84676		14.21685
	0.70827	0.69488									
69 Anthracene	0.98975	0.95637	0.96274	0.87867	0.84896	0.79020	AVRG		0.85661		12.88250
	0.72179	0.70439									
72 Di-n-butylphthalate	++++	1.07824	1.07896	0.96891	0.94016	0.86100	AVRG		0.92502		13.90864
	0.78495	0.76294									
76 Fluoranthene	0.96613	0.99565	0.98775	0.89525	0.88576	0.82605	AVRG		0.88331		11.06237
	0.76077	0.74912									
77 Benzidine	++++	0.16496	0.17612	0.17533	0.18316	0.20399	AVRG		0.18071		8.04733
	++++	++++									

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method File : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.22261	1.20757	1.22550	1.18785	1.07700	1.02203	AVRG		1.10528		10.90708
	0.95910	0.94056									
85 Butylbenzylphthalate	++++	0.46977	0.48666	0.48219	0.46135	0.43860	AVRG		0.45437		6.11141
	0.41592	0.42613									
89 Benzo(a)anthracene	1.01646	0.92461	0.93865	0.89978	0.87786	0.87368	AVRG		0.89454		7.54578
	0.80944	0.81582									
90 3,3'-Dichlorobenzidine	++++	0.25382	0.28702	0.27615	0.28032	0.27170	AVRG		0.27254		3.83263
	0.26982	0.26893									
92 Chrysene	0.93759	0.90738	0.90956	0.84654	0.82964	0.77165	AVRG		0.83356		9.75576
	0.73703	0.72911									
93 bis(2-Ethylhexyl)phthalate	0.44821	0.60552	0.62245	0.58201	0.57638	0.52529	AVRG		0.54345		11.43583
	0.48848	0.49930									
94 Di-n-octylphthalate	++++	1.07929	1.17121	1.15789	1.09227	1.04637	AVRG		1.09003		5.28671
	1.00988	1.07332									
95 Benzo(b)fluoranthene	0.88246	0.97102	0.98554	0.97118	0.96446	0.92774	AVRG		0.95543		3.77695
	0.94720	0.99386									
96 Benzo(k)fluoranthene	0.84893	0.98422	1.03228	0.98408	0.91666	0.94056	AVRG		0.93017		7.15968
	0.86684	0.86779									

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
97 Benzo(a)pyrene	Level 1 0.66013 0.80260	Level 2 0.80988 0.80869	Level 3 0.85077	Level 4 0.83719	Level 5 0.83001	Level 6 0.82192	AVRG		0.80265		7.44986
99 Indeno(1,2,3-cd)pyrene	0.52612 0.66281	0.65869 0.67741	0.67275	0.65863	0.73052	0.70820	AVRG		0.66189		9.14897
100 Dibenzo(a,h)anthracene	0.39370 0.53204	0.52424 0.54374	0.52777	0.52429	0.58896	0.56028	AVRG		0.52438		10.92705
101 Benzo(ghi)perylene	0.49104 0.53956	0.55527 0.54719	0.56802	0.54248	0.60883	0.57208	AVRG		0.55306		6.06501
102 1,4-Dioxane	++++ 0.31782	0.36553 0.31430	0.35909	0.35098	0.34610	0.33462	AVRG		0.34121		5.79435
103 Methyl methacrylate	++++ 0.17912	0.19555 0.17661	0.19892	0.17605	0.17439	0.18804	AVRG		0.18413		5.46065
104 Ethyl methacrylate	++++ 0.69099	0.81177 0.68370	0.80028	0.76060	0.75276	0.73096	AVRG		0.74729		6.61292
105 2-Picoline	++++ 1.06218	1.24054 1.04612	1.24905	1.19804	1.17640	1.13348	AVRG		1.15797		6.99292
106 N-Nitrosomethylethylamine	++++ 0.43393	0.43987 0.42388	0.43780	0.43606	0.43908	0.44516	AVRG		0.43654		1.51027

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	i	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
		Level 7	Level 8									
107 Methyl methanesulfonate	++++	0.52038	0.50403	0.48841	0.47463	0.47366		AVRG		0.47991		5.54995
	0.44840	0.44983										
108 N-Nitrosodiethylamine	++++	0.44977	0.45881	0.44946	0.44859	0.44083		AVRG		0.44277		2.96107
	0.43216	0.41974										
109 Ethyl Methanesulfonate	++++	0.63224	0.64143	0.62102	0.61469	0.60862		AVRG		0.60959		4.31824
	0.57777	0.57138										
110 Pentachloroethane	++++	0.33632	0.32705	0.33423	0.33227	0.32232		AVRG		0.32418		3.59728
	0.30920	0.30787										
111 N-Nitrosopyrrolidine	++++	0.43551	0.44313	0.45719	0.45762	0.44664		AVRG		0.43870		4.11968
	0.42182	0.40900										
113 N-Nitrosomorpholine	++++	0.55679	0.56256	0.54759	0.54561	0.52771		AVRG		0.53553		4.60304
	0.51411	0.49435										
114 o-Toluidine	++++	1.69503	1.67134	1.59776	1.55747	1.48378		AVRG		1.52862		9.30854
	1.35677	1.33818										
115 N-Nitrosopiperidine	++++	0.14453	0.14352	0.14222	0.14293	0.13673		AVRG		0.13910		3.97348
	0.13202	0.13174										
116 a,a-Dimethylphenethylamine	++++	0.71049	0.81047	0.82938	0.82627	0.79285		AVRG		0.79352		5.02597
	0.79192	0.79322										

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
117 Triethylphosphorothioate	++++ 0.12884	0.15813 0.12334	0.15247 0.14558	0.14130 0.13615	AVRG	0.14083	8.83448				
118 2,6-Dichlorophenol	++++ 0.20939	0.21455 0.20733	0.22501 0.22246	0.22523	AVRG	0.21500	3.38172				
119 Hexachloropropene	++++ 0.11417	0.09504 0.1181	0.09956	0.10386	0.11471	0.11290	7.36573				
120 p-Phenylenediamine	++++ 0.23039	0.16374 0.12012	0.22021	0.22491	0.17794	0.14134					
121 N-Nitrosodi-n-butylamine	++++ 0.16235	0.23003 0.15461	0.19478	0.18166	0.17874	0.16401					
122 Safrole	++++ 0.18402	0.21580 0.17893	0.21663	0.20415	0.20712	0.19160					
123 1,2,4,5-Tetrachlorobenzene	++++ 0.39066	0.49610 0.37513	0.48315	0.45408	0.44668	0.41521					
124 Isosafrole	++++ 0.31682	0.35343 0.30969	0.36103	0.34698	0.34332	0.32615					
125 1,4-Naphthoquinone	++++ ++++	0.38638 ++++	0.38970	0.36105	0.32872	0.27894					

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
126 m-Dinitrobenzene	++++ 0.17686	0.16760 0.17287	0.18483	0.18830	0.18573	0.18221	AVRG		0.17977		4.21235
127 Pentachlorobenzene	++++ 0.38007	0.46099 0.37580	0.46215	0.43641	0.43246	0.39846	AVRG		0.42091		8.61405
128 1-Naphthylamine	++++ 0.71351	0.84516 0.69205	0.86986	0.81331	0.77671	0.73145	AVRG		0.77744		8.77218
129 2-Naphthylamine	++++ 0.73612	0.86051 0.69803	0.88265	0.72624	0.70743	0.70600	AVRG		0.75956		10.25115
130 2,3,4,6-Tetrachlorophenol	++++ 0.27254	0.24741 0.26886	0.28330	0.29176	0.28793	0.27969	AVRG		0.27593		5.41217
131 5-Nitro-o-toluidine	++++ 0.26847	0.25522 0.26816	0.27723	0.28053	0.28444	0.27446	AVRG		0.27264		3.56550
132 Thionazin	++++ 0.13961	0.16876 0.13682	0.16898	0.15754	0.15847	0.14934	AVRG		0.15422		8.36404
134 Sulfotepp	++++ 0.09343	0.11187 0.09289	0.11238	0.10399	0.10327	0.09607	AVRG		0.10199		8.02880
135 Phorate	++++ 0.31172	0.38630 0.30457	0.39832	0.35195	0.35237	0.32010	AVRG		0.34648		10.53800

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	++++ 420057	27879 511784	62321	138005	184668	317537	LINR	0.14691	0.12002		0.99898
137 Phenacetin	++++ 0.25084	0.25740 0.24923	0.26288	0.25633	0.25808	0.25389	AVRG		0.25552		1.81503
138 Diallyl	++++ 0.18406	0.24268 0.18141	0.23118	0.21289	0.21131	0.19400	AVRG		0.20822		1.17940
139 Dimethoate	++++ 0.20730	0.18753 0.20845	0.21705	0.21365	0.21474	0.21574	AVRG		0.20921		4.89230
140 4-Aminobiphenyl	++++ 0.42866	0.42202 0.34240	0.39708	0.46549	0.47014	0.40070	AVRG		0.41807		10.49744
141 Pentachloronitrobenzene	++++ 0.06161	0.07586 0.06082	0.07497	0.07407	0.07114	0.06805	AVRG		0.06950		8.97524
142 Pronamide	++++ 0.20323	0.28377 0.19611	0.27719	0.25332	0.24975	0.22233	AVRG		0.24082		14.34189
143 Dinoseb	++++ 441014	13292 523880	48187	140514	193666	350383	LINR	0.23301	0.13105		0.99890
144 Disulfoton	++++ 0.24006	0.29329 0.23567	0.30178	0.27318	0.27189	0.24759	AVRG		0.26621		9.75078

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
145 Methyl parathion	++++ 0.18344	0.15400 0.17997	0.17883	0.18251	0.18307	0.19000	AVRG		0.17883		6.43859
146 4-Nitroquinoline-1-oxide	++++ 0.01041	0.01359 0.01009	0.01494	0.01260	0.01210	0.01128	AVRG		0.01215		14.29948
147 Methapyrilene	++++ 0.29152	0.39440 0.28724	0.39995	0.35966	0.34538	0.32125	AVRG		0.34277		13.26316
148 Isodrin	++++ 0.08722	0.11464 0.08703	0.11378	0.10613	0.10368	0.09333	AVRG		0.10083		11.64190
149 Atamite	++++ 0.04502	0.05187 0.04554	0.05554	0.05498	0.05295	0.04815	AVRG		0.05058		8.59495
150 Kepone	++++ 0.07029	0.08219 0.07540	0.09254	0.08033	0.07563	0.07134	AVRG		0.07824		9.76196
151 p-(Dimethylamino)azobenzene	++++ 0.23504	0.26484 0.22478	0.27157	0.25681	0.25572	0.24680	AVRG		0.25079		6.57202
152 Chlorobenzilate	++++ 0.25537	0.30598 0.24823	0.29627	0.28655	0.28692	0.26455	AVRG		0.27769		7.84563
153 3,3'-Dimethylbenzidine	++++ 0.40575	0.38067 0.39091	0.41680	0.41737	0.42875	0.41190	AVRG		0.40745		4.07344

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
154 Famphur	++++ 0.34375	0.31901 0.35579	0.36382	0.35627	0.36482	0.34603	AVRG		0.34993		4.51657
155 2-Acetylamino fluorene	++++ 0.31373	0.24317 0.30564	0.29167	0.30358	0.31916	0.31429	AVRG		0.29875		8.7418C
157 7,12Dimethylbenz(a)anthracene	++++ 0.41304	0.46101 0.40843	0.45942	0.45051	0.45543	0.42921	AVRG		0.43958		5.09169
158 3-Methylcholanthrene	++++ 0.35657	0.35627 0.36442	0.37957	0.37724	0.38134	0.36039	AVRG		0.36797		3.01003
166 Phthalic anhydride	++++ 0.11936	0.07744 0.12164	0.10565	0.11583	0.12297	0.12142	AVRG		0.11204		14.59819
173 Carbazole	0.74378	0.72321	0.61833	0.56548	0.55311	0.59106	AVRG		0.61324		12.66853
174 Hexachlorophene	++++ 2738062	360498	1297208	++++	1720101	2018387	LINR	4.79300	0.04531		0.99192
179 Dibenzo(a,e)pyrene	++++ 0.20548	0.17278 0.22987	0.17993	0.18984	0.25729	0.22875	AVRG		0.20913		14.72943
185 (2,3-Dibromopropyl)phosphate	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

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					
	Level 7	Level 8									
184 p-Benzoquinone	++++ 291170	18182 360514	47369	112994	138050	237801	LINE	0.16023	0.33794		0.99690
191 Parathion	++++ 3.06648	0.05709 0.06504	0.06758	0.06657	0.06638	0.06834	AVRG		0.06535		5.79671
192 Methoxychlor	++++ 0.49362	0.47873 0.49379	0.53078	0.54724	0.54387	0.52822	AVRG		0.51661		5.30166
210 m-Toluidine	++++ 1.39916	1.28965 1.47314	1.43316	1.49604	1.47062	1.43667	AVRG		1.42835		4.82997
211 p-Toluidine	++++ 1.12061	1.24139 1.08014	1.11105	1.17949	1.13067	1.18236	AVRG		1.14939		4.75218
212 Cis Diallate	++++ 0.23098	0.25250 0.23432	0.25488	0.25041	0.24739	0.24019	AVRG		0.24438		3.80915
213 Trans Diallate	++++ 0.21654	0.28550 0.21342	0.27198	0.25046	0.24860	0.22824	AVRG		0.24496		11.17940
214 1,4-Dinitrobenzene	++++ 0.17872	0.16298 0.17954	0.17846	0.18754	0.18271	0.18093	AVRG		0.17870		4.25552
215 2-Ethoxyethanol	++++ 0.62804	0.63687 0.63575	0.67943	0.67851	0.65745	0.65220	AVRG		0.65261		3.15836

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	SRSD or R^2
216 Methylenebis (2-chloroaniline)	++++ + + + +	0.08087 + + + +	0.06479	0.06607	0.07863	0.08978	AVRG		0.07603		13.87040
229 2,2'-Dichlorobenzil	++++ 0.54391	0.63671 0.53597	0.65119	0.62971	0.62092	0.57126	AVRG		0.59852		7.87986
230 4-Chlorothiobanisole	++++ 0.25284	0.29411 0.24000	0.28302	0.28596	0.28706	0.26130	AVRG		0.27204		7.55990
231 4-Chlorothiophenol	++++ 0.20521	0.14651 0.19840	0.18066	0.21093	0.21147	0.20592	AVRG		0.19416		12.10067
232 bis (p-Chlorophenyl) sulfone	++++ 0.32047	0.37480 0.31780	0.36710	0.35670	0.35813	0.33302	AVRG		0.34686		6.60237
233 bis (p-Chlorophenyl) disulfide	++++ 0.12850	0.12785 0.12980	0.12869	0.13235	0.13959	0.13091	AVRG		0.13110		3.09108
234 Diphenyl disulfide	++++ 0.20813	0.23999 0.20056	0.23106	0.22451	0.22878	0.21365	AVRG		0.22095		6.32587
235 Diphenyl sulfide	++++ 0.67656	0.84719 0.64652	0.81862	0.78561	0.76617	0.71309	AVRG		0.75054		9.90298
236 Phenyl sulfone	++++ 0.39106	0.45492 0.37513	0.43409	0.43022	0.42732	0.40418	AVRG		0.41670		6.64510

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
237 Hydroxymethyl phthalimide	++++ 0.16918	0.22503 0.18397	0.20336 0.19063	0.19442	0.16988	AVRG		0.19093			10.24085
238 Phthalic acid	++++ 540921	21882 594964	55283	157178	228085	378911	LINEAR	0.22443	0.16210		0.99130
239 Thiophenol	++++ 1.03411	0.88684 1.00510	1.01585	1.10562	1.10579	1.07600	AVRG		1.03276		7.38021
240 bis(Chloromethyl)ether	++++ 0.77450	0.88604 0.77223	0.86081	0.82935	0.84065	0.83220	AVRG		0.82797		5.07562
241 Octachlorostyrene	++++ 0.07071	0.08239 0.06666	0.07887	0.07610	0.07682	0.07255	AVRG		0.07487		7.06925
242 1-Hexanol	++++ 0.72849	0.82598 0.72514	0.82477	++++	++++	0.76714	AVRG		0.77430		6.38761
243 Quinoline	++++ 0.48750	0.55874 0.46613	0.57090	++++	++++	0.49453	AVRG		0.51556		8.99415
244 2,4-Toluene Dithiocyanate	++++ 210351	16043 229003	24181	++++	++++	157805	LINEAR	0.12062	0.11247		0.99784
245 5-Methylchrysene	++++ 0.48508	0.56483 0.47603	0.57397	++++	++++	0.50777	AVRG		0.52154		8.68872

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
246 1-Nitropyrene	++++ 612852	28885 676270	86519	++++	++++	416222	LINR	0.11556	0.19881		0.99932
247 Benzo(j)fluoranthene	++++ 0.80356	0.82001 0.77347	0.82464	++++	++++	0.81917	AVRG		0.80817		2.59397
248 Dibenzo(a,j)acridine	++++ 0.56369	0.58457 0.55669	0.63210	++++	++++	0.55845	AVRG		0.57910		5.46377
249 Dibenzo(a,h)acridine	++++ 0.52942	0.54819 0.52337	0.61240	++++	++++	0.52518	AVRG		0.54771		6.84337
250 7H-Dibenzo(c,g)carbazole	++++ 0.37356	0.35509 0.37554	0.42604	++++	++++	0.36354	AVRG		0.37875		7.30812
251 Dibenzo(a,l)pyrene	++++ 682134	78977 780308	81929	++++	++++	485577	LINR	-0.13397	0.24759		0.99733
252 Dibenzo(a,h)pyrene	++++ 0.24771	0.25585 0.26024	0.32029	++++	++++	0.24197	AVRG		0.26521		11.9173
253 Dibenzo(a,i)pyrene	++++ 0.15472	0.14360 0.16406	0.19016	++++	++++	0.14912	AVRG		0.16033		11.41912
255 Trichlorophenols	++++ 0.27097	0.28438 0.25598	0.30455	0.31147	0.30081	0.28150	AVRG		0.28709		6.89936

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
 End Cal Date : 02-MAR-2010 14:42
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
 Cal Date : 09-Mar-2010 10:02 rmb

Compound	1	10	20	40	50	80	Curve	b	Coeficients m1	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
IM 226 Tetrachlorophenols	++++	0.24741	0.28330	0.29176	0.28793	0.27969					
	0.27254	0.26886					AVRG		0.27593		5.41217
IM 227 Benzo(b,k)fluoranthene	0.86569	0.97762	1.00891	0.97763	0.94056	0.93415					
	0.90702	0.93083					AVRG		0.94280		4.78473
IM 228 TIO Sum Semivolatiles	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+00		0.000e+00
IS 3 2-Fluorophenol	++++	0.99086	1.05005	1.04535	0.99789	0.98800					
	0.95980	0.95981					AVRG		0.99882		3.65929
IS 5 Phenol-d5	++++	1.23180	1.30334	1.25825	1.19769	1.17114					
	1.12444	1.11677					AVRG		1.20049		5.74668
IS 187 2-Chlorophenol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+00		0.000e+00
IS 188 1,2-Dichlorobenzene-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+00		0.000e+00
IS 20 Nitrobenzene-d5	++++	0.33121	0.33833	0.31828	0.30072	0.28872					
	0.25789	0.24544					AVRG		0.29723		11.97530
IS 39 2-Fluorobiphenyl	++++	1.17478	1.15197	1.06610	1.00180	0.91744					
	0.85512	0.82626					AVRG		0.99907		13.91733

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 19:16
End Cal Date : 02-MAR-2010 14:42
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s030910.b/MSD5-M8270C-030210.m
Cal Date : 09-Mar-2010 10:02 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Coefficients b	m1	m2	%RSD or R^2
	100	120								
	Level 7	Level 8								
\$ 60 2,4,6-Tribromophenol	++++ 0.15387	0.12052 0.15366	0.14511	0.15820	0.15811	0.16220				
						AVRG		0.15024		9.42497
\$ 81 p-Terphenyl-d14	++++ 0.59225	0.72789 0.59600	0.73611	0.71572	0.66374	0.62587				
						AVRG		0.66537		9.33913

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/m.	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 17-FEB-2010 22:24
Lab File ID: s5b1719.d Init. Cal. Date(s): 17-FEB-2010 17-FEB-2010
Analysis Type: WATER Init. Cal. Times: 19:16 21:33
Lab Sample ID: WBN100120-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.77531	0.66610	0.66610	0.000	-14.08658	60.00000	Averaged
16 Acetophenone	1.11708	1.11375	1.11375	0.000	-0.29805	60.00000	Averaged
189 Caprolactam	0.08910	0.09340	0.09340	0.000	4.82821	60.00000	Averaged
208 1,1'-Biphenyl	1.11469	1.17331	1.17331	0.000	5.25881	60.00000	Averaged
207 Atrazine	0.03043	0.03788	0.03788	0.000	24.47374	60.00000	Averaged
77 Benzidine	0.18071	0.19088	0.19088	0.000	5.62492	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27254	0.27539	0.27539	0.000	1.04784	60.00000	Averaged
102 1,4-Dioxane	0.34121	0.41076	0.41076	0.000	20.38338	60.00000	Averaged
103 Methyl methacrylate	0.18410	0.20881	0.20881	0.000	13.42215	60.00000	Averaged
104 Ethyl methacrylate	0.74729	0.88722	0.88722	0.000	18.72391	60.00000	Averaged
105 2-Picoline	1.15797	1.13661	1.13661	0.000	-1.84480	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43654	0.43666	0.43666	0.000	0.02655	60.00000	Averaged
107 Methyl methanesulfonate	0.47991	0.51867	0.51867	0.000	8.07788	60.00000	Averaged
108 N-Nitrosodiethylamine	0.44277	0.43812	0.43812	0.000	-1.04951	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60959	0.73875	0.73875	0.000	21.18778	60.00000	Averaged
110 Pentachloroethane	0.32418	0.44058	0.44058	0.000	35.90579	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.43870	0.43367	0.43367	0.000	-1.14641	60.00000	Averaged
113 N-Nitrosomorpholine	0.53553	0.51538	0.51538	0.000	-3.76250	60.00000	Averaged
114 o-Toluidine	1.52862	1.55052	1.55052	0.000	1.43292	60.00000	Averaged
115 N-Nitrosopiperidine	0.13910	0.13842	0.13842	0.000	-0.48910	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.79352	0.79219	0.79219	0.000	-0.16671	60.00000	Averaged
118 2,6-Dichlorophenol	0.21700	0.22250	0.22250	0.000	2.53346	60.00000	Averaged
119 Hexachloropropene	0.10744	0.16005	0.16005	0.000	48.96804	60.00000	Averaged
120 p-Phenylenediamine	0.17838	0.22515	0.22515	0.000	26.22190	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.18088	0.17970	0.17970	0.000	-0.65201	60.00000	Averaged
122 Safrole	0.19975	0.23440	0.23440	0.000	17.34544	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.43728	0.48128	0.48128	0.000	10.06213	60.00000	Averaged
124 Isosafrole	0.33677	0.44883	0.44883	0.000	33.27155	60.00000	Averaged
125 1,4-Naphthoquinone	0.34896	0.35041	0.35041	0.000	0.41429	60.00000	Averaged
127 Pentachlorobenzene	0.42091	0.44333	0.44333	0.000	5.32754	60.00000	Averaged
128 1-Naphthylamine	0.77744	0.81643	0.81643	0.000	5.01632	60.00000	Averaged
129 2-Naphthylamine	0.75956	0.75452	0.75452	0.000	-0.66464	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27264	0.27934	0.27934	0.000	2.45687	60.00000	Averaged
136 1,3,5-Trinitrobenzene	47.69126	40.00000	0.12546	0.000	19.22815	60.00000	Linear
137 Phenacetin	0.25552	0.27015	0.27015	0.000	5.72528	60.00000	Averaged
138 Diallate	0.20822	0.19580	0.19580	0.000	-5.96255	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 17-FEB-2010 22:24
 Lab File ID: s5b1719.d Init. Cal. Date(s): 17-FEB-2010 17-FEB-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 21:33
 Lab Sample ID: WBN100120-08.1 Quant Type: ISTD
 Method: /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.24438	0.30304	0.30304	0.000	24.00201	60.00000	Averaged
213 Trans Diallate	0.24496	0.23036	0.23036	0.000	-5.96255	60.00000	Averaged
140 4-Aminobiphenyl	0.41807	0.48397	0.48397	0.000	15.76188	60.00000	Averaged
141 Pentachloronitrobenzene	0.06950	0.07449	0.07449	0.000	7.18207	60.00000	Averaged
142 Pronamide	0.24082	0.25964	0.25964	0.000	7.81540	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01215	0.01518	0.01518	0.000	24.94966	60.00000	Averaged
147 Methapyrilene	0.34277	0.38065	0.38065	0.000	11.05046	60.00000	Averaged
148 Isodrin	0.10083	0.09493	0.09493	0.000	-5.85371	60.00000	Averaged
149 Aramite	0.05058	0.04605	0.04605	0.000	-8.94696	60.00000	Averaged
150 Kepone	0.07824	0.06961	0.06961	0.000	-11.03453	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25079	0.26074	0.26074	0.000	3.96708	60.00000	Averaged
152 Chlorobenzilate	0.27769	0.28288	0.28288	0.000	1.86913	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.40745	0.41464	0.41464	0.000	1.76434	60.00000	Averaged
155 2-Acetylaminofluorene	0.29875	0.30382	0.30382	0.000	1.69797	60.00000	Averaged
157 7,12Dimethylbenz(a)anthracene	0.43958	0.42652	0.42652	0.000	-2.97148	60.00000	Averaged
158 3-Methylcholanthrene	0.36797	0.37662	0.37662	0.000	2.34966	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s021710.b/s5b1719.d
 Lab Smp Id: WBN100120-08.1 Client Smp ID: AP12ICV
 Inj Date : 17-FEB-2010 22:24
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100120-08.1|40 PPM|1|SVM|1|AP12ICV
 Misc Info : |MSD8270|WBN100205-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m
 Meth Date : 18-Feb-2010 09:04 rmb Quant Type: ISTD
 Cal Date : 17-FEB-2010 21:33 Cal File: s5b1717.d
 Als bottle: 19 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ap12.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.972	3.972	(1.000)	389120	40.0000	
* 29 Naphthalene-d8	136	4.837	4.837	(1.000)	1392166	40.0000	
* 46 Acenaphthene-d10	164	6.095	6.095	(1.000)	829840	40.0000	
* 67 Phenanthrene-d10	188	7.278	7.278	(1.000)	1476420	40.0000	
* 91 Chrysene-d12	240	9.695	9.695	(1.000)	1391152	40.0000	
* 98 Perylene-d12	264	11.413	11.413	(1.000)	1122280	40.0000	
209 Benzaldehyde	77	3.696	3.696	(0.930)	259192	40.0000	34.4
16 Acetophenone	105	4.219	4.219	(1.062)	433381	40.0000	39.9
189 Caprolactam	113	5.113	5.113	(1.057)	130031	40.0000	41.9 (H)
208 1,1'-Biphenyl	154	5.660	5.660	(0.929)	973656	40.0000	42.1
207 Atrazine	173	6.972	6.972	(0.958)	55926	40.0000	49.8
77 Benzidine	184	8.425	8.425	(0.869)	265539	40.0000	42.2
90 3,3'-Dichlorobenzidine	252	9.625	9.625	(0.993)	383112	40.0000	40.4

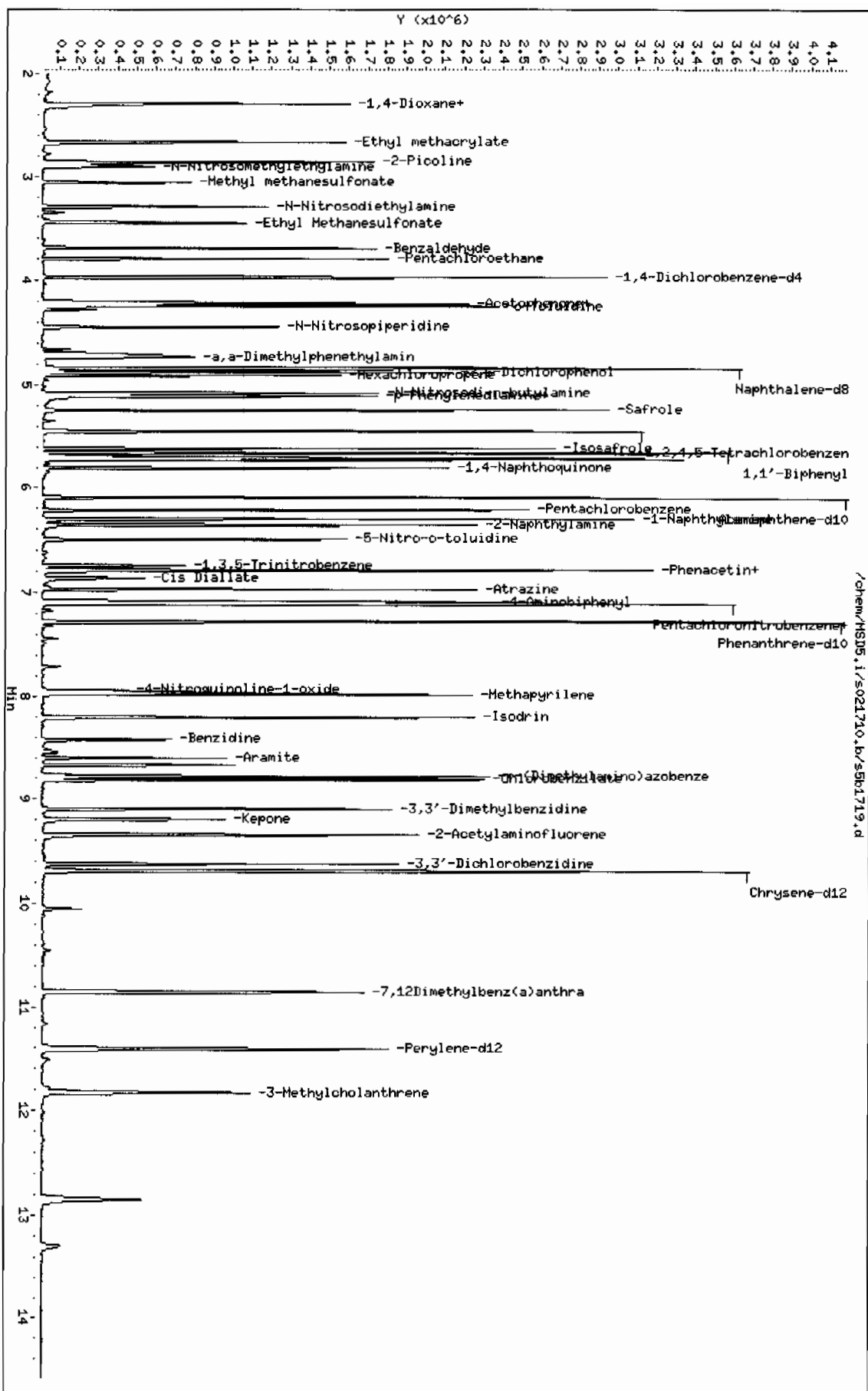
Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)
=====	=====	=====	=====	=====	=====	=====	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.296	2.296	(0.578)	159834	40.0000	48.2
103 Methyl methacrylate	100	2.290	2.290	(0.576)	81251	40.0000	45.4
104 Ethyl methacrylate	69	2.666	2.666	(0.671)	345234	40.0000	47.5
105 2-Picoline	93	2.860	2.860	(0.720)	442278	40.0000	39.3
106 N-Nitrosomethylethylamine	88	2.907	2.907	(0.732)	169912	40.0000	40.0
107 Methyl methanesulfonate	80	3.060	3.060	(0.770)	201826	40.0000	43.2
108 N-Nitrosodiethylamine	102	3.296	3.296	(0.830)	170481	40.0000	39.6
109 Ethyl Methanesulfonate	79	3.454	3.454	(0.870)	287463	40.0000	48.5
110 Pentachloroethane	167	3.796	3.796	(0.956)	171438	40.0000	54.4
111 N-Nitrosopyrrolidine	100	4.207	4.207	(1.059)	168751	40.0000	39.5(Q)
113 N-Nitrosomorpholine	56	4.225	4.225	(1.064)	200545	40.0000	38.5
114 o-Toluidine	106	4.248	4.248	(1.070)	603339	40.0000	40.6
115 N-Nitrosopiperidine	114	4.448	4.448	(0.920)	192701	40.0000	39.8
116 a,a-Dimethylphenethylamine	58	4.731	4.731	(0.978)	1102864	40.0000	39.9(H)
118 2,6-Dichlorophenol	162	4.878	4.878	(1.008)	309750	40.0000	41.0
119 Hexachloropropene	213	4.913	4.913	(1.016)	222814	40.0000	59.6
120 p-Phenylenediamine	108	5.113	5.113	(1.057)	313450	40.0000	50.5
121 N-Nitrosodi-n-butylamine	84	5.084	5.084	(1.051)	250176	40.0000	39.7(Q)
122 Safrole	162	5.248	5.248	(1.085)	326320	40.0000	46.9
123 1,2,4,5-Tetrachlorobenzene	216	5.454	5.454	(0.895)	399389	40.0000	44.0
124 Isosafrole	162	5.619	5.619	(0.922)	372453	40.0000	53.3
125 1,4-Naphthoquinone	158	5.807	5.807	(0.953)	290781	40.0000	40.2
127 Pentachlorobenzene	250	6.213	6.213	(1.019)	367894	40.0000	42.1
128 1-Naphthylamine	143	6.301	6.301	(1.034)	677510	40.0000	42.0
129 2-Naphthylamine	143	6.360	6.360	(1.043)	626128	40.0000	39.7
131 5-Nitro-o-toluidine	152	6.495	6.495	(1.066)	231809	40.0000	41.0
136 1,3,5-Trinitrobenzene	75	6.742	6.742	(0.926)	185235	40.0000	47.7
137 Phenacetin	108	6.795	6.795	(0.934)	398856	40.0000	42.3(Q)
138 Diallate	86	6.784	6.784	(0.932)	289086	40.0000	37.6
212 Cis Diallate	86	6.860	6.860	(0.943)	67112	6.00000	7.4(a)
213 Trans Diallate	86	6.784	6.784	(0.932)	289086	34.0000	32.0
140 4-Aminobiphenyl	169	7.089	7.089	(0.974)	714536	40.0000	46.3
141 Pentachloronitrobenzene	237	7.113	7.113	(0.977)	109985	40.0000	42.9(Q)
142 Pronamide	173	7.101	7.101	(0.976)	383333	40.0000	43.1
146 4-Nitroquinoline-1-oxide	101	7.942	7.942	(1.091)	22405	40.0000	50.0
147 Methapyrilene	58	7.983	7.983	(1.097)	561997	40.0000	44.4
148 Isodrin	193	8.207	8.207	(1.128)	140152	40.0000	37.6
149 Aramite	185	8.607	8.607	(1.183)	67993	40.0000	36.4
150 Kepone	272	9.201	9.201	(1.264)	102775	40.0000	35.6
151 p-(Dimethylamino)azobenzene	120	8.783	8.783	(0.906)	362732	40.0000	41.6
152 Chlorobenzilate	251	8.819	8.819	(0.910)	393536	40.0000	40.7
153 3,3'-Dimethylbenzidine	212	9.101	9.101	(0.939)	576826	40.0000	40.7
155 2-Acetylaminofluorene	181	9.348	9.348	(0.964)	422662	40.0000	40.7
157 7,12Dimethylbenz(a)anthracene	256	10.854	10.854	(0.951)	478671	40.0000	38.8
158 3-Methylcholanthrene	268	11.830	11.830	(1.037)	422671	40.0000	40.9(Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.i/s021710.b/sb01719.d
 Date: 17-FEB-2010 22:24
 Client ID: AP121CV
 Sample Info: ILSN100120-08.1140 PPH11SV111AP121CV
 Volume Injected (uL): 0.5
 Column phase: JMW DB-6MS

Instrument: MSD5.i
 Operator: RHB
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 18-FEB-2010 13:53
Lab File ID: s5b1738.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010
Analysis Type: WATER Init. Cal. Times: 19:16 19:01
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99882	1.00578	1.00578	0.000	0.69679	60.00000	Averaged
5 Phenol-d5	1.20049	1.16376	1.16376	0.000	-3.05957	60.00000	Averaged
20 Nitrobenzene-d5	0.29723	0.30777	0.30777	0.000	3.54729	60.00000	Averaged
39 2-Fluorobiphenyl	0.99907	1.03844	1.03844	0.000	3.94135	60.00000	Averaged
60 2,4,6-Tribromophenol	0.15024	0.15777	0.15777	0.000	5.01274	60.00000	Averaged
81 p-Terphenyl-d14	0.66537	0.72878	0.72878	0.000	9.53037	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59272	0.56166	0.56166	0.000	-5.24024	60.00000	Averaged
2 Pyridine	0.97945	0.75240	0.75240	0.000	-23.18156	60.00000	Averaged
4 Aniline	0.52827	0.48579	0.48579	0.000	-8.04185	60.00000	Averaged
6 Phenol	1.19992	1.21345	1.21345	0.001	1.12750	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.88170	0.82199	0.82199	0.000	-6.77159	60.00000	Averaged
8 2-Chlorophenol	1.05146	1.03682	1.03682	0.000	-1.39281	60.00000	Averaged
203 n-Decane	1.36730	1.20027	1.20027	0.000	-12.21557	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17211	1.19589	1.19589	0.000	2.02876	60.00000	Averaged
11 1,4-Dichlorobenzene	1.14989	1.14988	1.14988	0.001	-0.00078	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.02530	1.01387	1.01387	0.000	-1.11435	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.81534	1.79863	1.79863	0.000	-0.91998	60.00000	Averaged
12 Benzyl alcohol	0.66489	0.67243	0.67243	0.000	1.13399	60.00000	Averaged
15 o-Cresol	0.74336	0.68900	0.68900	0.000	-7.31395	60.00000	Averaged
18 m,p-Cresols	1.07878	1.07188	1.07188	0.000	-0.63915	60.00000	Averaged
17 N-Nitrosodipropylamine	0.63977	0.64509	0.64509	0.050	0.83137	60.00000	Averaged|spcc
19 Hexachloroethane	0.48048	0.47064	0.47064	0.000	-2.04852	60.00000	Averaged
21 Nitrobenzene	0.27657	0.27199	0.27199	0.000	-1.65507	60.00000	Averaged
22 Isophorone	0.53681	0.50248	0.50248	0.000	-6.39671	60.00000	Averaged
23 2-Nitrophenol	0.13846	0.13956	0.13956	0.001	0.79106	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.24823	0.25224	0.25224	0.000	1.61470	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31726	0.29560	0.29560	0.000	-6.82803	60.00000	Averaged
26 2,4-Dichlorophenol	0.22056	0.22516	0.22516	0.001	2.08287	20.00000	Averaged|ccc
27 Benzoic acid	41.88266	40.00000	0.13296	0.000	4.70665	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26776	0.26199	0.26199	0.000	-2.15441	60.00000	Averaged
30 Naphthalene	0.88979	0.73738	0.73738	0.000	-17.12845	60.00000	Averaged
204 alpha-Terpeneol	0.24206	0.20966	0.20966	0.000	-13.38476	60.00000	Averaged
31 4-Chloroaniline	0.37597	0.35549	0.35549	0.000	-5.44804	60.00000	Averaged
32 Hexachlorobutadiene	0.15870	0.16135	0.16135	0.001	1.66591	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.22089	0.22303	0.22303	0.001	0.96774	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.53949	0.51739	0.51739	0.000	-4.09644	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 18-FEB-2010 13:53
Lab File ID: s5b1738.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010
Analysis Type: WATER Init. Cal. Times: 19:16 19:01
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.54641	0.48790	0.48790	0.000	-10.70882	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.23313	0.19679	0.19679	0.050	-15.58705	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.49799	0.48359	0.48359	0.000	-2.89148	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26572	0.28054	0.28054	0.001	5.57632	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.30847	0.32672	0.32672	0.000	5.91868	60.00000	Averaged
40 2-Chloronaphthalene	0.92129	0.91455	0.91455	0.000	-0.73216	60.00000	Averaged
42 o-Nitroaniline	0.28579	0.27634	0.27634	0.000	-3.30856	60.00000	Averaged
41 m-Nitroaniline	0.22162	0.21808	0.21808	0.000	-1.59711	60.00000	Averaged
43 Dimethylphthalate	1.05128	1.02829	1.02829	0.000	-2.18699	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25396	0.25073	0.25073	0.000	-1.26952	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32369	0.32344	0.32344	0.000	-0.07949	60.00000	Averaged
45 Acenaphthylene	1.36031	1.35442	1.35442	0.000	-0.43309	60.00000	Averaged
47 Acenaphthene	0.88432	0.84173	0.84173	0.001	-4.81614	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	38.63590	40.00000	0.05108	0.050	-3.41026	60.00000	Linear|spcc
49 Dibenzofuran	1.20503	1.21770	1.21770	0.000	1.05150	60.00000	Averaged
51 Diethylphthalate	1.01609	1.01051	1.01051	0.000	-0.54899	60.00000	Averaged
52 4-Nitrophenol	41.33866	40.00000	0.15170	0.050	3.34664	60.00000	Linear|spcc
53 Fluorene	1.03882	0.99087	0.99087	0.000	-4.61639	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53418	0.52063	0.52063	0.000	-2.53677	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	45.58694	40.00000	0.08198	0.000	13.96736	60.00000	Linear
56 p-Nitroaniline	0.15152	0.16205	0.16205	0.000	6.94973	60.00000	Averaged
133 Diphenylamine	0.47541	0.47558	0.47558	0.001	0.03525	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.57531	0.57391	0.57391	0.000	-0.24382	60.00000	Averaged
61 4-Bromophenylphenylether	0.19084	0.18500	0.18500	0.000	-3.06124	60.00000	Averaged
63 Hexachlorobenzene	0.19982	0.19760	0.19760	0.000	-1.11055	60.00000	Averaged
65 Pentachlorophenol	42.06402	40.00000	0.09810	0.001	5.16004	20.00000	Linear|ccc
206 n-Octadecane	0.36396	0.37165	0.37165	0.000	2.11236	60.00000	Averaged
68 Phenanthrene	0.84676	0.80835	0.80835	0.000	-4.53620	60.00000	Averaged
69 Anthracene	0.85661	0.83174	0.83174	0.000	-2.90311	60.00000	Averaged
72 Di-n-butylphthalate	0.92502	0.93906	0.93906	0.000	1.51732	60.00000	Averaged
76 Fluoranthene	0.88331	0.87578	0.87578	0.001	-0.85228	20.00000	Averaged|ccc
79 Pyrene	1.10528	1.01985	1.01985	0.000	-7.72902	60.00000	Averaged
85 Butylbenzylphthalate	0.45437	0.44696	0.44696	0.000	-1.63213	60.00000	Averaged
89 Benzo(a)anthracene	0.89454	0.83845	0.83845	0.000	-6.27009	60.00000	Averaged
92 Chrysene	0.83356	0.81565	0.81565	0.000	-2.14930	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.54345	0.55544	0.55544	0.000	2.20639	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 18-FEB-2010 13:53
Lab File ID: s5b1738.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010
Analysis Type: WATER Init. Cal. Times: 19:16 19:01
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.09003	1.04067	1.04067	0.001	-4.52889	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	0.95543	0.91669	0.91669	0.000	-4.05472	60.00000	Averaged|
96 Benzo(k)fluoranthene	0.93017	0.87526	0.87526	0.000	-5.90300	60.00000	Averaged|
97 Benzo(a)pyrene	0.80265	0.78630	0.78630	0.001	-2.03662	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.66189	0.68009	0.68009	0.000	2.74984	60.00000	Averaged|
100 Dibenzo(a,h)anthracene	0.52438	0.53850	0.53850	0.000	2.69346	60.00000	Averaged|
101 Benzo(ghi)perylene	0.55306	0.55989	0.55989	0.000	1.23510	60.00000	Averaged|
126 m-Dinitrobenzene	0.17977	0.18248	0.18248	0.000	1.50849	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27593	0.26564	0.26564	0.000	-3.72885	60.00000	Averaged|
143 Dinoseb	38.12163	40.00000	0.09436	0.000	-4.69592	60.00000	Linear|
173 Carbazole	0.61324	0.60385	0.60385	0.000	-1.53165	60.00000	Averaged|
184 p-Benzoquinone	28.72159	40.00000	0.18850	0.000	-28.19603	60.00000	Linear|
192 Methoxychlor	0.51661	0.51294	0.51294	0.000	-0.70961	60.00000	Averaged|
211 p-Toluidine	1.14939	0.98483	0.98483	0.000	-14.31701	60.00000	Averaged|
210 m-Toluidine	1.42835	1.37751	1.37751	0.000	-3.55943	60.00000	Averaged|
26 Phthalic anhydride	0.11204	0.14837	0.14837	0.000	32.41934	60.00000	Averaged|
179 Dibenzo(a,e)pyrene	0.20913	0.16552	0.16552	0.000	-20.85423	60.00000	Averaged|
214 1,4-Dinitrobenzene	0.17870	0.18356	0.18356	0.000	2.72032	60.00000	Averaged|
215 2-Ethoxyethanol	0.65261	0.65952	0.65952	0.000	1.05937	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.07603	0.09225	0.09225	0.000	21.33735	60.00000	Averaged|
IM 225 Trichlorophenols	0.28709	0.30363	0.30363	0.000	5.76021	60.00000	Averaged|
IM 226 Tetrachlorophenols	0.27593	0.26564	0.26564	0.000	-3.72885	60.00000	Averaged|
IM 227 Benzo(b,k)fluoranthene	0.94280	0.89598	0.89598	0.000	-4.96648	60.00000	Averaged|

Data File: /chem/MSD5.i/s021710.b/s5b1738.d
Report Date: 19-Feb-2010 07:30

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s021710.b/s5b1738.d
Lab Smp Id: WBN100215-09.1 Client Smp ID: MEGAICV
Inj Date : 18-FEB-2010 13:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN100215-09.1|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN100205-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s021710.b/MSD5-M8270C-021710.m
Meth Date : 19-Feb-2010 07:30 rmb Quant Type: ISTD
Cal Date : 18-FEB-2010 17:51 Cal File: s5b1748.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL	
	=====	==	=====	=====	=====	(ng/ul)	(ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.974	3.974	(1.000)	419923	40.0000		
* 29 Naphthalene-d8	136	4.845	4.845	(1.000)	1623800	40.0000		
* 46 Acenaphthene-d10	164	6.107	6.107	(1.000)	899444	40.0000		
* 67 Phenanthrene-d10	188	7.282	7.282	(1.000)	1589292	40.0000		
* 91 Chrysene-d12	240	9.704	9.704	(1.000)	1399291	40.0000		
* 98 Perylene-d12	264	11.418	11.418	(1.000)	1150156	40.0000		
\$ 3 2-Fluorophenol	112	3.150	3.150	(0.793)	422351	40.0000	40.3	
\$ 5 Phenol-d5	99	3.680	3.680	(0.926)	488690	40.0000	38.8	
\$ 20 Nitrobenzene-d5	82	4.335	4.335	(0.895)	499758	40.0000	41.4	
\$ 39 2-Fluorobiphenyl	172	5.587	5.587	(0.915)	934021	40.0000	41.6	
\$ 60 2,4,6-Tribromophenol	329	6.704	6.704	(1.098)	141905	40.0000	42.0	
\$ 81 p-Terphenyl-d14	244	8.664	8.664	(0.893)	1019775	40.0000	43.8	
1 N-Methyl-N-nitrosomethylamine	74	2.457	2.457	(0.618)	235855	40.0000	37.9	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
2 Pyridine	79	2.491	2.491	(0.627)	315950	40.0000	30.7
4 Aniline	66	3.757	3.757	(0.945)	203995	40.0000	36.8
6 Phenol	94	3.690	3.690	(0.928)	509555	40.0000	40.4 (Q)
7 bis(2-Chloroethyl) ether	63	3.772	3.772	(0.949)	345173	40.0000	37.3
8 2-Chlorophenol	128	3.839	3.839	(0.966)	435384	40.0000	39.4
203 n-Decane	43	3.825	3.825	(0.962)	504022	40.0000	35.1
9 1,3-Dichlorobenzene	146	3.940	3.940	(0.992)	502181	40.0000	40.8
11 1,4-Dichlorobenzene	146	3.988	3.988	(1.004)	482863	40.0000	40.0
13 1,2-Dichlorobenzene	146	4.089	4.089	(1.029)	425749	40.0000	39.6
14 bis(2-Chloroisopropyl) ether	45	4.118	4.118	(1.036)	755288	40.0000	39.6
12 Benzyl alcohol	108	4.036	4.036	(1.016)	282370	40.0000	40.4
15 o-Cresol	107	4.085	4.085	(1.028)	289325	40.0000	37.1
18 m,p-Cresols	107	4.186	4.186	(1.053)	450109	40.0000	39.7
17 N-Nitrosodipropylamine	70	4.215	4.215	(1.061)	270888	40.0000	40.3
19 Hexachloroethane	117	4.320	4.320	(1.087)	197633	40.0000	39.2
21 Nitrobenzene	77	4.349	4.349	(0.898)	441657	40.0000	39.3
22 Isophorone	82	4.503	4.503	(0.929)	815921	40.0000	37.4
23 2-Nitrophenol	139	4.566	4.566	(0.942)	226610	40.0000	40.3
24 2,4-Dimethylphenol	122	4.552	4.552	(0.939)	409591	40.0000	40.6
25 bis(2-Chloroethoxy)methane	93	4.624	4.624	(0.954)	479994	40.0000	37.3
26 2,4-Dichlorophenol	162	4.725	4.725	(0.975)	365609	40.0000	40.8
27 Benzoic acid	105	4.609	4.609	(0.951)	215896	40.0000	41.9
28 1,2,4-Trichlorobenzene	180	4.792	4.792	(0.989)	425415	40.0000	39.1
30 Naphthalene	128	4.860	4.860	(1.003)	1197364	40.0000	33.1 (Q)
204 alpha-Terpineol	59	4.831	4.831	(0.997)	340445	40.0000	34.6
31 4-Chloroaniline	127	4.869	4.869	(1.005)	577243	40.0000	37.8
32 Hexachlorobutadiene	225	4.927	4.927	(1.017)	261998	40.0000	40.7
33 4-Chloro-3-methylphenol	107	5.178	5.178	(1.069)	362148	40.0000	40.4
34 2-Methylnaphthalene	142	5.341	5.341	(1.102)	840131	40.0000	38.4
35 1-Methylnaphthalene	142	5.414	5.414	(1.117)	792248	40.0000	35.7
36 Hexachlorocyclopentadiene	237	5.447	5.447	(0.892)	177000	40.0000	33.8
205 2,3-Dichloroaniline	161	5.534	5.534	(0.906)	434965	40.0000	38.8
37 2,4,6-Trichlorophenol	196	5.529	5.529	(0.905)	252327	40.0000	42.2
38 2,4,5-Trichlorophenol	196	5.553	5.553	(0.909)	293870	40.0000	42.4
40 2-Chloronaphthalene	162	5.698	5.698	(0.933)	822583	40.0000	39.7
42 o-Nitroaniline	65	5.751	5.751	(0.942)	248550	40.0000	38.7
41 m-Nitroaniline	138	6.049	6.049	(0.991)	196150	40.0000	39.4
43 Dimethylphthalate	163	5.861	5.861	(0.960)	924888	40.0000	39.1
44 2,6-Dinitrotoluene	165	5.914	5.914	(0.968)	225520	40.0000	39.5
50 2,4-Dinitrotoluene	165	6.213	6.213	(1.017)	290914	40.0000	40.0
45 Acenaphthylene	152	6.001	6.001	(0.983)	1218225	40.0000	39.8
47 Acenaphthene	154	6.131	6.131	(1.004)	757085	40.0000	38.1
48 2,4-Dinitrophenol	184	6.117	6.117	(1.002)	45947	40.0000	38.6
49 Dibenzofuran	168	6.251	6.251	(1.024)	1095256	40.0000	40.4
51 Diethylphthalate	149	6.372	6.372	(1.043)	908897	40.0000	39.8
52 4-Nitrophenol	139	6.131	6.131	(1.004)	136450	40.0000	41.3
53 Fluorene	166	6.516	6.516	(1.067)	891229	40.0000	38.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.492	6.492	(1.063)	468279	40.0000	39.0
55 2-Methyl-4,6-dinitrophenol	198	6.526	6.526	(0.896)	130283	40.0000	45.6
56 p-Nitroaniline	138	6.507	6.507	(1.065)	145751	40.0000	42.8
133 Diphenylamine	169	6.579	6.579	(0.903)	755834	40.0000	40.0
58 1,2-Diphenylhydrazine	77	6.617	6.617	(0.909)	912112	40.0000	39.9
61 4-Bromophenylphenylether	248	6.882	6.882	(0.945)	294018	40.0000	38.8
63 Hexachlorobenzene	284	6.954	6.954	(0.955)	314044	40.0000	39.6
65 Pentachlorophenol	266	7.104	7.104	(0.976)	155903	40.0000	42.1
206 n-Octadecane	57	7.094	7.094	(0.974)	590658	40.0000	40.8
68 Phenanthrene	178	7.301	7.301	(1.003)	1284707	40.0000	38.2
69 Anthracene	178	7.344	7.344	(1.009)	1321877	40.0000	38.8
72 Di-n-butylphthalate	149	7.701	7.701	(1.058)	1492438	40.0000	40.6
76 Fluoranthene	202	8.346	8.346	(1.146)	1391871	40.0000	39.6
79 Pyrene	202	8.563	8.563	(0.882)	1427067	40.0000	36.9
85 Butylbenzylphthalate	149	9.097	9.097	(0.937)	625424	40.0000	39.3
89 Benzo(a)anthracene	228	9.690	9.690	(0.998)	1173235	40.0000	37.5
92 Chrysene	228	9.728	9.728	(1.002)	1141329	40.0000	39.1
93 bis(2-Ethylhexyl)phthalate	149	9.622	9.622	(0.992)	777228	40.0000	40.9
94 Di-n-octylphthalate	149	10.291	10.291	(0.901)	1196930	40.0000	38.2
95 Benzo(b)fluoranthene	252	10.889	10.889	(0.954)	1054340	40.0000	38.4
96 Benzo(k)fluoranthene	252	10.927	10.927	(0.957)	1006686	40.0000	37.6
97 Benzo(a)pyrene	252	11.341	11.341	(0.993)	904369	40.0000	39.2
99 Indeno(1,2,3-cd)pyrene	276	13.238	13.238	(1.159)	782212	40.0000	41.1
100 Dibenzo(a,h)anthracene	278	13.258	13.258	(1.161)	619360	40.0000	41.1
101 Benzo(ghi)perylene	276	13.797	13.797	(1.208)	643960	40.0000	40.5
126 m-Dinitrobenzene	168	5.900	5.900	(0.966)	164133	40.0000	40.6
130 2,3,4,6-Tetrachlorophenol	232	6.328	6.328	(1.036)	238926	40.0000	38.5
143 Dinoseb	211	7.224	7.224	(0.992)	149971	40.0000	38.1
173 Carbazole	167	7.460	7.460	(1.024)	959697	40.0000	39.4
184 p-Benzoquinone	54	3.454	3.454	(0.869)	79157	40.0000	28.7
192 Methoxychlor	227	9.569	9.569	(0.986)	717755	40.0000	39.7
211 p-Toluidine	106	4.248	4.248	(1.069)	413552	40.0000	34.3
210 m-Toluidine	106	4.272	4.272	(1.075)	578447	40.0000	38.6
26 Phthalic anhydride	104	5.370	5.370	(1.108)	240919	40.0000	53.0
179 Dibenzo(a,e)pyrene	302	18.044	18.044	(1.580)	190375	40.0000	31.6
214 1,4-Dinitrobenzene	75	5.837	5.837	(0.956)	165101	40.0000	41.1 (H)
215 2-Ethoxyethanol	59	2.298	2.298	(0.578)	276948	40.0000	40.4
216 Methylenebis(2-chloroaniline)	231	9.627	9.627	(0.992)	129086	40.0000	48.5 (Q)
M 225 Trichlorophenols	196				546197	80.0000	84.6
M 226 Tetrachlorophenols	232				238926	40.0000	38.5
M 227 Benzo(b,k)fluoranthene	252				2061026	80.0000	76.0

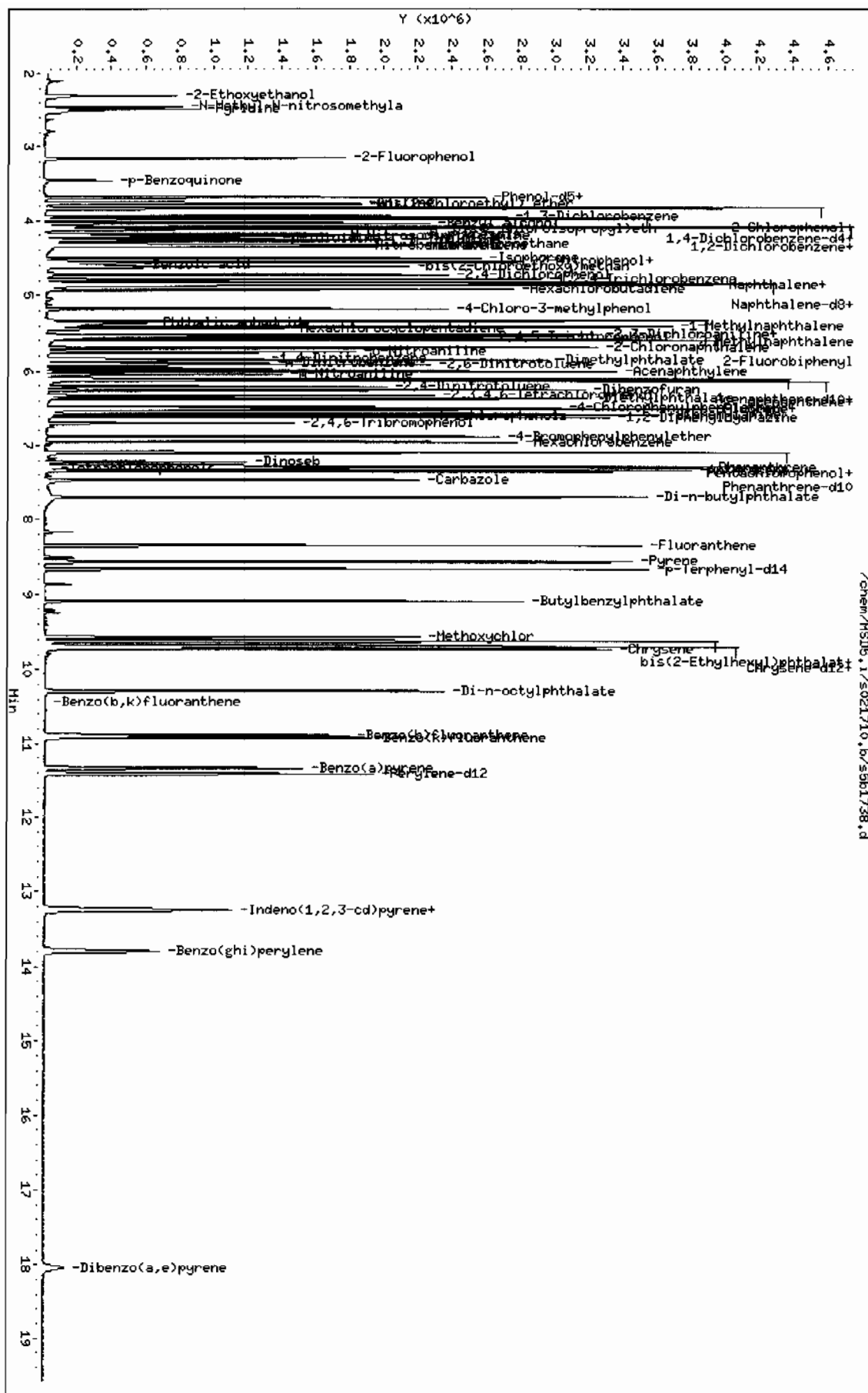
QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MS05.i/5021710.b/55b1738.d
 Date: 18-FEB-2010 13:53
 Client ID: MEGAICV
 Sample Info: IMEN00215-09.1140 PPH11SVH11MEGAICV
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MS05.i
 Operator: RMB
 Column diameter: 0.20

/chem/MS05.i/5021710.b/55b1738.d



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 10-MAR-2010 11:57
 Lab File ID: s5c1008.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 14:42
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
 Method: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.77531	0.88207	0.88207	0.000	13.76894	60.00000	Averaged
16 Acetophenone	1.11708	1.21035	1.21035	0.000	8.34982	60.00000	Averaged
189 Caprolactam	0.08910	0.08825	0.08825	0.000	-0.95507	60.00000	Averaged
208 1,1'-Biphenyl	1.11469	1.13007	1.13007	0.000	1.38022	60.00000	Averaged
207 Atrazine	0.03043	0.02853	0.02853	0.000	-6.24035	60.00000	Averaged
77 Benzidine	0.18071	0.12317	0.12317	0.000	-31.84336	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27254	0.27074	0.27074	0.000	-0.65840	60.00000	Averaged
102 1,4-Dioxane	0.34121	0.40734	0.40734	0.000	19.38257	60.00000	Averaged
103 Methyl methacrylate	0.18410	0.20408	0.20408	0.000	10.85329	60.00000	Averaged
104 Ethyl methacrylate	0.74729	0.81982	0.81982	0.000	9.70504	60.00000	Averaged
105 2-Picoline	1.15797	1.22997	1.22997	0.000	6.21715	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43654	0.45810	0.45810	0.000	4.93806	60.00000	Averaged
107 Methyl methanesulfonate	0.47991	0.57506	0.57506	0.000	19.82820	60.00000	Averaged
108 N-Nitrosodiethylamine	0.44277	0.45951	0.45951	0.000	3.78201	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60959	0.67480	0.67480	0.000	10.69748	60.00000	Averaged
110 Pentachloroethane	0.32418	0.33476	0.33476	0.000	3.26393	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.43870	0.49017	0.49017	0.000	11.73255	60.00000	Averaged
113 N-Nitrosomorpholine	0.53553	0.61134	0.61134	0.000	14.15687	60.00000	Averaged
114 o-Toluidine	1.52862	1.55490	1.55490	0.000	1.71949	60.00000	Averaged
115 N-Nitrosopiperidine	0.13910	0.13837	0.13837	0.000	-0.52437	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.79352	0.67782	0.67782	0.000	-14.58054	60.00000	Averaged
118 2,6-Dichlorophenol	0.21700	0.22005	0.22005	0.000	1.40631	60.00000	Averaged
119 Hexachloropropene	0.10744	0.11001	0.11001	0.000	2.39772	60.00000	Averaged
120 p-Phenylenediamine	0.17838	0.17499	0.17499	0.000	-1.89733	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.18088	0.18145	0.18145	0.000	0.31471	60.00000	Averaged
122 Safrole	0.19975	0.19123	0.19123	0.000	-4.26483	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.43728	0.41917	0.41917	0.000	-4.14236	60.00000	Averaged
124 Isosafrole	0.33677	0.32655	0.32655	0.000	-3.03580	60.00000	Averaged
125 1,4-Naphthoquinone	0.34896	0.36264	0.36264	0.000	3.92151	60.00000	Averaged
127 Pentachlorobenzene	0.42091	0.38712	0.38712	0.000	-8.02714	60.00000	Averaged
128 1-Naphthylamine	0.77744	0.75905	0.75905	0.000	-2.36521	60.00000	Averaged
129 2-Naphthylamine	0.75956	0.62562	0.62562	0.000	-17.63480	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27264	0.26063	0.26063	0.000	-4.40457	60.00000	Averaged
136 1,3,5-Trinitrobenzene	48.62064	40.00000	0.12825	0.000	21.55160	60.00000	Linear
137 Phenacetin	0.25552	0.27461	0.27461	0.000	7.47143	60.00000	Averaged
138 Diallate	0.20822	0.23250	0.23250	0.000	11.66439	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 10-MAR-2010 11:57
 Lab File ID: s5c1008.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 14:42
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
 Method: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.24438	0.25713	0.25713	0.000	5.21631	60.00000	Averaged
213 Trans Diallate	0.24496	0.27353	0.27353	0.000	11.66439	60.00000	Averaged
140 4-Aminobiphenyl	0.41807	0.34955	0.34955	0.000	-16.39023	60.00000	Averaged
141 Pentachloronitrobenzene	0.06950	0.07763	0.07763	0.000	11.68760	60.00000	Averaged
142 Pronamide	0.24082	0.25390	0.25390	0.000	5.43125	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01215	0.02190	0.02190	0.000	80.29365	60.00000	Averaged<-
147 Methapyrilene	0.34277	0.41237	0.41237	0.000	20.30625	60.00000	Averaged
148 Isodrin	0.10083	0.10639	0.10639	0.000	5.51073	60.00000	Averaged
149 Aramite	0.05058	0.04795	0.04795	0.000	-5.19882	60.00000	Averaged
150 Kepone	0.07824	0.07834	0.07834	0.000	0.11579	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25079	0.27632	0.27632	0.000	10.17935	60.00000	Averaged
152 Chlorobenzilate	0.27769	0.27208	0.27208	0.000	-2.02286	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.40745	0.37435	0.37435	0.000	-8.12484	60.00000	Averaged
155 2-Acetylaminofluorene	0.29875	0.31587	0.31587	0.000	5.73181	60.00000	Averaged
157 1,12Dimethylbenz(a)anthracene	0.43958	0.41598	0.41598	0.000	-5.36929	60.00000	Averaged
158 3-Methylcholanthrene	0.36797	0.35997	0.35997	0.000	-2.17592	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1008.d
 Lab Smp Id: WBN100218-03.2 Client Smp ID: AP12CVS
 Inj Date : 10-MAR-2010 11:57
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100218-03.2|40 PPM|1|SVM|1|AP12CVS
 Misc Info : |MSD8270|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 12:41 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 8 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ap12.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.784	(1.000)	249689	40.0000	
* 29 Naphthalene-d8	136	4.649	4.649	(1.000)	912928	40.0000	
* 46 Acenaphthene-d10	164	5.896	5.896	(1.000)	543278	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.054	(1.000)	951191	40.0000	
* 91 Chrysene-d12	240	9.448	9.448	(1.000)	942060	40.0000	
* 98 Perylene-d12	264	11.019	11.019	(1.000)	889308	40.0000	
209 Benzaldehyde	77	3.513	3.513	(0.928)	220242	40.0000	45.5
16 Acetophenone	105	4.037	4.037	(1.067)	302211	40.0000	43.3
189 Caprolactam	113	4.919	4.919	(1.058)	80565	40.0000	39.6
208 1,1'-Biphenyl	154	5.466	5.466	(0.927)	613943	40.0000	40.6
207 Atrazine	173	6.760	6.760	(0.958)	27140	40.0000	37.5
77 Benzdine	184	8.195	8.195	(0.867)	116031	40.0000	27.3
90 3,3'-Dichlorobenzidine	252	9.384	9.384	(0.993)	255055	40.0000	39.7

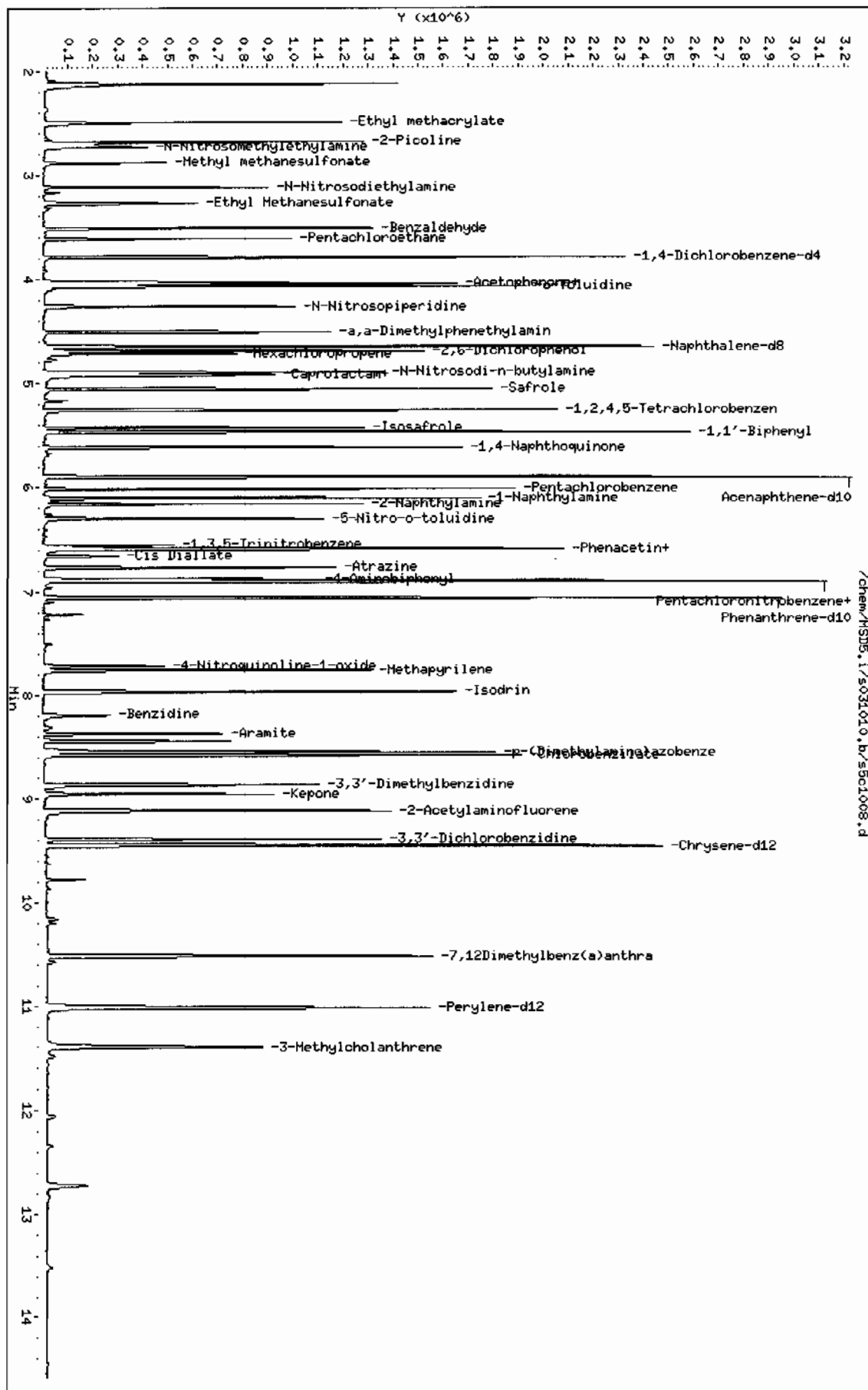
Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	==	=====	=====	=====	=====	=====	
102 1,4-Dioxane	88	2.131	2.131	(0.563)	101709	40.0000	47.8	
103 Methyl methacrylate	100	2.125	2.125	(0.562)	50956	40.0000	44.3	
104 Ethyl methacrylate	69	2.496	2.496	(0.660)	204700	40.0000	43.9	
105 2-Picoline	93	2.690	2.690	(0.711)	307109	40.0000	42.5	
106 N-Nitrosomethylethylamine	88	2.731	2.731	(0.722)	114382	40.0000	42.0	
107 Methyl methanesulfonate	80	2.890	2.890	(0.764)	143587	40.0000	47.9	
108 N-Nitrosodiethylamine	102	3.119	3.119	(0.824)	114735	40.0000	41.5	
109 Ethyl Methanesulfonate	79	3.272	3.272	(0.865)	168491	40.0000	44.3	
110 Pentachloroethane	167	3.607	3.607	(0.953)	83586	40.0000	41.3	
111 N-Nitrosopyrrolidine	100	4.019	4.019	(1.062)	122391	40.0000	44.7 (Q)	
113 N-Nitrosomorpholine	56	4.043	4.043	(1.068)	152646	40.0000	45.7	
114 o-Toluidine	106	4.060	4.060	(1.073)	388242	40.0000	40.7	
115 N-Nitrosopiperidine	114	4.260	4.260	(0.916)	126321	40.0000	39.8	
116 a,a-Dimethylphenethylamine	58	4.507	4.507	(0.970)	618798	40.0000	34.2	
118 2,6-Dichlorophenol	162	4.690	4.690	(1.009)	200889	40.0000	40.6	
119 Hexachloropropene	213	4.719	4.719	(1.015)	100435	40.0000	41.0	
120 p-Phenylenediamine	108	4.931	4.931	(1.061)	159757	40.0000	39.2	
121 N-Nitrosodi-n-butylamine	84	4.896	4.896	(1.053)	165652	40.0000	40.1 (Q)	
122 Safrole	162	5.060	5.060	(1.089)	174580	40.0000	38.3	
123 1,2,4,5-Tetrachlorobenzene	216	5.260	5.260	(0.892)	227726	40.0000	38.3	
124 Isosafrole	162	5.431	5.431	(0.921)	177408	40.0000	38.8	
125 1,4-Naphthoquinone	158	5.613	5.613	(0.952)	197017	40.0000	41.6	
127 Pentachlorobenzene	250	6.013	6.013	(1.020)	210314	40.0000	36.8	
128 1-Naphthylamine	143	6.101	6.101	(1.035)	412374	40.0000	39.0	
129 2-Naphthylamine	143	6.154	6.154	(1.044)	339884	40.0000	32.9	
131 5-Nitro-o-toluidine	152	6.296	6.296	(1.068)	141597	40.0000	38.2	
136 1,3,5-Trinitrobenzene	75	6.548	6.548	(0.928)	121991	40.0000	48.6 (H)	
137 Phenacetin	108	6.590	6.590	(0.934)	261209	40.0000	43.0 (Q)	
138 Diallate	86	6.578	6.578	(0.932)	221156	40.0000	44.7	
212 Cis Diallate	86	6.648	6.648	(0.942)	36687	6.00000	6.3 (aH)	
213 Trans Diallate	86	6.578	6.578	(0.932)	221156	34.0000	38.0	
140 4-Aminobiphenyl	169	6.872	6.872	(0.974)	332486	40.0000	33.4	
141 Pentachloronitrobenzene	237	6.890	6.890	(0.977)	73837	40.0000	44.7 (Q)	
142 Pronamide	173	6.890	6.890	(0.977)	241503	40.0000	42.2	
146 4-Nitroquinoline-1-oxide	101	7.719	7.719	(1.094)	20828	40.0000	72.1	
147 Methapyrilene	58	7.754	7.754	(1.099)	392247	40.0000	48.1	
148 Isodrin	193	7.972	7.972	(1.130)	101193	40.0000	42.2	
149 Aramite	185	8.378	8.378	(1.188)	45608	40.0000	37.9	
150 Kepone	272	8.948	8.948	(1.268)	74512	40.0000	40.0	
151 p-(Dimethylamino)azobenzene	120	8.548	8.548	(0.905)	260312	40.0000	44.1	
152 Chlorobenzilate	251	8.584	8.584	(0.908)	256313	40.0000	39.2	
153 3,3'-Dimethylbenzidine	212	8.866	8.866	(0.938)	352656	40.0000	36.8	
155 2-Acetylaminofluorene	181	9.113	9.113	(0.964)	297571	40.0000	42.3	
157 7,12Dimethylbenz(a)anthracene	256	10.519	10.519	(0.955)	369931	40.0000	37.8	
158 3-Methylcholanthrene	268	11.401	11.401	(1.035)	320120	40.0000	39.1 (Q)	

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.i/s031010.b/s01008.d
 Date: 10-MAR-2010 11:57
 Client ID: AP12CVS
 Sample Info: ILEN00218-03.2140 PPH11.SVH11AP12CVS
 Volume Injected (uL): 0.5
 Column phase: 38M DB-SHS

Instrument: MSDS.i
 Operator: RMB
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 10-MAR-2010 12:50
Lab File ID: s5c1010.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99882	1.10254	1.10254	0.000	10.38383	60.00000	Averaged
5 Phenol-d5	1.20049	1.30861	1.30861	0.000	9.00589	60.00000	Averaged
20 Nitrobenzene-d5	0.29723	0.31050	0.31050	0.000	4.46567	60.00000	Averaged
39 2-Fluorobiphenyl	0.99907	0.99050	0.99050	0.000	-0.85734	60.00000	Averaged
60 2,4,6-Tribromophenol	0.15024	0.14833	0.14833	0.000	-1.26967	60.00000	Averaged
81 p-Terphenyl-d14	0.66537	0.59690	0.59690	0.000	-10.29040	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59272	0.69923	0.69923	0.000	17.96983	60.00000	Averaged
2 Pyridine	0.97945	1.05827	1.05827	0.000	8.04705	60.00000	Averaged
4 Aniline	0.52827	0.57830	0.57830	0.000	9.47052	60.00000	Averaged
6 Phenol	1.19992	1.33569	1.33569	0.001	11.31501	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.88170	0.90556	0.90556	0.000	2.70642	60.00000	Averaged
8 2-Chlorophenol	1.05146	1.13152	1.13152	0.000	7.61397	60.00000	Averaged
203 n-Decane	1.36730	1.47622	1.47622	0.000	7.96646	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17211	1.25120	1.25120	0.000	6.74733	60.00000	Averaged
11 1,4-Dichlorobenzene	1.24989	1.20386	1.20386	0.001	4.69274	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.02530	1.09111	1.09111	0.000	6.41902	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.81534	2.16051	2.16051	0.000	19.01431	60.00000	Averaged
12 Benzyl alcohol	0.66489	0.73586	0.73586	0.000	10.67345	60.00000	Averaged
15 o-Cresol	0.74336	0.81830	0.81830	0.000	10.08085	60.00000	Averaged
18 m,p-Cresols	1.07878	1.13470	1.13470	0.000	5.18386	60.00000	Averaged
17 N-Nitrosodipropylamine	0.63977	0.73168	0.73168	0.050	14.36555	60.00000	Averaged|spcc
19 Hexachloroethane	0.48048	0.53729	0.53729	0.000	11.82307	60.00000	Averaged
21 Nitrobenzene	0.27657	0.31774	0.31774	0.000	14.88798	60.00000	Averaged
22 Isophorone	0.53681	0.57883	0.57883	0.000	7.82603	60.00000	Averaged
23 2-Nitrophenol	0.13846	0.13918	0.13918	0.001	0.52284	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.24823	0.24930	0.24930	0.000	0.43087	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31726	0.33415	0.33415	0.000	5.32265	60.00000	Averaged
26 2,4-Dichlorophenol	0.22056	0.23505	0.23505	0.001	6.56644	20.00000	Averaged|ccc
27 Benzoic acid	45.66404	40.00000	0.14822	0.000	14.16011	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26776	0.27566	0.27566	0.000	2.95378	60.00000	Averaged
30 Naphthalene	0.88979	0.83006	0.83006	0.000	-6.71247	60.00000	Averaged
204 alpha-Terpineol	0.24206	0.24640	0.24640	0.000	1.79466	60.00000	Averaged
31 4-Chloroaniline	0.37597	0.39210	0.39210	0.000	4.29040	60.00000	Averaged
32 Hexachlorobutadiene	0.15870	0.16702	0.16702	0.001	5.23696	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.22089	0.24701	0.24701	0.001	11.82616	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.53949	0.52912	0.52912	0.000	-1.92187	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 10-MAR-2010 12:50
Lab File ID: s5c1010.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.54641	0.51729	0.51729	0.000	-5.32987	Averaged
36 Hexachlorocyclopentadiene	0.23313	0.23321	0.23321	0.050	0.03676	Averaged|spcc
205 2,3-Dichloroaniline	0.49799	0.49156	0.49156	0.000	-1.29184	Averaged
37 2,4,6-Trichlorophenol	0.26572	0.28188	0.28188	0.001	6.08167	Averaged|ccc
38 2,4,5-Trichlorophenol	0.30847	0.30886	0.30886	0.000	0.12835	Averaged
40 2-Chloronaphthalene	0.92129	0.90605	0.90605	0.000	-1.65425	Averaged
42 o-Nitroaniline	0.28579	0.32326	0.32326	0.000	13.10895	Averaged
41 m-Nitroaniline	0.22162	0.19054	0.19054	0.000	-14.02514	Averaged
43 Dimethylphthalate	1.05128	1.08582	1.08582	0.000	3.28534	Averaged
44 2,6-Dinitrotoluene	0.25396	0.25561	0.25561	0.000	0.65140	Averaged
50 2,4-Dinitrotoluene	0.32369	0.32819	0.32819	0.000	1.38768	Averaged
45 Acenaphthylene	1.36031	1.35387	1.35387	0.000	-0.47329	Averaged
47 Acenaphthene	0.88432	0.91126	0.91126	0.001	3.04745	Averaged|ccc
48 2,4-Dinitrophenol	58.38170	40.00000	0.09576	0.050	45.95424	Linear|spcc
49 Dibenzofuran	1.20503	1.21807	1.21807	0.000	1.08202	Averaged
51 Diethylphthalate	1.01609	1.07078	1.07078	0.000	5.38227	Averaged
52 4-Nitrophenol	47.76230	40.00000	0.17784	0.050	19.40574	Linear|spcc
53 Fluorene	1.03882	1.03518	1.03518	0.000	-0.35076	Averaged
54 4-Chlorophenylphenylether	0.53418	0.51351	0.51351	0.000	-3.87003	Averaged
55 2-Methyl-4,6-dinitrophenol	49.82024	40.00000	0.09170	0.000	24.55060	Linear
56 p-Nitroaniline	0.15152	0.12014	0.12014	0.000	-20.71065	Averaged
133 Diphenylamine	0.47541	0.39879	0.39879	0.001	-16.11632	Averaged|ccc
58 1,2-Diphenylhydrazine	0.57531	0.65532	0.65532	0.000	13.90677	Averaged
61 4-Bromophenylphenylether	0.19084	0.17845	0.17845	0.000	-6.49368	Averaged
63 Hexachlorobenzene	0.19982	0.18554	0.18554	0.000	-7.14472	Averaged
65 Pentachlorophenol	41.70851	40.00000	0.09717	0.001	4.27127	Linear|ccc
206 n-Octadecane	0.36396	0.39356	0.39356	0.000	8.13162	Averaged
68 Phenanthrene	0.84676	0.84430	0.84430	0.000	-0.29062	Averaged
69 Anthracene	0.85661	0.86593	0.86593	0.000	1.08837	Averaged
72 Di-n-butylphthalate	0.92502	1.02605	1.02605	0.000	10.92174	Averaged
76 Fluoranthene	0.88331	0.92519	0.92519	0.001	4.74130	Averaged|ccc
79 Pyrene	1.10528	1.01120	1.01120	0.000	-8.51170	Averaged
85 Butylbenzylphthalate	0.45437	0.48642	0.48642	0.000	7.05228	Averaged
89 Benzo(a)anthracene	0.89454	0.90445	0.90445	0.000	1.10770	Averaged
92 Chrysene	0.83356	0.82804	0.82804	0.000	-0.66307	Averaged
93 bis(2-Ethylhexyl)phthalate	0.54345	0.64953	0.64953	0.000	19.51939	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 10-MAR-2010 12:50
Lab File ID: s5c1010.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	1.09003	1.10349	1.10349	0.001	1.23420	Averaged|ccc
95 Benzo(b)fluoranthene	0.95543	0.93790	0.93790	0.000	-1.83468	Averaged|
96 Benzo(k)fluoranthene	0.93017	0.86776	0.86776	0.000	-6.70917	Averaged|
97 Benzo(a)pyrene	0.80265	0.83667	0.83667	0.001	4.23836	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.66189	0.88904	0.88904	0.000	34.31802	Averaged|
100 Dibenzo(a,h)anthracene	0.52438	0.71783	0.71783	0.000	36.89103	Averaged|
101 Benzo(ghi)perylene	0.55306	0.78071	0.78071	0.000	41.16143	Averaged|
126 m-Dinitrobenzene	0.17977	0.18289	0.18289	0.000	1.73722	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27593	0.27263	0.27263	0.000	-1.19454	Averaged|
143 Dinoseb	47.70861	40.00000	0.12577	0.000	19.27153	Linear|
173 Carbazole	0.61324	0.42940	0.42940	0.000	-29.97905	Averaged|
184 p-Benzoquinone	20.44689	40.00000	0.11860	0.000	-48.88277	Linear|
192 Methoxychlor	0.51661	0.57498	0.57498	0.000	11.30003	Averaged|
211 p-Toluidine	1.14939	1.02334	1.02334	0.000	-10.96595	Averaged|
210 m-Toluidine	1.42835	1.35307	1.35307	0.000	-5.27020	Averaged|
26 Phthalic anhydride	0.11204	0.09090	0.09090	0.000	-18.87300	Averaged|
179 Dibenzo(a,e)pyrene	0.20913	0.48265	0.48265	0.000	131	Averaged|<-
214 1,4-Dinitrobenzene	0.17870	0.20695	0.20695	0.000	15.80890	Averaged|
215 2-Ethoxyethanol	0.65261	0.79669	0.79669	0.000	22.07791	Averaged|
216 Methylenebis(2-chloroanilin	0.07603	0.11084	0.11084	0.000	45.78918	Averaged|
M 225 Trichlorophenols	0.28709	0.29537	0.29537	0.000	2.88337	Averaged|
M 226 Tetrachlorophenols	0.27593	0.27263	0.27263	0.000	-1.19454	Averaged|
M 227 Benzo(b,k)fluoranthene	0.94280	0.90283	0.90283	0.000	-4.23928	Averaged|

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1010.d
 Lab Smp Id: WBN100129-05.5 Client Smp ID: MEGACVS
 Inj Date : 10-MAR-2010 12:50
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100129-05.5|40 PPM|1|SVM|1|MEGACVS
 Misc Info : |MSD8270|WBN10227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 10 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAIIICARE.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt / (Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)
						ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.791	3.791	(1.000)	264428	40.0000
* 29 Naphthalene-d8	136	4.653	4.653	(1.000)	1030643	40.0000
* 46 Acenaphthene-d10	164	5.905	5.905	(1.000)	587510	40.0000
* 67 Phenanthrene-d10	188	7.060	7.060	(1.000)	1034302	40.0000
* 91 Chrysene-d12	240	9.458	9.458	(1.000)	1013728	40.0000
* 98 Perylene-d12	264	11.033	11.033	(1.000)	1011401	40.0000
\$ 3 2-Fluorophenol	112	2.977	2.977	(0.785)	291542	40.0000 44.2
\$ 5 Phenol-d5	99	3.507	3.507	(0.925)	346032	40.0000 43.6
\$ 20 Nitrobenzene-d5	82	4.152	4.152	(0.892)	320015	40.0000 41.8
\$ 39 2-Fluorobiphenyl	172	5.394	5.394	(0.914)	581929	40.0000 39.6
\$ 60 2,4,6-Tribromophenol	329	6.492	6.492	(1.099)	87146	40.0000 39.5
\$ 81 p-Terphenyl-d14	244	8.428	8.428	(0.891)	605093	40.0000 35.9
1 N-Methyl-N-nitrosomethylamine	74	2.293	2.293	(0.605)	184897	40.0000 47.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
2 Pyridine	79	2.322	2.322	(0.613)	279836	40.0000	43.2
4 Aniline	66	3.574	3.574	(0.943)	152920	40.0000	43.8
6 Phenol	94	3.516	3.516	(0.928)	353194	40.0000	44.5 (O)
7 bis(2-Chloroethyl) ether	63	3.593	3.593	(0.948)	239455	40.0000	41.1
8 2-Chlorophenol	128	3.656	3.656	(0.964)	299206	40.0000	43.0
203 n-Decane	43	3.641	3.641	(0.961)	390354	40.0000	43.2
9 1,3-Dichlorobenzene	146	3.757	3.757	(0.991)	330851	40.0000	42.7
11 1,4-Dichlorobenzene	146	3.800	3.800	(1.003)	318333	40.0000	41.9
13 1,2-Dichlorobenzene	146	3.901	3.901	(1.029)	288521	40.0000	42.6
14 bis(2-Chloroisopropyl)ether	45	3.935	3.935	(1.038)	571299	40.0000	47.6
12 Benzyl alcohol	108	3.858	3.858	(1.018)	194582	40.0000	44.3
15 o-Cresol	107	3.911	3.911	(1.032)	216382	40.0000	44.0
18 m,p-Cresols	107	4.007	4.007	(1.057)	300047	40.0000	42.1
17 N-Nitrosodipropylamine	70	4.031	4.031	(1.063)	193476	40.0000	45.7
19 Hexachloroethane	117	4.133	4.133	(1.090)	142075	40.0000	44.7
21 Nitrobenzene	77	4.166	4.166	(0.895)	327479	40.0000	46.0
22 Isophorone	82	4.320	4.320	(0.929)	596563	40.0000	43.1
23 2-Nitrophenol	139	4.378	4.378	(0.941)	143449	40.0000	40.2
24 2,4-Dimethylphenol	122	4.373	4.373	(0.940)	256943	40.0000	40.2
25 bis(2-Chloroethoxy)methane	93	4.441	4.441	(0.954)	344388	40.0000	42.1
26 2,4-Dichlorophenol	162	4.537	4.537	(0.975)	242248	40.0000	42.6
27 Benzoic acid	105	4.426	4.426	(0.951)	152762	40.0000	45.7
28 1,2,4-Trichlorobenzene	180	4.604	4.604	(0.990)	284112	40.0000	41.2
30 Naphthalene	128	4.667	4.667	(1.003)	855500	40.0000	37.3
204 alpha-Terpineol	59	4.643	4.643	(0.998)	253953	40.0000	40.7
31 4-Chloroaniline	127	4.681	4.681	(1.006)	404118	40.0000	41.7
32 Hexachlorobutadiene	225	4.734	4.734	(1.018)	172134	40.0000	42.1
33 4-Chloro-3-methylphenol	107	4.994	4.994	(1.073)	254579	40.0000	44.7
34 2-Methylnaphthalene	142	5.149	5.149	(1.107)	545331	40.0000	39.2
35 1-Methylnaphthalene	142	5.221	5.221	(1.122)	533140	40.0000	37.9
36 Hexachlorocyclopentadiene	237	5.250	5.250	(0.889)	137014	40.0000	40.0
205 2,3-Dichloroaniline	161	5.346	5.346	(0.905)	288796	40.0000	39.5
37 2,4,6-Trichlorophenol	196	5.336	5.336	(0.904)	165607	40.0000	42.4
38 2,4,5-Trichlorophenol	196	5.365	5.365	(0.909)	181460	40.0000	40.0
40 2-Chloronaphthalene	162	5.500	5.500	(0.931)	532314	40.0000	39.3
42 o-Nitroaniline	65	5.558	5.558	(0.941)	189917	40.0000	45.2
41 m-Nitroaniline	138	5.852	5.852	(0.991)	111942	40.0000	34.4
43 Dimethylphthalate	163	5.673	5.673	(0.961)	637929	40.0000	41.3
44 2,6-Dinitrotoluene	165	5.726	5.726	(0.970)	150174	40.0000	40.3
50 2,4-Dinitrotoluene	165	6.020	6.020	(1.020)	192813	40.0000	40.6
45 Acenaphthylene	152	5.803	5.803	(0.983)	795414	40.0000	39.8
47 Acenaphthene	154	5.929	5.929	(1.004)	535377	40.0000	41.2
48 2,4-Dinitrophenol	184	5.924	5.924	(1.003)	56262	40.0000	58.4
49 Dibenzofuran	168	6.049	6.049	(1.024)	715629	40.0000	40.4
51 Diethylphthalate	149	6.174	6.174	(1.046)	629092	40.0000	42.2
52 4-Nitrophenol	139	5.943	5.943	(1.007)	104481	40.0000	47.8
53 Fluorene	166	6.309	6.309	(1.068)	608178	40.0000	39.8

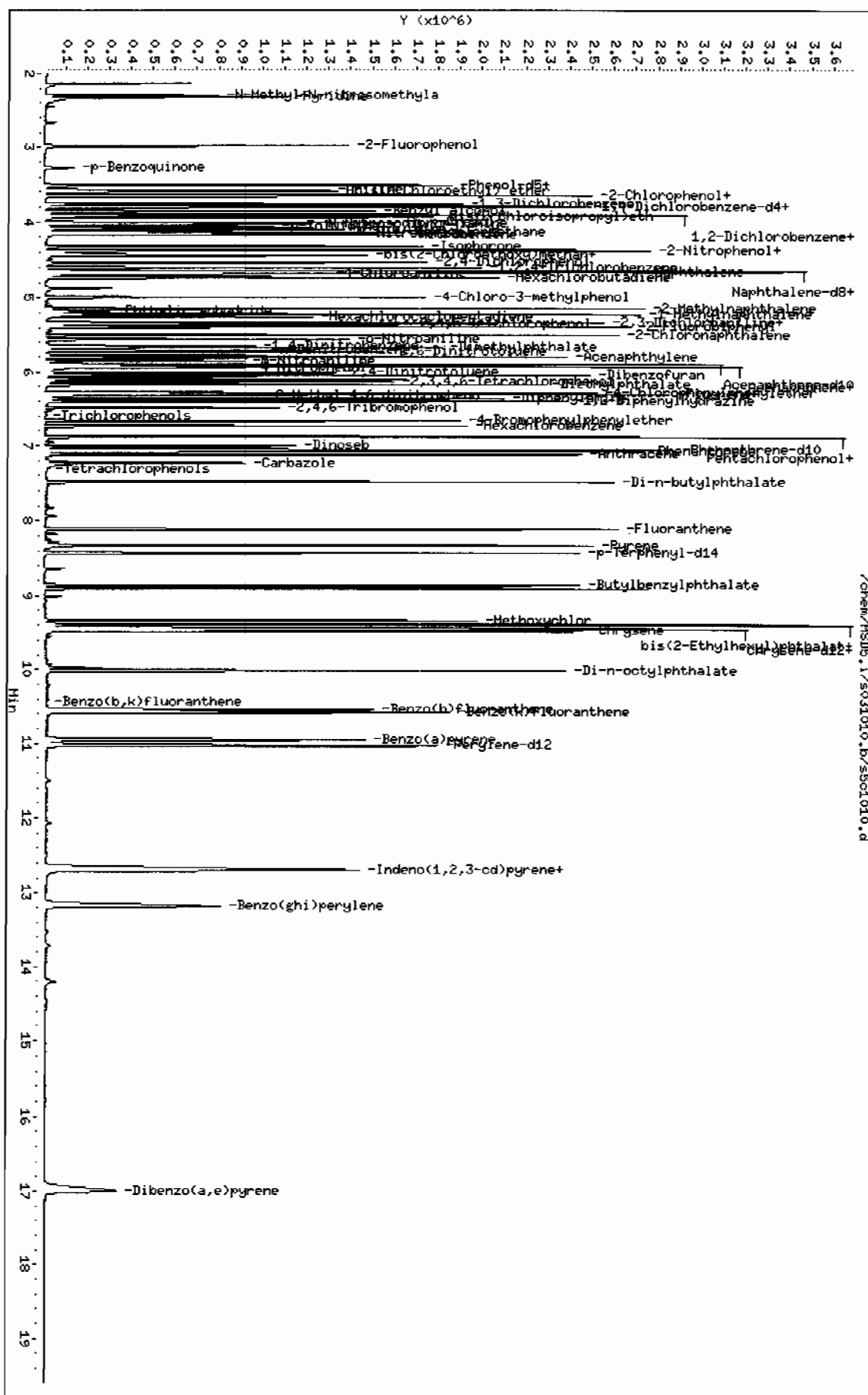
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
54 4-Chlorophenylphenylether	204	6.285	6.285	(1.064)	301692	40.0000	38.4
55 2-Methyl-4,6-dinitrophenol	198	6.323	6.323	(0.896)	94845	40.0000	49.8
56 p-Nitroaniline	138	6.304	6.304	(1.068)	70581	40.0000	31.7
133 Diphenylamine	169	6.372	6.372	(0.902)	412472	40.0000	33.6
58 1,2-Diphenylhydrazine	77	6.410	6.410	(0.908)	677800	40.0000	45.6
61 4-Bromophenylphenylether	248	6.670	6.670	(0.945)	184570	40.0000	37.4
63 Hexachlorobenzene	284	6.738	6.738	(0.954)	191907	40.0000	37.1
65 Pentachlorophenol	266	6.887	6.887	(0.975)	100505	40.0000	41.7
206 n-Octadecane	57	6.882	6.882	(0.975)	407056	40.0000	43.2
68 Phenanthrene	178	7.079	7.079	(1.003)	873263	40.0000	39.9
69 Anthracene	178	7.123	7.123	(1.009)	895634	40.0000	40.4
72 Di-n-butylphthalate	149	7.484	7.484	(1.060)	1061247	40.0000	44.4
76 Fluoranthene	202	8.110	8.110	(1.149)	956925	40.0000	41.9
79 Pyrene	202	8.322	8.322	(0.880)	1025081	40.0000	36.6
85 Butylbenzylphthalate	149	8.861	8.861	(0.937)	493095	40.0000	42.8
89 Benzo(a)anthracene	228	9.444	9.444	(0.998)	916863	40.0000	40.4
92 Chrysene	228	9.482	9.482	(1.003)	839404	40.0000	39.7
93 bis(2-Ethylhexyl)phthalate	149	9.391	9.391	(0.993)	658449	40.0000	47.8
94 Di-n-octylphthalate	149	10.017	10.017	(0.908)	1116068	40.0000	40.5
95 Benzo(b)fluoranthene	252	10.551	10.551	(0.956)	948597	40.0000	39.3
96 Benzo(k)fluoranthene	252	10.580	10.580	(0.959)	877655	40.0000	37.3
97 Benzo(a)pyrene	252	10.961	10.961	(0.993)	846206	40.0000	41.7
99 Indeno(1,2,3-cd)pyrene	276	12.675	12.675	(1.149)	899175	40.0000	53.7
100 Dibenzo(a,h)anthracene	278	12.694	12.694	(1.151)	726009	40.0000	54.8
101 Benzo(ghi)perylene	276	13.176	13.176	(1.194)	789606	40.0000	56.5
126 m-Dinitrobenzene	168	5.712	5.712	(0.967)	107452	40.0000	40.7
130 2,3,4,6-Tetrachlorophenol	232	6.131	6.131	(1.038)	160173	40.0000	39.5
143 Dinoseb	211	7.012	7.012	(0.993)	130088	40.0000	47.7
173 Carbazole	167	7.238	7.238	(1.025)	444129	40.0000	28.0
184 p-Benzoquinone	54	3.280	3.280	(0.865)	31360	40.0000	20.4
192 Methoxychlor	227	9.333	9.333	(0.987)	582878	40.0000	44.5
211 p-Toluidine	106	4.065	4.065	(1.072)	270601	40.0000	35.6
210 m-Toluidine	106	4.089	4.089	(1.079)	357790	40.0000	37.9
26 Phthalic anhydride	104	5.182	5.182	(1.114)	93683	40.0000	32.4
179 Dibenzo(a,e)pyrene	302	16.994	16.994	(1.540)	488148	40.0000	92.3
214 1,4-Dinitrobenzene	75	5.649	5.649	(0.957)	121584	40.0000	46.3
215 2-Ethoxyethanol	59	2.139	2.139	(0.564)	210667	40.0000	48.8
216 Methylenebis(2-chloroaniline)	231	9.391	9.391	(0.993)	112363	40.0000	58.3(Q)
M 225 Trichlorophenols	196				347067	80.0000	82.3
M 226 Tetrachlorophenols	232				160173	40.0000	39.5
M 227 Benzo(b,k)fluoranthene	252				1826252	80.0000	76.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDS.i/s031010.b/s01010.d
 Date: 10-MAR-2010 12:50
 Client ID: HECACVS
 Sample Info: MBN100129-05.5140 PPH11SM11MECACS
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-MAR-2010 10:52
Lab File ID: s5c1102.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99882	1.08917	1.08917	0.000	9.04572	60.00000	Averaged
5 Phenol-d5	1.20049	1.29623	1.29623	0.000	7.97492	60.00000	Averaged
20 Nitrobenzene-d5	0.29723	0.29853	0.29853	0.000	0.43763	60.00000	Averaged
39 2-Fluorobiphenyl	0.99907	0.96401	0.96401	0.000	-3.50882	60.00000	Averaged
60 2,4,6-Tribromophenol	0.15024	0.14946	0.14946	0.000	-0.51595	60.00000	Averaged
81 p-Terphenyl-d14	0.66537	0.58733	0.58733	0.000	-11.72820	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59272	0.66978	0.66978	0.000	13.00060	60.00000	Averaged
2 Pyridine	0.97945	1.03430	1.03430	0.000	5.60028	60.00000	Averaged
4 Aniline	0.52827	0.58234	0.58234	0.000	10.23502	60.00000	Averaged
6 Phenol	1.19992	1.31610	1.31610	0.001	9.68197	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.88170	0.96755	0.96755	0.000	9.73772	60.00000	Averaged
8 2-Chlorophenol	1.05146	1.13480	1.13480	0.000	7.92577	60.00000	Averaged
203 n-Decane	1.36730	1.46976	1.46976	0.000	7.49393	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17211	1.21327	1.21327	0.000	3.51152	60.00000	Averaged
11 1,4-Dichlorobenzene	1.14989	1.18759	1.18759	0.001	3.27807	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.02530	1.05887	1.05887	0.000	3.27464	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.81534	2.13560	2.13560	0.000	17.64200	60.00000	Averaged
12 Benzyl alcohol	0.66489	0.74477	0.74477	0.000	12.01291	60.00000	Averaged
15 o-Cresol	0.74336	0.79061	0.79061	0.000	6.35592	60.00000	Averaged
18 m,p-Cresols	1.07878	1.16661	1.16661	0.000	8.14136	60.00000	Averaged
17 N-Nitrosodipropylamine	0.63977	0.73348	0.73348	0.050	14.64713	60.00000	Averaged|spcc
19 Hexachloroethane	0.48048	0.51547	0.51547	0.000	7.28177	60.00000	Averaged
21 Nitrobenzene	0.27657	0.30556	0.30556	0.000	10.48289	60.00000	Averaged
22 Isophorone	0.53681	0.56986	0.56986	0.000	6.15646	60.00000	Averaged
23 2-Nitrophenol	0.13846	0.12679	0.12679	0.001	-8.43080	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.24823	0.24001	0.24001	0.000	-3.31181	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31726	0.32260	0.32260	0.000	1.68328	60.00000	Averaged
26 2,4-Dichlorophenol	0.22056	0.22963	0.22963	0.001	4.11024	20.00000	Averaged|ccc
27 Benzoic acid	28.13693	40.00000	0.07748	0.000	-29.65768	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26776	0.26537	0.26537	0.000	-0.89185	60.00000	Averaged
30 Naphthalene	0.88979	0.79004	0.79004	0.000	-11.21061	60.00000	Averaged
204 alpha-Terpineol	0.24206	0.24372	0.24372	0.000	0.68734	60.00000	Averaged
31 4-Chloroaniline	0.37597	0.39106	0.39106	0.000	4.01418	60.00000	Averaged
32 Hexachlorobutadiene	0.15870	0.16296	0.16296	0.001	2.67916	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.22089	0.24558	0.24558	0.001	11.17658	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.53949	0.50944	0.50944	0.000	-5.57008	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-MAR-2010 10:52
Lab File ID: s5c1102.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D	%D	%D	%D	%D	
35 1-Methylnaphthalene	0.54641	0.49474	0.49474	0.000	-9.45631	60.00000 Averaged
36 Hexachlorocyclopentadiene	0.23313	0.21059	0.21059	0.050	-9.66753	60.00000 Averaged|spcc
205 2,3-Dichloroaniline	0.49799	0.48925	0.48925	0.000	-1.75589	60.00000 Averaged
37 2,4,6-Trichlorophenol	0.26572	0.28223	0.28223	0.001	6.21303	20.00000 Averaged|ccc
38 2,4,5-Trichlorophenol	0.30847	0.30723	0.30723	0.000	-0.39958	60.00000 Averaged
40 2-Chloronaphthalene	0.92129	0.90327	0.90327	0.000	-1.95566	60.00000 Averaged
42 o-Nitroaniline	0.28579	0.32161	0.32161	0.000	12.53144	60.00000 Averaged
41 m-Nitroaniline	0.22162	0.17160	0.17160	0.000	-22.57153	60.00000 Averaged
43 Dimethylphthalate	1.05128	1.07026	1.07026	0.000	1.80527	60.00000 Averaged
44 2,6-Dinitrotoluene	0.25396	0.24923	0.24923	0.000	-1.86205	60.00000 Averaged
50 2,4-Dinitrotoluene	0.32369	0.31683	0.31683	0.000	-2.12078	60.00000 Averaged
45 Acenaphthylene	1.36031	1.35749	1.35749	0.000	-0.20764	60.00000 Averaged
47 Acenaphthene	0.88432	0.88522	0.88522	0.001	0.10249	20.00000 Averaged|ccc
48 2,4-Dinitrophenol	57.46147	40.00000	0.09368	0.050	43.65368	60.00000 Linear|spcc
49 Dibenzofuran	1.20503	1.20557	1.20557	0.000	0.04496	60.00000 Averaged
51 Diethylphthalate	1.01609	1.05866	1.05866	0.000	4.19014	60.00000 Averaged
52 4-Nitrophenol	51.88351	40.00000	0.19460	0.050	29.70878	60.00000 Linear|spcc
53 Fluorene	1.03882	1.00916	1.00916	0.000	-2.85507	60.00000 Averaged
54 4-Chlorophenylphenylether	0.53418	0.51500	0.51500	0.000	-3.59159	60.00000 Averaged
55 2-Methyl-4,6-dinitrophenol	46.05177	40.00000	0.08304	0.000	15.12943	60.00000 Linear
56 p-Nitroaniline	0.15152	0.15541	0.15541	0.000	2.56841	60.00000 Averaged
133 Diphenylamine	0.47541	0.46369	0.46369	0.001	-2.46626	20.00000 Averaged|ccc
58 1,2-Diphenylhydrazine	0.57531	0.63353	0.63353	0.000	10.11984	60.00000 Averaged
61 4-Bromophenylphenylether	0.19084	0.17677	0.17677	0.000	-7.37481	60.00000 Averaged
63 Hexachlorobenzene	0.19982	0.18331	0.18331	0.000	-8.26309	60.00000 Averaged
65 Pentachlorophenol	39.94177	40.00000	0.09258	0.001	-0.14557	20.00000 Linear|ccc
206 n-Octadecane	0.36396	0.38529	0.38529	0.000	5.86084	60.00000 Averaged
68 Phenanthrene	0.84676	0.82181	0.82181	0.000	-2.94717	60.00000 Averaged
69 Anthracene	0.85661	0.84120	0.84120	0.000	-1.79900	60.00000 Averaged
72 Di-n-butylphthalate	0.92502	1.01691	1.01691	0.000	9.93389	60.00000 Averaged
76 Fluoranthene	0.88331	0.92299	0.92299	0.001	4.49215	20.00000 Averaged|ccc
79 Pyrene	1.10528	0.98823	0.98823	0.000	-10.58978	60.00000 Averaged
85 Butylbenzylphthalate	0.45437	0.47532	0.47532	0.000	4.60892	60.00000 Averaged
89 Benzo(a)anthracene	0.89454	0.88095	0.88095	0.000	-1.51924	60.00000 Averaged
92 Chrysene	0.83356	0.82849	0.82849	0.000	-0.60899	60.00000 Averaged
93 bis(2-Ethylhexyl)phthalate	0.54345	0.65482	0.65482	0.000	20.49151	60.00000 Averaged

GEL Laboratories LLC
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-MAR-2010 10:52
Lab File ID: s5c1102.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.09003	1.12186	1.12186	0.001	2.91958	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	0.95543	0.90203	0.90203	0.000	-5.58957	60.00000	Averaged|
96 Benzo(k)fluoranthene	0.93017	0.87764	0.87764	0.000	-5.64720	60.00000	Averaged|
97 Benzo(a)pyrene	0.80265	0.83155	0.83155	0.001	3.60107	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.66189	0.90998	0.90998	0.000	37.48125	60.00000	Averaged|
100 Dibenzo(a,h)anthracene	0.52438	0.73624	0.73624	0.000	40.40278	60.00000	Averaged|
101 Benzo(ghi)perylene	0.55306	0.78660	0.78660	0.000	42.22805	60.00000	Averaged|
126 m-Dinitrobenzene	0.17977	0.17342	0.17342	0.000	-3.53172	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27593	0.27093	0.27093	0.000	-1.81064	60.00000	Averaged|
143 Dinoseb	43.98622	40.00000	0.11358	0.000	9.96555	60.00000	Linear|
173 Carbazole	0.61324	0.39926	0.39926	0.000	-34.89379	60.00000	Averaged|
184 p-Benzoquinone	28.55863	40.00000	0.18713	0.000	-28.60343	60.00000	Linear|
192 Methoxychlor	0.51661	0.56743	0.56743	0.000	9.83724	60.00000	Averaged|
211 p-Toluidine	1.14939	1.22972	1.22972	0.000	6.98967	60.00000	Averaged|
210 m-Toluidine	1.42835	1.53634	1.53634	0.000	7.56063	60.00000	Averaged|
26 Phthalic anhydride	0.11204	0.08393	0.08393	0.000	-25.09279	60.00000	Averaged|
179 Dibenzo(a,e)pyrene	0.20913	0.53648	0.53648	0.000	157	60.00000	Averaged|<-
214 1,4-Dinitrobenzene	0.17870	0.20625	0.20625	0.000	15.41902	60.00000	Averaged|
215 2-Ethoxyethanol	0.65261	0.72750	0.72750	0.000	11.47519	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.07603	0.09485	0.09485	0.000	24.75982	60.00000	Averaged|
IM 225 Trichlorophenols	0.28709	0.29473	0.29473	0.000	2.66054	60.00000	Averaged|
IM 226 Tetrachlorophenols	0.27593	0.27093	0.27093	0.000	-1.81064	60.00000	Averaged|
IM 227 Benzo(b,k)fluoranthene	0.94280	0.88983	0.88983	0.000	-5.61801	60.00000	Averaged|

Data File: /chem/MSD5.i/s031110.b/s5c1102.d
 Report Date: 11-Mar-2010 11:40

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1102.d
 Lab Smp Id: WBN100129-05.5 Client Smp ID: MEGACVS
 Inj Date : 11-MAR-2010 10:52
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100129-05.5|40 PPM|1|SVM|1|MEGACVS
 Misc Info : |MSD8270|WBN10227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
 Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152		3.916	3.916	(1.000)	223442	40.0000	
* 29 Naphthalene-d8	136		4.778	4.778	(1.000)	899668	40.0000	
* 46 Acenaphthene-d10	164		6.035	6.035	(1.000)	502203	40.0000	
* 67 Phenanthrene-d10	188		7.205	7.205	(1.000)	899929	40.0000	
* 91 Chrysene-d12	240		9.617	9.617	(1.000)	893171	40.0000	
* 98 Perylene-d12	264		11.283	11.283	(1.000)	888565	40.0000	
\$ 3 2-Fluorophenol	112		3.107	3.107	(0.793)	243367	40.0000	43.6
\$ 5 Phenol-d5	99		3.627	3.627	(0.926)	289632	40.0000	43.2
\$ 20 Nitrobenzene-d5	82		4.277	4.277	(0.895)	268576	40.0000	40.2
\$ 39 2-Fluorobiphenyl	172		5.519	5.519	(0.915)	484129	40.0000	38.6
\$ 60 2,4,6-Tribromophenol	329		6.627	6.627	(1.098)	75061	40.0000	39.8
\$ 81 p-Terphenyl-d14	244		8.582	8.582	(0.892)	524588	40.0000	35.3
1 N-Methyl-N-nitrosomethylamine	74		2.428	2.428	(0.620)	149657	40.0000	45.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
2 Pyridine	79	2.466	2.466	(0.630)	231107	40.0000	42.2
4 Aniline	66	3.699	3.699	(0.945)	130120	40.0000	44.1
6 Phenol	94	3.637	3.637	(0.929)	294071	40.0000	43.9(Q)
7 bis(2-Chloroethyl) ether	63	3.714	3.714	(0.948)	216192	40.0000	43.9
8 2-Chlorophenol	128	3.781	3.781	(0.966)	253562	40.0000	43.2
203 n-Decane	43	3.762	3.762	(0.961)	328406	40.0000	43.0
9 1,3-Dichlorobenzene	146	3.882	3.882	(0.991)	271095	40.0000	41.4
11 1,4-Dichlorobenzene	146	3.925	3.925	(1.002)	265357	40.0000	41.3
13 1,2-Dichlorobenzene	146	4.027	4.027	(1.028)	236597	40.0000	41.3
14 bis(2-Chloroisopropyl)ether	45	4.055	4.055	(1.036)	477182	40.0000	47.0
12 Benzyl alcohol	108	3.978	3.978	(1.016)	166412	40.0000	44.8
15 o-Cresol	107	4.031	4.031	(1.030)	176656	40.0000	42.5
18 m,p-Cresols	107	4.133	4.133	(1.055)	260669	40.0000	43.2
17 N-Nitrosodipropylamine	70	4.152	4.152	(1.060)	163890	40.0000	45.8
19 Hexachloroethane	117	4.258	4.258	(1.087)	115178	40.0000	42.9
21 Nitrobenzene	77	4.287	4.287	(0.897)	274902	40.0000	44.2
22 Isophorone	82	4.441	4.441	(0.929)	512688	40.0000	42.5
23 2-Nitrophenol	139	4.503	4.503	(0.943)	114066	40.0000	36.6
24 2,4-Dimethylphenol	122	4.494	4.494	(0.941)	215932	40.0000	38.7
25 bis(2-Chloroethoxy)methane	93	4.561	4.561	(0.955)	290235	40.0000	40.7
26 2,4-Dichlorophenol	162	4.662	4.662	(0.976)	206589	40.0000	41.6
27 Benzoic acid	105	4.547	4.547	(0.952)	69702	40.0000	28.1
28 1,2,4-Trichlorobenzene	180	4.725	4.725	(0.989)	238743	40.0000	39.6
30 Naphthalene	128	4.792	4.792	(1.003)	710774	40.0000	35.5(Q)
204 alpha-Terpineol	59	4.768	4.768	(0.998)	219269	40.0000	40.3
31 4-Chloroaniline	127	4.807	4.807	(1.006)	351828	40.0000	41.6
32 Hexachlorobutadiene	225	4.855	4.855	(1.016)	146607	40.0000	41.1
33 4-Chloro-3-methylphenol	107	5.120	5.120	(1.072)	220936	40.0000	44.5
34 2-Methylnaphthalene	142	5.274	5.274	(1.104)	458323	40.0000	37.8
35 1-Methylnaphthalene	142	5.346	5.346	(1.119)	445103	40.0000	36.2
36 Hexachlorocyclopentadiene	237	5.375	5.375	(0.891)	105758	40.0000	36.1
205 2,3-Dichloroaniline	161	5.471	5.471	(0.907)	245702	40.0000	39.3
37 2,4,6-Trichlorophenol	196	5.462	5.462	(0.905)	141736	40.0000	42.5
38 2,4,5-Trichlorophenol	196	5.490	5.490	(0.910)	154294	40.0000	39.8
40 2-Chloronaphthalene	162	5.625	5.625	(0.932)	453627	40.0000	39.2
42 o-Nitroaniline	65	5.683	5.683	(0.942)	161512	40.0000	45.0
41 m-Nitroaniline	138	5.982	5.982	(0.991)	86176	40.0000	31.0
43 Dimethylphthalate	163	5.794	5.794	(0.960)	537487	40.0000	40.7
44 2,6-Dinitrotoluene	165	5.852	5.852	(0.970)	125163	40.0000	39.2
50 2,4-Dinitrotoluene	165	6.150	6.150	(1.019)	159113	40.0000	39.2
45 Acenaphthylene	152	5.933	5.933	(0.983)	681734	40.0000	39.9
47 Acenaphthene	154	6.059	6.059	(1.004)	444561	40.0000	40.0
48 2,4-Dinitrophenol	184	6.054	6.054	(1.003)	47047	40.0000	57.5
49 Dibenzofuran	168	6.184	6.184	(1.025)	605443	40.0000	40.0
51 Diethylphthalate	149	6.304	6.304	(1.045)	531664	40.0000	41.7
52 4-Nitrophenol	139	6.073	6.073	(1.006)	97730	40.0000	51.9
53 Fluorene	166	6.444	6.444	(1.068)	506805	40.0000	38.8

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
54 4-Chlorophenylphenylether		204	6.420	6.420	(1.064)	258633	40.0000	38.6
55 2-Methyl-4,6-dinitrophenol		198	6.458	6.458	(0.896)	74733	40.0000	46.0
56 p-Nitroaniline		138	6.439	6.439	(1.067)	78046	40.0000	41.0
133 Diphenylamine		169	6.506	6.506	(0.903)	417285	40.0000	39.0
58 1,2-Diphenylhydrazine		77	6.545	6.545	(0.908)	570136	40.0000	44.0
61 4-Bromophenylphenylether		248	6.805	6.805	(0.945)	159078	40.0000	37.0
63 Hexachlorobenzene		284	6.877	6.877	(0.955)	164964	40.0000	36.7
65 Pentachlorophenol		266	7.027	7.027	(0.975)	83315	40.0000	39.9
206 n-Octadecane		57	7.017	7.017	(0.974)	346735	40.0000	42.3
68 Phenanthrene		178	7.224	7.224	(1.003)	739568	40.0000	38.8
69 Anthracene		178	7.267	7.267	(1.009)	757018	40.0000	39.3
72 Di-n-butylphthalate		149	7.624	7.624	(1.058)	915150	40.0000	44.0
76 Fluoranthene		202	8.264	8.264	(1.147)	830624	40.0000	41.8
79 Pyrene		202	8.481	8.481	(0.882)	882659	40.0000	35.8
85 Butylbenzylphthalate		149	9.010	9.010	(0.937)	424538	40.0000	41.8
89 Benzo(a)anthracene		228	9.603	9.603	(0.998)	786837	40.0000	39.4
92 Chrysene		228	9.641	9.641	(1.002)	739981	40.0000	39.8
93 bis(2-Ethylhexyl)phthalate		149	9.535	9.535	(0.991)	584862	40.0000	48.2
94 Di-n-octylphthalate		149	10.185	10.185	(0.903)	996844	40.0000	41.2
95 Benzo(b)fluoranthene		252	10.768	10.768	(0.954)	801511	40.0000	37.8
96 Benzo(k)fluoranthene		252	10.802	10.802	(0.957)	779840	40.0000	37.7
97 Benzo(a)pyrene		252	11.206	11.206	(0.993)	738888	40.0000	41.4
99 Indeno(1,2,3-cd)pyrene		276	13.036	13.036	(1.155)	808573	40.0000	55.0
100 Dibenzo(a,h)anthracene		278	13.060	13.060	(1.157)	654197	40.0000	56.2
101 Benzo(ghi)perylene		276	13.580	13.580	(1.204)	698949	40.0000	56.9
126 m-Dinitrobenzene		168	5.837	5.837	(0.967)	87093	40.0000	38.6
130 2,3,4,6-Tetrachlorophenol		232	6.261	6.261	(1.038)	136062	40.0000	39.3
143 Dinoseb		211	7.147	7.147	(0.992)	102212	40.0000	44.0
173 Carbazole		167	7.383	7.383	(1.025)	359306	40.0000	26.0
184 p-Benzoquinone		54	3.401	3.401	(0.868)	41812	40.0000	28.6
192 Methoxychlor		227	9.482	9.482	(0.986)	506810	40.0000	43.9
211 p-Toluidine		106	4.190	4.190	(1.070)	274772	40.0000	42.8
210 m-Toluidine		106	4.210	4.210	(1.075)	343283	40.0000	43.0
26 Phthalic anhydride		104	5.312	5.312	(1.112)	75508	40.0000	30.0
179 Dibenzo(a,e)pyrene		302	17.692	17.692	(1.568)	476698	40.0000	103
214 1,4-Dinitrobenzene		75	5.775	5.775	(0.957)	103580	40.0000	46.2
215 2-Ethoxyethanol		59	2.279	2.279	(0.582)	162553	40.0000	44.6
216 Methylenebis(2-chloroaniline)		231	9.545	9.545	(0.992)	84720	40.0000	49.9(Q)
M 225 Trichlorophenols		196				296030	80.0000	82.1
M 226 Tetrachlorophenols		232				136062	40.0000	39.3
M 227 Benzo(b,k)fluoranthene		252				1581351	80.0000	75.5

QC Flag Legend

Q - Qualifier signal failed the ratio test.

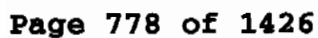
Page 1

Instrument: MSD5.1

Operator: RMB

Column diameter: Ø.20

/chem/MSDS, i/s031110, b/s501102.0



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-MAR-2010 11:20
Lab File ID: s5c1103.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
Method: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	REF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.77531	0.87450	0.87450	0.000	12.79359	60.00000	Averaged
16 Acetophenone	1.11708	1.21862	1.21862	0.000	9.08999	60.00000	Averaged
189 Caprolactam	0.08910	0.08493	0.08493	0.000	-4.67598	60.00000	Averaged
208 1,1'-Biphenyl	1.11469	1.12637	1.12637	0.000	1.04822	60.00000	Averaged
207 Atrazine	0.03043	0.03878	0.03878	0.000	27.44475	60.00000	Averaged
77 Benzidine	0.18071	0.19959	0.19959	0.000	10.44702	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27254	0.28065	0.28065	0.000	2.97676	60.00000	Averaged
102 1,4-Dioxane	0.34121	0.37428	0.37428	0.000	9.69302	60.00000	Averaged
103 Methyl methacrylate	0.18410	0.20050	0.20050	0.000	8.90921	60.00000	Averaged
104 Ethyl methacrylate	0.74729	0.50738	0.50738	0.000	-32.10494	60.00000	Averaged
105 2-Picoline	1.15797	1.20320	1.20320	0.000	3.90530	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43654	0.46796	0.46796	0.000	7.19666	60.00000	Averaged
107 Methyl methanesulfonate	0.47991	0.56263	0.56263	0.000	17.23811	60.00000	Averaged
108 N-Nitrosodiethylamine	0.44277	0.47610	0.47610	0.000	7.52833	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60959	0.66490	0.66490	0.000	9.07276	60.00000	Averaged
110 Pentachloroethane	0.32418	0.33318	0.33318	0.000	2.77559	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.43870	0.50882	0.50882	0.000	15.98186	60.00000	Averaged
113 N-Nitrosomorpholine	0.53553	0.67293	0.67293	0.000	25.65673	60.00000	Averaged
114 o-Toluidine	1.52862	1.57544	1.57544	0.000	3.06294	60.00000	Averaged
115 N-Nitrosopiperidine	0.13910	0.14248	0.14248	0.000	2.43054	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.79352	0.79612	0.79612	0.000	0.32805	60.00000	Averaged
118 2,6-Dichlorophenol	0.21700	0.22562	0.22562	0.000	3.97434	60.00000	Averaged
119 Hexachloropropene	0.10744	0.11276	0.11276	0.000	4.95274	60.00000	Averaged
120 p-Phenylenediamine	0.17838	0.24109	0.24109	0.000	35.15402	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.18088	0.18627	0.18627	0.000	2.97704	60.00000	Averaged
122 Safrole	0.19975	0.18902	0.18902	0.000	-5.37086	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.43728	0.41863	0.41863	0.000	-4.26507	60.00000	Averaged
124 Isosafrole	0.33677	0.32466	0.32466	0.000	-3.59713	60.00000	Averaged
125 1,4-Naphthoquinone	0.34896	0.32730	0.32730	0.000	-6.20837	60.00000	Averaged
127 Pentachlorobenzene	0.42091	0.39141	0.39141	0.000	-7.00810	60.00000	Averaged
128 1-Naphthylamine	0.77744	0.81119	0.81119	0.000	4.34156	60.00000	Averaged
129 2-Naphthylamine	0.75956	0.81930	0.81930	0.000	7.86470	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27264	0.25795	0.25795	0.000	-5.38886	60.00000	Averaged
136 1,3,5-Trinitrobenzene	49.71248	40.00000	0.13153	0.000	24.28120	60.00000	Linear
137 Phenacetin	0.25552	0.28502	0.28502	0.000	11.54494	60.00000	Averaged
138 Diallate	0.20822	0.23092	0.23092	0.000	10.90231	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-MAR-2010 11:20
 Lab File ID: s5c1103.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 14:42
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
 Method: /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.24438	0.25991	0.25991	0.000	6.35426	60.00000	Averaged
213 Trans Diallate	0.24496	0.27167	0.27167	0.000	10.90231	60.00000	Averaged
140 4-Aminobiphenyl	0.41807	0.47345	0.47345	0.000	13.24660	60.00000	Averaged
141 Pentachloronitrobenzene	0.06950	0.07922	0.07922	0.000	13.98728	60.00000	Averaged
142 Pronamide	0.24082	0.24988	0.24988	0.000	3.76589	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01215	0.01843	0.01843	0.000	51.76612	60.00000	Averaged
147 Methapyrilene	0.34277	0.39688	0.39688	0.000	15.78589	60.00000	Averaged
148 Isodrin	0.10083	0.10672	0.10672	0.000	5.84058	60.00000	Averaged
149 Aramite	0.05058	0.05021	0.05021	0.000	-0.71751	60.00000	Averaged
150 Kepone	0.07824	0.07893	0.07893	0.000	0.87224	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25079	0.27263	0.27263	0.000	8.70569	60.00000	Averaged
152 Chlorobenzilate	0.27769	0.27233	0.27233	0.000	-1.93120	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.40745	0.39858	0.39858	0.000	-2.17610	60.00000	Averaged
155 2-Acetylaminofluorene	0.29875	0.32640	0.32640	0.000	9.25558	60.00000	Averaged
157 7,12Dimethylbenz(a)anthracene	0.43958	0.40278	0.40278	0.000	-8.37050	60.00000	Averaged
158 3-Methylcholanthrene	0.36797	0.36902	0.36902	0.000	0.28530	60.00000	Averaged

Data File: /chem/MSD5.i/s031110.b/s5c1103.d
 Report Date: 22-Mar-2010 11:44

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031110.b/s5c1103.d
 Lab Smp Id: WBN100218-03.2 Client Smp ID: AP12CVS
 Inj Date : 11-MAR-2010 11:20
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100218-03.2|40 PPM|1|SVM|1|AP12CVS
 Misc Info : |MSD8270|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031110.b/MSD5-M8270C-030210.m
 Meth Date : 11-Mar-2010 11:40 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ap12.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*****	----	--	-----	-----	-----	-----	-----
* 10 1,4-Dichlorobenzene-d4	152	3.907	3.916	(1.000)	252166	40.0000	
* 29 Naphthalene-d8	136	4.772	4.778	(1.000)	939533	40.0000	
* 46 Acenaphthene-d10	164	6.025	6.035	(1.000)	560533	40.0000	
* 67 Phenanthrene-d10	188	7.195	7.205	(1.000)	960174	40.0000	
* 91 Chrysene-d12	240	9.607	9.617	(1.000)	953925	40.0000	
* 98 Perylene-d12	264	11.272	11.283	(1.000)	901998	40.0000	
209 Benzaldehyde	77	3.637	3.637	(0.931)	220520	40.0000	45.1
16 Acetophenone	105	4.160	4.160	(1.065)	307294	40.0000	43.6
189 Caprolactam	113	5.048	5.048	(1.058)	79798	40.0000	38.1
208 1,1'-Biphenyl	154	5.590	5.590	(0.928)	631368	40.0000	40.4
207 Atrazine	173	6.895	6.895	(0.958)	37239	40.0000	51.0
77 Benzidine	184	8.348	8.348	(0.869)	187828	40.0000	43.6
90 3,3'-Dichlorobenzidine	252	9.542	9.542	(0.993)	267718	40.0000	41.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
102 1,4-Dioxane	88	2.284	2.284 (0.585)		94381	40.0000	43.9
103 Methyl methacrylate	100	2.272	2.272 (0.582)		50559	40.0000	43.6
104 Ethyl methacrylate	69	2.631	2.272 (0.673)		202368	40.0000	43.0
105 2-Picoline	93	2.825	2.825 (0.723)		303405	40.0000	41.6
106 N-Nitrosomethylethylamine	88	2.860	2.860 (0.732)		118003	40.0000	42.9
107 Methyl methanesulfonate	80	3.013	3.013 (0.771)		141877	40.0000	46.9
108 N-Nitrosodiethylamine	102	3.243	3.243 (0.830)		120056	40.0000	43.0
109 Ethyl Methanesulfonate	79	3.396	3.396 (0.869)		167665	40.0000	43.6
110 Pentachloroethane	167	3.737	3.737 (0.956)		84016	40.0000	41.1
111 N-Nitrosopyrrolidine	100	4.149	4.149 (1.062)		128306	40.0000	46.4 (Q)
113 N-Nitrosomorpholine	56	4.166	4.166 (1.066)		169690	40.0000	50.3
114 o-Toluidine	106	4.184	4.184 (1.071)		397272	40.0000	41.2
115 N-Nitrosopiperidine	114	4.384	4.384 (0.919)		133864	40.0000	41.0
116 a,a-Dimethylphenethylamine	58	4.625	4.625 (0.969)		747980	40.0000	40.1
118 2,6-Dichlorophenol	162	4.813	4.813 (1.009)		211979	40.0000	41.6
119 Hexachloropropene	213	4.843	4.843 (1.015)		105941	40.0000	42.0
120 p-Phenylenediamine	108	5.054	5.054 (1.059)		226508	40.0000	54.1
121 N-Nitrosodi-n-butylamine	84	5.013	5.013 (1.051)		175004	40.0000	41.2 (Q)
122 Safrole	162	5.184	5.184 (1.086)		177592	40.0000	37.8
123 1,2,4,5-Tetrachlorobenzene	216	5.384	5.384 (0.894)		234658	40.0000	38.3
124 Isosafrole	162	5.554	5.554 (0.922)		181983	40.0000	38.6
125 1,4-Naphthoquinone	158	5.743	5.743 (0.953)		183460	40.0000	37.5
127 Pentachlorobenzene	250	6.143	6.143 (1.020)		219398	40.0000	37.2
128 1-Naphthylamine	143	6.231	6.231 (1.034)		454698	40.0000	41.7
129 2-Naphthylamine	143	6.290	6.290 (1.044)		459246	40.0000	43.1
131 5-Nitro-o-toluidine	152	6.431	6.431 (1.067)		144590	40.0000	37.8
136 1,3,5-Trinitrobenzene	75	6.684	6.684 (0.929)		126288	40.0000	49.7
137 Phenacetin	108	6.725	6.725 (0.935)		273670	40.0000	44.6 (Q)
138 Diallate	86	6.707	6.707 (0.932)		221721	40.0000	44.4
212 Cis Diallate	86	6.784	6.784 (0.943)		37434	6.00000	6.4 (a)
213 Trans Diallate	86	6.707	6.707 (0.932)		221721	34.0000	37.7
140 4-Aminobiphenyl	169	7.013	7.013 (0.975)		454594	40.0000	45.3
141 Pentachloronitrobenzene	237	7.031	7.031 (0.977)		76069	40.0000	45.6 (Q)
142 Pronamide	173	7.025	7.025 (0.976)		239933	40.0000	41.5
146 4-Nitroquinoline-1-oxide	101	7.866	7.866 (1.093)		17698	40.0000	60.7
147 Methapyrilene	58	7.901	7.901 (1.098)		381074	40.0000	46.3
148 Isodrin	193	8.119	8.119 (1.128)		102468	40.0000	42.3
149 Aramite	185	8.519	8.519 (1.184)		48215	40.0000	39.7
150 Kepone	272	9.107	9.107 (1.266)		75784	40.0000	40.3
151 p-(Dimethylamino)azobenzene	120	8.701	8.701 (0.906)		260065	40.0000	43.5
152 Chlorobenzilate	251	8.731	8.731 (0.909)		259784	40.0000	39.2
153 3,3'-Dimethylbenzidine	212	9.019	9.019 (0.939)		380219	40.0000	39.1
155 2-Acetylaminofluorene	181	9.266	9.266 (0.964)		311361	40.0000	43.7
157 7,12Dimethylbenz(a)anthracene	256	10.730	10.730 (0.952)		363310	40.0000	36.6
158 3-Methylcholanthrene	268	11.672	11.672 (1.035)		332857	40.0000	40.1 (Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD5.i/s031110.b/s0c1103.d

Date: 11-MAR-2010 11:20

Client ID: AP12CVS

Sample Info: MBN100218-03.2140 PPM11ISW111P12CVS

Volume Injected (uL): 0.5

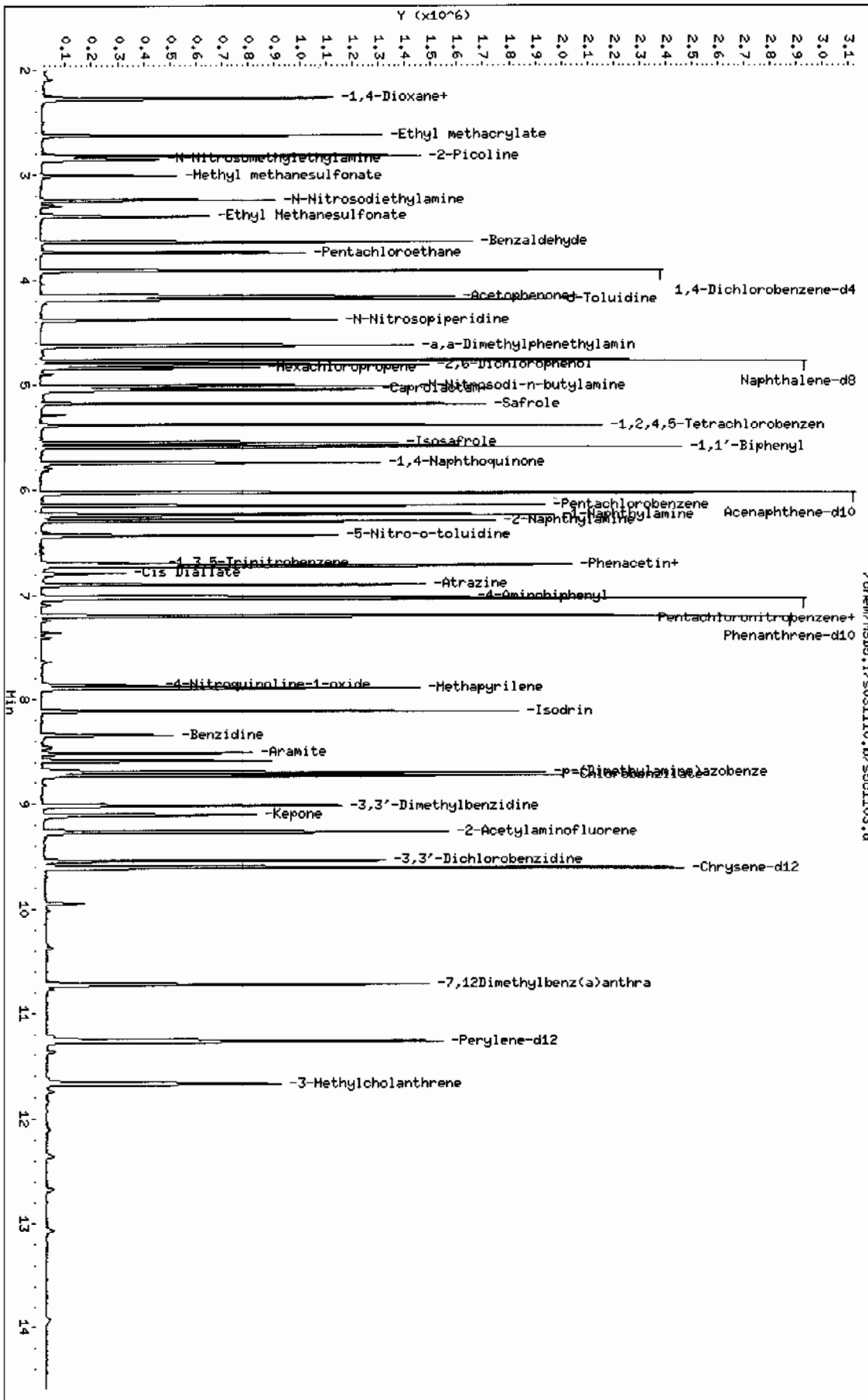
Column phase: 38M DB-5HS

Instrument: HSD5.i

Operator: RHB

Column diameter: 0.20

Page 1



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-MAR-2010 10:54
Lab File ID: s5c1202.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99882	1.10514	1.10514	0.000	10.64410	60.00000	Averaged
5 Phenol-d5	1.20049	1.30017	1.30017	0.000	8.30294	60.00000	Averaged
20 Nitrobenzene-d5	0.29723	0.31206	0.31206	0.000	4.99073	60.00000	Averaged
39 2-Fluorobiphenyl	0.99907	0.95910	0.95910	0.000	-4.00077	60.00000	Averaged
60 2,4,6-Tribromophenol	0.15024	0.14695	0.14695	0.000	-2.19187	60.00000	Averaged
81 p-Terphenyl-d14	0.66537	0.58065	0.58065	0.000	-12.73267	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59272	0.71048	0.71048	0.000	19.86743	60.00000	Averaged
2 Pyridine	0.97945	1.07778	1.07778	0.000	10.03862	60.00000	Averaged
4 Aniline	0.52827	0.60862	0.60862	0.000	15.20960	60.00000	Averaged
6 Phenol	1.19992	1.31964	1.31964	0.001	9.97725	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.88170	0.98447	0.98447	0.000	11.65635	60.00000	Averaged
8 2-Chlorophenol	1.05146	1.16495	1.16495	0.000	10.79282	60.00000	Averaged
203 n-Decane	1.36730	1.48414	1.48414	0.000	8.54543	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17211	1.23502	1.23502	0.000	5.36700	60.00000	Averaged
11 1,4-Dichlorobenzene	1.14989	1.18518	1.18518	0.001	3.06850	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.02530	1.07172	1.07172	0.000	4.52772	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.81534	2.18175	2.18175	0.000	20.18421	60.00000	Averaged
12 Benzyl alcohol	0.66489	0.74506	0.74506	0.000	12.05777	60.00000	Averaged
15 o-Cresol	0.74336	0.80225	0.80225	0.000	7.92152	60.00000	Averaged
18 m,p-Cresols	1.07878	1.16248	1.16248	0.000	7.75844	60.00000	Averaged
17 N-Nitrosodipropylamine	0.63977	0.79849	0.79849	0.050	24.80876	60.00000	Averaged|spcc
19 Hexachloroethane	0.48048	0.54577	0.54577	0.000	13.58662	60.00000	Averaged
21 Nitrobenzene	0.27657	0.31817	0.31817	0.000	15.04354	60.00000	Averaged
22 Isophorone	0.53681	0.57889	0.57889	0.000	7.83864	60.00000	Averaged
23 2-Nitrophenol	0.13846	0.13508	0.13508	0.001	-2.44409	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.24823	0.24417	0.24417	0.000	-1.63885	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31726	0.33363	0.33363	0.000	5.15986	60.00000	Averaged
26 2,4-Dichlorophenol	0.22056	0.22776	0.22776	0.001	3.26183	20.00000	Averaged|ccc
27 Benzoic acid	26.19026	40.00000	0.06962	0.000	-34.52436	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26776	0.27146	0.27146	0.000	1.38382	60.00000	Averaged
30 Naphthalene	0.88979	0.79851	0.79851	0.000	-10.25860	60.00000	Averaged
204 alpha-Terpineol	0.24206	0.24690	0.24690	0.000	2.00077	60.00000	Averaged
31 4-Chloroaniline	0.37597	0.40581	0.40581	0.000	7.93578	60.00000	Averaged
32 Hexachlorobutadiene	0.15870	0.16766	0.16766	0.001	5.64521	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.22089	0.25073	0.25073	0.001	13.50822	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.53949	0.51445	0.51445	0.000	-4.64053	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-MAR-2010 10:54
Lab File ID: s5c1202.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
Method: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.54641	0.50208	0.50208	0.000	-8.11403	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.23313	0.22355	0.22355	0.050	-4.10625	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.49799	0.49417	0.49417	0.000	-0.76779	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26572	0.27864	0.27864	0.001	4.86438	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.30847	0.31156	0.31156	0.000	1.00397	60.00000	Averaged
40 2-Chloronaphthalene	0.92129	0.89496	0.89496	0.000	-2.85814	60.00000	Averaged
42 o-Nitroaniline	0.28579	0.32599	0.32599	0.000	14.06567	60.00000	Averaged
41 m-Nitroaniline	0.22162	0.17346	0.17346	0.000	-21.73125	60.00000	Averaged
43 Dimethylphthalate	1.05128	1.05178	1.05178	0.000	0.04794	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25396	0.24212	0.24212	0.000	-4.66026	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32369	0.31844	0.31844	0.000	-1.62399	60.00000	Averaged
45 Acenaphthylene	1.36031	1.32611	1.32611	0.000	-2.51403	60.00000	Averaged
47 Acenaphthene	0.88432	0.87664	0.87664	0.001	-0.86772	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	51.62206	40.00000	0.08047	0.050	29.05514	60.00000	Linear|spcc
49 Dibenzofuran	1.20503	1.17932	1.17932	0.000	-2.13400	60.00000	Averaged
51 Diethylphthalate	1.01609	1.06109	1.06109	0.000	4.42930	60.00000	Averaged
52 4-Nitrophenol	50.12503	40.00000	0.18745	0.050	25.31257	60.00000	Linear|spcc
53 Fluorene	1.03882	0.98291	0.98291	0.000	-5.38188	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53418	0.50216	0.50216	0.000	-5.99472	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	44.25388	40.00000	0.07891	0.000	10.63470	60.00000	Linear
56 p-Nitroaniline	0.15152	0.14491	0.14491	0.000	-4.36129	60.00000	Averaged
133 Diphenylamine	0.47541	0.45794	0.45794	0.001	-3.67554	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.57531	0.64139	0.64139	0.000	11.48497	60.00000	Averaged
61 4-Bromophenylphenylether	0.19084	0.17226	0.17226	0.000	-9.73542	60.00000	Averaged
63 Hexachlorobenzene	0.19982	0.18451	0.18451	0.000	-7.66161	60.00000	Averaged
65 Pentachlorophenol	38.99965	40.00000	0.09013	0.001	-2.50087	20.00000	Linear|ccc
206 n-Octadecane	0.36396	0.38344	0.38344	0.000	5.35280	60.00000	Averaged
68 Phenanthrene	0.84676	0.82368	0.82368	0.000	-2.72562	60.00000	Averaged
69 Anthracene	0.85661	0.83239	0.83239	0.000	-2.82707	60.00000	Averaged
72 Di-n-butylphthalate	0.92502	1.01230	1.01230	0.000	9.43536	60.00000	Averaged
76 Fluoranthene	0.88331	0.90901	0.90901	0.001	2.91002	20.00000	Averaged|ccc
79 Pyrene	1.10528	0.98085	0.98085	0.000	-11.25720	60.00000	Averaged
85 Butylbenzylphthalate	0.45437	0.47253	0.47253	0.000	3.99633	60.00000	Averaged
89 Benzo(a)anthracene	0.89454	0.87015	0.87015	0.000	-2.72673	60.00000	Averaged
92 Chrysene	0.83356	0.81192	0.81192	0.000	-2.59631	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.54345	0.65409	0.65409	0.000	20.35790	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-MAR-2010 10:54
 Lab File ID: s5c1202.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 14:42
 Lab Sample ID: WBN100129-05.5 Quant Type: ISTD
 Method: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.09003	1.13419	1.13419	0.001	4.05095	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	0.95543	0.86984	0.86984	0.000	-8.95905	60.00000	Averaged|
96 Benzo(k)fluoranthene	0.93017	0.90811	0.90811	0.000	-2.37115	60.00000	Averaged|
97 Benzo(a)pyrene	0.80265	0.82639	0.82639	0.001	2.95737	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.66189	0.87313	0.87313	0.000	31.91449	60.00000	Averaged|
100 Dibenzo(a,h)anthracene	0.52438	0.71488	0.71488	0.000	36.32986	60.00000	Averaged|
101 Benzo(ghi)perylene	0.55306	0.74881	0.74881	0.000	35.39373	60.00000	Averaged|
126 m-Dinitrobenzene	0.17977	0.17421	0.17421	0.000	-3.09247	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27593	0.25547	0.25547	0.000	-7.41268	60.00000	Averaged|
143 Dinoseb	44.49935	40.00000	0.11526	0.000	11.24839	60.00000	Linear|
173 Carbazole	0.61324	0.40815	0.40815	0.000	-33.44343	60.00000	Averaged|
184 p-Benzoquinone	25.66954	40.00000	0.16272	0.000	-35.82616	60.00000	Linear|
192 Methoxychlor	0.51661	0.58076	0.58076	0.000	12.41751	60.00000	Averaged|
211 p-Toluidine	1.14939	1.23455	1.23455	0.000	7.40933	60.00000	Averaged|
210 m-Toluidine	1.42835	1.59357	1.59357	0.000	11.56697	60.00000	Averaged|
26 Phthalic anhydride	0.11204	0.08691	0.08691	0.000	-22.42816	60.00000	Averaged|
179 Dibenzo(a,e)pyrene	0.20913	0.46508	0.46508	0.000	122	60.00000	Averaged|<-
214 1,4-Dinitrobenzene	0.17870	0.20392	0.20392	0.000	14.11246	60.00000	Averaged|
215 2-Ethoxyethanol	0.65261	0.75279	0.75279	0.000	15.35121	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.07603	0.08346	0.08346	0.000	9.77911	60.00000	Averaged|
M 225 Trichlorophenols	0.28709	0.29510	0.29510	0.000	2.79043	60.00000	Averaged|
M 226 Tetrachlorophenols	0.27593	0.25547	0.25547	0.000	-7.41268	60.00000	Averaged|
M 227 Benzo(b,k)fluoranthene	0.94280	0.88897	0.88897	0.000	-5.70924	60.00000	Averaged|

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1202.d
 Lab Smp Id: WBN100129-05.5 Client Smp ID: MEGACVS
 Inj Date : 12-MAR-2010 10:54
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100129-05.5|40 PPM|1|SVM|1|MEGACVS
 Misc Info : |MSD8270|WBN10227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAICARE.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)
						ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.911	3.911	(1.000)	243328	40.0000
* 29 Naphthalene-d8	136	4.773	4.773	(1.000)	964709	40.0000
* 46 Acenaphthene-d10	164	6.030	6.030	(1.000)	553511	40.0000
* 67 Phenanthrene-d10	188	7.195	7.195	(1.000)	970735	40.0000
* 91 Chrysene-d12	240	9.608	9.608	(1.000)	964578	40.0000
* 98 Perylene-d12	264	11.269	11.269	(1.000)	947823	40.0000
\$ 3 2-Fluorophenol	112	3.107	3.107	(0.794)	268911	40.0000 44.2
\$ 5 Phenol-d5	99	3.627	3.627	(0.927)	316367	40.0000 43.3
\$ 20 Nitrobenzene-d5	82	4.272	4.272	(0.895)	301048	40.0000 42.0
\$ 39 2-Fluorobiphenyl	172	5.515	5.515	(0.915)	530870	40.0000 38.4
\$ 60 2,4,6-Tribromophenol	329	6.622	6.622	(1.098)	81336	40.0000 39.1
\$ 81 p-Terphenyl-d14	244	8.572	8.572	(0.892)	560081	40.0000 34.9
1 N-Methyl-N-nitrosomethylamine	74	2.428	2.428	(0.621)	172880	40.0000 47.9

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
2 Pyridine	79	2.466	2.466	(0.631)	262253	40.0000	44.0
4 Aniline	66	3.694	3.694	(0.945)	148095	40.0000	46.1
6 Phenol	94	3.637	3.637	(0.930)	321105	40.0000	44.0(Q)
7 bis(2-Chloroethyl) ether	63	3.709	3.709	(0.948)	239549	40.0000	44.7
8 2-Chlorophenol	128	3.776	3.776	(0.966)	283464	40.0000	44.3
203 n-Decane	43	3.757	3.757	(0.961)	361132	40.0000	43.4
9 1,3-Dichlorobenzene	146	3.877	3.877	(0.991)	300514	40.0000	42.1
11 1,4-Dichlorobenzene	146	3.921	3.921	(1.002)	288387	40.0000	41.2
13 1,2-Dichlorobenzene	146	4.022	4.022	(1.028)	260780	40.0000	41.8
14 bis(2-Chloroisopropyl)ether	45	4.051	4.051	(1.036)	530880	40.0000	48.1
12 Benzyl alcohol	108	3.978	3.978	(1.017)	181295	40.0000	44.8
15 o-Cresol	107	4.027	4.027	(1.030)	195210	40.0000	43.2
18 m,p-Cresols	107	4.128	4.128	(1.055)	282863	40.0000	43.1
17 N-Nitrosodipropylamine	70	4.152	4.152	(1.062)	194295	40.0000	49.9
19 Hexachloroethane	117	4.253	4.253	(1.087)	132800	40.0000	45.4
21 Nitrobenzene	77	4.287	4.287	(0.898)	306944	40.0000	46.0
22 Isophorone	82	4.441	4.441	(0.930)	558464	40.0000	43.1
23 2-Nitrophenol	139	4.498	4.498	(0.942)	130309	40.0000	39.0
24 2,4-Dimethylphenol	122	4.489	4.489	(0.940)	235549	40.0000	39.3
25 bis(2-Chloroethoxy)methane	93	4.556	4.556	(0.955)	321858	40.0000	42.1
26 2,4-Dichlorophenol	162	4.657	4.657	(0.976)	219719	40.0000	41.3
27 Benzoic acid	105	4.542	4.542	(0.952)	67161	40.0000	26.2
28 1,2,4-Trichlorobenzene	180	4.725	4.725	(0.990)	261881	40.0000	40.6
30 Naphthalene	128	4.787	4.787	(1.003)	770331	40.0000	35.9(Q)
204 alpha-Terpineol	59	4.763	4.763	(0.998)	238188	40.0000	40.8
31 4-Chloroaniline	127	4.807	4.807	(1.007)	391487	40.0000	43.2
32 Hexachlorobutadiene	225	4.850	4.850	(1.016)	161747	40.0000	42.2
33 4-Chloro-3-methylphenol	107	5.115	5.115	(1.072)	241877	40.0000	45.4
34 2-Methylnaphthalene	142	5.269	5.269	(1.104)	496295	40.0000	38.1
35 1-Methylnaphthalene	142	5.341	5.341	(1.119)	484357	40.0000	36.8
36 Hexachlorocyclopentadiene	237	5.370	5.370	(0.891)	123739	40.0000	38.4
205 2,3-Dichloroaniline	161	5.466	5.466	(0.907)	273528	40.0000	39.7
37 2,4,6-Trichlorophenol	196	5.457	5.457	(0.905)	154233	40.0000	41.9
38 2,4,5-Trichlorophenol	196	5.486	5.486	(0.910)	172454	40.0000	40.4
40 2-Chloronaphthalene	162	5.620	5.620	(0.932)	495370	40.0000	38.8
42 o-Nitroaniline	65	5.683	5.683	(0.942)	180440	40.0000	45.6
41 m-Nitroaniline	138	5.977	5.977	(0.991)	96011	40.0000	31.3
43 Dimethylphthalate	163	5.789	5.789	(0.960)	582174	40.0000	40.0
44 2,6-Dinitrotoluene	165	5.847	5.847	(0.970)	134017	40.0000	38.1
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.019)	176259	40.0000	39.4
45 Acenaphthylene	152	5.929	5.929	(0.983)	734018	40.0000	39.0
47 Acenaphthene	154	6.054	6.054	(1.004)	485231	40.0000	39.6
48 2,4-Dinitrophenol	184	6.049	6.049	(1.003)	44540	40.0000	51.6
49 Dibenzofuran	168	6.174	6.174	(1.024)	652765	40.0000	39.1
51 Diethylphthalate	149	6.299	6.299	(1.045)	587327	40.0000	41.8
52 4-Nitrophenol	139	6.068	6.068	(1.006)	103755	40.0000	50.1
53 Fluorene	166	6.439	6.439	(1.068)	544054	40.0000	37.8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.415	6.415	(1.064)	277951	40.0000	37.6
55 2-Methyl-4,6-dinitrophenol	198	6.454	6.454	(0.897)	76604	40.0000	44.2
56 p-Nitroaniline	138	6.434	6.434	(1.067)	80208	40.0000	38.2
133 Diphenylamine	169	6.502	6.502	(0.904)	444536	40.0000	38.5
58 1,2-Diphenylhydrazine	77	6.535	6.535	(0.908)	622618	40.0000	44.6
61 4-Bromophenylphenylether	248	6.800	6.800	(0.945)	167221	40.0000	36.1
63 Hexachlorobenzene	284	6.872	6.872	(0.955)	179110	40.0000	36.9
65 Pentachlorophenol	266	7.022	7.022	(0.976)	87493	40.0000	39.0
206 n-Octadecane	57	7.007	7.007	(0.974)	372221	40.0000	42.1
68 Phenanthrene	178	7.214	7.214	(1.003)	799578	40.0000	38.9
69 Anthracene	178	7.258	7.258	(1.009)	808031	40.0000	38.9
72 Di-n-butylphthalate	149	7.614	7.614	(1.058)	982677	40.0000	43.8
76 Fluoranthene	202	8.254	8.254	(1.147)	882411	40.0000	41.2
79 Pyrene	202	8.471	8.471	(0.882)	946110	40.0000	35.5
85 Butylbenzylphthalate	149	9.001	9.001	(0.937)	455794	40.0000	41.6
89 Benzo(a)anthracene	228	9.593	9.593	(0.998)	839324	40.0000	38.9
92 Chrysene	228	9.632	9.632	(1.002)	783162	40.0000	39.0
93 bis(2-Ethylhexyl)phthalate	149	9.526	9.526	(0.991)	630920	40.0000	48.1
94 Di-n-octylphthalate	149	10.176	10.176	(0.903)	1075012	40.0000	41.6
95 Benzo(b)fluoranthene	252	10.754	10.754	(0.954)	824450	40.0000	36.4
96 Benzo(k)fluoranthene	252	10.792	10.792	(0.958)	860730	40.0000	39.0
97 Benzo(a)pyrene	252	11.192	11.192	(0.993)	783267	40.0000	41.2
99 Indeno(1,2,3-cd)pyrene	276	13.017	13.017	(1.155)	827573	40.0000	52.8
100 Dibenzo(a,h)anthracene	278	13.036	13.036	(1.157)	677582	40.0000	54.5
101 Benzo(ghi)perylene	276	13.556	13.556	(1.203)	709736	40.0000	54.2
126 m-Dinitrobenzene	168	5.832	5.832	(0.967)	96428	40.0000	38.8
130 2,3,4,6-Tetrachlorophenol	232	6.256	6.256	(1.038)	141407	40.0000	37.0
143 Dinoseb	211	7.142	7.142	(0.993)	111886	40.0000	44.5
173 Carbazole	167	7.373	7.373	(1.025)	396210	40.0000	26.6
184 p-Benzoquinone	54	3.401	3.401	(0.869)	39594	40.0000	25.7
192 Methoxychlor	227	9.473	9.473	(0.986)	560186	40.0000	45.0
211 p-Toluidine	106	4.185	4.185	(1.070)	300400	40.0000	43.0
210 m-Toluidine	106	4.210	4.210	(1.076)	387759	40.0000	44.6
26 Phthalic anhydride	104	5.307	5.307	(1.112)	83847	40.0000	31.0
179 Dibenzo(a,e)pyrene	302	17.649	17.649	(1.566)	440811	40.0000	89.0
214 1,4-Dinitrobenzene	75	5.775	5.775	(0.958)	112870	40.0000	45.6
215 2-Ethoxyethanol	59	2.279	2.279	(0.583)	183175	40.0000	46.1
216 Methylenebis(2-chloroaniline)	231	9.535	9.535	(0.992)	80507	40.0000	43.9(Q)
M 225 Trichlorophenols	196				326687	80.0000	82.2
M 226 Tetrachlorophenols	232				141407	40.0000	37.0
M 227 Benzo(b,k)fluoranthene	252				1685180	80.0000	75.4

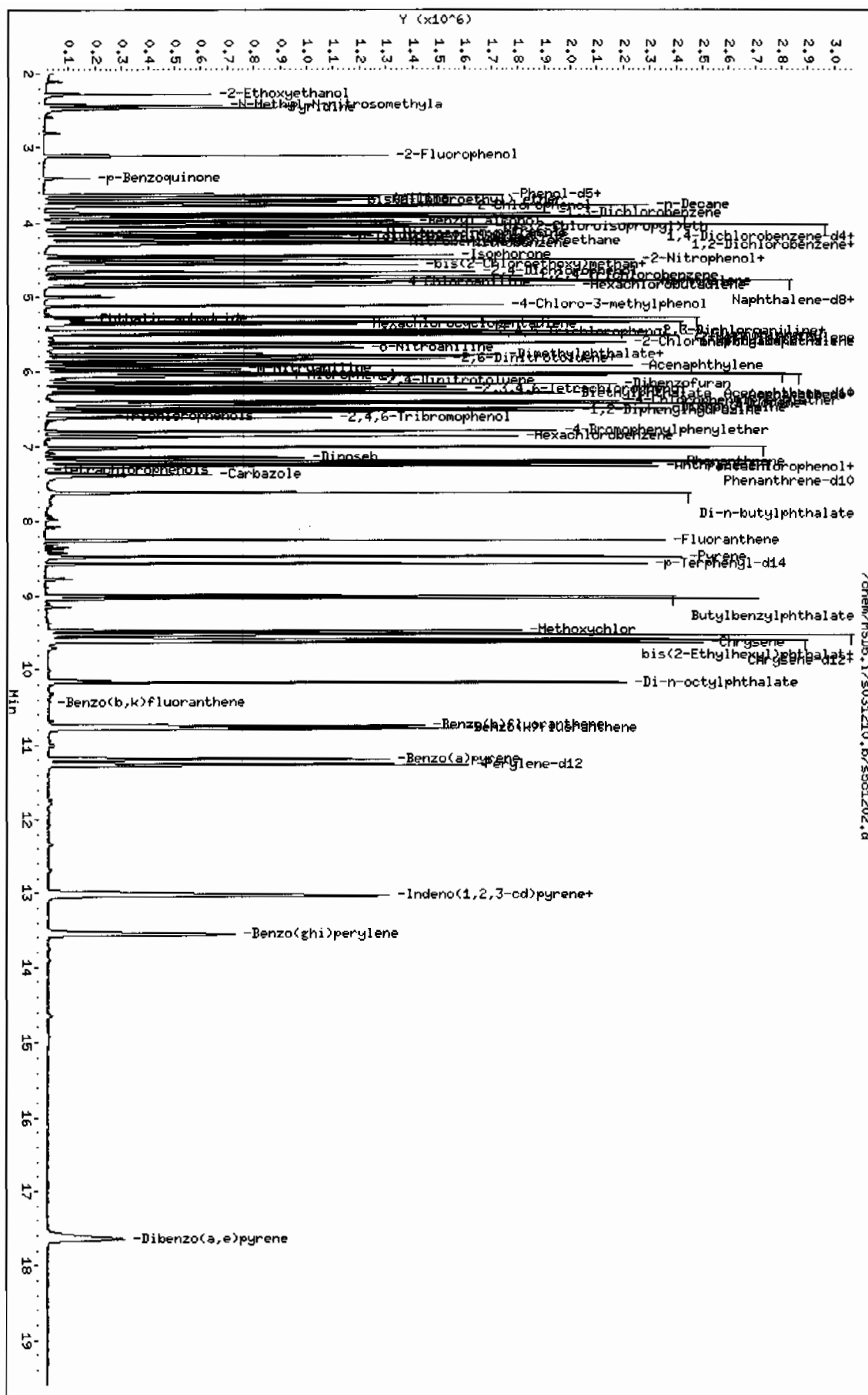
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD5.i/5031210.b/55c1202.d
 Date : 12-MAR-2010 10:54
 Client ID: MECACVS
 Sample Info: IMBNI00129-05.5140 PPH11.SVH11.MECACVS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5HS

Instrument: HSD5.i
 Operator: RHB
 Column diameter: 0.20

/chem/HSD5.i/5031210.b/55c1202.d



Data File: /chem/MSD5.i/s031210.b/s5c1203.d
Report Date: 22-Mar-2010 11:44

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-MAR-2010 11:22
Lab File ID: s5c1203.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
Analysis Type: WATER Init. Cal. Times: 19:16 14:42
Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
Method: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX		CURVE TYPE
			RRF40	RRF	%D / %DRIFT	%D / %DRIFT	
209 Benzaldehyde	0.77531	0.83866	0.83866	0.000	8.17115	60.00000	Averaged
16 Acetophenone	1.11708	1.16292	1.16292	0.000	4.10385	60.00000	Averaged
189 Caprolactam	0.08910	0.08343	0.08343	0.000	-6.36547	60.00000	Averaged
208 1,1'-Biphenyl	1.11469	1.11319	1.11319	0.000	-0.13441	60.00000	Averaged
207 Atrazine	0.03043	0.03849	0.03849	0.000	26.47209	60.00000	Averaged
77 Benzidine	0.18071	0.18360	0.18360	0.000	1.59590	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27254	0.27096	0.27096	0.000	-0.57777	60.00000	Averaged
102 1,4-Dioxane	0.34121	0.37623	0.37623	0.000	10.26446	60.00000	Averaged
103 Methyl methacrylate	0.18410	0.19981	0.19981	0.000	8.53598	60.00000	Averaged
104 Ethyl methacrylate	0.74729	0.51734	0.51734	0.000	-30.77134	60.00000	Averaged
105 2-Picoline	1.15797	1.19216	1.19216	0.000	2.95268	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43654	0.46905	0.46905	0.000	7.44630	60.00000	Averaged
107 Methyl methanesulfonate	0.47991	0.53730	0.53730	0.000	11.95853	60.00000	Averaged
108 N-Nitrosodiethylamine	0.44277	0.47658	0.47658	0.000	7.63738	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60959	0.64876	0.64876	0.000	6.42571	60.00000	Averaged
110 Pentachloroethane	0.32418	0.34084	0.34084	0.000	5.14058	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.43870	0.49923	0.49923	0.000	13.79730	60.00000	Averaged
113 N-Nitrosomorpholine	0.53553	0.66040	0.66040	0.000	23.31636	60.00000	Averaged
114 o-Toluidine	1.52862	1.52943	1.52943	0.000	0.05311	60.00000	Averaged
115 N-Nitrosopiperidine	0.13910	0.13838	0.13838	0.000	-0.51642	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.79352	0.77646	0.77646	0.000	-2.14902	60.00000	Averaged
118 2,6-Dichlorophenol	0.21700	0.21611	0.21611	0.000	-0.40888	60.00000	Averaged
119 Hexachloropropene	0.10744	0.11573	0.11573	0.000	7.71822	60.00000	Averaged
120 p-Phenylenediamine	0.17838	0.21636	0.21636	0.000	21.29006	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.18088	0.18642	0.18642	0.000	3.06212	60.00000	Averaged
122 Safrole	0.19975	0.18563	0.18563	0.000	-7.06877	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.43728	0.41429	0.41429	0.000	-5.25741	60.00000	Averaged
124 Isosafrole	0.33677	0.32473	0.32473	0.000	-3.57741	60.00000	Averaged
125 1,4-Naphthoquinone	0.34896	0.34261	0.34261	0.000	-1.81842	60.00000	Averaged
127 Pentachlorobenzene	0.42091	0.38510	0.38510	0.000	-8.50719	60.00000	Averaged
128 1-Naphthylamine	0.77744	0.80528	0.80528	0.000	3.58174	60.00000	Averaged
129 2-Naphthylamine	0.75956	0.89793	0.89793	0.000	18.21677	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27264	0.25789	0.25789	0.000	-5.41245	60.00000	Averaged
136 1,3,5-Trinitrobenzene	51.90759	40.00000	0.13811	0.000	29.76897	60.00000	Linear
137 Phenacetin	0.25552	0.27680	0.27680	0.000	8.32592	60.00000	Averaged
138 Diallate	0.20822	0.22175	0.22175	0.000	6.49727	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-MAR-2010 11:22
 Lab File ID: s5c1203.d Init. Cal. Date(s): 17-FEB-2010 02-MAR-2010
 Analysis Type: WATER Init. Cal. Times: 19:16 14:42
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD
 Method: /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.24438	0.25410	0.25410	0.000	3.97800	60.00000	Averaged
213 Trans Diallate	0.24496	0.26088	0.26088	0.000	6.49727	60.00000	Averaged
140 4-Aminobiphenyl	0.41807	0.46028	0.46028	0.000	10.09612	60.00000	Averaged
141 Pentachloronitrobenzene	0.06950	0.07976	0.07976	0.000	14.75425	60.00000	Averaged
142 Pronamide	0.24082	0.24337	0.24337	0.000	1.06225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01215	0.01521	0.01521	0.000	25.23623	60.00000	Averaged
147 Methapyrilene	0.34277	0.36574	0.36574	0.000	6.70241	60.00000	Averaged
148 Isodrin	0.10083	0.10453	0.10453	0.000	3.66917	60.00000	Averaged
149 Aramite	0.05058	0.04678	0.04678	0.000	-7.51330	60.00000	Averaged
150 Kepone	0.07824	0.08149	0.08149	0.000	4.14839	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25079	0.26443	0.26443	0.000	5.43844	60.00000	Averaged
152 Chlorobenzilate	0.27769	0.26488	0.26488	0.000	-4.61284	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.40745	0.33863	0.33863	0.000	-16.89075	60.00000	Averaged
155 2-Acetylaminofluorene	0.29875	0.32235	0.32235	0.000	7.90114	60.00000	Averaged
157 7,12Dimethylbenz(a)anthracene	0.43958	0.39727	0.39727	0.000	-9.62447	60.00000	Averaged
158 3-Methylcholanthrene	0.36797	0.35880	0.35880	0.000	-2.49359	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031210.b/s5c1203.d
 Lab Smp Id: WBN100218-03.2 Client Smp ID: AP12CVS
 Inj Date : 12-MAR-2010 11:22
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN100218-03.2|40 PPM|1|SVM|1|AP12CVS
 Misc Info : |MSD8270|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031210.b/MSD5-M8270C-030210.m
 Meth Date : 13-Mar-2010 15:12 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: apl2.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul) ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.907	3.911	(1.000)	257256	40.0000
* 29 Naphthalene-d8	136	4.766	4.773	(1.000)	949793	40.0000
* 46 Acenaphthene-d10	164	6.019	6.030	(1.000)	553482	40.0000
* 67 Phenanthrene-d10	188	7.189	7.195	(1.000)	972200	40.0000
* 91 Chrysene-d12	240	9.595	9.608	(1.000)	956943	40.0000
* 98 Perylene-d12	264	11.254	11.269	(1.000)	907195	40.0000
209 Benzaldehyde	77	3.631	3.631	(0.929)	215752	40.0000 43.3
16 Acetophenone	105	4.154	4.154	(1.063)	299168	40.0000 41.6
189 Caprolactam	113	5.043	5.043	(1.058)	79239	40.0000 37.4
208 1,1'-Biphenyl	154	5.584	5.584	(0.928)	616129	40.0000 39.9
207 Atrazine	173	6.889	6.889	(0.958)	37417	40.0000 50.6
77 Benzidine	184	8.342	8.342	(0.869)	173734	40.0000 40.2
90 3,3'-Dichlorobenzidine	252	9.530	9.530	(0.993)	259294	40.0000 39.8

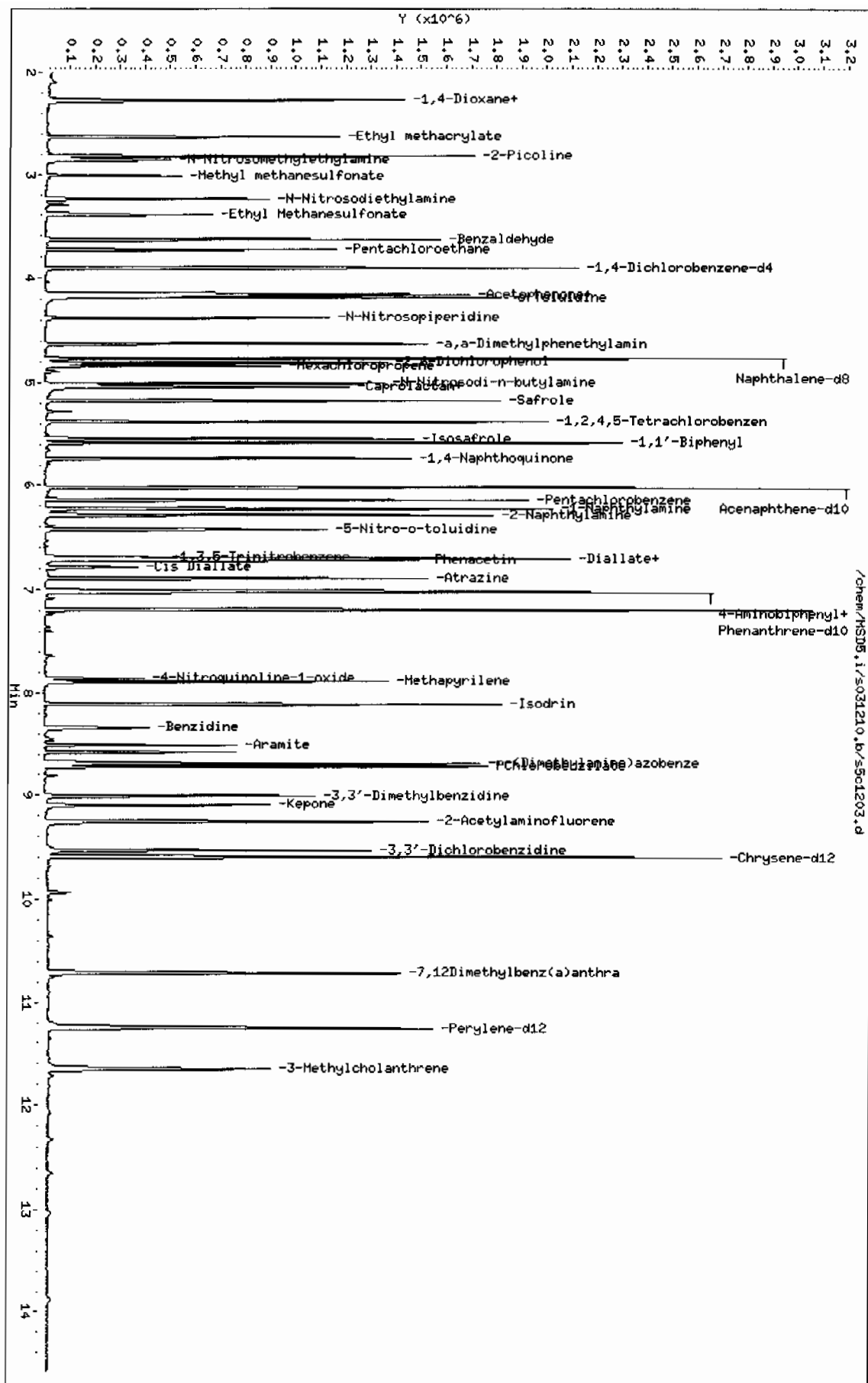
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.284	2.284	(0.584)	96788	40.0000	44.1
103 Methyl methacrylate	100	2.272	2.272	(0.582)	51402	40.0000	43.4
104 Ethyl methacrylate	69	2.631	2.272	(0.673)	203439	40.0000	42.3
105 2-Picoline	93	2.819	2.819	(0.722)	306692	40.0000	41.2
106 N-Nitrosomethylethylamine	88	2.860	2.860	(0.732)	120665	40.0000	43.0
107 Methyl methanesulfonate	80	3.013	3.013	(0.771)	138223	40.0000	44.8
108 N-Nitrosodiethylamine	102	3.243	3.243	(0.830)	122603	40.0000	43.0
109 Ethyl Methanesulfonate	79	3.396	3.396	(0.869)	166898	40.0000	42.6
110 Pentachloroethane	167	3.731	3.731	(0.955)	87684	40.0000	42.0
111 N-Nitrosopyrrolidine	100	4.143	4.143	(1.060)	128430	40.0000	45.5(Q)
113 N-Nitrosomorpholine	56	4.160	4.160	(1.065)	169891	40.0000	49.3
114 o-Toluidine	106	4.178	4.178	(1.069)	393456	40.0000	40.0
115 N-Nitrosopiperidine	114	4.378	4.378	(0.919)	131432	40.0000	39.8
116 a,a-Dimethylphenethylamine	58	4.625	4.625	(0.970)	737479	40.0000	39.1
118 2,6-Dichlorophenol	162	4.807	4.807	(1.009)	205259	40.0000	39.8
119 Hexachloropropene	213	4.837	4.837	(1.015)	109919	40.0000	43.1
120 p-Phenylenediamine	108	5.048	5.048	(1.059)	208397	40.0000	49.2
121 N-Nitrosodi-n-butylamine	84	5.007	5.007	(1.051)	177061	40.0000	41.2(Q)
122 Safrole	162	5.178	5.178	(1.086)	176310	40.0000	37.2
123 1,2,4,5-Tetrachlorobenzene	216	5.378	5.378	(0.893)	229304	40.0000	37.9
124 Isosafrole	162	5.548	5.548	(0.922)	179730	40.0000	38.6
125 1,4-Naphthoquinone	158	5.737	5.737	(0.953)	189631	40.0000	39.3
127 Pentachlorobenzene	250	6.137	6.137	(1.020)	213145	40.0000	36.6
128 1-Naphthylamine	143	6.225	6.225	(1.034)	445755	40.0000	41.4
129 2-Naphthylamine	143	6.284	6.284	(1.044)	496989	40.0000	47.3
131 5-Nitro-o-toluidine	152	6.425	6.425	(1.067)	142735	40.0000	37.8
136 1,3,5-Trinitrobenzene	75	6.684	6.684	(0.930)	134273	40.0000	51.9
137 Phenacetin	108	6.719	6.719	(0.935)	269101	40.0000	43.3(Q)
138 Diallate	86	6.701	6.701	(0.932)	215580	40.0000	42.6
212 Cis Diallate	86	6.778	6.778	(0.943)	37055	6.00000	6.2(a)
213 Trans Diallate	86	6.701	6.701	(0.932)	215580	34.0000	36.2
140 4-Aminobiphenyl	169	7.007	7.007	(0.975)	447482	40.0000	44.0
141 Pentachloronitrobenzene	237	7.025	7.025	(0.977)	77540	40.0000	45.9(Q)
142 Pronamide	173	7.019	7.019	(0.976)	236608	40.0000	40.4
146 4-Nitroquinoline-1-oxide	101	7.860	7.860	(1.093)	14787	40.0000	50.1
147 Methapyrilene	58	7.889	7.889	(1.097)	355576	40.0000	42.7
148 Isodrin	193	8.113	8.113	(1.128)	101622	40.0000	41.5
149 Aramite	185	8.513	8.513	(1.184)	45477	40.0000	37.0
150 Kepone	272	9.095	9.095	(1.265)	79225	40.0000	41.6
151 p-(Dimethylamino)azobenzene	120	8.689	8.689	(0.906)	253046	40.0000	42.2
152 Chlorobenzilate	251	8.725	8.725	(0.909)	253479	40.0000	38.2
153 3,3'-Dimethylbenzidine	212	9.007	9.007	(0.939)	324048	40.0000	33.2
155 2-Acetylaminofluorene	181	9.254	9.254	(0.964)	308474	40.0000	43.2
157 7,12Dimethylbenz(a)anthracene	256	10.713	10.713	(0.952)	360402	40.0000	36.2
158 3-Methylcholanthrene	268	11.654	11.654	(1.036)	325498	40.0000	39.0(Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDS.i/s031210.b/s031203.d
 Date: 12-MAR-2010 11:22
 Client ID: API2CVS
 Sample Info: ILMN100218-03.2140 PPH11SVH11AP12CVS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RHB
 Column diameter: 0.20



QC Data

Data File: /chem/MSD5.i/s021710.b/s5b1701.d

Page 1

Date : 17-FEB-2010 14:51

Client ID: DFTTP

Instrument: MSD5.i

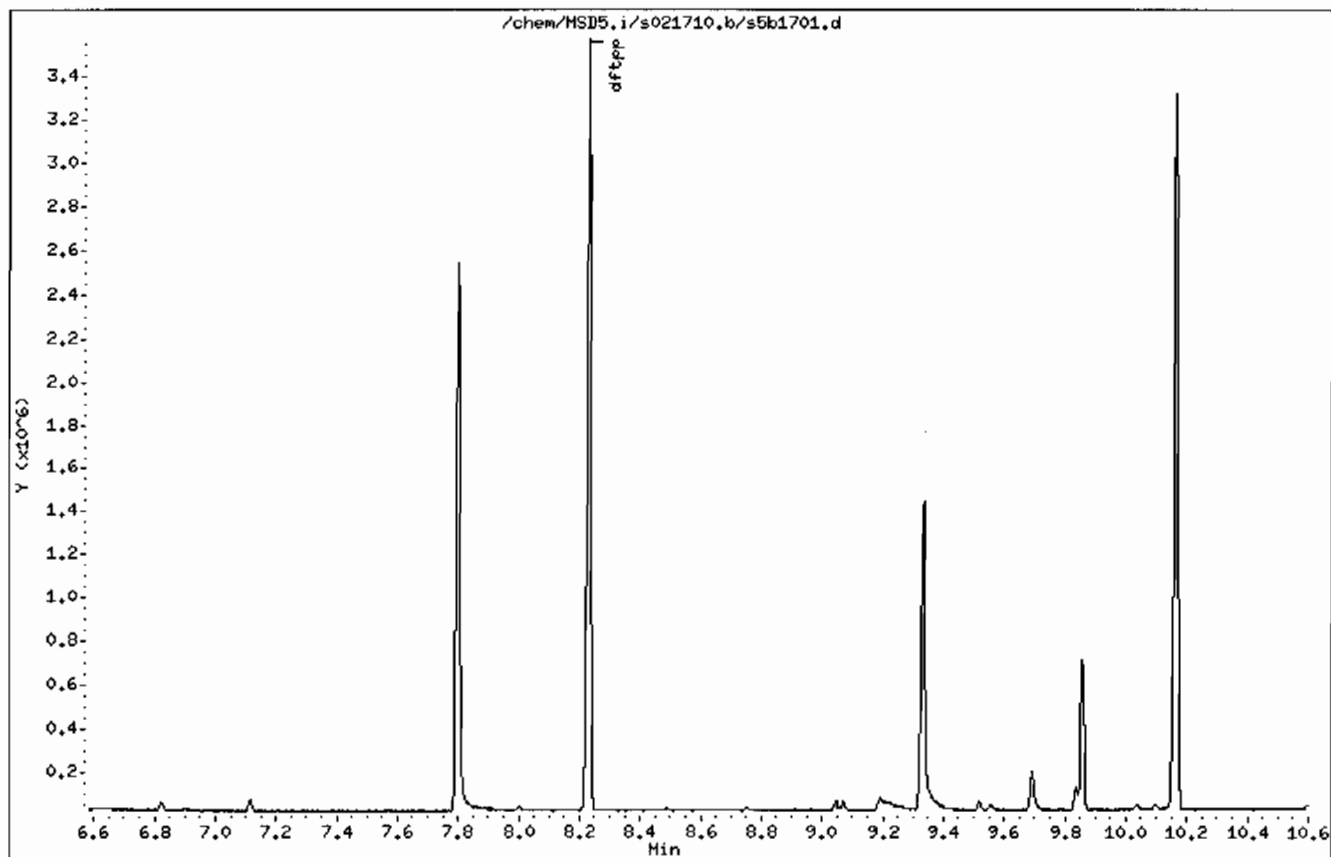
Sample Info: INBN100207-01150PPM11ISVMF111DFTTP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 17-FEB-2010 14:51

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: INBN100207-01150PPH11SVHF111DFTPP

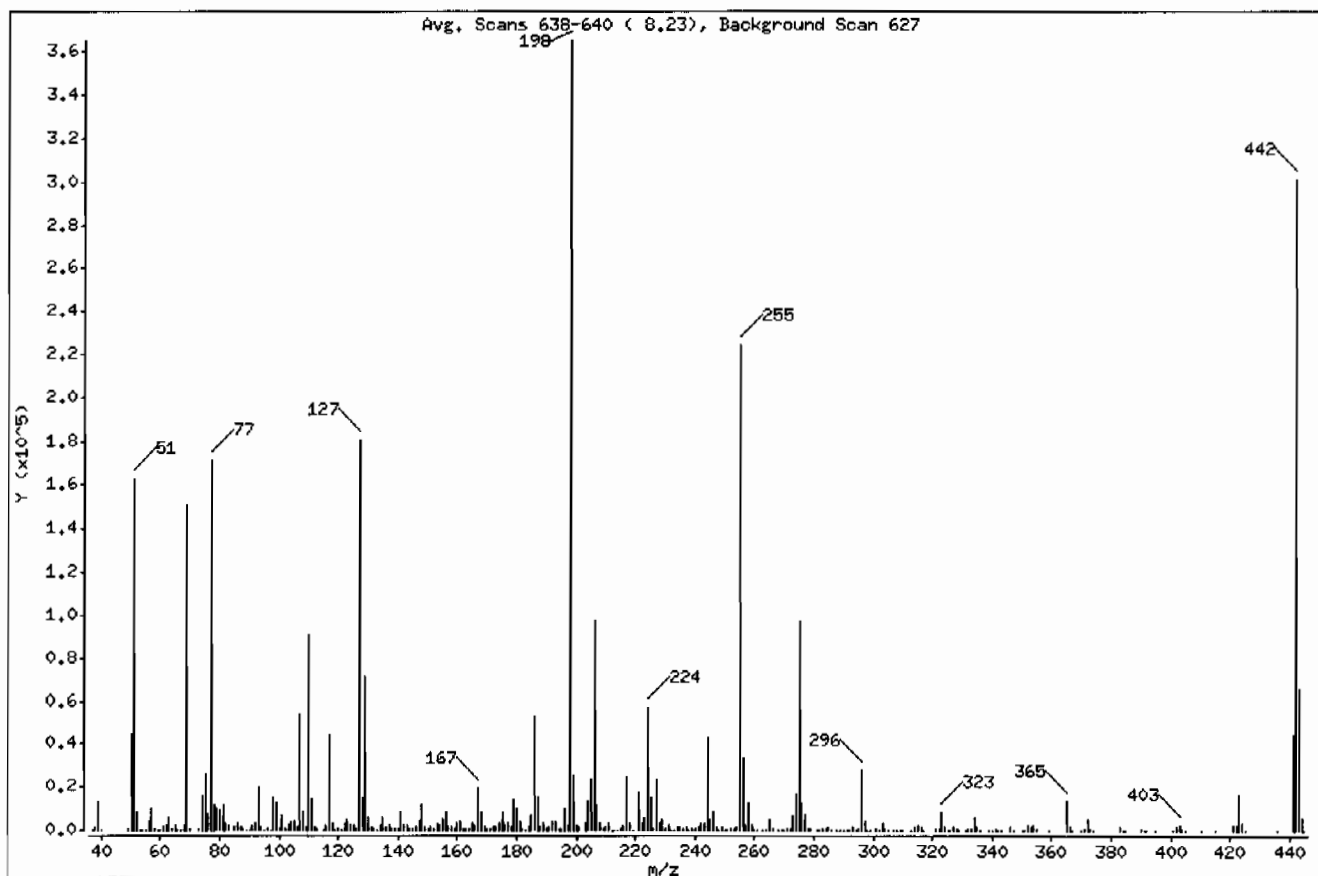
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.51
68	Less than 2.00% of mass 69	0.60 (1.45)
69	Mass 69 relative abundance	41.28
70	Less than 2.00% of mass 69	0.16 (0.39)
127	40.00 - 60.00% of mass 198	49.41
197	Less than 1.00% of mass 198	0.59
199	5.00 - 9.00% of mass 198	6.97
275	10.00 - 30.00% of mass 198	26.65
365	Greater than 1.00% of mass 198	3.62
441	Present, but less than mass 443	12.08
442	Greater than 40.00% of mass 198	82.57
443	17.00 - 23.00% of mass 442	17.93 (21.71)

Date : 17-FEB-2010 14:51

Client ID: DFTTP

Instrument: MSD5.i

Sample Info: IWBH100207-01150PFI11SVHF11IDFTTP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1701.d

Spectrum: Avg. Scans 638-640 (8.23), Background Scan 627

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y

37.00	361	130.00	5987	212.00	300	298.00	254
38.00	1969	131.00	1344	213.00	172	299.00	47
39.00	13265	132.00	804	214.00	53	301.00	427
40.00	48	133.00	147	215.00	1077	302.00	385
49.00	1063	134.00	2184	216.00	2121	303.00	3761

50.00	44552	135.00	5531	217.00	24160	304.00	987
51.00	162560	136.00	1866	218.00	3405	305.00	70
52.00	8132	137.00	2662	219.00	319	307.00	52
53.00	182	138.00	673	221.00	17368	308.00	315
54.00	207	139.00	486	222.00	3248	309.00	214

55.00	136	140.00	769	223.00	5707	310.00	317
56.00	4399	141.00	8763	224.00	57488	313.00	242
57.00	10417	142.00	2838	225.00	14714	314.00	1413
58.00	482	143.00	2408	226.00	1090	315.00	2813
59.00	149	144.00	442	227.00	23544	316.00	1684

60.00	29	145.00	451	228.00	3156	317.00	293
61.00	1661	146.00	1412	229.00	4889	321.00	918
62.00	2267	147.00	4615	230.00	651	322.00	466
63.00	6260	148.00	11368	231.00	2130	323.00	8498
64.00	923	149.00	1963	232.00	390	324.00	1931

65.00	2891	150.00	727	233.00	359	325.00	154
66.00	340	151.00	1300	234.00	1584	326.00	244
67.00	149	152.00	447	235.00	1627	327.00	1440
68.00	2192	153.00	3027	236.00	1163	328.00	838
69.00	150784	154.00	2235	237.00	1820	329.00	221

70.00	581	155.00	4948	238.00	195	331.00	76
73.00	1034	156.00	8083	239.00	1100	332.00	625
74.00	15925	157.00	1566	240.00	739	333.00	886
75.00	25632	158.00	1724	241.00	1754	334.00	5481
76.00	7798	159.00	1237	242.00	3036	335.00	1601

77.00	171392	160.00	3019	243.00	3095	336.00	66
78.00	12055	161.00	4454	244.00	43056	339.00	111
79.00	10339	162.00	1256	245.00	5342	340.00	110
80.00	9252	163.00	444	246.00	8278	341.00	1148
81.00	12036	164.00	538	247.00	1675	342.00	228

Date : 17-FEB-2010 14:51

Client ID: DFTTP

Instrument: HSD5.i

Sample Info: IWBNI00207-01150PPH11SVHF111DFTTP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1701.d

Spectrum: Avg. Scans 638-640 (8.23), Background Scan 627

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	3057	165.00	3477	248.00	367	343.00	48
83.00	2803	166.00	2848	249.00	1622	346.00	1902
85.00	1758	167.00	18976	250.00	348	347.00	292
86.00	3636	168.00	8785	251.00	407	350.00	120
87.00	1475	169.00	1487	252.00	524	351.00	148
88.00	636	170.00	581	253.00	935	352.00	2700
89.00	339	171.00	635	254.00	1285	353.00	1763
90.00	46	172.00	1588	255.00	223808	354.00	2694
91.00	2851	173.00	2079	256.00	33528	355.00	548
92.00	3628	174.00	3675	257.00	2631	359.00	237
93.00	20472	175.00	8268	258.00	12715	365.00	13239
94.00	1304	176.00	2190	259.00	2130	366.00	1964
95.00	288	177.00	3105	260.00	324	367.00	127
96.00	1052	178.00	1370	261.00	318	370.00	174
97.00	299	179.00	13901	263.00	49	371.00	710
98.00	15208	180.00	9993	264.00	405	372.00	4778
99.00	12219	181.00	4379	265.00	5063	373.00	1122
100.00	1114	182.00	657	266.00	1045	374.00	52
101.00	6339	183.00	413	268.00	151	383.00	1395
102.00	441	184.00	1296	269.00	49	384.00	284
103.00	2221	185.00	6675	270.00	325	385.00	56
104.00	4430	186.00	52656	271.00	426	390.00	670
105.00	3953	187.00	15425	272.00	739	391.00	366
106.00	1544	188.00	1650	273.00	6863	392.00	233
107.00	53360	189.00	3117	274.00	17208	395.00	44
108.00	8197	190.00	658	275.00	97336	401.00	401
109.00	1356	191.00	1377	276.00	12347	402.00	1862
110.00	91024	192.00	4441	277.00	7588	403.00	2900
111.00	14377	193.00	4369	278.00	1228	404.00	1074
112.00	1793	194.00	838	279.00	425	405.00	83
113.00	647	195.00	724	281.00	48	410.00	116
115.00	211	196.00	9824	282.00	131	415.00	43
116.00	2613	197.00	2157	283.00	894	421.00	2180
117.00	44624	198.00	365248	284.00	703	422.00	2251
118.00	2997	199.00	25440	285.00	1722	423.00	16528

Date : 17-FEB-2010 14:51

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00207-01150PPH11ISVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1701.d

Spectrum: Avg. Scans 638-640 (8.23), Background Scan 627

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	313	200.00	2259	286.00	307	424.00	3199
120.00	561	201.00	1725	288.00	72	425.00	383
121.00	383	203.00	3016	289.00	417	436.00	59
122.00	3459	204.00	13781	290.00	312	441.00	44128
123.00	5215	205.00	23504	291.00	173	442.00	301568
124.00	2572	206.00	97768	292.00	399	443.00	65480
125.00	2202	207.00	11724	293.00	1788	444.00	5798
126.00	551	208.00	3271	294.00	366	445.00	233
127.00	180480	209.00	1106	295.00	509		
128.00	14726	210.00	1625	296.00	27920		
129.00	71424	211.00	3508	297.00	3986		

Data File: /chem/MSD5.i/s021710.b/s5b1727.d

Page 1

Date : 18-FEB-2010 08:43

Client ID: DFTPP

Instrument: MSD5.i

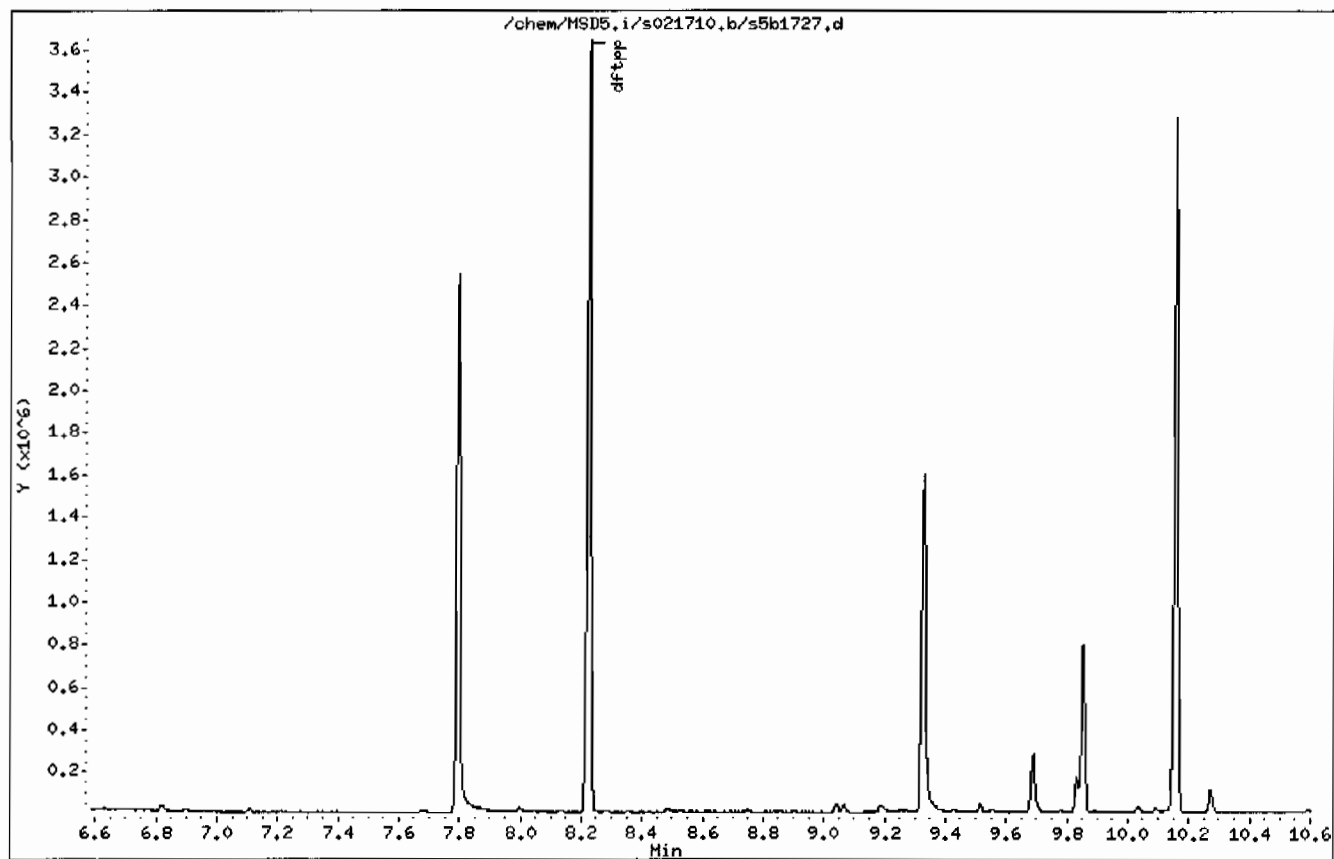
Sample Info: IWBNI00207-01I50PPH11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 18-FEB-2010 08:43

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: INBN100207-01150PPH11SVMF11IDFTPP

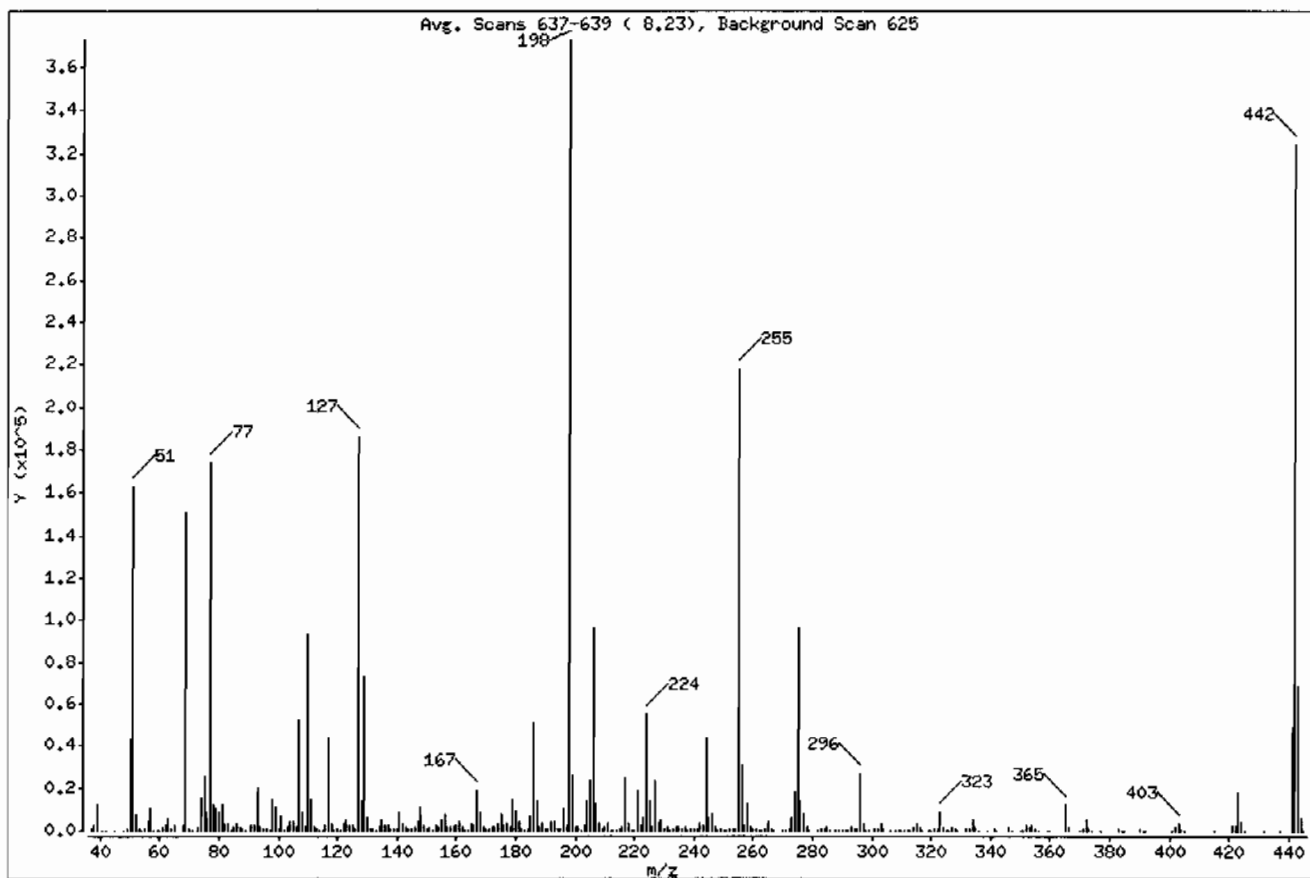
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	43.61
68	Less than 2.00% of mass 69	0.66 (1.63)
69	Mass 69 relative abundance	40.56
70	Less than 2.00% of mass 69	0.20 (0.50)
127	40.00 - 60.00% of mass 198	49.98
197	Less than 1.00% of mass 198	0.64
199	5.00 - 9.00% of mass 198	6.93
275	10.00 - 30.00% of mass 198	25.73
365	Greater than 1.00% of mass 198	3.23
441	Present, but less than mass 443	13.22
442	Greater than 40.00% of mass 198	86.90
443	17.00 - 23.00% of mass 442	18.31 (21.08)

Date : 18-FEB-2010 08:43

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBNI00207-01150PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1727.d

Spectrum: Avg. Scans 637-639 (8.23), Background Scan 625

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y

37.00	539	128.00	14119	210.00	1361	297.00	3812
38.00	2192	129.00	73040	211.00	3331	298.00	172
39.00	12292	130.00	5822	212.00	268	299.00	132
41.00	23	131.00	1184	213.00	326	301.00	450
42.00	189	132.00	1082	214.00	79	302.00	440

45.00	196	133.00	91	215.00	1093	303.00	3020
48.00	143	134.00	1948	216.00	1924	304.00	764
49.00	1042	135.00	5335	217.00	24576	306.00	83
50.00	42928	136.00	2453	218.00	3333	308.00	397
51.00	162560	137.00	2712	219.00	330	309.00	358

52.00	7848	138.00	490	220.00	194	310.00	278
53.00	449	139.00	484	221.00	18432	311.00	49
54.00	59	140.00	933	222.00	2577	312.00	45
55.00	970	141.00	8840	223.00	5903	313.00	333
56.00	4328	142.00	3050	224.00	54456	314.00	1402

57.00	9982	143.00	2099	225.00	13650	315.00	3341
58.00	359	144.00	649	226.00	1337	316.00	1911
59.00	44	145.00	582	227.00	22984	317.00	245
60.00	41	146.00	1577	228.00	3218	319.00	41
61.00	1726	147.00	4452	229.00	4940	320.00	157

62.00	2229	148.00	10896	230.00	506	321.00	949
63.00	5605	149.00	2285	231.00	1943	322.00	445
64.00	734	150.00	553	232.00	292	323.00	8864
65.00	2800	151.00	1446	233.00	454	324.00	1641
68.00	2460	152.00	327	234.00	1460	325.00	213

69.00	151168	153.00	2912	235.00	1560	326.00	115
70.00	760	154.00	2124	236.00	1133	327.00	1634
71.00	215	155.00	5432	237.00	1930	328.00	1137
73.00	1310	156.00	7521	238.00	231	329.00	108
74.00	15766	157.00	1550	239.00	960	332.00	577

75.00	25320	158.00	1909	240.00	668	333.00	757
76.00	8191	159.00	1487	241.00	1130	334.00	5438
77.00	173760	160.00	2911	242.00	3017	335.00	1394
78.00	11845	161.00	4281	243.00	2745	336.00	164
79.00	10657	162.00	1429	244.00	44064	339.00	115

Date : 18-FEB-2010 08:43

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: INBN100207-01150PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1727.d

Spectrum: Avg. Scans 637-639 (8.23), Background Scan 625

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	8642	163.00	275	245.00	5736	341.00	872
81.00	12269	164.00	379	246.00	8116	342.00	260
82.00	3002	165.00	3001	247.00	1577	346.00	1733
83.00	3046	166.00	2641	248.00	379	347.00	311
84.00	240	167.00	18632	249.00	1239	350.00	88
85.00	2009	168.00	8696	250.00	319	351.00	152
86.00	3315	169.00	1407	251.00	364	352.00	2711
87.00	1465	170.00	591	252.00	441	353.00	2120
88.00	619	171.00	796	253.00	1082	354.00	2703
89.00	266	172.00	1603	254.00	1253	355.00	520
91.00	2674	173.00	2114	255.00	217216	356.00	44
92.00	2918	174.00	3506	256.00	31232	359.00	353
93.00	19824	175.00	7357	257.00	2430	360.00	59
94.00	1521	176.00	2187	258.00	12681	365.00	12045
95.00	433	177.00	3385	259.00	2138	366.00	1910
96.00	841	178.00	1407	260.00	462	370.00	265
97.00	216	179.00	14277	261.00	434	371.00	686
98.00	14963	180.00	9735	262.00	44	372.00	4885
99.00	11067	181.00	4082	263.00	217	373.00	1282
100.00	1178	182.00	941	264.00	473	374.00	48
101.00	6668	183.00	338	265.00	4376	377.00	45
102.00	358	184.00	1033	266.00	837	383.00	1156
103.00	2068	185.00	6522	267.00	65	384.00	364
104.00	4014	186.00	50200	270.00	252	385.00	91
105.00	4028	187.00	13718	271.00	402	390.00	632
106.00	1546	188.00	1542	272.00	525	391.00	391
107.00	52656	189.00	3160	273.00	6207	392.00	287
108.00	8274	190.00	656	274.00	17784	401.00	206
109.00	1606	191.00	1217	275.00	95912	402.00	2063
110.00	93368	192.00	4509	276.00	13465	403.00	3070
111.00	14556	193.00	4570	277.00	7732	404.00	861
112.00	1577	194.00	899	278.00	1376	405.00	161
113.00	739	195.00	519	279.00	247	415.00	59
114.00	52	196.00	9978	282.00	198	421.00	2541
115.00	272	197.00	2375	283.00	900	422.00	2569

Date : 18-FEB-2010 08:43

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBNI00207-01150PPH11ISVMFI11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5b1727.d

Spectrum: Avg. Scans 637-639 (8.23), Background Scan 625

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	2784	198.00	372736	284.00	794	423.00	17968
117.00	44104	199.00	25840	285.00	1398	424.00	3949
118.00	3386	200.00	2010	286.00	252	425.00	310
119.00	343	201.00	1697	288.00	41	432.00	59
120.00	753	202.00	399	289.00	281	437.00	58
121.00	303	203.00	2749	290.00	350	441.00	49264
122.00	3428	204.00	13386	291.00	337	442.00	323904
123.00	4848	205.00	23312	292.00	364	443.00	68264
124.00	2331	206.00	95880	293.00	1924	444.00	6205
125.00	2270	207.00	12604	294.00	448	445.00	343
126.00	676	208.00	3299	295.00	596		
127.00	186304	209.00	1027	296.00	26816		

Data File: /chem/MSD5.i/s031010.b/s5c1006.d

Page 1

Date : 10-MAR-2010 11:15

Client ID: DFTPP

Instrument: MSD5.i

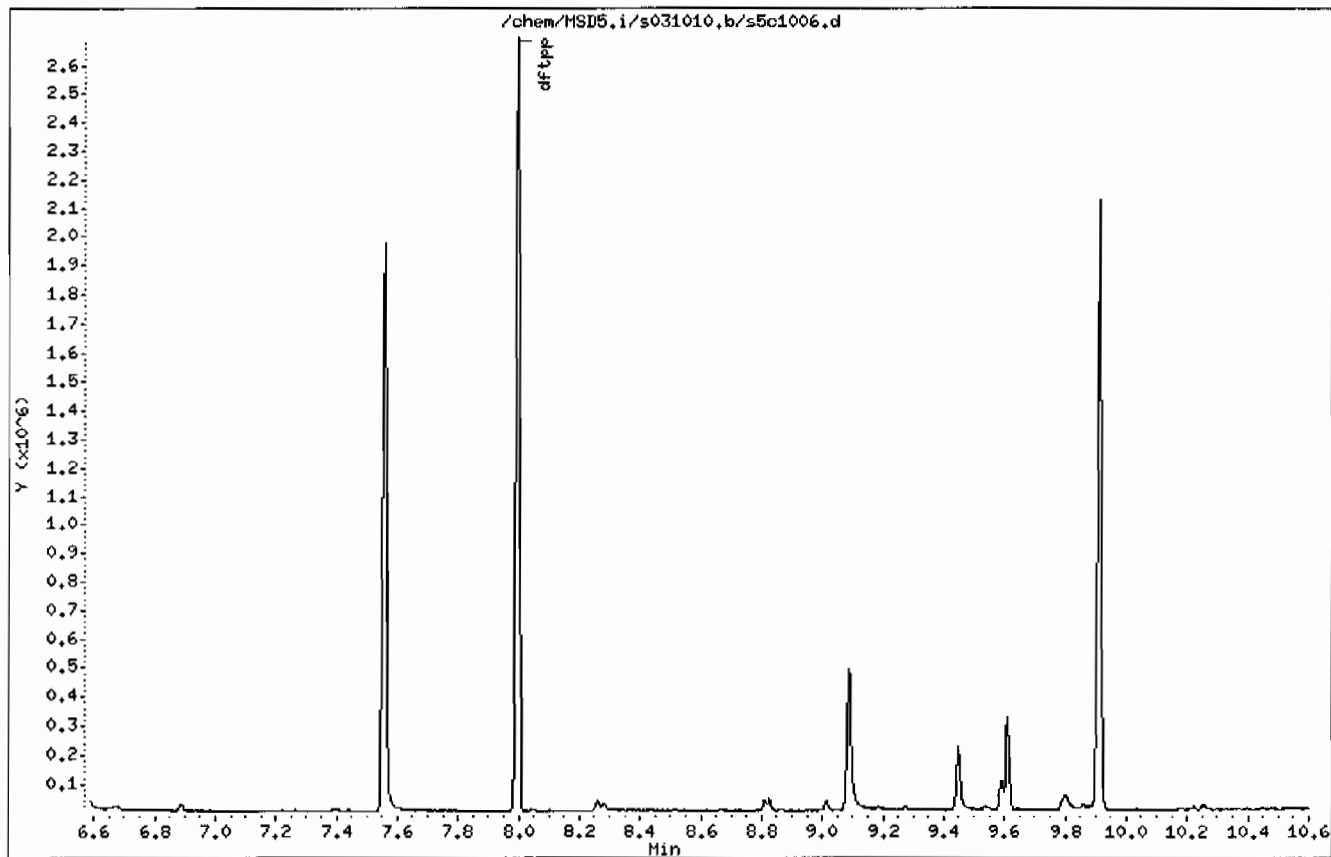
Sample Info: IWBH100207-01150PPH11ISVMF11IDFTPP

Volume Injected (UL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 10-MAR-2010 11:15

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: INBN100207-01150PPH11ISVHF11IDFTPP

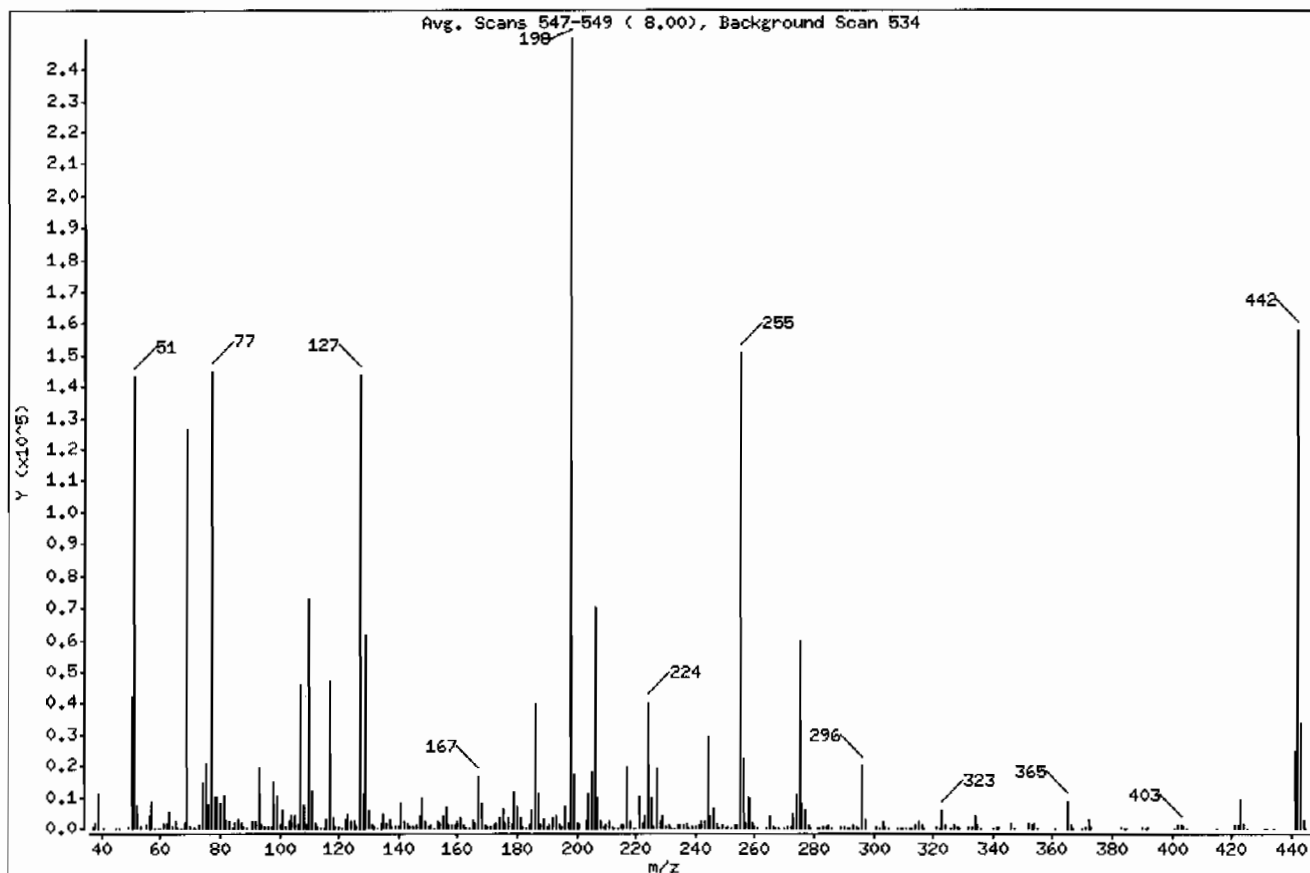
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	57.15
68	Less than 2.00% of mass 69	0.80 (1.58)
69	Mass 69 relative abundance	50.50
70	Less than 2.00% of mass 69	0.21 (0.42)
127	40.00 - 60.00% of mass 198	57.58
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 30.00% of mass 198	23.90
365	Greater than 1.00% of mass 198	3.52
441	Present, but less than mass 443	9.90
442	Greater than 40.00% of mass 198	63.17
443	17.00 - 23.00% of mass 442	13.64 (21.59)

Date : 10-MAR-2010 11:15

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBH100207-01I50PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1006.d

Spectrum: Avg. Scans 547-549 (8.00), Background Scan 534

Location of Maximum: 198.00

Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	688	125.00	2405	206.00	69888	292.00	220
38.00	1869	126.00	288	207.00	9509	293.00	1248
39.00	11082	127.00	143872	208.00	2576	294.00	337
41.00	49	128.00	10918	209.00	830	295.00	237
45.00	108	129.00	61472	210.00	1309	296.00	20120
46.00	46	130.00	5785	211.00	2404	297.00	3028
49.00	678	131.00	1058	212.00	367	301.00	290
50.00	41776	132.00	457	213.00	229	302.00	278
51.00	142784	133.00	44	214.00	106	303.00	2382
52.00	7267	134.00	1928	215.00	878	304.00	569
53.00	312	135.00	4678	216.00	1424	305.00	105
55.00	871	136.00	1856	217.00	19568	308.00	189
56.00	4141	137.00	2742	218.00	2452	309.00	256
57.00	8619	138.00	603	219.00	227	310.00	207
58.00	282	139.00	369	220.00	284	311.00	50
59.00	53	140.00	789	221.00	10157	312.00	161
60.00	60	141.00	7896	222.00	1575	313.00	110
61.00	1735	142.00	2285	223.00	3941	314.00	864
62.00	1907	143.00	1847	224.00	40264	315.00	2583
63.00	5372	144.00	504	225.00	9801	316.00	1203
64.00	674	145.00	386	226.00	759	317.00	199
65.00	2272	146.00	1320	227.00	19112	321.00	636
66.00	190	147.00	4054	228.00	2538	322.00	279
67.00	255	148.00	9961	229.00	4086	323.00	5606
68.00	1992	149.00	2081	230.00	514	324.00	944
69.00	126176	150.00	451	231.00	1251	326.00	98
70.00	536	151.00	1107	232.00	162	327.00	1396
71.00	59	152.00	112	233.00	241	328.00	571
72.00	44	153.00	2239	234.00	1152	329.00	100
73.00	1112	154.00	1940	235.00	1211	332.00	406
74.00	14525	155.00	4270	236.00	1012	333.00	469
75.00	20936	156.00	6620	237.00	1473	334.00	3900
76.00	7256	157.00	1324	238.00	111	335.00	899
77.00	144512	158.00	1361	239.00	801	336.00	42
78.00	9682	159.00	1044	240.00	632	340.00	51

Date : 10-MAR-2010 11:15

Client ID: DFTPP

Instrument: MSD5,i

Sample Info: IWBNI00207-01I50PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1006.d

Spectrum: Avg. Scans 547-549 (8.00), Background Scan 534

Location of Maximum: 198.00

Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	9756	160.00	2287	241.00	1018	341.00	772
80.00	8179	161.00	3569	242.00	2024	342.00	293
81.00	10513	162.00	985	243.00	2098	346.00	1489
82.00	2847	163.00	261	244.00	29200	347.00	278
83.00	2090	164.00	264	245.00	4111	352.00	1694
84.00	228	165.00	2987	246.00	6551	353.00	1124
85.00	1629	166.00	2000	247.00	1443	354.00	1827
86.00	3078	167.00	16528	248.00	168	355.00	254
87.00	1616	168.00	8294	249.00	1131	361.00	79
88.00	493	169.00	1285	250.00	150	365.00	8788
89.00	204	170.00	529	251.00	391	366.00	1144
91.00	2508	171.00	603	252.00	182	367.00	74
92.00	2556	172.00	1083	253.00	918	370.00	66
93.00	19680	173.00	1755	254.00	985	371.00	363
94.00	1192	174.00	3429	255.00	150720	372.00	2978
95.00	355	175.00	6554	256.00	22160	373.00	636
96.00	783	176.00	1487	257.00	1902	383.00	828
97.00	294	177.00	3311	258.00	9899	384.00	278
98.00	14832	178.00	1054	259.00	1726	385.00	55
99.00	10499	179.00	11506	260.00	393	390.00	357
100.00	990	180.00	7075	261.00	235	391.00	231
101.00	5586	181.00	3585	264.00	224	392.00	305
102.00	326	182.00	515	265.00	4074	401.00	108
103.00	2049	183.00	259	266.00	514	402.00	1038
104.00	3886	184.00	922	267.00	69	403.00	1352
105.00	3761	185.00	5611	268.00	42	404.00	507
106.00	976	186.00	39848	270.00	212	405.00	49
107.00	46136	187.00	10912	271.00	295	415.00	47
108.00	7516	188.00	1283	272.00	474	421.00	1321
109.00	942	189.00	2904	273.00	4407	422.00	1252
110.00	73096	190.00	472	274.00	11124	423.00	9116
111.00	11996	191.00	1292	275.00	59728	424.00	1883
112.00	1633	192.00	3309	276.00	8293	425.00	264
113.00	420	193.00	3883	277.00	5616	431.00	43
114.00	44	194.00	1087	278.00	1044	432.00	72

Date : 10-MAR-2010 11:15

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00207-01150PPH11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1006.d

Spectrum: Avg. Scans 547-549 (8.00), Background Scan 534

Location of Maximum: 198.00

Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	106	195.00	451	279.00	210	434.00	46
116.00	2652	196.00	6928	281.00	91	441.00	24744
117.00	46920	197.00	1726	282.00	53	442.00	157824
118.00	3326	198.00	249856	283.00	762	443.00	34072
119.00	330	199.00	17400	284.00	580	444.00	3119
120.00	414	200.00	1536	285.00	1122	445.00	99
121.00	177	201.00	1234	286.00	249		
122.00	3054	203.00	2167	289.00	302		
123.00	4726	204.00	11160	290.00	304		
124.00	2275	205.00	17536	291.00	80		

Data File: /chem/MSD5.i/s031110.b/s5c1101.d

Page 1

Date : 11-MAR-2010 10:38

Client ID: DFTPP

Instrument: MSD5.i

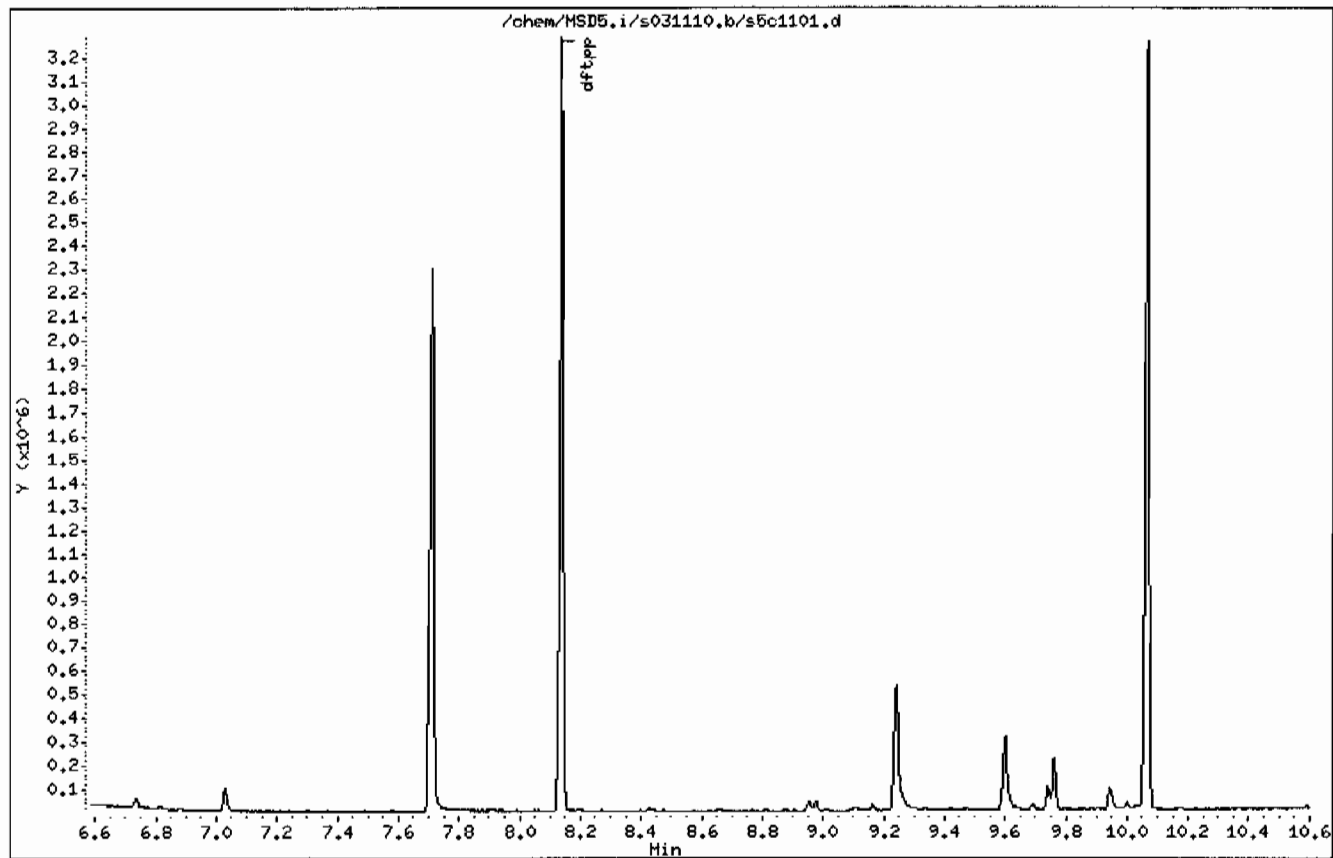
Sample Info: INBN100306-01,2150PPM11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 11-MAR-2010 10:38

Client ID: DFTPP

Instrument: HSD5,i

Sample Info: IWBNI00306-01,2150PPM11ISVMF11IDFTPP

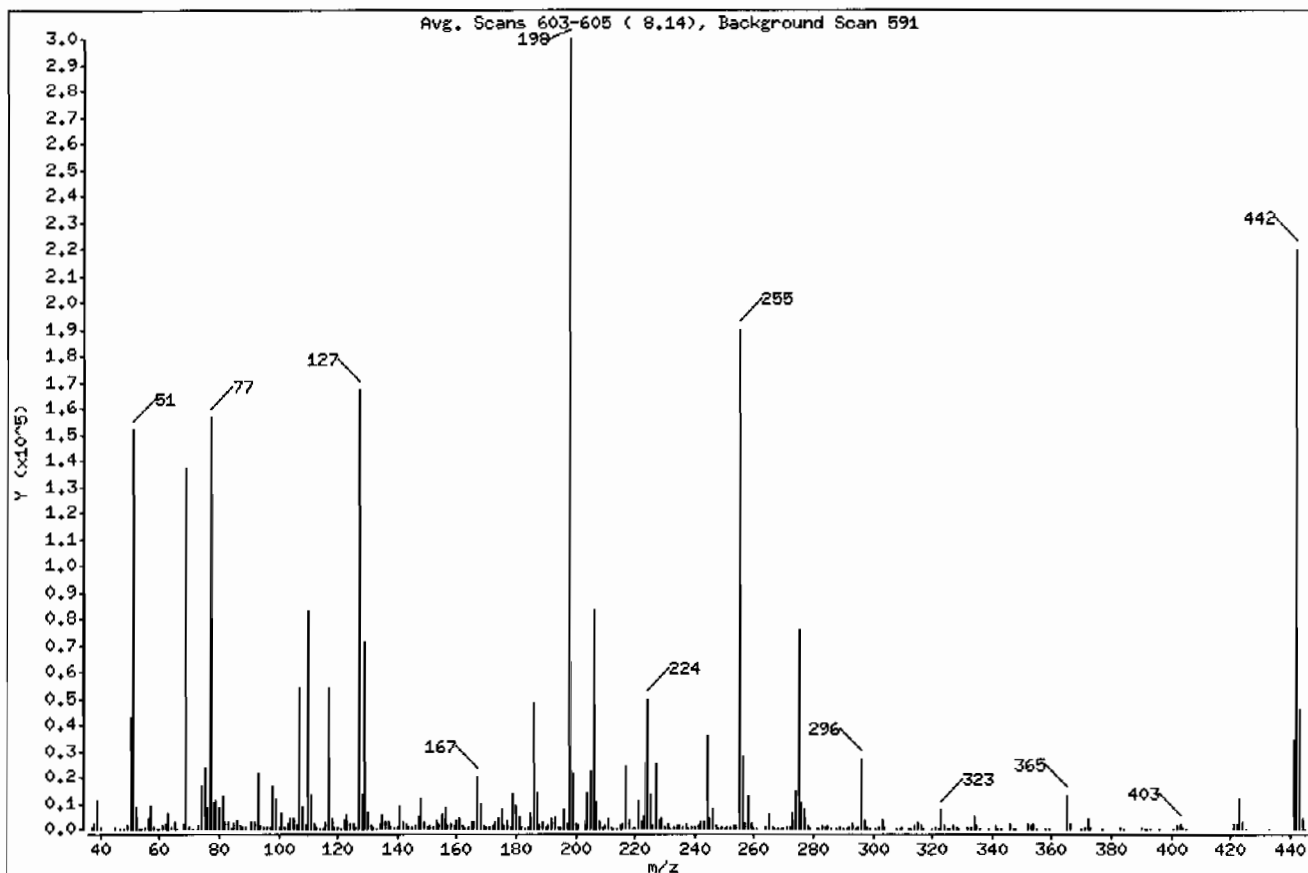
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-SMS

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	50.64
68	Less than 2.00% of mass 69	0.78 (1.70)
69	Mass 69 relative abundance	45.82
70	Less than 2.00% of mass 69	0.23 (0.50)
127	40.00 - 60.00% of mass 198	55.73
197	Less than 1.00% of mass 198	0.65
199	5.00 - 9.00% of mass 198	7.07
275	10.00 - 30.00% of mass 198	25.34
365	Greater than 1.00% of mass 198	4.25
441	Present, but less than mass 443	11.60
442	Greater than 40.00% of mass 198	73.40
443	17.00 - 23.00% of mass 442	15.44 (21.03)

Date : 11-MAR-2010 10:38

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBNI00306-01,2150PPH11|SVMF11|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1101.d

Spectrum: Avg. Scans 603-605 (8.14), Background Scan 591

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	579	126.00	642	208.00	3022	293.00	1876
38.00	2204	127.00	167360	209.00	1002	294.00	342
39.00	11342	128.00	13089	210.00	1153	295.00	447
40.00	397	129.00	71224	211.00	3932	296.00	26776
45.00	379	130.00	6080	212.00	422	297.00	3772
47.00	60	131.00	1199	213.00	264	298.00	352
48.00	83	132.00	665	214.00	111	299.00	42
49.00	1037	133.00	341	215.00	1051	301.00	310
50.00	42816	134.00	2350	216.00	2222	302.00	423
51.00	152064	135.00	5736	217.00	24192	303.00	3144
52.00	8261	136.00	2458	218.00	3162	304.00	920
53.00	324	137.00	2851	219.00	319	308.00	307
54.00	66	138.00	554	220.00	370	309.00	206
55.00	812	139.00	400	221.00	10962	310.00	488
56.00	4020	140.00	646	222.00	2964	312.00	157
57.00	8897	141.00	9147	223.00	4847	313.00	162
58.00	457	142.00	2817	224.00	49632	314.00	1091
59.00	56	143.00	1913	225.00	12786	315.00	2900
60.00	121	144.00	562	226.00	1281	316.00	1452
61.00	1623	145.00	600	227.00	24640	317.00	223
62.00	2267	146.00	1500	228.00	3430	320.00	136
63.00	6160	147.00	4839	229.00	4273	321.00	767
64.00	775	148.00	11833	230.00	669	322.00	241
65.00	2577	149.00	2515	231.00	2198	323.00	7909
66.00	223	150.00	530	232.00	257	324.00	1517
68.00	2344	151.00	1087	233.00	491	325.00	181
69.00	137600	152.00	750	234.00	1508	326.00	224
70.00	689	153.00	3129	235.00	1698	327.00	1435
71.00	43	154.00	2398	236.00	1009	328.00	762
73.00	1445	155.00	5196	237.00	1823	329.00	125
74.00	16364	156.00	8079	238.00	155	332.00	684
75.00	23312	157.00	1453	239.00	882	333.00	752
76.00	8005	158.00	1880	240.00	732	334.00	4669
77.00	156544	159.00	1210	241.00	1449	335.00	1407
78.00	10674	160.00	3371	242.00	2942	336.00	87

Date : 11-MAR-2010 10:38

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBNI00306-01.2150PPH11SVNF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1101.d

Spectrum: Avg, Scans 603-605 (8,14), Background Scan 591

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y

| 79.00	11365	| 161.00	4159	| 243.00	2632	| 339.00	41
| 80.00	8587	| 162.00	1080	| 244.00	35968	| 341.00	1040
| 81.00	12437	| 163.00	236	| 245.00	4487	| 342.00	232
| 82.00	2680	| 164.00	393	| 246.00	7936	| 343.00	83
| 83.00	2478	| 165.00	2972	| 247.00	1433	| 346.00	1760

| 84.00	290	| 166.00	2958	| 248.00	287	| 347.00	340
| 85.00	1826	| 167.00	20088	| 249.00	985	| 348.00	41
| 86.00	3390	| 168.00	9445	| 250.00	234	| 352.00	2271
| 87.00	1374	| 169.00	1685	| 251.00	549	| 353.00	1480
| 88.00	511	| 170.00	536	| 252.00	405	| 354.00	2230

| 89.00	450	| 171.00	602	| 253.00	1207	| 355.00	329
| 91.00	2952	| 172.00	1372	| 254.00	1151	| 358.00	93
| 92.00	2793	| 173.00	2629	| 255.00	189952	| 359.00	185
| 93.00	21344	| 174.00	3894	| 256.00	27560	| 365.00	12774
| 94.00	1372	| 175.00	7645	| 257.00	1972	| 366.00	1998

| 95.00	393	| 176.00	1349	| 258.00	12492	| 370.00	173
| 96.00	899	| 177.00	3545	| 259.00	1974	| 371.00	642
| 97.00	403	| 178.00	972	| 260.00	304	| 372.00	3907
| 98.00	16880	| 179.00	13957	| 261.00	341	| 373.00	890
| 99.00	11566	| 180.00	8972	| 264.00	399	| 377.00	45

| 100.00	989	| 181.00	4606	| 265.00	5581	| 383.00	954
| 101.00	6268	| 182.00	758	| 266.00	708	| 384.00	205
| 102.00	379	| 183.00	322	| 267.00	43	| 390.00	502
| 103.00	2102	| 184.00	1004	| 268.00	89	| 391.00	317
| 104.00	4332	| 185.00	6521	| 269.00	50	| 392.00	248

| 105.00	4323	| 186.00	48664	| 270.00	296	| 393.00	43
| 106.00	1533	| 187.00	13982	| 271.00	519	| 396.00	46
| 107.00	53600	| 188.00	1466	| 272.00	547	| 401.00	324
| 108.00	7990	| 189.00	3085	| 273.00	5885	| 402.00	1537
| 109.00	1426	| 190.00	455	| 274.00	14299	| 403.00	1993

| 110.00	82656	| 191.00	1659	| 275.00	76096	| 404.00	833
| 111.00	13410	| 192.00	4393	| 276.00	10692	| 405.00	74
| 112.00	1839	| 193.00	4506	| 277.00	7843	| 421.00	1762
| 113.00	666	| 194.00	994	| 278.00	1153	| 422.00	1842
| 114.00	98	| 195.00	549	| 279.00	248	| 423.00	12011

Date : 11-MAR-2010 10:38

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00306-01,2I50PPH1IISVHF1I1DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0,20

Data File: s5c1101.d

Spectrum: Avg. Scans 603-605 (8,14), Background Scan 591

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	270	196.00	7767	281.00	251	424.00	2771
116.00	2922	197.00	1946	282.00	253	425.00	295
117.00	53976	198.00	300288	283.00	1163	433.00	52
118.00	3843	199.00	21216	284.00	545	441.00	34840
119.00	425	200.00	2116	285.00	1398	442.00	220416
120.00	743	201.00	1288	286.00	211	443.00	46360
121.00	279	203.00	2902	288.00	126	444.00	4224
122.00	3630	204.00	13549	289.00	387	445.00	234
123.00	5858	205.00	22056	290.00	249		
124.00	2398	206.00	83520	291.00	174		
125.00	2154	207.00	10549	292.00	364		

Data File: /chem/MSD5,i/s031210,b/s5c1201.d

Page 1

Date : 12-MAR-2010 10:40

Client ID: DFTPP

Instrument: MSD5.i

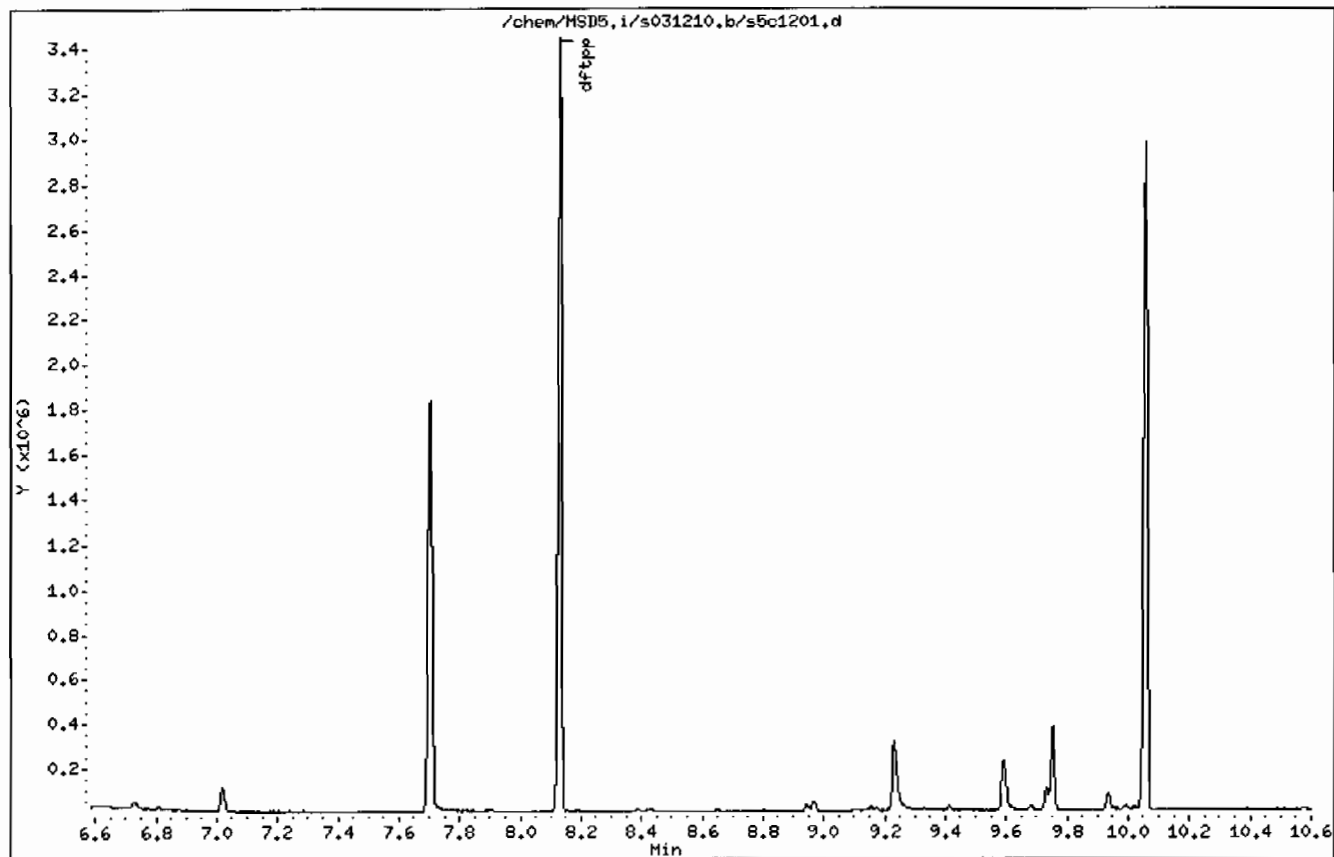
Sample Info: INBN100306-01.2150PPH11|SVMFI11|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 12-MAR-2010 10:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBH100306-01.2150PPH11SVHF111DFTPP

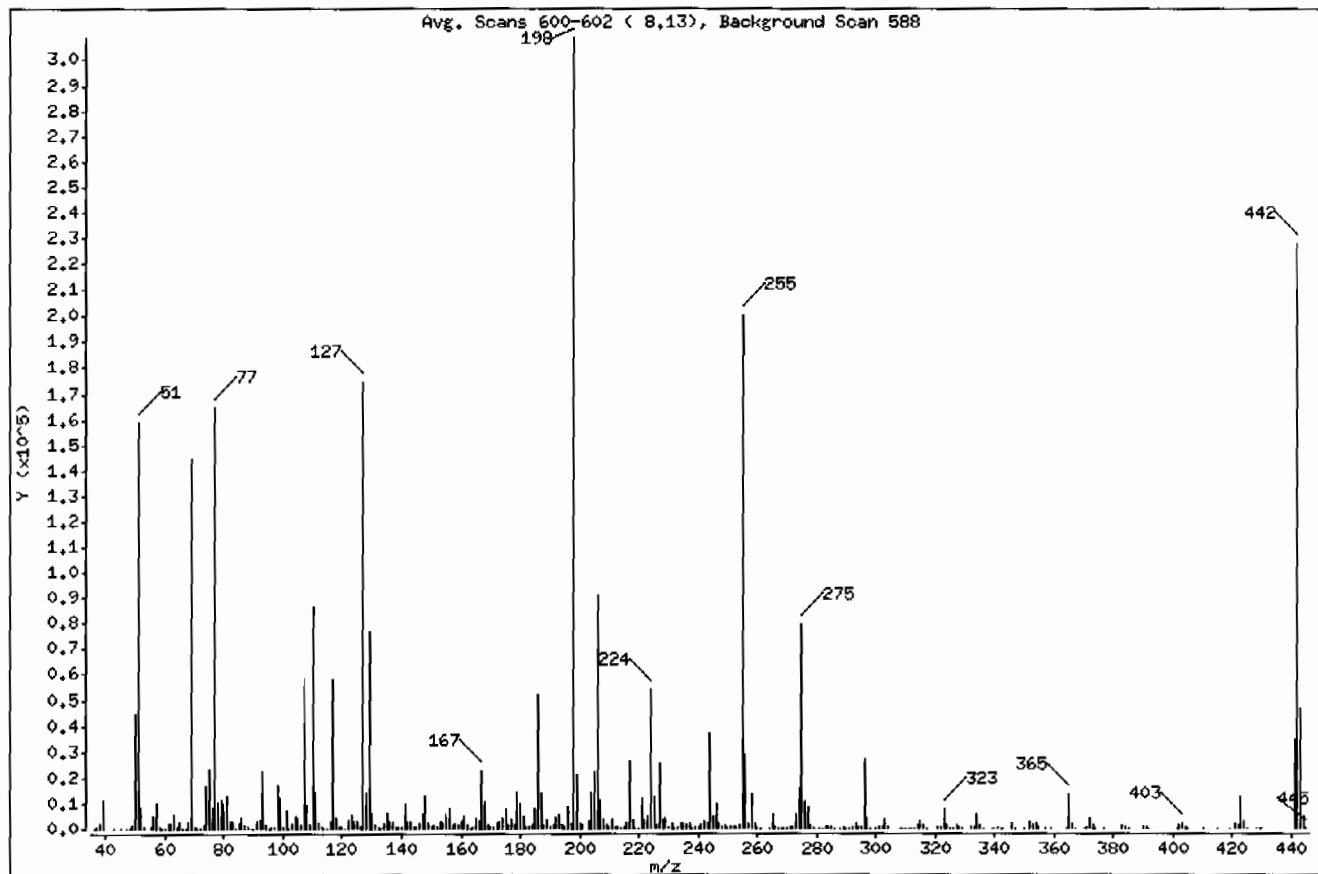
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	51.43
68	Less than 2.00% of mass 69	0.83 (1.76)
69	Mass 69 relative abundance	46.97
70	Less than 2.00% of mass 69	0.24 (0.52)
127	40.00 - 60.00% of mass 198	56.61
197	Less than 1.00% of mass 198	0.74
199	5.00 - 9.00% of mass 198	6.87
275	10.00 - 30.00% of mass 198	25.75
365	Greater than 1.00% of mass 198	4.26
441	Present, but less than mass 443	11.36
442	Greater than 40.00% of mass 198	73.75
443	17.00 - 23.00% of mass 442	15.28 (20.72)

Date : 12-MAR-2010 10:40

Client ID: DFTTP

Instrument: MSD5.i

Sample Info: IHN0100306-01.2150PPH11SVMF111DFTTP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1201.d

Spectrum: Avg. Scans 600-602 (8.13), Background Scan 588

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	19	126.00	811	211.00	3247	300.00	48
37.00	748	127.00	174848	212.00	609	301.00	454
38.00	2099	128.00	14502	213.00	391	302.00	482
39.00	11511	129.00	76776	214.00	108	303.00	3223
43.00	16	130.00	6650	215.00	1064	304.00	981
45.00	352	131.00	1392	216.00	2229	308.00	341
47.00	198	132.00	669	217.00	26256	309.00	305
48.00	125	133.00	153	218.00	3283	310.00	355
49.00	1248	134.00	2249	219.00	318	311.00	59
50.00	45064	135.00	6603	220.00	350	312.00	192
51.00	158848	136.00	2582	221.00	11866	313.00	207
52.00	8252	137.00	3192	222.00	3455	314.00	1119
53.00	386	138.00	383	223.00	5253	315.00	3180
55.00	901	139.00	439	224.00	53840	316.00	1591
56.00	4866	140.00	961	225.00	13079	317.00	337
57.00	9608	141.00	10218	226.00	1633	321.00	762
58.00	395	142.00	2945	227.00	25760	322.00	385
59.00	113	143.00	2511	228.00	3668	323.00	8154
60.00	67	144.00	546	229.00	4362	324.00	1436
61.00	1972	145.00	520	230.00	689	325.00	140
62.00	2242	146.00	1836	231.00	1868	326.00	112
63.00	5821	147.00	5346	232.00	296	327.00	1601
64.00	836	148.00	12924	233.00	544	328.00	679
65.00	2731	149.00	2301	234.00	1874	329.00	98
66.00	179	150.00	661	235.00	1796	332.00	635
67.00	171	151.00	1158	236.00	1366	333.00	812
68.00	2559	152.00	587	237.00	1997	334.00	5472
69.00	145088	153.00	3018	238.00	270	335.00	1066
70.00	749	154.00	2382	239.00	765	336.00	299
71.00	237	155.00	5509	240.00	727	339.00	167
72.00	46	156.00	8023	241.00	1373	340.00	113
73.00	1396	157.00	1564	242.00	2755	341.00	927
74.00	17016	158.00	1797	243.00	2461	342.00	262
75.00	23296	159.00	1440	244.00	36720	343.00	44
76.00	8541	160.00	3060	245.00	5063	346.00	1901

Date : 12-MAR-2010 10:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00306-01.2150PPH11SVMF11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1201.d

Spectrum: Avg. Scans 600-602 (8.13), Background Scan 588

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y

| 77.00	164736	| 161.00	5052	| 246.00	9950	| 347.00	336
| 78.00	10638	| 162.00	1396	| 247.00	1825	| 350.00	49
| 79.00	11084	| 163.00	279	| 248.00	387	| 352.00	2689
| 80.00	9748	| 164.00	455	| 249.00	1276	| 353.00	1770
| 81.00	12683	| 165.00	4070	| 250.00	232	| 354.00	2243

| 82.00	2853	| 166.00	2877	| 251.00	518	| 355.00	469
| 83.00	2822	| 167.00	22616	| 252.00	496	| 357.00	52
| 84.00	316	| 168.00	10894	| 253.00	979	| 359.00	124
| 85.00	2013	| 169.00	1371	| 254.00	1280	| 364.00	68
| 86.00	3915	| 170.00	640	| 255.00	200384	| 365.00	13173

| 87.00	1275	| 171.00	826	| 256.00	29008	| 366.00	2079
| 88.00	573	| 172.00	1800	| 257.00	2132	| 367.00	104
| 89.00	334	| 173.00	2580	| 258.00	13418	| 370.00	237
| 90.00	49	| 174.00	4019	| 259.00	2265	| 371.00	427
| 91.00	2629	| 175.00	8121	| 260.00	319	| 372.00	4073

| 92.00	3578	| 176.00	1725	| 261.00	240	| 373.00	1118
| 93.00	22552	| 177.00	3767	| 264.00	299	| 374.00	52
| 94.00	1379	| 178.00	1275	| 265.00	5614	| 377.00	62
| 95.00	350	| 179.00	14400	| 266.00	939	| 383.00	1223
| 96.00	882	| 180.00	10046	| 267.00	80	| 384.00	499

| 97.00	415	| 181.00	4851	| 268.00	43	| 385.00	110
| 98.00	17288	| 182.00	611	| 269.00	119	| 390.00	548
| 99.00	12422	| 183.00	516	| 270.00	342	| 391.00	426
| 100.00	952	| 184.00	1311	| 271.00	649	| 392.00	236
| 101.00	6943	| 185.00	7578	| 272.00	795	| 401.00	315

| 102.00	309	| 186.00	51784	| 273.00	5918	| 402.00	1714
| 103.00	2227	| 187.00	14244	| 274.00	15715	| 403.00	2259
| 104.00	4860	| 188.00	1427	| 275.00	79544	| 404.00	1000
| 105.00	4290	| 189.00	3557	| 276.00	10962	| 405.00	96
| 106.00	1619	| 190.00	586	| 277.00	8611	| 410.00	51

| 107.00	58032	| 191.00	1292	| 278.00	1539	| 415.00	78
| 108.00	8963	| 192.00	4531	| 279.00	351	| 419.00	52
| 109.00	1710	| 193.00	5670	| 281.00	171	| 421.00	1878
| 110.00	86312	| 194.00	1071	| 282.00	231	| 422.00	1401
| 111.00	14376	| 195.00	513	| 283.00	1025	| 423.00	13073

Date : 12-MAR-2010 10:40

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBNI00306-01,2150PPH11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5c1201.d

Spectrum: Avg. Scans 600-602 (8,13), Background Scan 588

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	1784	196.00	8452	284.00	604	424.00	2709
113.00	609	197.00	2287	285.00	999	425.00	213
114.00	154	198.00	308864	286.00	253	428.00	42
115.00	149	199.00	21232	288.00	44	429.00	64
116.00	3069	200.00	2106	289.00	358	430.00	47
117.00	58000	201.00	1398	290.00	260	441.00	35072
118.00	3979	203.00	2865	291.00	159	442.00	227776
119.00	481	204.00	13947	292.00	357	443.00	47192
120.00	899	205.00	22344	293.00	1995	444.00	4717
121.00	301	206.00	90984	294.00	614	445.00	328
122.00	3745	207.00	11451	295.00	509		
123.00	5802	208.00	3333	296.00	26928		
124.00	2606	209.00	1439	297.00	3924		
125.00	2819	210.00	880	298.00	272		

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

SDG Number: 10-2134

Matrix: SOIL

Lab Sample ID: 1202060535

Client Sample: QC for batch 960658

Client: LANL010

Project: QC

Client ID: MB for batch 960658

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 960659

Inst: MSD5.I

Dilution: 1

Run Date: 03/10/2010 14:41

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 03/04/2010 10:53

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5c1014-2.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	<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: 10-2134		Matrix: SOIL
Lab Sample ID: 1202060535		
Client Sample: QC for batch 960658	Client: LANL010	Project: QC
Client ID: MB for batch 960658	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.1	Dilution: 1
Run Date: 03/10/2010 14:41	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1014-2.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	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 Aldol Condensate	2.81	254	ug/kg		JA

Data File: /chem/MSD5.i/s031010.b/s5c1014-2.d
Report Date: 10-Mar-2010 15:10

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1014-2.d
Lab Smp Id: 1202060535 Client Smp ID: SBLK01
Inj Date : 10-MAR-2010 14:41
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202060535|960659|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100227-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2134.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791	(1.000)	226602	40.0000	
* 29 Naphthalene-d8	136	4.643	4.653	(1.000)	830368	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905	(1.000)	478134	40.0000	
* 67 Phenanthrene-d10	188	7.048	7.060	(1.000)	825330	40.0000	
* 91 Chrysene-d12	240	9.442	9.458	(1.000)	777461	40.0000	
* 98 Perylene-d12	264	11.019	11.033	(1.000)	719553	40.0000	
\$ 3 2-Fluorophenol	112	2.978	2.977	(0.787)	413411	73.0617	2440
\$ 5 Phenol-d5	99	3.501	3.507	(0.925)	500565	73.6034	2450
\$ 20 Nitrobenzene-d5	82	4.143	4.152	(0.892)	224343	36.3591	1210
\$ 39 2-Fluorobiphenyl	172	5.389	5.394	(0.914)	450204	37.6986	1260
\$ 60 2,4,6-Tribromophenol	329	6.484	6.492	(1.100)	145212	80.8595	2700
\$ 81 p-Terphenyl-d14	244	8.425	8.428	(0.892)	603127	46.6368	1550

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1014-2.d
 Lab Smp Id: 1202060535 Client Smp ID: SBLK01
 Inj Date : 10-MAR-2010 14:41
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202060535|960659|1|SVM|1|SBLK01
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 14 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

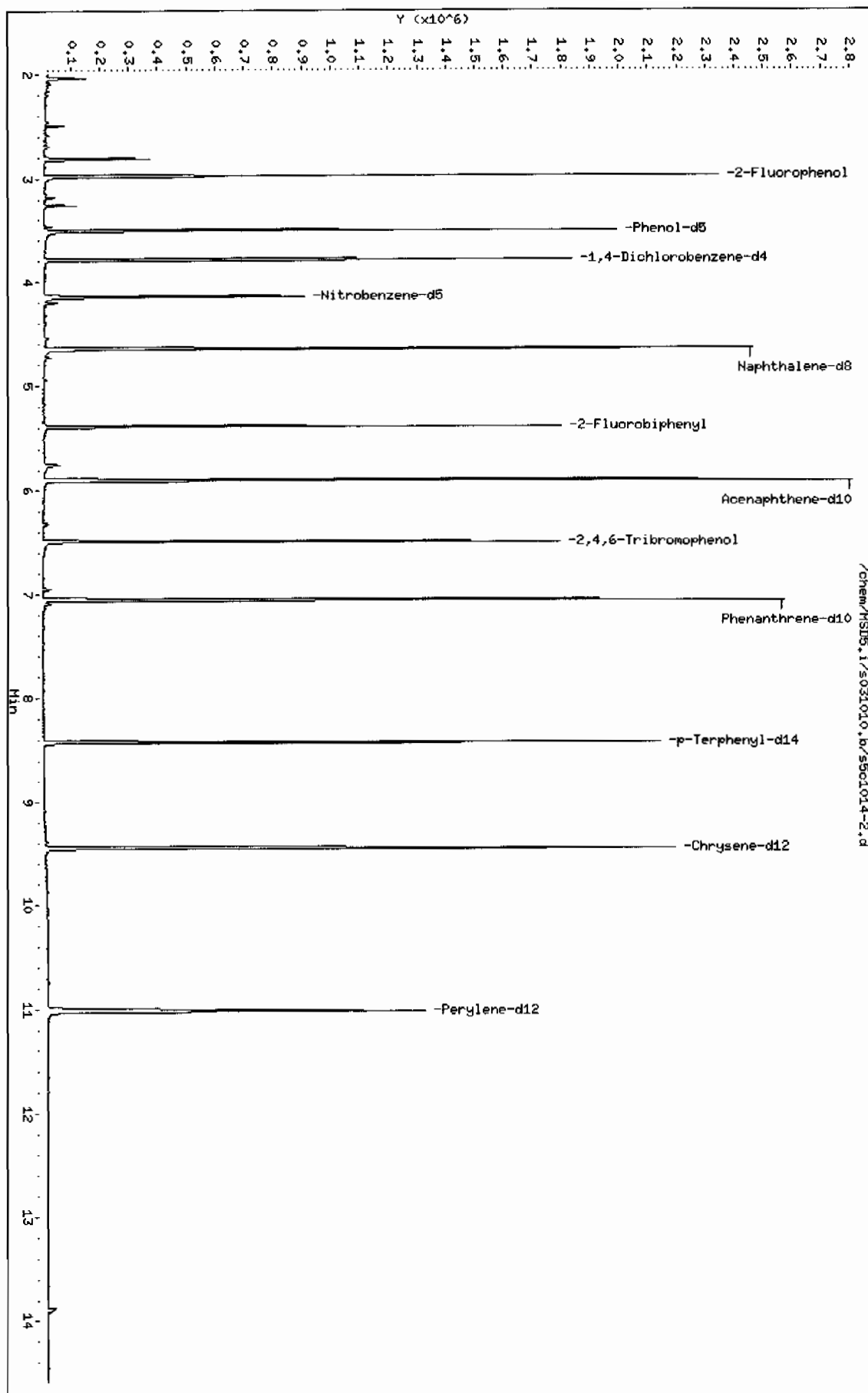
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.784	1525364	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
2.813	290081	7.60685287	254	0		0	10

Data File: /chem/HSD5.i/s031010.b/s501014-2.d
Date: 10-MAR-2010 14:41
Client ID: SBLK01
Sample Info: 11202060535196065911SVH11SBLK01
Volume Injected (uL): 0.5
Column phase: JSM DB-5HS

Instrument: HSD5.i
Operator: RMB
Column diameter: 0.20

Page 1



Date : 10-MAR-2010 14:41

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: I12020605351960659111SVH111SBLK01

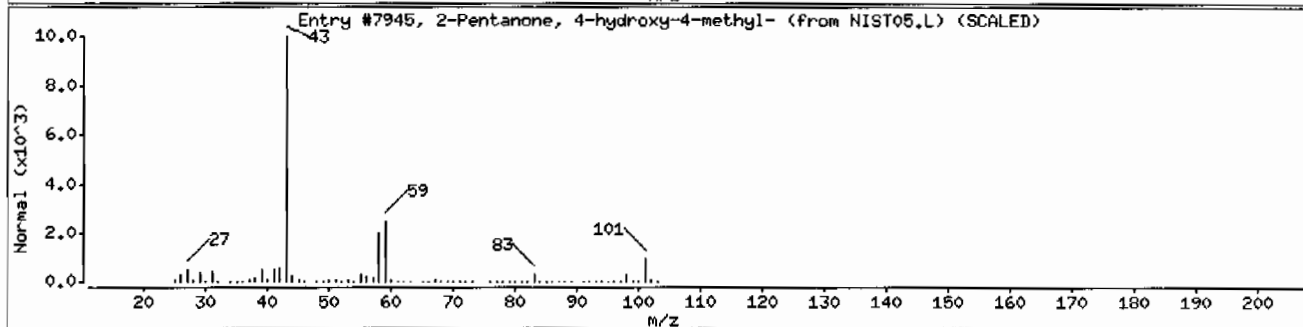
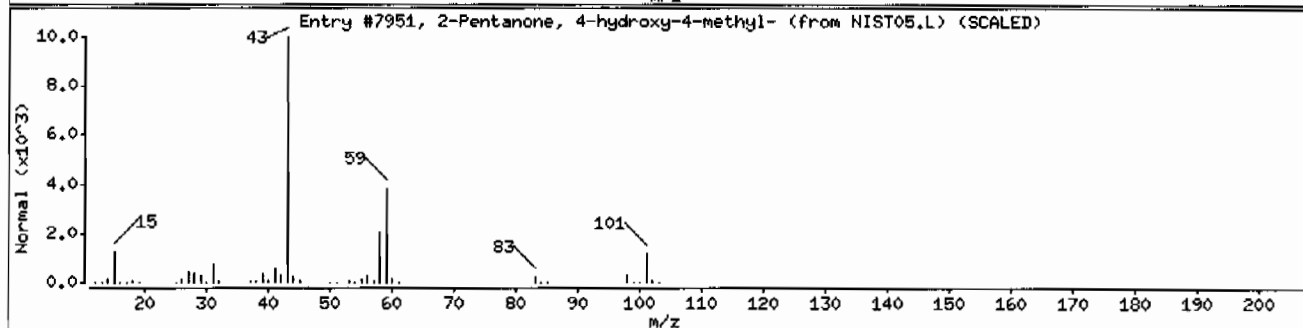
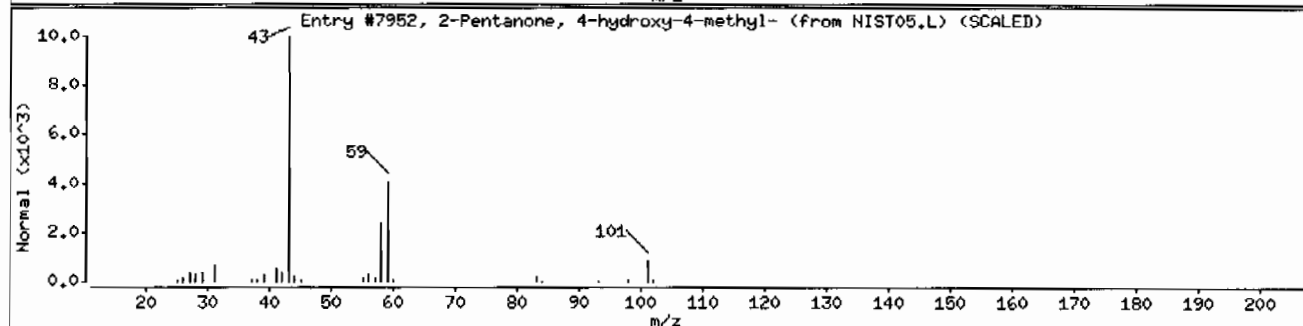
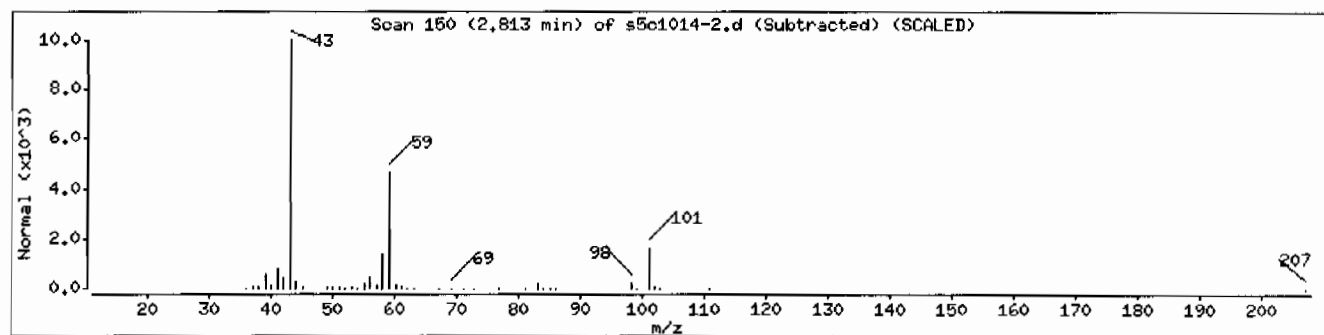
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	28	C6H12O2	116



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

SDG Number: 10-2134

Matrix: SOIL

Lab Sample ID: 1202060536

Client Sample: QC for batch 960658

Client: LANL010

Project: QC

Client ID: LCS for batch 960658

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 960659

Inst: MSD5.1

Dilution: 1

Run Date: 03/10/2010 15:05

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 03/04/2010 10:53

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5c1015-2.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1330	ug/kg	66.7	333
108-95-2	Phenol		1410	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1510	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1240	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1550	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1620	ug/kg	66.7	333
83-32-9	Acenaphthene		1390	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1510	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1860	ug/kg	110	333
87-86-5	Pentachlorophenol		1600	ug/kg	83.3	333
129-00-0	Pyrene		1310	ug/kg	10.0	33.3
110-86-1	Pyridine		1370	ug/kg	66.7	333
62-53-3	Aniline		1240	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1340	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1240	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1520	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1330	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1600	ug/kg	66.7	333
95-48-7	o-Cresol		1570	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1600	ug/kg	100	333
67-72-1	Hexachloroethane		1290	ug/kg	66.7	333
98-95-3	Nitrobenzene		1560	ug/kg	66.7	333
78-59-1	Isophorone		1480	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1350	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1430	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1380	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1460	ug/kg	66.7	333
65-85-0	Benzoic acid		3600	ug/kg	167	667
91-20-3	Naphthalene		1180	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1190	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1340	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1370	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1280	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1520	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1430	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1340	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1580	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1470	ug/kg	66.7	333

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

SDG Number: 10-2134		Matrix: SOIL
Lab Sample ID: 1202060536		
Client Sample: QC for batch 960658	Client: LANL010	Project: QC
Client ID: LCS for batch 960658	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 960659	Inst: MSD5.I	Dilution: 1
Run Date: 03/10/2010 15:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 03/04/2010 10:53	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5c1015-2.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1500	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1420	ug/kg	33.3	333
208-96-8	Acenaphthylene		1430	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		2200	ug/kg	127	667
132-64-9	Dibenzofuran		1420	ug/kg	66.7	333
84-66-2	Diethylphthalate		1590	ug/kg	66.7	333
86-73-7	Fluorene		1330	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1380	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1660	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1980	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1470	ug/kg	66.7	333
122-66-7	Azobenzene		1700	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1310	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1300	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		1690	ug/kg	66.7	333
206-44-0	Fluoranthene		1520	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1640	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1480	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1240	ug/kg	100	333
218-01-9	Chrysene		1480	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1820	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1550	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1460	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1370	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1520	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1930	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1990	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1970	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1350	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1015-2.d
 Lab Smp Id: 1202060536 Client Smp ID: SBLK01LCS
 Inj Date : 10-MAR-2010 15:05
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202060536|960659|1|SVM|1|SBLK01LCS
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 15 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2134.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

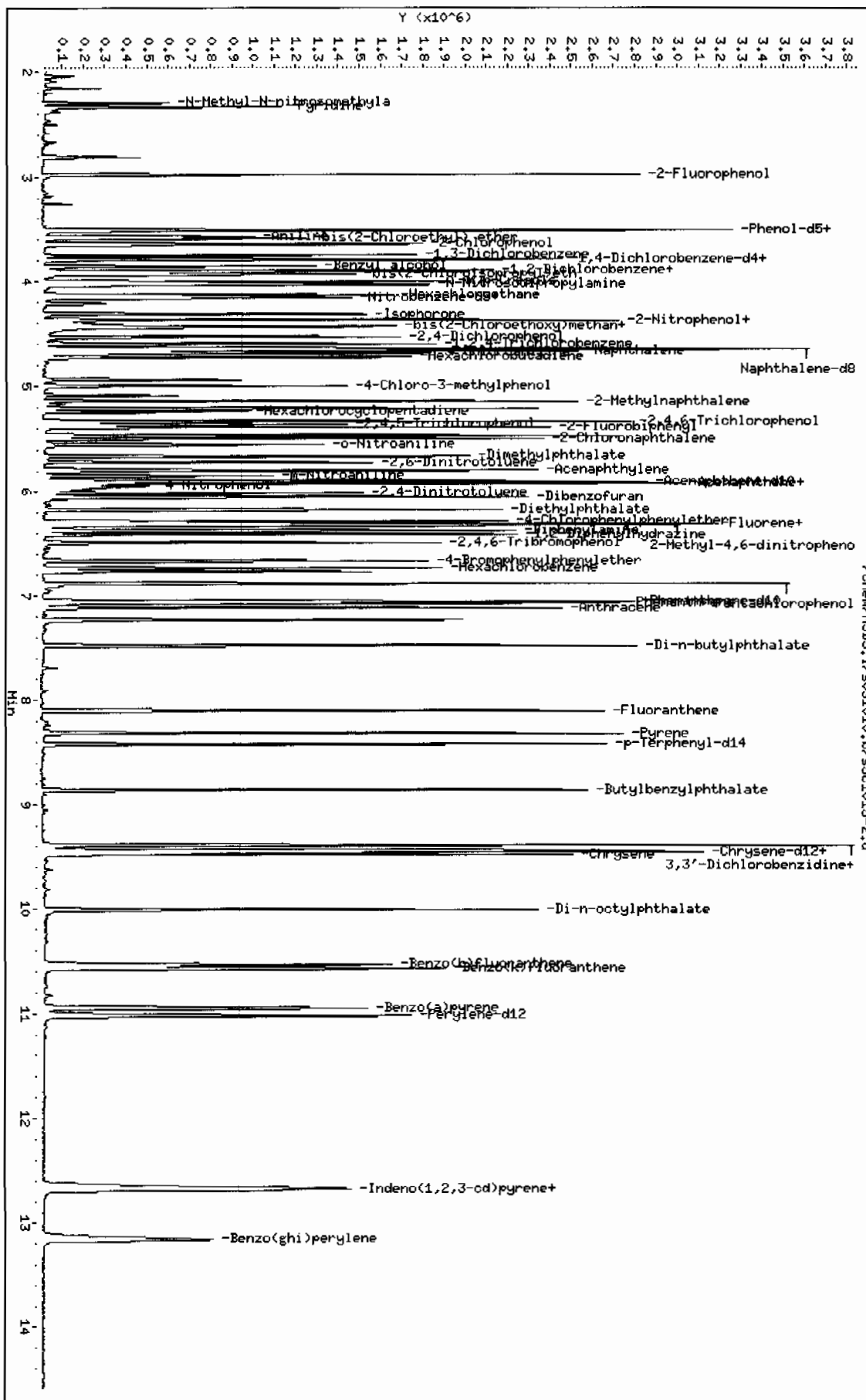
Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791 (1.000)	254005	40.0000	
* 29 Naphthalene-d8	136	4.648	4.653 (1.000)	983809	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905 (1.000)	562431	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060 (1.000)	1012204	40.0000	
* 91 Chrysene-d12	240	9.448	9.458 (1.000)	983637	40.0000	
* 98 Perylene-d12	264	11.025	11.033 (1.000)	964682	40.0000	
\$ 3 2-Fluorophenol	112	2.978	2.977 (0.787)	520380	82.0446	2730
\$ 5 Phenol-d5	99	3.502	3.507 (0.925)	596195	78.2073	2610
\$ 20 Nitrobenzene-d5	82	4.143	4.152 (0.891)	309139	42.2877	1410
\$ 39 2-Fluorobiphenyl	172	5.390	5.394 (0.914)	564816	40.2072	1340
\$ 60 2,4,6-Tribromophenol	329	6.490	6.492 (1.101)	174244	82.4835	2750
\$ 81 p-Terphenyl-d14	244	8.425	8.428 (0.892)	712524	43.5475	1450

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	3.513	3.516	(0.928)	321840	42.2382	1410(Q)
8 2-Chlorophenol		128	3.649	3.656	(0.964)	301869	45.2108	1510
11 1,4-Dichlorobenzene		146	3.796	3.800	(1.003)	272296	37.2908	1240
17 N-Nitrosodipropylamine		70	4.019	4.031	(1.062)	189050	46.5340	1550(Q)
28 1,2,4-Trichlorobenzene		180	4.596	4.604	(0.989)	267275	40.5853	1350
33 4-Chloro-3-methylphenol		107	5.001	4.994	(1.076)	263951	48.5849	1620
47 Acenaphthene		154	5.919	5.929	(1.004)	518075	41.6655	1390
50 2,4-Dinitrotoluene		165	6.013	6.020	(1.020)	206163	45.2966	1510
52 4-Nitrophenol		139	5.943	5.943	(1.008)	118551	55.8609	1860
65 Pentachlorophenol		266	6.884	6.887	(0.976)	114900	47.9959	1600
79 Pyrene		202	8.319	8.322	(0.880)	1064675	39.1716	1300
2 Pyridine		79	2.337	2.322	(0.618)	256464	41.2345	1370
4 Aniline		66	3.566	3.574	(0.942)	125187	37.3179	1240
7 bis(2-Chloroethyl) ether		63	3.584	3.593	(0.947)	225466	40.2698	1340
9 1,3-Dichlorobenzene		146	3.749	3.757	(0.991)	277301	37.2564	1240
12 Benzyl alcohol		108	3.849	3.858	(1.017)	192628	45.6232	1520
13 1,2-Dichlorobenzene		146	3.896	3.901	(1.030)	260400	39.9952	1330
14 bis(2-Chloroisopropyl) ether		45	3.925	3.935	(1.037)	552475	47.9263	1600
15 o-Cresol		107	3.907	3.911	(1.033)	222687	47.1749	1570
18 m,p-Cresols		107	4.001	4.007	(1.058)	327987	47.8786	1600
19 Hexachloroethane		117	4.125	4.133	(1.090)	118398	38.8046	1290
21 Nitrobenzene		77	4.154	4.166	(0.894)	318239	46.7845	1560
22 Isophorone		82	4.313	4.320	(0.928)	588167	44.5477	1480
23 2-Nitrophenol		139	4.372	4.378	(0.941)	137746	40.4486	1350
24 2,4-Dimethylphenol		122	4.366	4.373	(0.939)	261558	42.8406	1430
25 bis(2-Chloroethoxy) methane		93	4.431	4.441	(0.953)	322222	41.2939	1380
26 2,4-Dichlorophenol		162	4.531	4.537	(0.975)	237796	43.8351	1460
27 Benzoic acid		105	4.443	4.426	(0.956)	393605	108.063	3600
30 Naphthalene		128	4.660	4.667	(1.003)	776338	35.4741	1180
31 4-Chloroaniline		127	4.678	4.681	(1.006)	329692	35.6535	1190
32 Hexachlorobutadiene		225	4.725	4.734	(1.016)	156943	40.2069	1340
34 2-Methylnaphthalene		142	5.143	5.149	(1.106)	545082	41.0801	1370
36 Hexachlorocyclopentadiene		237	5.248	5.250	(0.890)	125393	38.2537	1280
37 2,4,6-Trichlorophenol		196	5.331	5.336	(0.904)	170436	45.6172	1520
38 2,4,5-Trichlorophenol		196	5.366	5.365	(0.910)	185558	42.7821	1430
40 2-Chloronaphthalene		162	5.495	5.500	(0.932)	521042	40.2223	1340
42 o-Nitroaniline		65	5.554	5.558	(0.942)	190045	47.2929	1580
41 m-Nitroaniline		138	5.848	5.852	(0.992)	137216	44.0341	1470
43 Dimethylphthalate		163	5.660	5.673	(0.960)	666428	45.0843	1500
44 2,6-Dinitrotoluene		165	5.719	5.726	(0.970)	152271	42.6431	1420
45 Acenaphthylene		152	5.795	5.803	(0.983)	819434	42.8417	1430
48 2,4-Dinitrophenol		184	5.919	5.924	(1.004)	63722	66.1307	2200(QR)
49 Dibenzofuran		168	6.043	6.049	(1.025)	724113	42.7364	1420
51 Diethylphthalate		149	6.172	6.174	(1.047)	681434	47.6961	1590
53 Fluorene		166	6.301	6.309	(1.069)	583283	39.9327	1330
54 4-Chlorophenylphenylether		204	6.284	6.285	(1.066)	310505	41.3399	1380
55 2-Methyl-4,6-dinitrophenol		198	6.325	6.323	(0.897)	92643	49.7447	1660

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
56 p-Nitroaniline	138	6.301	6.304	(1.069)	126778	59.5082	1980
133 Diphenylamine	169	6.372	6.372	(0.903)	532268	44.2438	1470
58 1,2-Diphenylhydrazine	77	6.407	6.410	(0.908)	741900	50.9604	1700
61 4-Bromophenylphenylether	248	6.666	6.670	(0.945)	189204	39.1787	1300
63 Hexachlorobenzene	284	6.731	6.738	(0.954)	197394	39.0381	1300
68 Phenanthrene	178	7.072	7.079	(1.002)	905311	42.2501	1410
69 Anthracene	178	7.113	7.123	(1.008)	911916	42.0692	1400
72 Di-n-butylphthalate	149	7.478	7.484	(1.060)	1184709	50.6117	1690
76 Fluoranthene	202	8.107	8.110	(1.149)	1018352	45.5593	1520
85 Butylbenzylphthalate	149	8.860	8.861	(0.938)	549947	49.2190	1640
89 Benzo(a)anthracene	228	9.436	9.444	(0.999)	974228	44.2881	1480
90 3,3'-Dichlorobenzidine	252	9.389	9.384	(0.994)	249568	37.2383	1240
92 Chrysene	228	9.478	9.482	(1.003)	909238	41.3572	1480
93 bis(2-Ethylhexyl)phthalate	149	9.383	9.391	(0.993)	729964	54.6216	1820
94 Di-n-octylphthalate	149	10.013	10.017	(0.908)	1222065	46.4868	1550
95 Benzo(b)fluoranthene	252	10.542	10.551	(0.956)	1008894	43.7846	1460
96 Benzo(k)fluoranthene	252	10.578	10.580	(0.959)	922803	41.1361	1370
97 Benzo(a)pyrene	252	10.954	10.961	(0.994)	884580	45.6970	1520
99 Indeno(1,2,3-cd)pyrene	276	12.666	12.675	(1.149)	926590	58.0466	1930
100 Dibenzo(a,h)anthracene	278	12.683	12.694	(1.150)	754415	59.6544	1990
101 Benzo(ghi)perylene	276	13.166	13.176	(1.194)	789508	59.1918	1970
1 N-Methyl-N-nitrosomethylamine	74	2.302	2.293	(0.608)	150173	39.8986	1330

QC Flag Legend

Q - Qualifier signal failed the ratio test.
 R - Spike/Surrogate failed recovery limits.



Data File: /chem/MSDB.i/s031010.b/s501015-2.d
 Date: 10-MAR-2010 15:05
 Client ID: SBLK01LCS
 Sample Info: 1120206053619C065911SVH11SBLK01LCS
 Volume Injected (uL): 0.5
 Column Phase: JMW DB-5MS

Instrument: MSDB.i
 Operator: RHB
 Column diameter: 0.20

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 960658 Verified by: _____
 Analyst: Joshua McCartney 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)
1202060535 MB	04-MAR-2010 10:53:00	30	1	0.03333
1202060536 LCS	04-MAR-2010 10:53:00	30	1	0.03333
248234001	04-MAR-2010 10:53:00	30.01	1	0.03332
248234002	04-MAR-2010 10:53:00	30	1	0.03333
248234003	04-MAR-2010 10:53:00	30	1	0.03333
248234004	04-MAR-2010 10:53:00	30.03	1	0.0333
1202060537 MS (248234004)	04-MAR-2010 10:53:00	30.08	1	0.03324
1202060538 MSD (248234004)	04-MAR-2010 10:53:00	30	1	0.03333
248234005	04-MAR-2010 10:53:00	30	1	0.03333
248234006	04-MAR-2010 10:53:00	30.06	1	0.03327
248234007	04-MAR-2010 10:53:00	30.06	1	0.03327
248240001	04-MAR-2010 10:53:00	30	1	0.03333
248240002	04-MAR-2010 10:53:00	30.09	1	0.03323
248240003	04-MAR-2010 10:53:00	30.01	1	0.03332
248240004	04-MAR-2010 10:53:00	30.09	1	0.03323
248240005	04-MAR-2010 10:53:00	30	1	0.03333
248240006	04-MAR-2010 10:53:00	30.01	1	0.03332
248240007	04-MAR-2010 10:53:00	30.02	1	0.03331
248240008	04-MAR-2010 10:53:00	30.04	1	0.03329
248240009	04-MAR-2010 10:53:00	30.09	1	0.03323
248240010	04-MAR-2010 10:53:00	30	1	0.03333

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202060536	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
LCS	1202060536	BENZIDINE LCS	UE100222-22	1	mL
MS	1202060537	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
MS	1202060537	BENZIDINE LCS	UE100222-22	1	mL
MSD	1202060538	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
MSD	1202060538	BENZIDINE LCS	UE100222-22	1	mL
SURR	All	BNA for all Surrogate	UE100301-10	1	mL
REGENT	All	Methylene Chloride	100301-D	150	mL
REGENT	All	Acetone	1273739-B1	150	mL
SOURC	All	SODIUM SULFATE	1274910	30	g

Verified By: RWH
 Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 03/10/2010

METHOD: 8270C MSD5-DFTPPx.m

OPERATOR: rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1266705-D

Multiplier Voltage: 1447 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100227-01

CALIBRATION & QC INFORMATION:

Initial Calibration Status: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD5.i/s031010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1s5c1001.d	WBN100207-01	rmb	10-MAR-2010 08:09	150PPM	1s031010	1.0	DFTPP	DOSE
1s5c1002.d	WBN100129-05.5	rmb	10-MAR-2010 08:23	140 PPM	1s031010	1.0	MEGACVS	DOSE - fail
1s5c1003.d	WBN100218-03.2	rmb	10-MAR-2010 08:52	140 PPM	1s031010	1.0	AP12CVS	DOSE
1s5c1004.d	WBN100301-05.4	rmb	10-MAR-2010 09:15	140 PPM	1s031010	1.0	BJCOCVS	DOSE - fail
1s5c1005.d	WBN100129-05.5	rmb	10-MAR-2010 09:44	140 PPM	1s031010	1.0	MEGACVS	DOSE - clean IP
1s5c1006-D.d	WBN100207-01	rmb	10-MAR-2010 11:15	150PPM	1s031010	1.0	DFTPP	
1s5c1006.d	WBN100207-01	rmb	10-MAR-2010 11:15	150PPM	1s031010	1.0	DFTPP	
1s5c1007.d	WBN100129-05.5	rmb	10-MAR-2010 11:29	140 PPM	1s031010	1.0	MEGACVS	DOSE - fail
1s5c1008.d	WBN100218-03.2	rmb	10-MAR-2010 11:57	140 PPM	1s031010	1.0	AP12CVS	
1s5c1009.d	WBN100301-05.4	rmb	10-MAR-2010 12:21	140 PPM	1s031010	1.0	BJCOCVS	DOSE - fail
1s5c1010-D.d	WBN100129-05.5	rmb	10-MAR-2010 12:50	140 PPM	1s031010	1.0	MEGACVS	264428
1s5c1010.d	WBN100129-05.5	rmb	10-MAR-2010 12:50	140 PPM	1s031010	1.0	MEGACVS	264428
1s5c1011.d	WBN100301-05.4	rmb	10-MAR-2010 13:19	140 PPM	1s031010	1.0	BJCOCVS	
1s5c1012-2.d	1202065979	rmb	10-MAR-2010 13:55	1963034	1248717	1.0	SBLK01	
1s5c1012-3.d	1202065979	rmb	10-MAR-2010 13:55	1963034	1248738	1.0	SBLK01	
1s5c1012.d	1202065979	rmb	10-MAR-2010 13:55	1963034	1248567	1.0	SBLK01	
1s5c1013-2.d	1202065980	rmb	10-MAR-2010 14:18	1963034	1248717	1.0	SBLK01LCS	
1s5c1013-3.d	1202065980	rmb	10-MAR-2010 14:18	1963034	1248738	1.0	SBLK01LCS	
1s5c1013.d	1202065980	rmb	10-MAR-2010 14:18	1963034	1248567	1.0	SBLK01LCS	

1s5c1014-2.d	1202060535	RMB	10-MAR-2010 14:41	960659	10-2134	1.0|SBLK01	
1s5c1014.d	1202060535	RMB	10-MAR-2010 14:41	960659	10-2131	1.0|SBLK01	
1s5c1015-2.d	1202060536	RMB	10-MAR-2010 15:05	960659	10-2134	1.0|SBLK01LCS	
1s5c1015.d	1202060536	RMB	10-MAR-2010 15:05	960659	10-2131	1.0|SBLK01LCS	
1s5c1016.d	1248567001	RMB	10-MAR-2010 15:27	963034	1248567	1.0|USWR	
1s5c1017.d	1202065981	RMB	10-MAR-2010 15:50	963034	1248567	1.0|USWR67001MS	
1s5c1018.d	1202065982	RMB	10-MAR-2010 16:13	963034	1248567	1.0|USWR67001MSD	
1s5c1019.d	1248717001	RMB	10-MAR-2010 16:36	963034	1248717	1.0|COMM	
1s5c1020.d	1248717003	RMB	10-MAR-2010 16:59	963034	1248717	1.0|COMM	
1s5c1021.d	1248738001	RMB	10-MAR-2010 17:21	963034	1248738	1.0 LAID	
1s5c1022.d	1248234001	RMB	10-MAR-2010 17:44	960659	10-2131	1.0|LANL	
1s5c1023.d	1248234002	RMB	10-MAR-2010 18:07	960659	10-2131	1.0|LANL	
1s5c1024.d	1248234003	RMB	10-MAR-2010 18:30	960659	10-2131	1.0|LANL	DUSE - s5c1123 passes - Fail IS - rr
1s5c1025.d	1248234004	RMB	10-MAR-2010 18:53	960659	10-2131	1.0|LANL	
1s5c1026.d	1202060537	RMB	10-MAR-2010 19:16	960659	10-2131	1.0|LANL34004MS	
1s5c1027.d	1202060538	RMB	10-MAR-2010 19:39	960659	10-2131	1.0|LANL34004MSD	
1s5c1028.d	1248234005	RMB	10-MAR-2010 20:02	960659	10-2131	1.0|LANL	
1s5c1029.d	1248234006	RMB	10-MAR-2010 20:25	960659	10-2131	1.0|LANL	
1s5c1030.d	1248234007	RMB	10-MAR-2010 20:49	960659	10-2131	1.0|LANL	
1s5c1031.d	1248240001	RMB	10-MAR-2010 21:11	960659	10-2134	1.0|LANL	
1s5c1032.d	1248240002	RMB	10-MAR-2010 21:34	960659	10-2134	1.0|LANL	
1s5c1033.d	1248240003	RMB	10-MAR-2010 21:58	960659	10-2134	1.0|LANL	

Instrument Batch: /chem/MSD5.i/s031010.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1s5c1034.d	1248240004	RMB	10-MAR-2010 22:21	960659	10-2134	1.0|LANL		
1s5c1035.d	1248240005	RMB	10-MAR-2010 22:44	960659	10-2134	1.0|LANL		
1s5c1036.d	1248240006	RMB	10-MAR-2010 23:06	960659	10-2134	1.0|LANL		

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 03/11/2010

METHOD: 8270C MSD5-DFTPPx.m

OPERATOR: rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1266705-D

Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100227-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23

Sequence Number: /chem/MSD5.i/s031110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
IsSc1101.d	WBN100306-01.2	rmb	11-MAR-2010 10:38	150PPM	s031110	1.0	DFTPP	
IsSc1102-BOE.d	WBN100129-05.5	RMB	11-MAR-2010 10:52	140 PPM	s031110	1.0	MEGACVS	223442
IsSc1102.d	WBN100129-05.5	RMB	11-MAR-2010 10:52	140 PPM	s031110	1.0	MEGACVS	223442
IsSc1103.d	WBN100218-03.2	RMB	11-MAR-2010 11:20	140 PPM	s031110	1.0	AP12CVS	
IsSc1104-2.d	1202067595	RMB	11-MAR-2010 11:49	1963788	1248616	1.0	SBLK01	
IsSc1104-3.d	1202067595	RMB	11-MAR-2010 11:49	1963788	1249065	1.0	SBLK01	
IsSc1104.d	1202067595	RMB	11-MAR-2010 11:49	1963788	1248463	1.0	SBLK01	
IsSc1105-2.d	1202067596	RMB	11-MAR-2010 12:12	1963788	1248616	1.0	SBLK01LCS	
IsSc1105-3.d	1202067596	RMB	11-MAR-2010 12:12	1963788	1249065	1.0	SBLK01LCS	
IsSc1105.d	1202067596	RMB	11-MAR-2010 12:12	1963788	1248463	1.0	SBLK01LCS	
IsSc1106-2.d	1202067597	RMB	11-MAR-2010 12:35	1963788	1248616	1.0	SBLK01LCS	
IsSc1106-3.d	1202067597	RMB	11-MAR-2010 12:35	1963788	1249065	1.0	SBLK01LCS	
IsSc1106.d	1202067597	RMB	11-MAR-2010 12:35	1963788	1248463	1.0	SBLK01LCS	
IsSc1107.d	1202064242	RMB	11-MAR-2010 12:58	1963335	1248494-2	1.0	TCLPBLANK	
IsSc1108.d	1202065401	RMB	11-MAR-2010 13:21	1963335	1248625-1	1.0	TCLPBLANK	
IsSc1109-2.d	1202066655	RMB	11-MAR-2010 13:44	1963335	1248625-1	1.0	SBLK01	
IsSc1109.d	1202066655	RMB	11-MAR-2010 13:44	1963335	1248494-2	1.0	SBLK01	
IsSc1110-2.d	1202066656	RMB	11-MAR-2010 14:06	1963335	1248625-1	1.0	SBLK01LCS	
IsSc1110.d	1202066656	RMB	11-MAR-2010 14:06	1963335	1248494-2	1.0	SBLK01LCS	

s5c1111.d	1202066175	RMB	11-MAR-2010 14:29	963129	10-2068	1.0|SELK02	
s5c1112.d	1202066176	RMB	11-MAR-2010 14:52	963129	10-2068	1.0|SELK02LCS	
s5c1113.d	1202066177	RMB	11-MAR-2010 15:15	963129	10-2068	1.0|SELK02LCSDI	
s5c1114.d	1248463023	RMB	11-MAR-2010 15:38	963788	1248463	1.0|SSFURE	DUSE - not needed
s5c1115.d	1248616019	RMB	11-MAR-2010 16:00	963788	1248616	1.0|SSFURE	DUSE - not needed
s5c1116.d	1249065014	RMB	11-MAR-2010 16:23	963788	1249065	1.0|SSFU	
s5c1117.d	1248504008	RMB	11-MAR-2010 16:45	963335	1248494-2	1.0|BY12	
s5c1118.d	1202066657	RMB	11-MAR-2010 17:08	963335	1248494-2	1.0|BY1204008MSI	
s5c1119.d	1202066658	RMB	11-MAR-2010 17:31	963335	1248494-2	1.0|BY1204008MSD	
s5c1120.d	1248637005	RMB	11-MAR-2010 17:54	963335	1248625-1	1.0|BY12	
s5c1121.d	1248637010	RMB	11-MAR-2010 18:16	963335	1248625-1	1.0|BY12	
s5c1122.d	1248637013	RMB	11-MAR-2010 18:39	963335	1248625-1	1.0|BY12	
s5c1123.d	1248234003	RMB	11-MAR-2010 19:02	960659	10-2131	1.0|LANL	
s5c1124.d	1248240007	RMB	11-MAR-2010 19:25	960659	10-2134	1.0|LANL	
s5c1125.d	1248240008	RMB	11-MAR-2010 19:48	960659	10-2134	1.0|LANL	DUSE - s5c1228 passes - Fail IS - rr
s5c1126.d	1248240009	RMB	11-MAR-2010 20:10	960659	10-2134	1.0|LANL	DUSE - s5c1229 passes - Fail IS - rr
s5c1127.d	1248240010	RMB	11-MAR-2010 20:33	960659	10-2134	1.0|LANL	
s5c1128.d	1248027004	RMB	11-MAR-2010 20:56	963129	10-2068	1.0|LANLRE	DUSE - Rx of s7c0822 - fail SS(confirms)/IS

Instrument Batch: /chem/MSD5.i/s031110.b

Page: 1

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 03/12/2010

METHOD: 8270C MSD5-DFTPPX.m

OPERATOR: rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1198658-D

Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD5.i/s031210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
IsSc1201.d	WBN100306-01.2	rmb	12-MAR-2010 10:40	150PPM	Is031210	1.0	DFTPP	
IsSc1202.d	WBN100129-05.5	rmb	12-MAR-2010 10:54	140 PPM	Is031210	1.0	MEGACVS	ipass 243328
IsSc1203.d	WBN100218-03.2	rmb	12-MAR-2010 11:22	140 PPM	Is031210	1.0	NP12CVS	
IsSc1204.d	WBN100127-03	rmb	12-MAR-2010 11:46	140 PPM	Is031210	1.0	NEVADACVS	
IsSc1205.d	WBN100304-23.5	rmb	12-MAR-2010 12:08	140 PPM	Is031210	1.0	PESTCVS	
IsSc1206.d	1202068599	rmb	12-MAR-2010 12:31	1964229	10-2082	1.0	SELK02	
IsSc1207.d	1202068600	rmb	12-MAR-2010 12:54	1964229	10-2082	1.0	SELK02LCS	
IsSc1208.d	1202068601	rmb	12-MAR-2010 13:18	1964229	10-2082	1.0	SELK02LCS	
IsSc1209.d	1202061214	rmb	12-MAR-2010 13:41	1960989	1248149	1.0	SELK01	
IsSc1210.d	1202061220	rmb	12-MAR-2010 14:04	1960989	1248149	1.0	SELK01LCS	
IsSc1211.d	1248149001	rmb	12-MAR-2010 14:26	1960989	1248149	1.0	BRCM	
IsSc1212.d	1202061215	rmb	12-MAR-2010 14:49	1960989	1248149	1.0	BRCM49001DUP	
IsSc1213.d	1248149002	rmb	12-MAR-2010 15:12	1960989	1248149	1.0	BRCM	
IsSc1214.d	1248149003	rmb	12-MAR-2010 15:35	1960989	1248149	1.0	BRCM	
IsSc1215.d	1248149004	rmb	12-MAR-2010 15:58	1960989	1248149	1.0	BRCM	
IsSc1216.d	1248149005	rmb	12-MAR-2010 16:21	1960989	1248149	1.0	BRCM	
IsSc1217.d	1248149006	rmb	12-MAR-2010 16:44	1960989	1248149	1.0	BRCM	
IsSc1218.d	1248149008	rmb	12-MAR-2010 17:07	1960989	1248149	1.0	BRCM	
IsSc1219.d	1202061216	rmb	12-MAR-2010 17:30	1960989	1248149	1.0	BRCM49008MS	

Is5c1220.d	1202061218	RMB	12-MAR-2010 17:52	960989	1248149	1.0|BRCM49008MSD|	
Is5c1221.d	1248149009	RMB	12-MAR-2010 18:15	960989	1248149	1.0|BRCM	
Is5c1222.d	1248149010	RMB	12-MAR-2010 18:39	960989	1248149	1.0|BRCM	
Is5c1223.d	1248149011	RMB	12-MAR-2010 19:02	960989	1248149	1.0|BRCM	
Is5c1224.d	1248149012	RMB	12-MAR-2010 19:25	960989	1248149	1.0|BRCM	
Is5c1225.d	1248149013	RMB	12-MAR-2010 19:47	960989	1248149	1.0|BRCM	
Is5c1226.d	1248149015	RMB	12-MAR-2010 20:10	960989	1248149	1.0|BRCM	
Is5c1227.d	1248149016	RMB	12-MAR-2010 20:34	960989	1248149	1.0|BRCM	
Is5c1228.d	1248240008	RMB	12-MAR-2010 20:57	960659	110-2134	1.0|LANL	
Is5c1229.d	1248240009	RMB	12-MAR-2010 21:20	960659	110-2134	1.0|LANL	
Is5c1230.d	1248059006	RMB	12-MAR-2010 21:43	964229	110-2082	1.0|LANL	
Is5c1231.d	1248059008	RMB	12-MAR-2010 22:07	964229	110-2082	1.0|LANL	
Is5c1232.d	1248059009	RMB	12-MAR-2010 22:30	964229	110-2082	1.0|LANL	

Instrument Batch: /chem/MSD5.i/s031210.b

Page: 1

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 02/17/2010

METHOD: 8270C MSD5-DFTPP8270D.m

OPERATOR: rmb

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1253574-D

Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD5.i/s021710.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
ls5b1701.d	WBN100207-01	rmb	17-FEB-2010 14:51	150PPM	1	1.0	DFTPP	
ls5b1701.d	WBN100207-01	rmb	17-FEB-2010 14:51	150PPM	1	1.0	DFTPP	
ls5b1702.d	Instrument blank	rmb	17-FEB-2010 15:05	1	1.0	1		
ls5b1703.d	WBN100215-08	rmb	17-FEB-2010 15:27	11 PPM	1	1.0	MEGAICAL001	DUSE
ls5b1704.d	WBN100215-07	rmb	17-FEB-2010 15:56	110 PPM	1	1.0	MEGAICAL010	DUSE
ls5b1705.d	WBN100215-06	rmb	17-FEB-2010 16:25	120 PPM	1	1.0	MEGAICAL020	DUSE
ls5b1706.d	WBN100215-05.1	rmb	17-FEB-2010 16:53	140 PPM	1	1.0	MEGAICAL040	DUSE
ls5b1707.d	WBN100215-04	rmb	17-FEB-2010 17:22	150 PPM	1	1.0	MEGAICAL050	DUSE
ls5b1708.d	WBN100215-03	rmb	17-FEB-2010 17:50	180 PPM	1	1.0	MEGAICAL080	DUSE
ls5b1709.d	WBN100215-02	rmb	17-FEB-2010 18:19	1100 PPM	1	1.0	MEGAICAL100	DUSE
ls5b1710.d	WBN100215-01	rmb	17-FEB-2010 18:47	1120 PPM	1	1.0	MEGAICAL120	DUSE
ls5b1711.d	WBN100120-01	rmb	17-FEB-2010 19:16	110 PPM	1	1.0	AP12ICAL010	
ls5b1712.d	WBN100120-02	rmb	17-FEB-2010 19:38	120 PPM	1	1.0	AP12ICAL020	
ls5b1713.d	WBN100120-03.1	rmb	17-FEB-2010 20:01	140 PPM	1	1.0	AP12ICAL040	
ls5b1714.d	WBN100120-04	rmb	17-FEB-2010 20:24	150 PPM	1	1.0	AP12ICAL050	
ls5b1715.d	WBN100120-05	rmb	17-FEB-2010 20:47	180 PPM	1	1.0	AP12ICAL080	
ls5b1716.d	WBN100120-06	rmb	17-FEB-2010 21:10	1100 PPM	1	1.0	AP12ICAL100	
ls5b1717.d	WBN100120-07	rmb	17-FEB-2010 21:33	1120 PPM	1	1.0	AP12ICAL120	
ls5b1718.d	WBN100215-09.1	rmb	17-FEB-2010 21:56	140 PPM	1	1.0	MEGAICAL	DUSE

155b1719-625.d\WBN100120-08.1	RMB	17-FEB-2010 22:24	140 PPM	s021710	1.0\AP12ICV	AP12ICV - 625 - 021710
155b1719-8270D.d\WBN100120-08.1	RMB	17-FEB-2010 22:24	140 PPM	s021710	1.0\AP12ICV	AP12ICV - 8270D - 021710
155b1719.d	WBN100120-08.1	17-FEB-2010 22:24	140 PPM	s021710	1.0\AP12ICV	AP12ICV - 8270C - 021710
155b1720-TEST.d\WBN100127-01	RMB	17-FEB-2010 22:47	110 PPM	s021710	1.0\NEV010	
155b1720.d	WBN100127-01	17-FEB-2010 22:47	110 PPM	s021710	1.0\NEV010	
155b1721.d	WBN100127-02	17-FEB-2010 23:10	120 PPM	s021710	1.0\NEV020	
155b1722.d	WBN100127-03	17-FEB-2010 23:33	140 PPM	s021710	1.0\NEV040	
155b1723.d	WBN100127-04	17-FEB-2010 23:55	150 PPM	s021710	1.0\NEV050	
155b1724.d	WBN100127-05	18-FEB-2010 00:18	180 PPM	s021710	1.0\NEV080	
155b1725.d	WBN100127-06	18-FEB-2010 00:41	1100 PPM	s021710	1.0\NEV100	
155b1726.d	WBN100127-07	18-FEB-2010 01:04	1120 PPM	s021710	1.0\NEV120	
155b1727-0.d	WBN100207-01	18-FEB-2010 08:43	150PPM	s021710	1.0\DFTPP	
155b1727.d	WBN100207-01	18-FEB-2010 08:43	150PPM	s021710	1.0\DFTPP	
155b1728.d	instrument blank	18-FEB-2010 09:19		s021710	1.0	
155b1729.d	WBN100215-08	18-FEB-2010 09:42	11 PPM	s021710	1.0\MEGAICAL001	
155b1730-TEST.d\WBN100215-07	RMB	18-FEB-2010 10:10	110 PPM	s021710	1.0\MEGAICAL010	
155b1730.d	WBN100215-07	18-FEB-2010 10:10	110 PPM	s021710	1.0\MEGAICAL010	
155b1731-TEST.d\WBN100215-06	RMB	18-FEB-2010 10:39	120 PPM	s021710	1.0\MEGAICAL020	
155b1731.d	WBN100215-06	18-FEB-2010 10:39	120 PPM	s021710	1.0\MEGAICAL020	
155b1732.d	WBN100215-05.1	18-FEB-2010 11:08	140 PPM	s021710	1.0\MEGAICAL040	
155b1733.d	WBN100215-04	18-FEB-2010 11:35	150 PPM	s021710	1.0\MEGAICAL050	
155b1734.d	WBN100215-03	18-FEB-2010 12:04	180 PPM	s021710	1.0\MEGAICAL080	
155b1735.d	WBN100215-02	18-FEB-2010 12:32	1100 PPM	s021710	1.0\MEGAICAL100	
155b1736.d	WBN100215-01	18-FEB-2010 13:01	1120 PPM	s021710	1.0\MEGAICAL120	
155b1737.d	instrument blank	18-FEB-2010 13:30		s021710	1.0	
155b1738-625.d\WBN100215-09.1	RMB	18-FEB-2010 13:53	140 PPM	s021710	1.0\MEGAICV	MEGAICV - 625 - 021710
155b1738-8270D.d\WBN100215-09.1	RMB	18-FEB-2010 13:53	140 PPM	s021710	1.0\MEGAICV	MEGAICV - 8270C - 021710

1s5b1738-BOE.d	WBN100215-09.1	RMB	18-FEB-2010 13:53	140 PPM	s021710	1.0|MEGA1CV	MEGA1CV - BOE - 021710
1s5b1738.d	WBN100215-09.1	RMB	18-FEB-2010 13:53	140 PPM	s021710	1.0|MEGA1CV	MEGA1CV - 8270C - 021710
1s5b1739.d	WBN100205-25	RMB	18-FEB-2010 14:22	110 PPM	s021710	1.0|PEST1CAL01C	
1s5b1740.d	WBN100205-24	RMB	18-FEB-2010 14:45	120 PPM	s021710	1.0|PEST1CAL0201	
1s5b1741.d	WBN100205-23.1	RMB	18-FEB-2010 15:08	140 PPM	s021710	1.0|PEST1CAL0401	
1s5b1742.d	WBN100205-22	RMB	18-FEB-2010 15:32	150 PPM	s021710	1.0|PEST1CAL0501	
1s5b1743.d	WBN100205-21	RMB	18-FEB-2010 15:55	180 PPM	s021710	1.0|PEST1CAL0801	
1s5b1744.d	WBN100205-20	RMB	18-FEB-2010 16:18	1010 PPM	s021710	1.0|PEST1CAL1301	
1s5b1745.d	WBN100205-19	RMB	18-FEB-2010 16:41	1120 PPM	s021710	1.0|PEST1CAL1201	
1s5b1746.d	WBN100120-16	RMB	18-FEB-2010 17:05	1500 PPM	s021710	1.0|HEX1CAL5001	
1s5b1747.d	WBN100120-15	RMB	18-FEB-2010 17:28	11000 PPM	s021710	1.0|HEX1CAL10001	
1s5b1748.d	WBN100120-14	RMB	18-FEB-2010 17:51	11250 PPM	s021710	1.0|HEX1CAL12501	
1s5b1749.d	WBN100120-13	RMB	18-FEB-2010 18:14	11500 PPM	s021710	1.0|HEX1CAL15001	
1s5b1750.d	WBN100120-12	RMB	18-FEB-2010 18:38	11750 PPM	s021710	1.0|HEX1CAL17501	
1s5b1751.d	WBN090828-26.1	RMB	18-FEB-2010 19:01	12000 PPM	s021710	1.0|HEX1CAL20001	
1s5b1752-625.d	WBN100205-26.1	RMB	18-FEB-2010 19:24	140 PPM	s021710	1.0|PEST1CV	PEST1CV - 625 - 021710
1s5b1752-8270d.d	WBN100205-26.1	RMB	18-FEB-2010 19:24	140 PPM	s021710	1.0|PEST1CV	PEST1CV - 8270D - 021710
1s5b1752.d	WBN100205-26.1	RMB	18-FEB-2010 19:24	140 PPM	s021710	1.0|PEST1CV	PEST1CV - 8270C - 021710
1s5b1753-625.d	WBN100103-10.4	RMB	18-FEB-2010 19:47	11250 PPM	s021710	1.0|HEX1CV	HEX1CV - 625 - 021710
1s5b1753-8270D.d	WBN100103-10.4	RMB	18-FEB-2010 19:47	11250 PPM	s021710	1.0|HEX1CV	HEX1CV - 8270D - 02171
1s5b1753.d	WBN100103-10.4	RMB	18-FEB-2010 19:47	11250 PPM	s021710	1.0|HEX1CV	HEX1CV - 8270C - 02171

Instrument Batch: /chem/MSD5.i/s021710.b

Page: 1

DATA EXCEPTION REPORT

Mo. Day Yr. 15-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEMIVOA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 960659	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248234(10-2131), 248240(10-2134)			
Application Issues: Failed Recovery for MS/PS Failed Recovery for LCS/LCSD Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. The LCS(1202060536) recovered 2,4-Dinitrophenol at 132%. The limits are 18%-127%. 2. The MS(1202060537) and MSD(1202060538) both recovered 3,3'-Dichlorobenzidine at 0%. The limits are 30%-124%.		1. The LCS failure represents less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data results have been reported. 2. Since the MSD spike recovery confirmed the MS spike recovery, the failures were attributed to sample matrix interference and the data results have been reported.	

Originator's Name:

Richard Bomar 15-MAR-10

Data Validator/Group Leader:

Barbara Bailey 15-MAR-10

Data File: /chem/MSD5.i/s031010.b/s5c1026.d
 Report Date: 11-Mar-2010 07:20

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1026.d
 Lab Smp Id: 1202060537 Client Smp ID: RE11-10-1857MS
 Inj Date : 10-MAR-2010 19:16
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202060537|960659|1|SVM|1|LANL34004MS
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 26 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2131.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	23.47830	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT S1G				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791	(1.000)	222510	40.0000
* 29 Naphthalene-d8	136	4.649	4.653	(1.000)	860976	40.0000
* 46 Acenaphthene-d10	164	5.896	5.905	(1.000)	493392	40.0000
* 67 Phenanthrene-d10	188	7.054	7.060	(1.000)	854160	40.0000
* 91 Chrysene-d12	240	9.454	9.458	(1.000)	705099	40.0000
* 98 Perylene-d12	264	11.025	11.033	(1.000)	522352	40.0000
\$ 3 2-Fluorophenol	112	2.984	2.977	(0.789)	345626	62.2055 2700
\$ 5 Phenol-d5	99	3.507	3.507	(0.927)	409987	61.3935 2670
\$ 20 Nitrobenzene-d5	82	4.143	4.152	(0.891)	184839	28.8918 1260
\$ 39 2-Fluorobiphenyl	172	5.390	5.394	(0.914)	321336	26.0755 1130
\$ 60 2,4,6-Tribromophenol	329	6.490	6.492	(1.101)	112433	60.6711 2640
\$ 81 p-Terphenyl-d14	244	8.425	8.428	(0.891)	359330	30.6367 1330

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.513	3.516	(0.928)	213874	32.0418	1390 (Q)
8 2-Chlorophenol	128	3.649	3.656	(0.964)	187525	32.0609	1390
11 1,4-Dichlorobenzene	146	3.796	3.800	(1.003)	118411	18.5117	804
17 N-Nitrosodipropylamine	70	4.019	4.031	(1.062)	112913	31.7271	1380 (Q)
28 1,2,4-Trichlorobenzene	180	4.596	4.604	(0.989)	133186	23.1094	1000
33 4-Chloro-3-methylphenol	107	5.001	4.994	(1.076)	174258	36.6516	1590
47 Acenaphthene	154	5.919	5.929	(1.004)	289805	26.5684	1150
50 2,4-Dinitrotoluene	165	6.013	6.020	(1.020)	112615	28.2052	1220
52 4-Nitrophenol	139	5.948	5.943	(1.009)	59945	33.9128	1470
65 Pentachlorophenol	266	6.884	6.887	(0.976)	76473	38.7690	1680
79 Pyrene	202	8.319	8.322	(0.880)	507020	26.0234	1130
2 Pyridine	79	2.325	2.322	(0.614)	133863	24.5691	1070
4 Aniline	66	3.566	3.574	(0.942)	39558	13.4615	585 (Q)
7 bis(2-Chloroethyl) ether	63	3.584	3.593	(0.947)	138670	28.2733	1230
9 1,3-Dichlorobenzene	146	3.749	3.757	(0.991)	113205	17.3624	754
12 Benzyl alcohol	108	3.854	3.858	(1.019)	122744	33.1864	1440
13 1,2-Dichlorobenzene	146	3.896	3.901	(1.030)	124501	21.8291	948
14 bis(2-Chloroisopropyl) ether	45	3.931	3.935	(1.039)	317541	31.4451	1370
15 o-Cresol	107	3.907	3.911	(1.033)	138601	33.5178	1460
18 m,p-Cresols	107	4.002	4.007	(1.058)	194891	32.4766	1410
19 Hexachloroethane	117	4.125	4.133	(1.090)	54305	20.3176	883
21 Nitrobenzene	77	4.160	4.166	(0.895)	188110	31.5996	1370
22 Isophorone	82	4.313	4.320	(0.928)	375960	32.5377	1410
23 2-Nitrophenol	139	4.372	4.378	(0.941)	87340	29.3061	1270
24 2,4-Dimethylphenol	122	4.366	4.373	(0.939)	140788	26.3497	1140
25 bis(2-Chloroethoxy) methane	93	4.431	4.441	(0.953)	202723	29.6862	1290
26 2,4-Dichlorophenol	162	4.531	4.537	(0.975)	150751	31.7541	1380
27 Benzoic acid	105	4.443	4.426	(0.956)	325421	102.584	4460
30 Naphthalene	128	4.660	4.667	(1.003)	433432	22.6309	983
31 4-Chloroaniline	127	4.660	4.681	(1.003)	141592	17.4966	760
32 Hexachlorobutadiene	225	4.731	4.734	(1.018)	63003	18.4434	801
34 2-Methylnaphthalene	142	5.143	5.149	(1.106)	299615	25.8020	1120
36 Hexachlorocyclopentadiene	237	5.248	5.250	(0.890)	33945	11.8049	513 (R)
37 2,4,6-Trichlorophenol	196	5.331	5.336	(0.904)	109427	33.3864	1450
38 2,4,5-Trichlorophenol	196	5.366	5.365	(0.910)	118845	31.2349	1360
40 2-Chloronaphthalene	162	5.496	5.500	(0.932)	289700	25.4929	1110
42 o-Nitroaniline	65	5.554	5.558	(0.942)	111807	31.7167	1380
41 m-Nitroaniline	138	5.848	5.852	(0.992)	58771	21.4995	934
43 Dimethylphthalate	163	5.660	5.673	(0.960)	423459	32.6559	1420
44 2,6-Dinitrotoluene	165	5.719	5.726	(0.970)	93842	29.9575	1300
45 Acenaphthylene	152	5.795	5.803	(0.983)	477198	28.4399	1240
48 2,4-Dinitrophenol	184	5.919	5.924	(1.004)	20934	34.8116	1510 (Q)
49 Dibenzofuran	168	6.043	6.049	(1.025)	412805	27.7724	1210
51 Diethylphthalate	149	6.172	6.174	(1.047)	438044	34.9505	1520
53 Fluorene	166	6.301	6.309	(1.069)	337259	26.3203	1140
54 4-Chlorophenylphenylether	204	6.284	6.285	(1.066)	172214	26.1365	1140
55 2-Methyl-4,6-dinitrophenol	198	6.319	6.323	(0.896)	35385	27.9347	1210

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.301	6.304	(1.069)	60318	32.2747	1400
133 Diphenylamine	169	6.366	6.372	(0.902)	277075	27.2928	1180
58 1,2-Diphenylhydrazine	77	6.401	6.410	(0.907)	410003	33.3737	1450
61 4-Bromophenylphenylether	248	6.666	6.670	(0.945)	103399	25.3726	1100
63 Hexachlorobenzene	284	6.731	6.738	(0.954)	104205	24.4216	1060
68 Phenanthrene	178	7.072	7.079	(1.002)	477350	26.3995	1150
69 Anthracene	178	7.113	7.123	(1.008)	473292	25.8743	1120
72 Di-n-butylphthalate	149	7.478	7.484	(1.060)	656365	33.2287	1440
76 Fluoranthene	202	8.107	8.110	(1.149)	494292	26.2055	1140
85 Butylbenzylphthalate	149	8.860	8.861	(0.937)	270208	33.7362	1460
89 Benzo(a)anthracene	228	9.436	9.444	(0.998)	377942	23.9683	1040
92 Chrysene	228	9.472	9.482	(1.002)	364345	24.7961	1080
93 bis(2-Ethylhexyl)phthalate	149	9.389	9.391	(0.993)	349343	36.4670	1580
94 Di-n-octylphthalate	149	10.013	10.017	(0.908)	506833	35.6059	1550
95 Benzo(b)fluoranthene	252	10.542	10.551	(0.956)	306248	24.5454	1070
96 Benzo(k)fluoranthene	252	10.578	10.580	(0.959)	307790	25.3391	1100
97 Benzo(a)pyrene	252	10.954	10.961	(0.994)	248509	23.7091	1030
99 Indeno(1,2,3-cd)pyrene	276	12.654	12.675	(1.148)	187860	21.7343	944
100 Dibenzo(a,h)anthracene	278	12.672	12.694	(1.149)	166806	24.3593	1060
101 Benzo(ghi)perylene	276	13.154	13.176	(1.193)	142908	19.7872	860
1 N-Methyl-N-nitrosomethylamine	74	2.290	2.293	(0.605)	98546	29.8881	1300

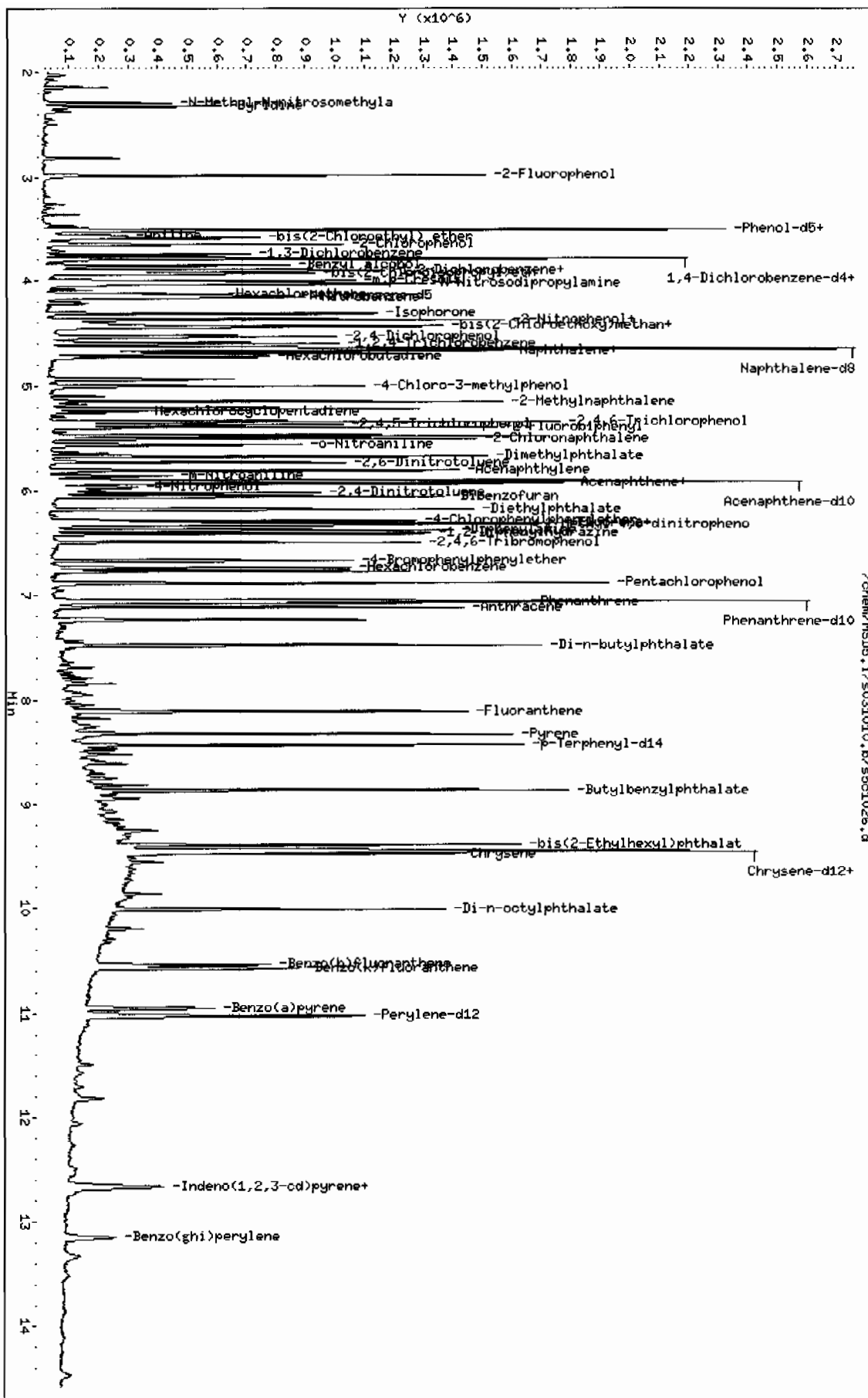
QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSDS.i/s031010.b/s031026.d
 Date: 10-MAR-2010 19:16
 Client ID: RE11-10-1857MS
 Sample Info: 142020605371%0609141SWH11LPLN134004HS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20

/chem/MSDS.i/s031010.b/s031026.d



GEL Laboratories LLC

Data file : /chem/MSD5.i/s031010.b/s5c1027.d
 Lab Smp Id: 1202060538 Client Smp ID: RE11-10-1857MSD
 Inj Date : 10-MAR-2010 19:39
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202060538|960659|1|SVM|1|LANL34004MSD
 Misc Info : |MSD8270_S|WBN100227-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s031010.b/MSD5-M8270C-030210.m
 Meth Date : 10-Mar-2010 15:06 rmb Quant Type: ISTD
 Cal Date : 02-MAR-2010 14:42 Cal File: s5c0209.d
 Als bottle: 27 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2131.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	23.47830	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.784	3.791 (1.000)	213355	40.0000	
* 29 Naphthalene-d8	136	4.649	4.653 (1.000)	843583	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.905 (1.000)	482316	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.060 (1.000)	865273	40.0000	
* 91 Chrysene-d12	240	9.454	9.458 (1.000)	783460	40.0000	
* 98 Perylene-d12	264	11.030	11.033 (1.000)	658624	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.977 (0.789)	339213	63.6707	2770
\$ 5 Phenol-d5	99	3.507	3.507 (0.927)	401910	62.7663	2730
\$ 20 Nitrobenzene-d5	82	4.143	4.152 (0.891)	179696	28.6670	1250
\$ 39 2-Fluorobiphenyl	172	5.390	5.394 (0.914)	293860	24.3936	1060
\$ 60 2,4,6-Tribromophenol	329	6.490	6.492 (1.101)	107312	59.2375	2580
\$ 81 p-Terphenyl-d14	244	8.425	8.428 (0.891)	343134	26.3297	1150

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	3.513	3.516	(0.928)	214887	33.5749	1460(Q)
8 2-Chlorophenol		128	3.649	3.656	(0.964)	185979	33.1609	1440
11 1,4-Dichlorobenzene		146	3.796	3.800	(1.003)	119645	19.5071	850
17 N-Nitrosodipropylamine		70	4.019	4.031	(1.062)	113046	33.1275	1440(Q)
28 1,2,4-Trichlorobenzene		180	4.596	4.604	(0.989)	134217	23.7685	1040
33 4-Chloro-3-methylphenol		107	5.001	4.994	(1.076)	168129	36.0915	1570
47 Acenaphthene		154	5.919	5.929	(1.004)	280094	26.2679	1140
50 2,4-Dinitrotoluene		165	6.013	6.020	(1.020)	110846	28.3997	1240
52 4-Nitrophenol		139	5.954	5.943	(1.010)	62155	35.7250	1560
65 Pentachlorophenol		266	6.884	6.887	(0.976)	70530	35.6840	1550
79 Pyrene		202	8.319	8.322	(0.880)	486039	22.4514	978
2 Pyridine		79	2.325	2.322	(0.614)	134917	25.8249	1120
4 Aniline		66	3.566	3.574	(0.942)	33895	12.0292	524(Q)
7 bis(2-Chloroethyl) ether		63	3.584	3.593	(0.947)	128385	27.2994	1190(Q)
9 1,3-Dichlorobenzene		146	3.749	3.757	(0.991)	115477	18.4707	804
12 Benzyl alcohol		108	3.854	3.858	(1.019)	122179	34.4512	1500
13 1,2-Dichlorobenzene		146	3.896	3.901	(1.030)	125361	22.9229	998
14 bis(2-Chloroisopropyl) ether		45	3.931	3.935	(1.039)	310757	32.0937	1400
15 o-Cresol		107	3.907	3.911	(1.033)	145824	36.7776	1600
18 m,p-Cresols		107	4.001	4.007	(1.058)	187400	32.5682	1420
19 Hexachloroethane		117	4.125	4.133	(1.090)	56364	21.9930	958
21 Nitrobenzene		77	4.160	4.166	(0.895)	186782	32.0234	1390
22 Isophorone		82	4.313	4.320	(0.928)	372510	32.9038	1430
23 2-Nitrophenol		139	4.372	4.378	(0.941)	85816	29.3885	1280
24 2,4-Dimethylphenol		122	4.366	4.373	(0.939)	128985	24.6383	1070
25 bis(2-Chloroethoxy)methane		93	4.431	4.441	(0.953)	205917	30.7757	1340
26 2,4-Dichlorophenol		162	4.531	4.537	(0.975)	146659	31.5291	1370
27 Benzoic acid		105	4.449	4.426	(0.957)	313895	101.130	4400
30 Naphthalene		128	4.660	4.667	(1.003)	427152	22.7629	992
31 4-Chloroaniline		127	4.660	4.681	(1.003)	134444	16.9558	739
32 Hexachlorobutadiene		225	4.731	4.734	(1.018)	62238	18.5952	810
34 2-Methylnaphthalene		142	5.143	5.149	(1.106)	293763	25.8196	1120
36 Hexachlorocyclopentadiene		237	5.248	5.250	(0.890)	34172	12.1565	530
37 2,4,6-Trichlorophenol		196	5.331	5.336	(0.904)	102137	31.8780	1390
38 2,4,5-Trichlorophenol		196	5.366	5.365	(0.910)	112437	30.2293	1320
40 2-Chloronaphthalene		162	5.496	5.500	(0.932)	284135	25.5774	1110
42 o-Nitroaniline		65	5.554	5.558	(0.942)	109276	31.7103	1380
41 m-Nitroaniline		138	5.848	5.852	(0.992)	56416	21.1120	920
43 Dimethylphthalate		163	5.660	5.673	(0.960)	425227	33.5452	1460
44 2,6-Dinitrotoluene		165	5.719	5.726	(0.970)	89665	29.2815	1280
45 Acenaphthylene		152	5.795	5.803	(0.983)	460198	28.0566	1220
48 2,4-Dinitrophenol		184	5.925	5.924	(1.005)	22569	36.7399	1600(Q)
49 Dibenzofuran		168	6.043	6.049	(1.025)	395563	27.2236	1180
51 Diethylphthalate		149	6.166	6.174	(1.046)	417547	34.0802	1480
53 Fluorene		166	6.301	6.309	(1.069)	320722	25.6044	1120
54 4-Chlorophenylphenylether		204	6.284	6.285	(1.066)	164563	25.5488	1110
55 2-Methyl-4,6-dinitrophenol		198	6.319	6.323	(0.896)	38534	29.2874	1280

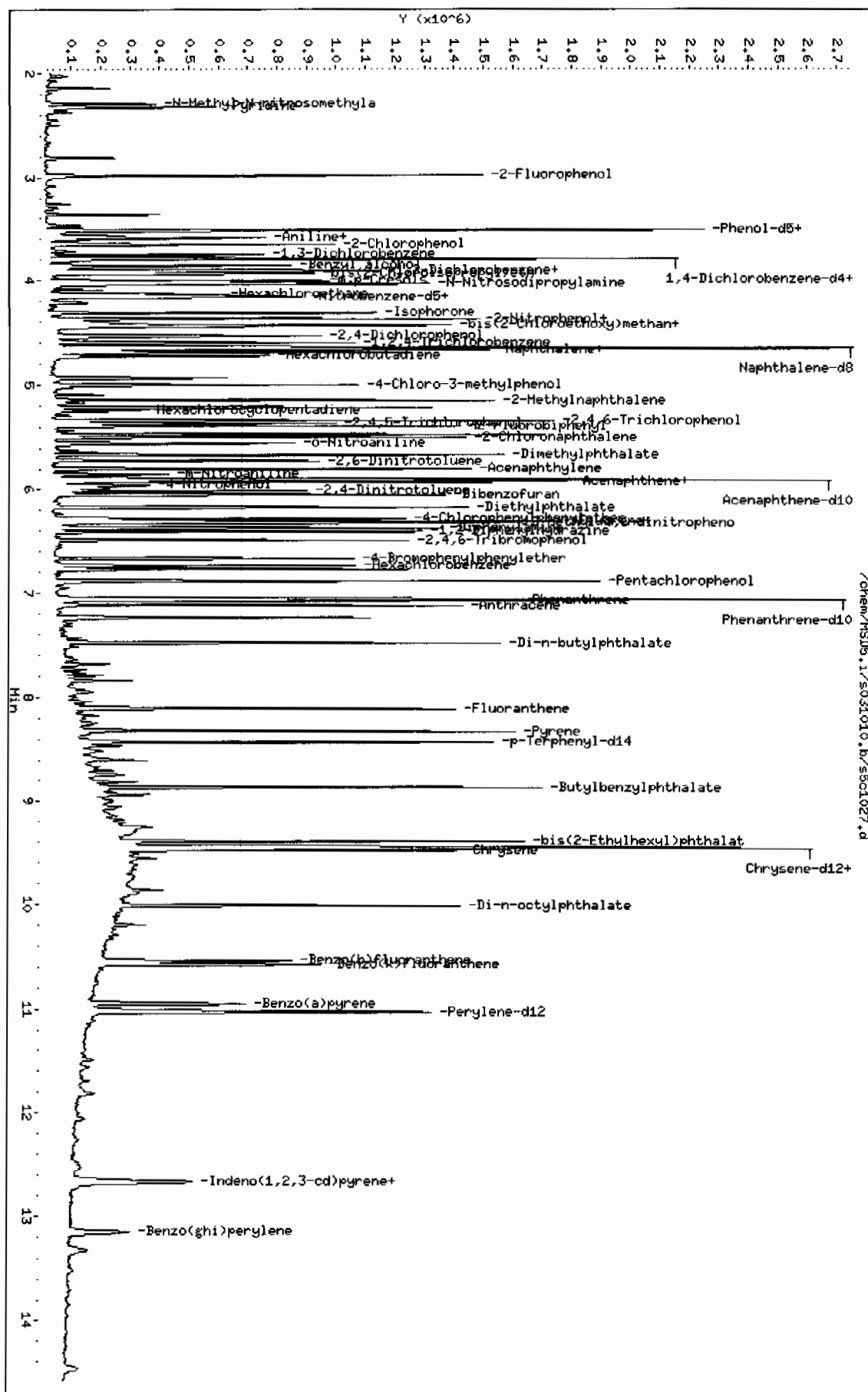
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.301	6.304	(1.069)	51213	28.0322	1220
133 Diphenylamine	169	6.366	6.372	(0.902)	264035	25.6743	1120
58 1,2-Diphenylhydrazine	77	6.401	6.410	(0.907)	401256	32.2421	1400
61 4-Bromophenylphenylether	248	6.666	6.670	(0.945)	96921	23.4775	1020
63 Hexachlorobenzene	284	6.731	6.738	(0.954)	102342	23.6770	1030
68 Phenanthrene	178	7.072	7.079	(1.002)	459314	25.0758	1090
69 Anthracene	178	7.113	7.123	(1.008)	455873	24.6019	1070
72 Di-n-butylphthalate	149	7.478	7.484	(1.060)	608531	30.4114	1320
76 Fluoranthene	202	8.107	8.110	(1.149)	480467	25.1454	1100
85 Butylbenzylphthalate	149	8.860	8.861	(0.937)	260824	29.3074	1280
89 Benzo(a)anthracene	228	9.436	9.444	(0.998)	397241	22.6724	988
92 Chrysene	228	9.478	9.482	(1.002)	399556	24.4727	1070
93 bis(2-Ethylhexyl)phthalate	149	9.389	9.391	(0.993)	340553	31.9938	1390
94 Di-n-octylphthalate	149	10.013	10.017	(0.908)	539124	30.0380	1310
95 Benzo(b)fluoranthene	252	10.542	10.551	(0.956)	342982	21.8019	950
96 Benzo(k)fluoranthene	252	10.578	10.580	(0.959)	351637	22.9592	1000
97 Benzo(a)pyrene	252	10.954	10.961	(0.993)	290939	22.0141	959
99 Indeno(1,2,3-cd)pyrene	276	12.660	12.675	(1.148)	234818	21.5461	938
100 Dibenzo(a,h)anthracene	278	12.677	12.694	(1.149)	211669	24.5152	1070
101 Benzo(ghi)perylene	276	13.154	13.176	(1.192)	178887	19.6440	856
1 N-Methyl-N-nitrosomethylamine	74	2.290	2.293	(0.605)	96525	30.5314	1330

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDS.i/s031010.b/s031027.d
 Date: 10-MAR-2010 19:39
 Client ID: REL1-10-1857MSD
 Sample Info: 11202060538196065911SVH11LNL34004MSD
 Volume Injected (uL): 0.5
 Column phase: 30M DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2134**

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: 959334

Prep Batch Number: 959332

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
248240001	RE36-10-7458
248240002	RE36-10-7453
248240003	RE36-10-7454
248240004	RE36-10-7460
248240005	RE36-10-7456
248240006	RE36-10-7455
248240007	RE36-10-7459
248240008	RE36-10-7457
248240009	RE36-10-7520
248240010	RE36-10-7519
1202057490	Method Blank (MB)
1202057491	Laboratory Control Sample (LCS)
1202057492	248240001(RE36-10-7458) Matrix Spike (MS)
1202057493	248240001(RE36-10-7458) 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.

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 248240001 (RE36-10-7458) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Tetryl at 31.2%. The limits are 36-124%. Please see data exception report 810723.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for Tetryl was 57.5%. The acceptance limits are 0-30%. Since all other Primary 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 810723.

Internal Standard (ISTD) Acceptance

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

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 and QC 1202057493 (RE36-10-7458MSD), 248240002 (RE36-10-7453), 248240003 (RE36-10-7454), 248240004 (RE36-10-7460), 248240005 (RE36-10-7456), 248240006 (RE36-10-7455), 248240007 (RE36-10-7459), 248240008 (RE36-10-7457), 248240009 (RE36-10-7520) and 248240010 (RE36-10-7519) were re-analyzed due to bracketing CCV recoveries that did not meet acceptance criteria. The re-analysis passed acceptance criteria and is reported.

Secondary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS recovered 2,6-Diamino-4-nitrotoluene at 124%. The recovery limits are 64-122%. While the LCS exhibited a high bias in the, both the MS and MSD met acceptance limits for 2,6-Diamino-4-nitrotoluene. Since 2,6-Diamino-4-nitrotoluene was not detected in the associated samples, The data are reported. Please see data exception-report 810723.

QC Sample Designation

Sample 248240001 (RE36-10-7458) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recovered TATB at 187%. The recovery limits are 29-155%. Since the LCS met acceptance limits for TATB, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 810723.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for 2,4-Diamino-6-nitrotoluene was 47.7%. The acceptance limits are 0-26%. Since all other Secondary 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 810723.

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

Miscellaneous Information

Data Exception (DER) Documentation

Data exception report 810723 was generated for this SDG.

The LCS recovered 2,6-Diamino-4-nitrotoluene at 124%. The recovery limits are 64-122%. While the LCS exhibited a high bias in the, both the MS and MSD met acceptance limits for 2,6-Diamino-4-nitrotoluene. Since 2,6-Diamino-4-nitrotoluene was not detected in the associated samples, The data are reported.

The MS recovered TATB at 187%. The recovery limits are 29-155%. Since the LCS met acceptance limits for TATB, the noted exception is attributed to vagaries in the extraction process. The data are reported.

The MSD recovered Tetryl at 31.2%. The limits are 36-124%. Please see data exception report 810723.

The MS/MSD RPD for Tetryl was 57.5%. The acceptance limits are 0-30%. Since all other Primary RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The MS/MSD RPD for 2,4-Diamino-6-nitrotoluene was 47.7%. The acceptance limits are 0-26%. Since all other Secondary 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: Deshaun M. Moore Date: 04/02/10

SAMPLE DATA SUMMARY

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEI

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323097a

Date Analyzed: 25-MAR-10 08:20

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160093.wiff

Date Analyzed: 17-MAR-10 08:22

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325014a

Date Analyzed: 25-MAR-10 23:10

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160096.wiff

Date Analyzed: 17-MAR-10 09:10

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Moisture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325015a

Date Analyzed: 25-MAR-10 23:39

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Moisture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160097.wiff

Date Analyzed: 17-MAR-10 09:25

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325016a

Date Analyzed: 26-MAR-10 00:09

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160098.wiff

Date Analyzed: 17-MAR-10 09:41

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325017a

Date Analyzed: 26-MAR-10 00:38

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: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160099.wiff

Date Analyzed: 17-MAR-10 09:57

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325018a

Date Analyzed: 26-MAR-10 01:08

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160100.wiff

Date Analyzed: 17-MAR-10 10:12

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325019a

Date Analyzed: 26-MAR-10 01:37

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160104.wiff

Date Analyzed: 17-MAR-10 11:15

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325020a

Date Analyzed: 26-MAR-10 02:07

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160105.wiff

Date Analyzed: 17-MAR-10 11:31

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325021a

Date Analyzed: 26-MAR-10 02:36

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160106.wiff

Date Analyzed: 17-MAR-10 11:47

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325022a

Date Analyzed: 26-MAR-10 03:06

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160107.wiff

Date Analyzed: 17-MAR-10 12:02

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
248240001	RE36-10-7458	122	70 - 144	
248240001	RE36-10-7458	102	70 - 144	
248240002	RE36-10-7453	107	70 - 144	
248240002	RE36-10-7453	109	70 - 144	
248240003	RE36-10-7454	108	70 - 144	
248240003	RE36-10-7454	103	70 - 144	
248240004	RE36-10-7460	98.7	70 - 144	
248240004	RE36-10-7460	103	70 - 144	
248240005	RE36-10-7456	103	70 - 144	
248240005	RE36-10-7456	104	70 - 144	
248240006	RE36-10-7455	96.7	70 - 144	
248240006	RE36-10-7455	103	70 - 144	
248240007	RE36-10-7459	105	70 - 144	
248240007	RE36-10-7459	100	70 - 144	
248240008	RE36-10-7457	99.5	70 - 144	
248240008	RE36-10-7457	104	70 - 144	
248240009	RE36-10-7520	99	70 - 144	
248240009	RE36-10-7520	104	70 - 144	
248240010	RE36-10-7519	101	70 - 144	
248240010	RE36-10-7519	107	70 - 144	
1202057490	MB for batch 959332	108	70 - 144	
1202057490	MB for batch 959332	99.2	70 - 144	
1202057491	LCS for batch 959332	110	70 - 144	
1202057491	LCS for batch 959332	100	70 - 144	
1202057492	RE36-10-7458(248240001MS)	105	70 - 144	
1202057492	RE36-10-7458(248240001MS)	99.2	70 - 144	
1202057493	RE36-10-7458(248240001MSD)	99.1	70 - 144	
1202057493	RE36-10-7458(248240001MSD)	98	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) 10-2134

Extract Batch Code: 959332

Date Extracted: 08-MAR-10

GEL LCS ID: 1202057491

GEL LCSDUP ID:

Analysis Date/Time: 25-MAR-10 01:28

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-Amino-4,6-dinitrotoluene	5000	5530	111					90 - 130
4-Amino-2,6-dinitrotoluene	5000	5160	103					84 - 130
HMX	5000	5020	100					58 - 138
Nitrobenzene	5000	4470	89.4					71 - 122
2,6-Dinitrotoluene	5000	4940	98.8					89 - 120
2,4-Dinitrotoluene	5000	4990	99.8					87 - 137
2,4,6-Trinitrotoluene	5000	4560	91.1					73 - 149
1,3,5-Trinitrobenzene	5000	4340	86.7					69 - 126
PETN	5000	5330	107					64 - 137
RDX	5000	5330	107					81 - 137
Tetryl	5000	3100	61.9					51 - 112
m-Dinitrobenzene	5000	4850	97.1					83 - 122
m-Nitrotoluene	5000	4590	91.8					73 - 118
o-Nitrotoluene	5000	4660	93.2					72 - 119
p-Nitrotoluene	5000	4880	97.7					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) 10-2134

Extract Batch Code: 959332

Date Extracted: 08-MAR-10

GEL LCS ID: 1202057491

GEL LCSDUP ID:

Analysis Date/Time: 17-MAR-10 04:43

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	5000	5450	109					52 - 114
2,6-Diamino-4-nitrotoluene	5000	6220	124 *					64 - 122
TATB	5000	6530	131					28 - 162
3,5-Dinitroaniline	5000	4900	98					70 - 127
tris(o-cresyl) phosphate	5000	5260	105					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: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Extract Batch Code: 959332

Date Extracted: 08-MAR-10

GEL Spike ID: 1202057492

GEL SpikeDup ID: 1202057493

Analysis Date/Time: 25-MAR-10 08:50

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
4-Amino-2,6-dinitrotoluene	5000	0	5090	102	5060	101	.548	30	72 - 143
HMX	5000	0	5370	107	3990	79.7	29.5	30	51 - 144
Nitrobenzene	5000	0	4680	93.5	4640	92.8	.854	30	70 - 122
1,3,5-Trinitrobenzene	5000	0	4880	97.6	3990	79.9	20	30	50 - 140
2-Amino-4,6-dinitrotoluene	5000	0	5420	108	5000	100	8.07	30	85 - 137
2,6-Dinitrotoluene	5000	0	4950	99	4860	97.2	1.86	30	90 - 118
2,4-Dinitrotoluene	5000	0	4900	98	4720	94.4	3.75	30	86 - 135
2,4,6-Trinitrotoluene	5000	0	4520	90.5	5080	102	11.7	30	76 - 144
PETN	5000	0	5570	111	4650	93	18	30	60 - 140
RDX	5000	0	5650	113	4680	93.6	18.8	30	59 - 152
Tetryl	5000	0	2820	56.5	1560	31.2 *	57.5 *	30	36 - 124
m-Dinitrobenzene	5000	0	5230	105	4810	96.1	8.46	30	85 - 118
m-Nitrotoluene	5000	0	4690	93.7	4710	94.1	.455	30	70 - 120
o-Nitrotoluene	5000	0	4590	91.7	4920	98.5	7.05	30	69 - 123
p-Nitrotoluene	5000	0	4970	99.4	5000	99.9	.566	30	65 - 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Extract Batch Code: 959332

Date Extracted: 08-MAR-10

GEL Spike ID: 1202057492

GEL SpikeDup ID: 1202057493

Analysis Date/Time: 17-MAR-10 08:38

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	3040	60.8	1870	37.4	47.7 *	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	4470	89.4	3740	74.8	17.8	30	55 - 130
TATB	5000	0	9370	187 *	7470	149	22.6	30	29 - 155
3,5-Dinitroaniline	5000	0	4790	95.8	4700	94	1.9	30	73 - 129
tris(o-cresyl) phosphate	5000	0	5720	114	5650	113	1.23	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): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:08

GEL Data File: EXP0323001a

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	229.482
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	228.802
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMx	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 24 09:32:17 2010, Page 1 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323001a

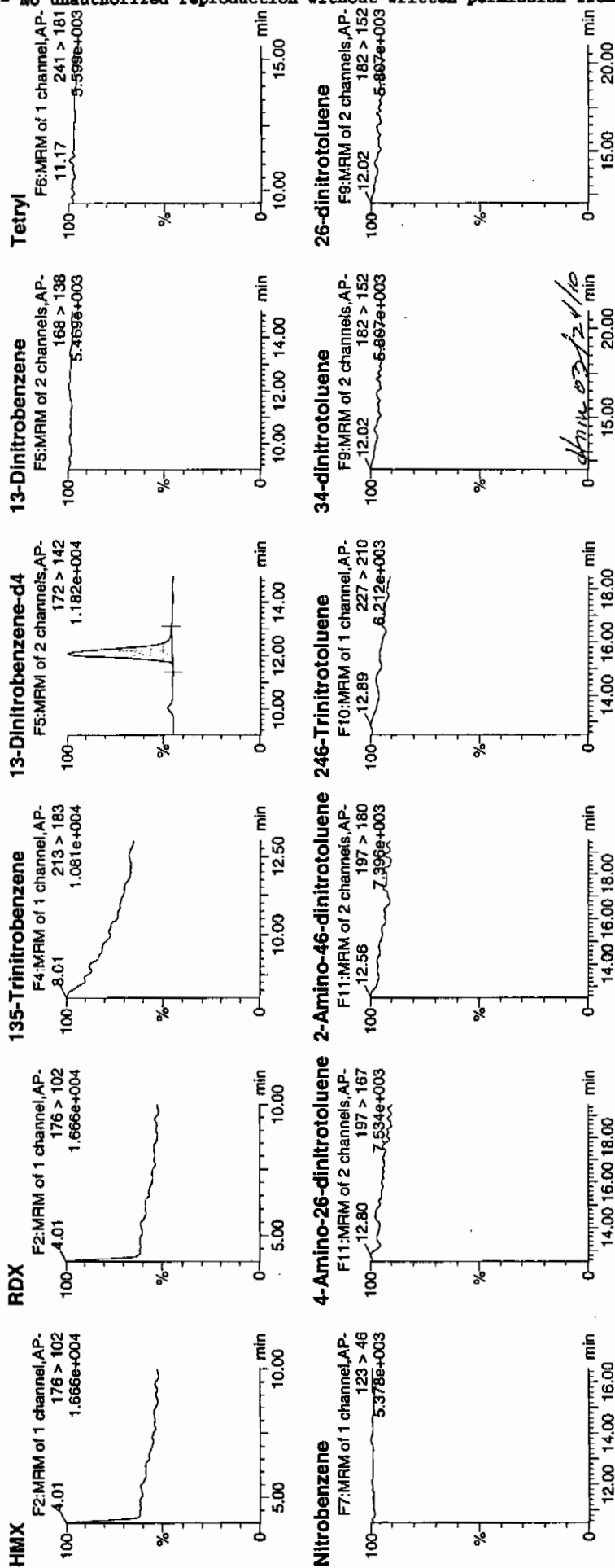
Date: 23-Mar-2010

Time: 09:08:58

ID: XIBLK01

Vial: 1:1,A

1071
3/24/10

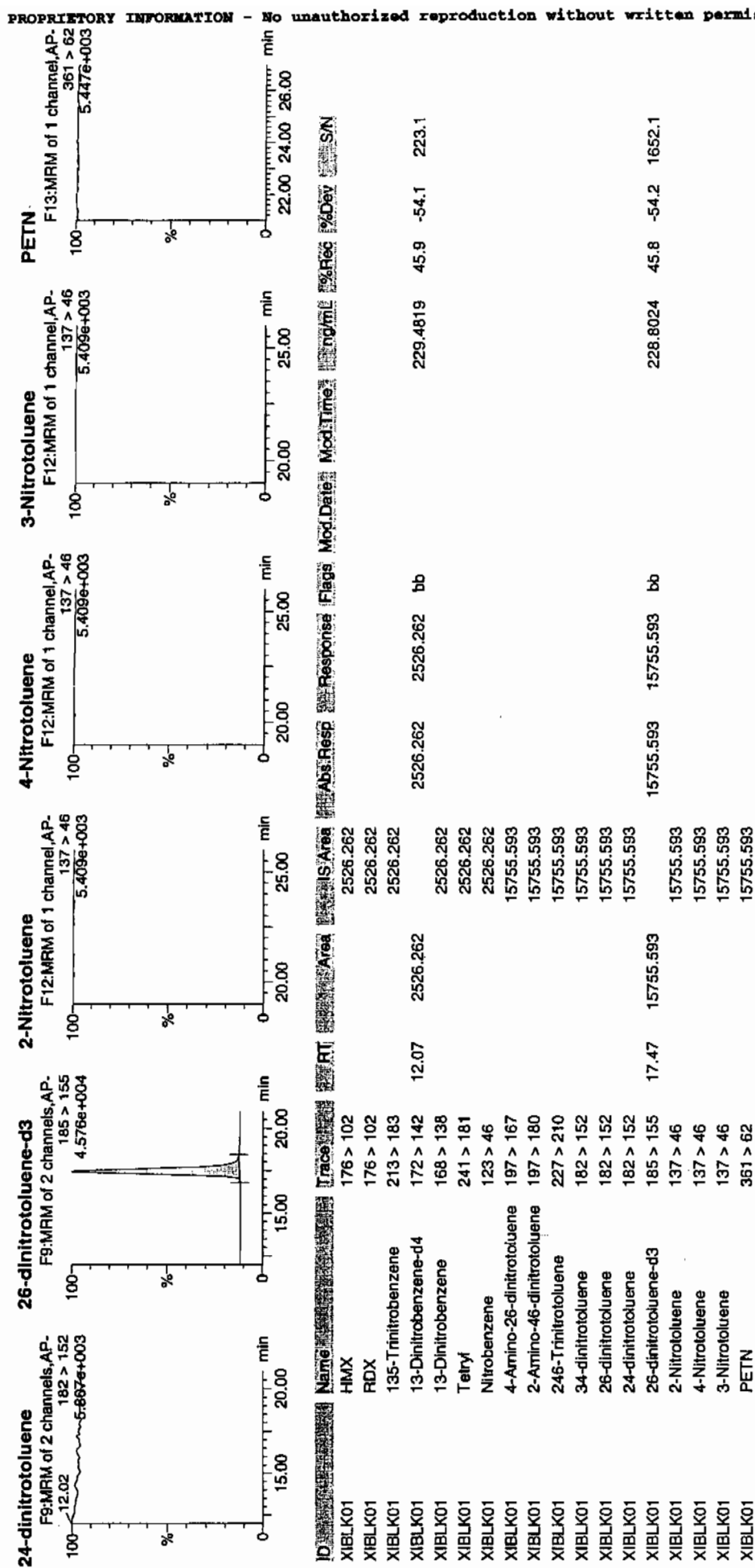


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 2 of 99

Dataset: C:\MASSLYNX\New_Exp\PRO032310expA.qld, Time: Wed Mar 24 09:29:41 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:38

GEL Data File: EXP0323002a

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	249.294
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	247.4
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

Printed: Wed Mar 24 09:32:17 2010, Page 3 of 99

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA.qtd, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0323002a

Date: 23-Mar-2010

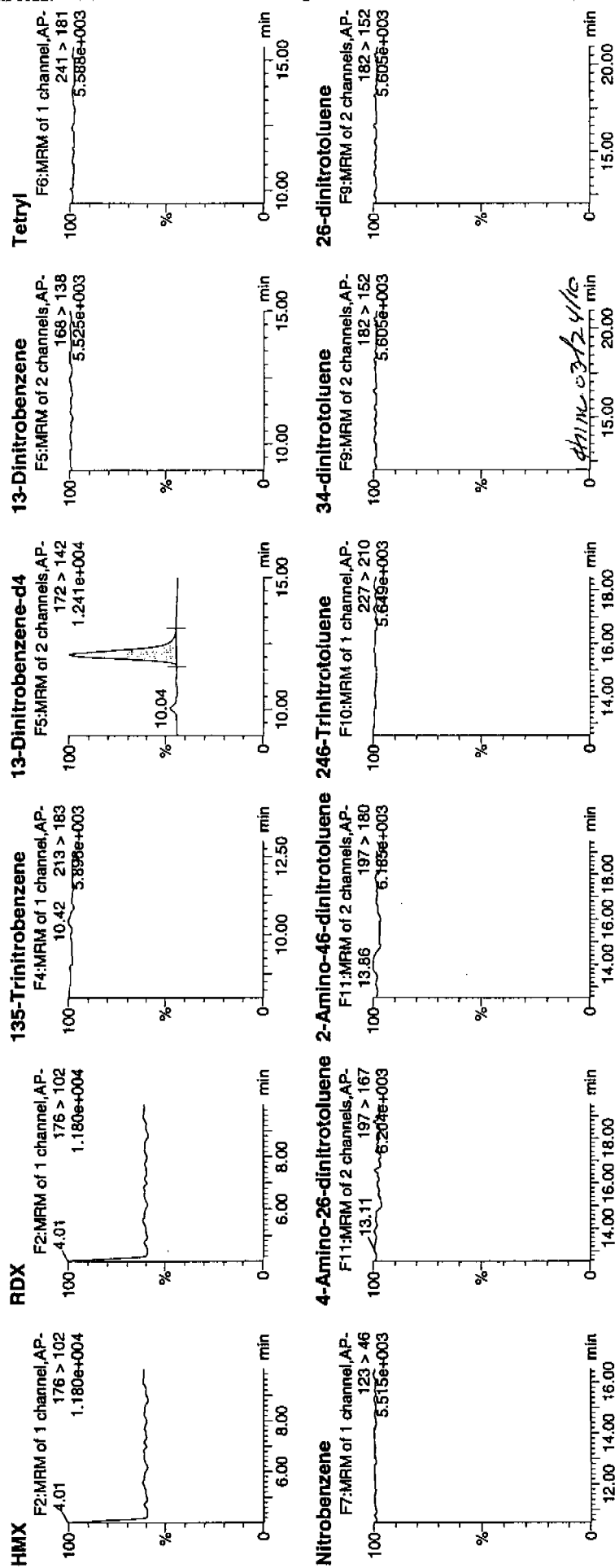
Time: 09:38:34

ID: XIBLK01

Vial: 1:1,A

3/24/10
MTP

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

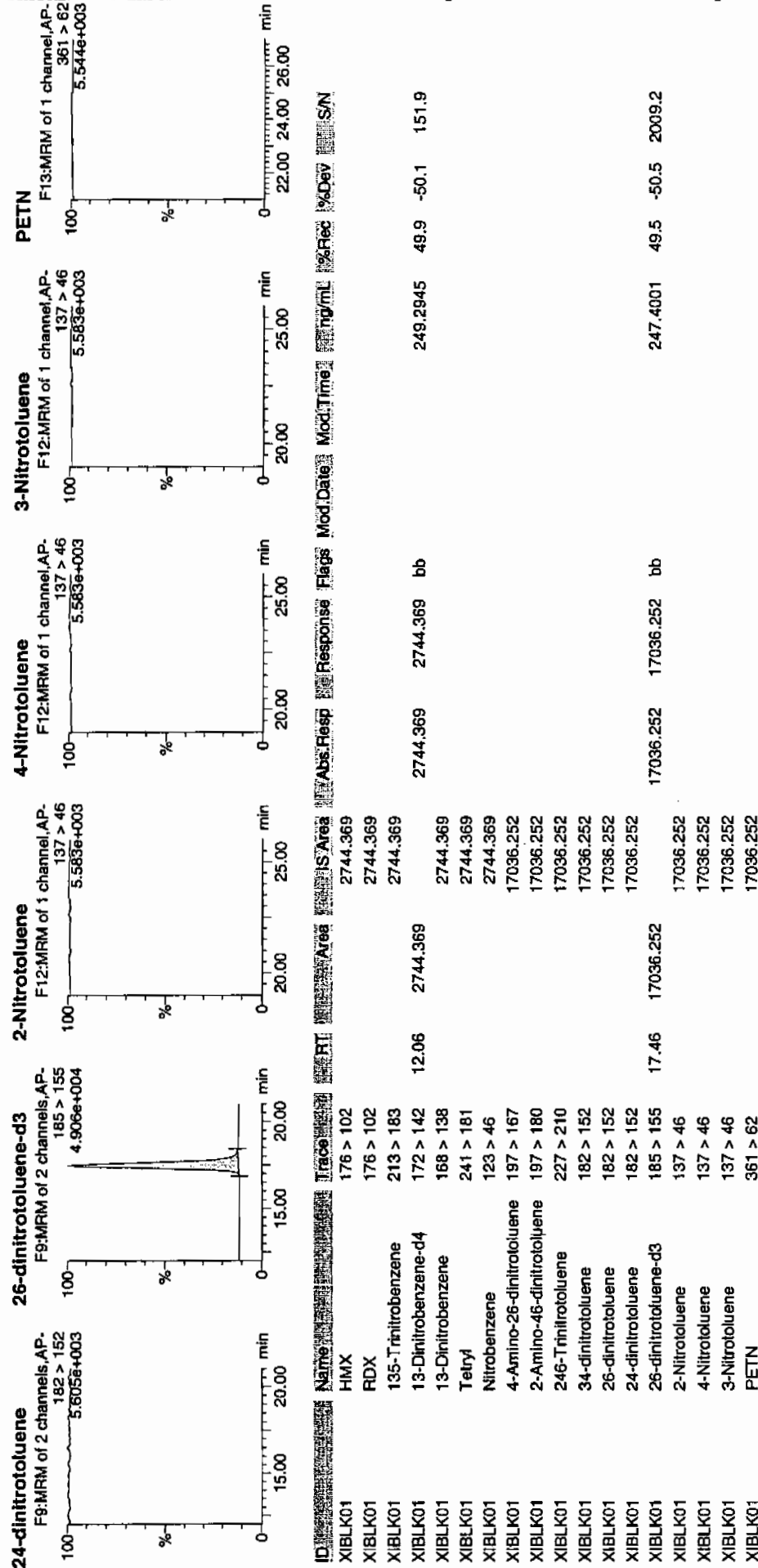


Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 4 of 99

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-MAR-10 16:47

GEL Data File: EXP0325001a

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	363.603
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	364.316
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

Printed: Fri Mar 26 12:46:39 2010, Page 1 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032510expa.mdb, Time: Fri Mar 26 11:07:34 2010

Calibration: Untitled, Time: Fri Mar 26 12:43:58 2010

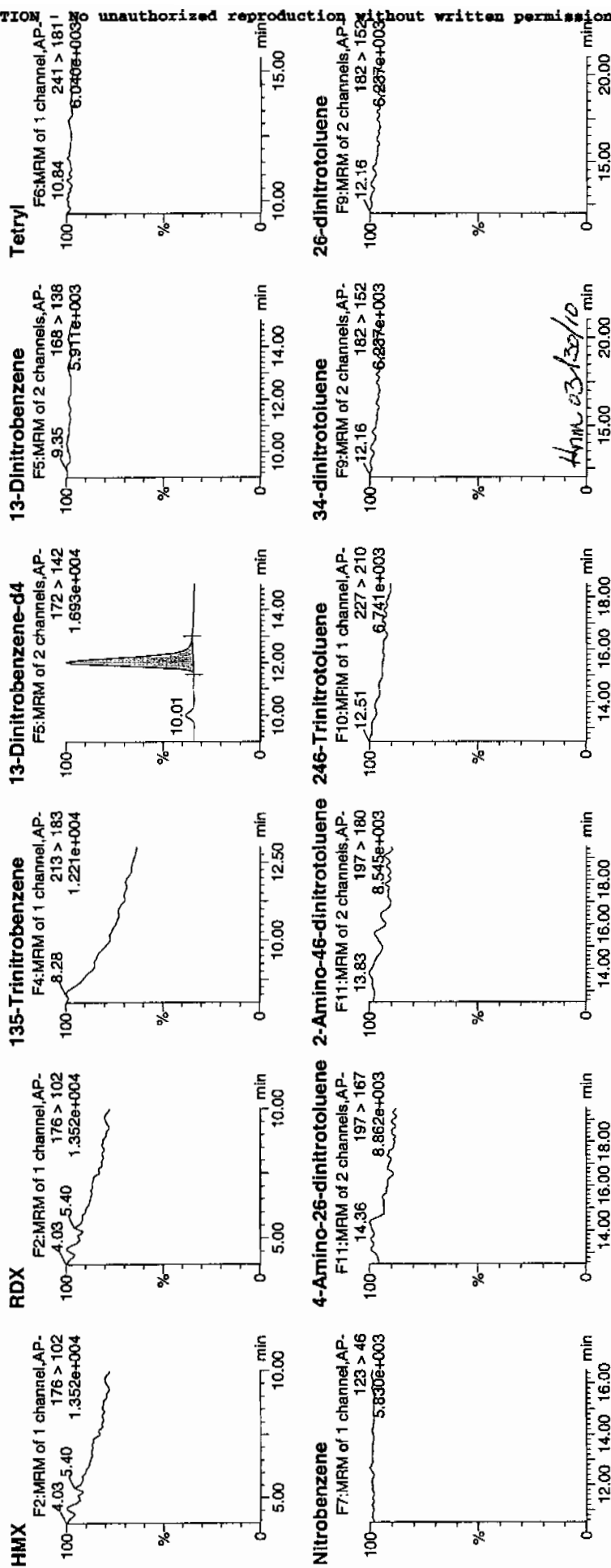
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325001a

Date: 25-Mar-2010

Time: 16:47:09

ID: XIBLK01

Vial: 1:1,A

MUT
2/16/10

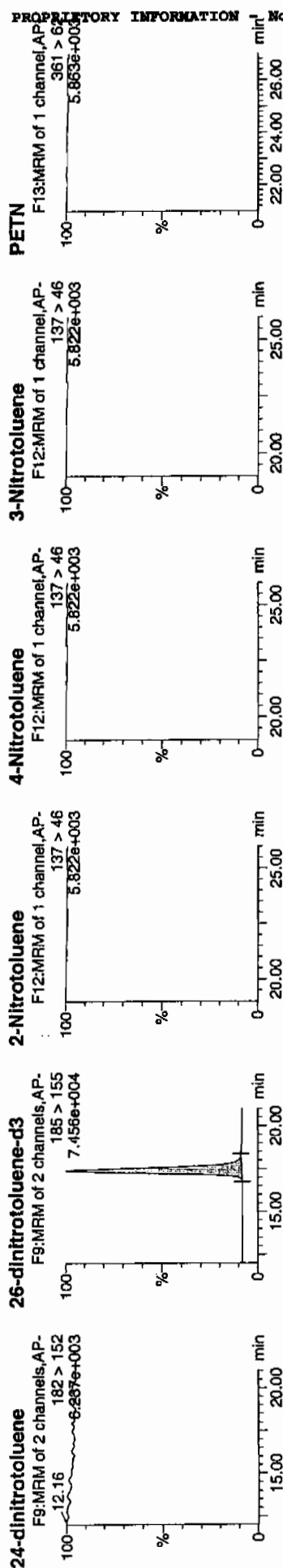
GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report

Printed: Fri Mar 26 12:46:39 2010, Page 2 of 77

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



PROPRIETARY INFORMATION

No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ppm)	% Rec	% Day	SYN
XIBLK01	HMX	176 > 102			4364.032									
XIBLK01	RDX	176 > 102			4364.032									
XIBLK01	135-Trinitrobenzene	213 > 183			4364.032									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.03	4364.032		4364.032	4364.032	bb			363.6033	72.7	-27.3	388.0
XIBLK01	13-Dinitrobenzene	168 > 138												
XIBLK01	Tetryl	241 > 181												
XIBLK01	Nitrobenzene	123 > 46												
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167												
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180												
XIBLK01	246-Trinitrotoluene	227 > 210												
XIBLK01	34-dinitrotoluene	182 > 152												
XIBLK01	26-dinitrotoluene	182 > 152												
XIBLK01	24-dinitrotoluene	182 > 152												
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.40	26701.807		26701.807	26701.807	bb			364.3159	72.9	-27.1	2324.7
XIBLK01	2-Nitrotoluene	137 > 46												
XIBLK01	4-Nitrotoluene	137 > 46												
XIBLK01	3-Nitrotoluene	137 > 46												
XIBLK01	PETN	361 > 62												

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-MAR-10 17:16

GEL Data File: EXP0325002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	393.47
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	404.518
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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325002a

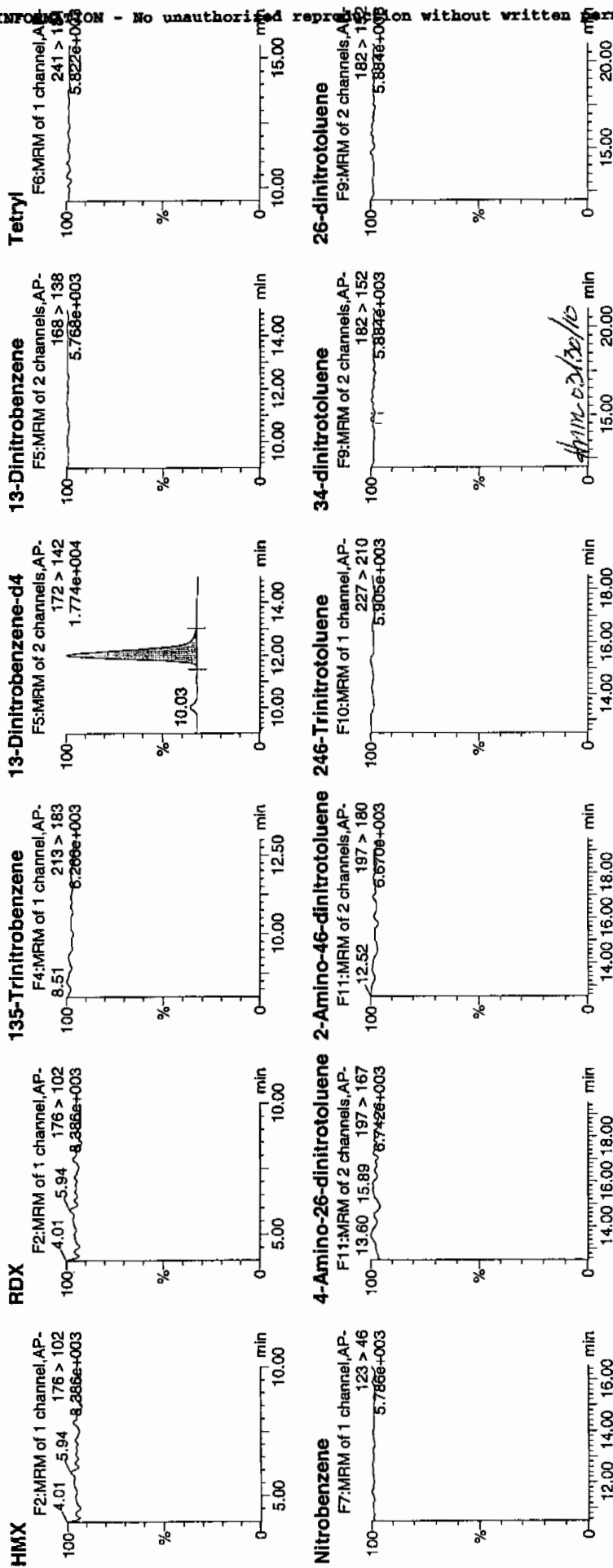
Date: 25-Mar-2010

Time: 17:16:38

ID: XIBLK01

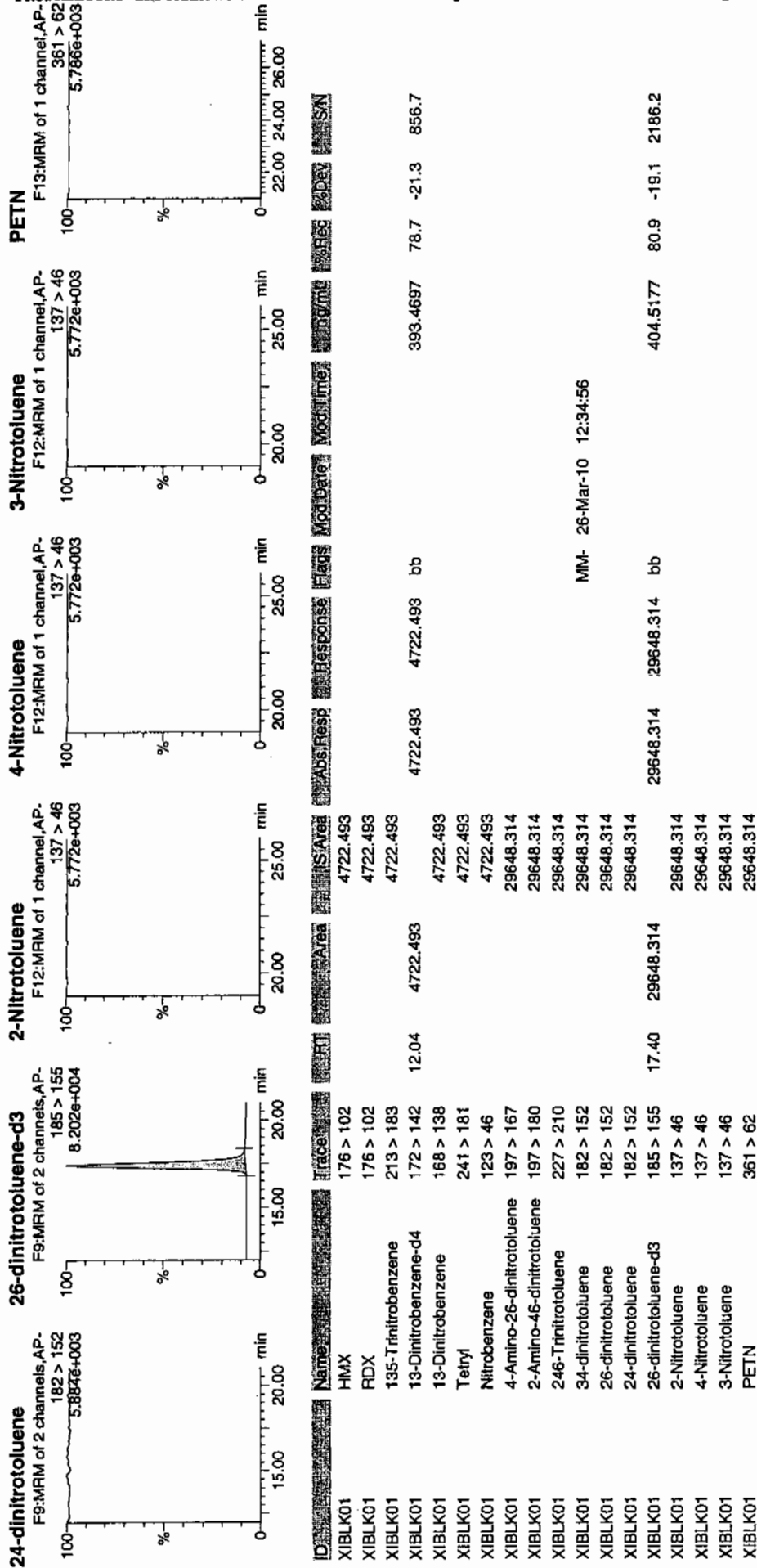
Vial: 1:1,A

1.77
3.16



Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL.



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-MAR-10 08:17

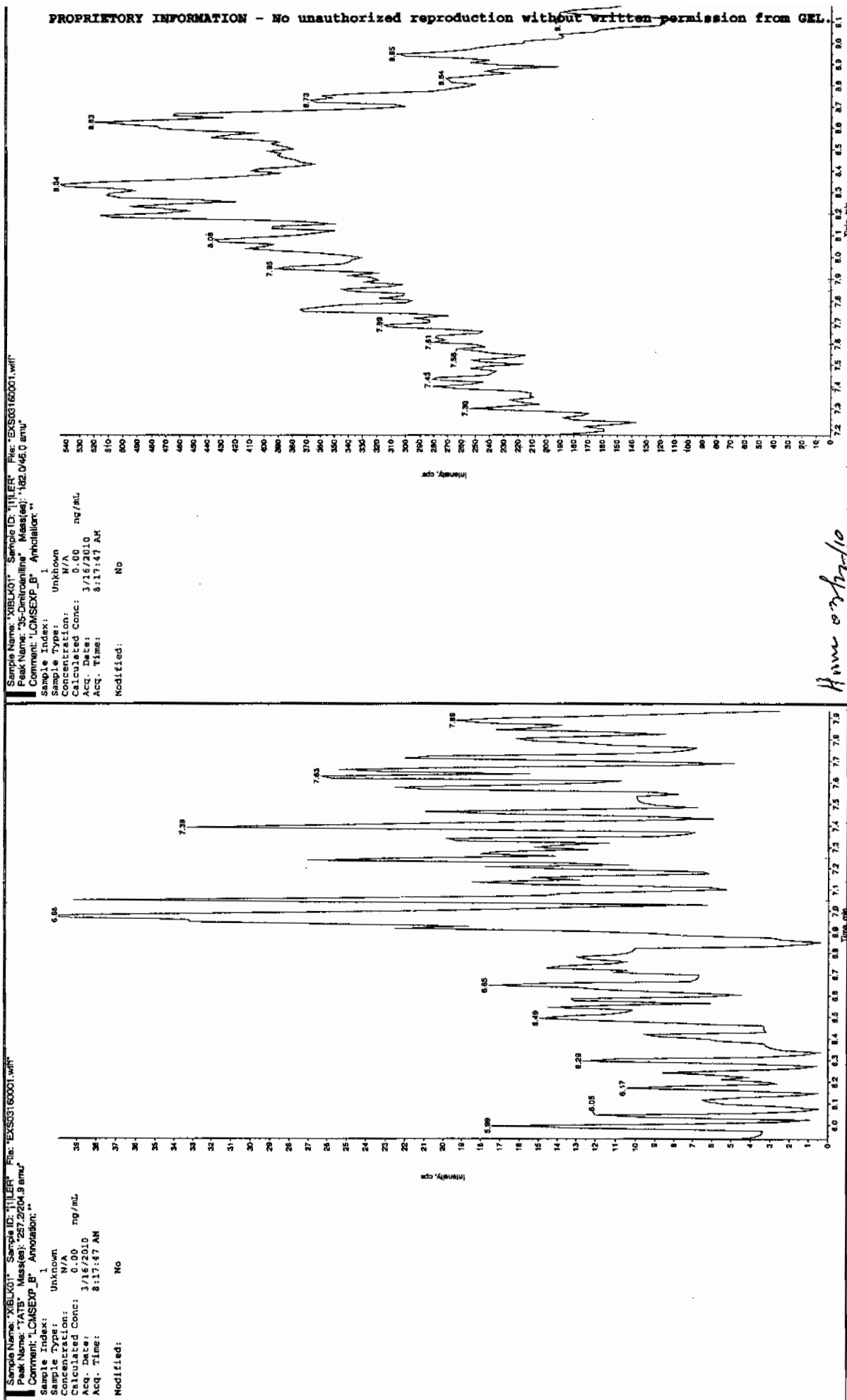
GEL Data File: EXS03160001.wiff

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

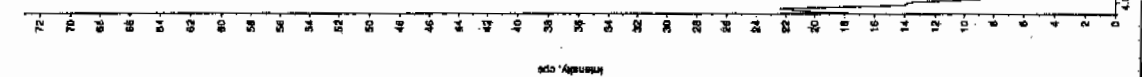
Jan 3/18/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

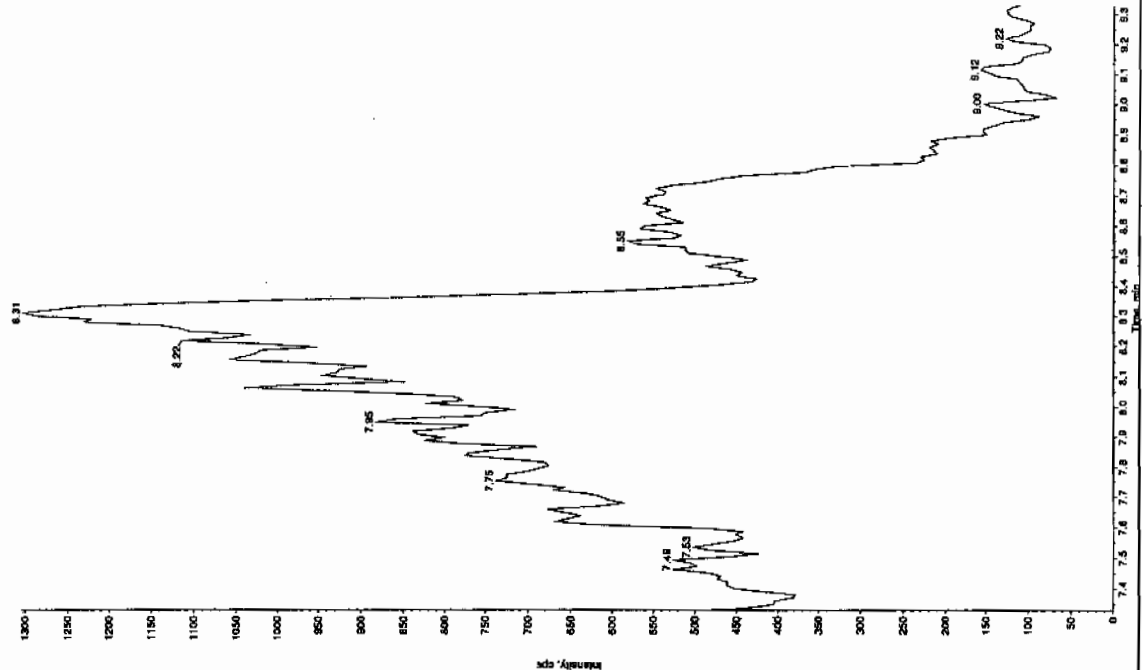
Sample Name: "XBL101" Sample ID: "11111" File: "EX03165001.wiff"
 Peak Name: "25-Diamino-4-phenylthio" Mass(es): "162.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 8:17:47 AM
 Modified: No



Sample Name: "XBL101" Sample ID: "11111" File: "EX03165001.wiff"
 Peak Name: "34-Dinitrophenyl" Mass(es): "182.1751.9 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 8:17:47 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK01" Sample ID: "TILER" File: "EX503160001.wiff"
 Peak Name: "24-Diamino-6-nitroindane" Mass(es): "156.0/46.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No Intercept
 Acq. Date: 3/16/2010
 Acq. Time: 8:17:47 AM

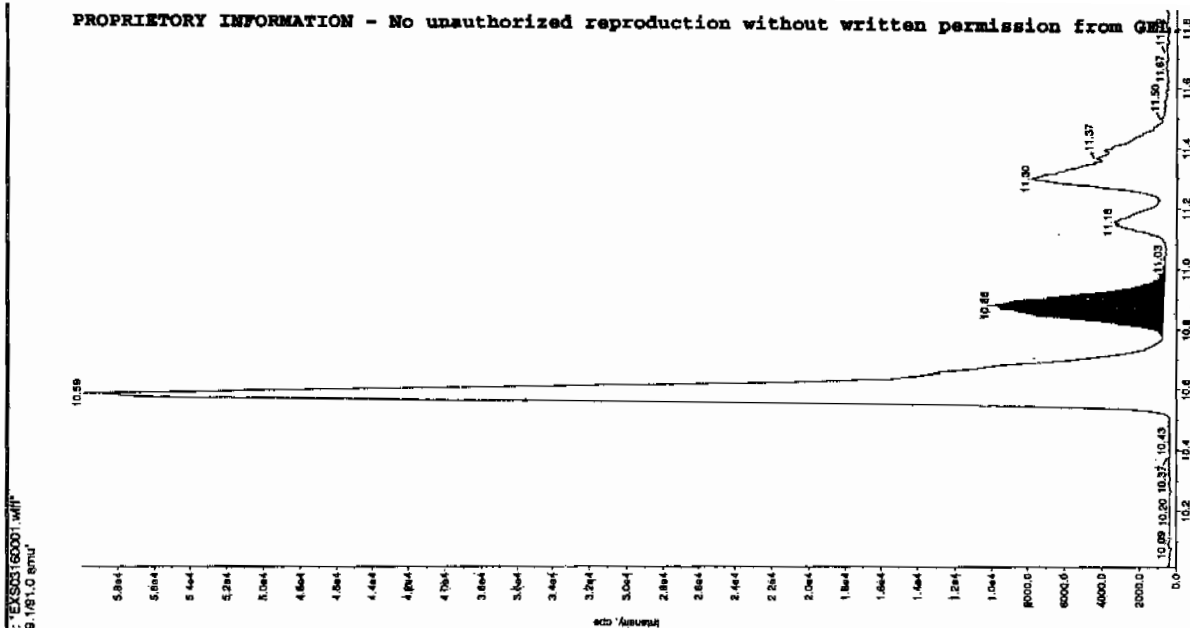
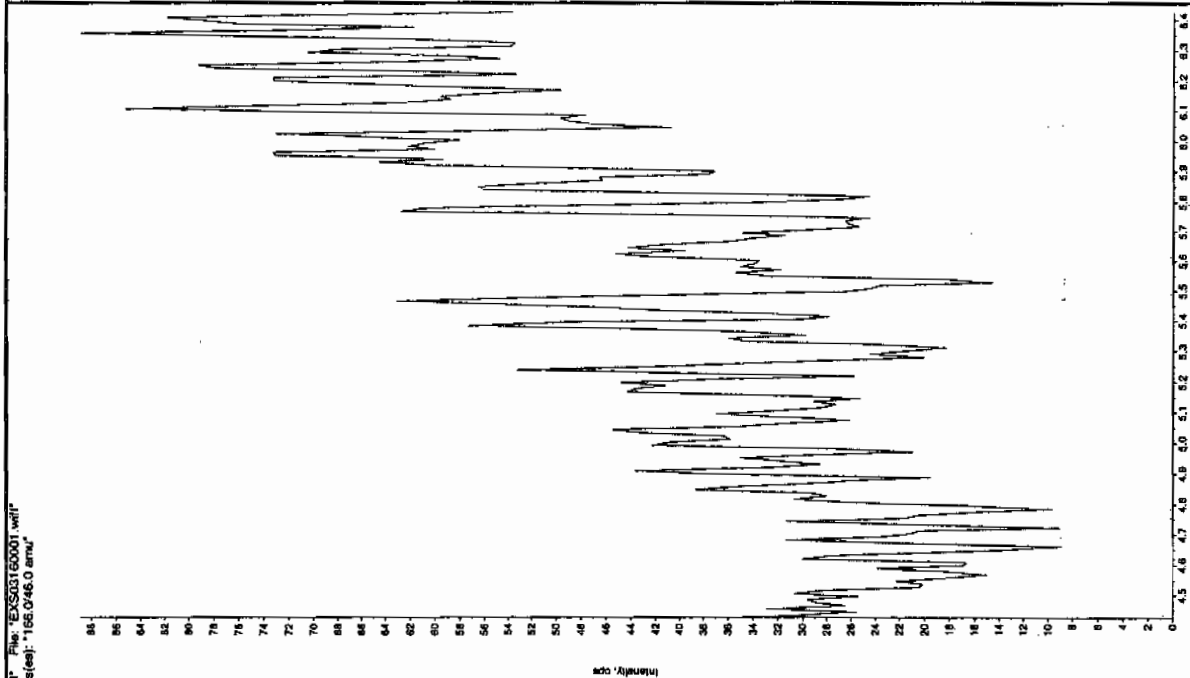
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.77e+004 counts
 Height: 9350.677 cps
 Start Time: 10.6 min
 End Time: 11.0 min

Sample Name: "XBLK01" Sample ID: "TILER" File: "EX503160001.wiff"
 Peak Name: "24-Diamino-6-nitroindane" Mass(es): "156.0/46.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 8:17:47 AM

Modified: No



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-MAR-10 08:33

GEL Data File: EXS03160002.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/18/10

Sample Name: "XBLX01" Sample ID: "T1LER" File: "EX503160002.wit"

Peak Name: "TATB" Mass(es): "257.22049 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

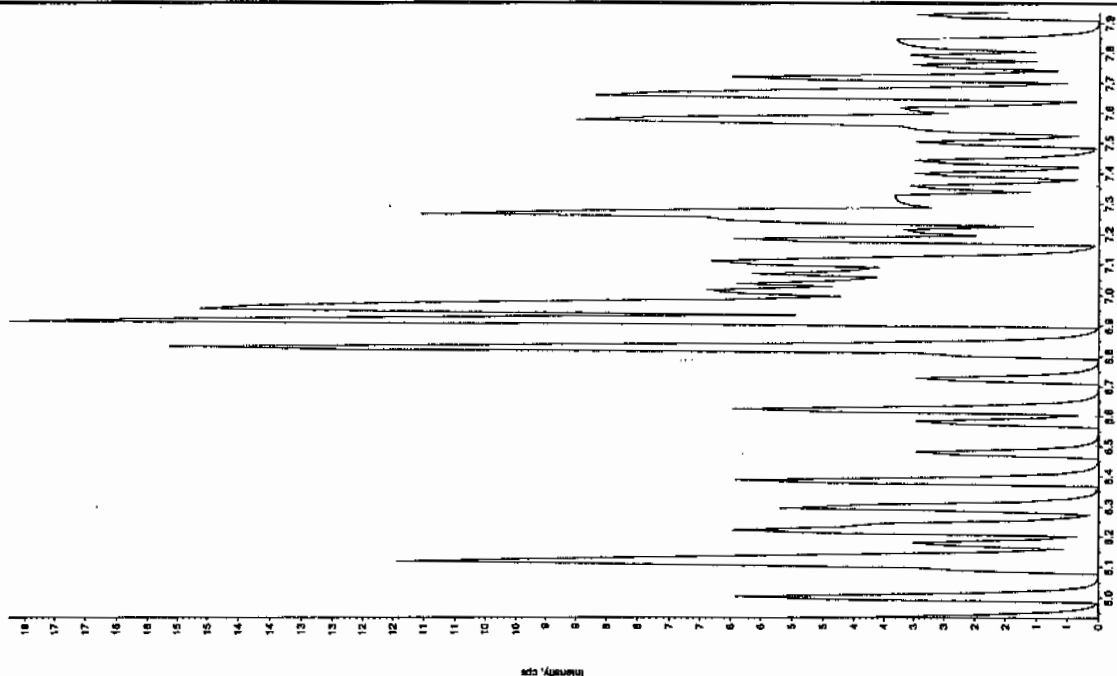
Concentration: 0/0 ng/mL

Calculated Conc: 3/16/2010

Acq. Date: 8:33:14 AM

Acq. Time: 8:33:14 AM

Modified: No



Sample Name: "XBLX01" Sample ID: "T1LER" File: "EX503160002.wit"

Peak Name: "35-Dinitroaniline" Mass(es): "192.0450 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

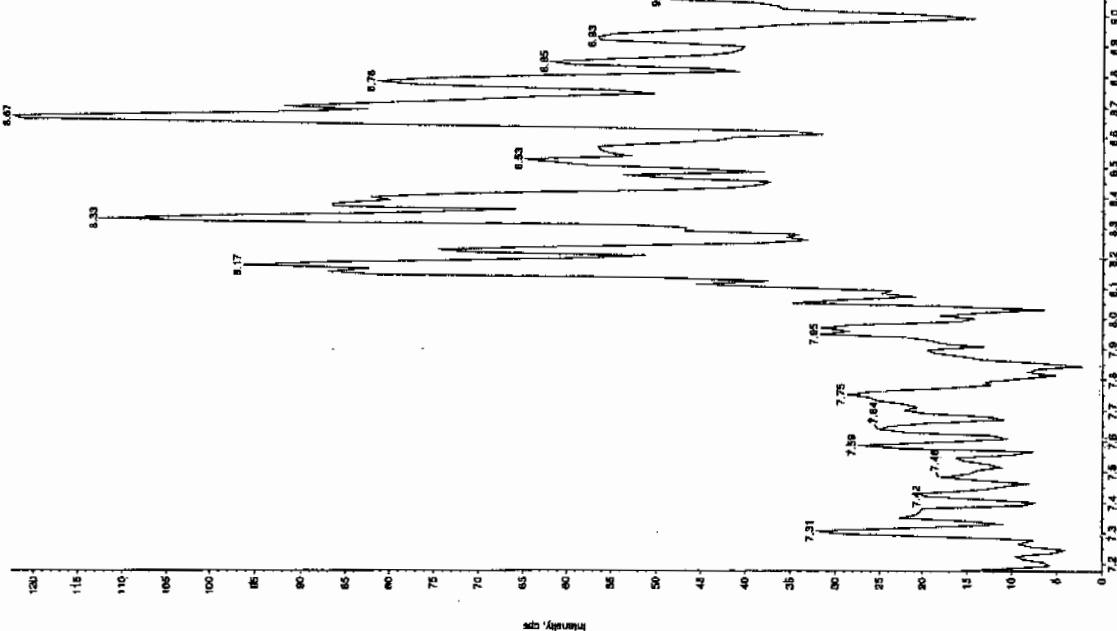
Concentration: 0/0 ng/mL

Calculated Conc: 3/16/2010

Acq. Date: 8:33:14 AM

Acq. Time: 8:33:14 AM

Modified: No

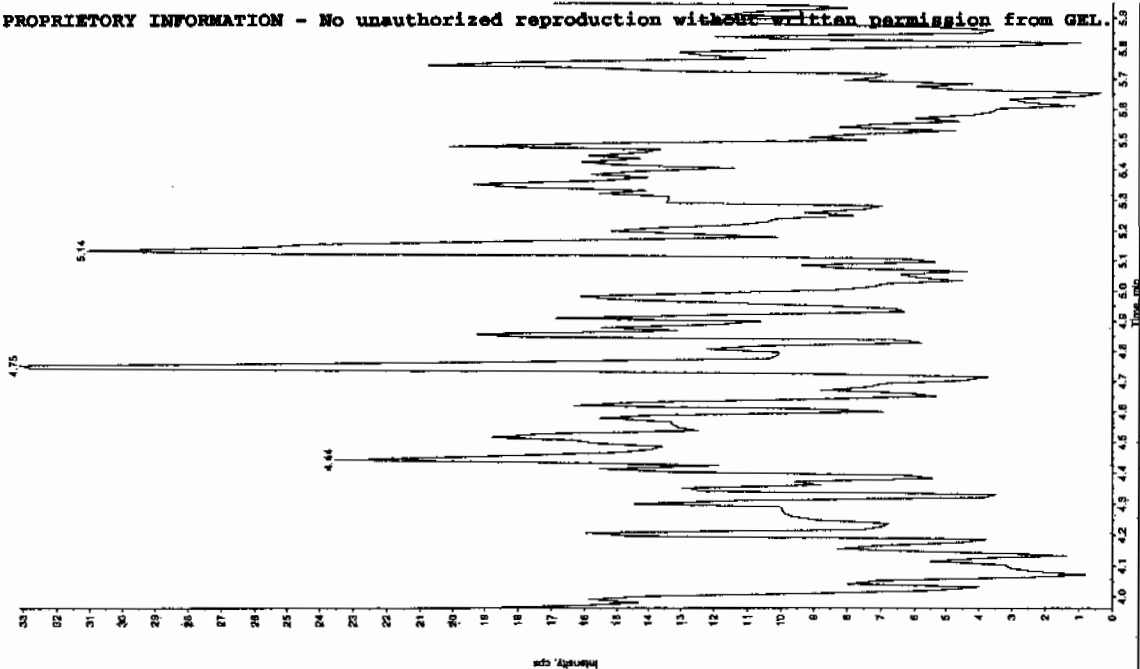


Ann 03/22/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

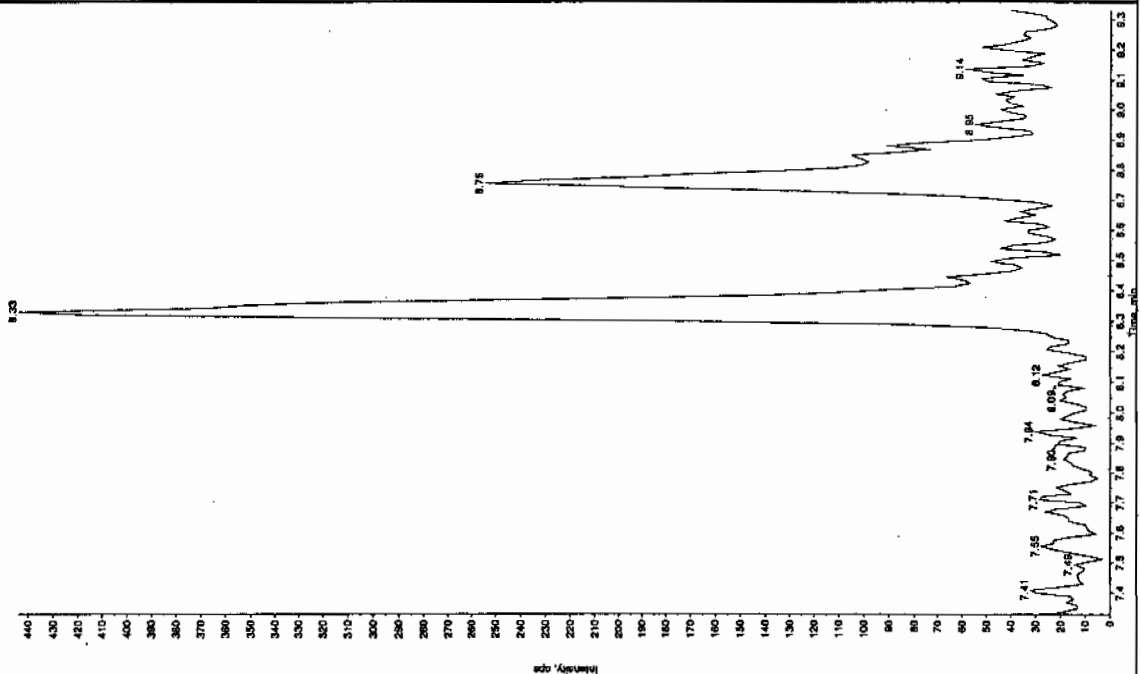
Sample Name: "XIBLK01" Sample ID: "111ER" File: "EX503160002.wif"
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 8:33:34 AM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "111ER" File: "EX503160002.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

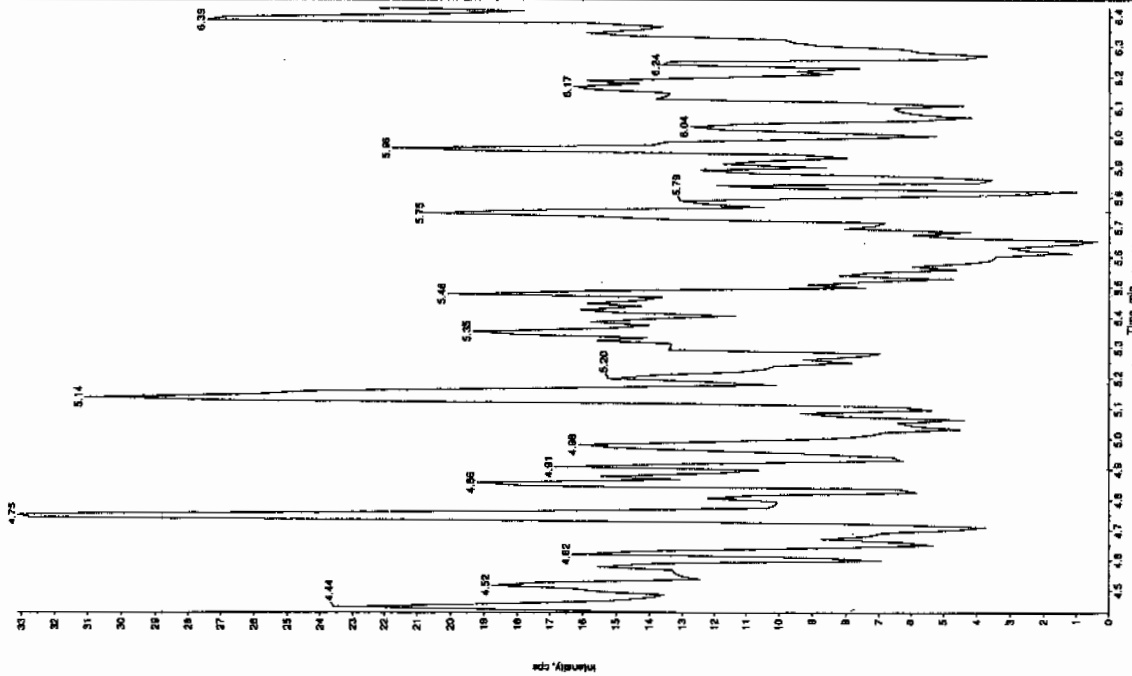
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 8:33:34 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

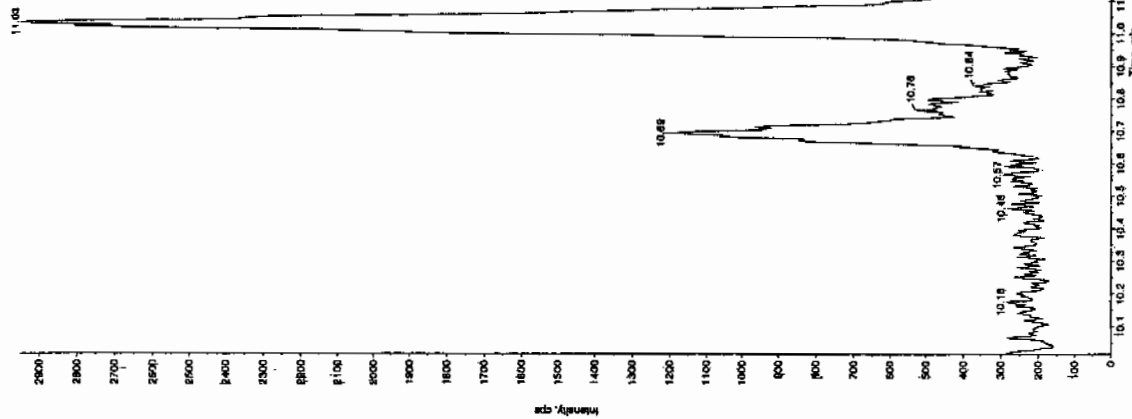
Sample Name: "XIBUJ01" Sample ID: "XIBUJ01" File: "EX50316002.wif"
 Peak Name: "24-Diamino-6-nitroindene" Mass (es): "156.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 3/16/2010
 Acq. Time: 8:33:34 AM
 Modified: No



Sample Name: "XIBUJ01" Sample ID: "XIBUJ01" File: "EX50316002.wif"
 Peak Name: "24-Diamino-6-nitroindene" Mass (es): "156.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 3/16/2010
 Acq. Time: 8:33:34 AM
 Modified: No



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 23-MAR-10 13:04

GEL Data File: EXP0323009a

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	400.005
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	359.09
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\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323009a

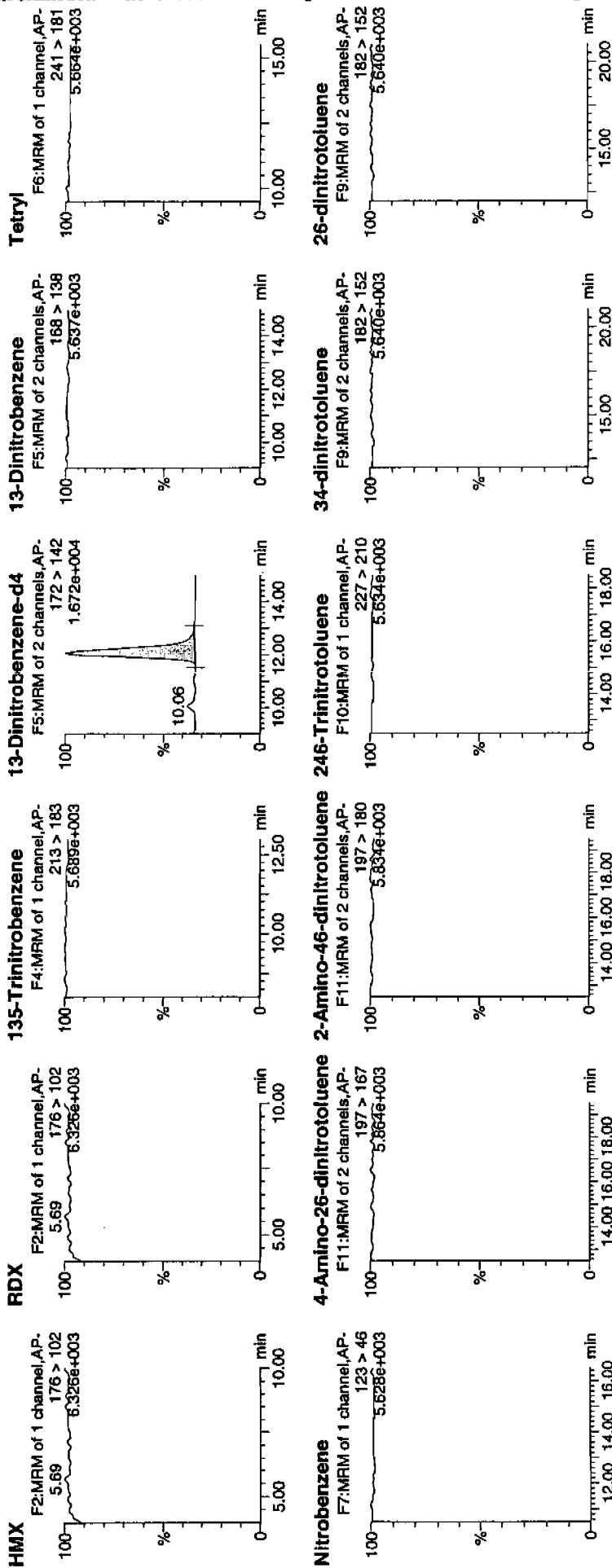
Date: 23-Mar-2010

Time: 13:04:52

ID: XIBLK02

Vial: 1:1,A

Min
5.637e+003

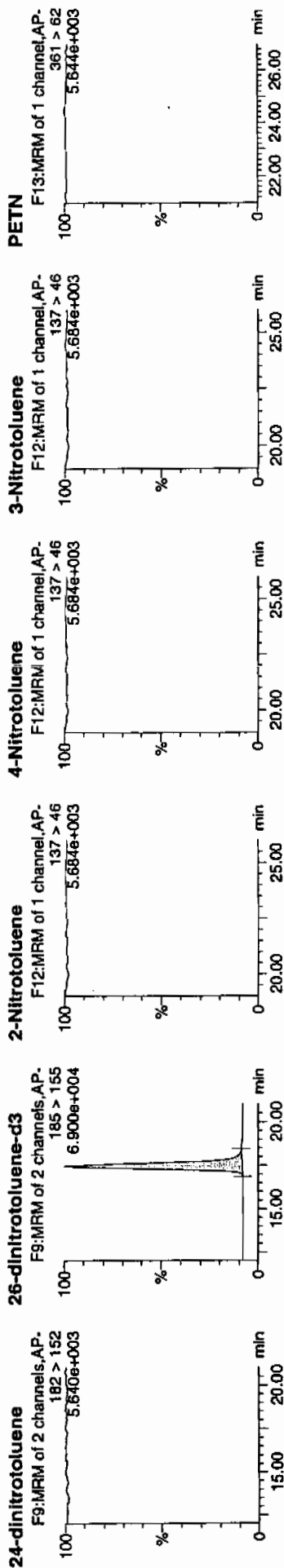


Handwritten signature: *Handwritten signature*

Printed: Wed Mar 24 09:32:17 2010, Page 18 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flag	Mod Date	Mod Time	Conc ng/ml	%Rec	%Dev	S/N
XIBLK02	HMX	176 > 102			4403.474									
XIBLK02	RDX	176 > 102			4403.474									
XIBLK02	135-Trinitrobenzene	213 > 183			4403.474									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.07	4403.474				bb			400.0051	80.0	-20.0	434.0
XIBLK02	13-Dinitrobenzene	168 > 138			4403.474									
XIBLK02	Tetryl	241 > 181			4403.474									
XIBLK02	Nitrobenzene	123 > 46			4403.474									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			24727.354									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			24727.354									
XIBLK02	246-Trinitrotoluene	227 > 210			24727.354									
XIBLK02	34-dinitrotoluene	182 > 152			24727.354									
XIBLK02	26-dinitrotoluene	182 > 152			24727.354									
XIBLK02	24-dinitrotoluene	182 > 152			24727.354									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.44	24727.354				bb			24727.354	24727.354	71.8	-28.2
XIBLK02	2-Nitrotoluene	137 > 46			24727.354						359.0901	359.0901		3290.4
XIBLK02	4-Nitrotoluene	137 > 46			24727.354									
XIBLK02	3-Nitrotoluene	137 > 46			24727.354									
XIBLK02	PETN	361 > 62			24727.354									

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 23-MAR-10 14:03

GEL Data File: EXP0323011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	505.262
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	469.688
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 24 09:32:17 2010, Page 21 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323011a

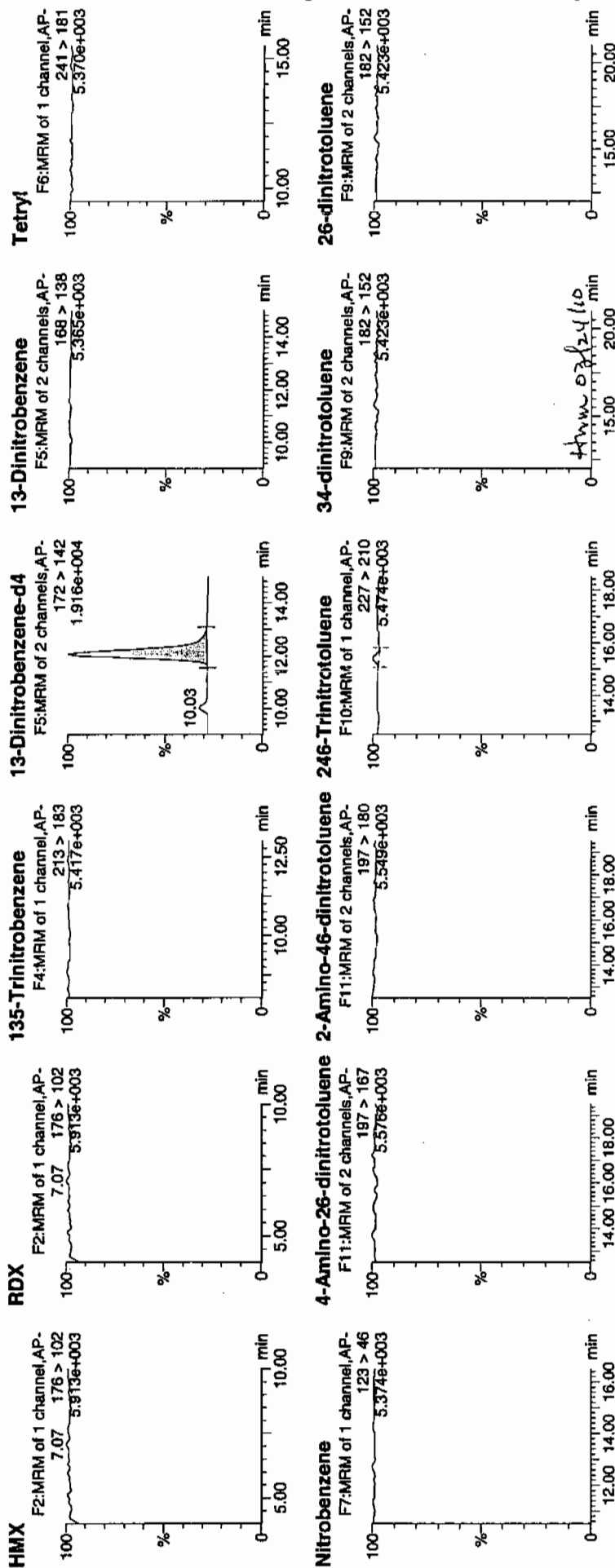
Date: 23-Mar-2010

Time: 14:03:49

ID: XIBLK03

Vial: 1:1,A

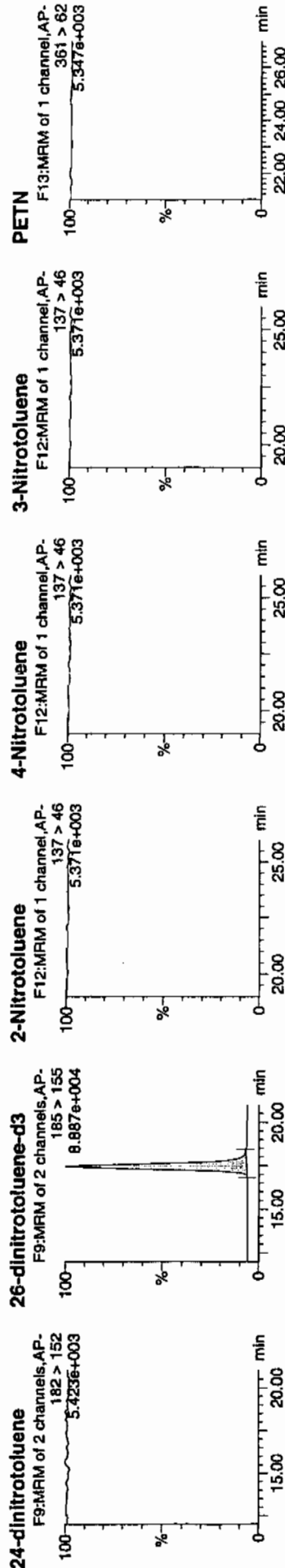
100%
3/24/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

[illegible]

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 23-MAR-10 20:27

GEL Data File: EXP0323024a

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	562.021
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.426
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 24 09:32:17 2010, Page 47 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323024a

Date: 23-Mar-2010

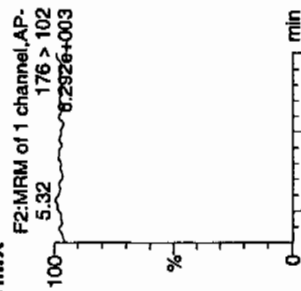
Time: 20:27:13

ID: XIBLK04

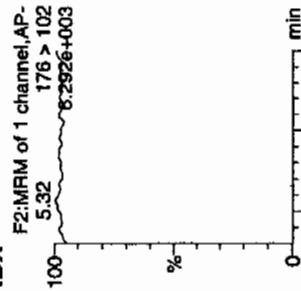
Vial: 1:1,A

HT
3/24/10

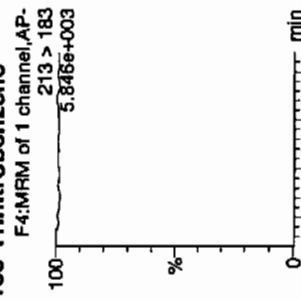
HMX



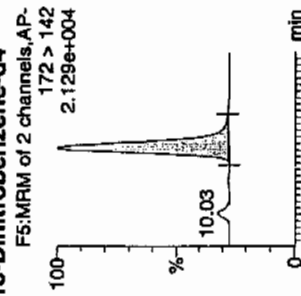
RDX



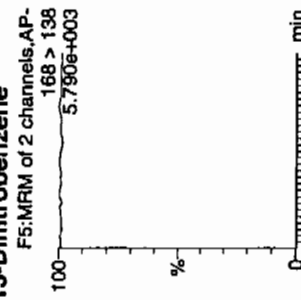
135-Trinitrobenzene



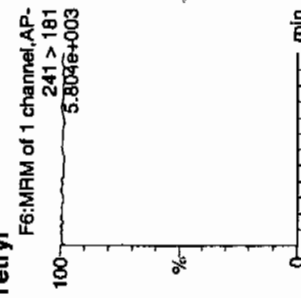
13-Dinitrobenzene-d4



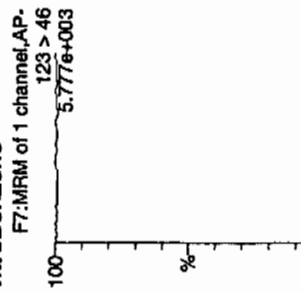
13-Dinitrobenzene



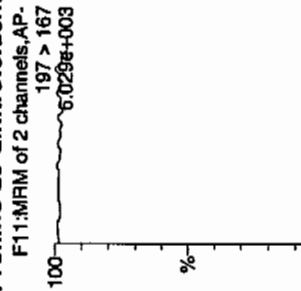
Tetryl



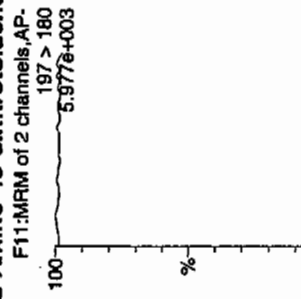
Nitrobenzene



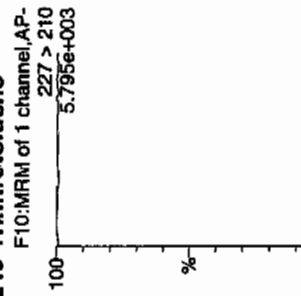
4-Amino-26-dinitrotoluene



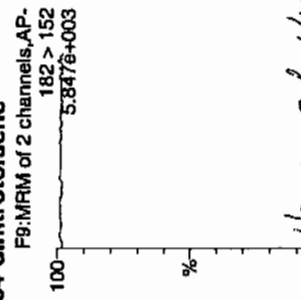
2-Amino-46-dinitrotoluene



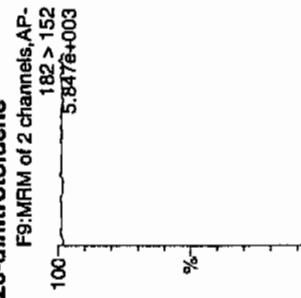
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

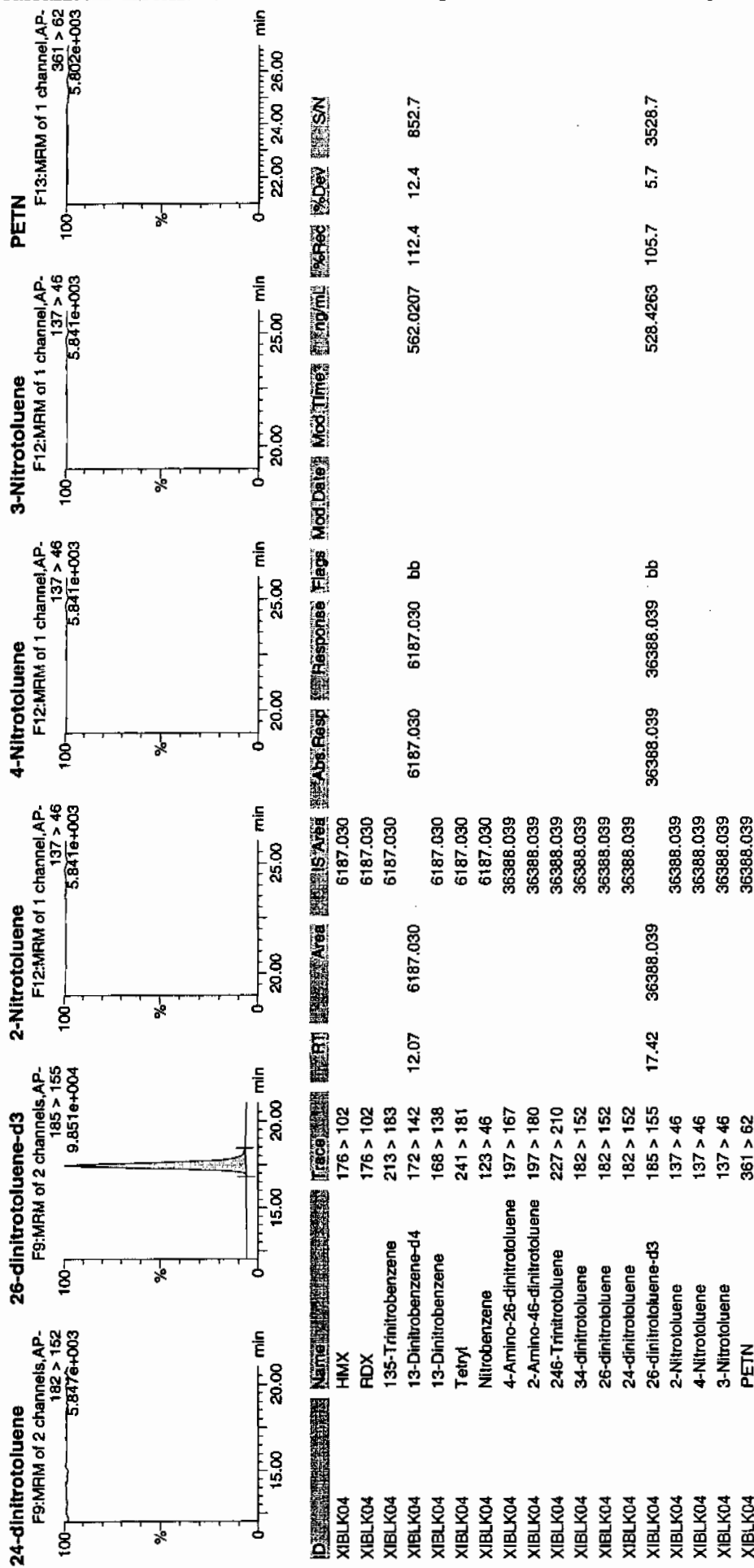


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 48 of 99

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 24-MAR-10 02:50

GEL Data File: EXP0323037a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	534.426
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	585.234
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

Printed: Wed Mar 24 09:32:17 2010, Page 73 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323037a

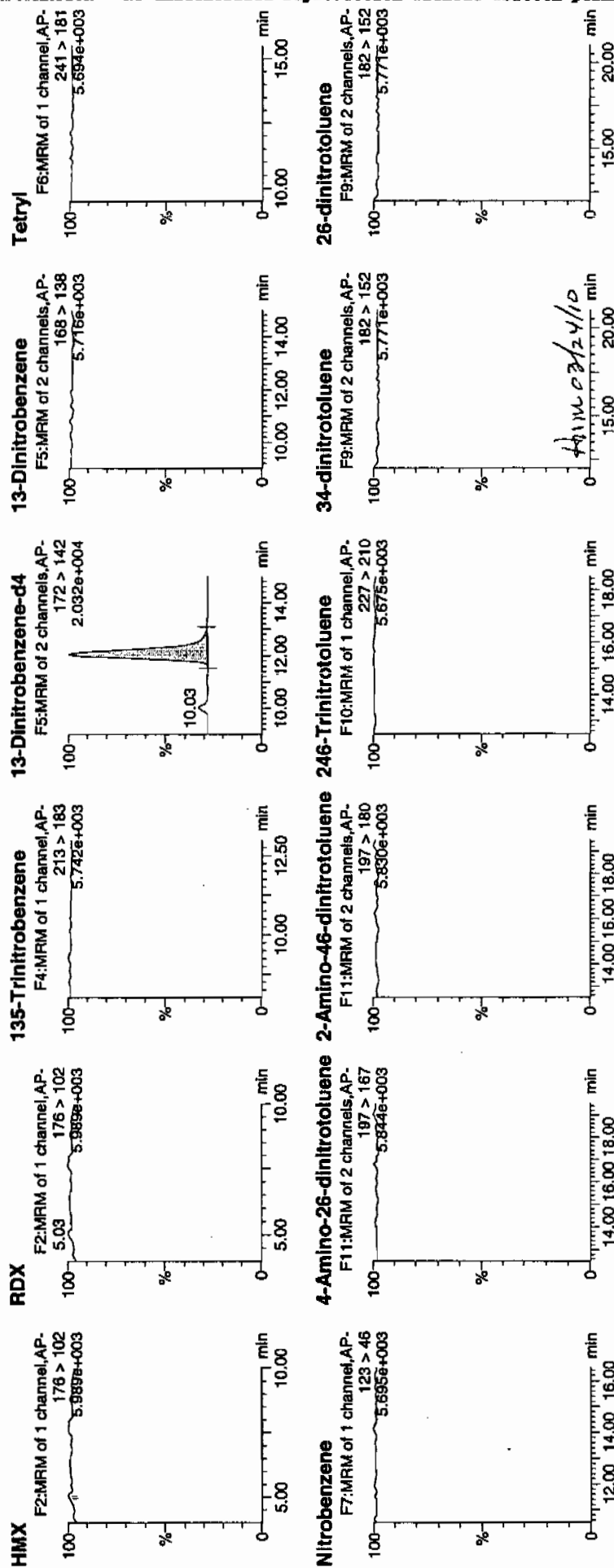
Date: 24-Mar-2010

Time: 02:50:36

ID: XIBLK05

Vial: 1:1,A

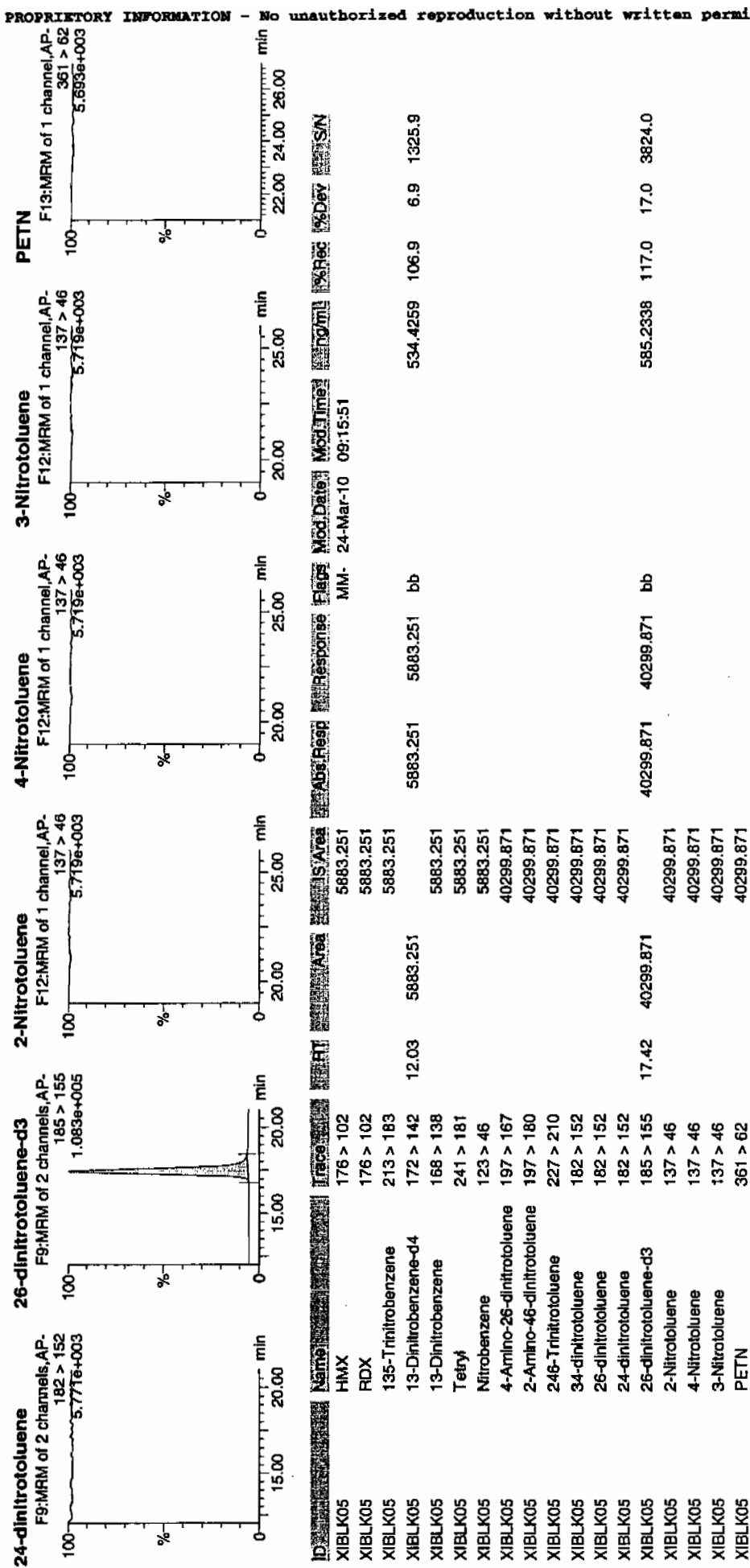
10/11
1/24/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 74 of 99

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 24-MAR-10 08:15

GEL Data File: EXP0323048a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0 [†]	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	525.584
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	553.206
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 24 09:32:17 2010, Page 95 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323048a

Date: 24-Mar-2010

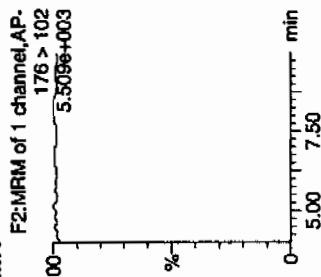
Time: 08:15:01

ID: XIBLK06

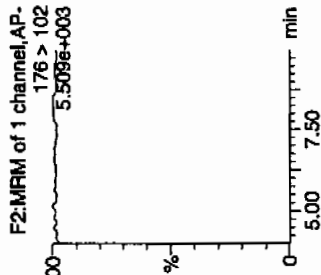
Vial: 1:1,A

107
3/24/10

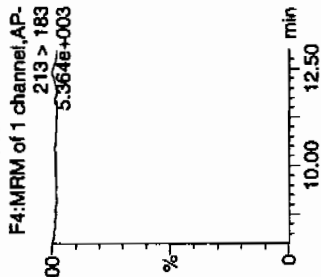
HMX



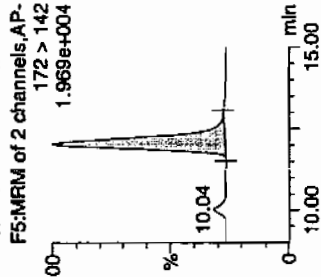
RDX



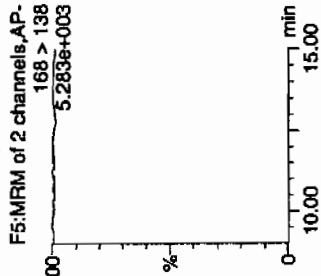
135-Trinitrobenzene



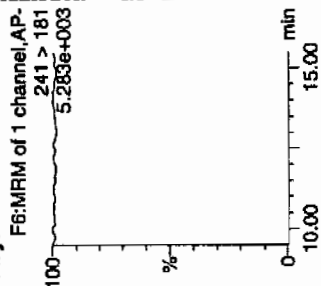
13-Dinitrobenzene-d4



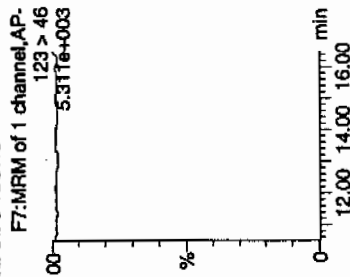
13-Dinitrobenzene



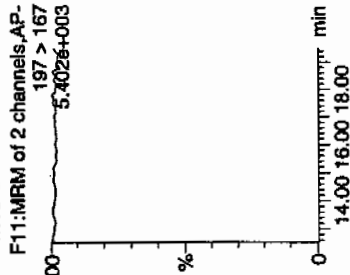
Tetryl



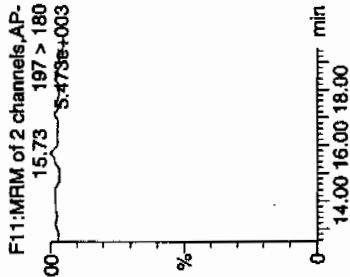
Nitrobenzene



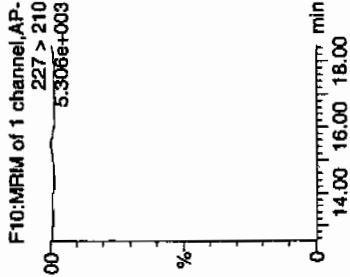
4-Amino-26-dinitrotoluene



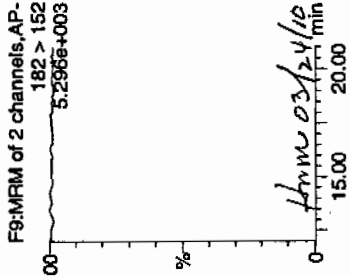
2-Amino-46-dinitrotoluene



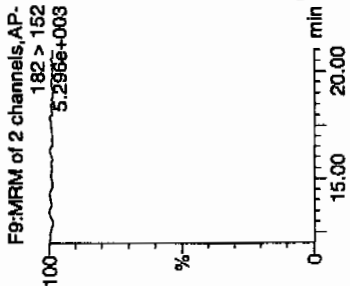
246-Trinitrotoluene



34-dinitrotoluene



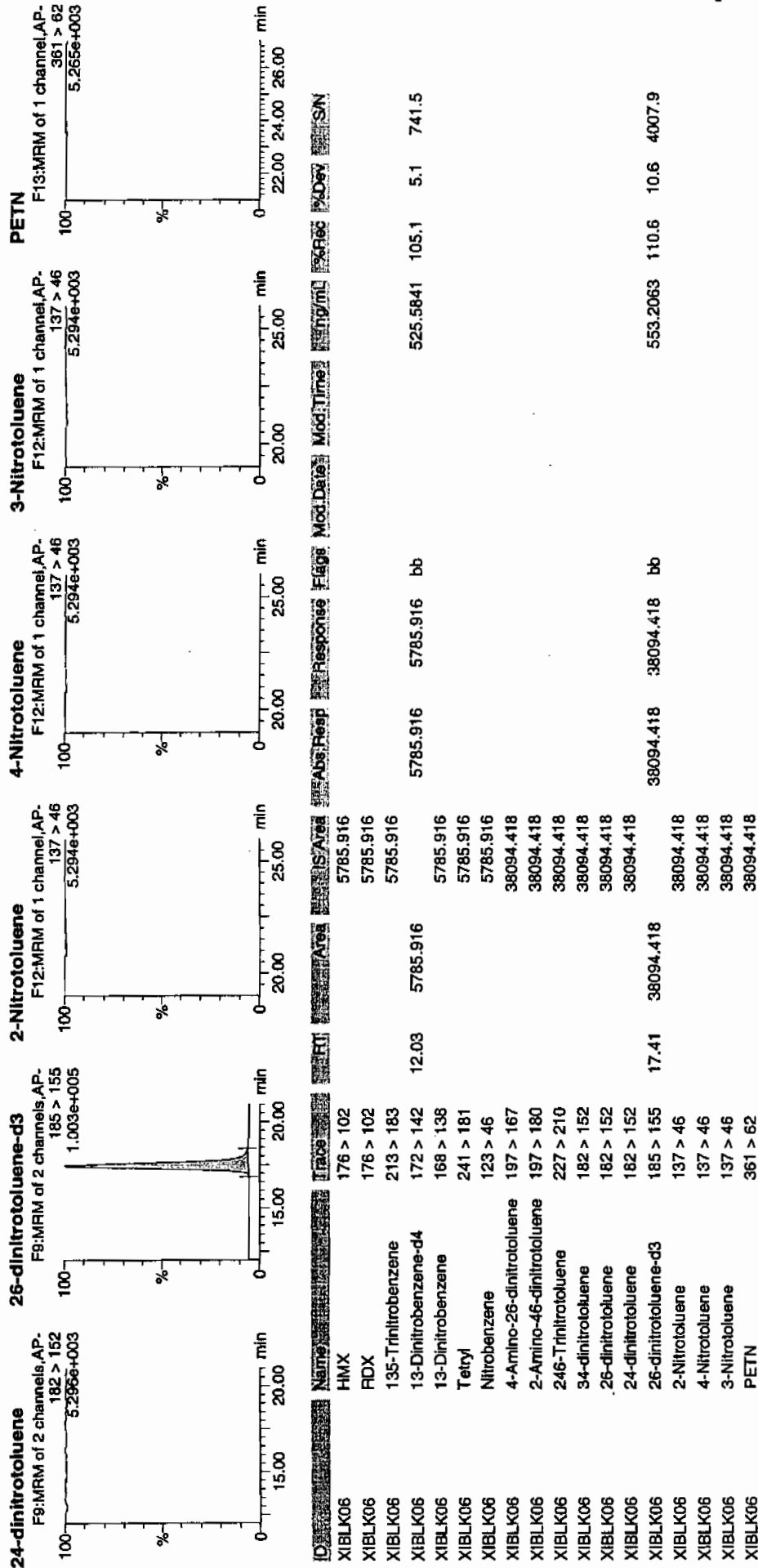
26-dinitrotoluene



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 24-MAR-10 14:38

GEL Data File: EXP0323061a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	509.311
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	504.889
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

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

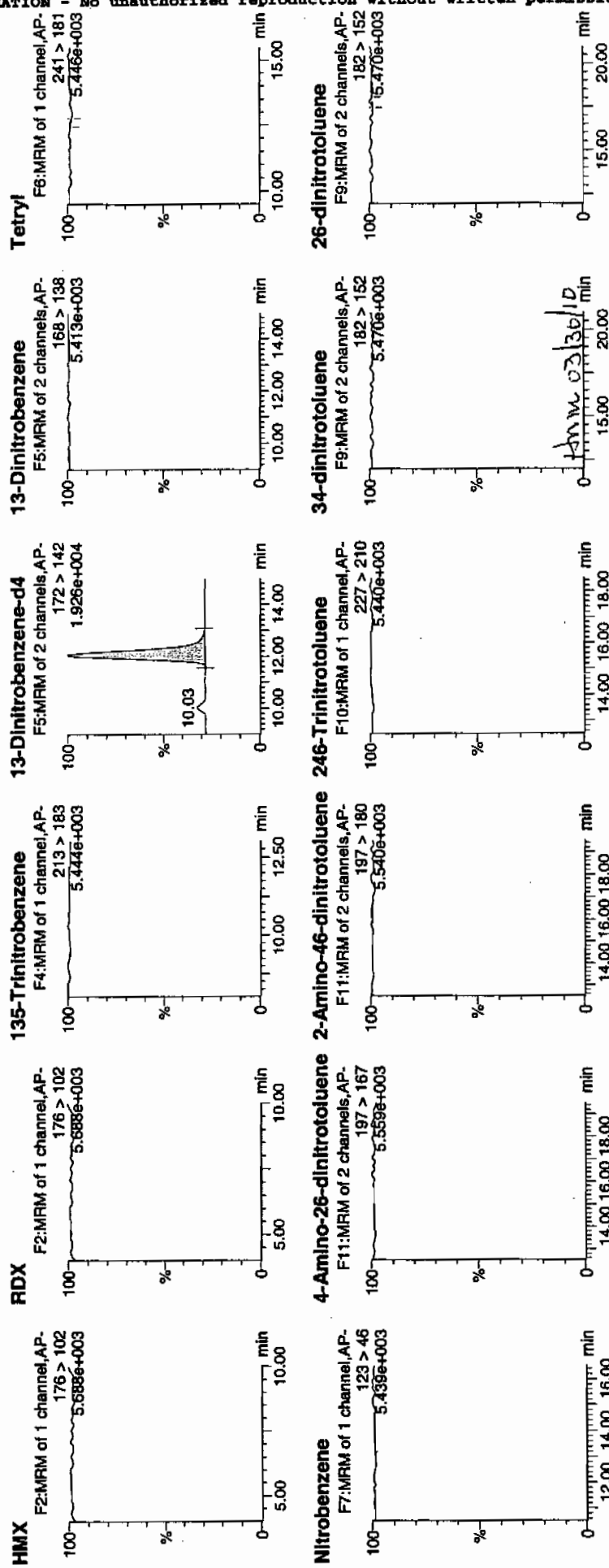
Name: C:\MASSLYNX\NEW_EXP_PROJ\Data\EXP0323061a

Date: 24-Mar-2010

Time: 14:38:46

ID: XIBLK07

Vial: 1:1,A

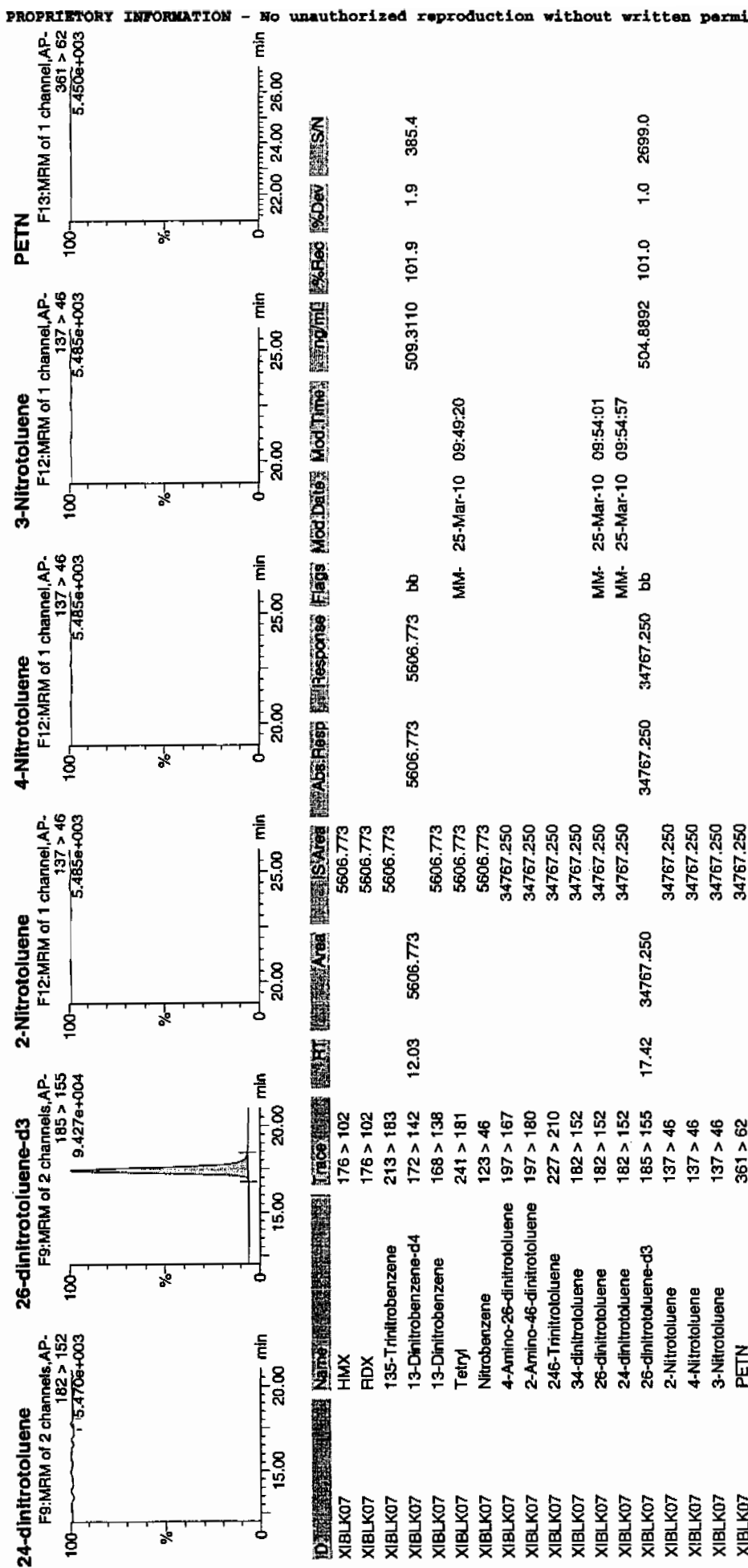


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 24 of 79

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 24-MAR-10 21:02

GEL Data File: EXP0323074a

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	608.614
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	531.363
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Thu Mar 25 10:04:08 2010, Page 49 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323074a

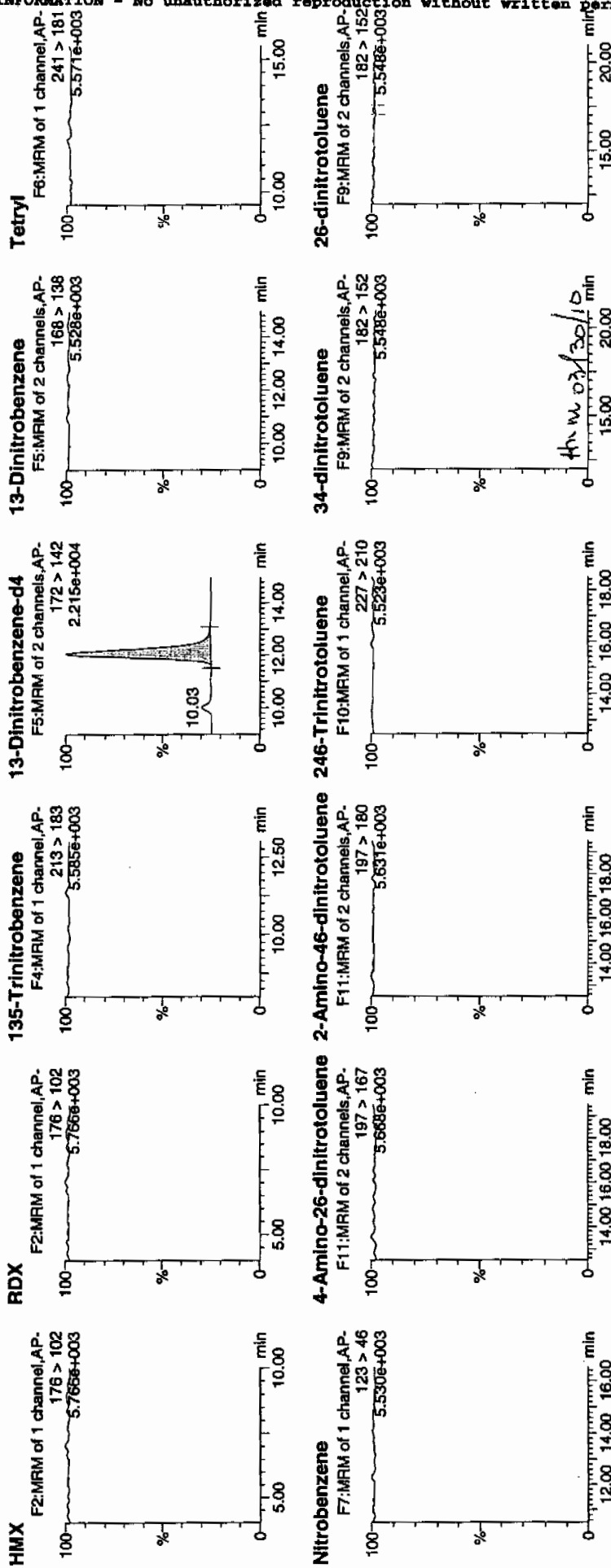
Date: 24-Mar-2010

Time: 21:02:20

ID: XIBLK08

Vial: 1:1,A

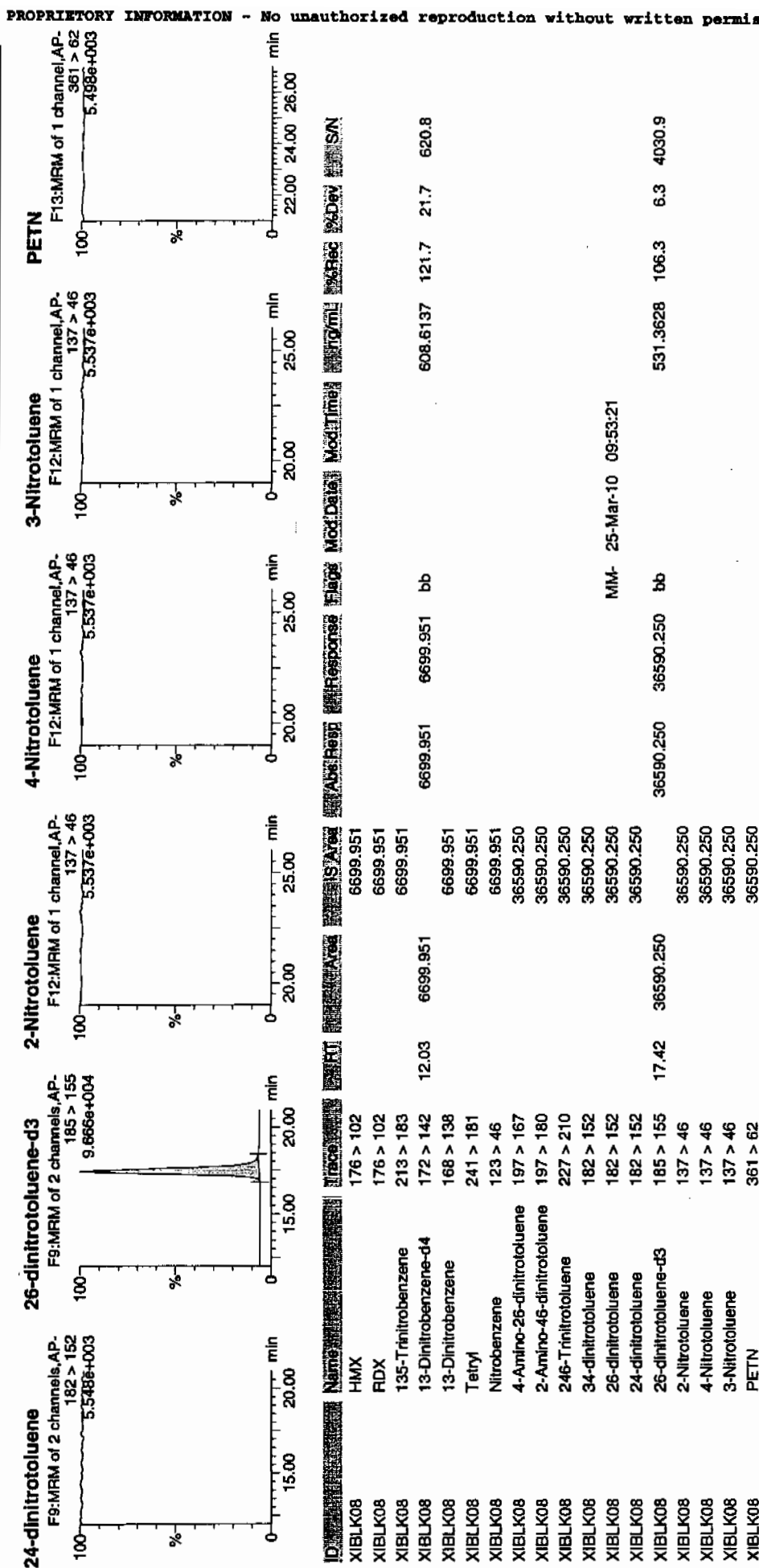
10.03
10.03
10.03



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 50 of 79

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA1.qid, Time: Thu Mar 25 09:56:44 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 25-MAR-10 00:28

GEL Data File: EXP0323081a

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	569.342
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	537.727
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Thu Mar 25 10:04:08 2010, Page 63 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323081a

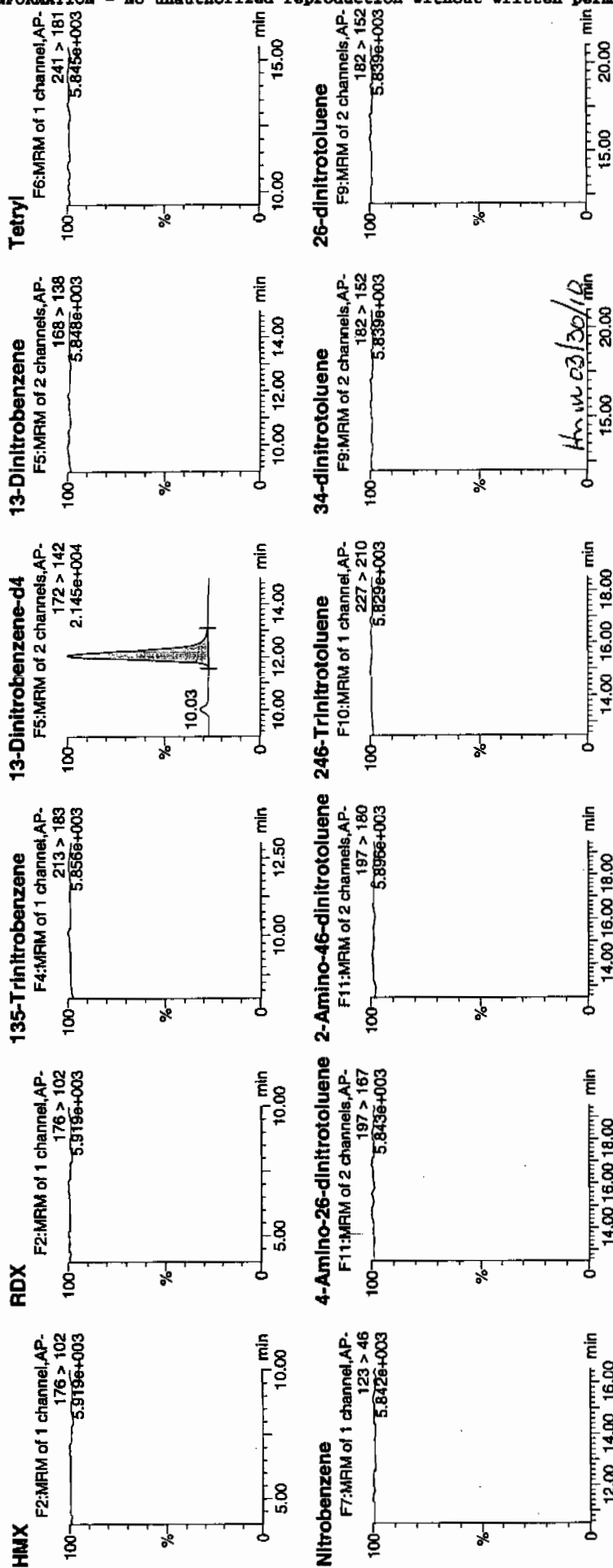
Date: 25-Mar-2010

Time: 00:28:55

ID: XIBLK09

Vial: 1:1,A

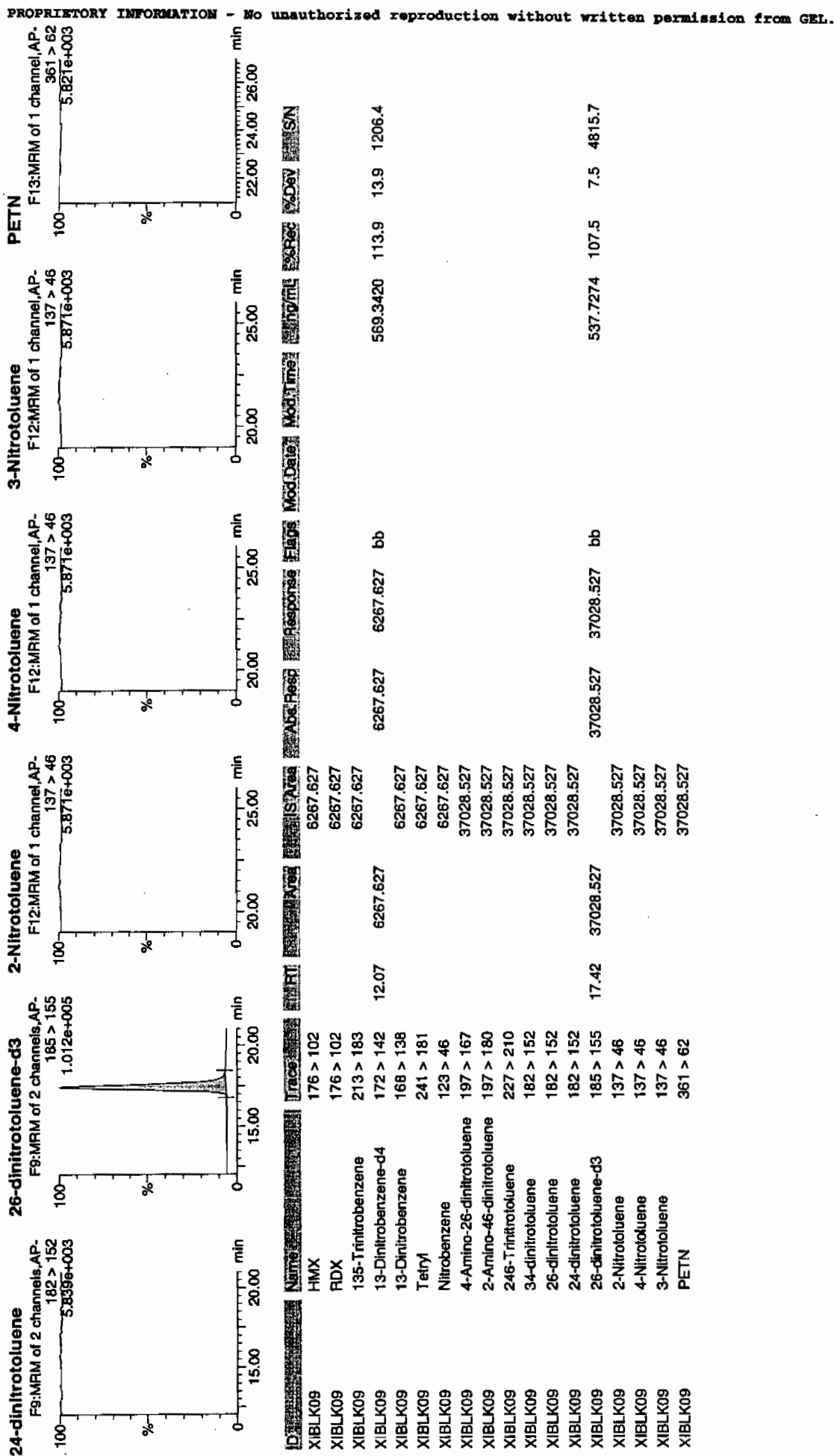
WAT
3/15/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 64 of 79

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 25-MAR-10 03:26

GEL Data File: EXP0323087a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	533.943
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	485.827
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Thu Mar 25 10:04:08 2010, Page 75 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323087a

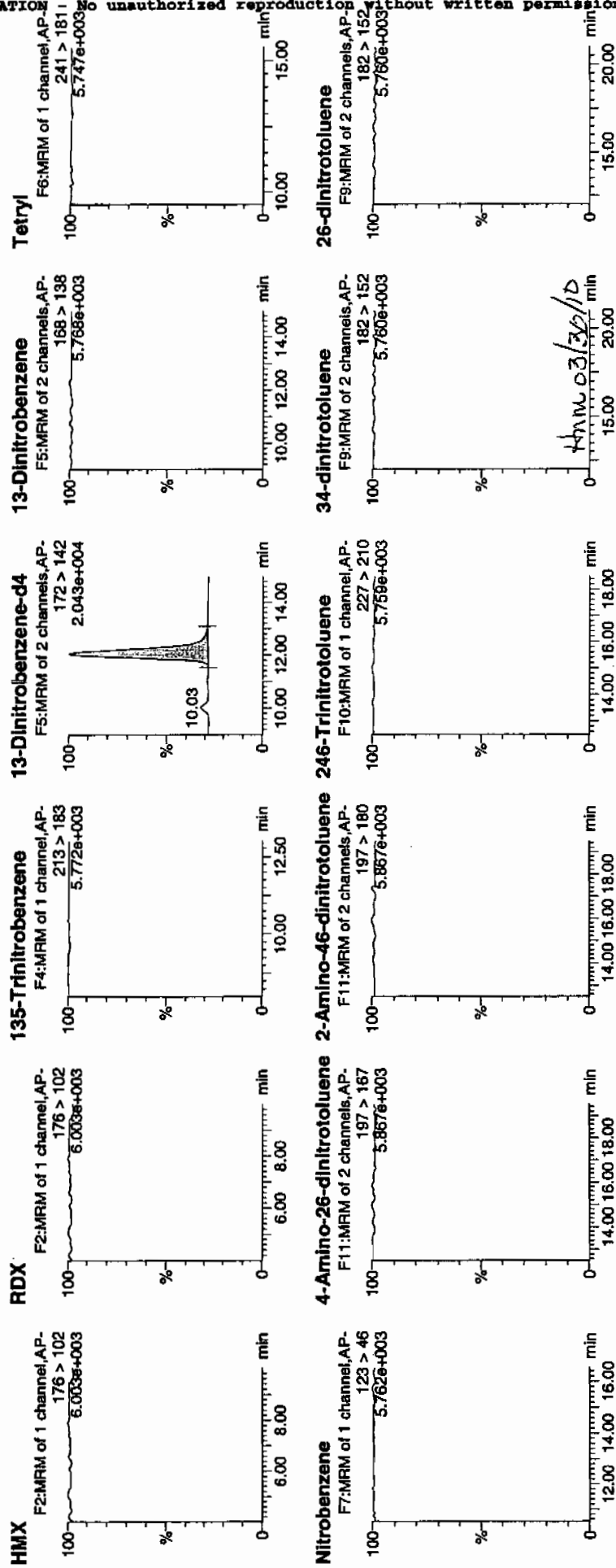
Date: 25-Mar-2010

Time: 03:26:02

ID: XIBLK10

Vial: 1:1,A

WAT
3/25/10

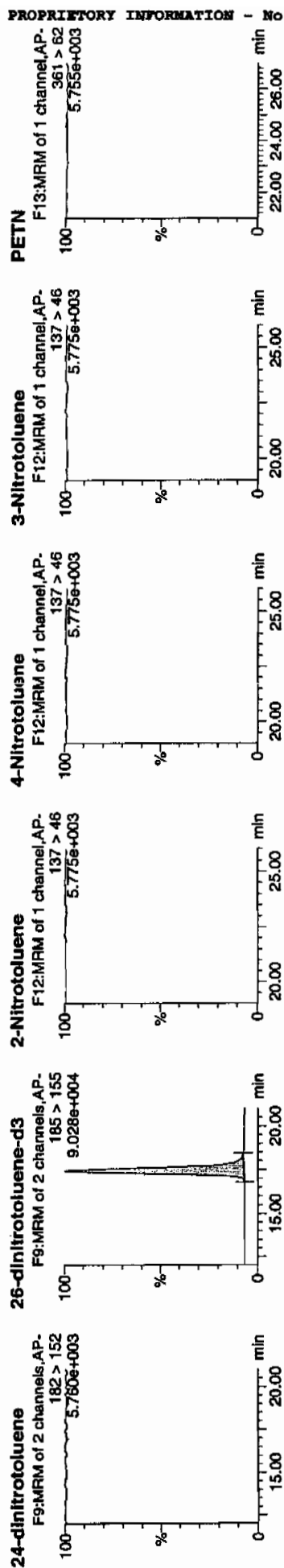


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 76 of 79

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Name	Trace	Area	HT	Abs Resp	Response	Flags	Mod Date	Mod Time	Intp/ml	Exchd	%Dev	TSN
XIBLK10	176 > 102	5877.940										
XIBLK10	176 > 102	5877.940										
XIBLK10	213 > 183	5877.940										
XIBLK10	172 > 142	5877.940	12.03						5877.940	5877.940	106.8	619.4
XIBLK10	168 > 138	5877.940										
XIBLK10	241 > 181	5877.940										
XIBLK10	123 > 46	5877.940										
XIBLK10	197 > 167	33454.594										
XIBLK10	197 > 180	33454.594										
XIBLK10	227 > 210	33454.594										
XIBLK10	182 > 152	33454.594										
XIBLK10	182 > 152	33454.594										
XIBLK10	182 > 152	33454.594										
XIBLK10	185 > 155	33454.594	17.42						33454.594	33454.594	97.2	1881.8
XIBLK10	137 > 46	33454.594										
XIBLK10	137 > 46	33454.594										
XIBLK10	137 > 46	33454.594										
XIBLK10	361 > 62	33454.594										
PETN									485.8268			

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 25-MAR-10 09:49

GEL Data File: EXP0323100a

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	578.138
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	576.977
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

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323100a

Date: 25-Mar-2010

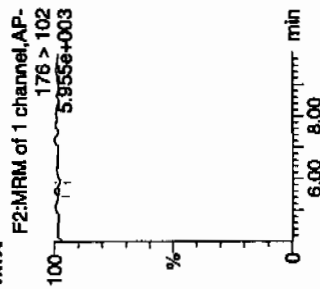
Time: 09:49:20

ID: XIBLK11

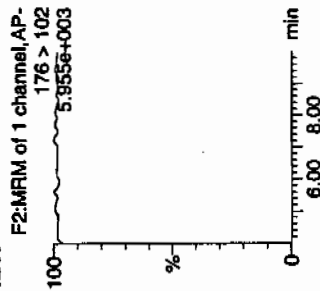
Vial: 1:1,A

WFT
3/26/10

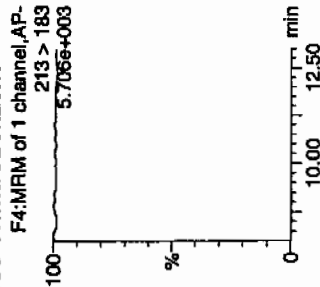
HMX



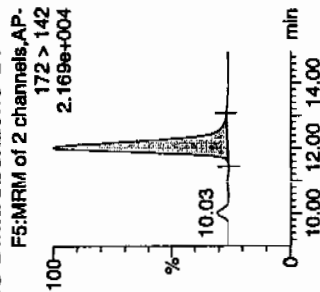
RDX



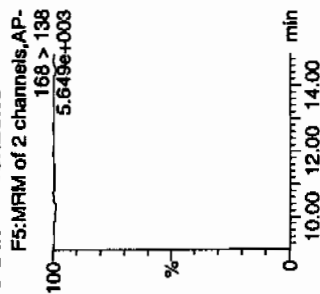
135-Trinitrobenzene



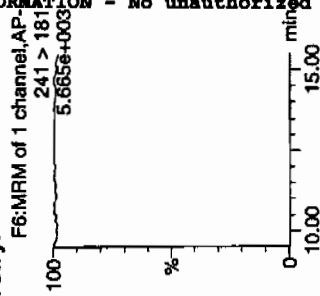
13-Dinitrobenzene-d4



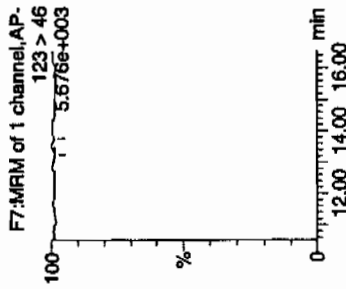
13-Dinitrobenzene



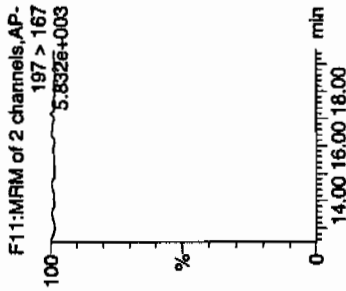
Tetryl



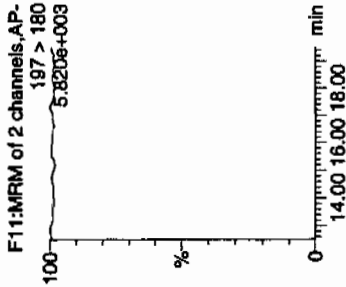
Nitrobenzene



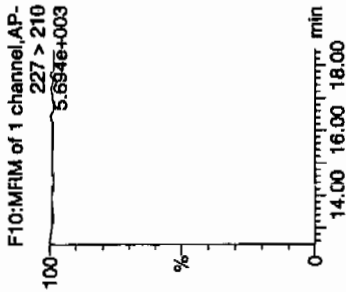
4-Amino-26-dinitrotoluene



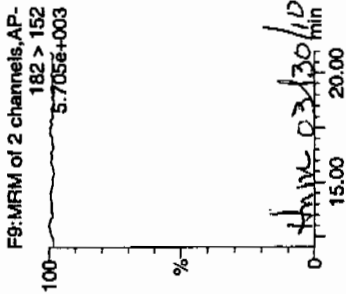
2-Amino-46-dinitrotoluene



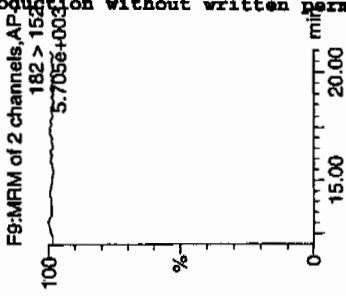
246-Trinitrotoluene



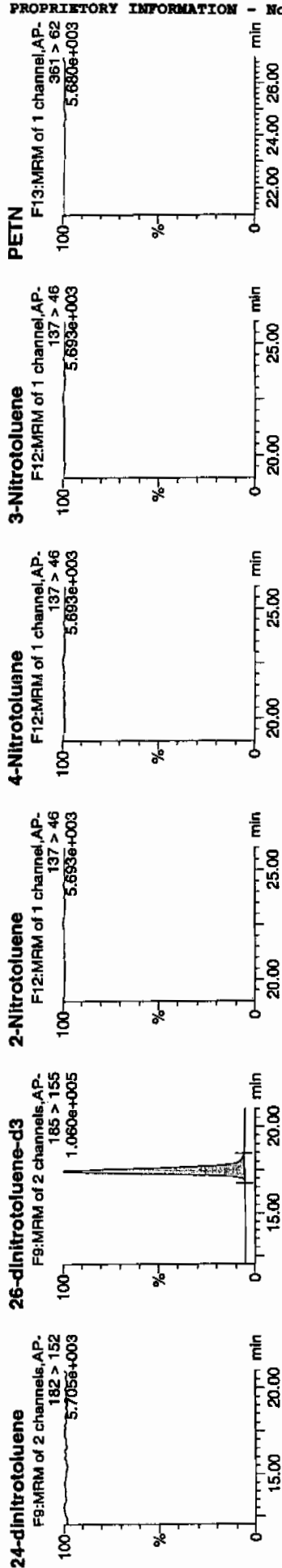
34-dinitrotoluene



26-dinitrotoluene



Dataset: C:\MASSLYN\New_Exp.PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

[illegible]

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-MAR-10 20:42

GEL Data File: EXP0325009a

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	459.921
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	433.464
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\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325009a

Date: 25-Mar-2010

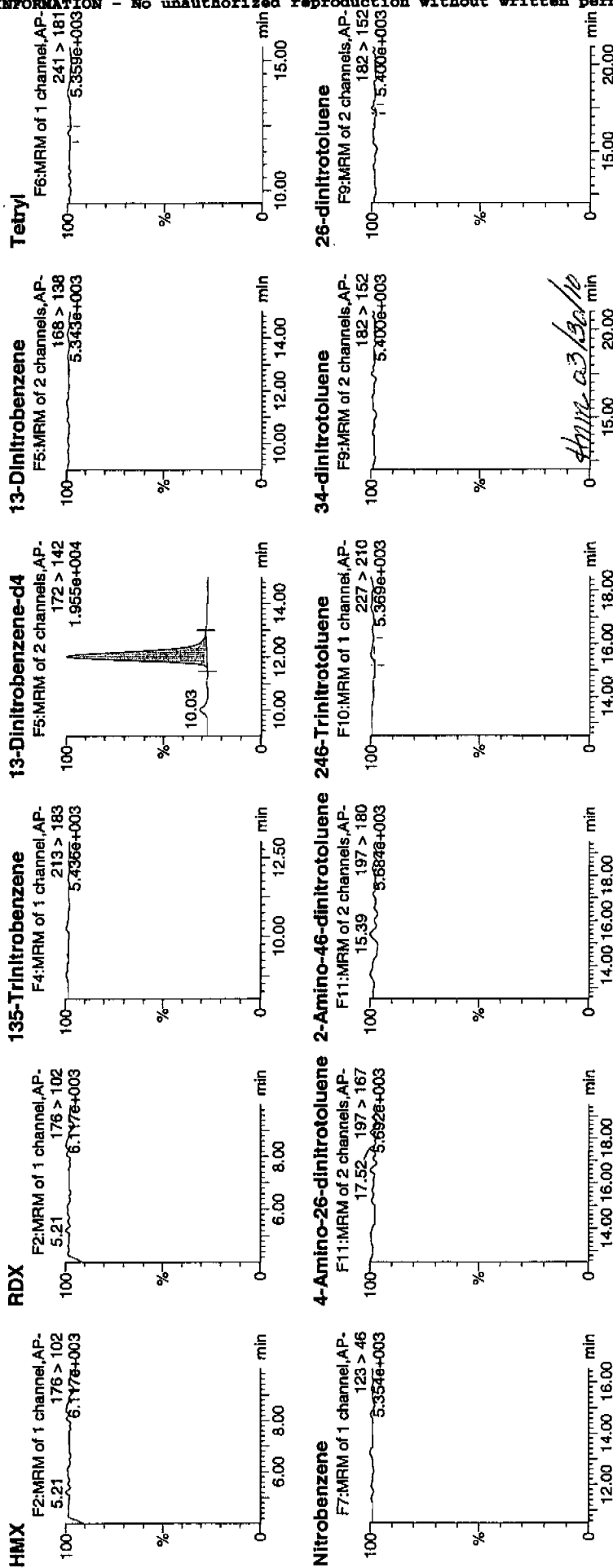
Time: 20:42:57

ID: XIBLK02

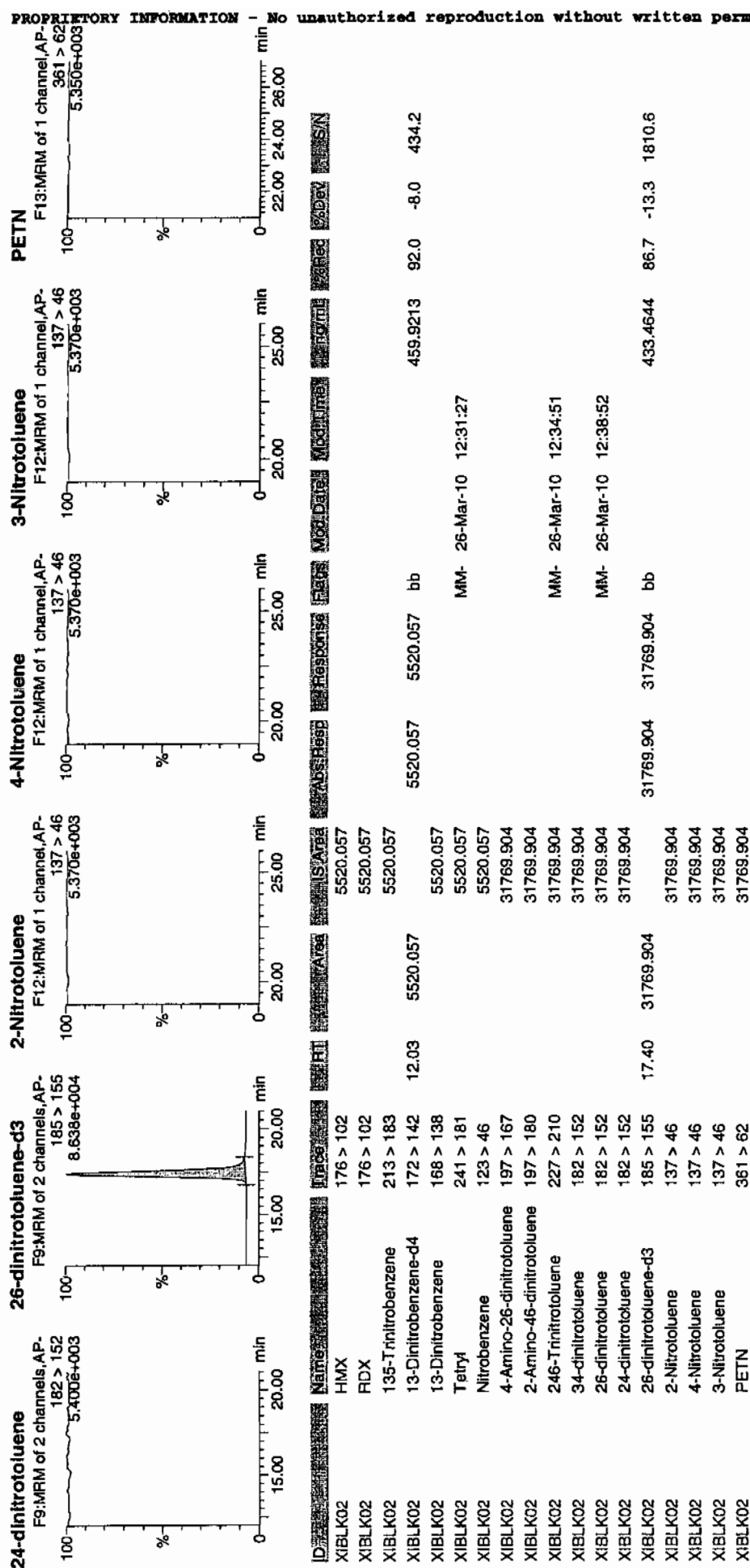
Vial: 1:1,A

10.03
3/16/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-MAR-10 21:41

GEL Data File: EXP0325011a

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	511.194
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	510.95
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325011a

Date: 25-Mar-2010

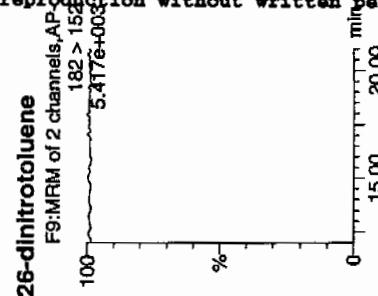
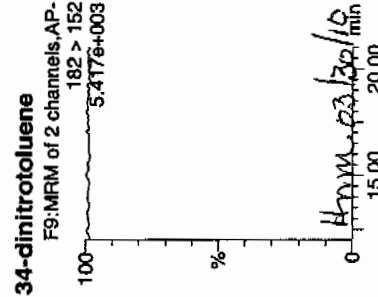
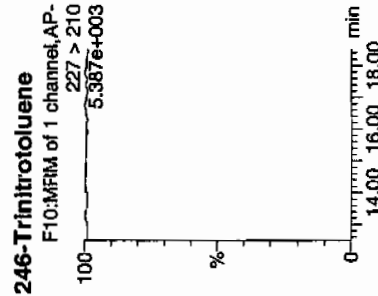
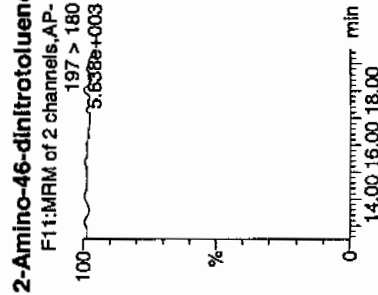
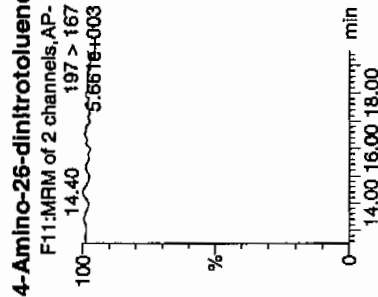
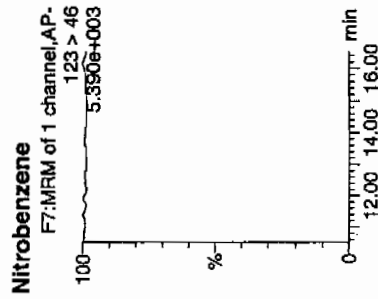
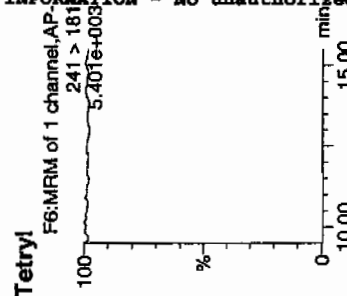
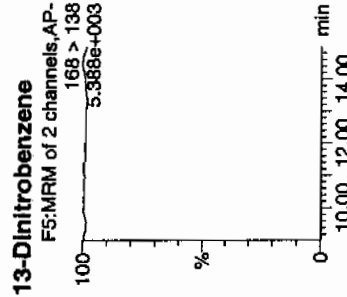
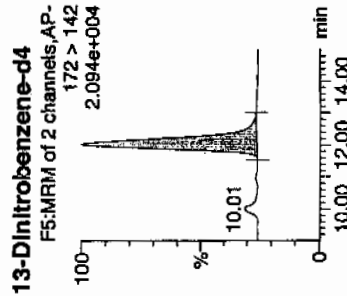
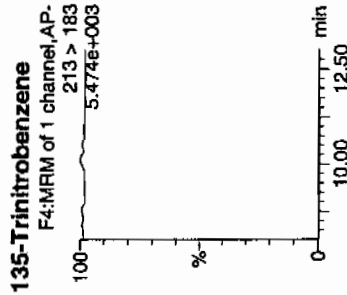
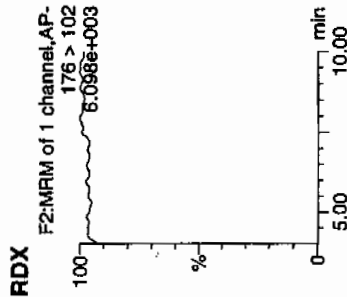
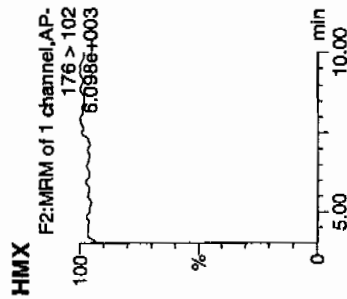
Time: 21:41:54

ID: XIBLK03

Vial: 1:1,A

135
3/26/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

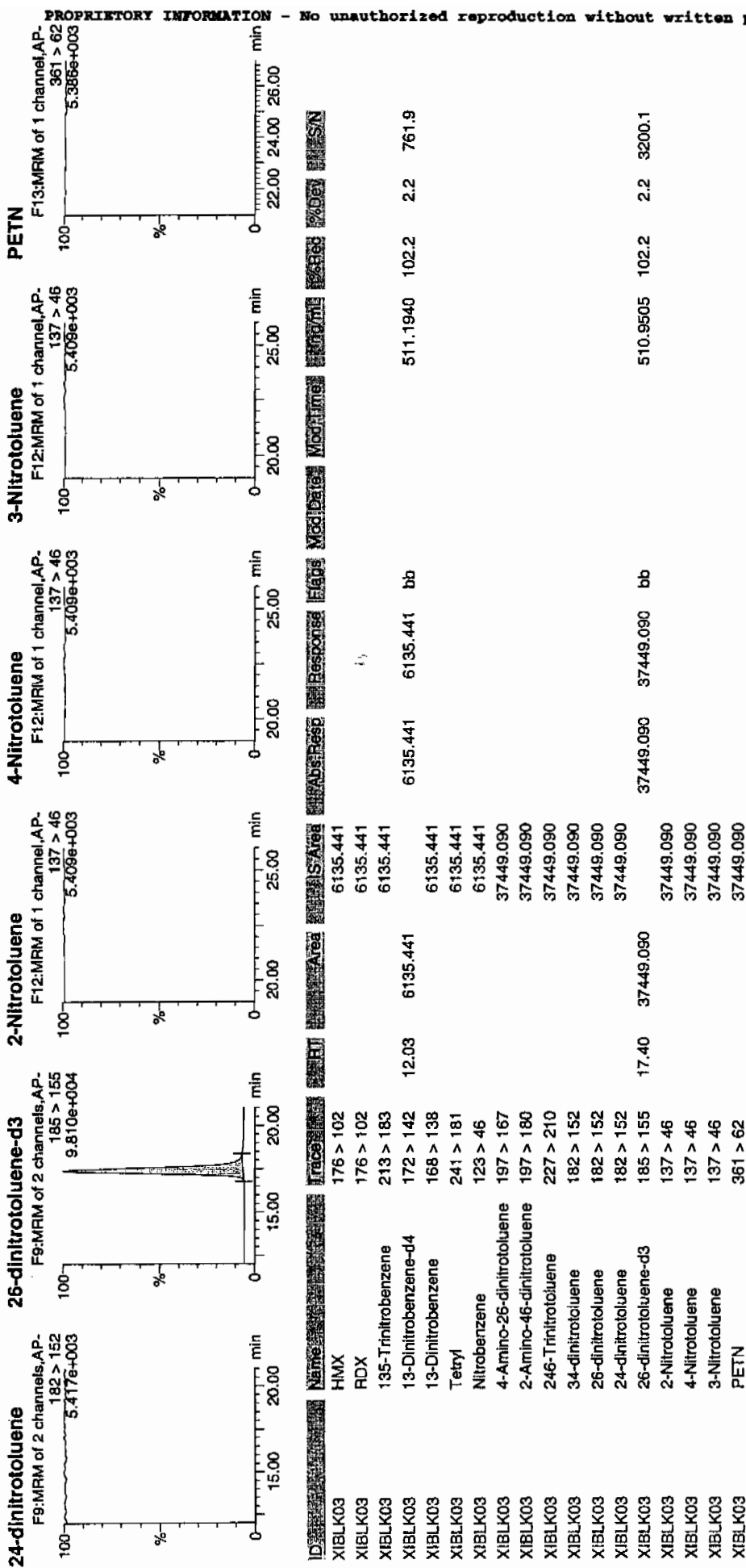


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 22 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 26-MAR-10 04:05

GEL Data File: EXP0325024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	506.259
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	511.238
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

Printed: Fri Mar 26 12:46:39 2010, Page 47 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325024a

Date: 26-Mar-2010

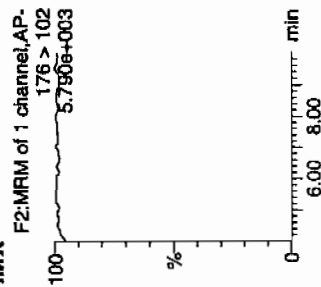
Time: 04:05:17

ID: XIBLK04

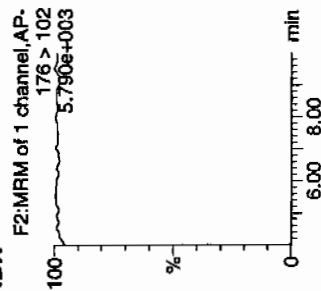
Vial: 1:1,A

100
31000

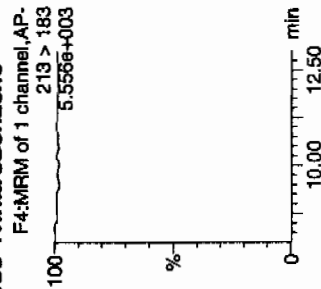
HMX



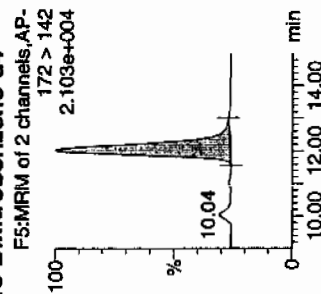
RDX



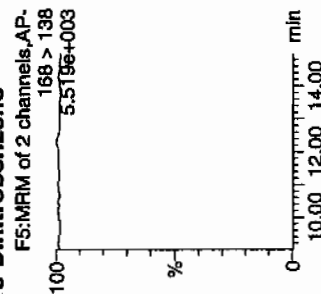
135-Trinitrobenzene



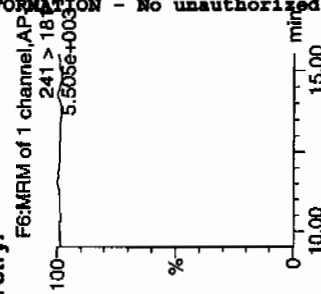
13-Dinitrobenzene-d4



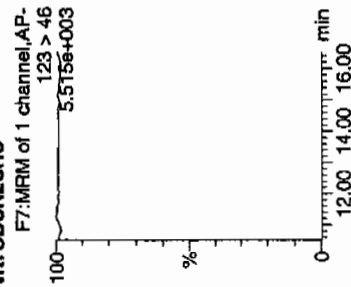
13-Dinitrobenzene



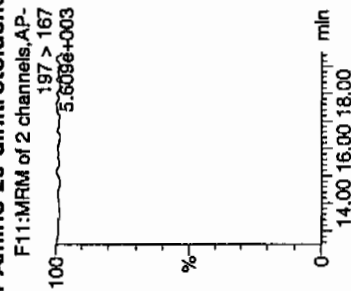
Tetryl



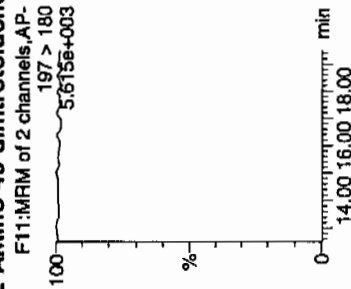
Nitrobenzene



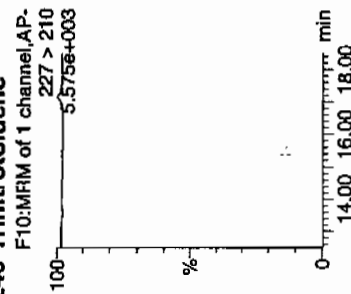
4-Amino-26-dinitrotoluene



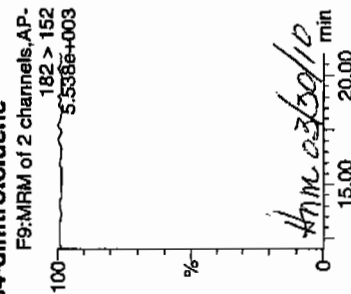
2-Amino-46-dinitrotoluene



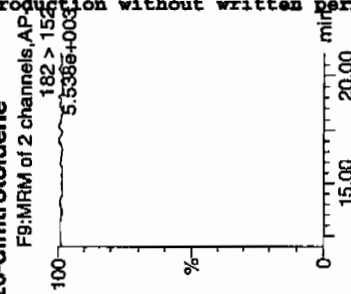
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

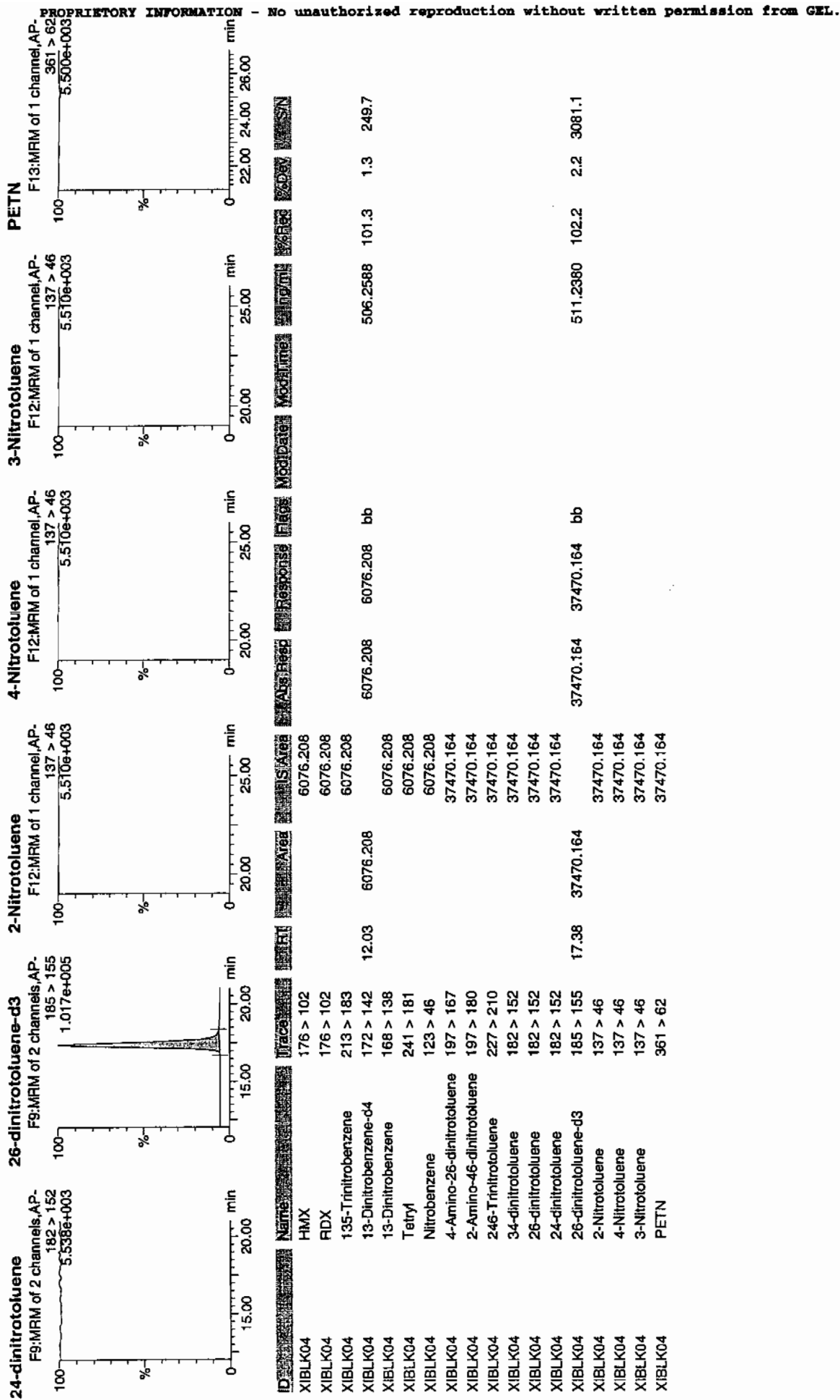


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 48 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 16-MAR-10 10:39

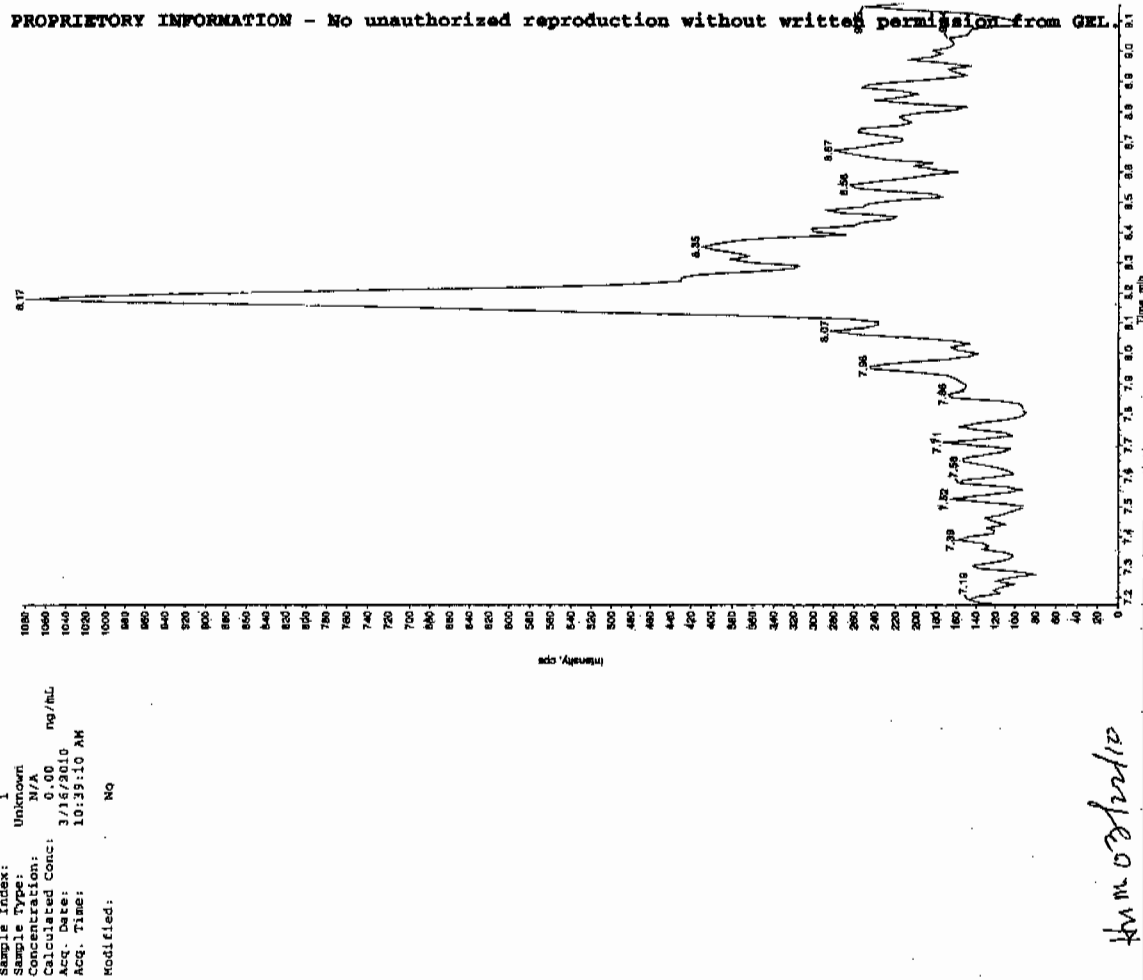
GEL Data File: EXS03160010.wiff

Instrument ID: LCMSMS

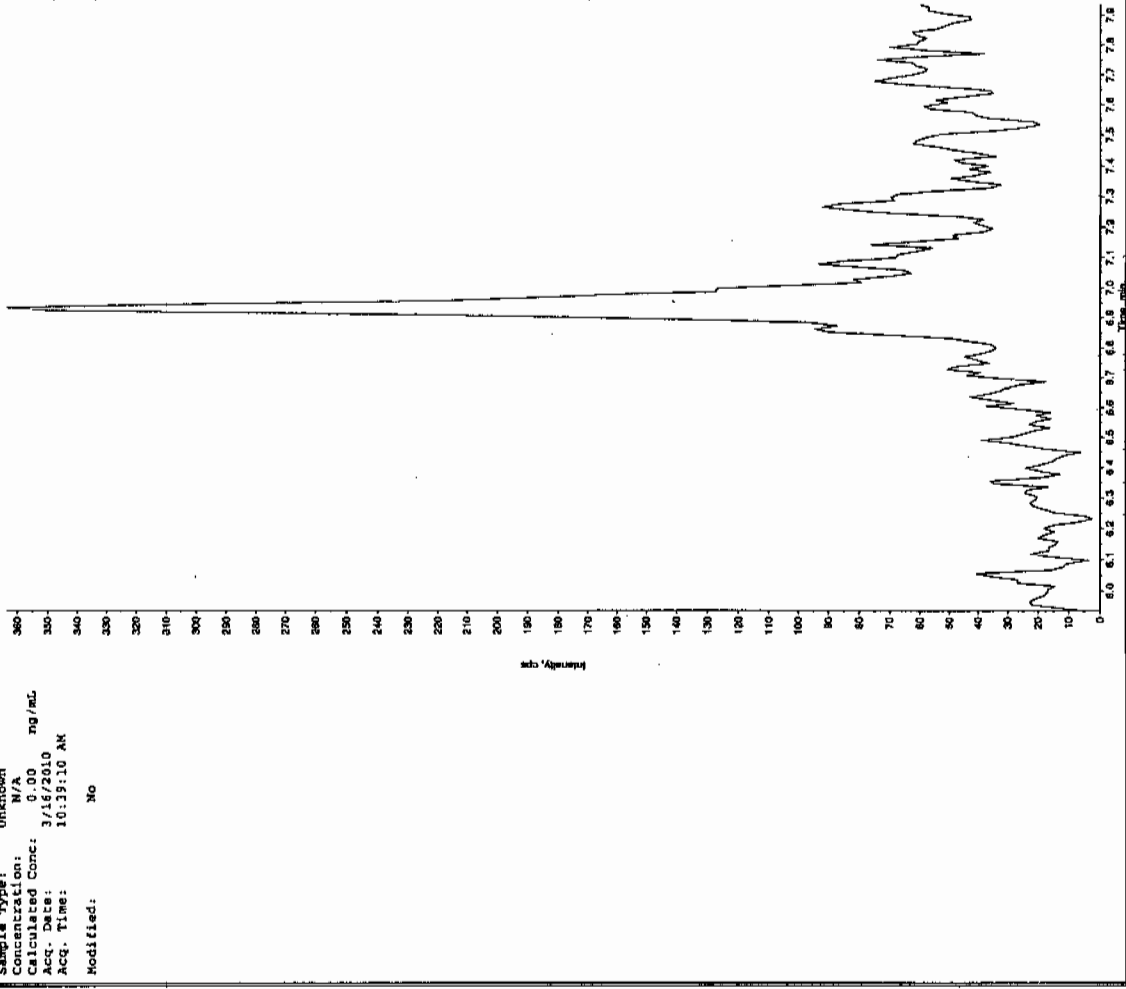
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.31
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 31/8/10



Jan 31/8/10

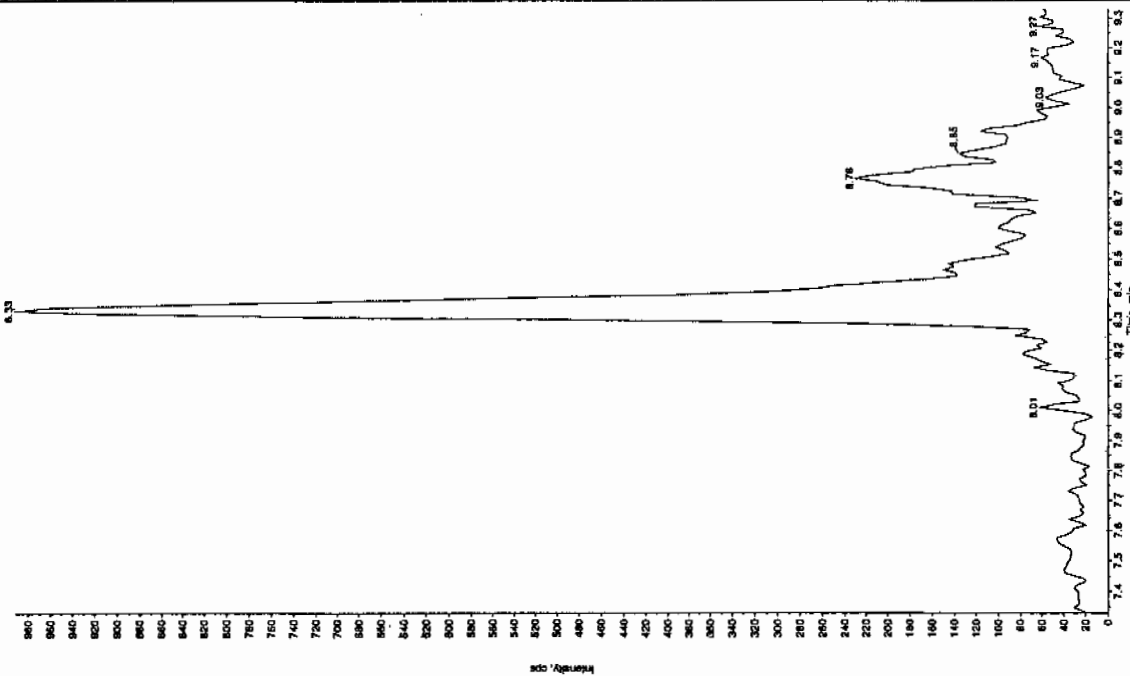


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK02" Sample ID: "T1LER" File: "EX503160010.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 3/16/2010
 Acq. Date: 10:39:10 AM
 Acq. Time: 10:39:10 AM
 Modified: No



Sample Name: "XBLK02" Sample ID: "T1LER" File: "EX503160010.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

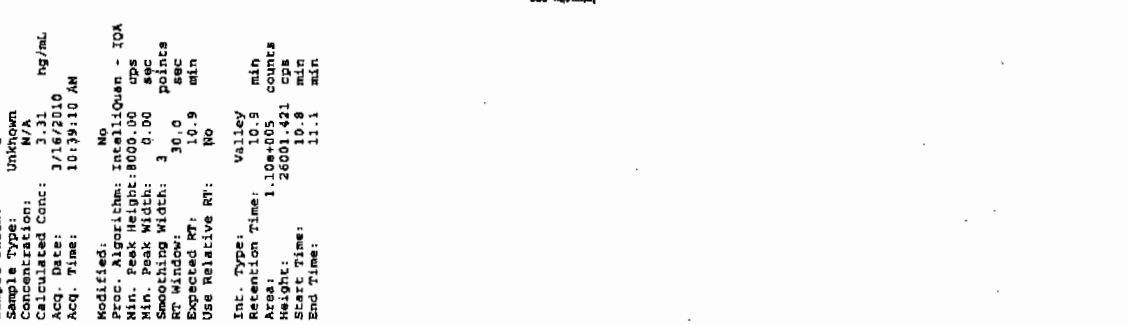
Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 3/16/2010
 Acq. Date: 10:39:10 AM
 Acq. Time: 10:39:10 AM
 Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBL002" Sample ID: "JILLER" File: "EX503160010.wif"
 Peak Name: "tris(o-cresyl) phosphata" Mass(es): "355.17810 amu"
 Comment: "LCMSEXP.B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.31 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:39:10 AM
 Modified: No
 Acquisition: InterQual - TOA
 Min. Peak Height: 8000 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.10e+005 counts
 Height: 26001.421 cps
 Start Time: 10.8 min
 End Time: 11.1 min

Intensity, cps



Sample Name: "XIBL002" Sample ID: "JILLER" File: "EX503160010.wif"
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "155.046.0 amu"
 Comment: "LCMSEXP.B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:39:10 AM
 Modified: No

Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 16-MAR-10 11:10

GEL Data File: EXS03160012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultra[®]carb 5u ODS(20)

Compound	True	Found (ug/L)
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0

Law 3/18/10

Sample Name: "XIBUKQ" Sample ID: "TILER" File: "EXS03160012.wif"

Peak Name: "TATB" Mass(es): "257.22049 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

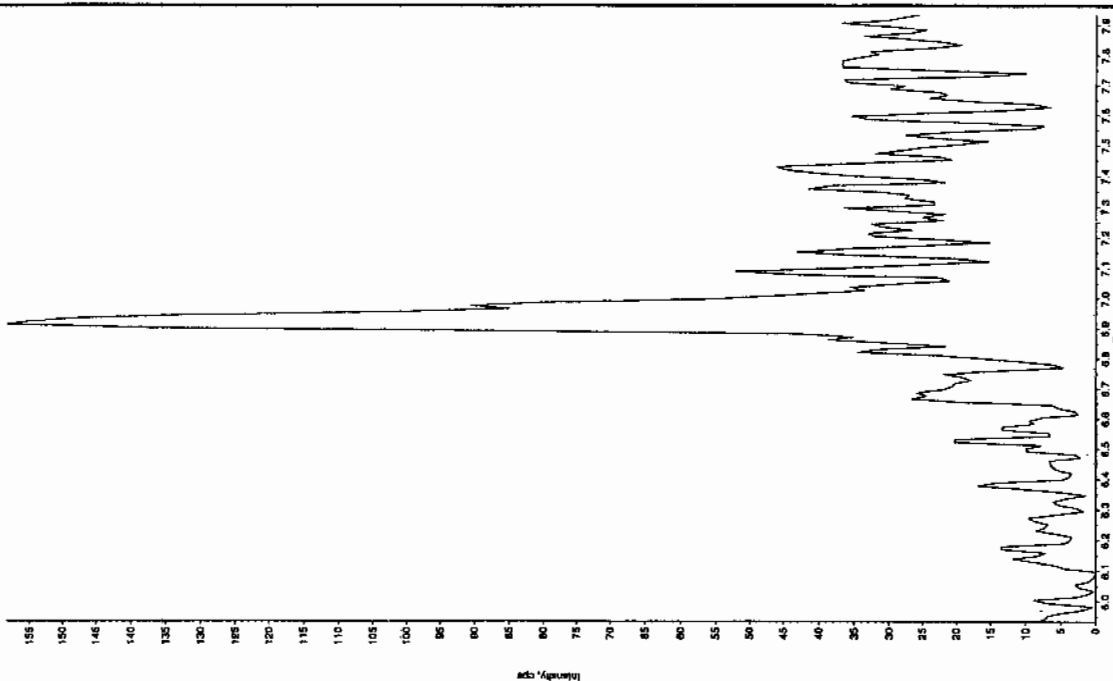
Concentration: 0.00 ng/mL

Acq. Date: 3/16/2010

Acq. Time: 11:10:32 AM

Modified:

No



Sample Name: "XIBUKQ" Sample ID: "TILER" File: "EXS03160012.wif"

Peak Name: "35-Nitroaniline" Mass(es): "182.0460 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

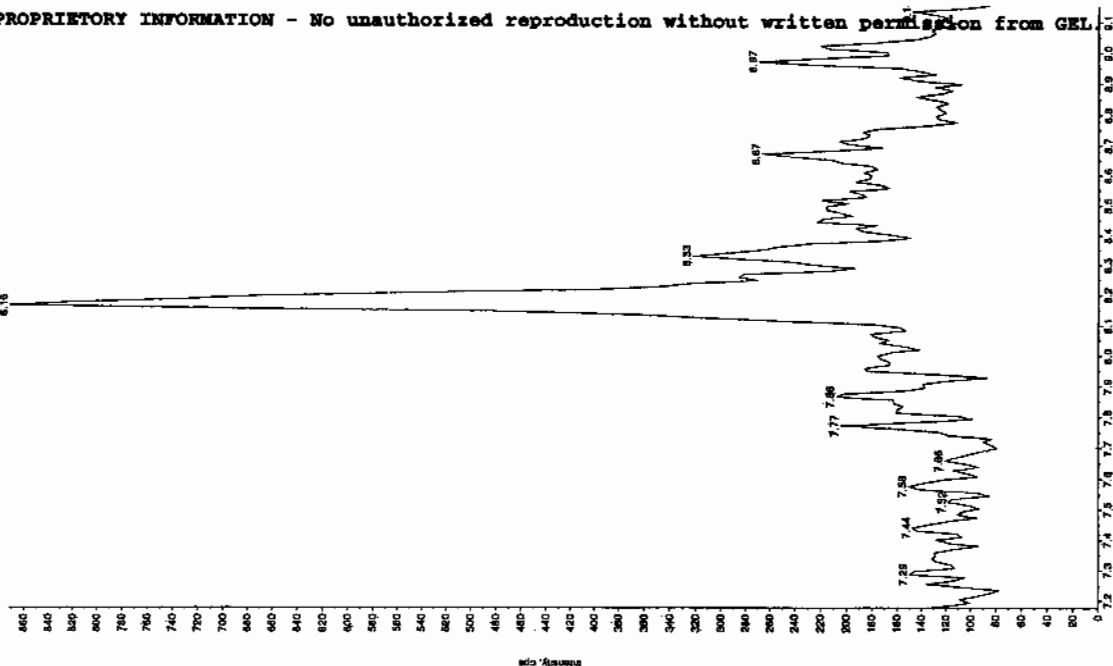
Concentration: 0.00 ng/mL

Acq. Date: 3/16/2010

Acq. Time: 11:10:32 AM

Modified:

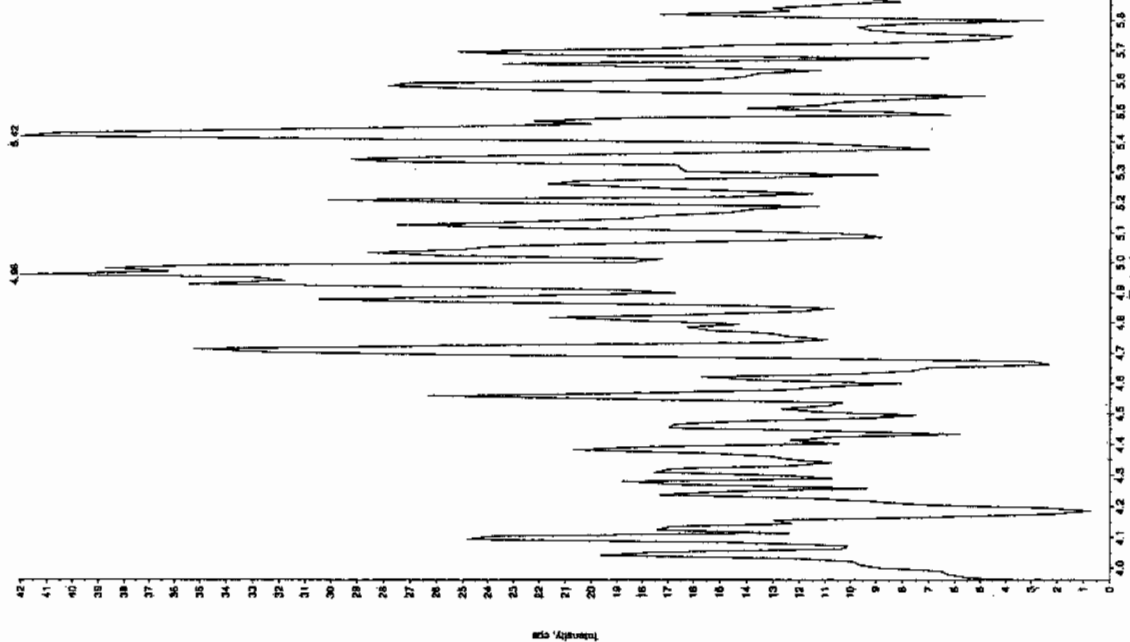
No



Law 3/18/10

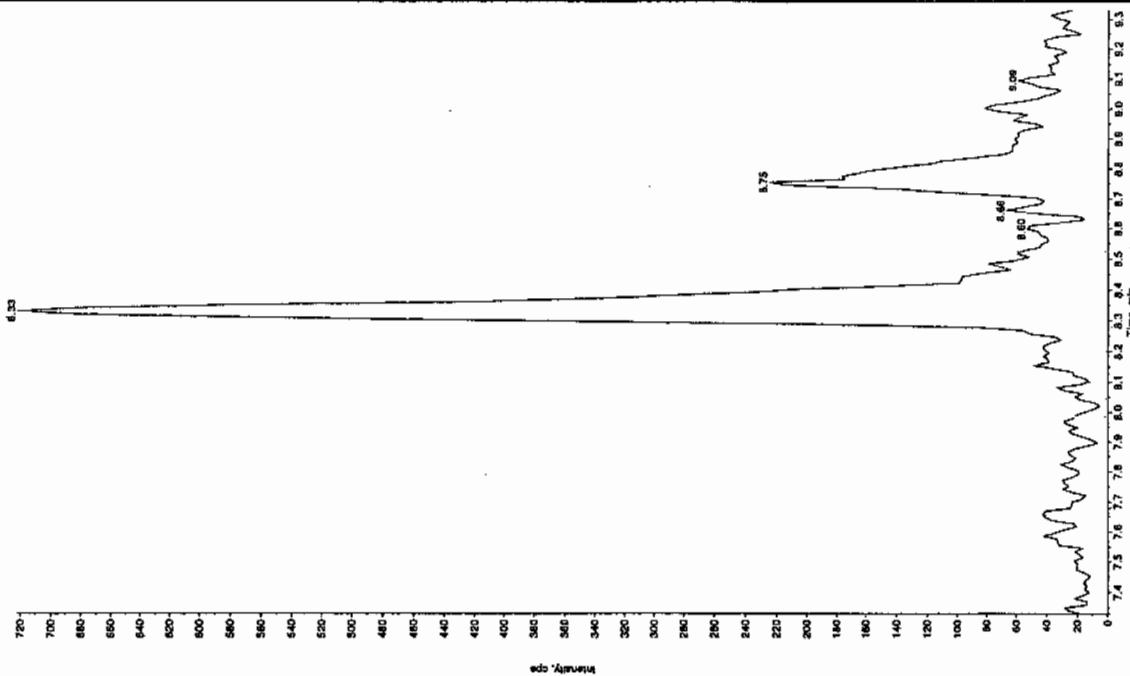
Sample Name: "HBLX03" Sample ID: "HBLER" File: "EX503160012.wif"
 Peak Name: "34, Dinitrophenol" Mass(es): "162.0460 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 11:10:12 AM
 Modified: No



Sample Name: "HBLX03" Sample ID: "HBLER" File: "EX503160012.wif"
 Peak Name: "34, Dinitrophenol" Mass(es): "162.0460 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 11:10:12 AM
 Modified: No



Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 16-MAR-10 14:34

GEL Data File: EXS03160025.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

Run 3116110

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "XIBLK04" Sample ID: "11111" File: "EXS03160025.wif"

Peak Name: "35-Ontroshing" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 3/16/2010

Acq. Time: 2:34:37 PM

Modified: No

Sample Name: "XIBLK04" Sample ID: "11111" File: "EXS03160025.wif"

Peak Name: "YATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

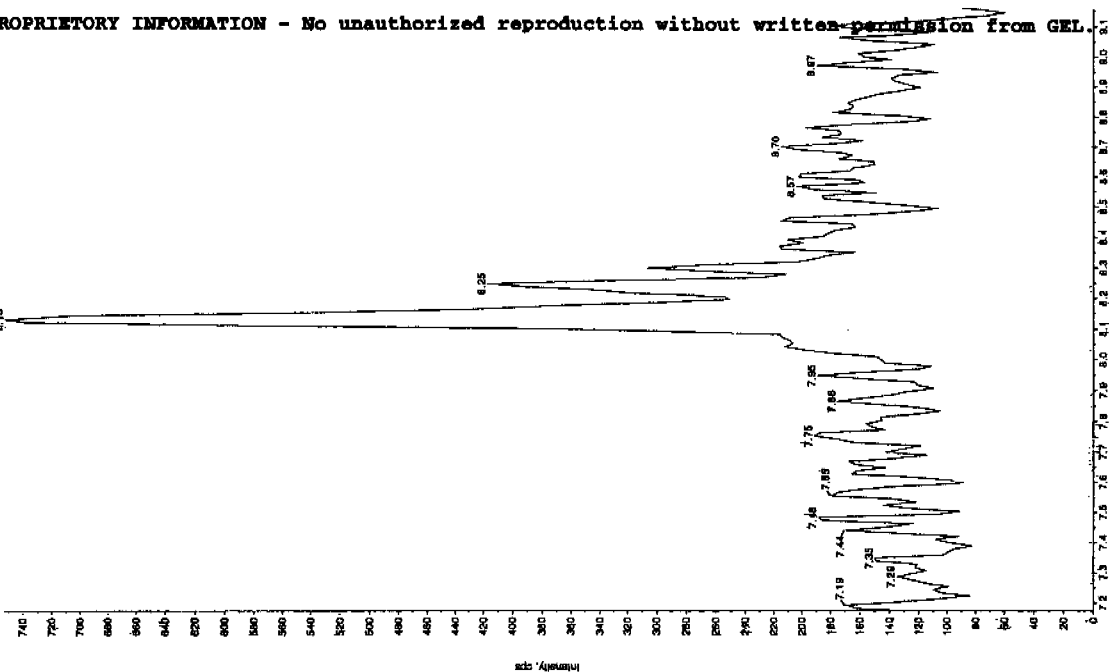
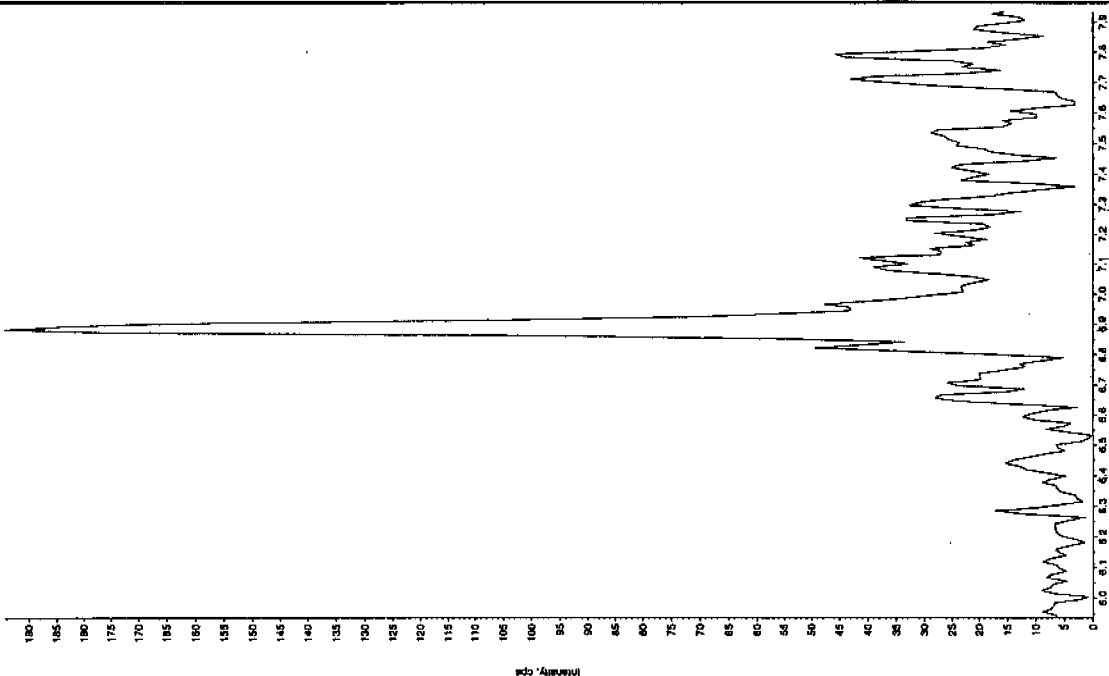
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 3/16/2010

Acq. Time: 2:34:37 PM

Modified: No

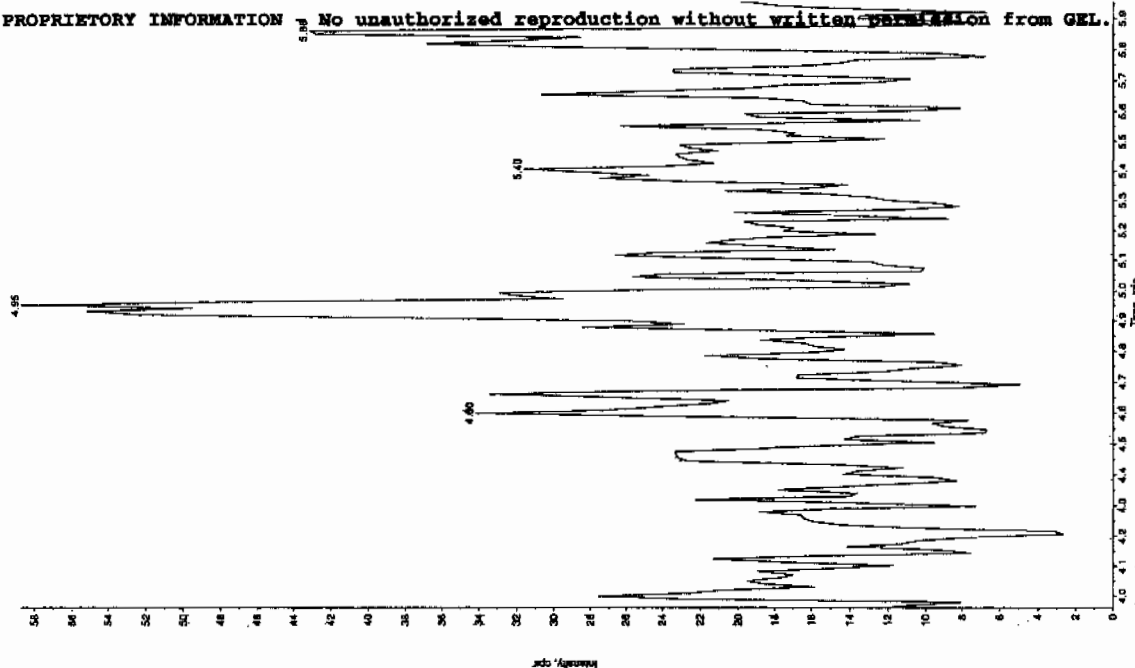


Run 03/16/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

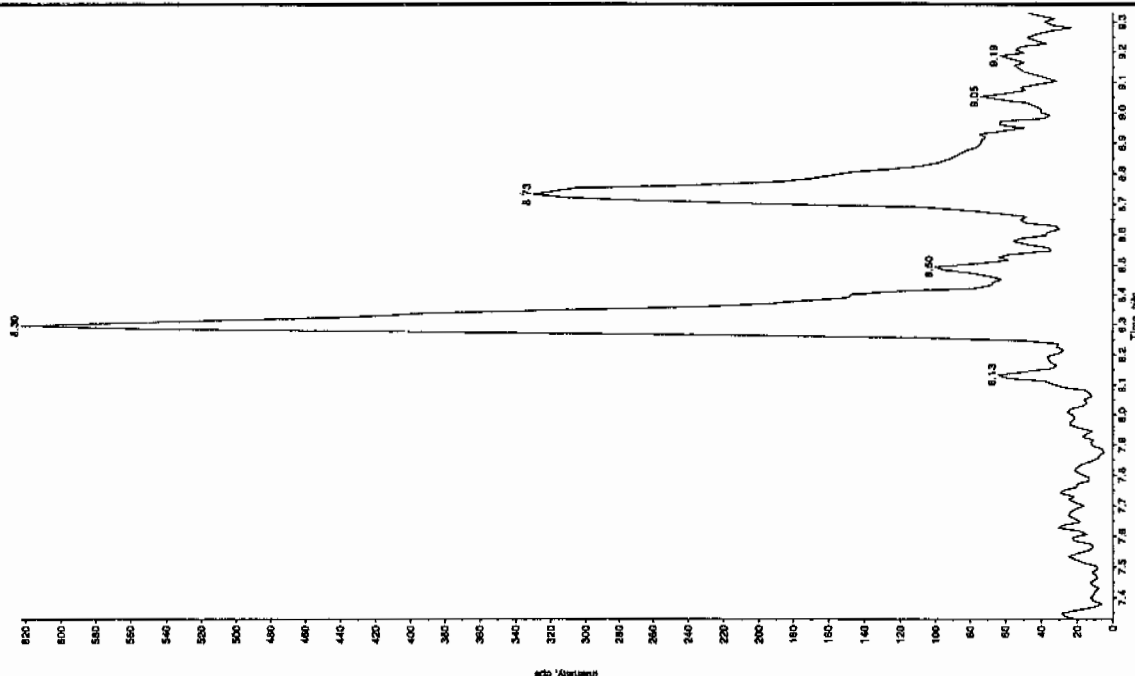
Sample Name: "XIBLK04" Sample ID: "11111" File: "EXS03160025.wml"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.0465.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:34:37 PM
 Modified: No



Sample Name: "XIBLK04" Sample ID: "11111" File: "EXS03160025.wml"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

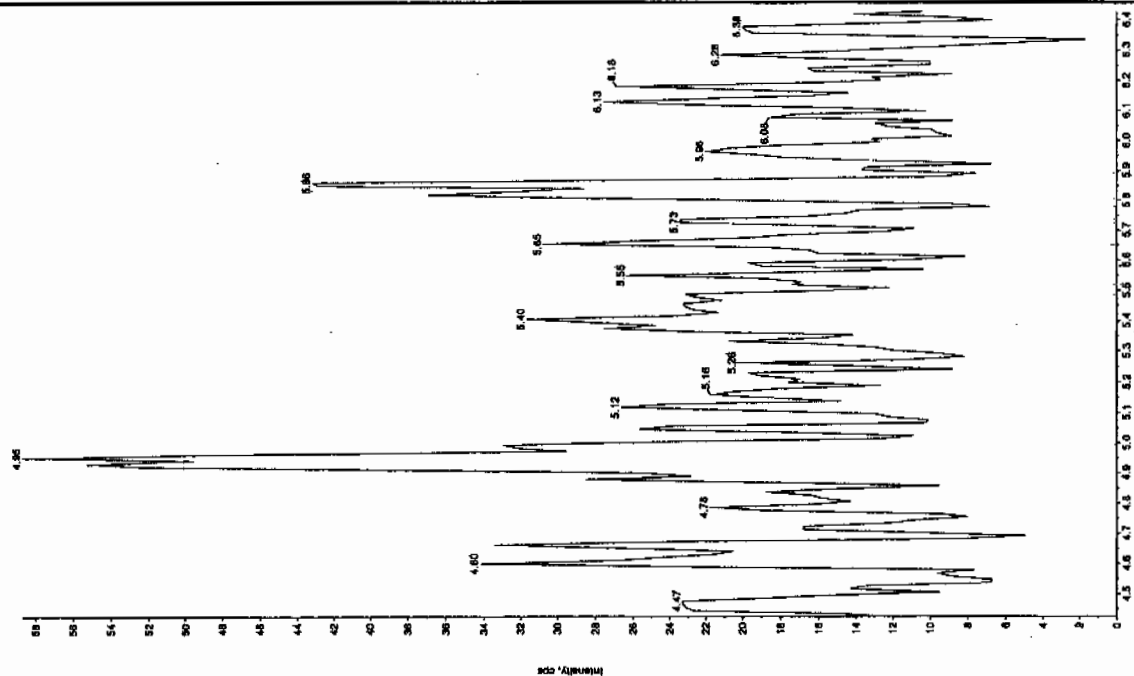
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:34:37 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLKGA" Sample ID: "11LER" File: "EX50316025.wif"
 Peak Name: "iso-crotyl phosphate" Mass(es): "359.161.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No Intercept
 Acq. Date: 3/16/2010
 Acq. Time: 2:34:37 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention time: 10.9 min
 Noise: 6.30e+004 counts
 Height: 10492.743 cps
 Start Time: 10.8 min
 End Time: 11.0 min



Sample Name: "XBLKGA" Sample ID: "11LER" File: "EX50316025.wif"
 Peak Name: "iso-crotyl phosphate" Mass(es): "359.161.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:34:37 PM
 Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 16-MAR-10 21:23

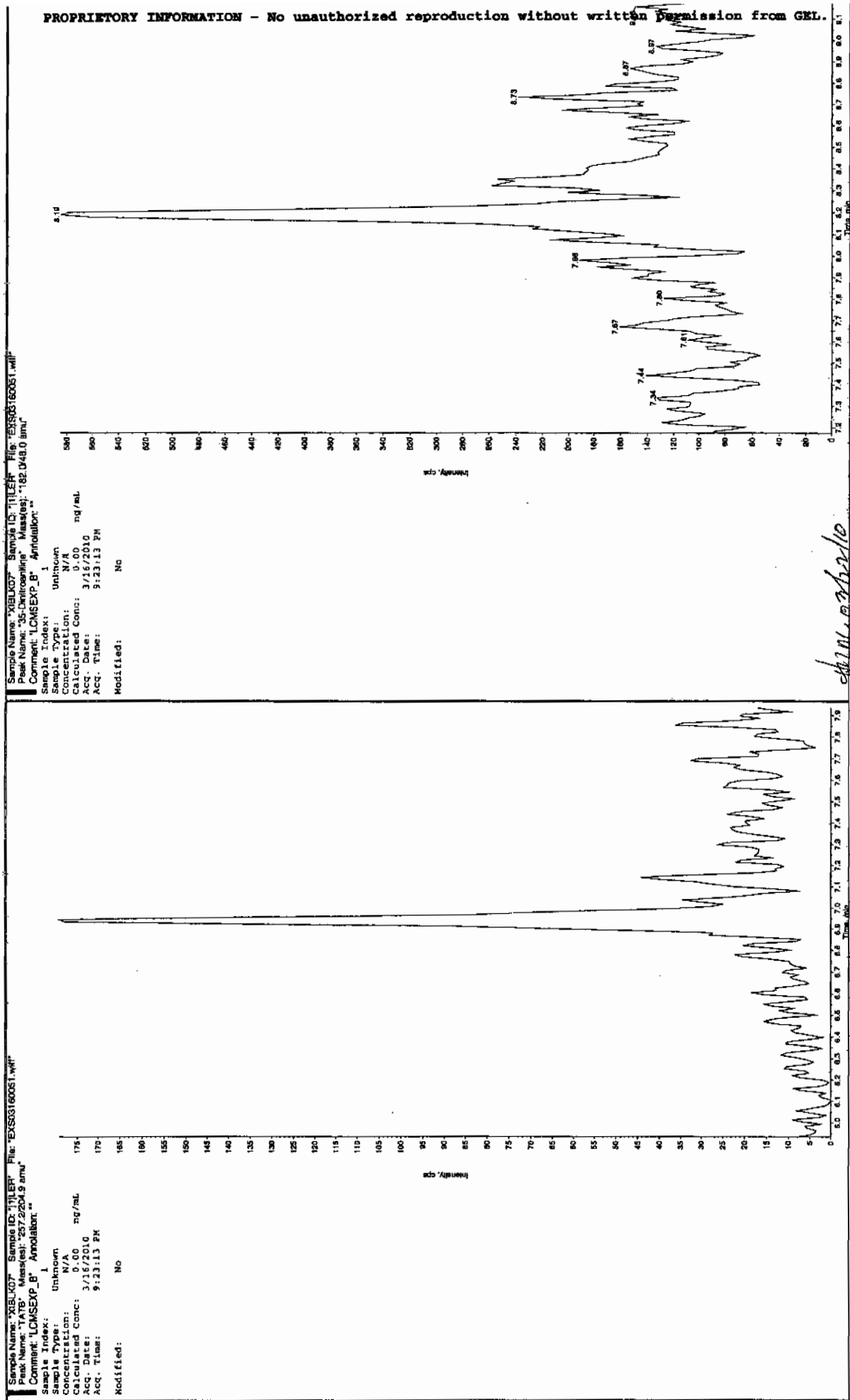
GEL Data File: EXS03160051.wiff

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 31/8/10

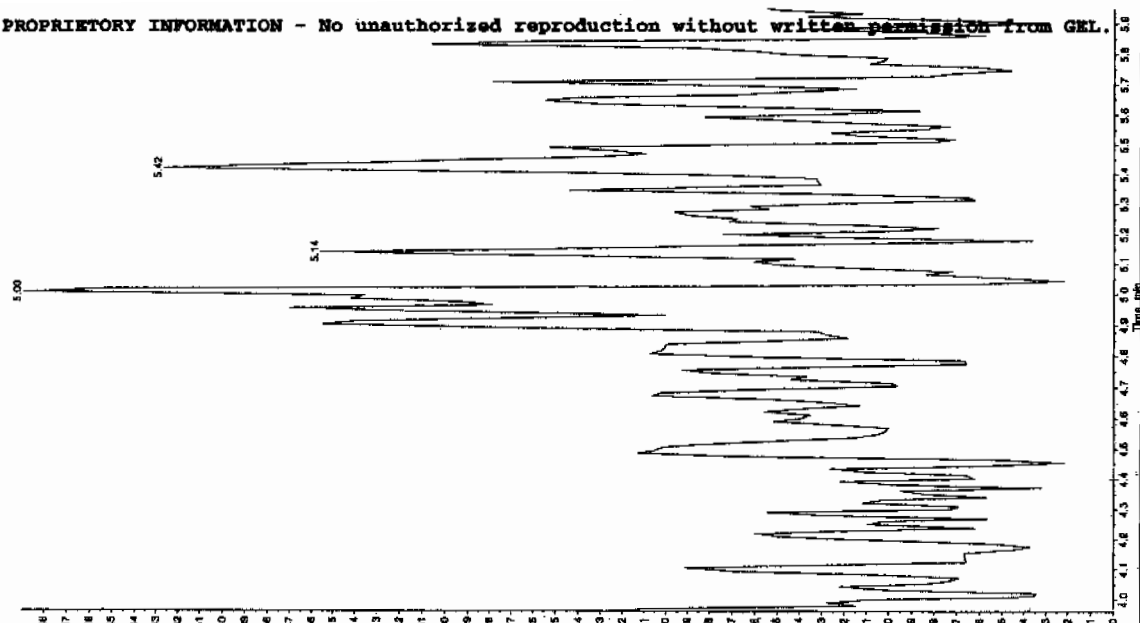


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK07" Sample ID: "111ER" File: "EXS03160031.wiff"
 Peak Name: "25-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/18/2010
 Acq. Time: 3:23:13 PM
 Modified: No

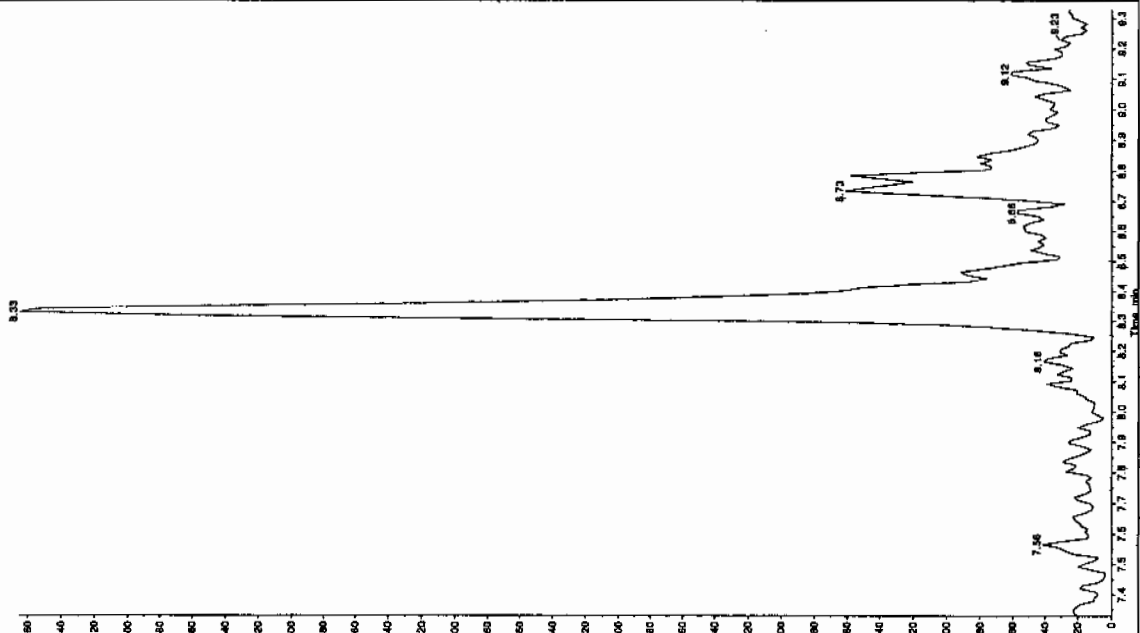
Intensity, cps



Sample Name: "XBLK07" Sample ID: "111ER" File: "EXS03160031.wiff"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.17151.9 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/18/2010
 Acq. Time: 3:23:13 PM
 Modified: No

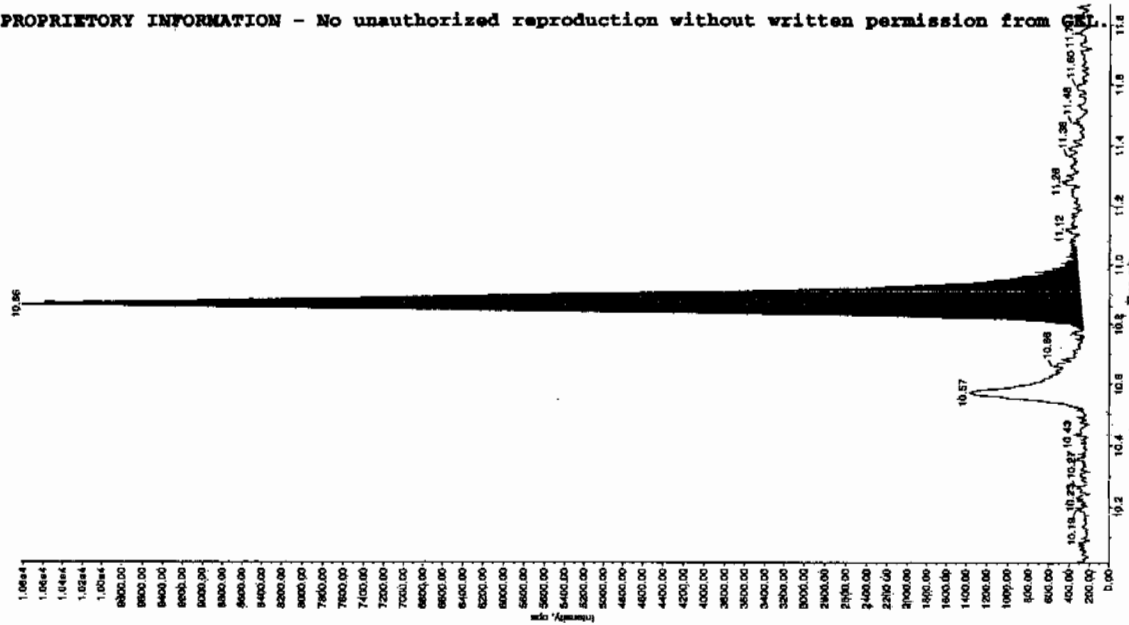
Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

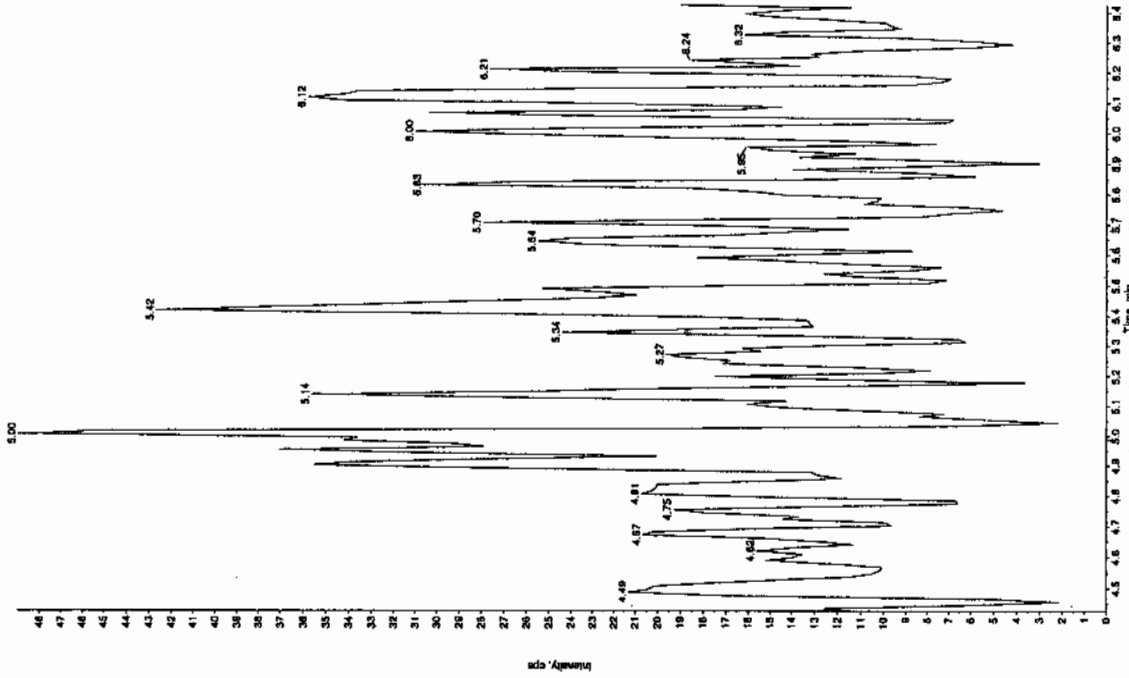
Sample Name: "XBLK07" Sample ID: "TLER" File: "EX03160051.wif"
 Peak Name: "tris-(p-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
 Comment: "LQMSXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No. 0.00
 Acq. Date: 3/16/2010
 Acq. Time: 9:23:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.17e+004 counts
 Height: 10536.640 cps
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: "XBLK07" Sample ID: "TLER" File: "EX03160051.wif"
 Peak Name: "tris-(p-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
 Comment: "LQMSXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No. 0.00
 Acq. Date: 3/16/2010
 Acq. Time: 9:23:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.17e+004 counts
 Height: 10536.640 cps
 Start Time: 10.8 min
 End Time: 11.1 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LQMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 17-MAR-10 00:31

GEL Data File: EXS03160063.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0

01/10/10
J. J. J.

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: 8321A-Modified LCMSMS#4

Peak Name: 8321A-Modified LCMSMS#4

Comment: LCMSMS#4

Sample Index: 1

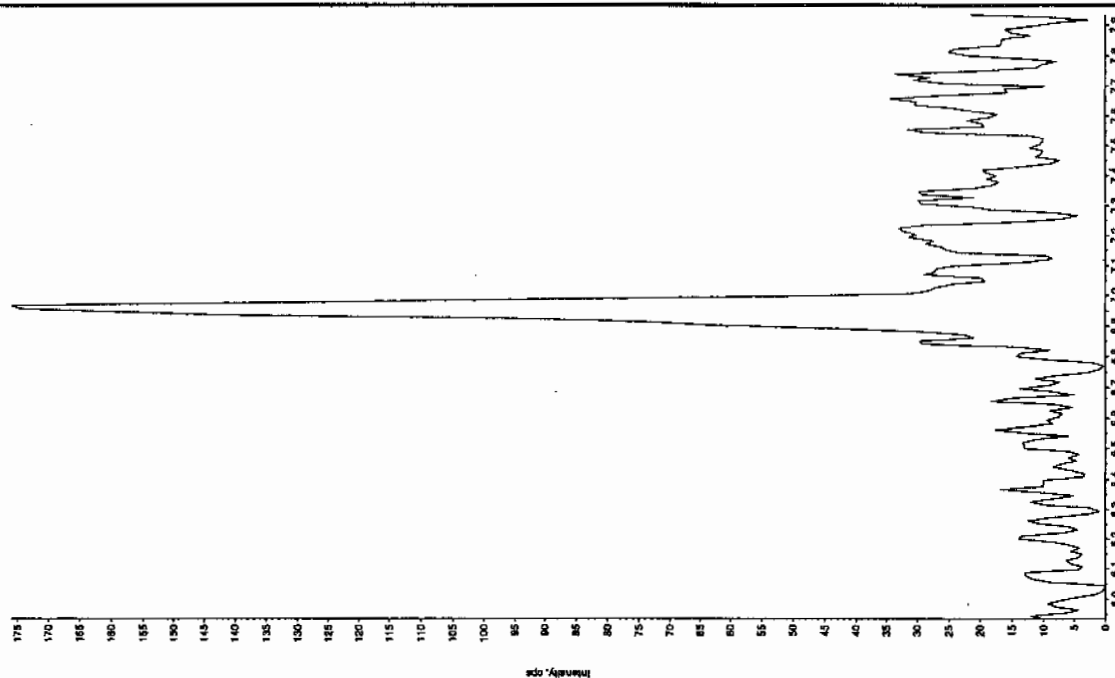
Sample Name: 8321A-Modified LCMSMS#4

Concentration: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 12:31:46 AM

Modified: No



Sample Name: 8321A-Modified LCMSMS#4

Peak Name: 8321A-Modified LCMSMS#4

Comment: LCMSMS#4

Sample Index: 1

Sample Name: 8321A-Modified LCMSMS#4

Concentration: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 12:31:46 AM

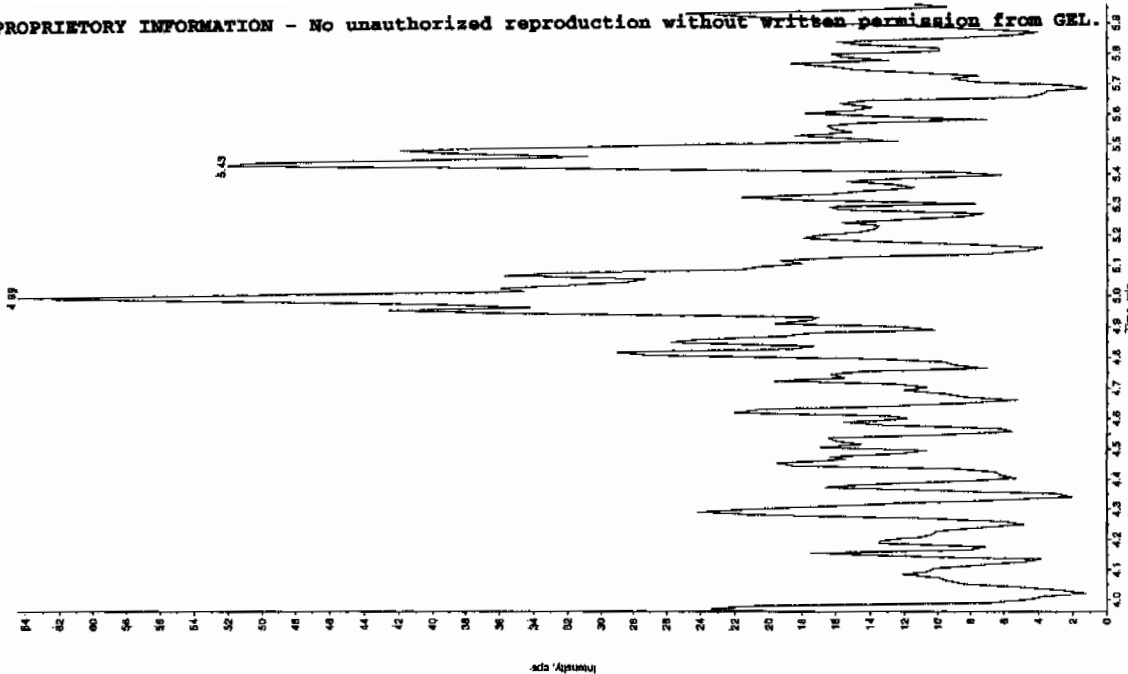
Modified: No

03/22/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

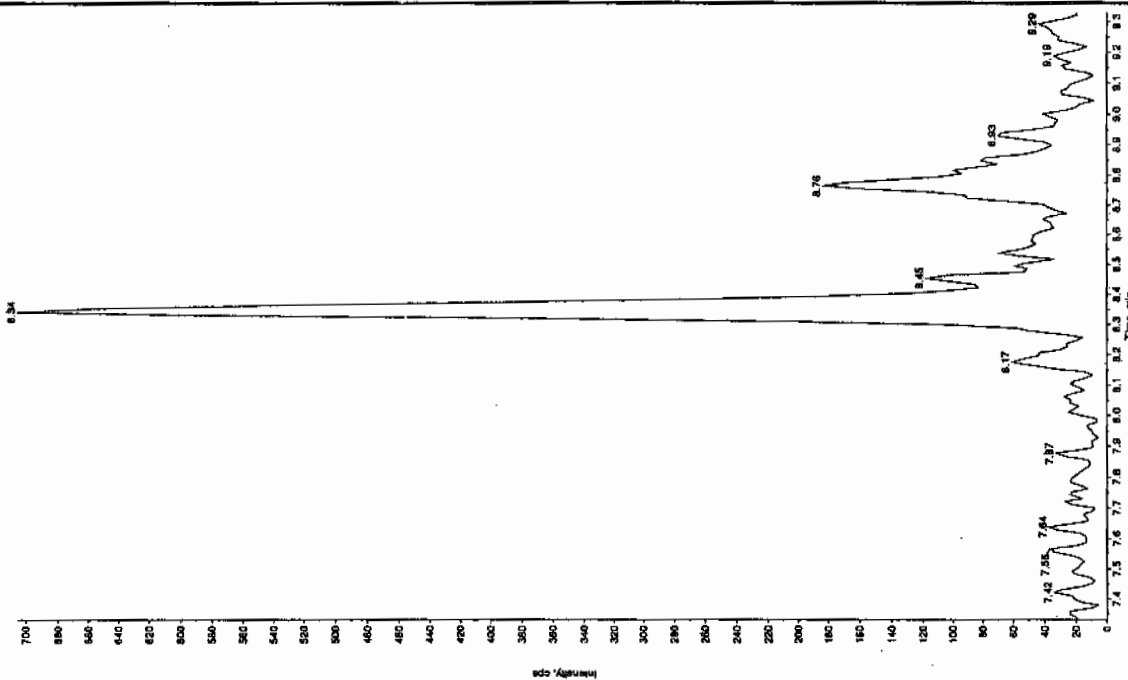
Sample Name: "XIBLK08" Sample ID: "JULER" File: "EX50316003.will"
 Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:31:16 AM
 Modified: No



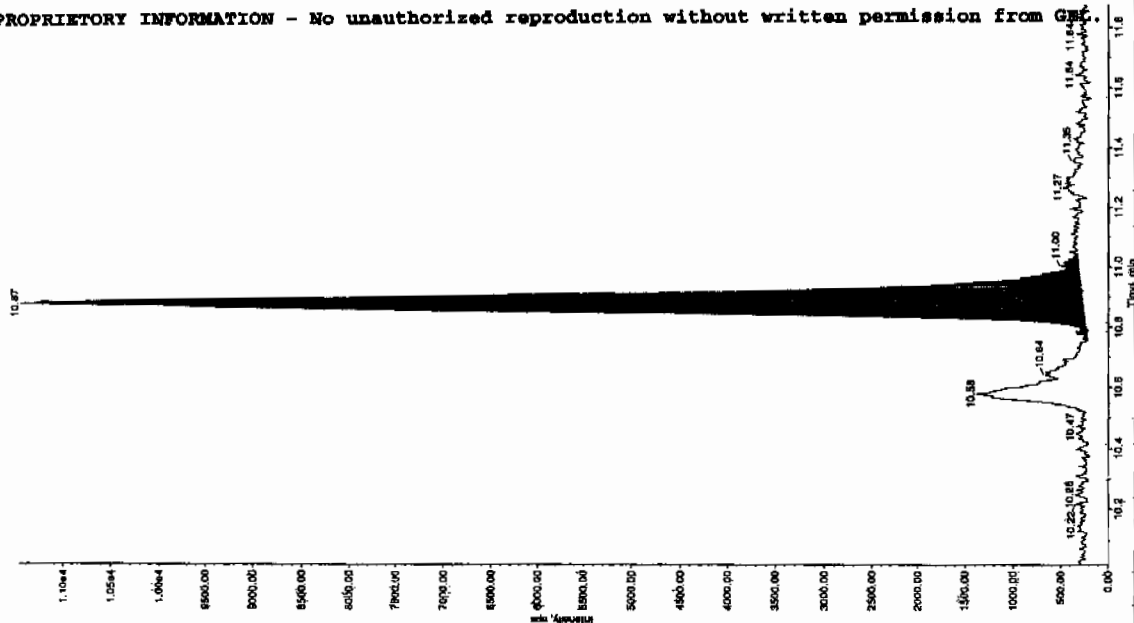
Sample Name: "XIBLK08" Sample ID: "JULER" File: "EX50316003.will"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17518 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:31:16 AM
 Modified: No



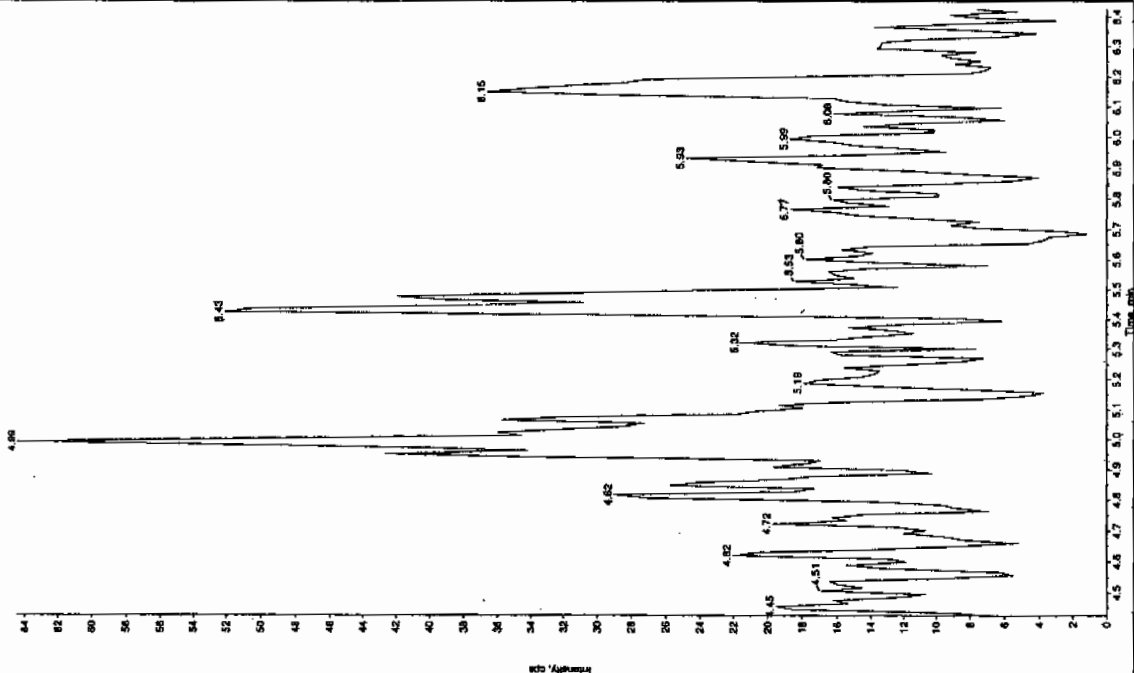
Sample Name: "XIBLK08" Sample ID: "11LEP" File: "EX503160083.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.1/51.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No Intercept
 Acq. Date: 3/17/2010
 Acq. Time: 12:31:46 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Resolution: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.54e+004 counts
 Height: 11211.111 cps
 Start Time: 10.8 min
 End Time: 11.0 min



Sample Name: "XIBLK08" Sample ID: "11LEP" File: "EX503160083.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:31:46 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 17-MAR-10 03:55

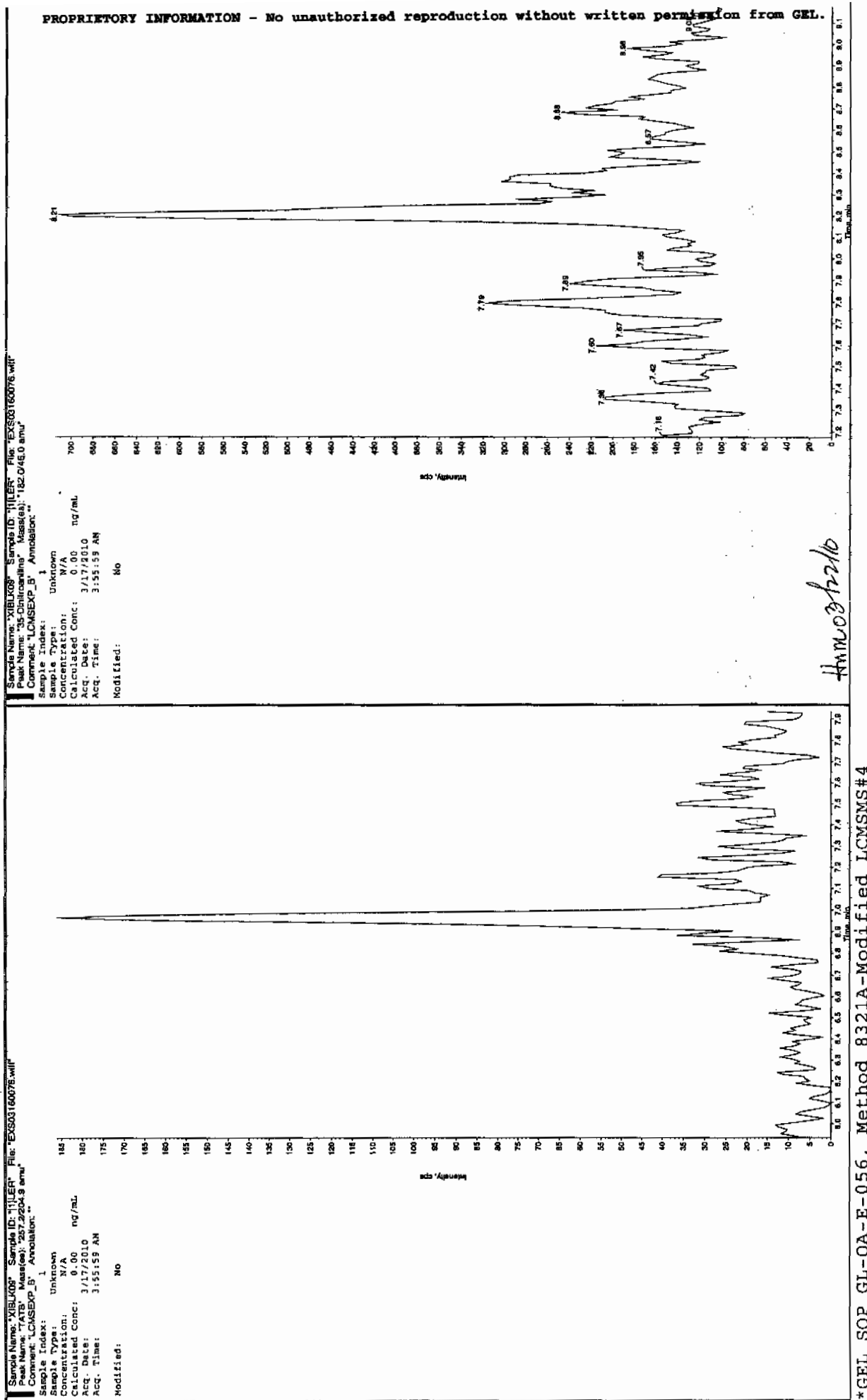
GEL Data File: EXS03160076.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

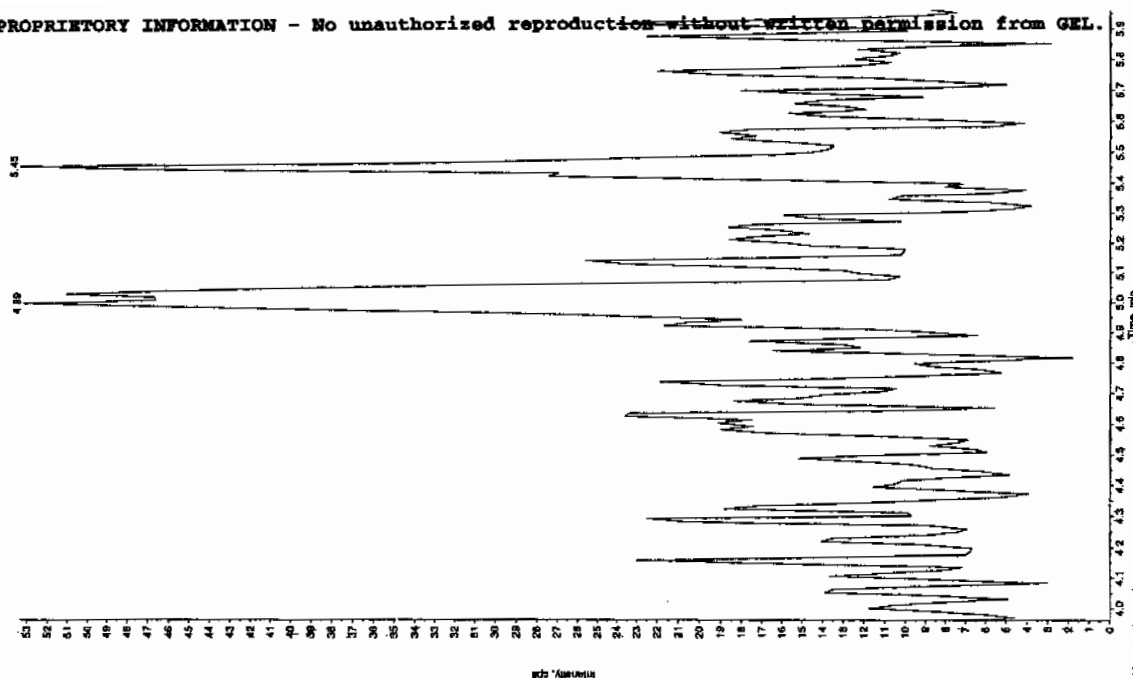
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 31/19/10



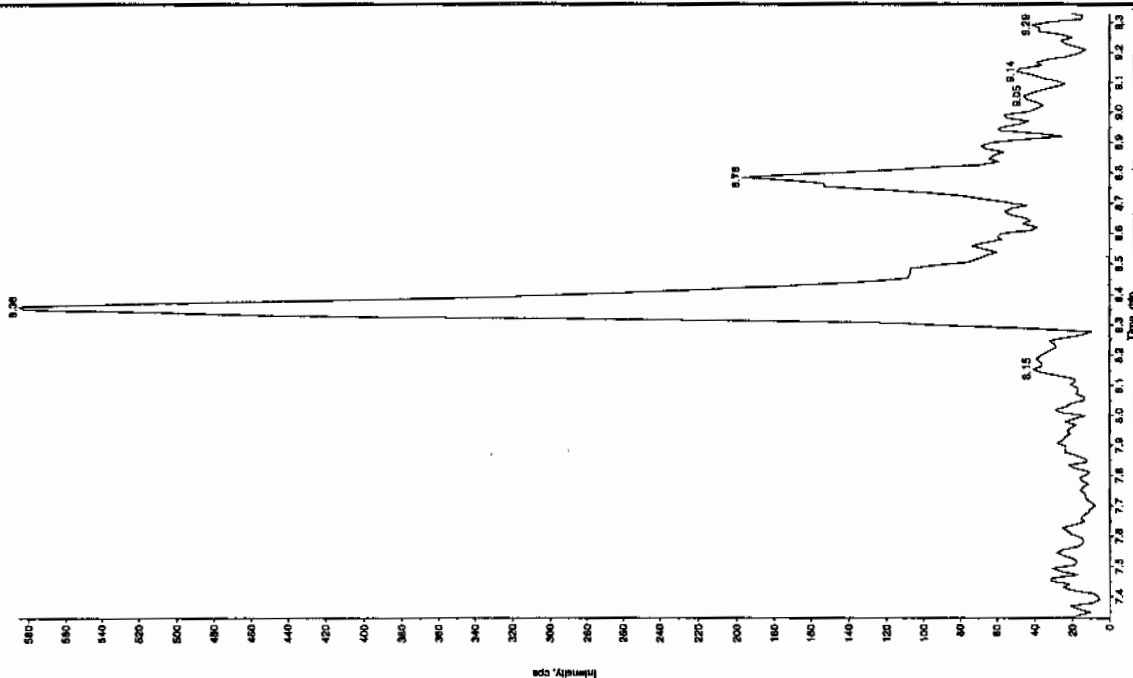
Sample Name: "XBLK09" Sample ID: "11LEF" File: "EX503160076.wiff"
 Peak Name: "25-Diamino-4-nitrochlorine" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:55:59 AM
 Modified: No



Sample Name: "XBLK09" Sample ID: "11LEF" File: "EX503160076.wiff"
 Peak Name: "34-Dinitrochlorine" Mass(es): "182.1451.9 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:55:59 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK09" Sample ID: "11111" File: "EX503160076.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "369.191.9 amu"
 Comment: "LCMSXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Calculated Conc: No Tracer

Acq. Date: 3/17/2010

Acq. Time: 3:55:59 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 8000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

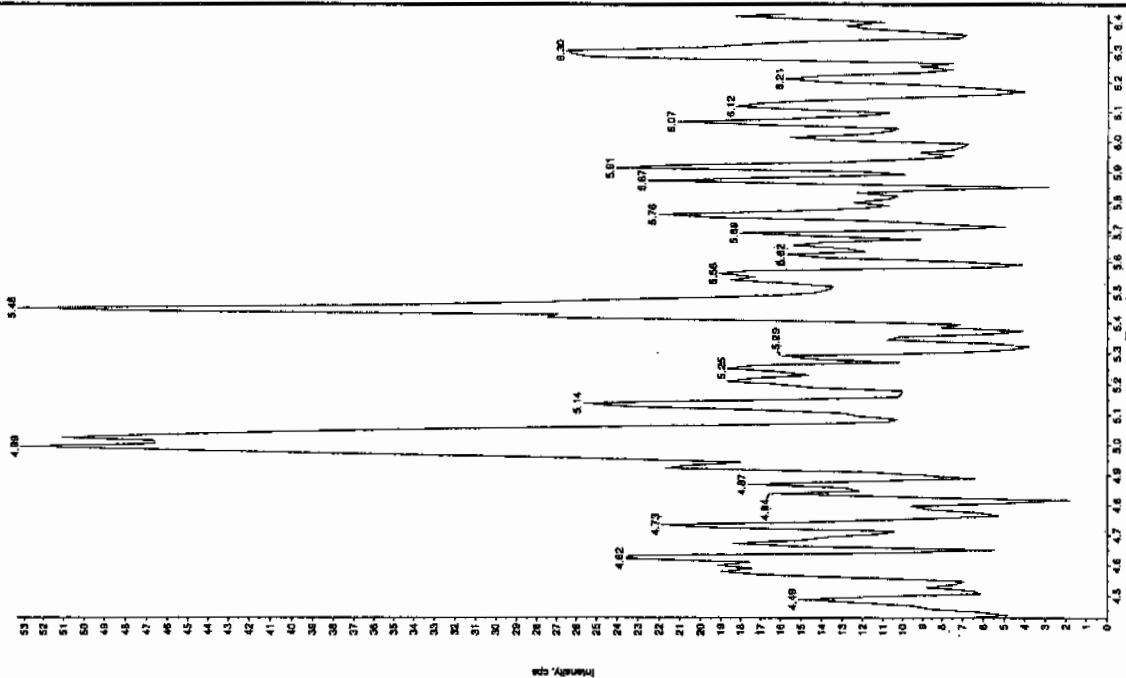
Retention Time: 10.9 min

Area: 4.28e+004 counts

Height: 10545.054 cps

Start Time: 10.8 min

End Time: 11.1 min



Sample Name: "XBLK09" Sample ID: "11111" File: "EX503160076.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "369.191.9 amu"
 Comment: "LCMSXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 3:55:59 AM

Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 17-MAR-10 07:20

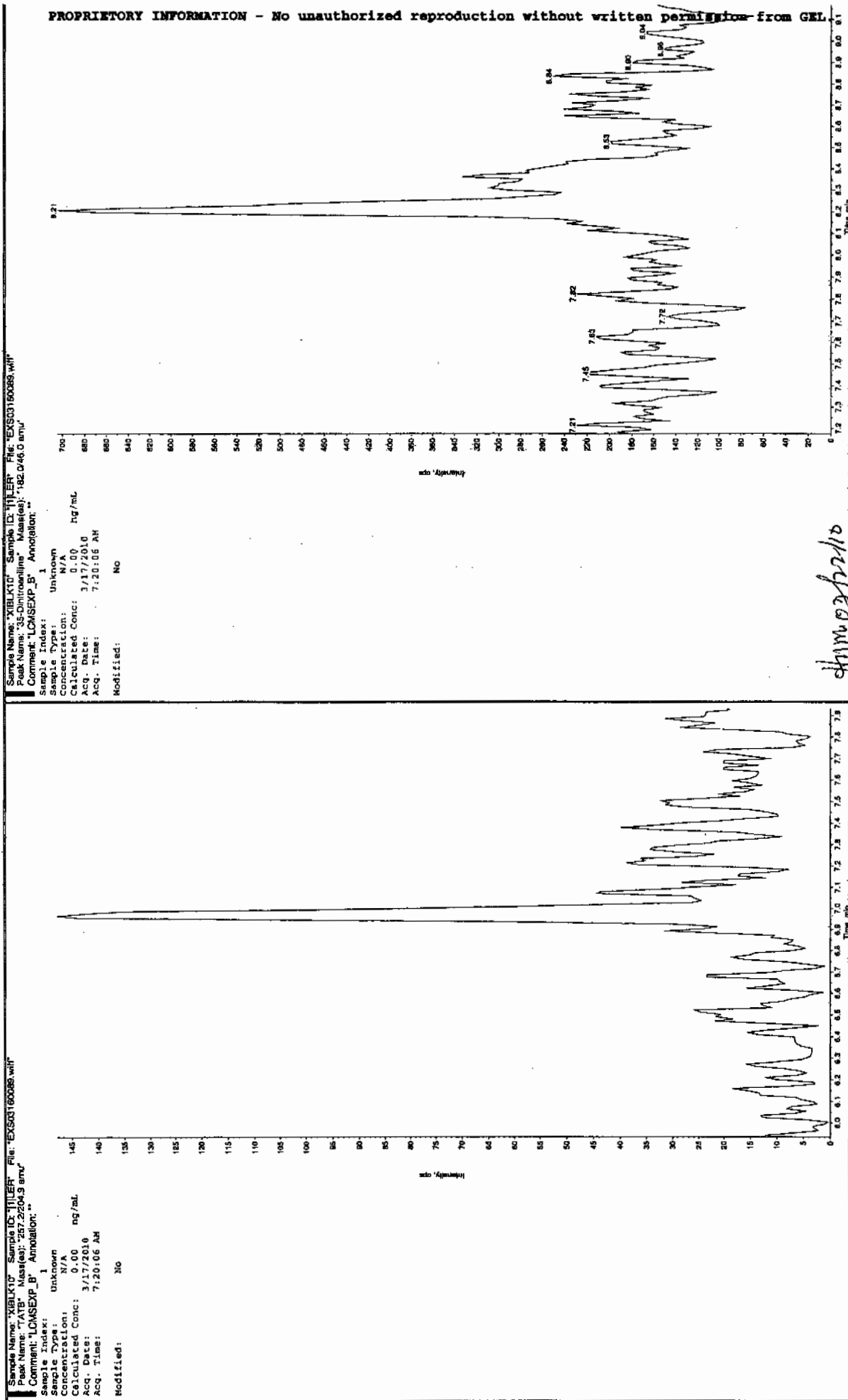
GEL Data File: EXS03160089.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Ken 2/19/10

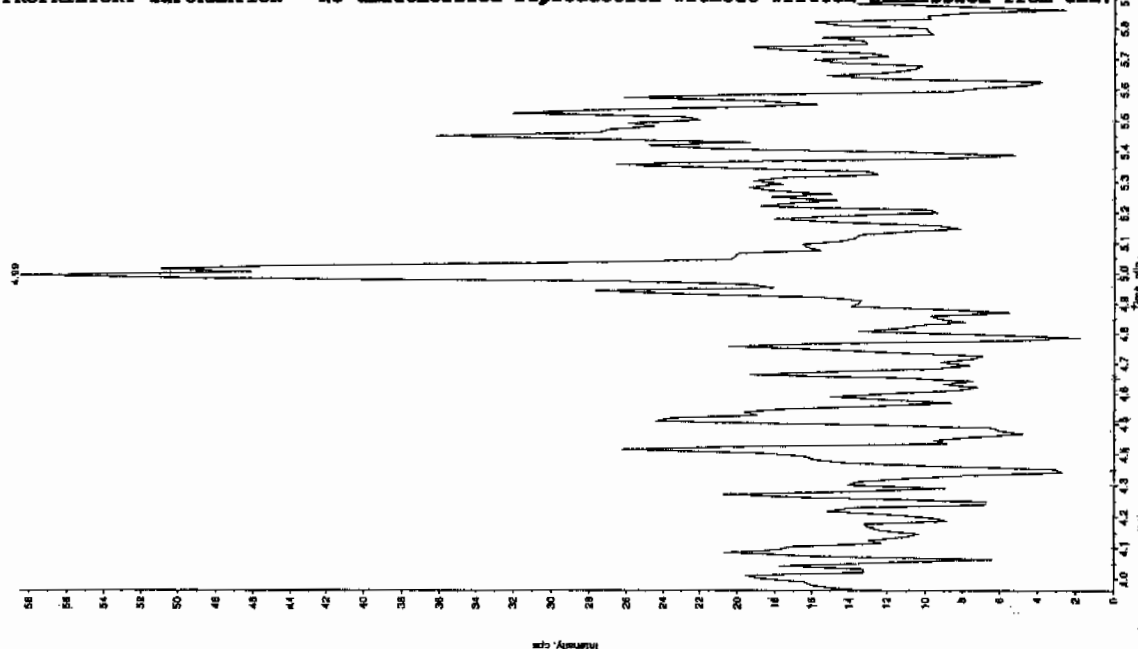


chm02/22/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

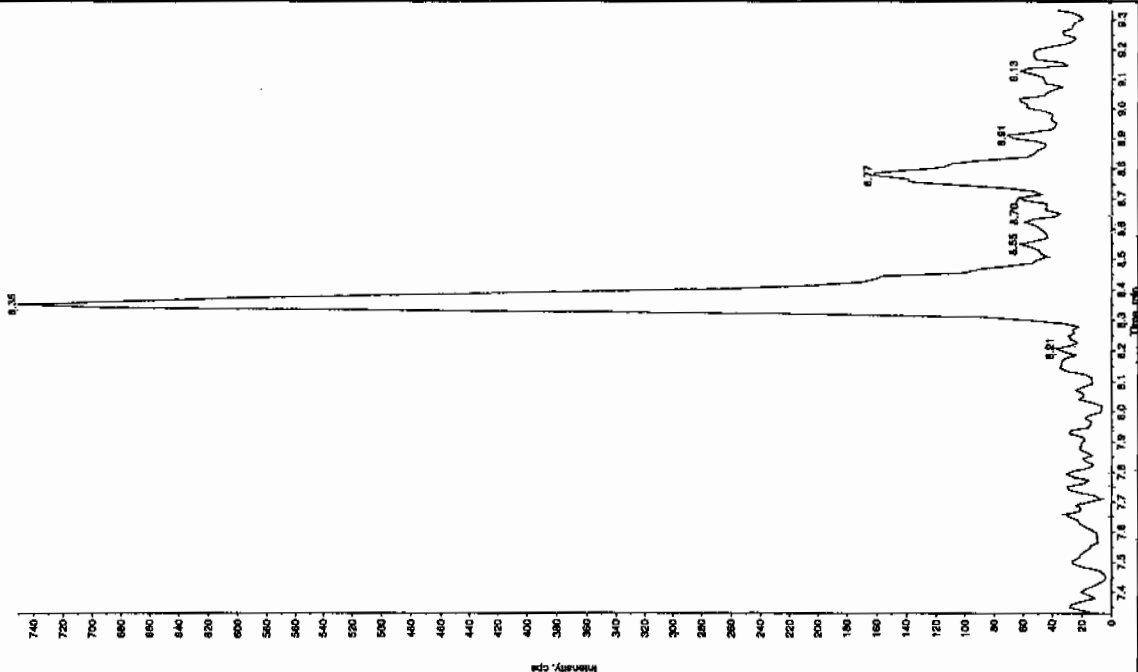
Sample Name: "XIBLK10" Sample ID: "1111ER" File: "EX503160089.wiff"
 Peak Name: "26-Diamino-4-nitrophenol" Mass(es): "166.0/168.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:20:06 AM
 Modified: No



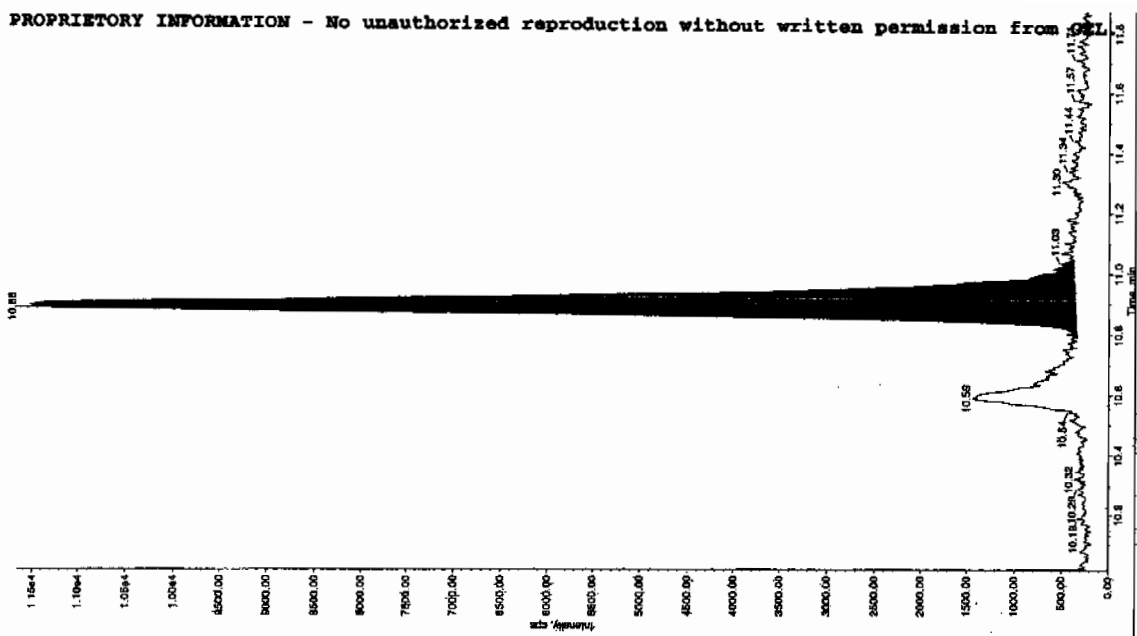
Sample Name: "XIBLK10" Sample ID: "1111ER" File: "EX503160089.wiff"
 Peak Name: "34-Dinitrophenol" Mass(es): "182.1/181.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:20:06 AM
 Modified: No



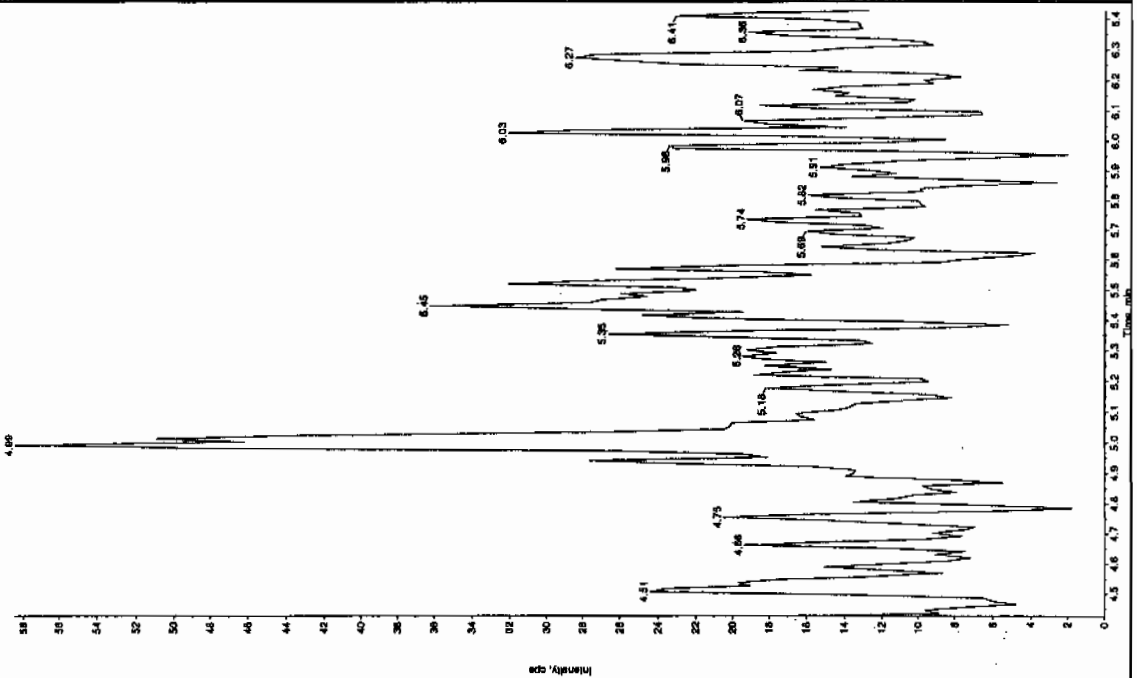
Sample Name: "XBLK10" Sample ID: "11LER" File: "EXS03150089.wif"
 Peak Name: "bis(2-oxo-2-phenyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Collected Conc: 3/17/2010
 Acq. Date: 7:20:06 AM
 Acq. Time: 7:20:06 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.88e+004 counts
 Height: 11313.847 cps
 Start Time: 10.8 min
 End Time: 11.0 min



Sample Name: "XBLK10" Sample ID: "11LER" File: "EXS03150089.wif"
 Peak Name: "24-Diamino-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Collected Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:20:06 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 17-MAR-10 10:44

GEL Data File: EXS03160102.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

LCM 3/19/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Sample Name: "XIBLK11" Sample ID: "11LER" File: "EXS03160102.wht"

Peak Name: "35-Chloroaniline" Mass(es): "182.045 0 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 0.06 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 10:44:14 AM

Modified: No

Sample Name: "XIBLK11" Sample ID: "11LER" File: "EXS03160102.wht"

Peak Name: "TATB" Mass(es): "257.2204 9 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

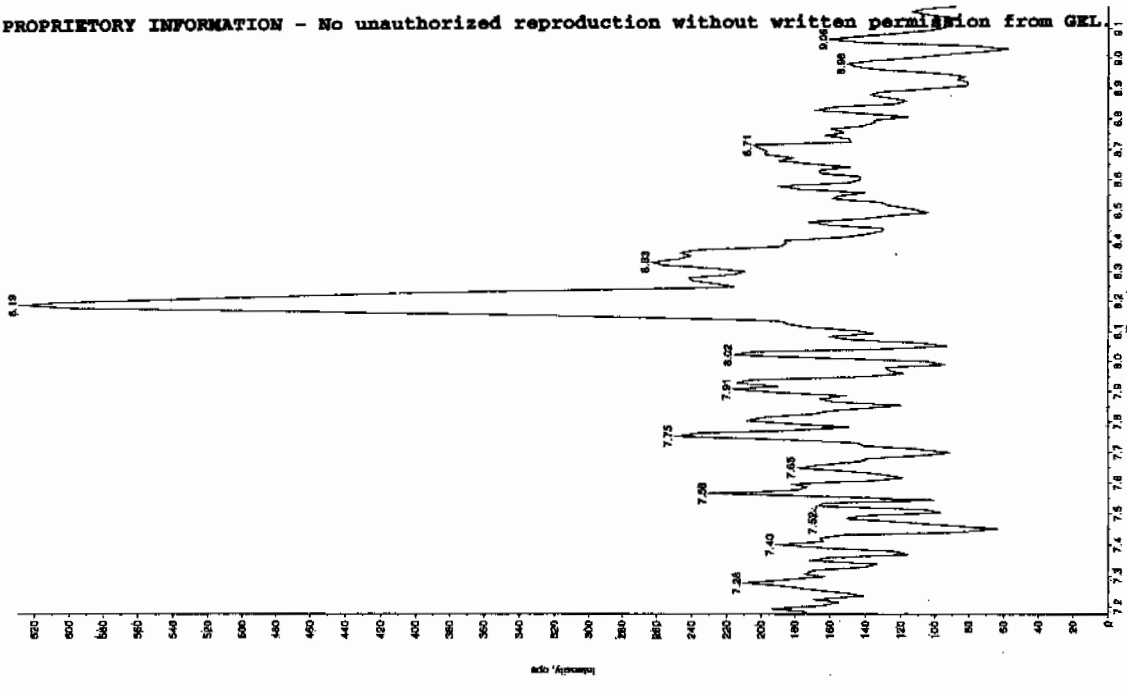
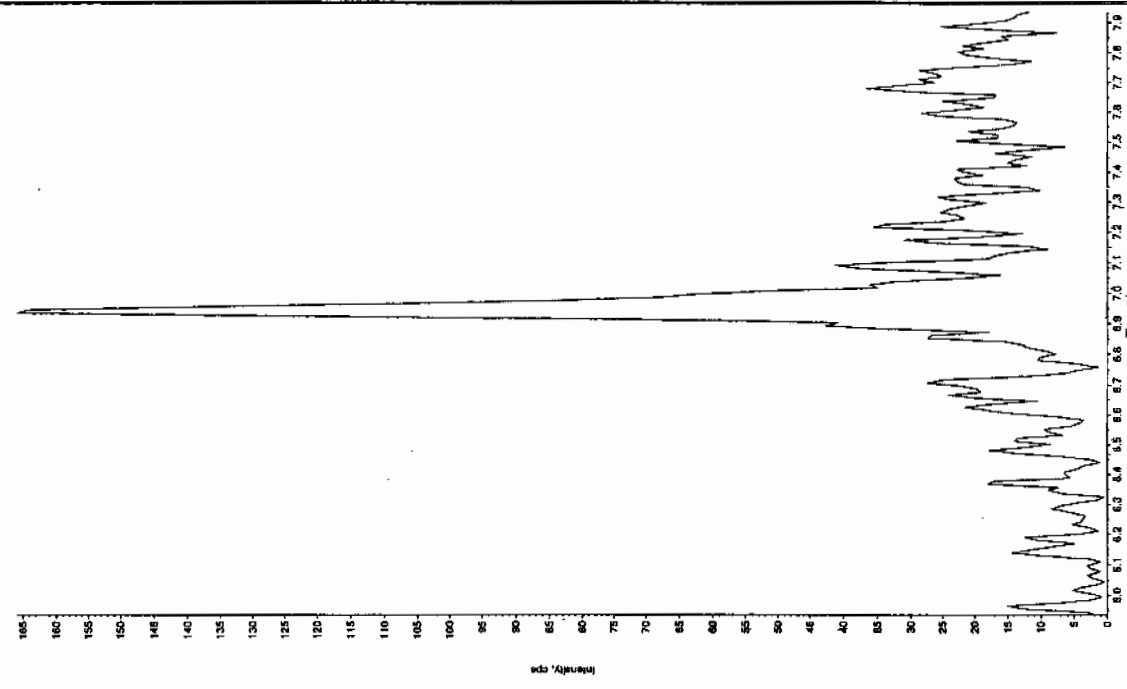
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 10:44:14 AM

Modified: No

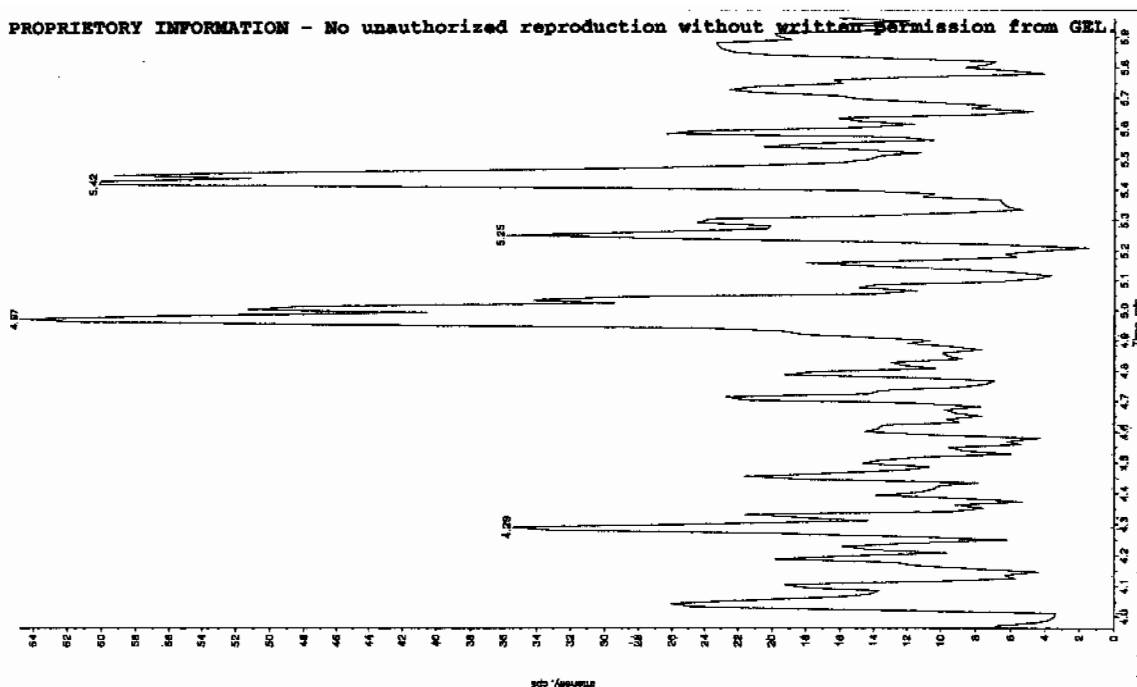


4mm 03/22/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

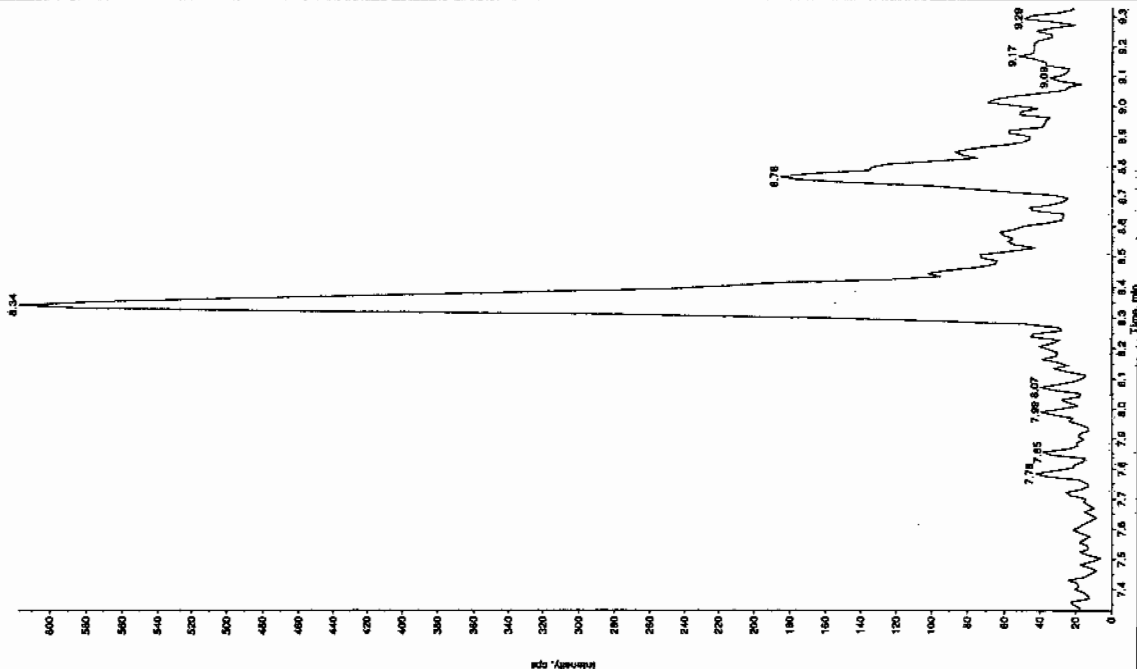
Sample Name: "XIBLK11" Sample ID: "JILER" File: "EX503160102.wi"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.0465.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:44:14 AM
 Modified: No



Sample Name: "XIBLK11" Sample ID: "JILER" File: "EX503160102.wi"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

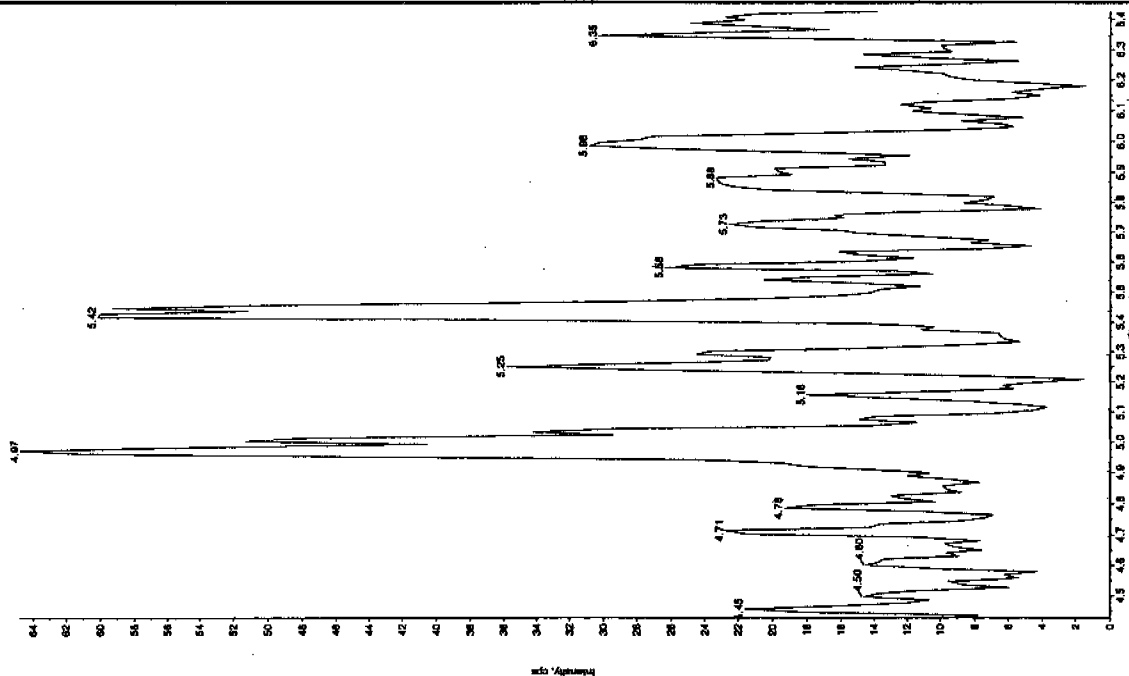
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:44:14 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK11" Sample ID: "JILLER" File: "EX03160102.wif"
 Peak Name: "1,2,4,5-tetrahydro-6-methyl-3-pyridinecarboxylic acid" Mass(es): "369.161.0 amu"
 Comment: "LCMEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: No Intercept
 Acq. Date: 3/17/2010
 Acq. Time: 10:44:14 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.75e+004 counts
 Height: 11242.225 cps
 Start Time: 10.8 min
 End Time: 11.0 min



Sample Name: "XBLK11" Sample ID: "JILLER" File: "EX03160102.wif"
 Peak Name: "24-Olefinic-6-nitrochloride" Mass(es): "186.046.0 amu"
 Comment: "LCMEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:44:14 AM
 Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2134

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 17-MAR-10 12:34

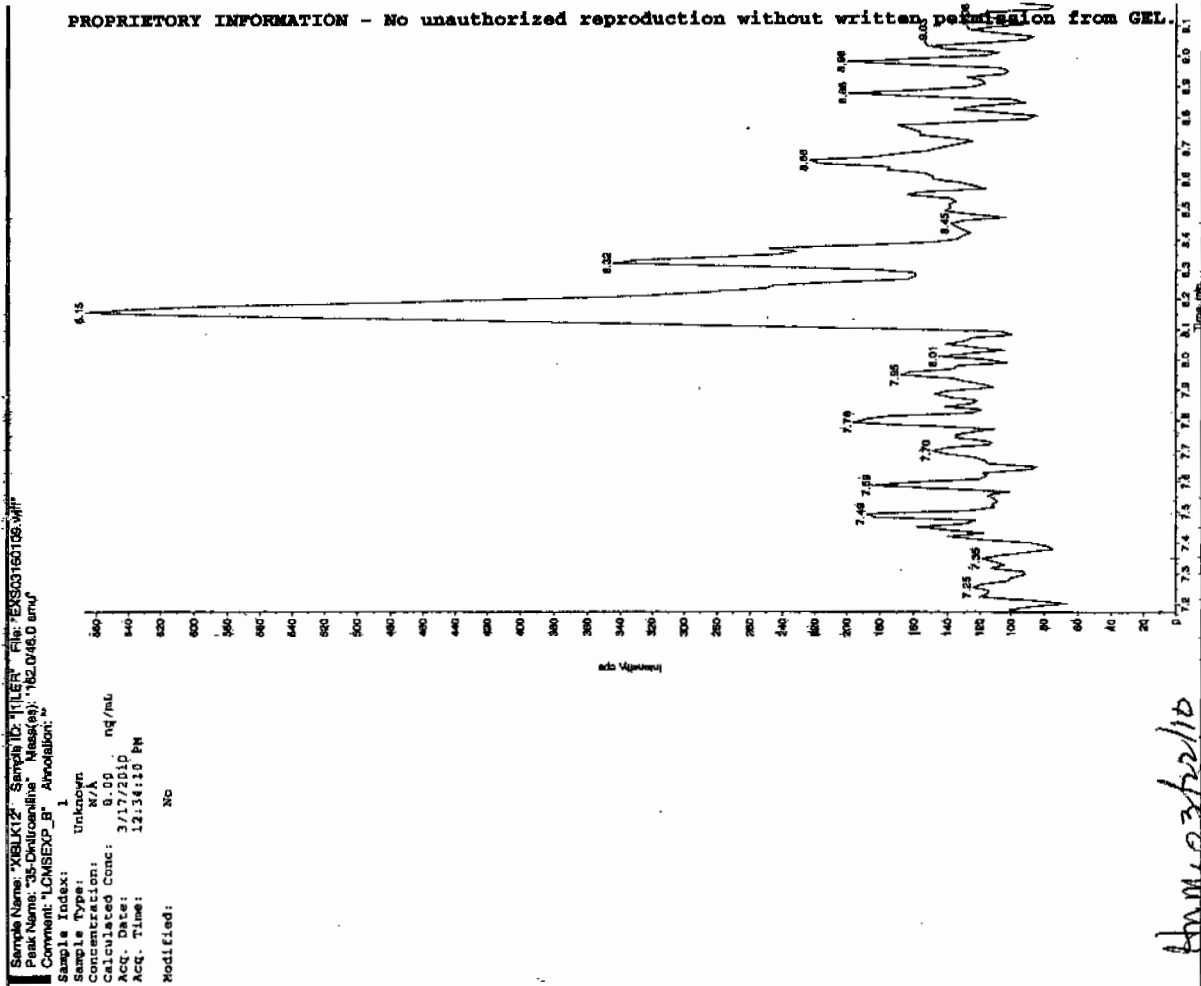
GEL Data File: EXS03160109.wiff

Instrument ID: LCMSMS

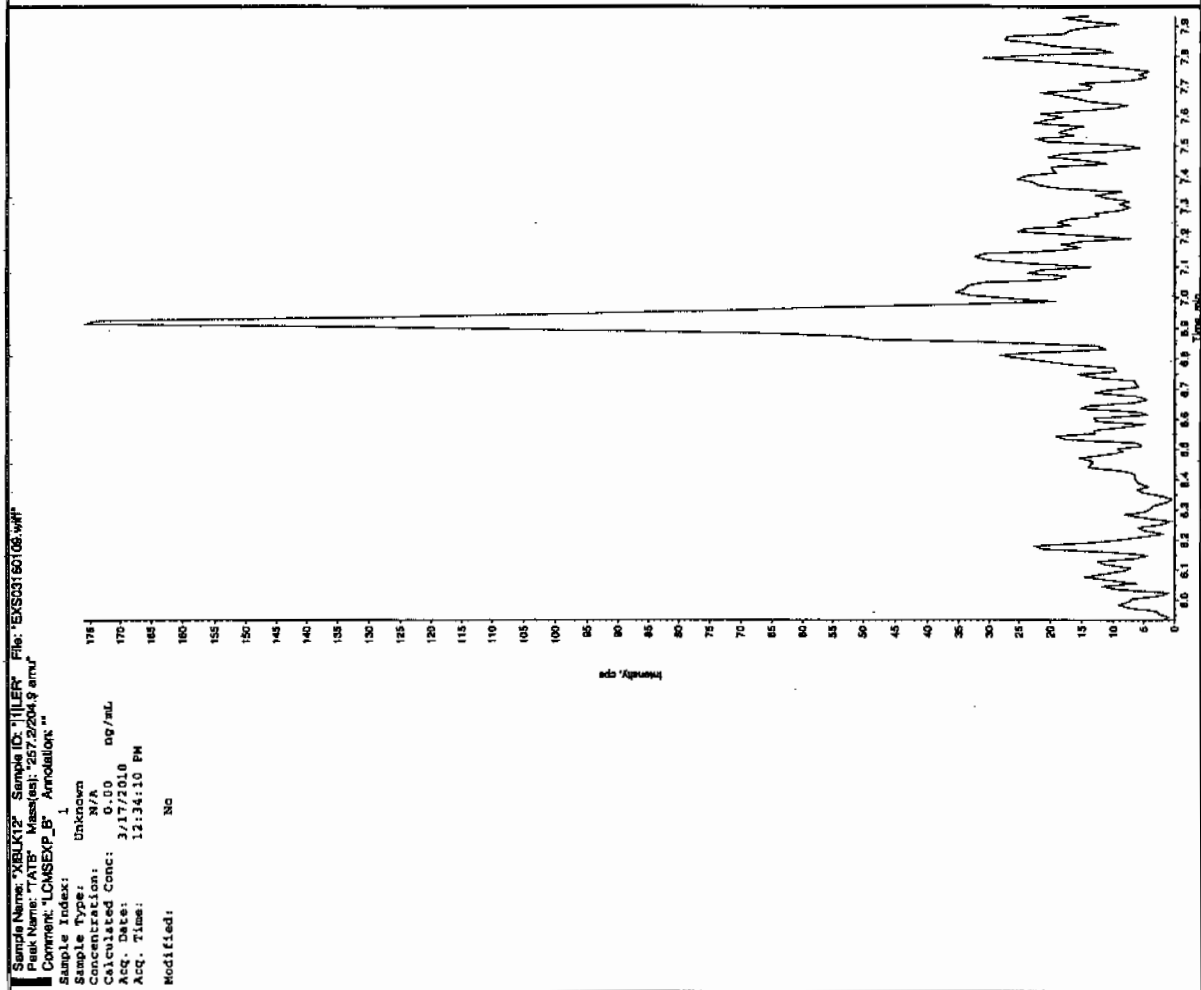
Column: Phenomenex Ultracarb 5u ODS(20)

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

Lat 3/19/10



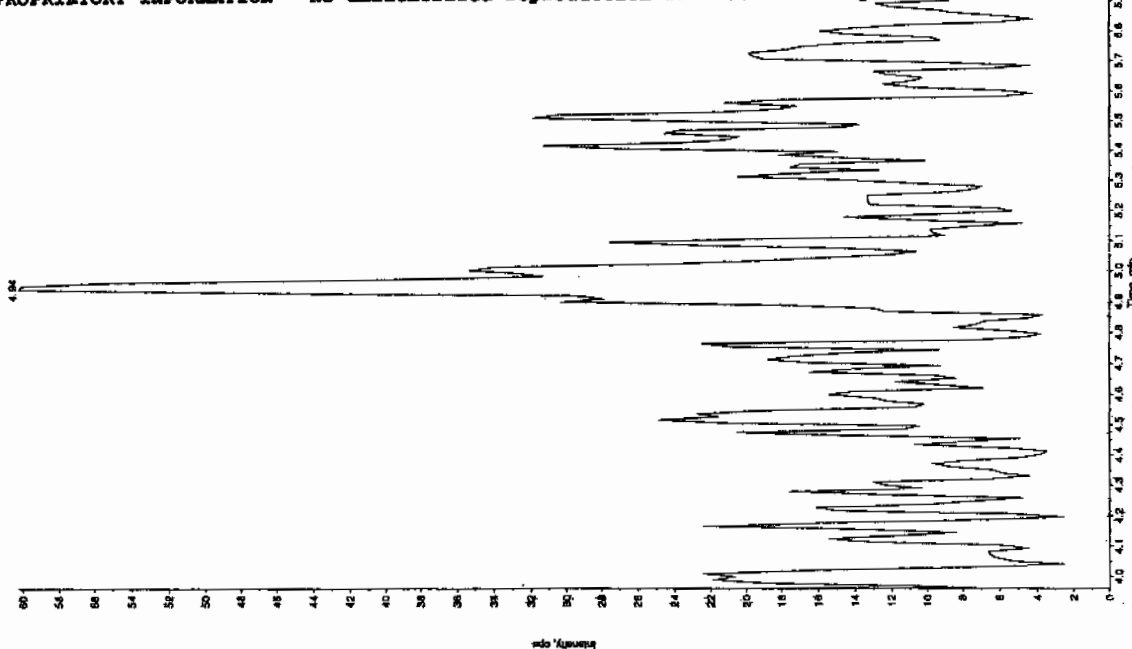
Lat 3/19/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

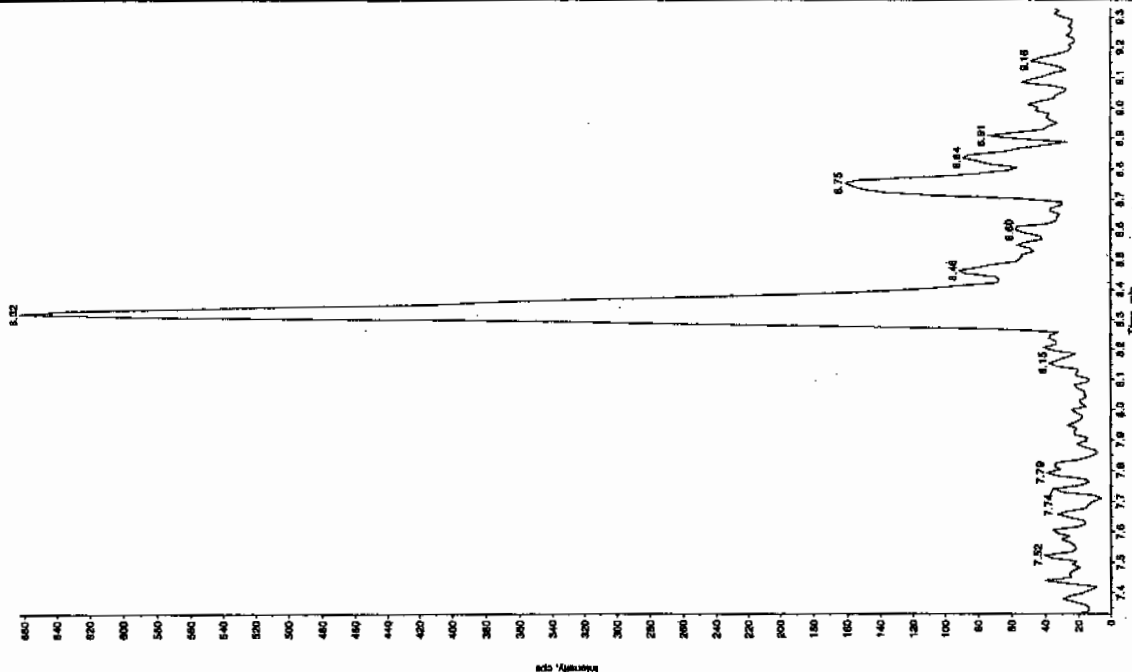
Sample Name: 'XIBLK12' Sample ID: '1111EP' File: 'EX553150109.wif'
 Peak Name: '25-Diamino-4-nitrophenol' Mass(es): '195.0/196.0 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:34:10 PM
 Modified: No



Sample Name: 'XIBLK12' Sample ID: '1111EP' File: 'EX553150109.wif'
 Peak Name: '25-Diamino-4-nitrophenol' Mass(es): '195.0/196.0 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

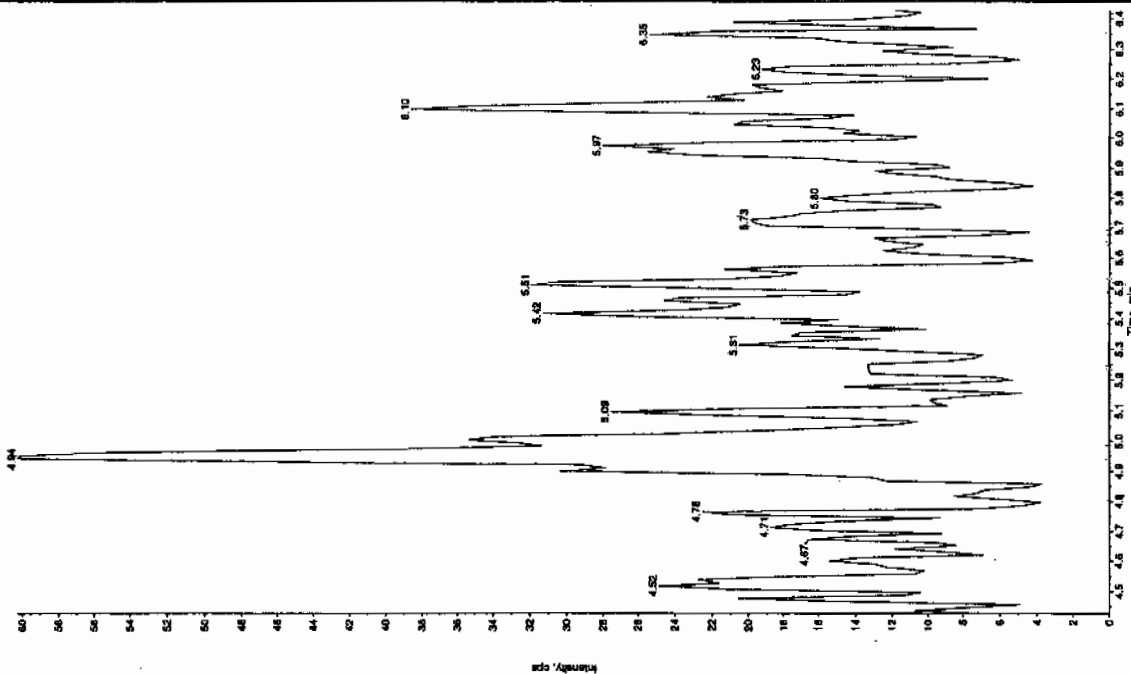
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:34:10 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

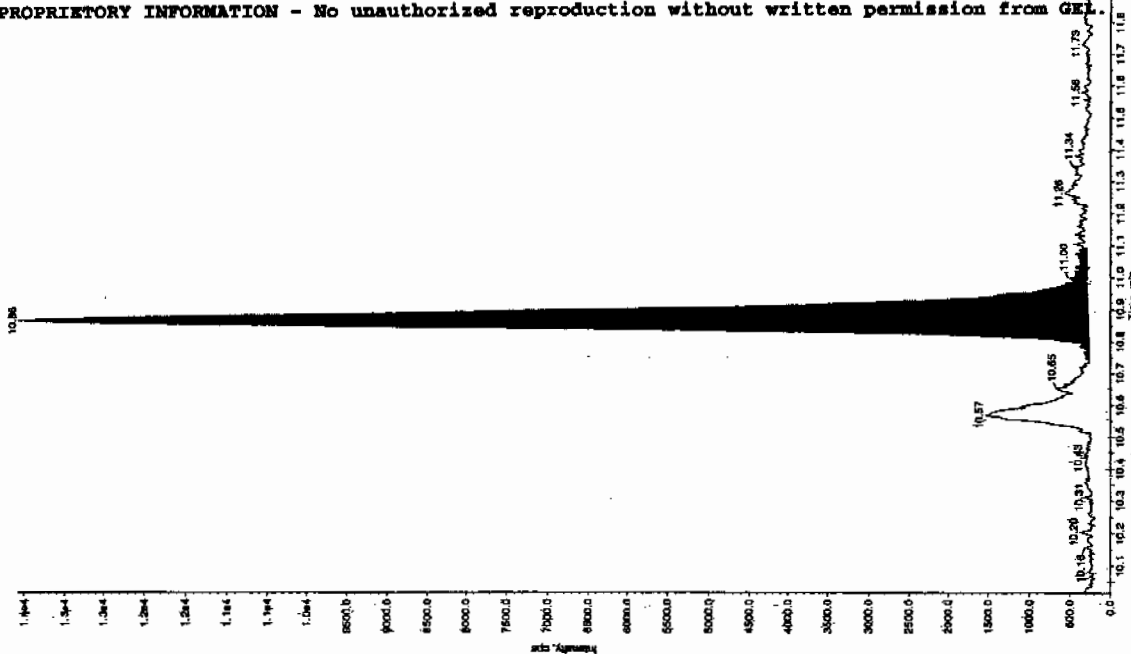
Sample Name: YBLK12 Sample ID: HILF File: EXS0150128.wiff
Peak Name: "24-Deoxy-6-epiandrosterone" Multiplier: 165.046.0 nm
Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Acq. Date: 3/17/2010
Acq. Time: 12:34:10 PM
Modified: No



Sample Name: YBLK12 Sample ID: HILF File: EXS0150128.wiff
Peak Name: "24-Deoxy-6-epiandrosterone" Multiplier: 355.191.0 gmu
Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: < 0
Acq. Date: 3/17/2010
Acq. Time: 12:34:10 PM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 8000.00 cps
Min. Peak Width: 8.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 10.9 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 10.9 min
Height: 5.50e+004 counts
Start Time: 13307.563 cps
End Time: 11.1 min



Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

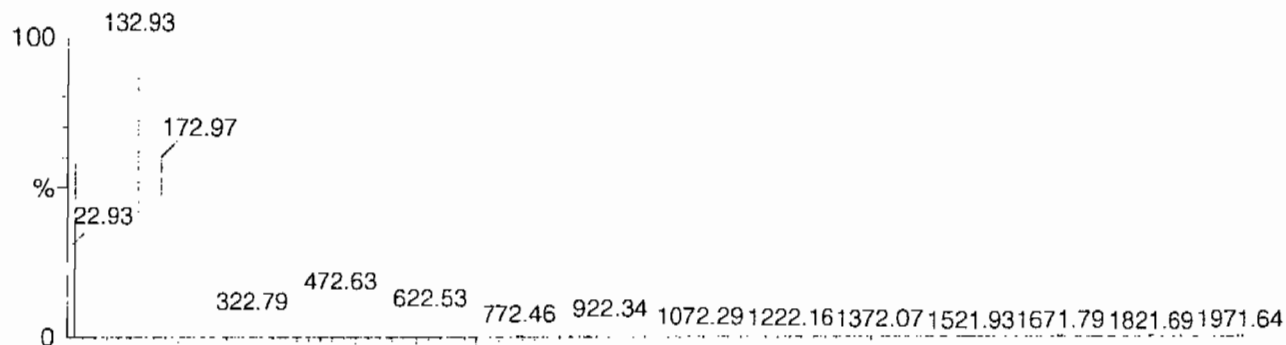
Calibration Report - MS1 Static

Page 1 of 1

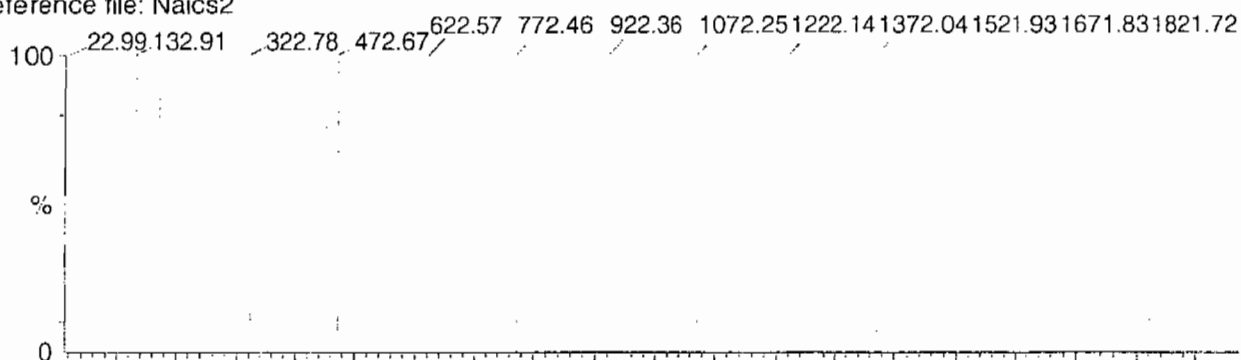
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

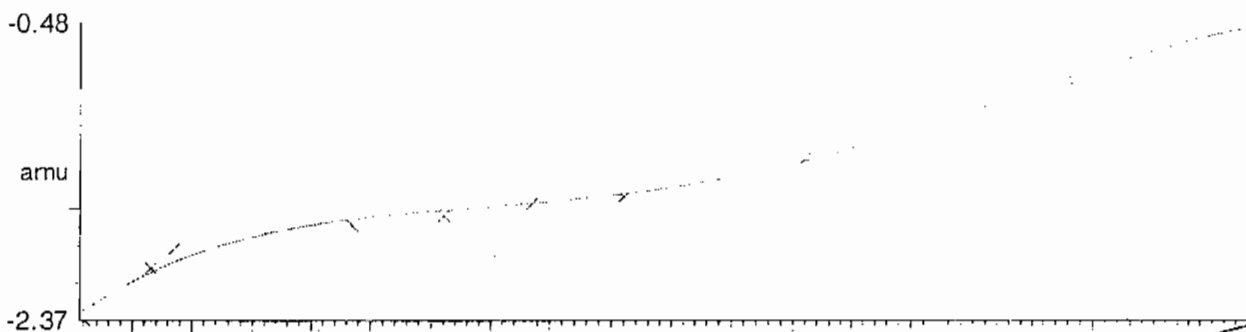
15 matches of 15 tested references



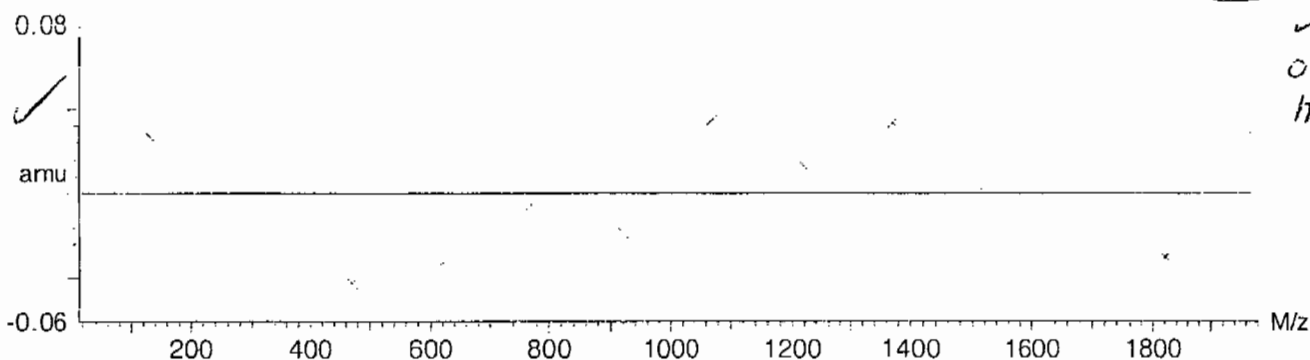
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$

ok
hm

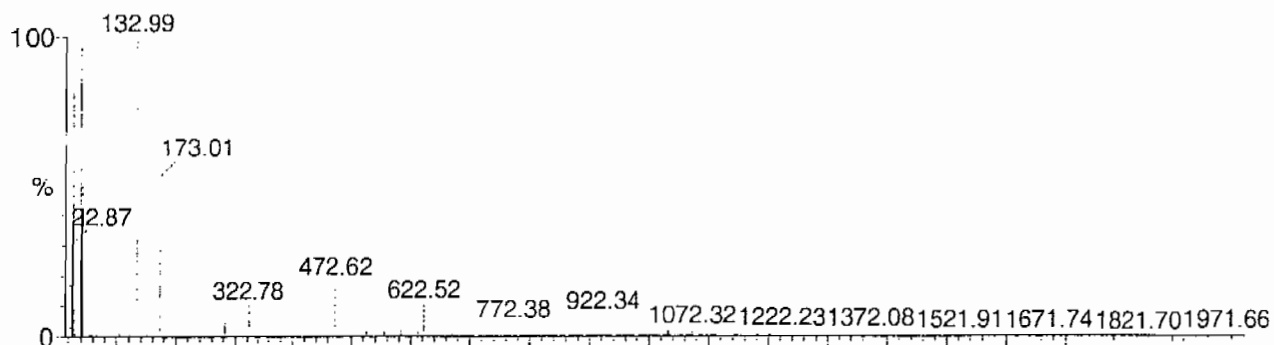
Calibration Report - MS1 Scanning

Page 1 of 1

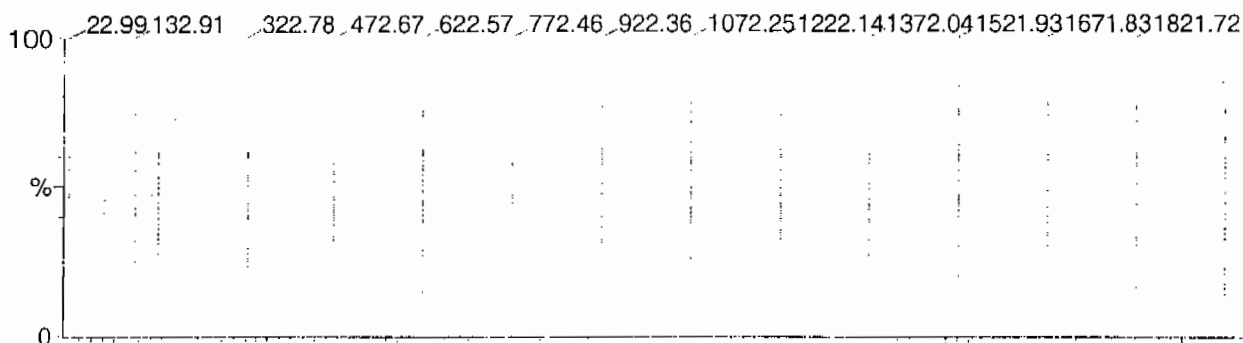
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

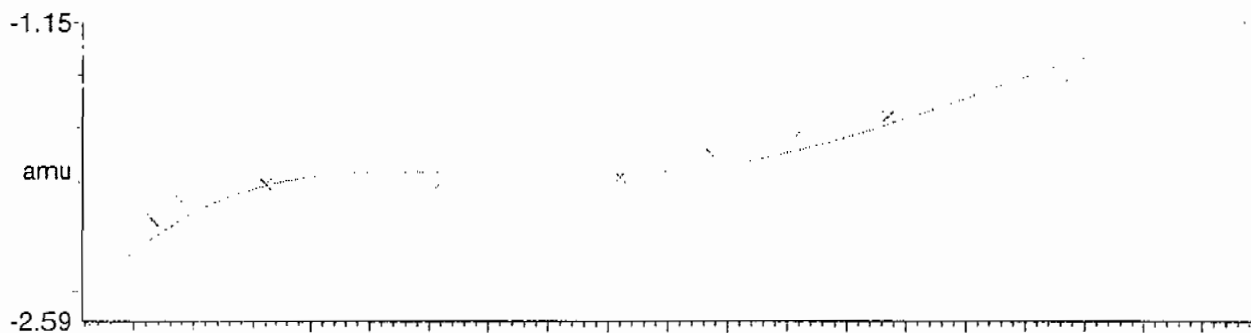
15 matches of 15 tested references



Reference file: Naics2

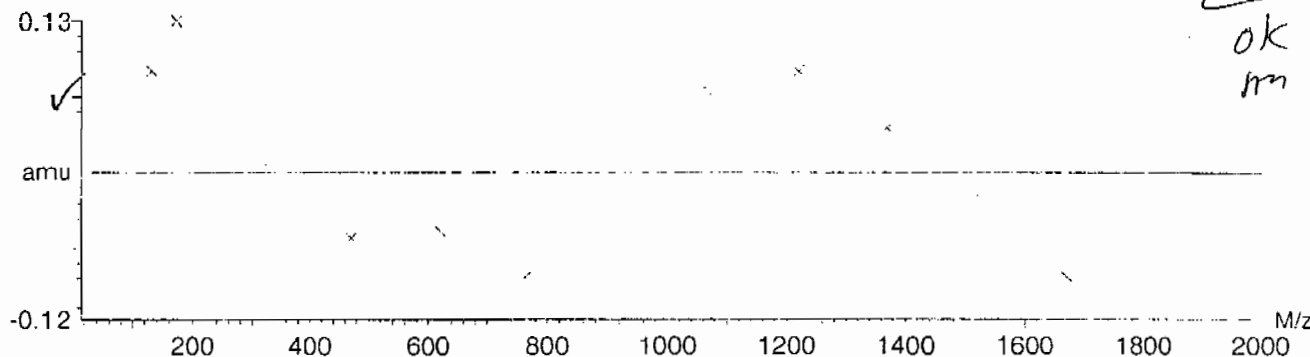


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$



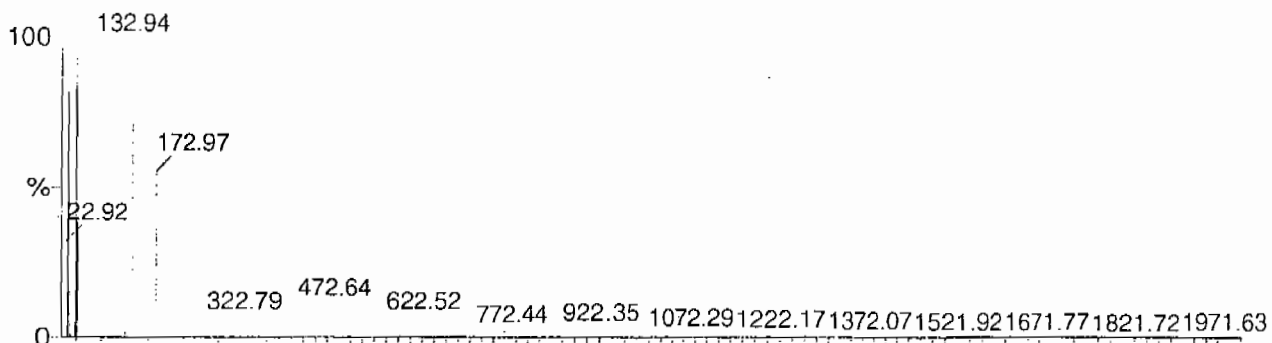
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

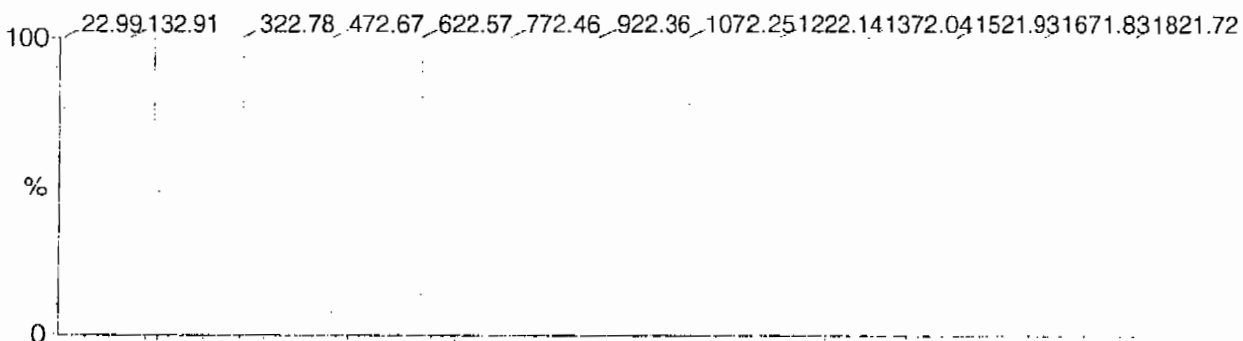
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

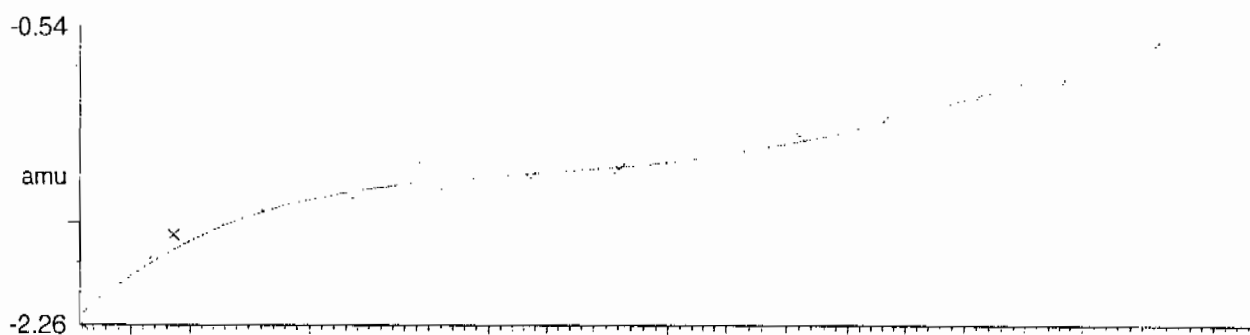
15 matches of 15 tested references



Reference file: Naics2

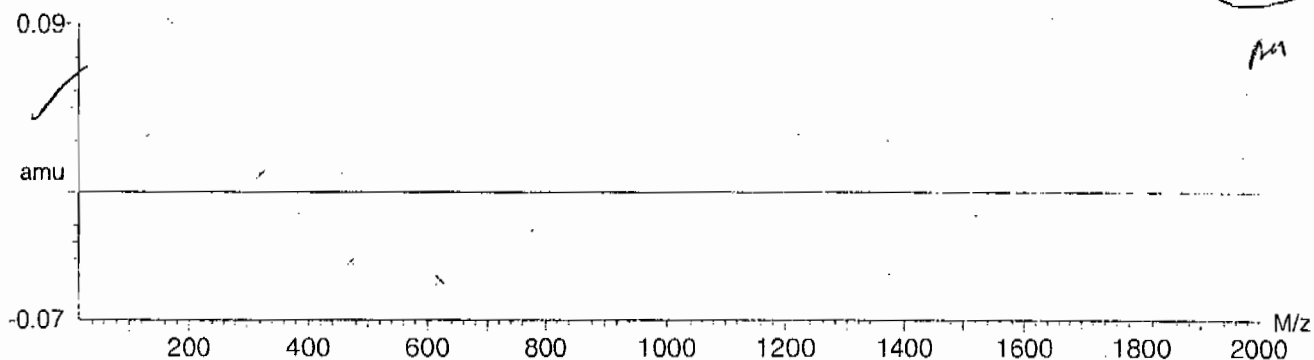


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639 \times 10^{-9} \pm 0.040487$



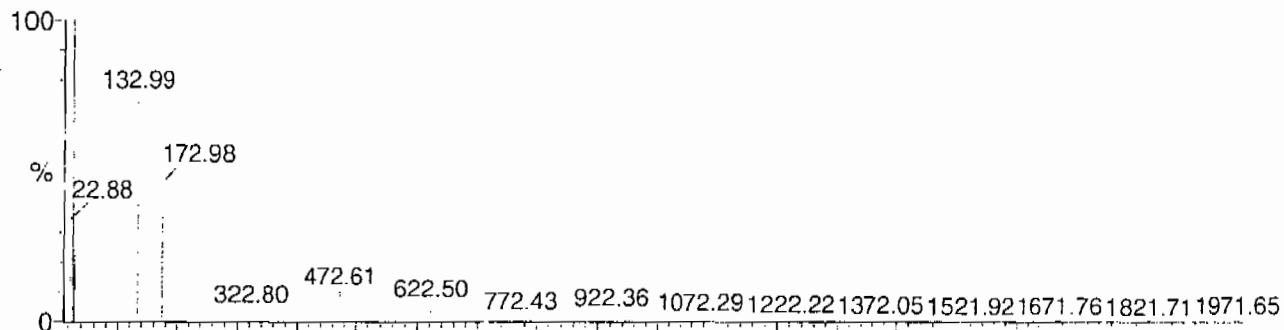
Calibration Report - MS2 Static

Page 1 of 1

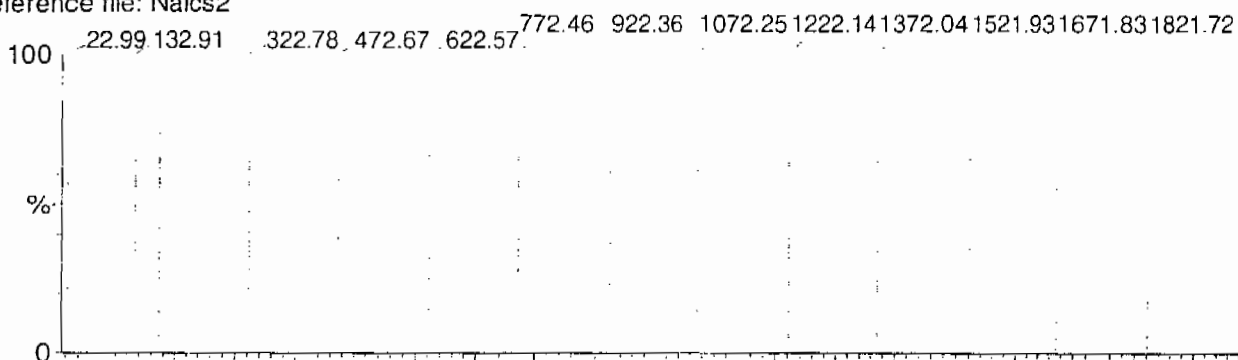
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

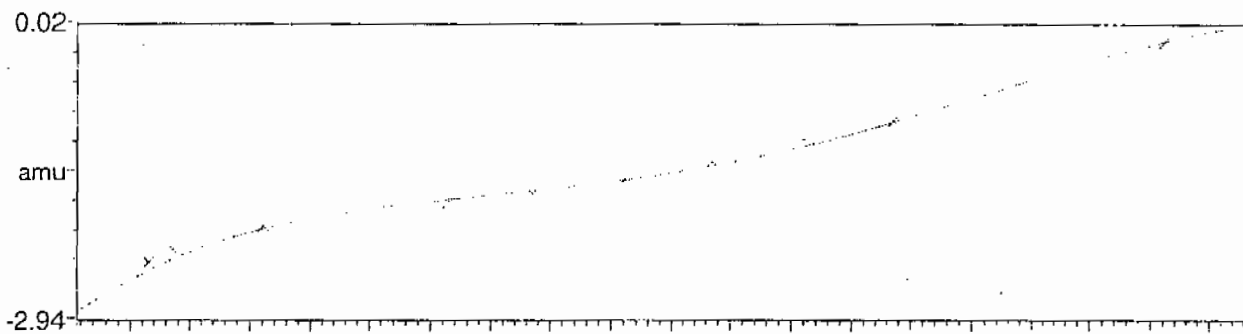
15 matches of 15 tested references



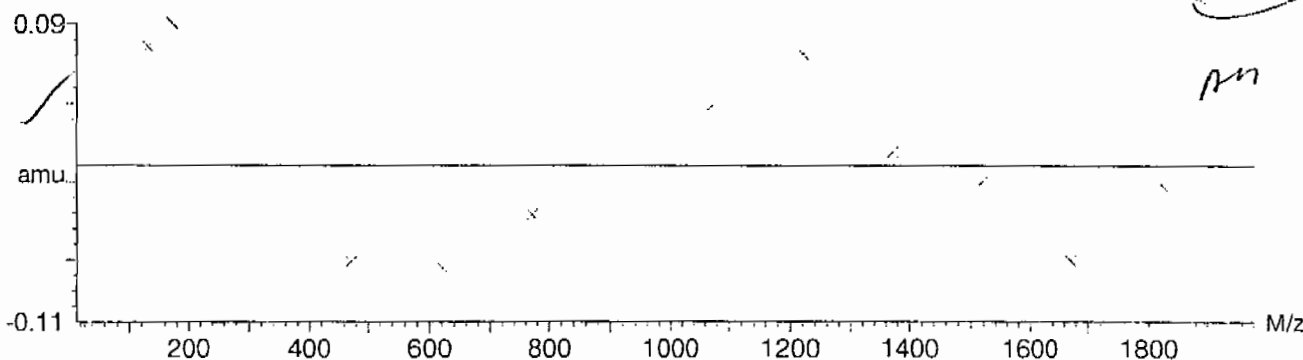
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



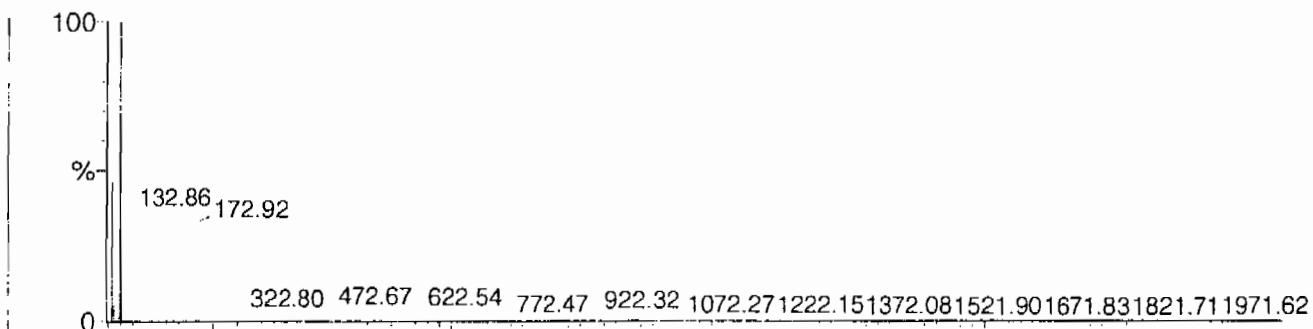
Calibration Report - MS2 Scanning

Page 1 of 1

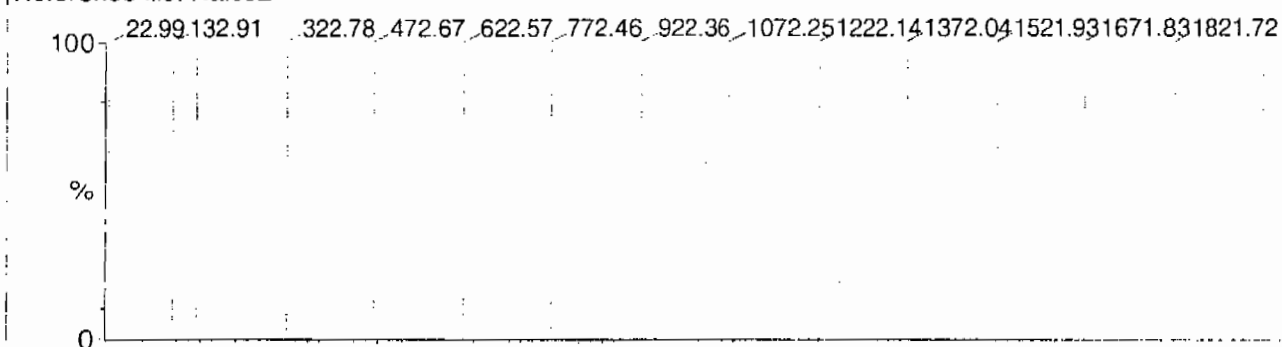
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

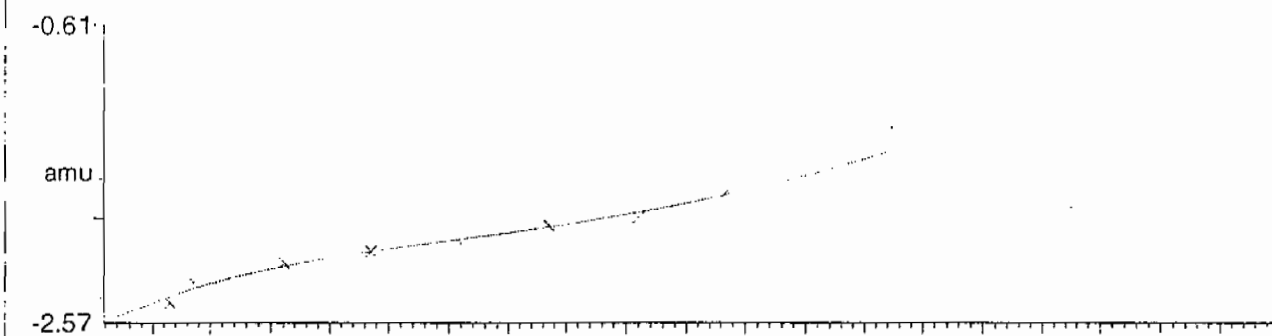
14 matches of 15 tested references



Reference file: Naics2

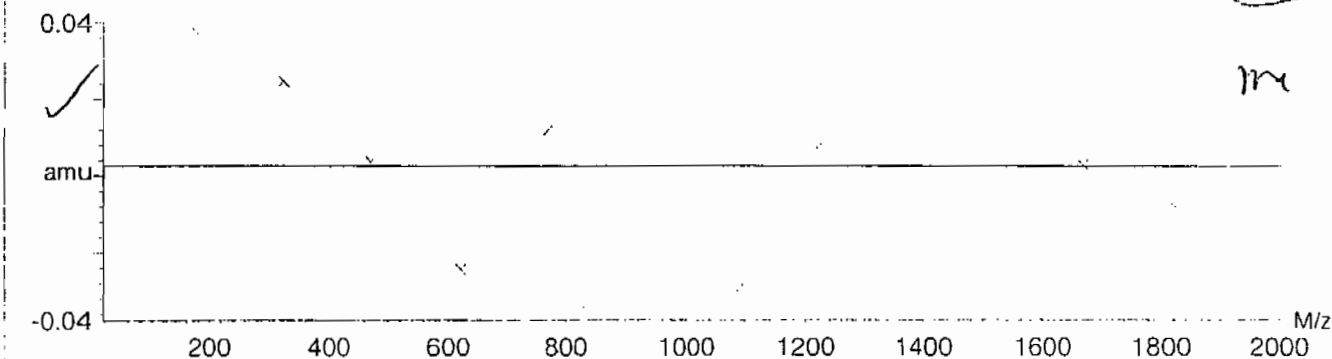


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



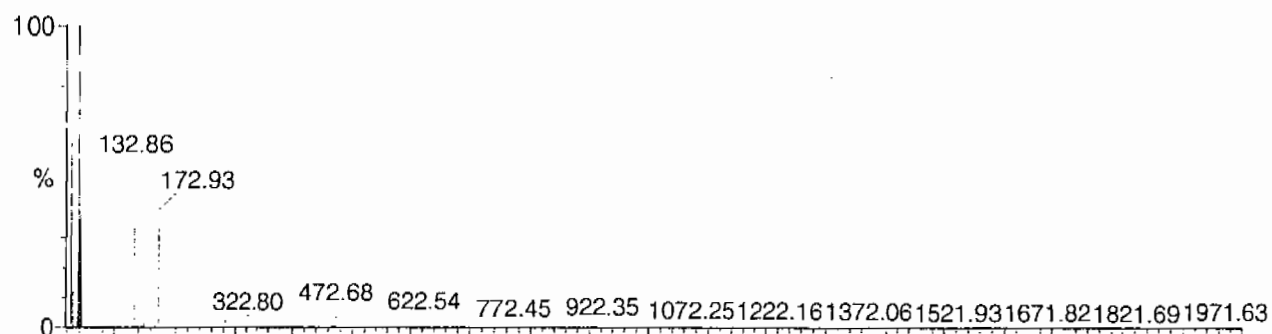
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

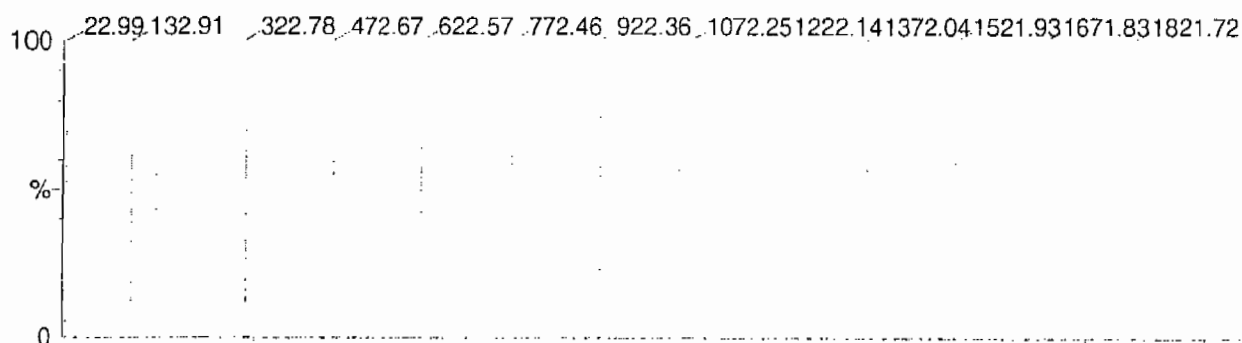
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

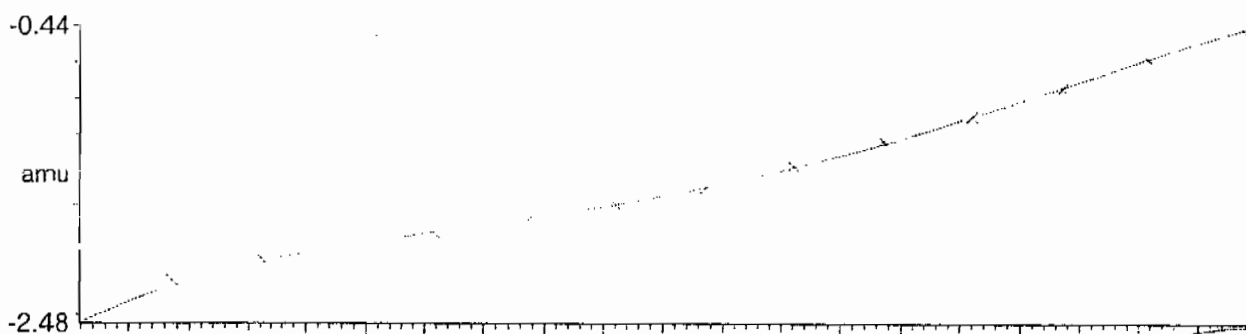
14 matches of 15 tested references



Reference file: Naics2

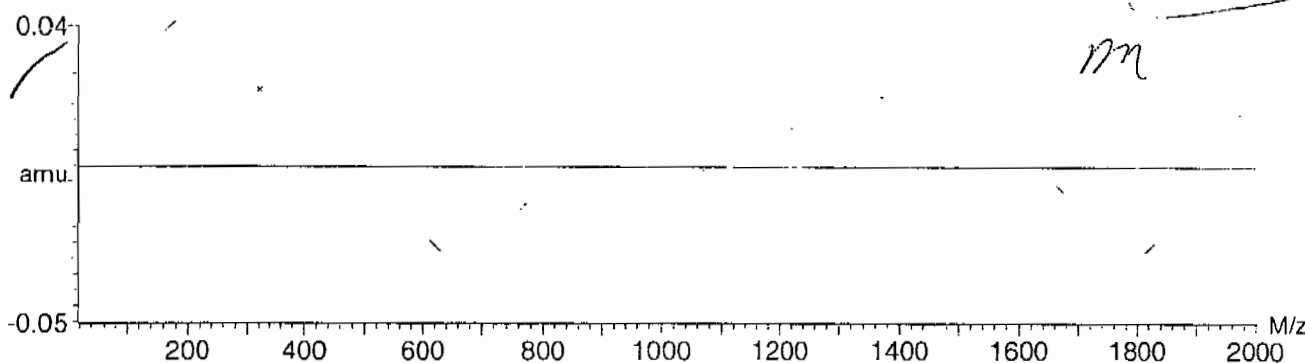


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

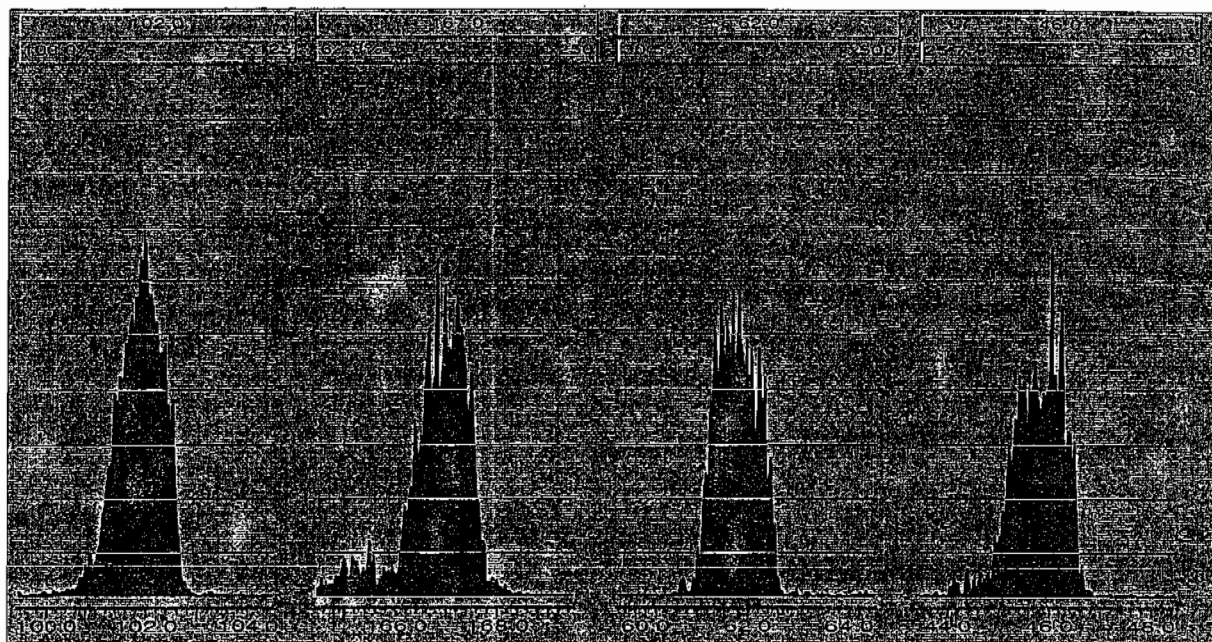


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Tue Mar 23 09:07:10 2010

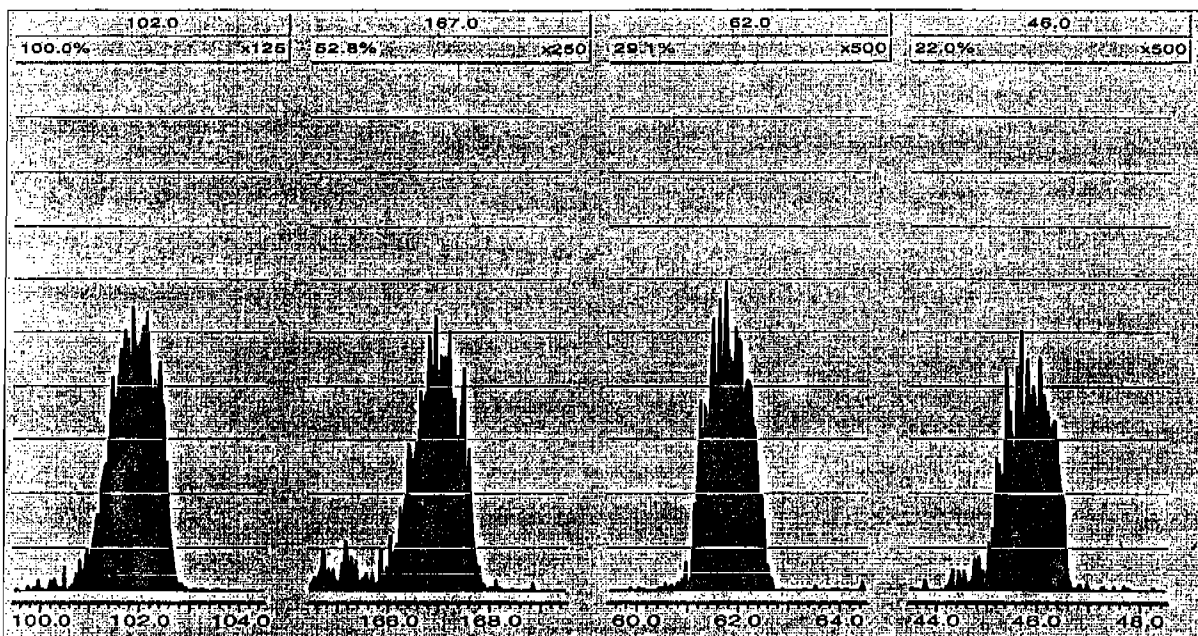


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PROVACQUDB\explosives04.IPR

Printed : Thu Mar 25 16:45:37 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

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) #
			5504.273	12.072	34430.583	17.449
Upper Limit			7155.5549	12.572	44759.7579	17.949
Lower Limit			3852.9911	11.572	24101.4081	16.949
MB for batch 959332	25-mar-10 00:58	EXP0323082a	6345.49	12.033	37551.3	17.42
LCS for batch 959332	25-mar-10 01:28	EXP0323083a	6274.86	12.066	37408.9	17.422
RE36-10-7458	25-mar-10 08:20	EXP0323097a	6375.17	12.032	34885.3	17.42
RE36-10-7458(248240001MS)	25-mar-10 08:50	EXP0323098a	5981.77	12.068	38989.1	17.421
	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			6001.088	12.028	36646.517	17.387
Upper Limit			7801.4144	12.528	47640.4721	17.887
Lower Limit			4200.7616	11.528	25652.5619	16.887
RE36-10-7458(248240001MSD)	25-mar-10 22:40	EXP0325013a	6735.76	12.037	42232.2	17.376
RE36-10-7453	25-mar-10 23:10	EXP0325014a	6673.26	12.037	41283.6	17.377
RE36-10-7454	25-mar-10 23:39	EXP0325015a	6443.9	12.036	35592.6	17.377
RE36-10-7460	26-mar-10 00:09	EXP0325016a	5948.6	12.033	37024.3	17.379
RE36-10-7456	26-mar-10 00:38	EXP0325017a	5985.69	12.033	36550	17.378
RE36-10-7455	26-mar-10 01:08	EXP0325018a	6455.06	12.033	39647.9	17.378
RE36-10-7459	26-mar-10 01:37	EXP0325019a	6100.76	12.031	37985.3	17.398
RE36-10-7457	26-mar-10 02:07	EXP0325020a	6446.31	12.033	39202.5	17.379
RE36-10-7520	26-mar-10 02:36	EXP0325021a	6376.12	12.033	38974.4	17.397
RE36-10-7519	26-mar-10 03:06	EXP0325022a	6623.6	12.033	40632.9	17.4

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323097a

Date Analyzed: 25-MAR-10 08:20

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 09:12:00 2010, Page 17 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323097a

Date: 25-Mar-2010

Time: 08:20:48

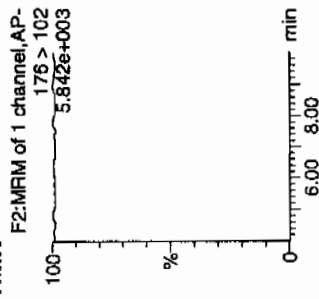
ID: 248240001

Vial: 3:3,A

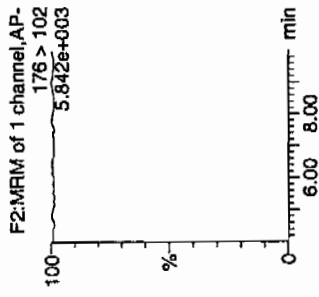
4.077
3/26/10

WAV 959334 | 8022 | 2 |

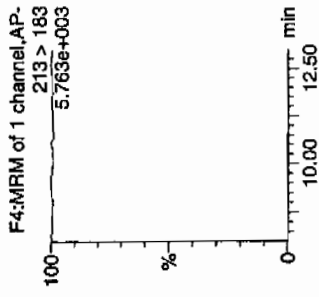
HMX



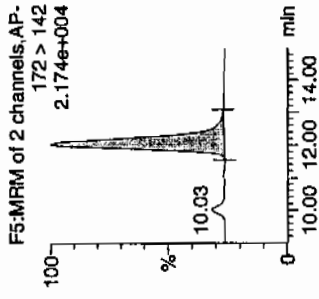
RDX



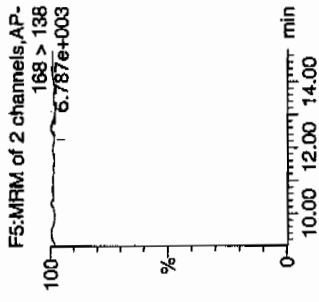
135-Trinitrobenzene



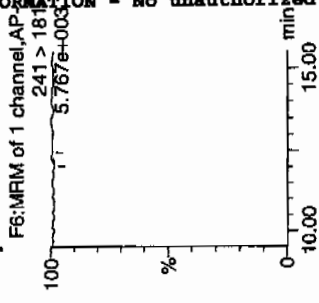
13-Dinitrobenzene-d4



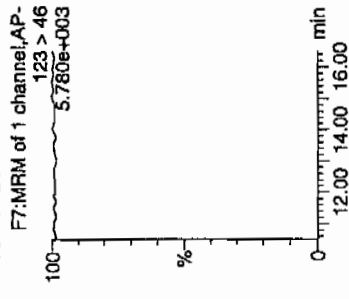
13-Dinitrobenzene



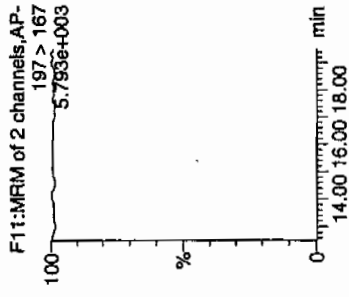
Tetryl



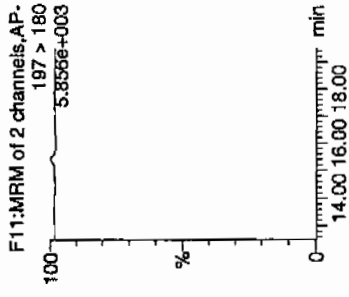
Nitrobenzene



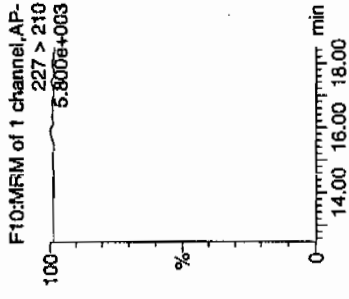
4-Amino-26-dinitrotoluene



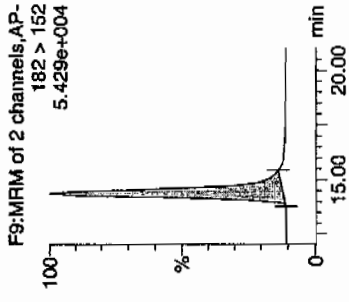
2-Amino-46-dinitrotoluene



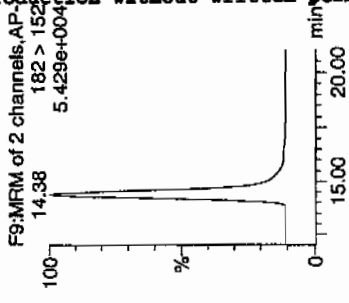
246-Trinitrotoluene



34-dinitrotoluene

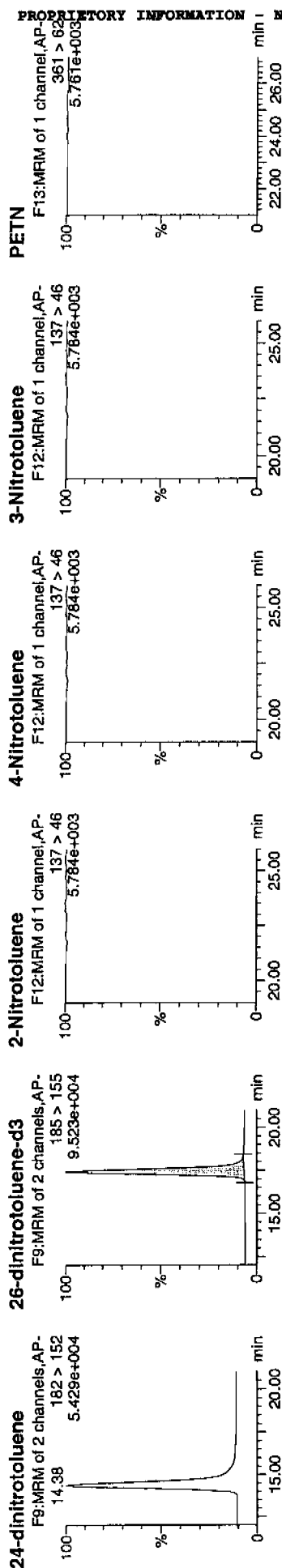


26-dinitrotoluene



4.111W
03/30/10

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010



PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	State	Abs Resp	Response	Flag	Mod Date	Mod Time	%Rec	SN
248240001	HMX	176 > 102		6375.169								
248240001	RDX	176 > 102		6375.169								
248240001	135-Trinitrobenzene	213 > 183		6375.169								
248240001	13-Dinitrobenzene-d4	172 > 142	12.03	6375.169								
248240001	13-Dinitrobenzene	168 > 138		6375.169								
248240001	Tetryl	241 > 181		6375.169								
248240001	Nitrobenzene	123 > 46		6375.169								
248240001	4-Amino-26-dinitrotoluene	197 > 167		6375.169								
248240001	2-Amino-46-dinitrotoluene	197 > 180		34885.332								
248240001	246-Trinitrotoluene	227 > 210		34885.332								
248240001	34-dinitrotoluene	182 > 152	14.38	22513.971								
248240001	26-dinitrotoluene	182 > 152		34885.332								
248240001	24-dinitrotoluene	182 > 152		34885.332								
248240001	26-dinitrotoluene-d3	185 > 155	17.42	34885.332								
248240001	2-Nitrotoluene	137 > 46		34885.332								
248240001	4-Nitrotoluene	137 > 46		34885.332								
248240001	3-Nitrotoluene	137 > 46		34885.332								
248240001	PETN	361 > 62		34885.332								
						6375.169	6375.169	bb	MM- 26-Mar-10	09:05:38	579.1110	115.8
									MM- 26-Mar-10	09:05:47		702.4
						22513.971	322.685	bb			304.7412	121.9
						34885.332	34885.332	bb			506.6040	101.3
											1.3	3152.2

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240001

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160093.wiff

Date Analyzed: 17-MAR-10 08:22

Units: ug/kg

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

*Concentration =

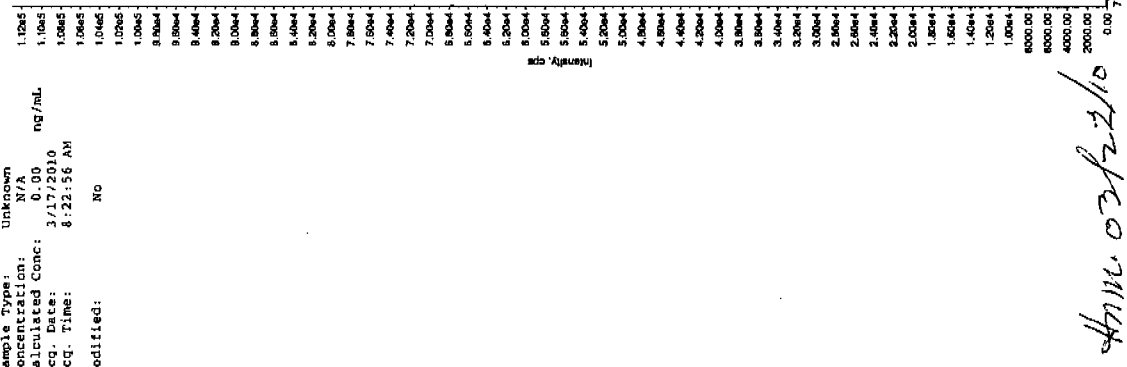
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Sample Name: "241240001" Sample ID: "95833421ER" File: "EX503160093.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 8:22:56 AM
 Modified: No

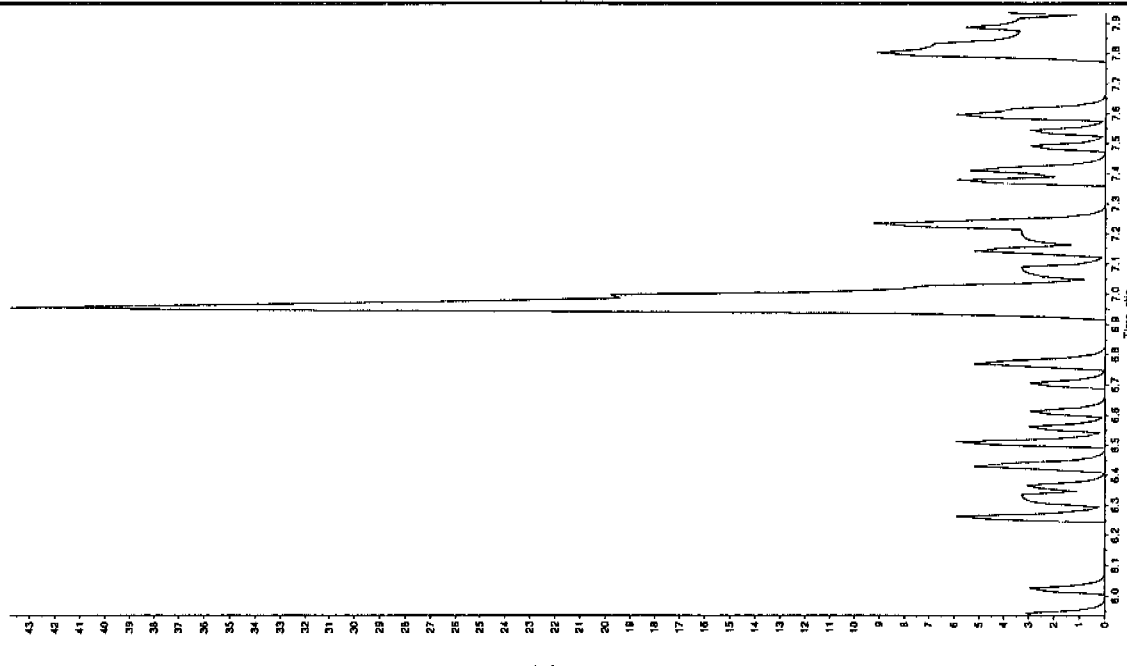


Sample Name: "241240001" Sample ID: "95833421ER" File: "EX503160093.wif"

Peak Name: "1AT3" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: "

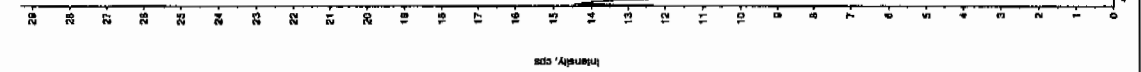
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 8:22:56 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

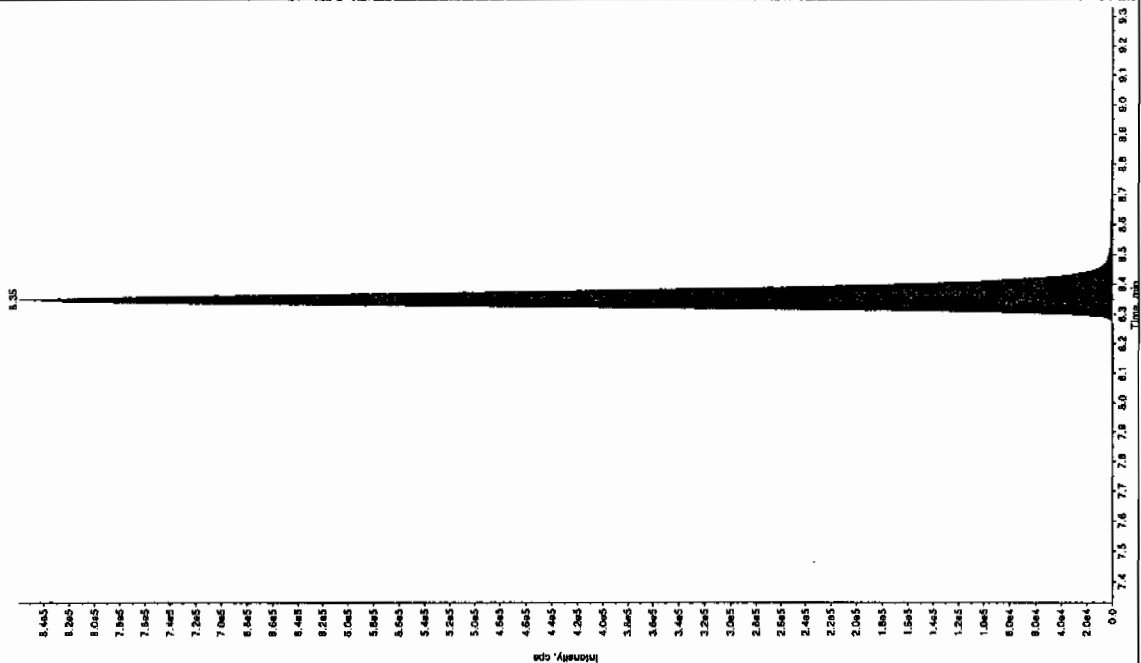
Sample Name: "218240001" Sample ID: "95933421ER" File: "EX503160093.wif"
 Peak Name: "26-Diamino-4-nitrolobene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 8:22:56 AM
 Modified: No



Sample Name: "218240001" Sample ID: "95933421ER" File: "EX503160093.wif"
 Peak Name: "34-Dinitrolobene" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 255.
 Acq. Date: 3/17/2010
 Acq. Time: 8:22:56 AM
 Modified: No
 Proc Algorithm: IntelliQuan - IOL
 Win. Peak Height: 1460.00 cps
 Win. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Area: 3.22e+006 counts
 Height: 858905.029 cps
 Start Time: 8.21 min
 End Time: 8.67 min

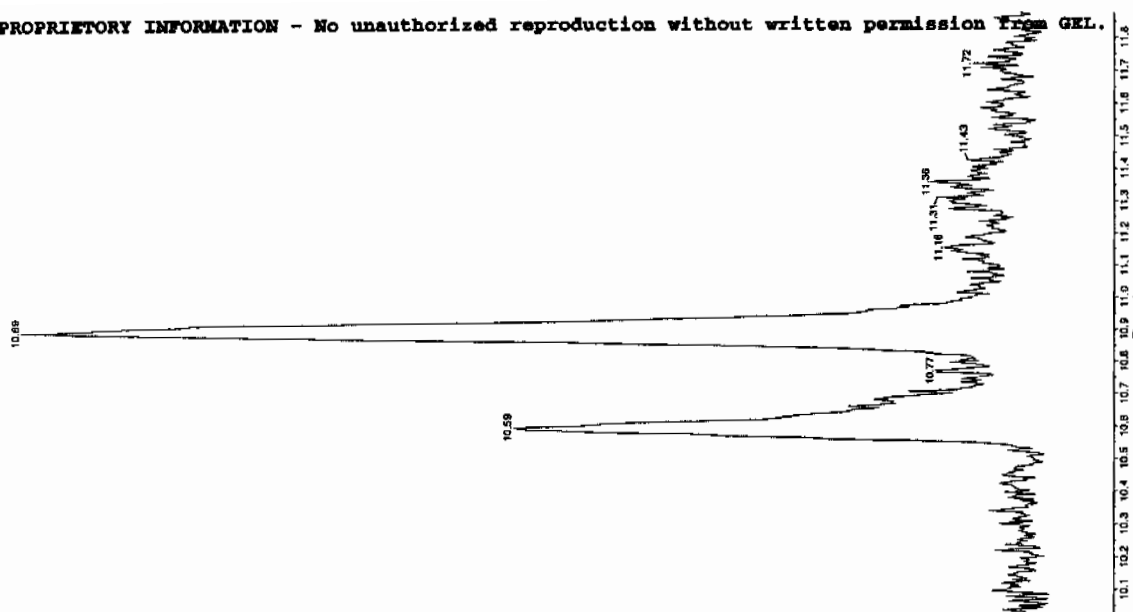


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248240001" Sample ID: "95533421" File: "EXS03160083.wif"
 Peak Name: "11.0-crasy" phosphate" Mass(es): "355.191.0 amu"
 Comment: "LCX832125" Annotation: "

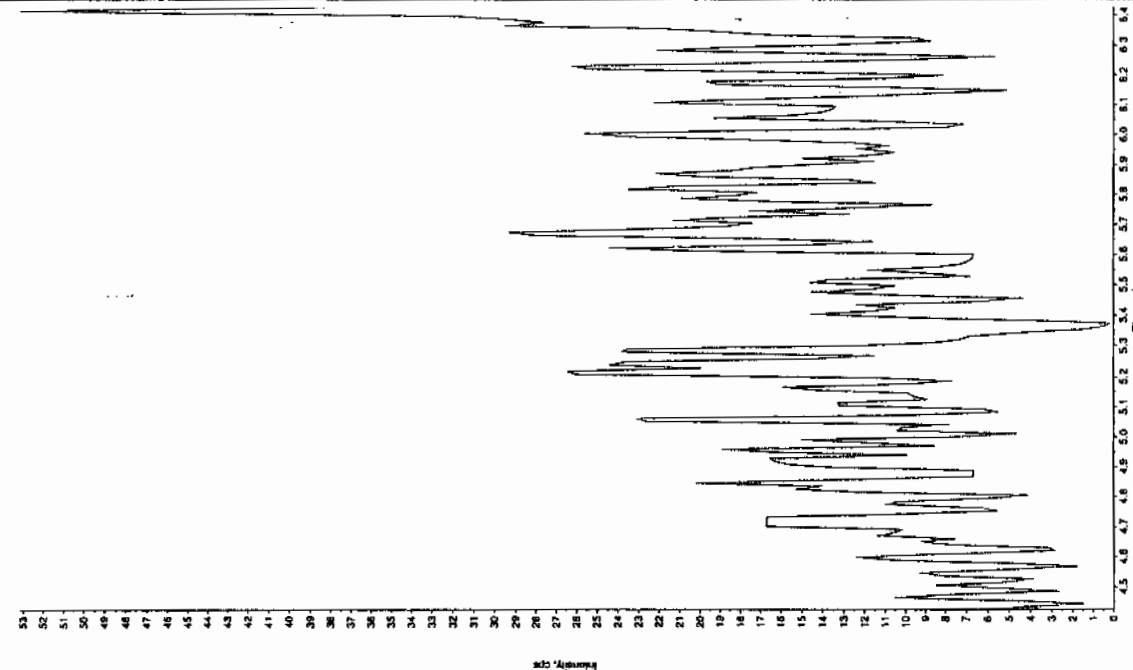
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 8:22:55 AM
 Acq. Time:
 Modified: No

Intensity, cps



Sample Name: "248240001" Sample ID: "95533421" File: "EXS03160083.wif"
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "155.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 8:22:55 AM
 Acq. Time:
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325014a

Date Analyzed: 25-MAR-10 23:10

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325014a

Date: 25-Mar-2010

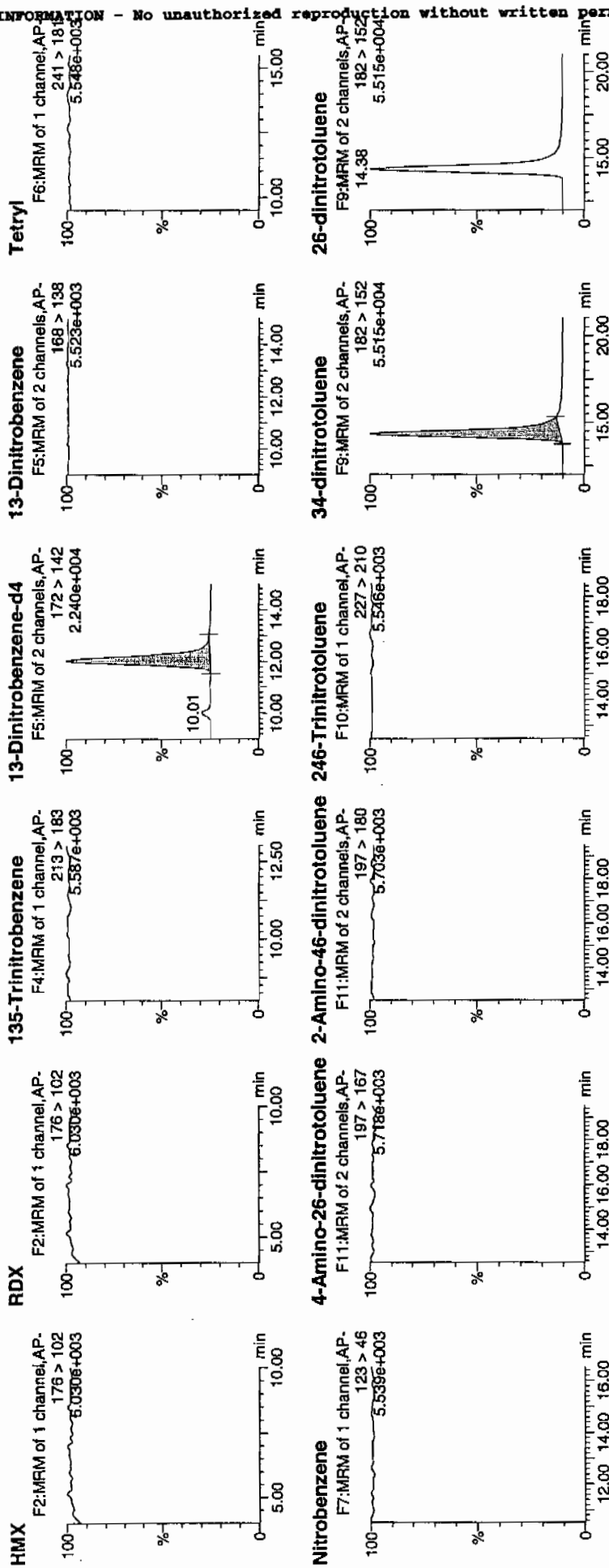
Time: 23:10:25

ID: 248240002

Vial: 3:3,D

1007
3/26/10

959334 / 21



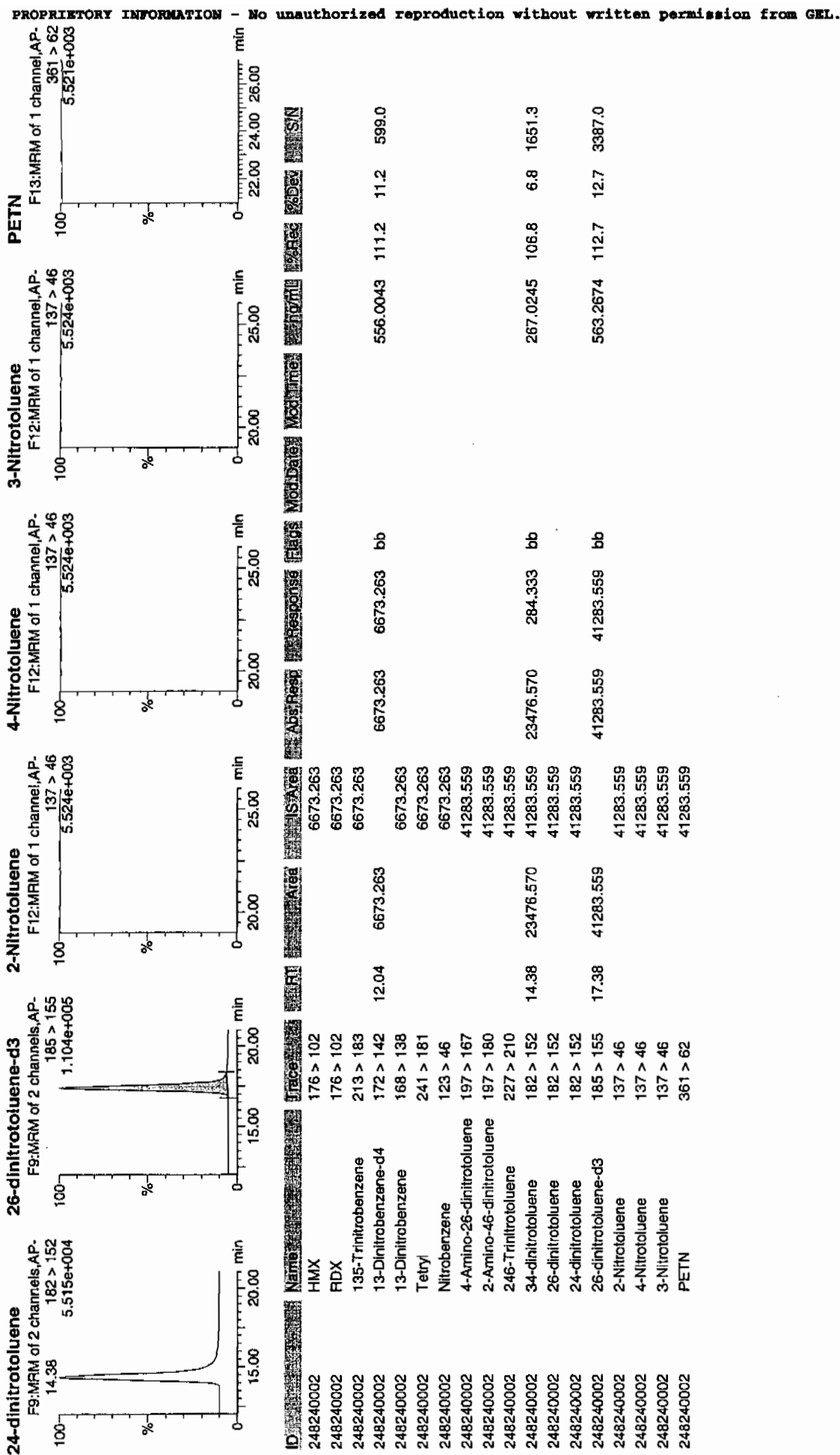
Amu 03/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 28 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO1032510expA.qld, Time: Fri Mar 26 12:43:58 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7453

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240002

Sample Amount 2

Moisture: 44.7

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160096.wiff

Date Analyzed: 17-MAR-10 09:10

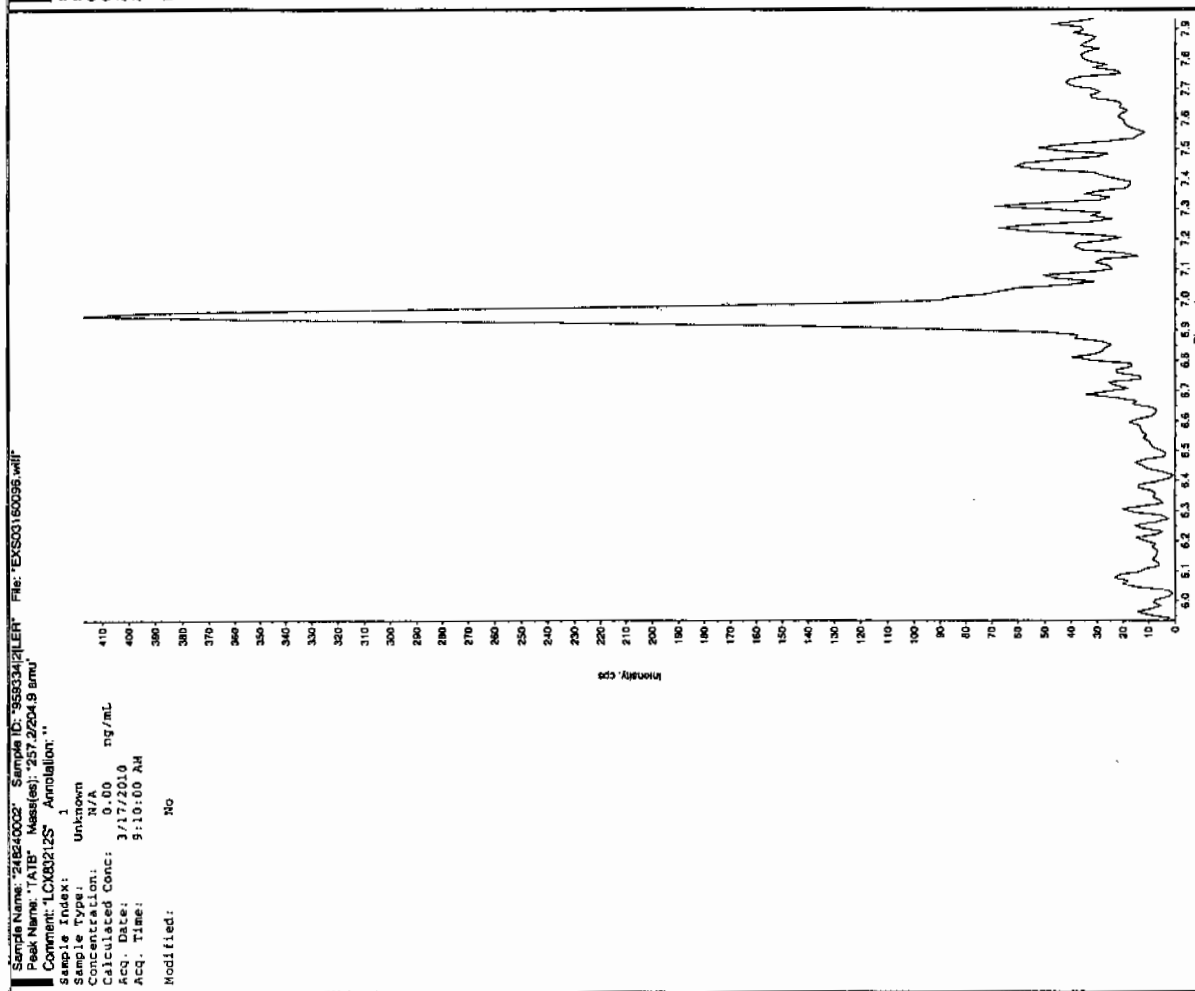
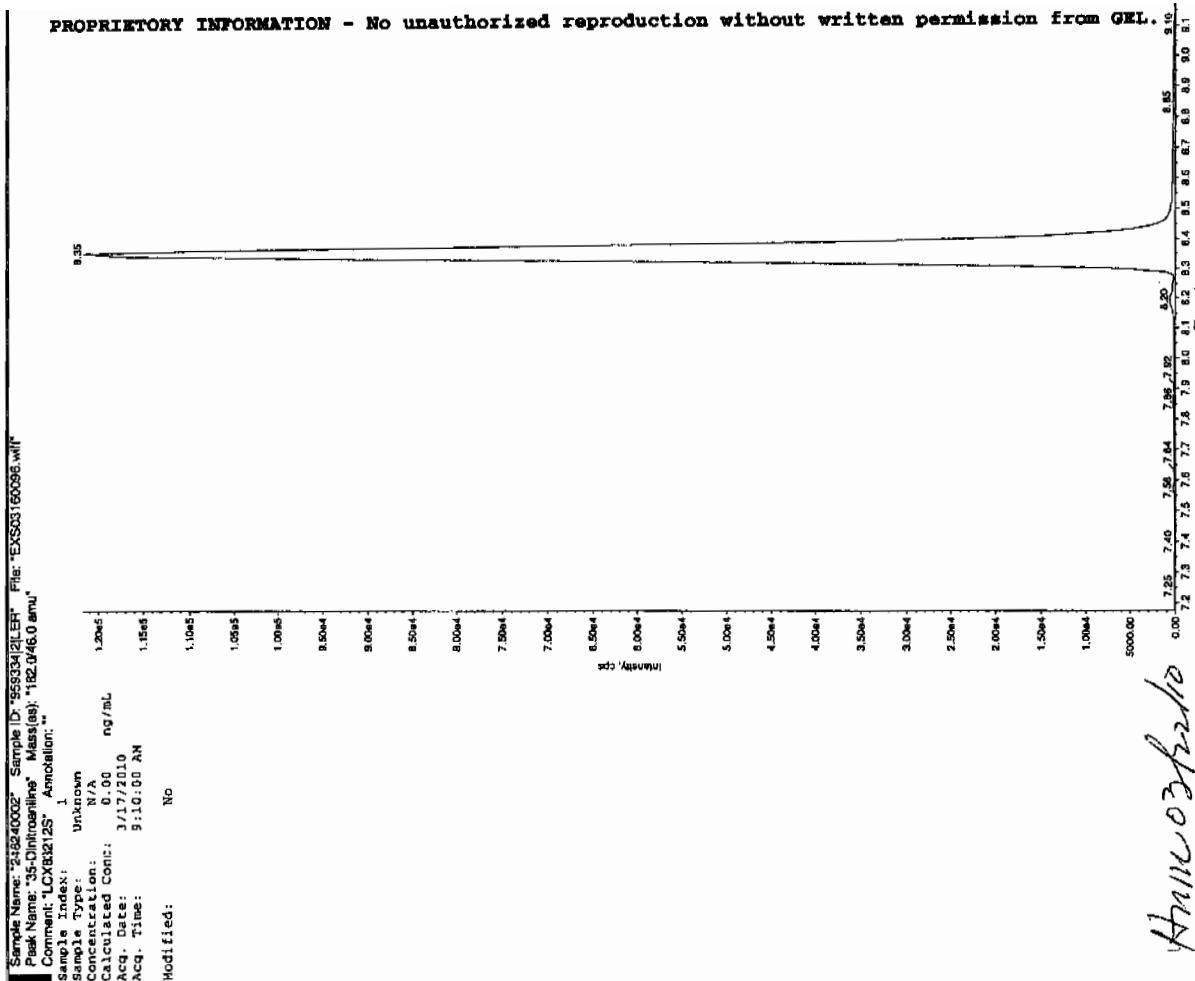
Units: ug/kg

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

*Concentration =

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

See 3/10/10

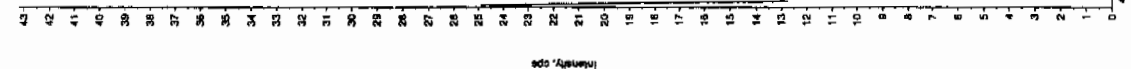


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: 246240002 Sample ID: 959334121ER File: EX503160096.will
 Peak Name: 26-Cleminio-4-nitrobenzene Mass(es): 186.046.0 amu
 Comment: LCX832125 Annotation: 1

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 9:10:00 AM
 Acq. Time: 5:10:00 AM
 Modified: No

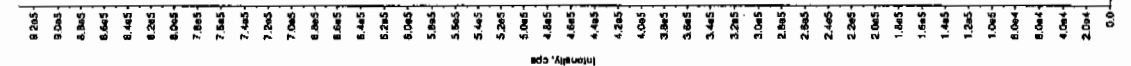
Intensity, cps



Sample Name: 246240002 Sample ID: 959334121ER File: EX503160096.will
 Peak Name: 34-Cleminio-4-nitrobenzene Mass(es): 182.1151.9 amu
 Comment: LCX832125 Annotation: 1

Sample Index: 1
 Sample Type: Unknown
 Concentration: 272. ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 9:10:00 AM
 Acq. Time: 5:10:00 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Peak Height: 3.43e+005 cps
 Weight: 93631.409 cps
 Start Time: 8.23 min
 End Time: 8.59 min

Intensity, cps



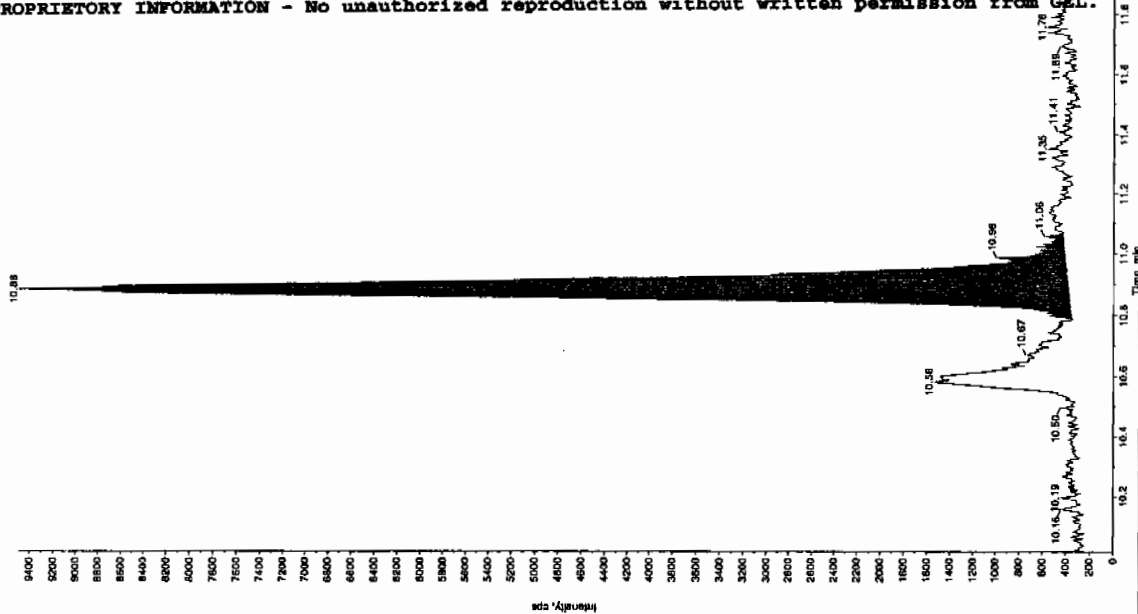
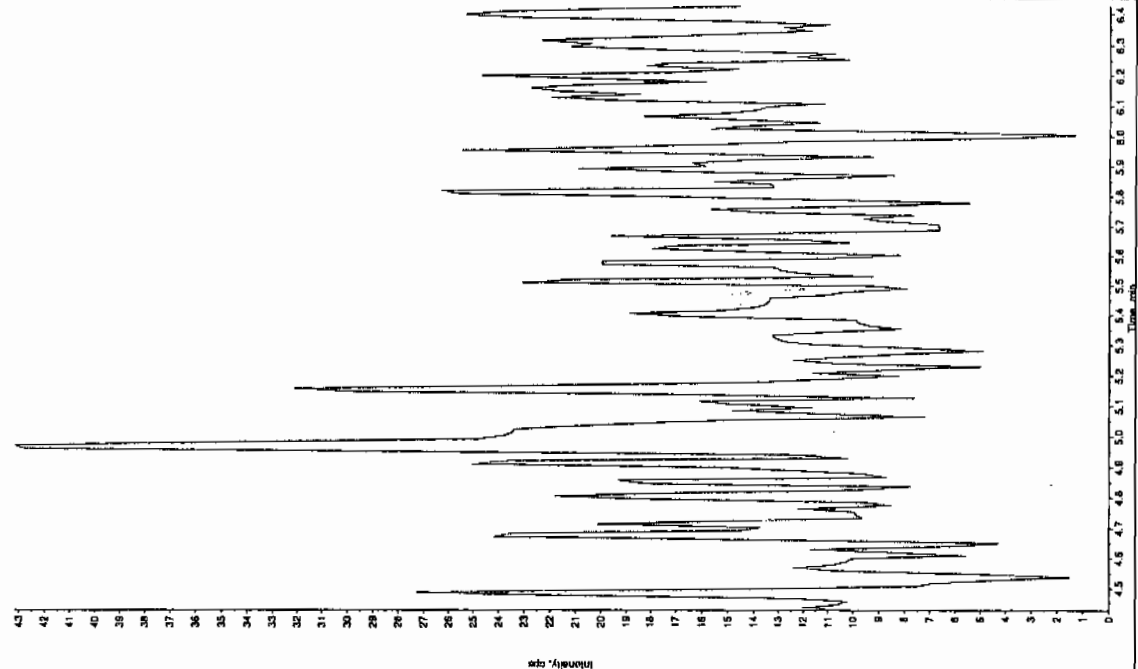
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "24824002" Sample ID: "9553342125" File: "EX503160956.wif"
 Peak Name: "24-Diamino-6-neurotensin" Mass(es): 365.191.0 amu
 Comment: "LCX832125" Annotation: "

Sample Name: "24824002" Sample ID: "9553342125" File: "EX503160956.wif"
 Peak Name: "24-Diamino-6-neurotensin" Mass(es): 365.191.0 amu
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: No Intercept
 Acq. Date: 3/17/2010
 Acq. Time: 9:10:00 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 3.85e+004 counts
 Height: 9110.622 cps
 Start Time: 10.6 min
 End Time: 11.1 min

Sample Index: 1
 Sample Type: Unknown
 Concentration: No Intercept
 Acq. Date: 3/17/2010
 Acq. Time: 9:10:00 AM
 Modified: No



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Moisture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325015a

Date Analyzed: 25-MAR-10 23:39

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325015a

Date: 25-Mar-2010

Time: 23:39:53

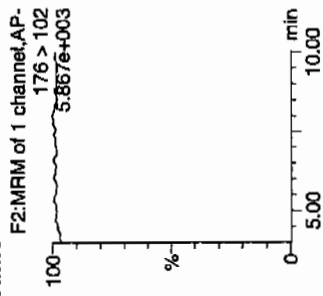
ID: 248240003

Vial: 3:3,E

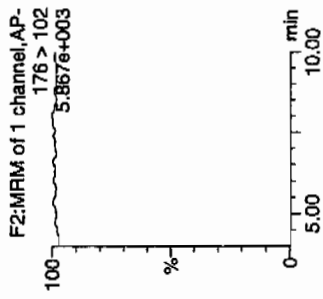
100%
3/26/10

1959334 / 21
SOLVENT

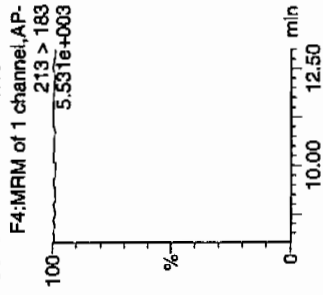
HMX



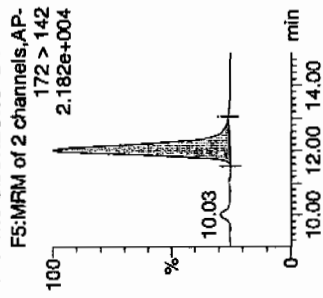
RDX



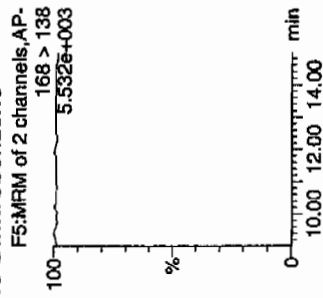
135-Trinitrobenzene



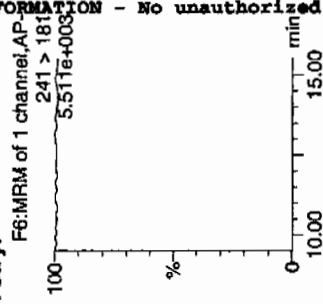
13-Dinitrobenzene-d4



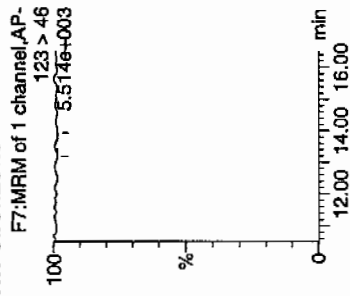
13-Dinitrobenzene



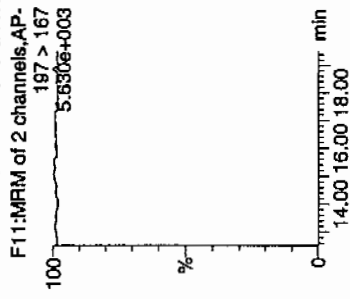
Tetryl



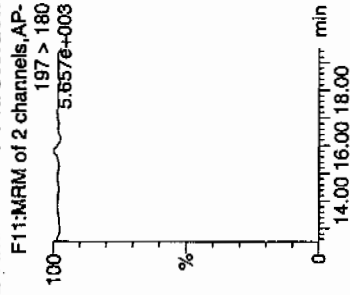
Nitrobenzene



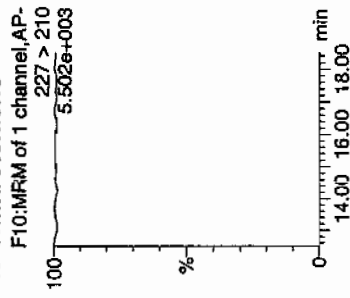
4-Amino-26-dinitrotoluene



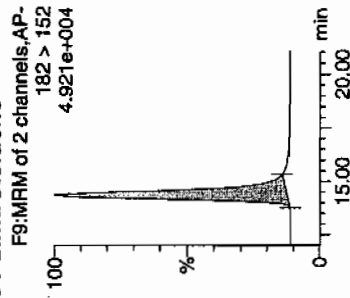
2-Amino-46-dinitrotoluene



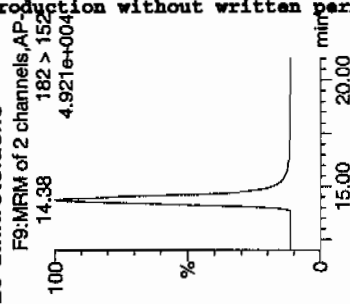
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



Amu03/20/10

Quantify Sample Report

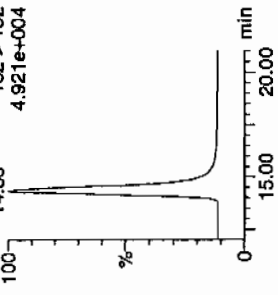
GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 30 of 77

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

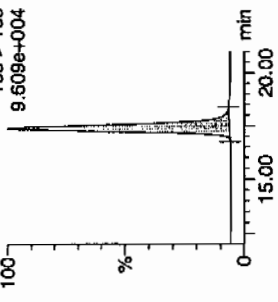
24-dinitrotoluene

F9:MRM of 2 channels, AP-
182 > 152
4.921e+004



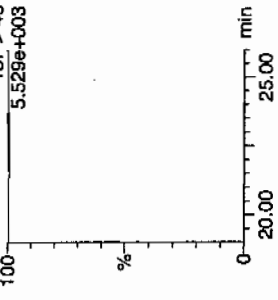
26-dinitrotoluene-d3

F9:MRM of 2 channels, AP-
185 > 155
9.609e+004



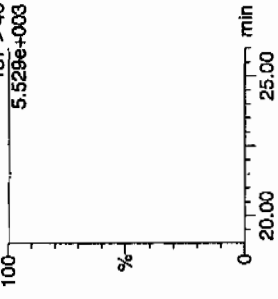
2-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.529e+003



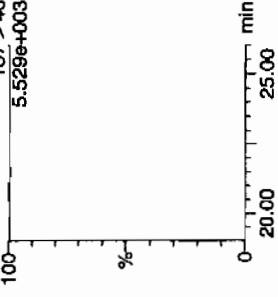
4-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.529e+003



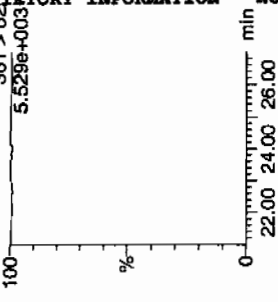
3-Nitrotoluene

F12:MRM of 1 channel, AP-
137 > 46
5.529e+003



PETN

F13:MRM of 1 channel, AP-
361 > 82
5.529e+003



PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	S Area	Abs Resp	Flap	Mod Date	Mod Time	%Rec	%Dev	S/N
248240003	HMX	176 > 102		6443.896								
248240003	RDX	176 > 102		6443.896								
248240003	135-Trinitrobenzene	213 > 183		6443.896								
248240003	13-Dinitrobenzene-d4	172 > 142	12.04	6443.896								
248240003	13-Dinitrobenzene	168 > 138		6443.896								
248240003	Tetryl	241 > 181		6443.896								
248240003	Nitrobenzene	123 > 46		6443.896								
248240003	4-Amino-26-dinitrotoluene	197 > 167		35592.570								
248240003	2-Amino-46-dinitrotoluene	197 > 180		35592.570								
248240003	246-Trinitrotoluene	227 > 210		35592.570								
248240003	34-dinitrotoluene	182 > 152	14.38	20538.611								
248240003	26-dinitrotoluene	182 > 152		35592.570								
248240003	24-dinitrotoluene	182 > 152		35592.570								
248240003	26-dinitrotoluene-d3	185 > 155	17.38	35592.570								
248240003	2-Nitrotoluene	137 > 46		35592.570								
248240003	4-Nitrotoluene	137 > 46		35592.570								
248240003	3-Nitrotoluene	137 > 46		35592.570								
248240003	PETN	361 > 62		35592.570								
									MM- 26-Mar-10 12:31:33			
										6443.896	6443.896	bb
										536.8939	107.4	7.4 862.9
										20538.611	288.524	bb
										35592.570	35592.570	bb
										270.9600	108.4	8.4 843.2
										485.6203	97.1	-2.9 2667.7

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7454

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240003

Sample Amount 2

Moisture: 8.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160097.wiff

Date Analyzed: 17-MAR-10 09:25

Units: ug/kg

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

*Concentration =

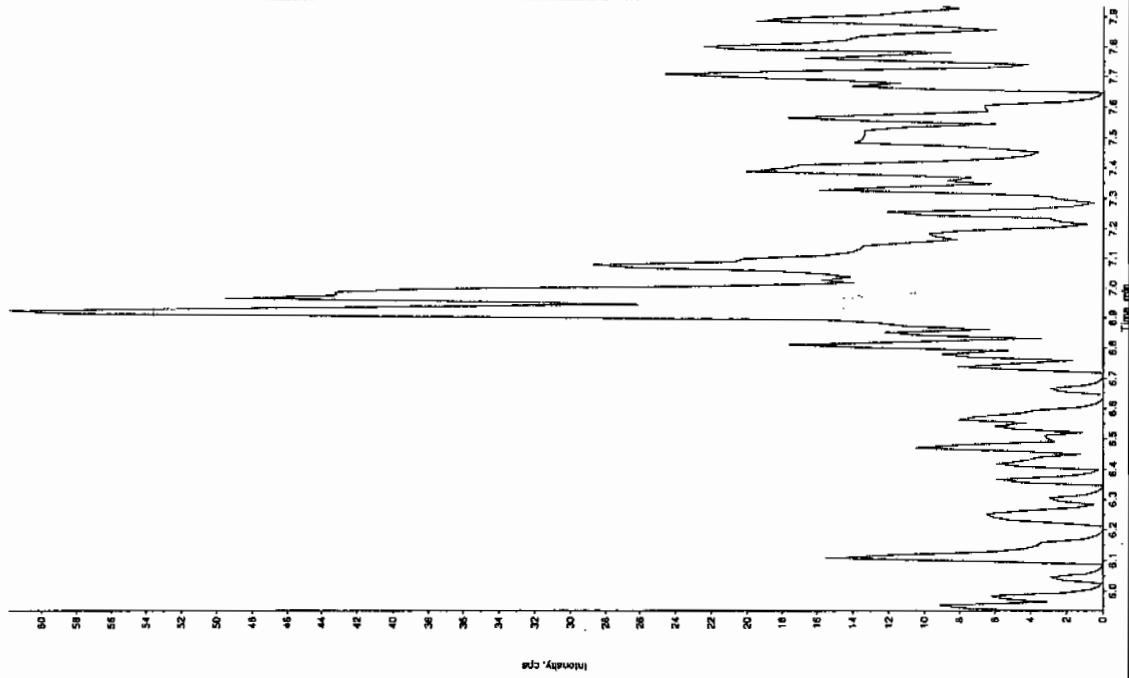
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Don 2/19/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: 248240003 Sample ID: 95833421ER File: EX503160097.wit
Peak Name: 35-Dinitroaniline Mass(es): 182.046.0 amu
Comment: LCX83212S Annotation:

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Calculated Conc: 3/17/2010
Acq. Date: 9:25:41 AM
Acq. Time: 9:25:41 AM
Modified: No

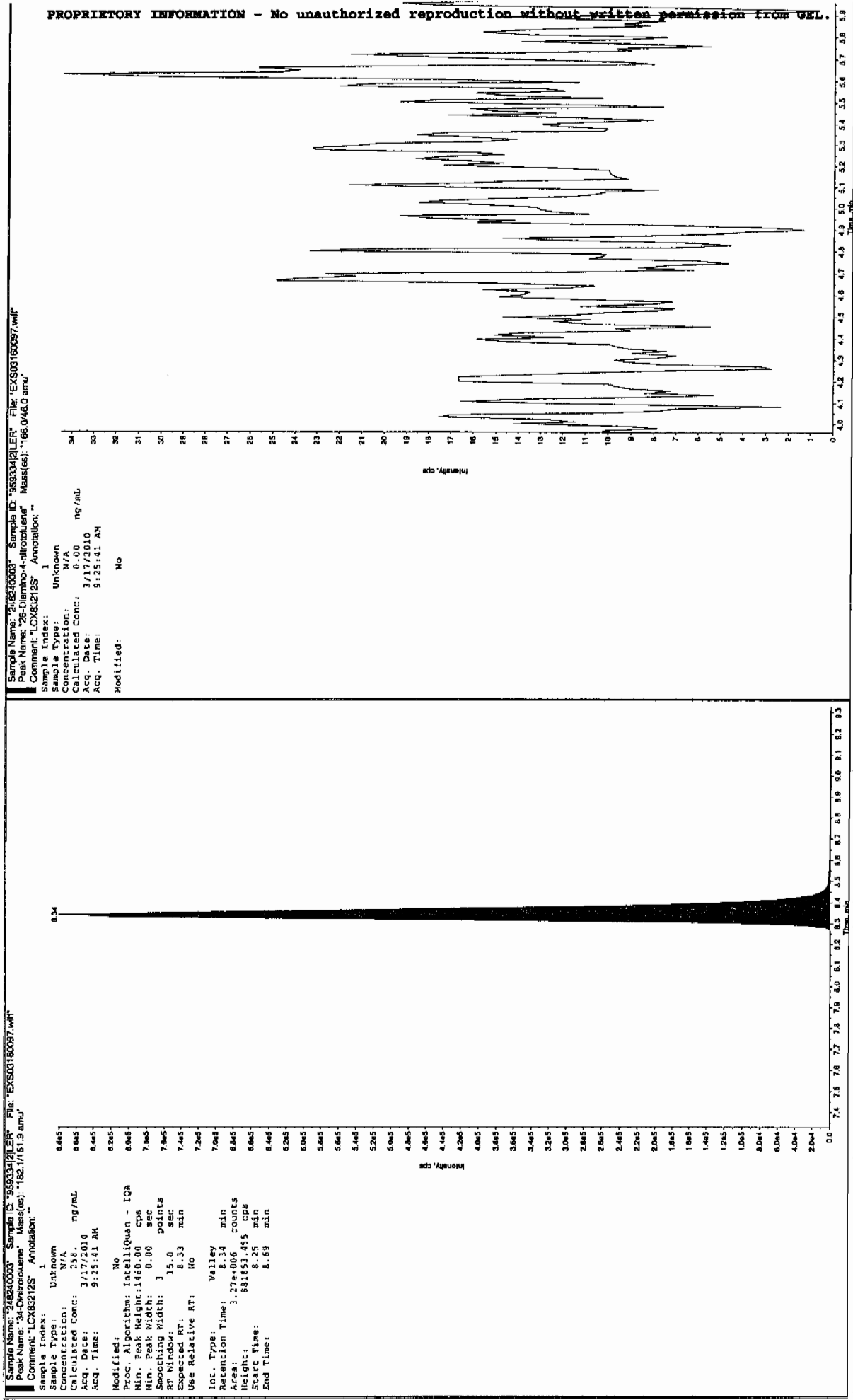


Sample Name: 248240003 Sample ID: 95833421ER File: EX503160097.wit
Peak Name: 35-Dinitroaniline Mass(es): 182.046.0 amu
Comment: LCX83212S Annotation:

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Calculated Conc: 3/17/2010
Acq. Date: 9:25:41 AM
Acq. Time: 9:25:41 AM
Modified: No

44M 03/19/10

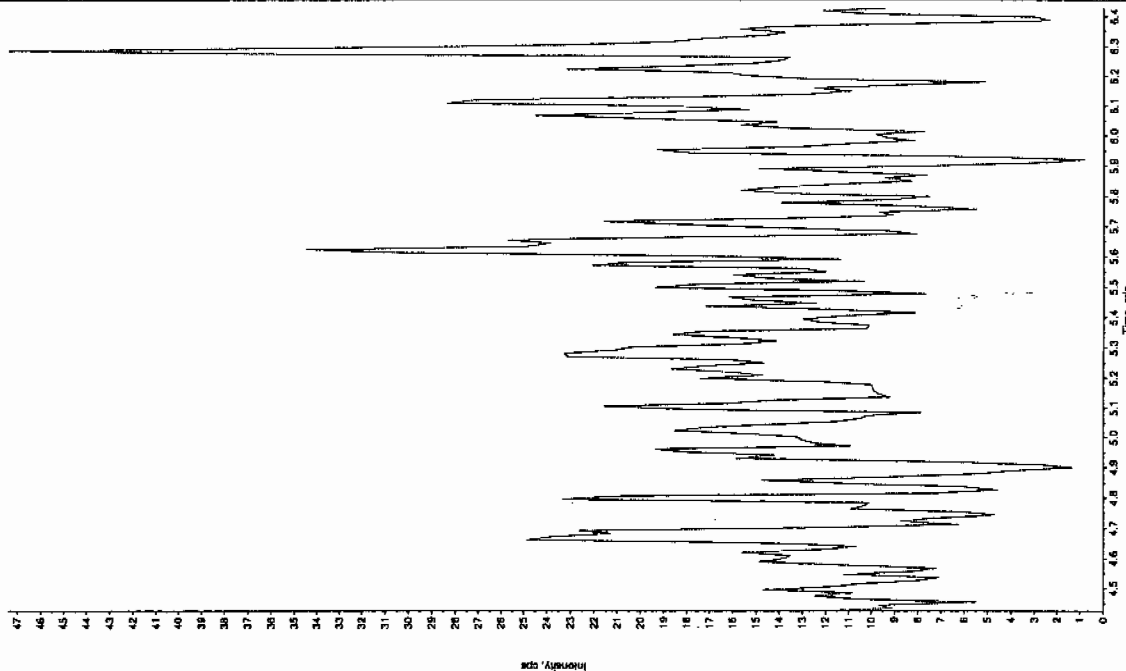
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

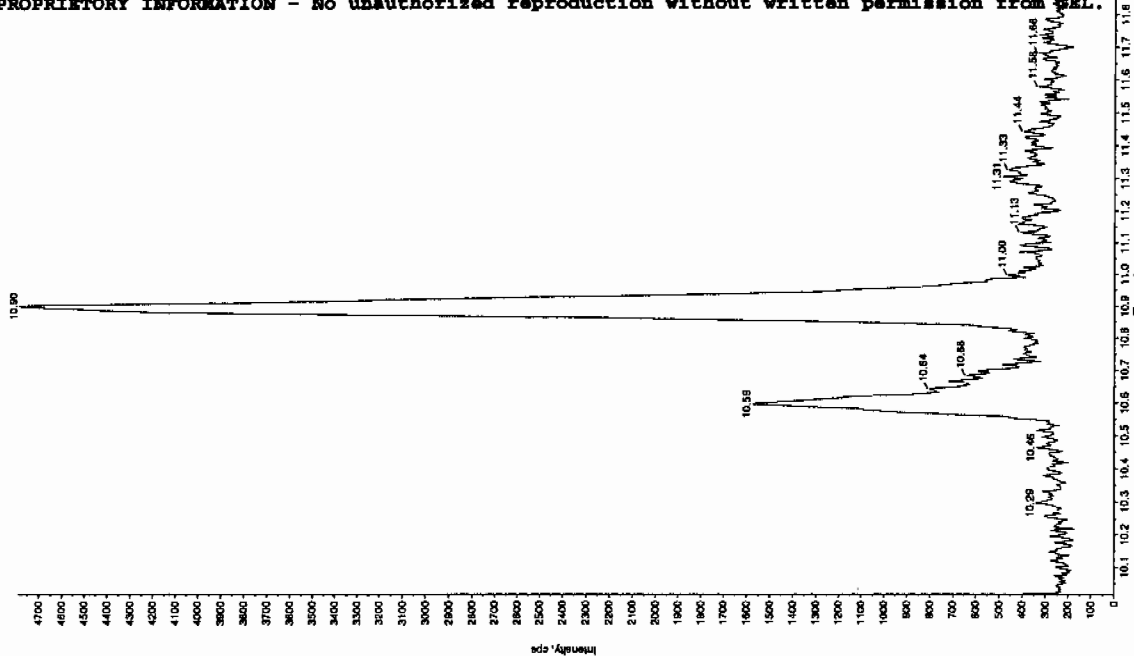
Sample Name: "24824003" Sample ID: "555134121ER" File: "EX503160097.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:25:41 AM
 Modified: No



Sample Name: "24824003" Sample ID: "555334121ER" File: "EX503160097.wif"
 Peak Name: "166.046.0 amu" Mass(es): "366.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:25:41 AM
 Modified: No



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325016a

Date Analyzed: 26-MAR-10 00:09

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\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325016a

Date: 26-Mar-2010

Time: 00:09:21

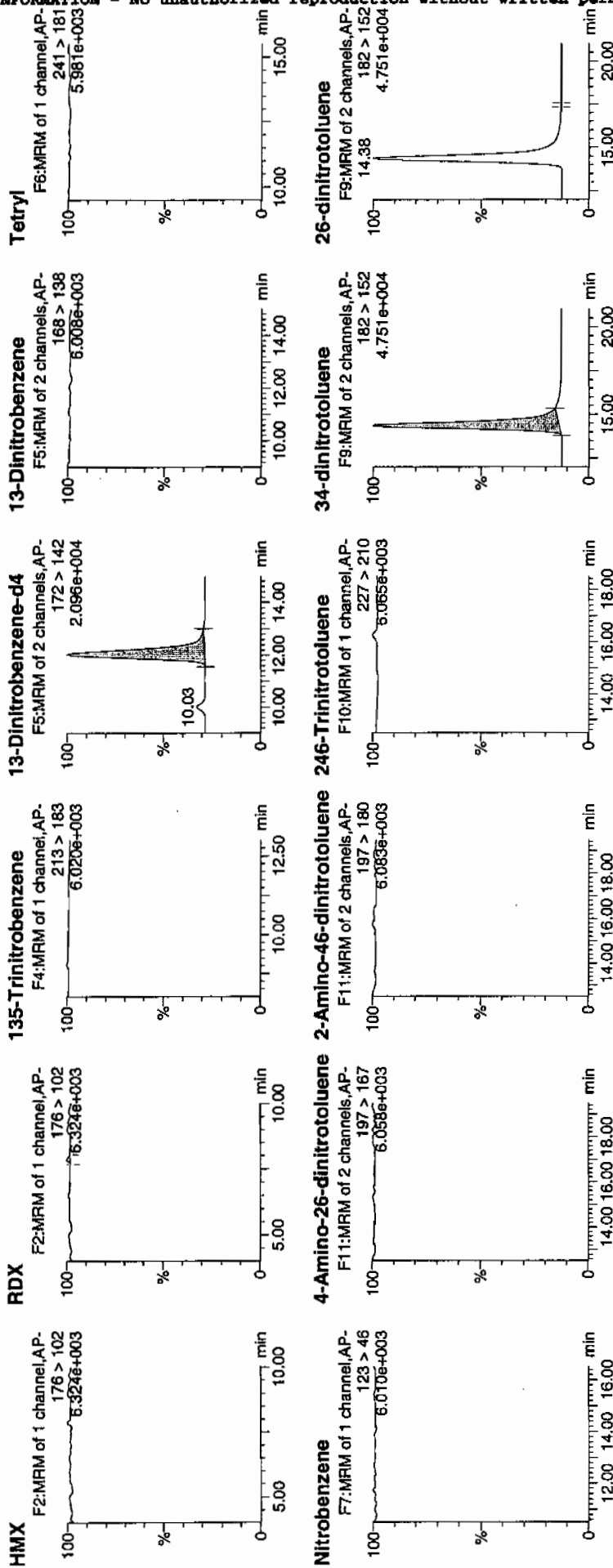
ID: 248240004

Vial: 3:3,F

14077
3/26/10

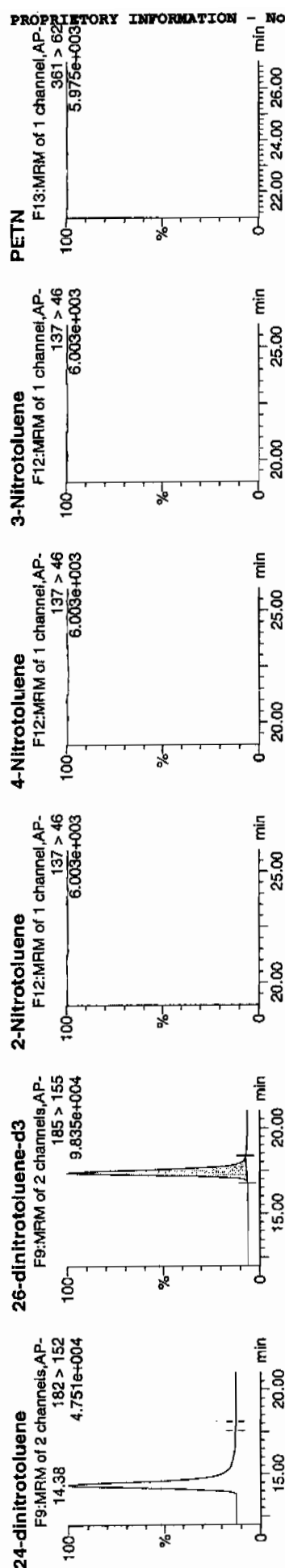
195334 | 21 |
SOLN

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



14077
3/26/10

Dataset: C:\MASSLYNX\New Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

[illegible]

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7460

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160098.wiff

Date Analyzed: 17-MAR-10 09:41

Units: ug/kg

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

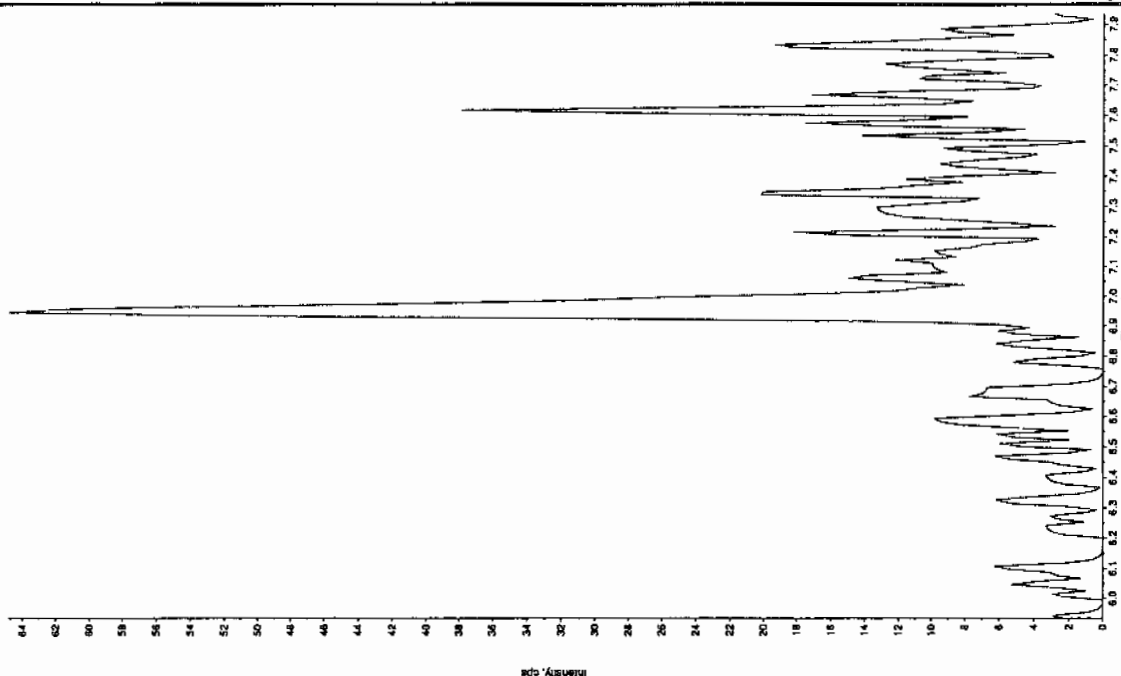
*Concentration =

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

don 3/19/10

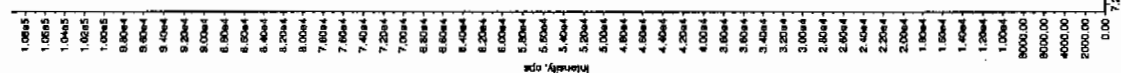
Sample Name: "248240004" Sample ID: "95930421ER" File: "EXS03160098.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 9:41:25 AM
 Acq. Time: 9:41:25 AM
 Modified: No



Sample Name: "248240004" Sample ID: "95930421ER" File: "EXS03160098.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "1"

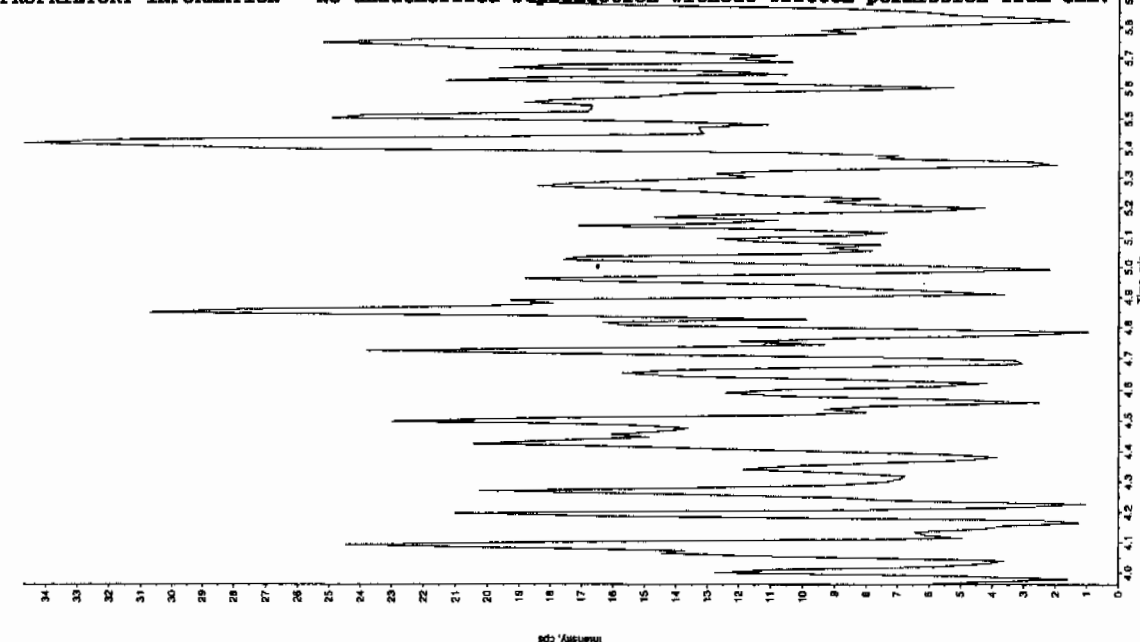
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 9:41:25 AM
 Acq. Time: 9:41:25 AM
 Modified: No



don 03/22/10

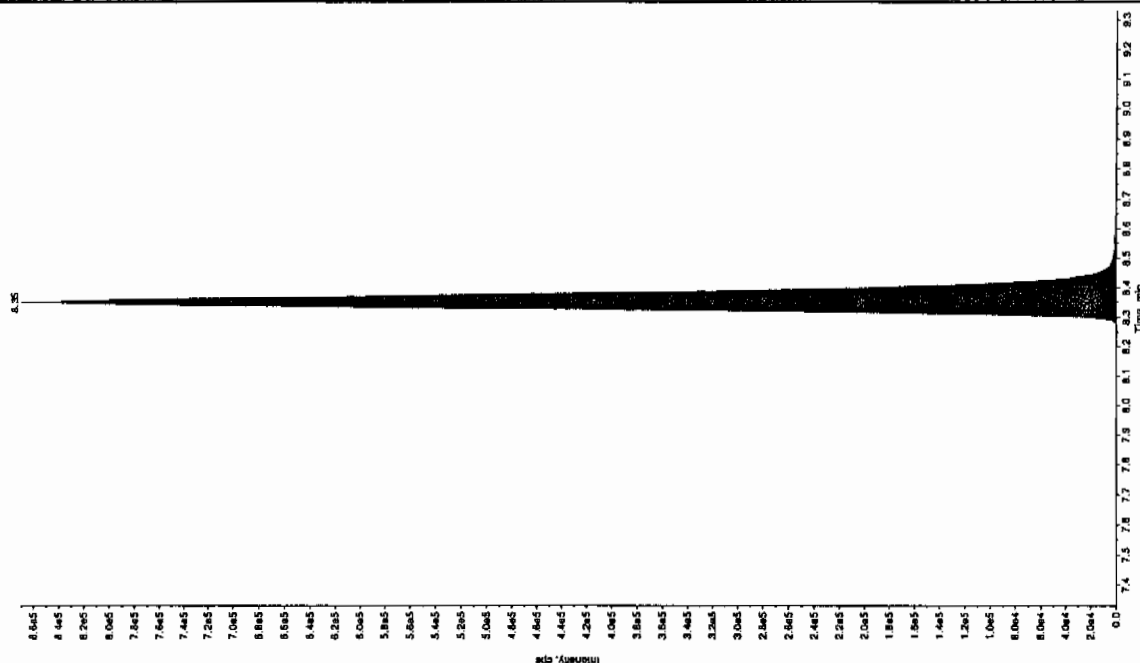
Sample Name: 248240004 Sample ID: 958334[LER] File: EX503160088.wif
 Peak Name: 25-Diamino-4-nitrofluorene Mass(es): 165.0465.0 amu
 Comment: LCX812125 Annotation: *

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:41:25 AM
 Modified: No



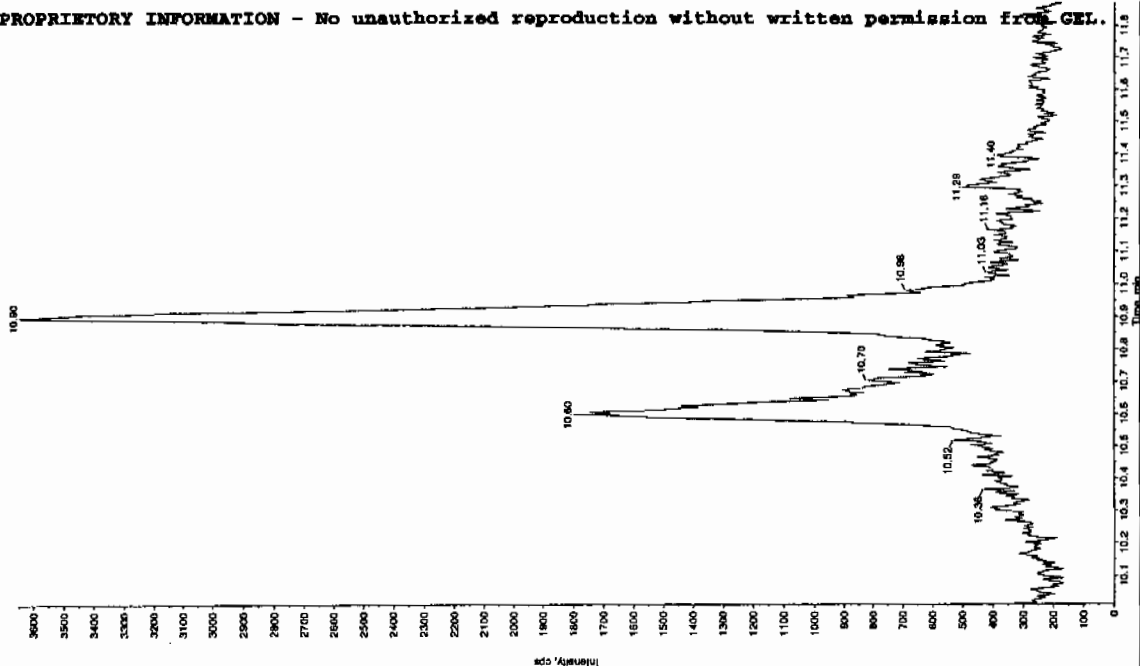
Sample Name: 248240004 Sample ID: 958334[LER] File: EX503160088.wif
 Peak Name: 25-Diamino-4-nitrofluorene Mass(es): 165.0465.0 amu
 Comment: LCX812125 Annotation: *

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 257 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:41:25 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Peak Height: 3.25e+006 counts
 Start Time: 8.23 min
 End Time: 8.59 min



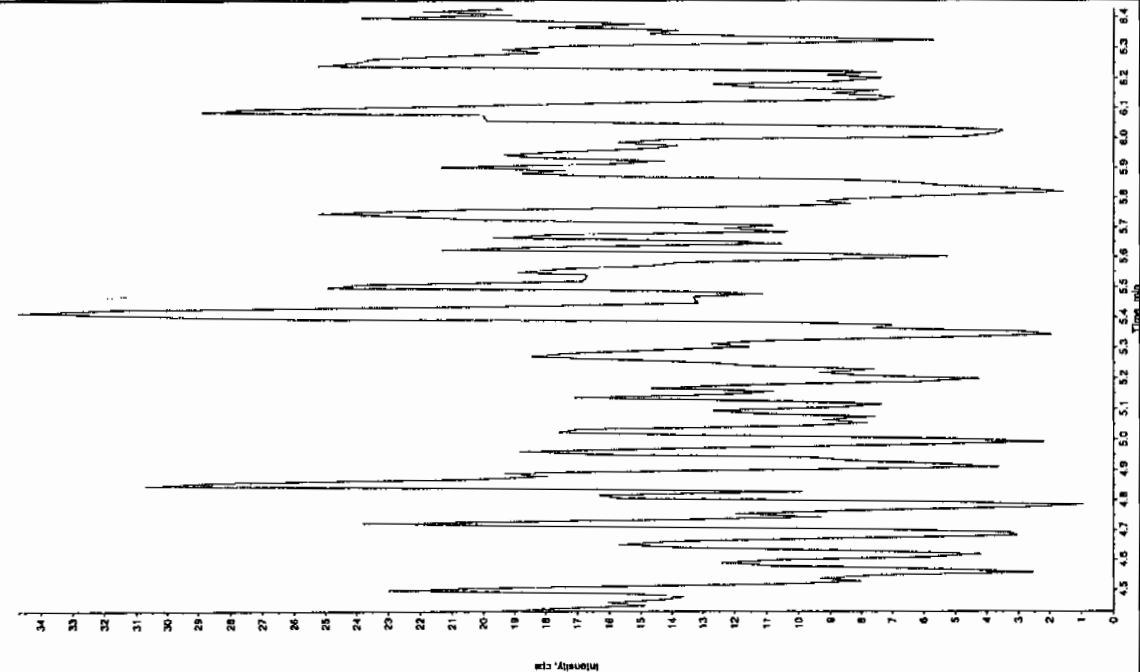
Sample Name: "246240004" Sample ID: "9593342121" File: "EXS03160098.wif"
 Peak Name: "Tri(o-cresyl) phosphate" Mass(es): "359.1/91.0 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 3/17/2010
 Acq. Time: 9:41:25 AM
 Modified: No



Sample Name: "246240004" Sample ID: "9593342121" File: "EXS03160098.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "196.046.0 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 3/17/2010
 Acq. Time: 9:41:25 AM
 Modified: No



*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: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325017a

Date Analyzed: 26-MAR-10 00:38

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\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325017a

Date: 26-Mar-2010

Time: 00:38:49

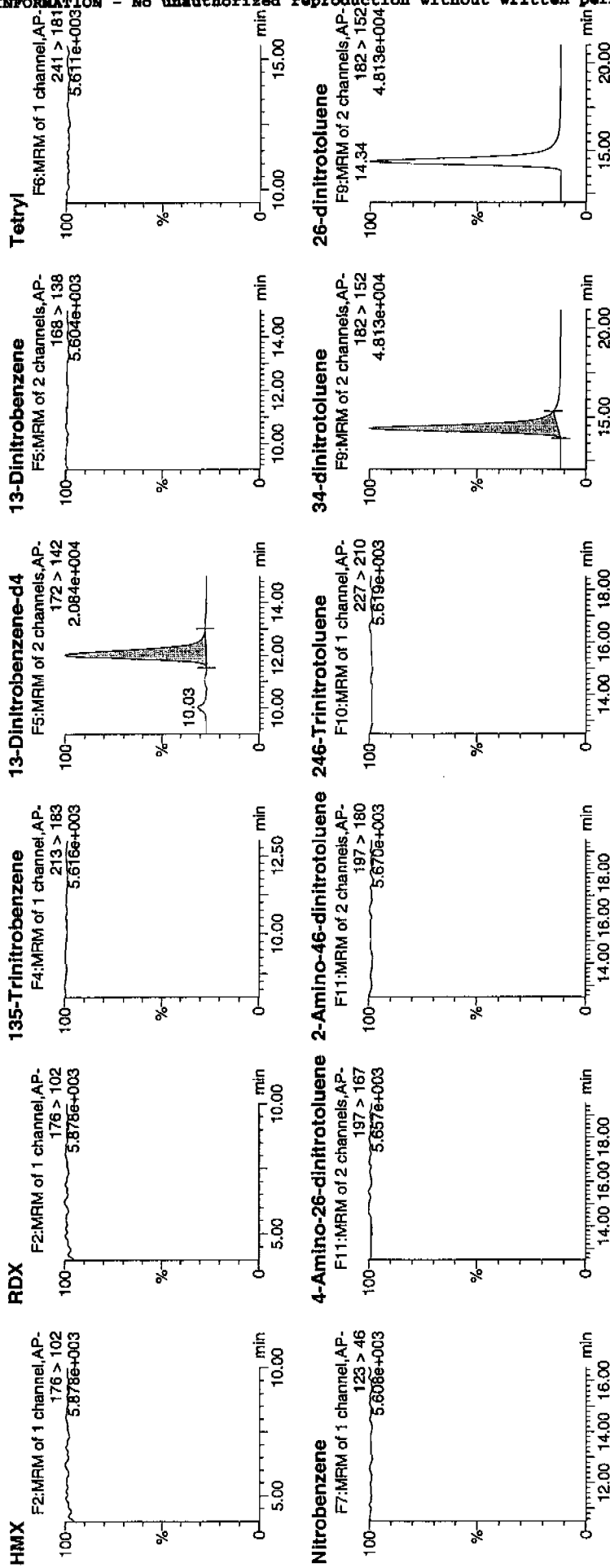
ID: 248240005

Vial: 3:4,A

4077
3/26/10

LAU-959334 / 8022 / 21

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



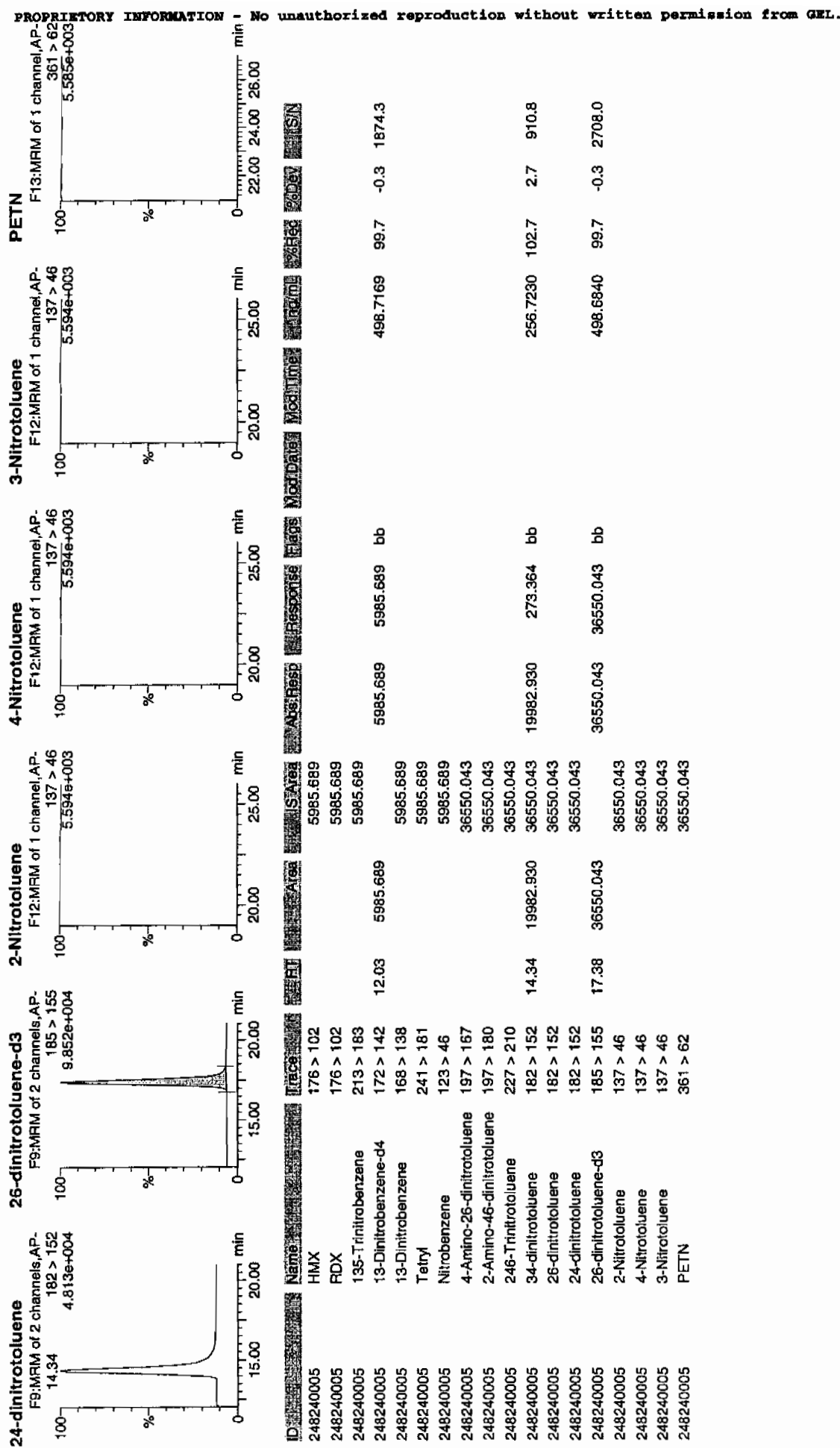
4077
03/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 34 of 77

Dataset: C:\MASSLYNX\New_Exp_PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7456

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240005

Sample Amount 2

Moisture: 7.5

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160099.wiff

Date Analyzed: 17-MAR-10 09:57

Units: ug/kg

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

*Concentration =

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

See 3/19/10

Sample Name: "249240005" Sample ID: "95933421LER" File: "EXS03160089.wiff"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX833125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

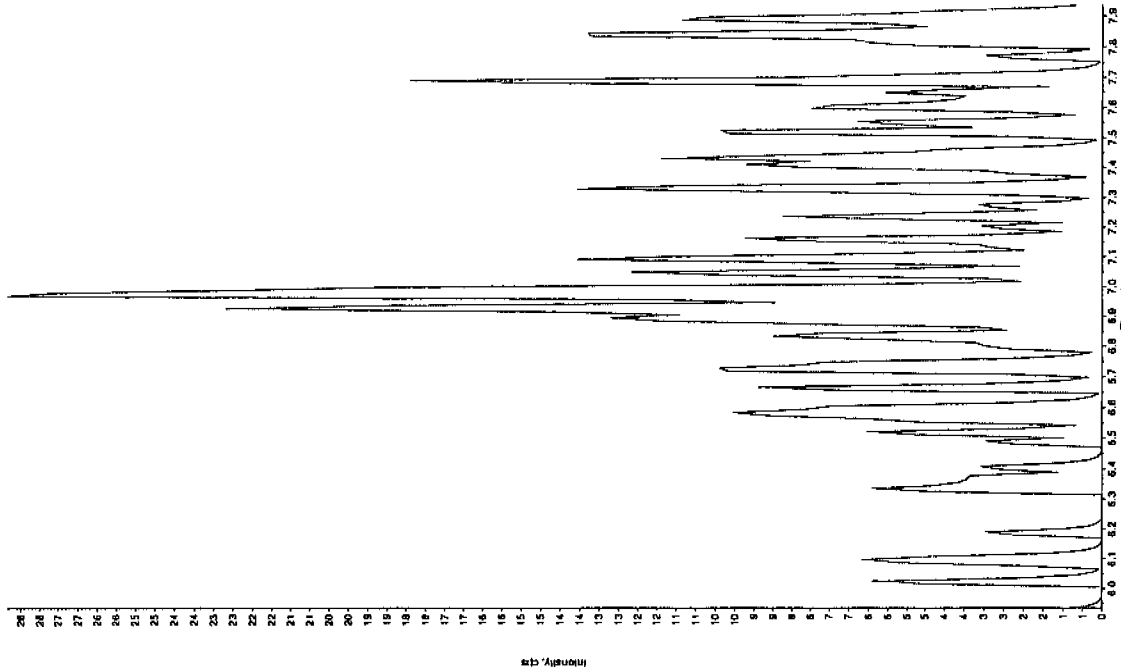
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 9:57:07 AM

Modified: No



Chrom. 03/19/10

Sample Name: "249240005" Sample ID: "95933421LER" File: "EXS03160089.wiff"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX833125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 9:57:07 AM

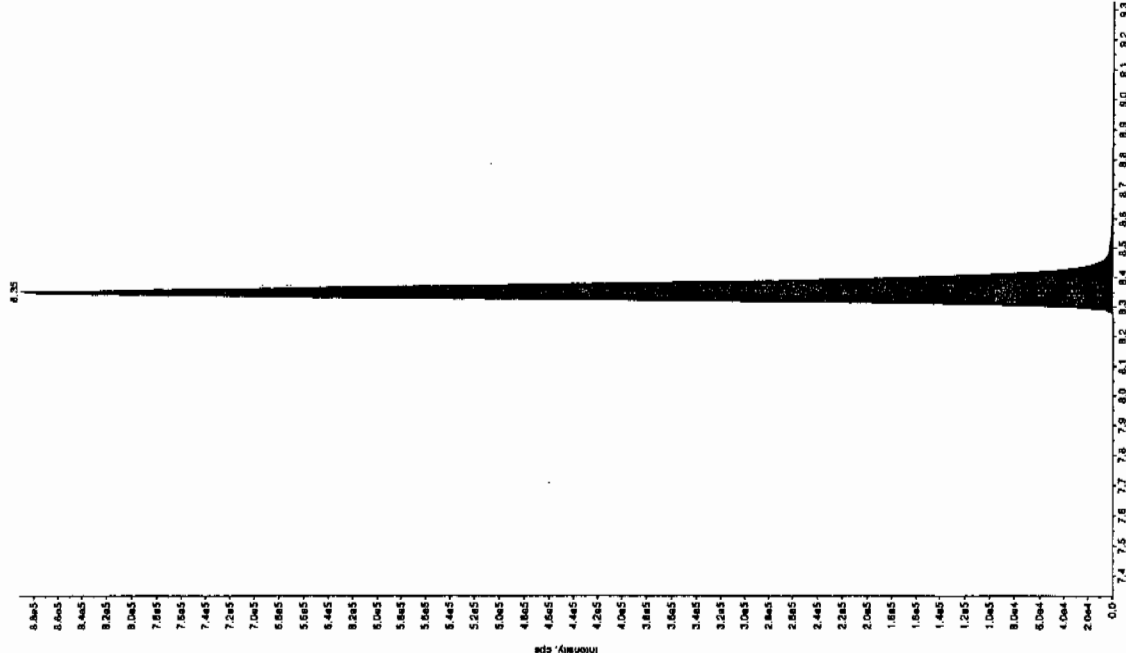
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "242240005" Sample ID: "955334121" File: "EX503160095.wif"
 Peak Name: "24-Dihydro-4-Hydroxyand" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:57:07 AM
 Modified: No

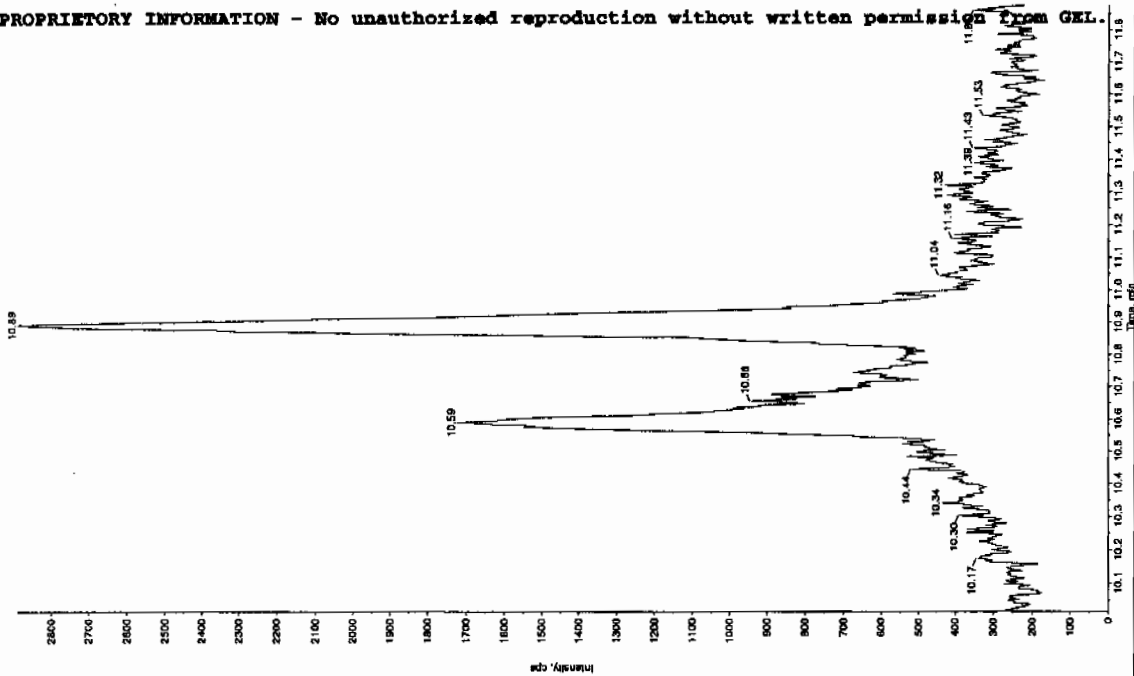


Sample Name: "242240005" Sample ID: "955334121" File: "EX503160095.wif"
 Peak Name: "24-Dihydro-4-Hydroxyand" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 259. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:57:07 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Area: 3.27e+006 counts
 Height: 89187.109 cps
 Start Time: 8.24 min
 End Time: 8.65 min

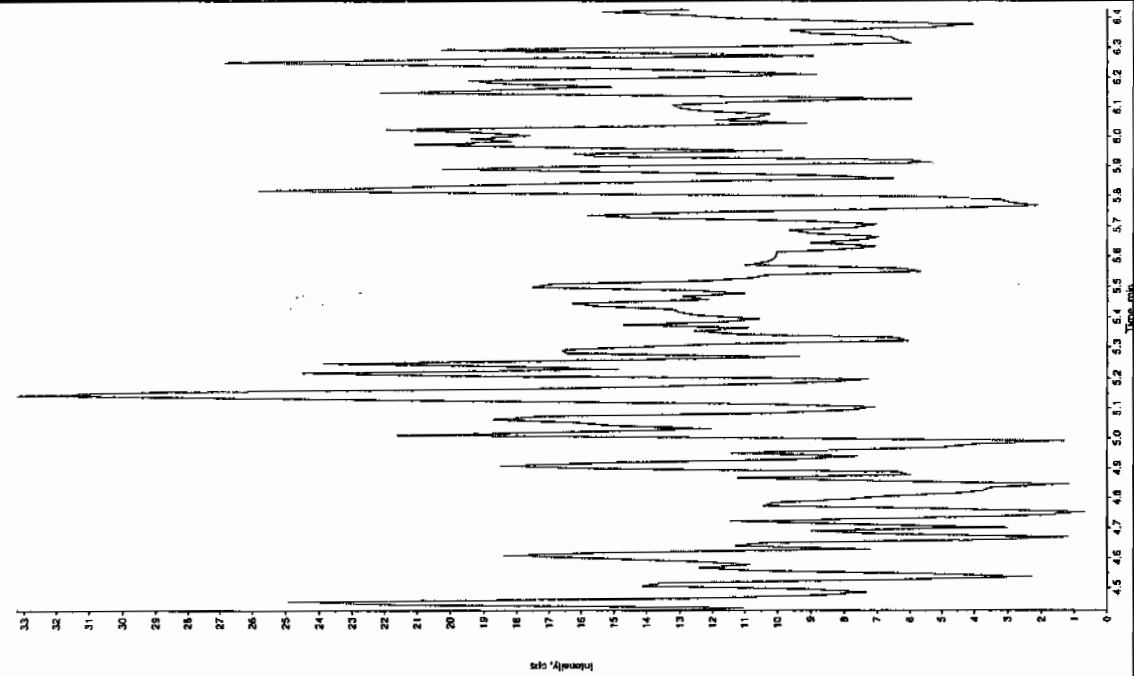
Sample Name: "248240005" Sample ID: "95933421LER" File: "EX503160069.wif"
 Peak Name: "tris(p-cresyl) phosphate" Mass(es): "369.179.1.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:57:07 AM
 Modified: NO



Sample Name: "248240005" Sample ID: "95933421LER" File: "EX503160069.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 9:57:07 AM
 Modified: NO



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325018a

Date Analyzed: 26-MAR-10 01:08

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\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325018a

Date: 26-Mar-2010

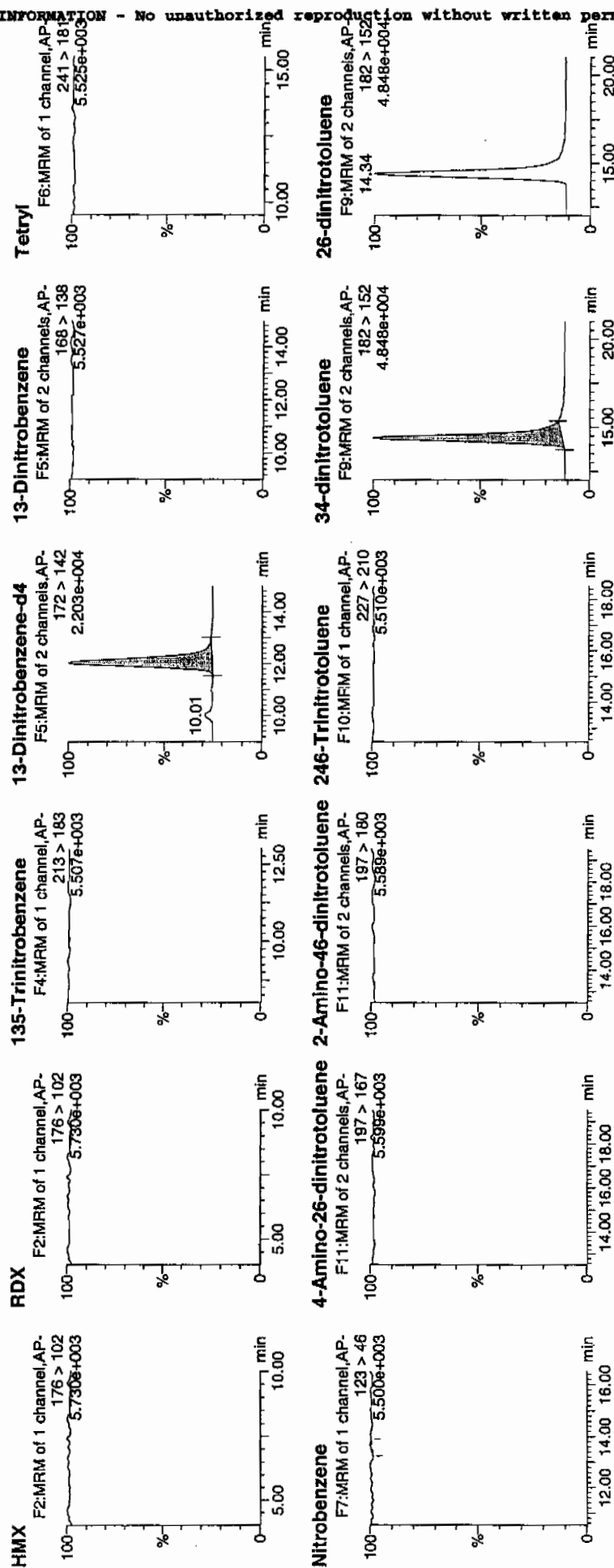
Time: 01:08:19

ID: 248240006

Vial: 3:4,B

Handwritten: 1477
3/26/10

Handwritten: 1959334 / 21



Handwritten: 1477
3/26/10

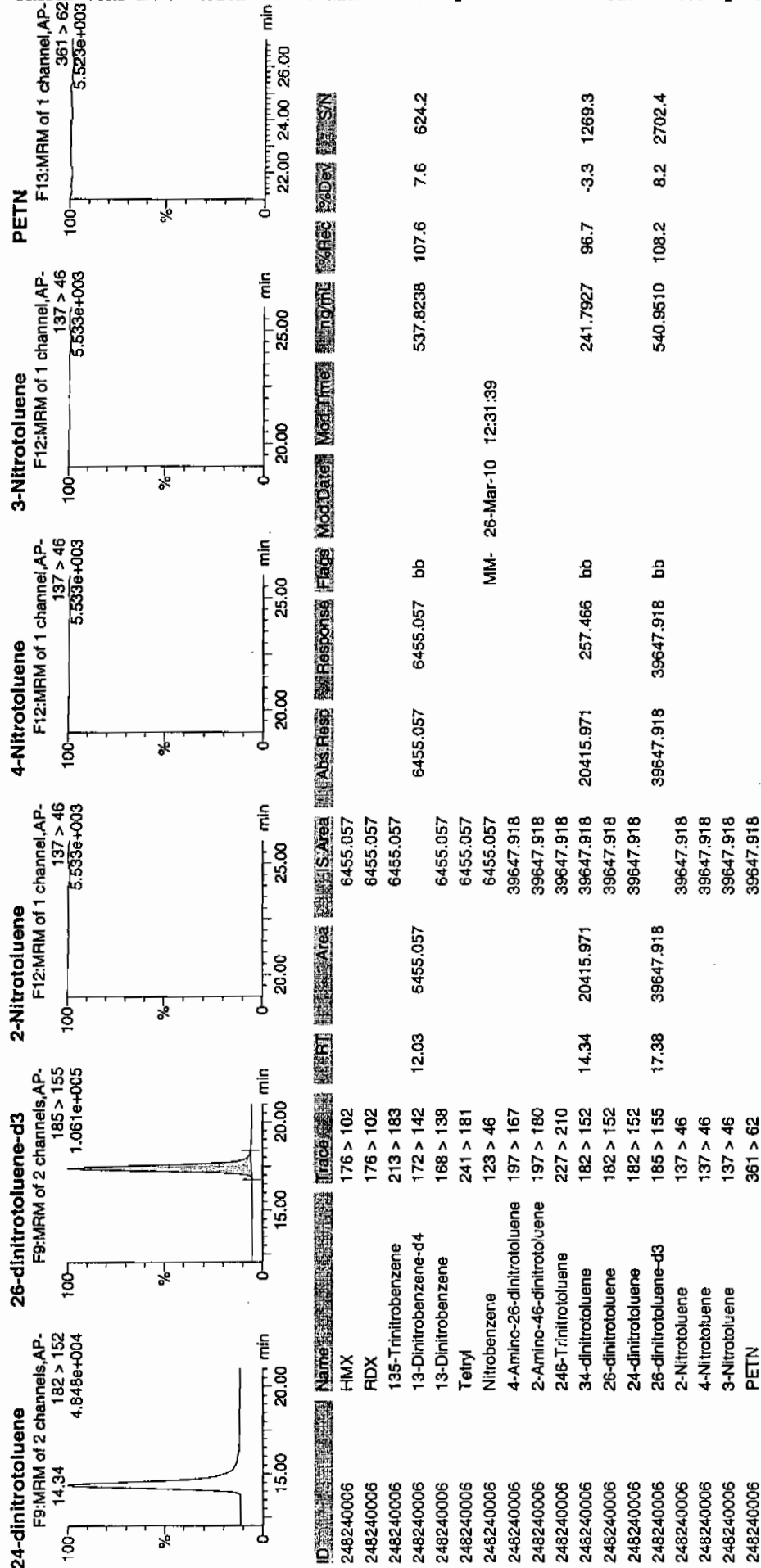
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 36 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO1032510expA.qld, Time: Fri Mar 26 12:43:58 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7455

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240006

Sample Amount 2

Moisture: 24.4

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160100.wiff

Date Analyzed: 17-MAR-10 10:12

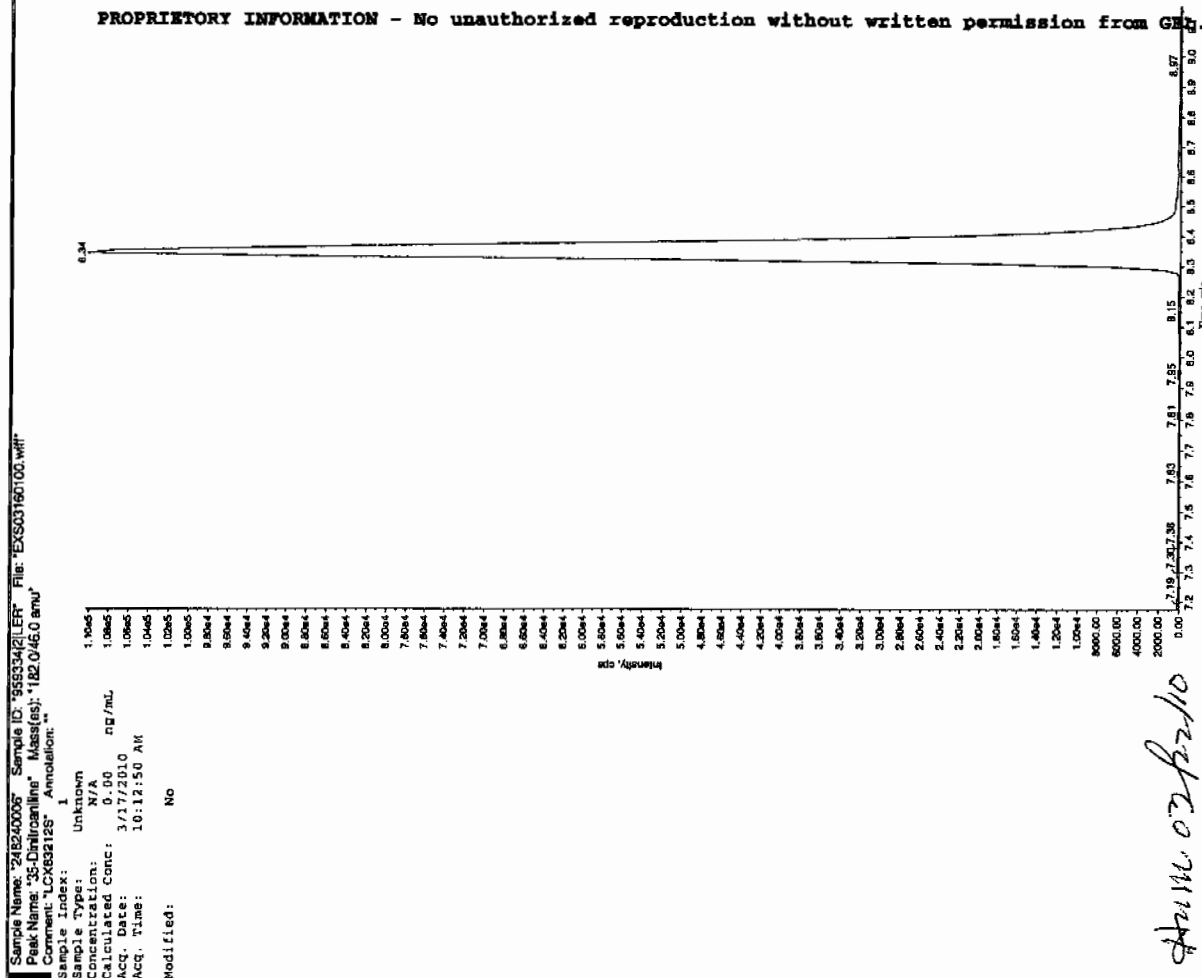
Units: ug/kg

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

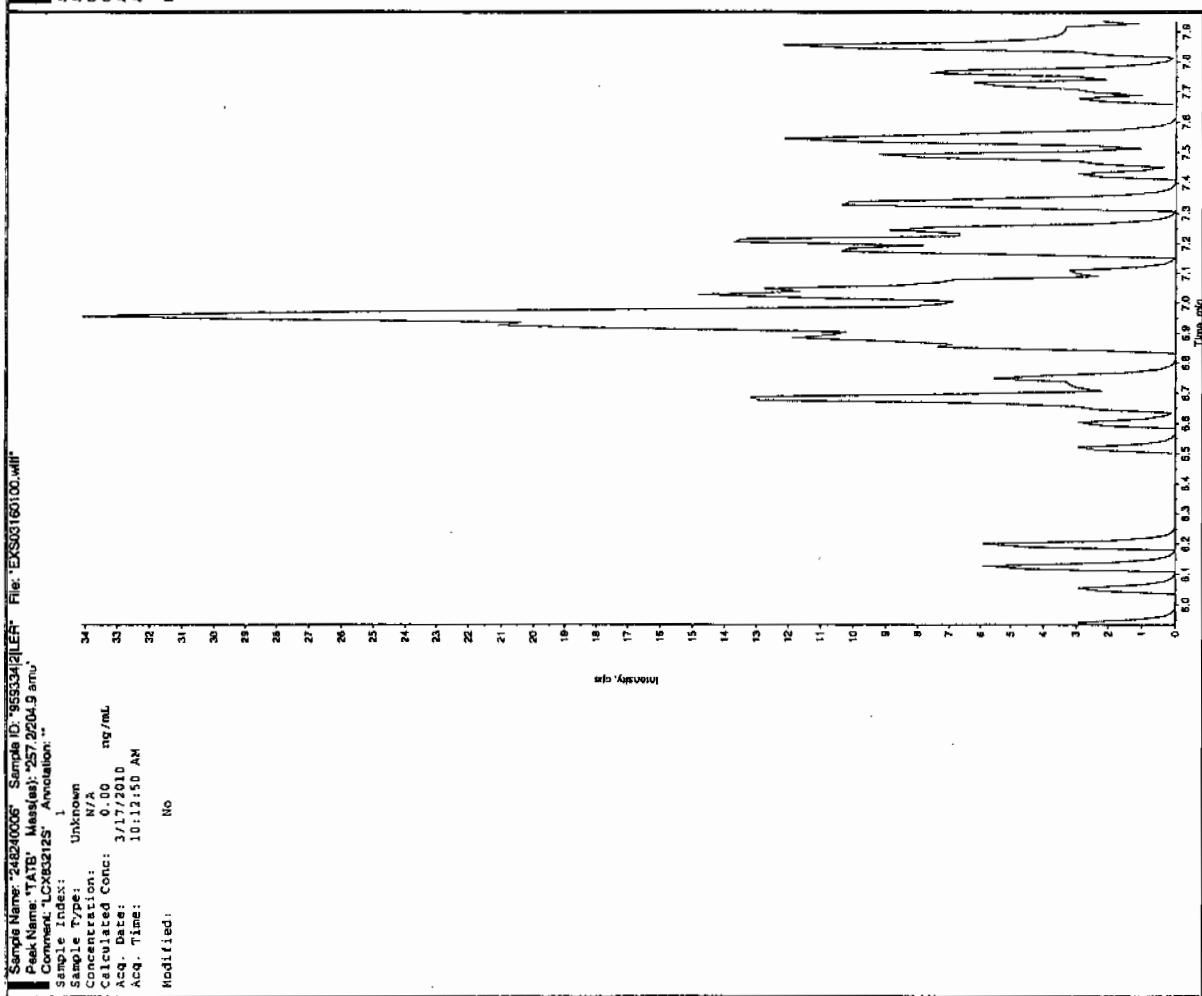
*Concentration =

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

Jan 31/9/10

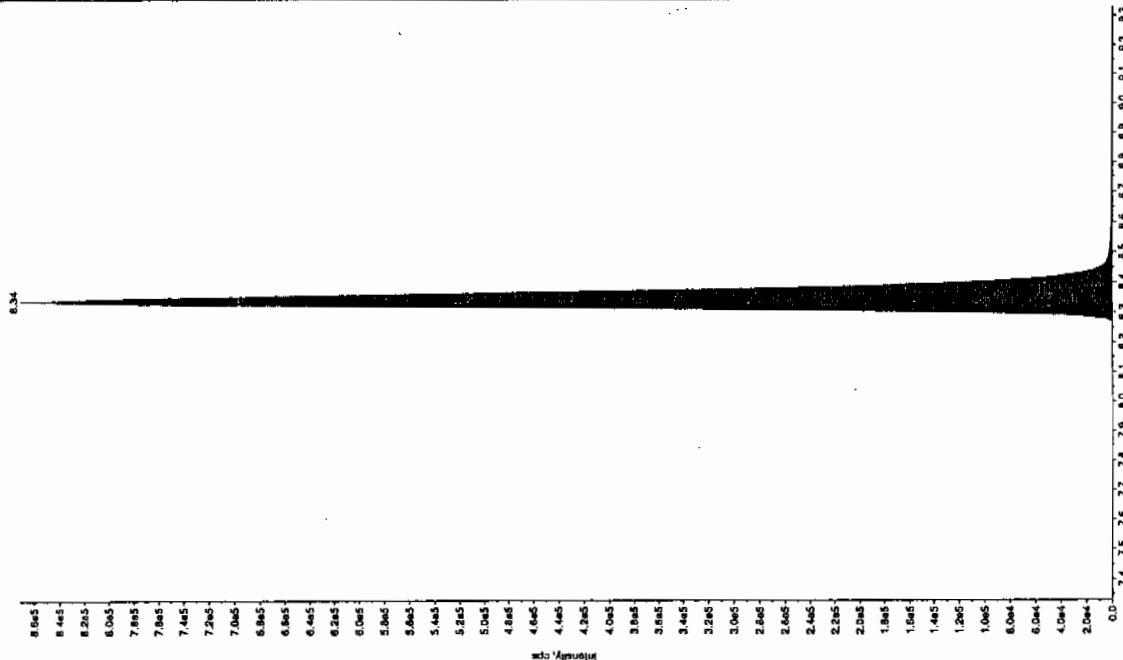


Jan 03/9/10



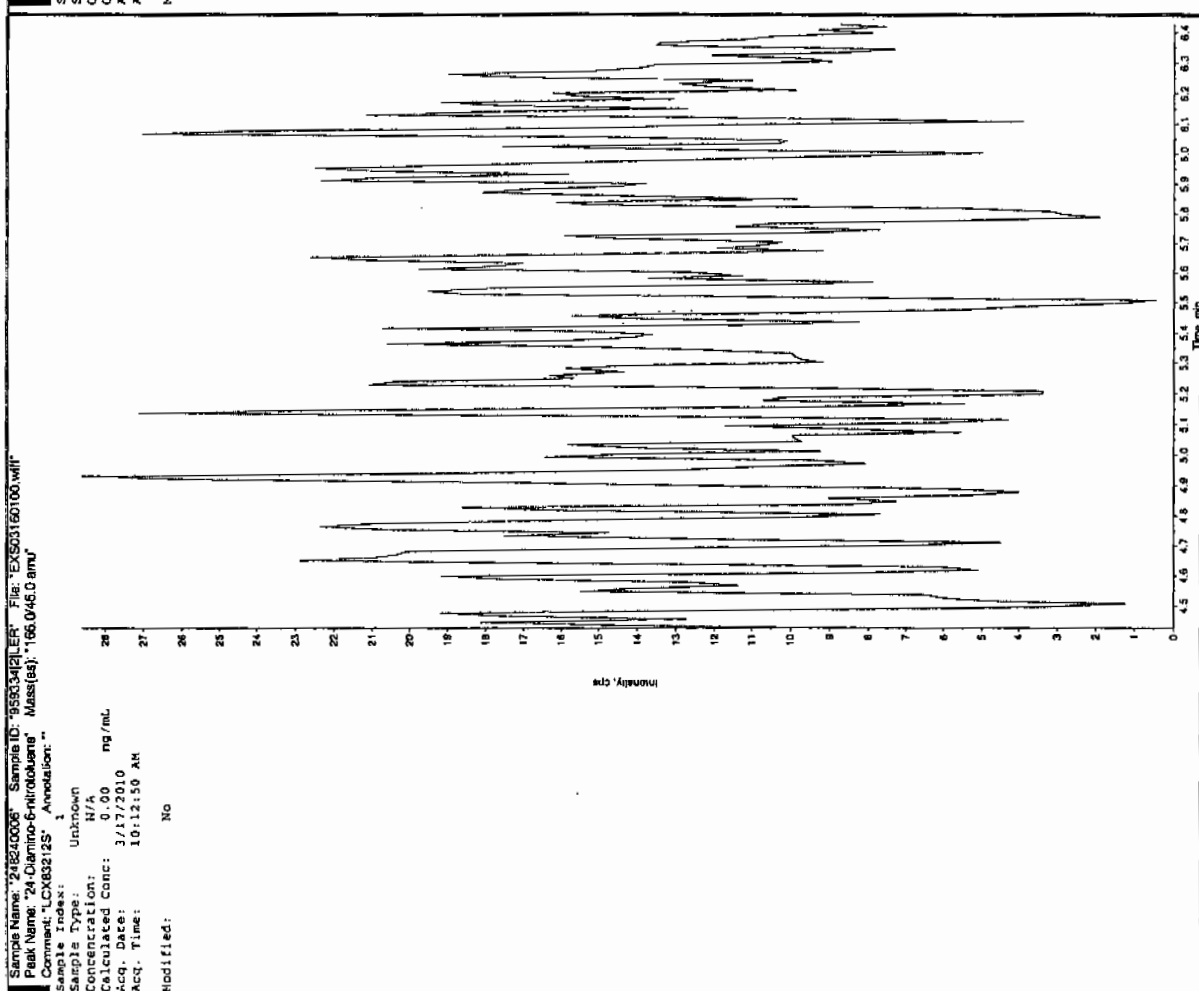
Sample Name: "24824006" Sample ID: "95934211" File: "EX503160100.wif"
 Peak Name: "34-Diethoxybenzene" Mass(es): "162.1/151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:12:50 AM
 Modified: NO



Sample Name: "24824006" Sample ID: "95934211" File: "EX503160100.wif"
 Peak Name: "34-Diethoxybenzene" Mass(es): "162.1/151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:12:50 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: NO
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 3.25e+008 counts
 Height: 872035.217 cps
 Start Time: 8.23 min
 End Time: 8.65 min



*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325019a

Date Analyzed: 26-MAR-10 01:37

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 37 of 77

Dataset: C:\MASSLYN\New_Exp\PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYN\NEW_EXP\PRO\Data\EXP0325019a

Date: 26-Mar-2010

Time: 01:37:48

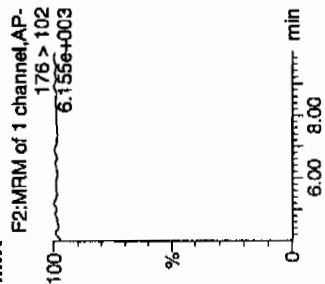
ID: 248240007

Vial: 3:4,C

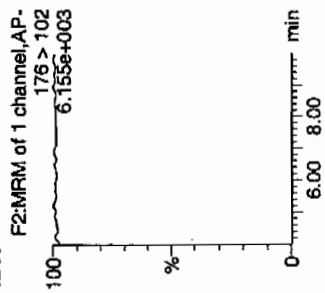
100%
3/26/10

100%
959334 / 2003 / 21

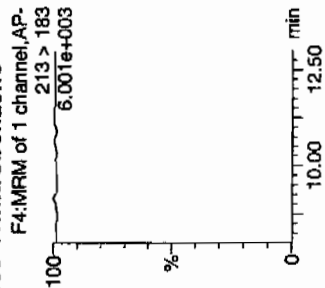
HMX



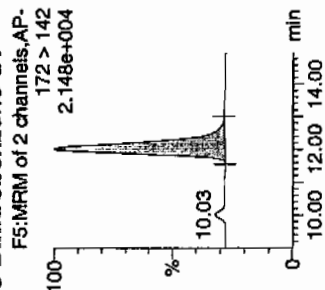
RDX



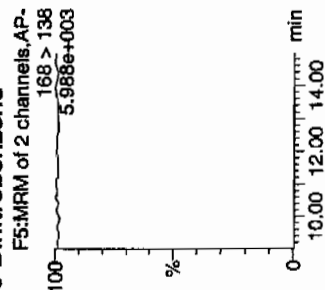
135-Trinitrobenzene



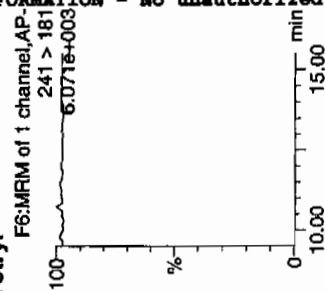
13-Dinitrobenzene-d4



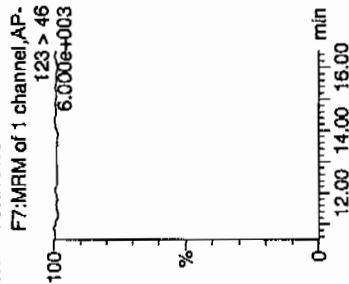
13-Dinitrobenzene



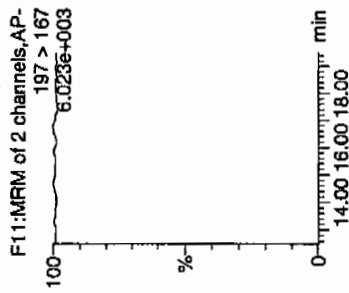
Tetryl



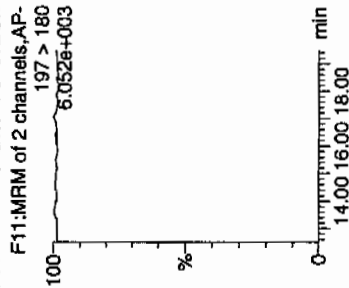
Nitrobenzene



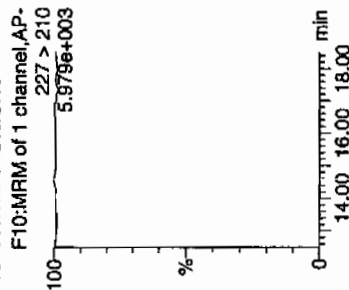
4-Amino-26-dinitrotoluene



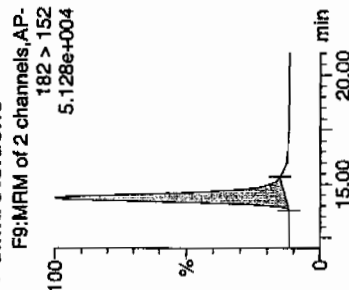
2-Amino-46-dinitrotoluene



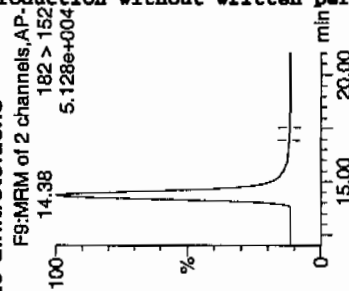
246-Trinitrotoluene



34-dinitrotoluene



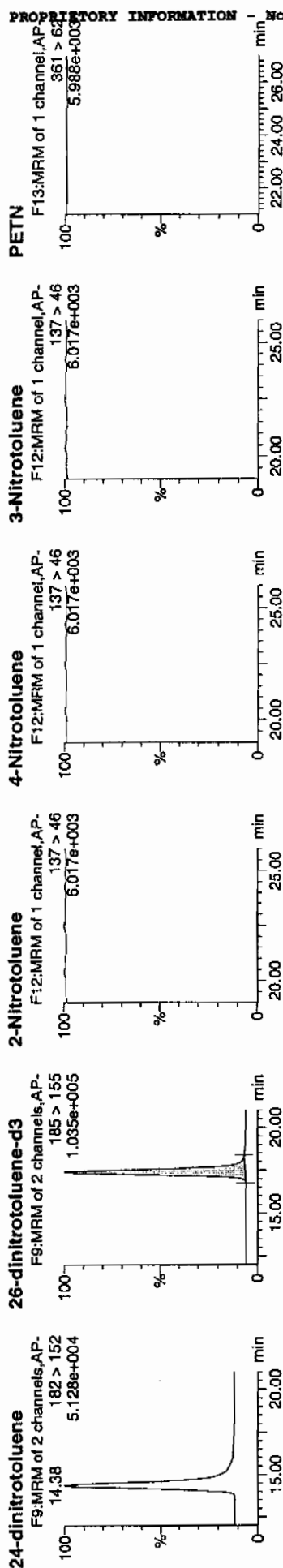
26-dinitrotoluene



4/11/10 3/30/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



PROPERTY INFORMATION - No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Mod User	Rec	Dev	SN
248240007	HMx	176 > 102		6100.759										
248240007	RDX	176 > 102		6100.759										
248240007	135-Trinitrobenzene	213 > 183		6100.759										
248240007	13-Dinitrobenzene-d4	172 > 142	12.03	6100.759		6100.759	6100.759	bb				508.3043	101.7	1.7 1279.6
248240007	13-Dinitrobenzene	168 > 138		6100.759										
248240007	Tetryl	241 > 181		6100.759										
248240007	Nitrobenzene	123 > 46		6100.759										
248240007	4-Amino-26-dinitrotoluene	197 > 167		37985.348										
248240007	2-Amino-46-dinitrotoluene	197 > 180		37985.348										
248240007	246-Trinitrotoluene	227 > 210		37985.348										
248240007	34-dinitrotoluene	182 > 152	14.38	21181.855		21181.855	278.816	bb	MM-	26-Mar-10	12:39:26	261.8433	104.7	4.7 1138.0
248240007	26-dinitrotoluene	182 > 152		37985.348										
248240007	24-dinitrotoluene	182 > 152		37985.348										
248240007	26-dinitrotoluene-d3	185 > 155	17.40	37985.348		37985.348	37985.348	bb				518.2671	103.7	3.7 3235.6
248240007	2-Nitrotoluene	137 > 46		37985.348										
248240007	4-Nitrotoluene	137 > 46		37985.348										
248240007	3-Nitrotoluene	137 > 46		37985.348										
248240007	PETN	361 > 62		37985.348										

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7459

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240007

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160104.wiff

Date Analyzed: 17-MAR-10 11:15

Units: ug/kg

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

*Concentration =

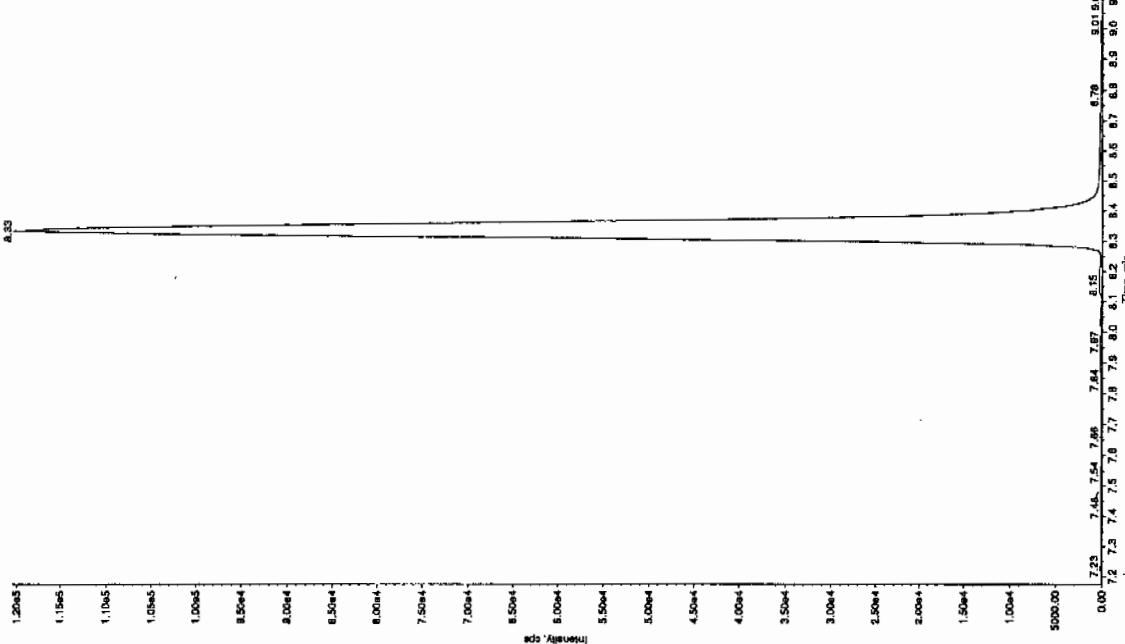
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Sample Name: "2420-0007" Sample ID: "959334/2LER" File: "EX503180104.wit"

Peak Name: "35-Dinitroanthracene" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 11:15:41 AM
 Acq. Time: 11:15:41 AM
 Modified: No

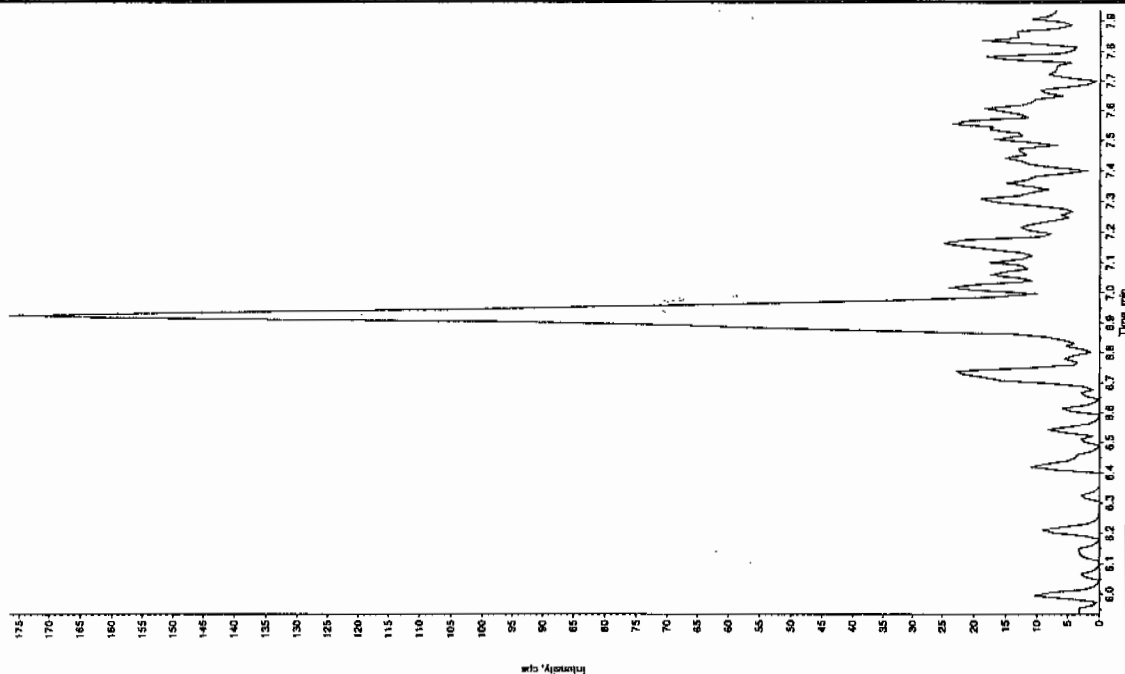


Sample Name: "2420-0007" Sample ID: "959334/2LER" File: "EX503180104.wit"

Peak Name: "TATB" Mass(es): "237.2204.9 amu"

Comment: "LCX832125" Annotation: ""

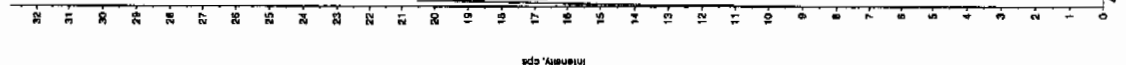
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 11:15:41 AM
 Acq. Time: 11:15:41 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

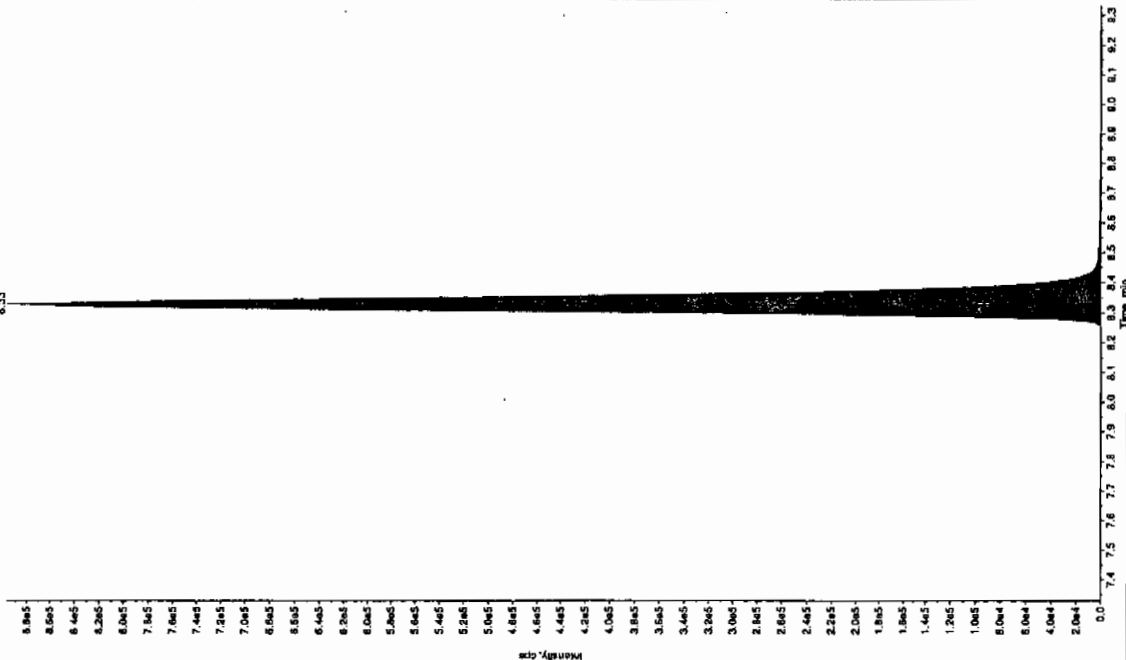
Sample Name: "241240007" Sample ID: "559334125" File: "EX503160104.wif"
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:15:41 AM
 Modified: No



Sample Name: "241240007" Sample ID: "559334125" File: "EX503160104.wif"
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "182.151.9 amu"
 Comment: "LCX832125" Annotation: ""

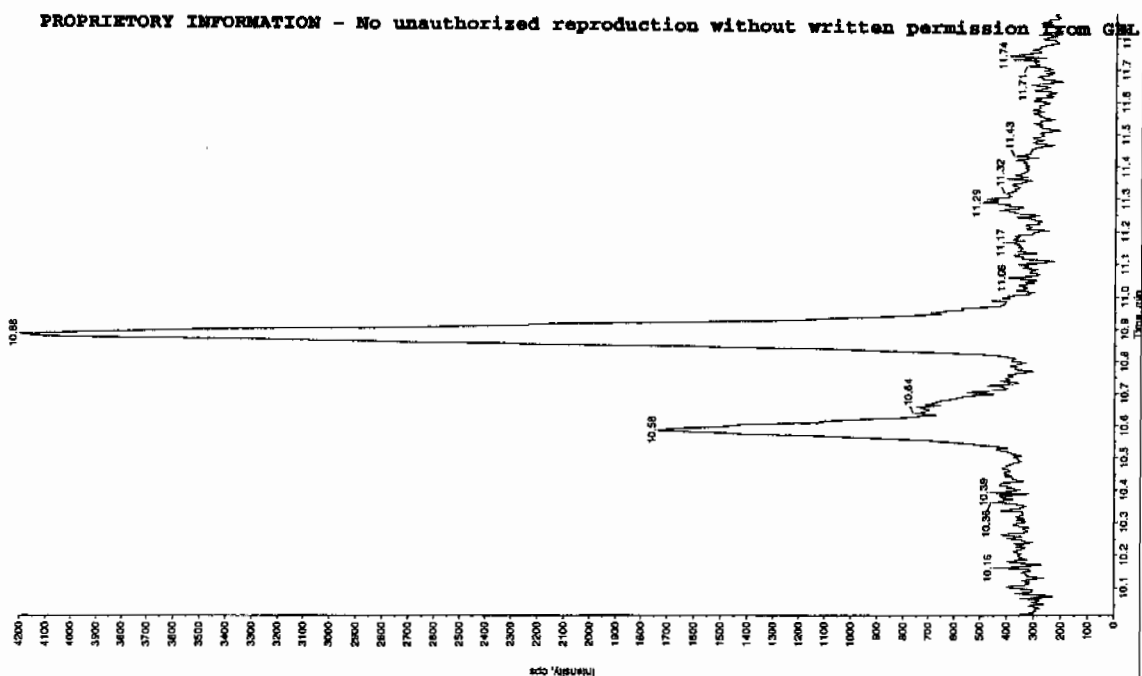
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 251. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:15:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 3.18e+006 counts
 Height: 897218.323 cps
 Start Time: 8.22 min
 End Time: 8.71 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

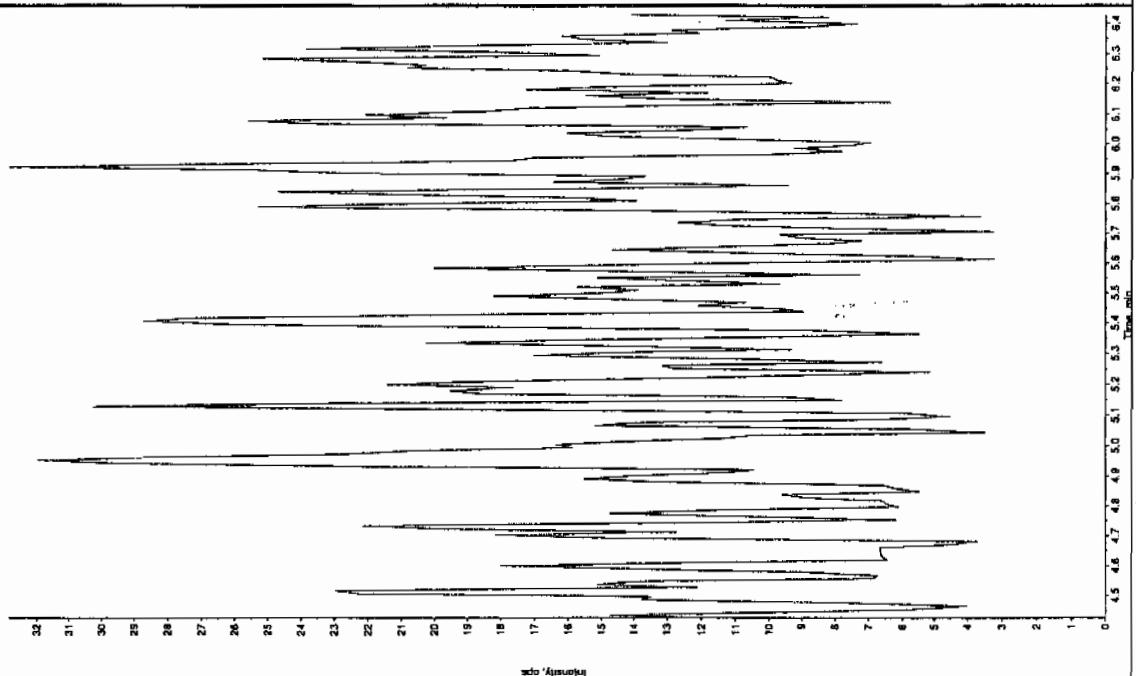
Sample Name: "248240007" Sample ID: "95033421ER" File: "EXS03160104.wil"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
 Comment: "LCX63212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.7172010 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:15:41 AM
 Modified: No



Sample Name: "248240007" Sample ID: "95033421ER" File: "EXS03160104.wil"
 Peak Name: "24-Diamino-6-nitroquind" Mass(es): "166.0/46.0 amu"
 Comment: "LCX63212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:15:41 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325020a

Date Analyzed: 26-MAR-10 02:07

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 39 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325020a

Date: 26-Mar-2010

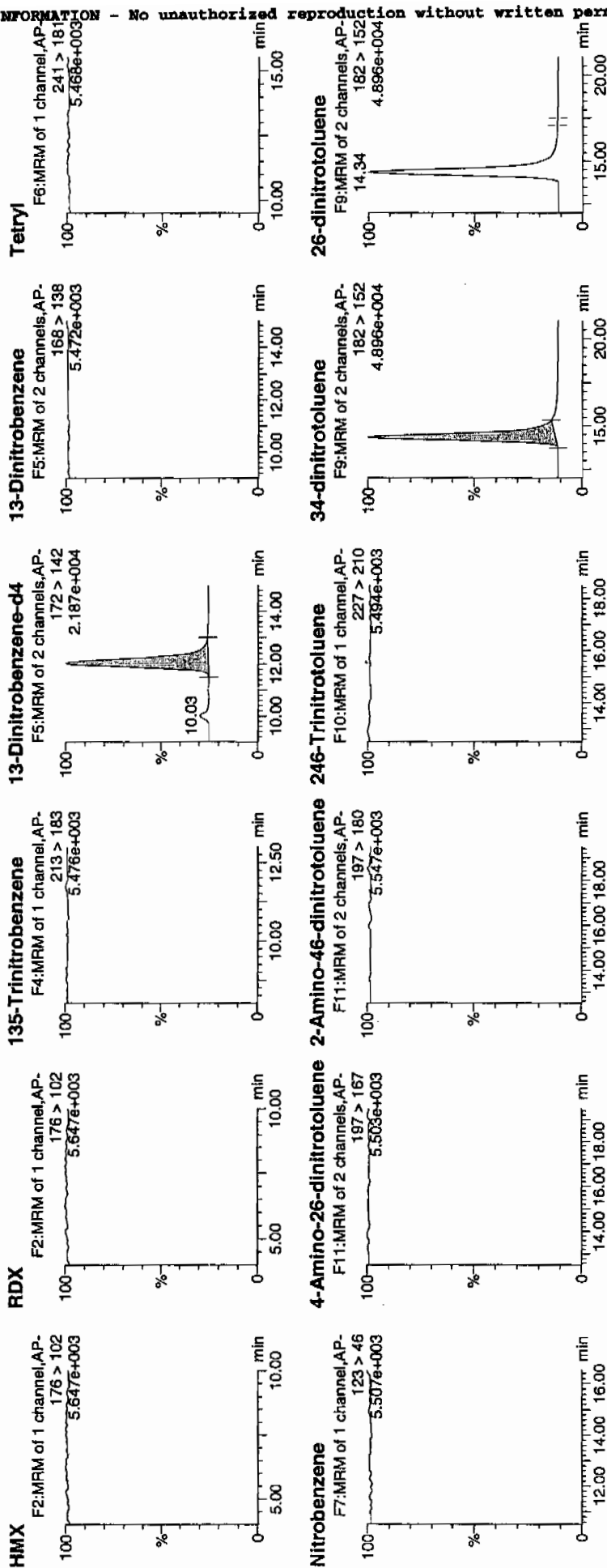
Time: 02:07:18

ID: 248240008

Vial: 3:4,D

4477
3/26/10

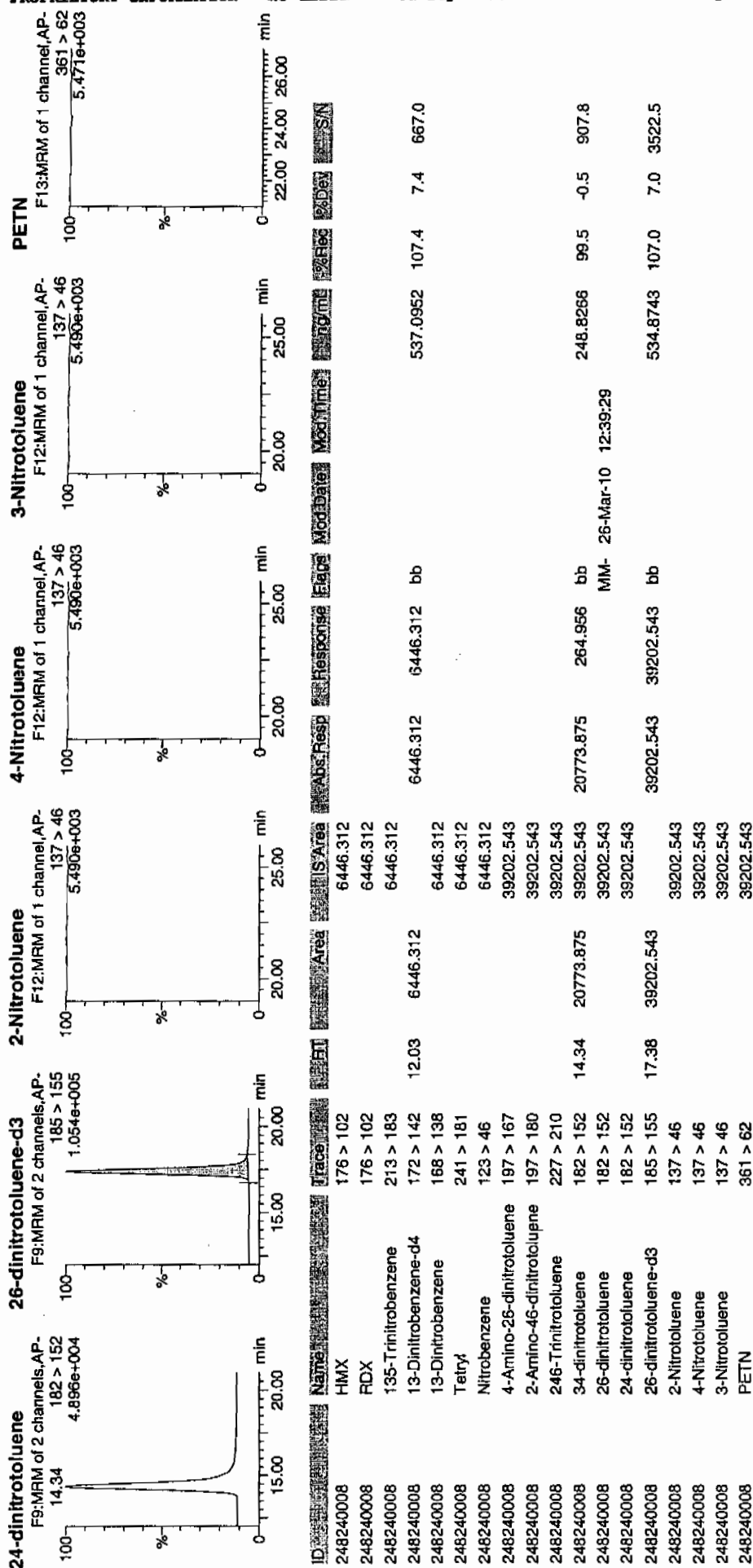
1959334 / 8022 / 21



4477
3/26/10

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7457

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240008

Sample Amount 2

Moisture: 18.8

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160105.wiff

Date Analyzed: 17-MAR-10 11:31

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

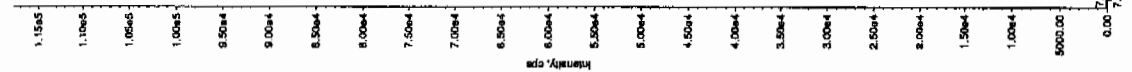
*Concentration =

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

Run 3/19/10

Sample Name: 24820008 Sample ID: 95933421.ER File: EXS03160105.wif
 Peak Name: 1S-Diastereoisomer Mass (u): 162.046.0 amu
 Comment: LCX832125 Annotation:

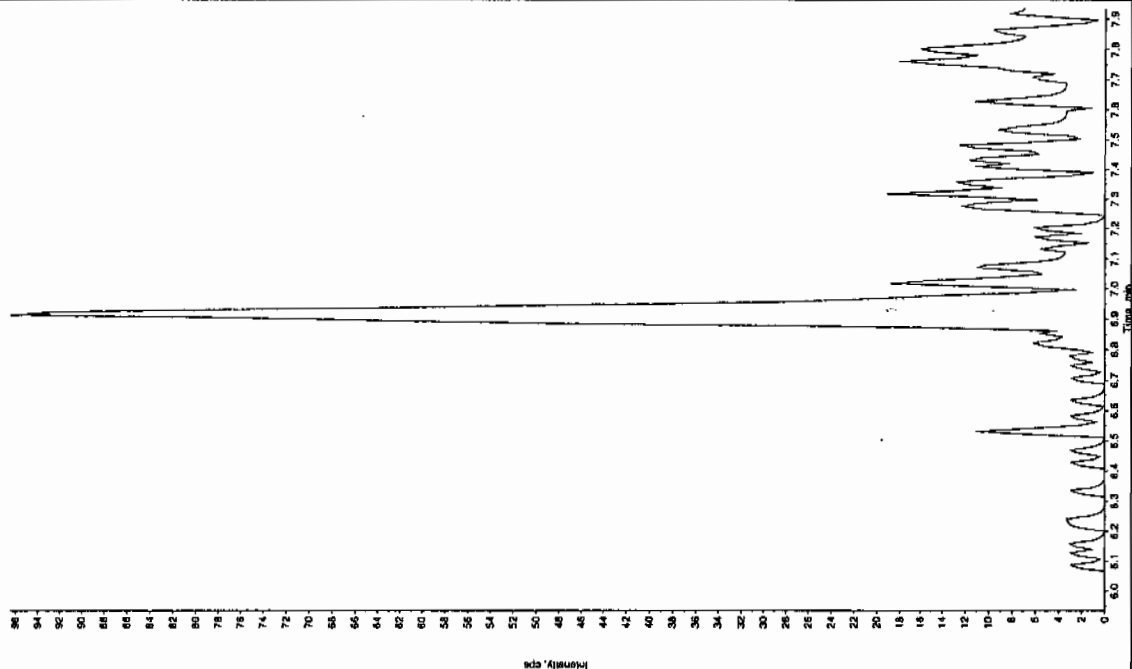
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:31:23 AM
 Modified: No



Run 03/22/10

Sample Name: 24820008 Sample ID: 95933421.ER File: EXS03160105.wif
 Peak Name: 1S-Diastereoisomer Mass (u): 257.2204.9 amu
 Comment: LCX832125 Annotation:

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:31:23 AM
 Modified: No



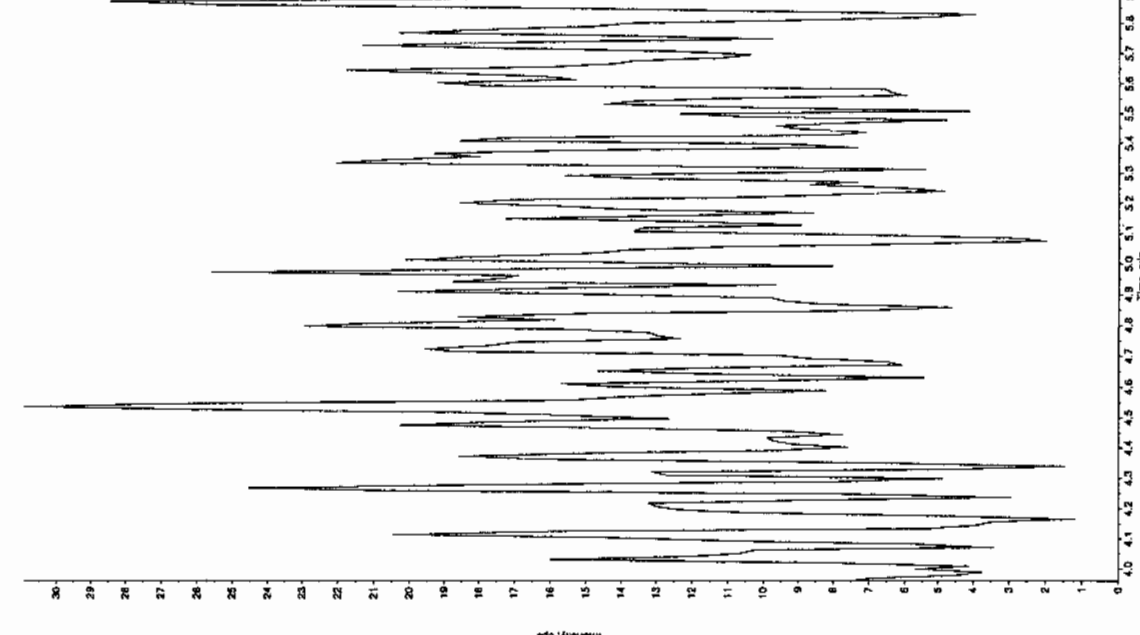
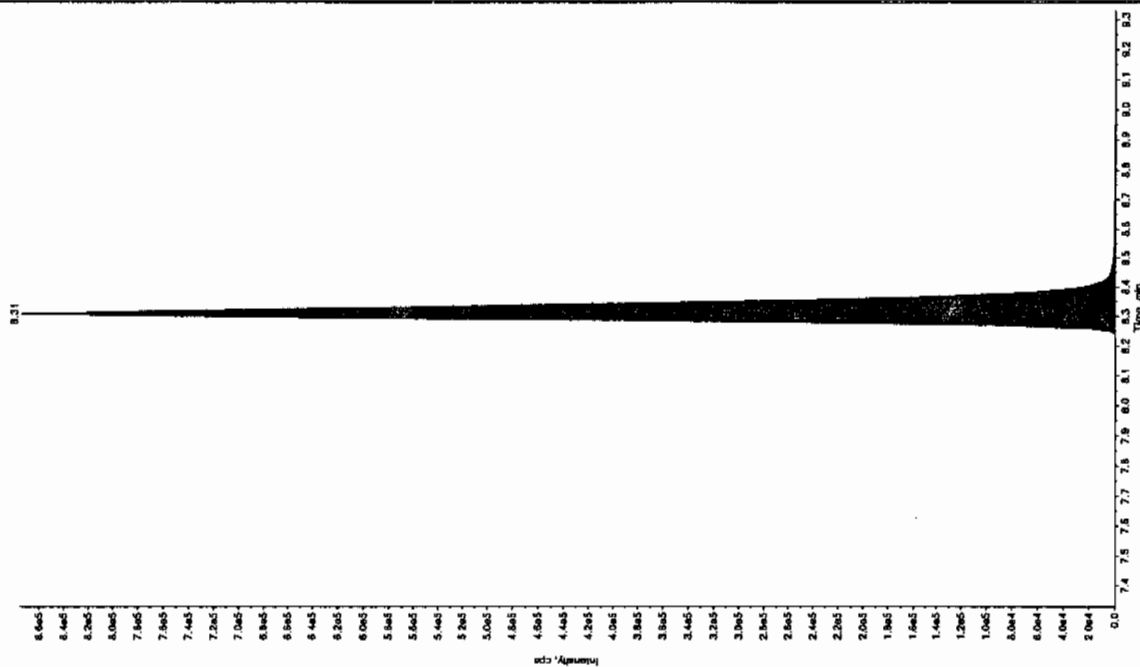
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248240008" Sample ID: "95933421ER" File: "EX503160105.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/17/2010
Acq. Time: 11:31:23 AM
Modified: No

Sample Name: "248240008" Sample ID: "95933421ER" File: "EX503160105.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 259. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 11:31:23 AM
Modified: No
Proc. Algorithm: Int. Liouan - IQA
Min. Peak Height: 1450.0 cps
Min. Peak Width: 3.00 sec
Scan Width: 15.0 sec
RT Window: 8.33 min
Expected RT: 8.33 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.31 min
Area: 3.28e+006 counts
Height: 875329.102 cps
Start Time: 8.22 min
End Time: 8.65 min



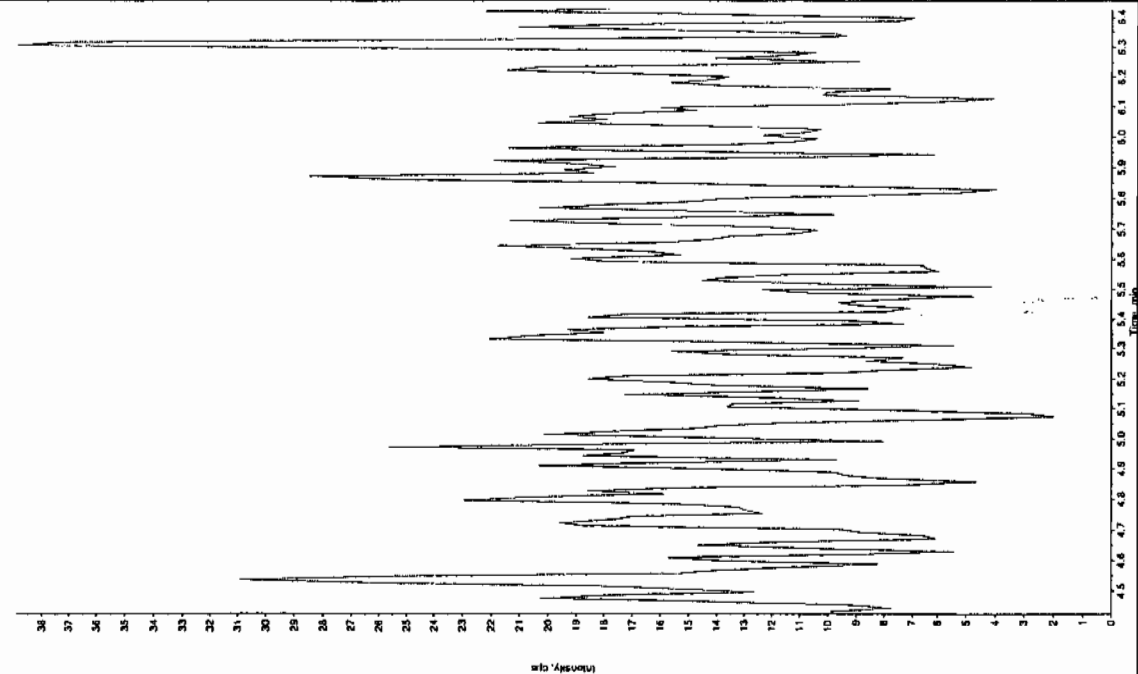
Sample Name: "246240008" Sample ID: "95833412LER" File: "EX803180105.wif"
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "359.1/91.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:31:23 AM
 Modified: No



Sample Name: "246240008" Sample ID: "95833412LER" File: "EX803180105.wif"
 Peak Name: "24-Diamino-5-ethyltoluene" Mass(es): "166.0/46.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:31:23 AM
 Modified: No



*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: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325021a

Date Analyzed: 26-MAR-10 02:36

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 41 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325021a

Date: 26-Mar-2010

Time: 02:36:47

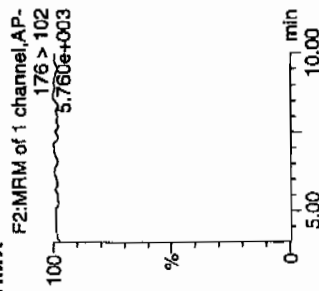
ID: 248240009

Vial: 3:4,E

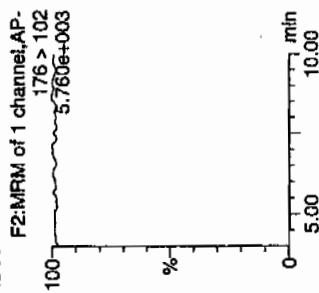
4477
3/26/10

WAX 959334 / 21

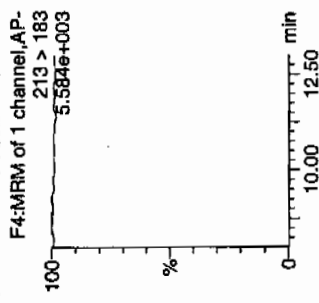
HMX



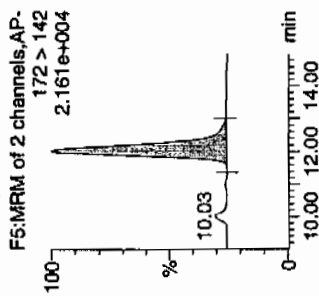
RDX



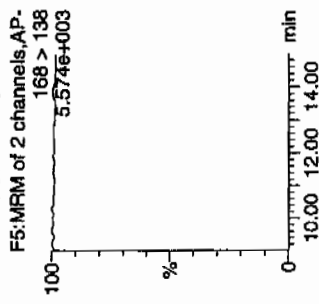
135-Trinitrobenzene



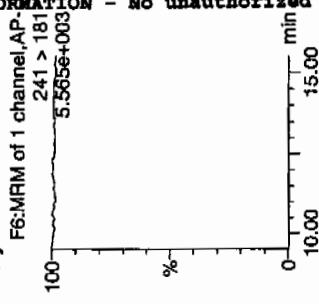
13-Dinitrobenzene-d4



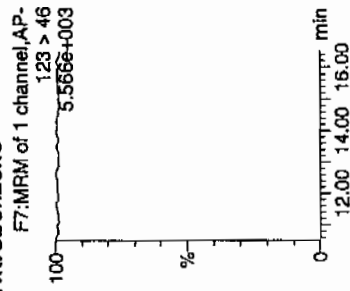
13-Dinitrobenzene



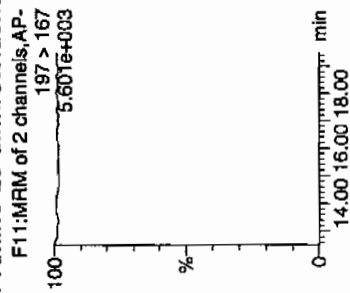
Tetryl



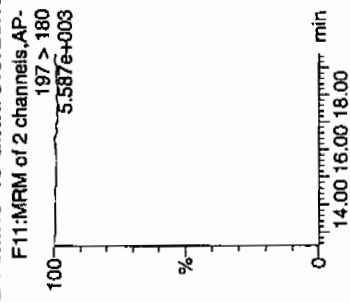
Nitrobenzene



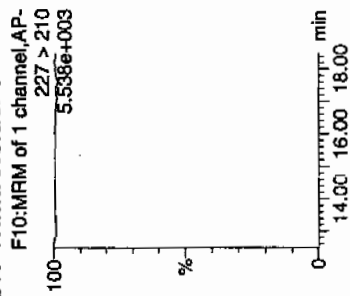
4-Amino-26-dinitrotoluene



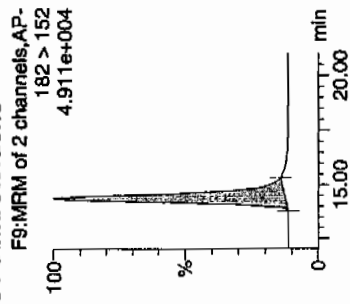
2-Amino-46-dinitrotoluene



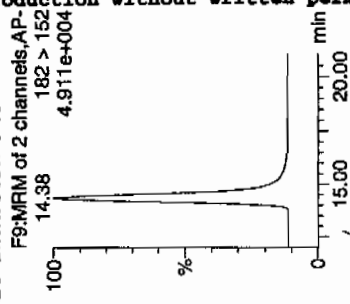
246-Trinitrotoluene



34-dinitrotoluene



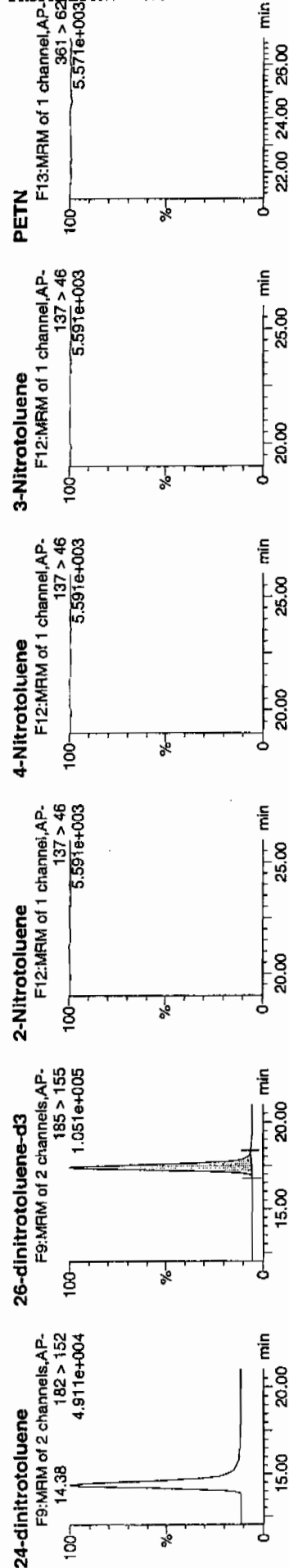
26-dinitrotoluene



47111 03/20/10

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

[illegible]

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7520

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240009

Sample Amount 2

Moisture: 42.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160106.wiff

Date Analyzed: 17-MAR-10 11:47

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

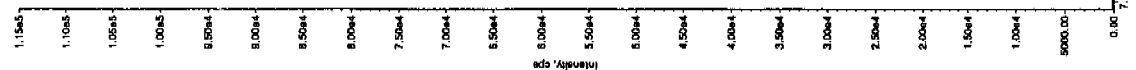
LCN 319110

Sample Name: "248240009" Sample ID: "959334212" File: "EX503160106.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No

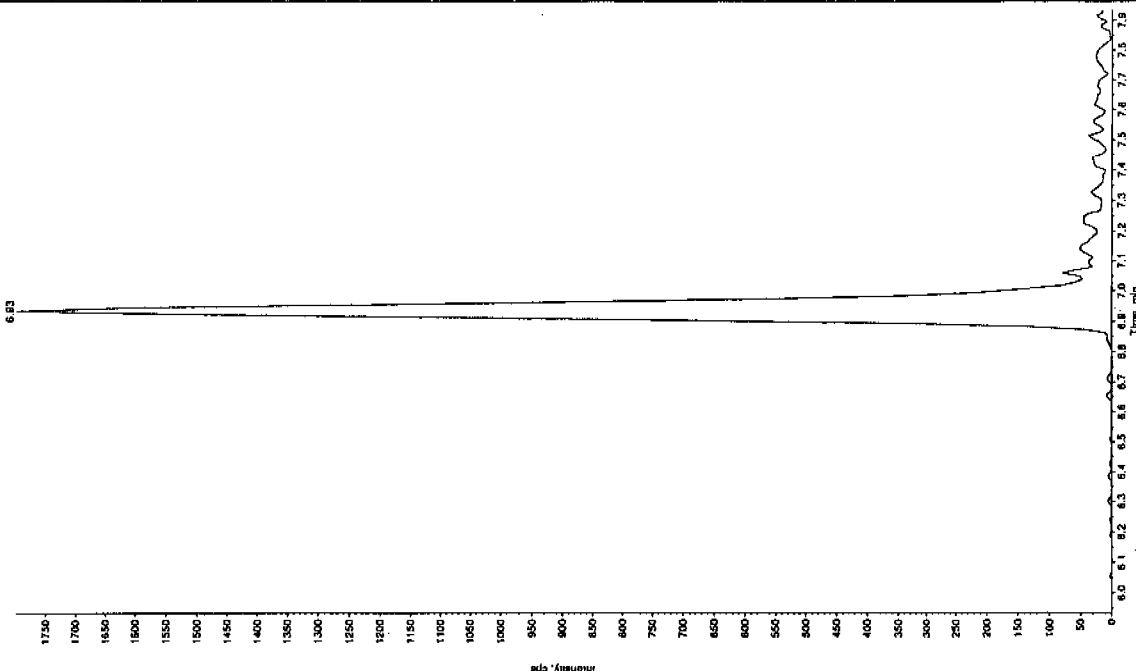


Sample Name: "248240009" Sample ID: "959334212" File: "EX503160106.wif"

Peak Name: "TATB" Mass(es): "257.2/204.8 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No



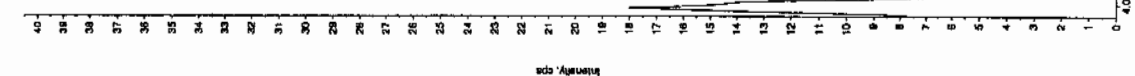
LCN 038210

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "243240009" Sample ID: "95833421ER" File: "EXS03160106.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "156.046.0 amu"
 Comment: "LCX53212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No

Intensity, cps



Sample Name: "243240009" Sample ID: "95833421ER" File: "EXS03160106.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.171.9 amu"
 Comment: "LCX53212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No
 Proc. algorithm: Intelligent - ION
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 3.27e+006 counts
 Height: 569793.213 cps
 Start Time: 8.24 min
 End Time: 8.71 min

Intensity, cps

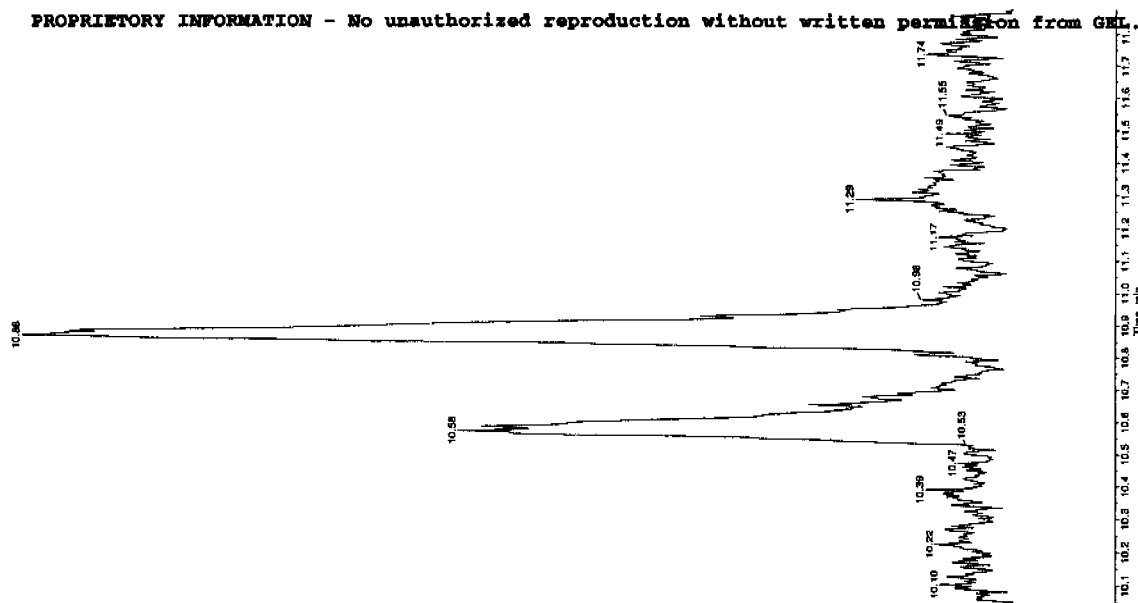


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "242240009" Sample ID: "95833421LER" File: "EXS03160105.wif"
 Peak Name: "tris(2-chloroethyl) phosphite" Mass(es): 353.179.0 amu
 Comment: "LCX63212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No

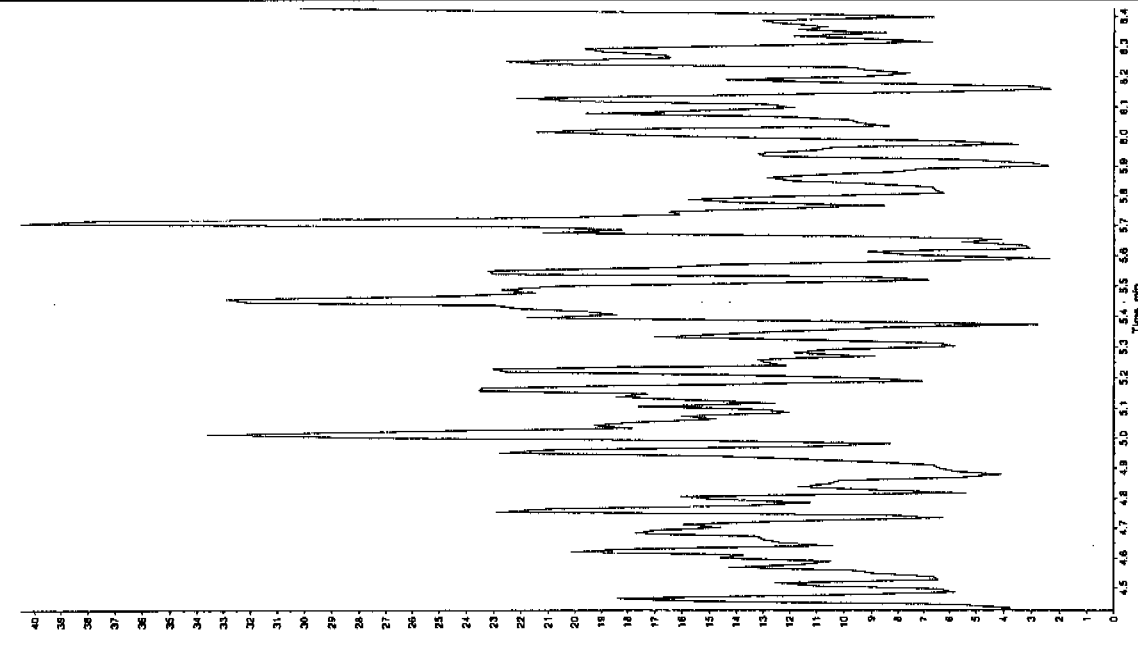
Intensity, cps



Sample Name: "242240009" Sample ID: "95833421LER" File: "EXS03160105.wif"
 Peak Name: "24-Diamino-6-nitrobenzoate" Mass(es): 166.046.0 amu
 Comment: "LCX63212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 11:47:05 AM
 Modified: No

Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325022a

Date Analyzed: 26-MAR-10 03:06

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325022a

Date: 26-Mar-2010

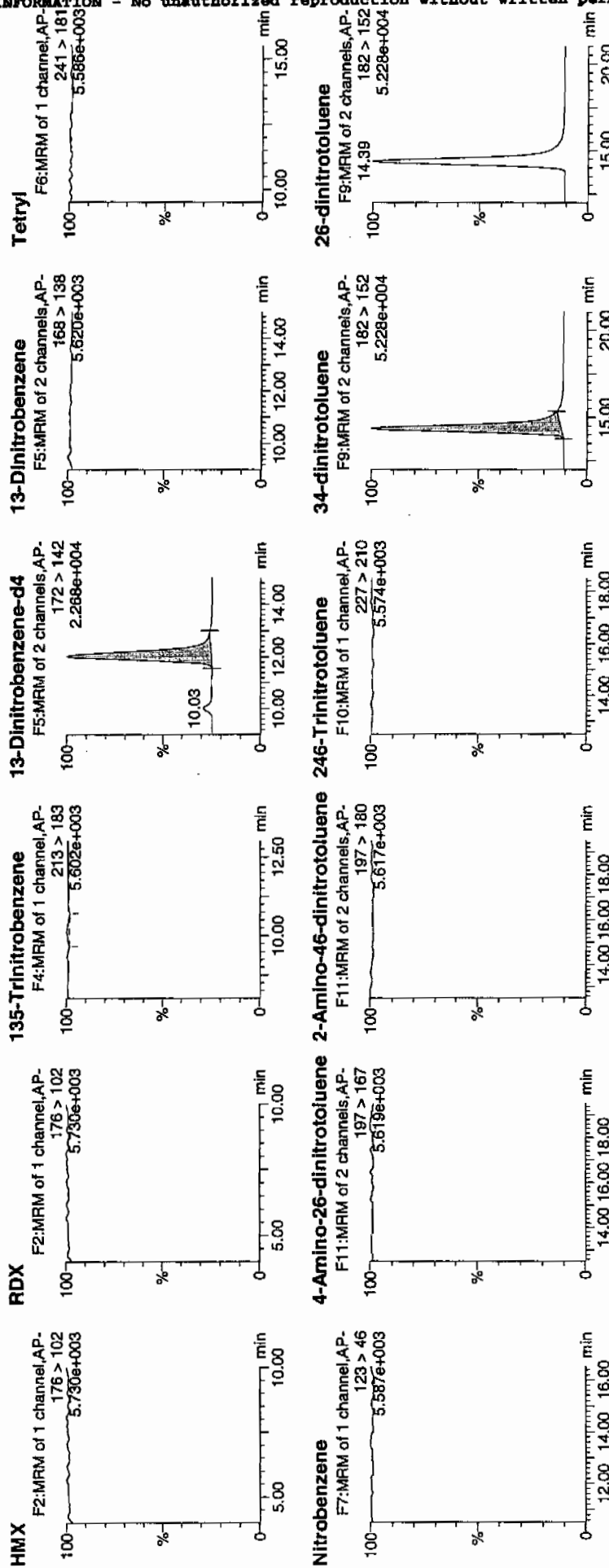
Time: 03:06:15

ID: 248240010

Vial: 3:4,F

1477
3/24/10

LAU 959334 / 8000 / 2 /



411W 03/30/10

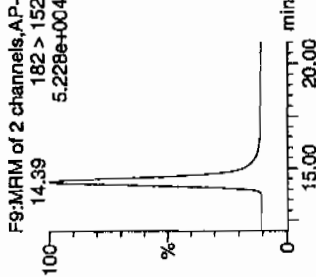
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

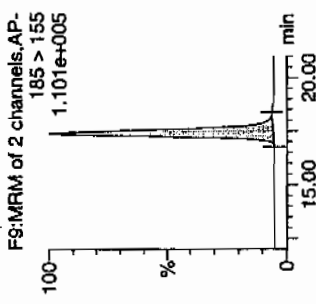
Printed: Fri Mar 26 12:46:39 2010, Page 44 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

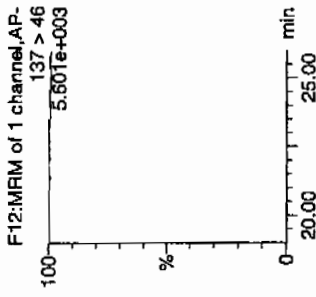
24-dinitrotoluene



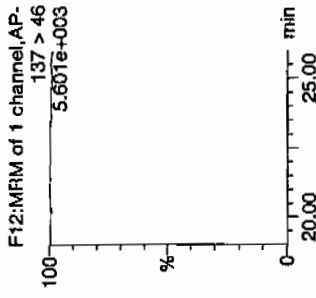
26-dinitrotoluene-d3



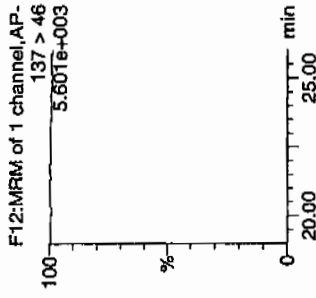
2-Nitrotoluene



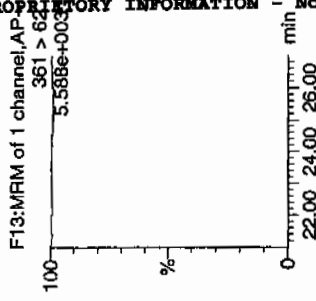
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	RT	Area	IS Area	Response	Flags	Mod Date	Mod Time	Lab	SN
248240010	HMX									
248240010	RDX									
248240010	135-Trinitrobenzene									
248240010	13-Dinitrobenzene-d4									
248240010	13-Dinitrobenzene									
248240010	Tetryl									
248240010	Nitrobenzene									
248240010	4-Amino-26-dinitrotoluene									
248240010	2-Amino-46-dinitrotoluene									
248240010	246-Trinitrotoluene									
248240010	34-dinitrotoluene									
248240010	26-dinitrotoluene									
248240010	24-dinitrotoluene									
248240010	26-dinitrotoluene-d3									
248240010	2-Nitrotoluene									
248240010	4-Nitrotoluene									
248240010	3-Nitrotoluene									
248240010	PETN									

176 > 102	6623.601									
176 > 102	6623.601									
213 > 183	6623.601									
172 > 142	12.03	6623.601								
168 > 138		6623.601								
241 > 181		6623.601								
123 > 46		6623.601								
197 > 167		40632.895								
197 > 180		40632.895								
227 > 210		40632.895								
182 > 152	14.39	21859.936								
182 > 152		40632.895								
182 > 152		40632.895								
185 > 155	17.40	40632.895								
137 > 46		40632.895								
137 > 46		40632.895								
137 > 46		40632.895								
361 > 62		40632.895								

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7519

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 248240010

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160107.wiff

Date Analyzed: 17-MAR-10 12:02

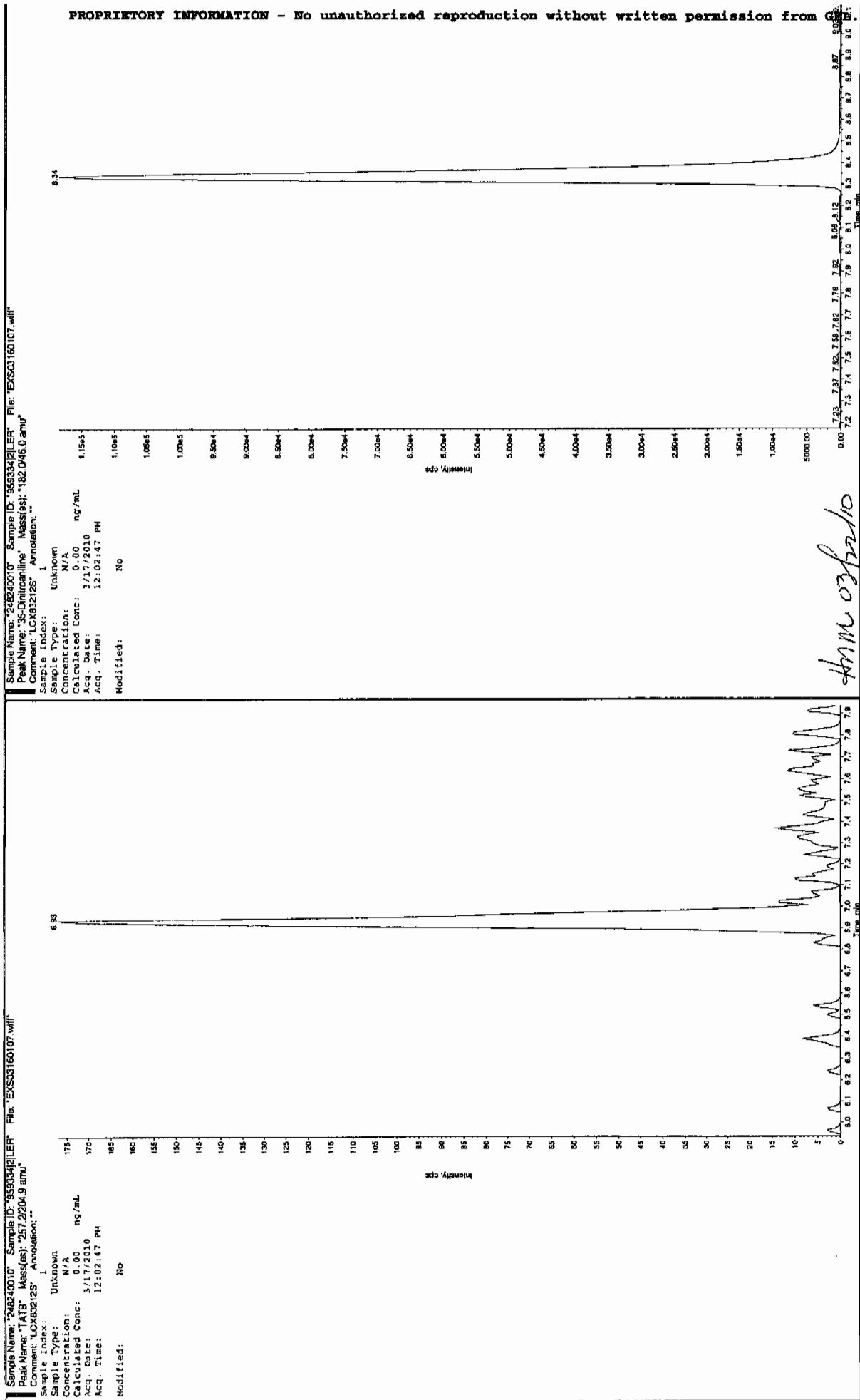
Units: ug/kg

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

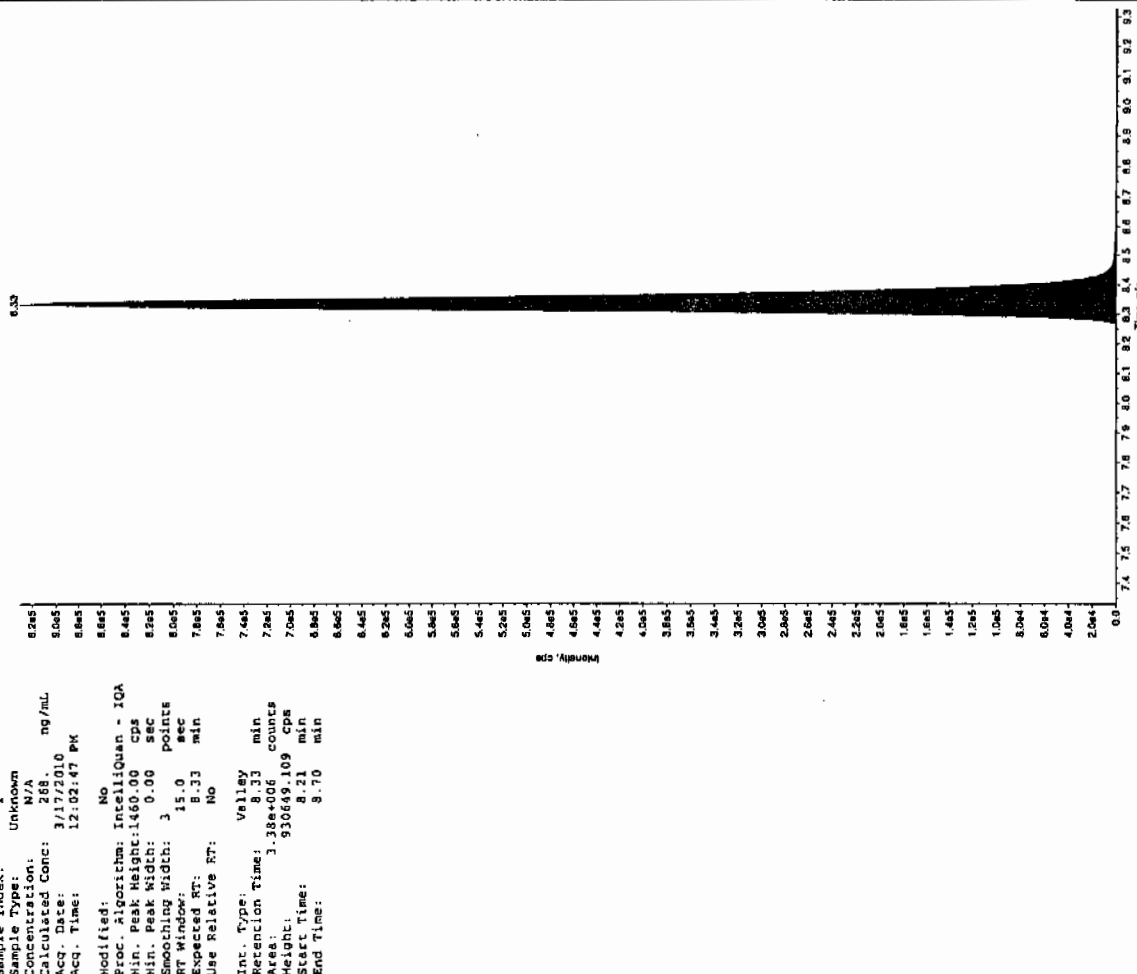
LC# 3/19/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248240010" Sample ID: "958334JLER" File: "EX803160107.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:02:47 PM
 Modified: No



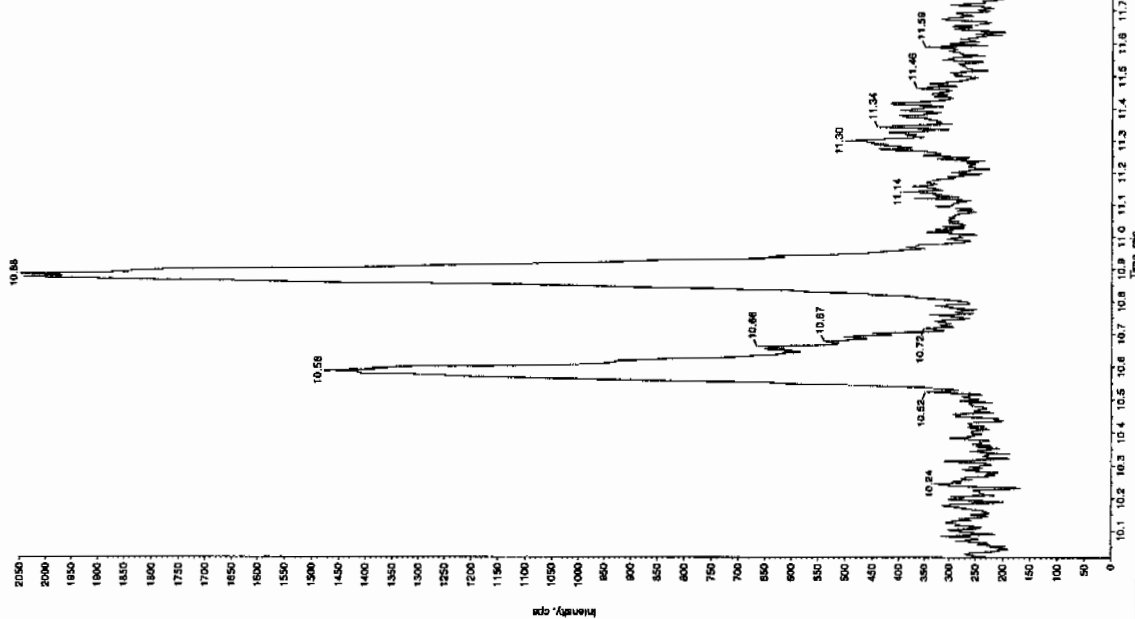
Sample Name: "248240010" Sample ID: "958334JLER" File: "EX803160107.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:02:47 PM
 Modified: No
 Proc. algorithm: IntelliQuan - IQA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 3.38e+006 counts
 Height: 930649.109 cps
 Start Time: 8.21 min
 End Time: 8.70 min

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

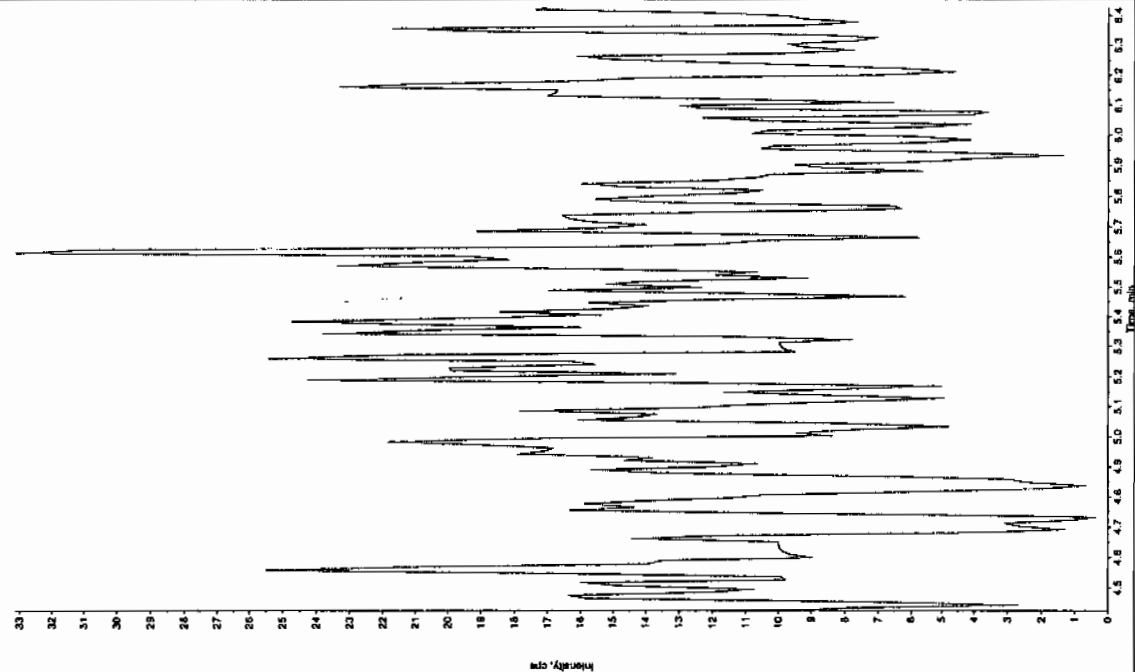
Sample Name: 248240010 Sample ID: 9593342LER File: EX503160107.wif
 Peak Name: "histo-cresyl phosphate" Mass(es): 369.191.0 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/17/2010
 Acq. Time: 12:02:47 PM
 Modified: No



Sample Name: 248240010 Sample ID: 9593342LER File: EX503160107.wif
 Peak Name: "histo-cresyl phosphate" Mass(es): 369.191.0 amu
 Comment: LCX832125 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/17/2010
 Acq. Time: 12:02:47 PM
 Modified: No



*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: 10-2134

Lab Code: GEL

Run Date: 16-MAR-10 23-MAR-10 25-MAR-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:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a			
Data File:									
1,3,5-Trinitrobenzene	5.032	4.994	4.537	4.6	4.618	4.575	4.726	4.748	
1,3-Dinitrobenzene-d4	11.754	12.906	11.01	10.6	10.117	9.664	11.009	10.69	
2,4,6-Trinitrotoluene	.424	.368	.38	.453	.443	.394	0.410	8.493	
2,4-Dinitrotoluene	.262	.293	.273	.265	.282	.289	0.277	4.587	
2,6-Dinitrotoluene	1.112	1.205	1.106	1.163	1.182	1.174	1.157	3.448	
2,6-Dinitrotoluene-d3	82.805	73.801	67.998	67.968	62.879	57.717	68.861	12.666	
2-Amino-4,6-dinitrotoluene	.508	.507	.537	.569	.587	.577	0.548	6.473	
3,4-Dinitrotoluene	.915	.995	1.13	1.083	1.133	1.097	1.059	8.15	
4-Amino-2,6-dinitrotoluene	.347	.327	.35	.36	.369	.368	0.354	4.504	
HMX	5.311	4.69	5.261	6.242	6.079	5.497	5.513	10.373	
Nitrobenzene	.686	.654	.672	.653	.651	.615	0.655	3.64	
RDX	3.229	2.859	3.253	3.567	3.545	3.415	3.311	7.936	
Tetryl	1.129	1.002	1.143	1.22	1.115	1.273	1.147	8.152	
m-Dinitrobenzene	1.371	1.208	1.328	1.336	1.345	1.381	1.328	4.687	
m-Nitrotoluene	.051	.048	.054	.052	.048	.049	0.050	4.981	
o-Nitrotoluene	.076	.089	.078	.08	.079	.082	0.081	5.666	
p-Nitrotoluene	.03	.046	.039	.039	.039	.04	0.039	13.369	

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: 10-2134

Lab Code: GEL

Run Date: 16-MAR-10.23-MAR-10.25-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:	1	2	3	4	5	6	Slope	Intercept	COD	Q
Data File:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a				
Parname										
PETN	2318.77	4444.01	14597.9	26021	45749.6	53868.3	.909	16.24	.9989	

Linear fit : $Y=mx +b$
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

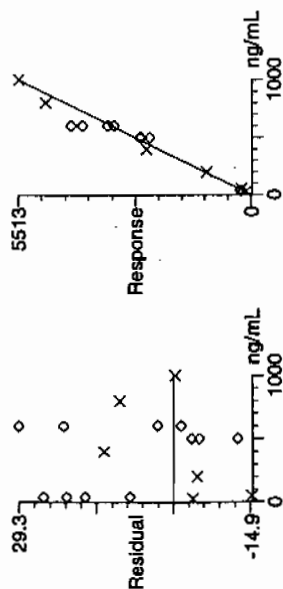
* Values outside of QC Limit

Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

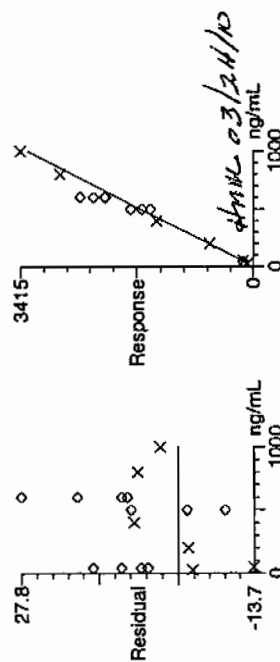
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

Compound name: HMX
Response Factor: 5.51311
RRF SD: 0.571885, % Relative SD: 10.3732
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: RDX
Response Factor: 3.31129
RRF SD: 0.26278, % Relative SD: 7.93586
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

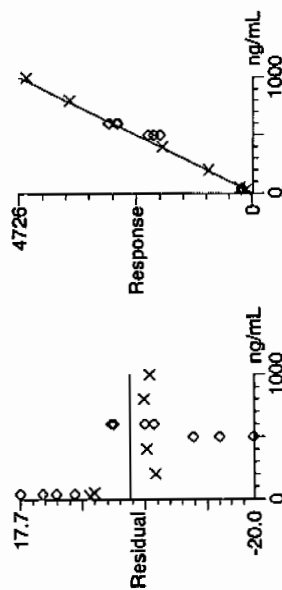


Printed: Wed Mar 24 09:32:17 2010, Page 2 of 9

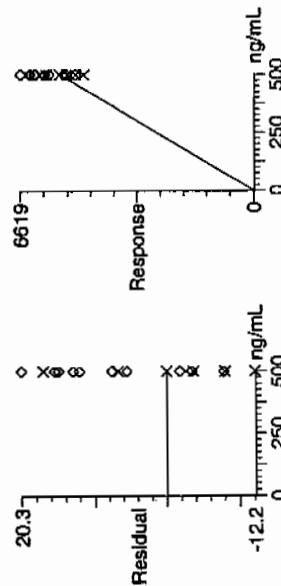
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 135-Trinitrobenzene
Response Factor: 4.7262
RRF SD: 0.224421, % Relative SD: 4.74845
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



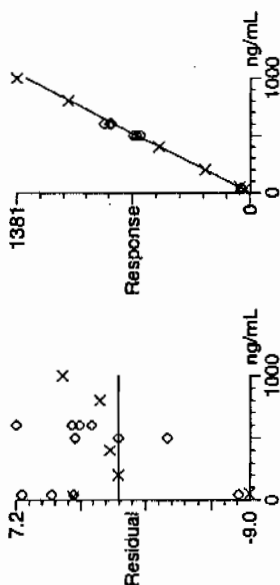
Compound name: 13-Dinitrobenzene-d4
Response Factor: 11.0085
RRF SD: 1.17683, % Relative SD: 10.6902
Response type: External Std, Area
Curve type: RF



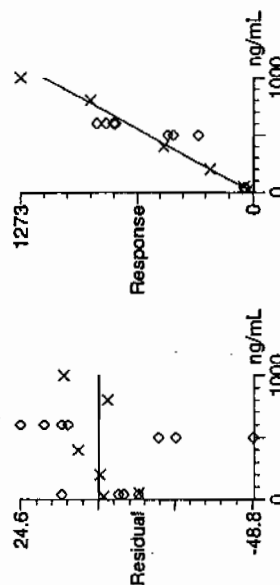
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\WASSLYN\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 13-Dinitrobenzene
 Response Factor: 1.32795
 RRF SD: 0.0622466, % Relative SD: 4.68744
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: Tetra
 Response Factor: 1.14683
 RRF SD: 0.0934919, % Relative SD: 8.15221
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF

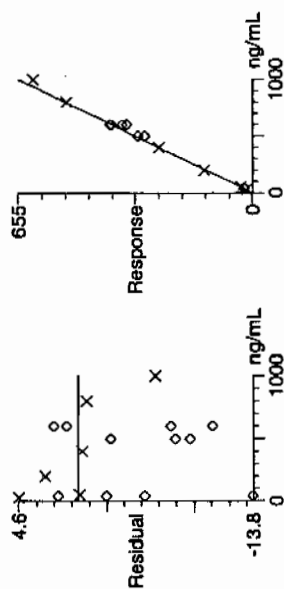


Printed: Wed Mar 24 09:32:17 2010, Page 4 of 9

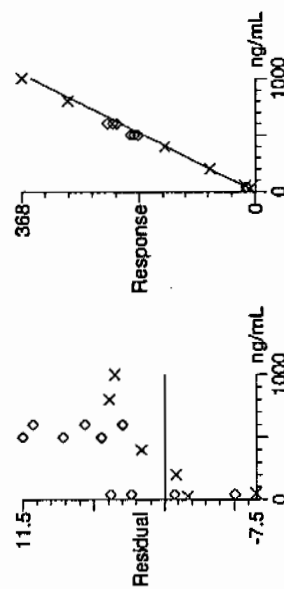
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: Nitrobenzene
Response Factor: 0.655153
RRF SD: 0.0238446, % Relative SD: 3.63954
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.353375
RRF SD: 0.0159163, % Relative SD: 4.50407
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

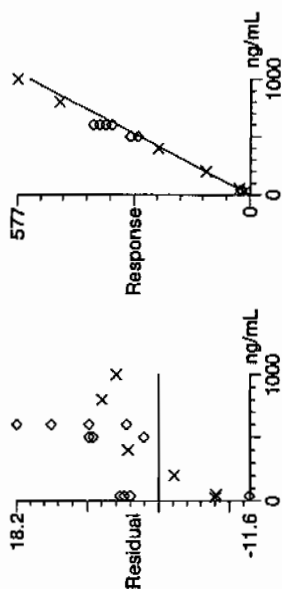


Printed: Wed Mar 24 09:32:17 2010, Page 5 of 9

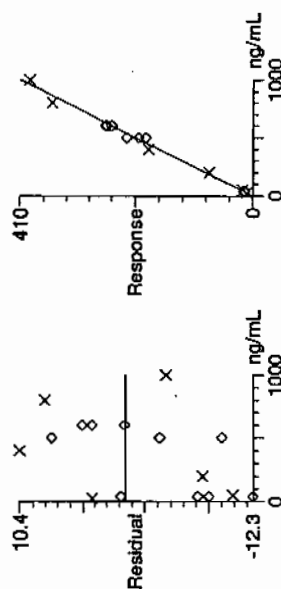
Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.547585
RRF SD: 0.0354456, % Relative SD: 6.47307
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

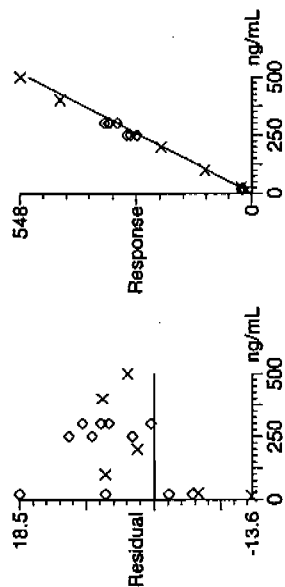


Compound name: 246-Trinitrotoluene
Response Factor: 0.410071
RRF SD: 0.0348258, % Relative SD: 8.49263
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

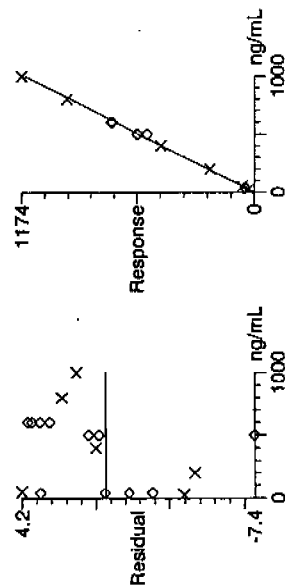


Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 34-dinitrotoluene
 Response Factor: 1.05888
 RRF SD: 0.0862978, % Relative SD: 8.14988
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



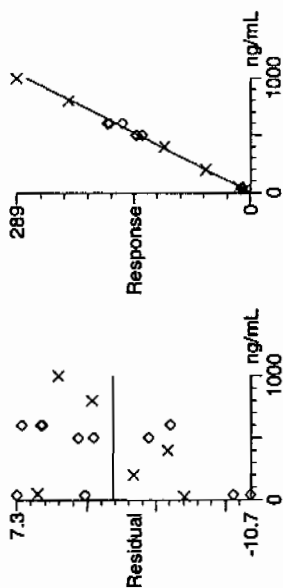
Compound name: 26-dinitrotoluene
 Response Factor: 1.15701
 RRF SD: 0.0398889, % Relative SD: 3.44758
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



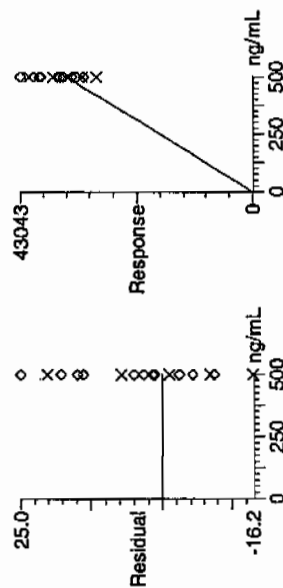
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.277495
RRF SD: 0.0127293, % Relative SD: 4.58723
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 26-dinitrotoluene-d3
Response Factor: 68.8611
RRF SD: 8.72211, % Relative SD: 12.6662
Response type: External Std, Area
Curve type: RF

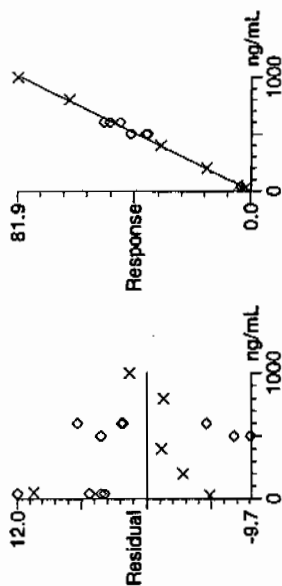


Printed: Wed Mar 24 09:32:17 2010, Page 8 of 9

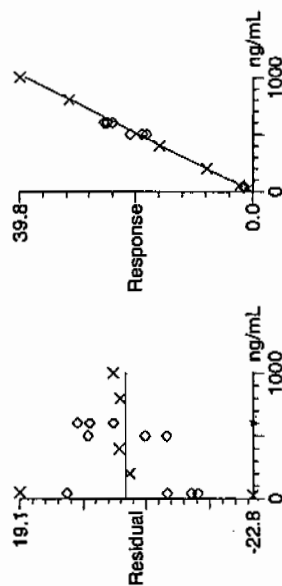
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 2-Nitrotoluene
Response Factor: 0.0806432
RRF SD: 0.00456922, % Relative SD: 5.66596
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



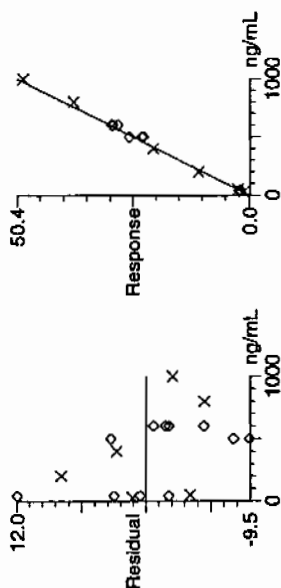
Compound name: 4-Nitrotoluene
Response Factor: 0.0389409
RRF SD: 0.00520599, % Relative SD: 13.369
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



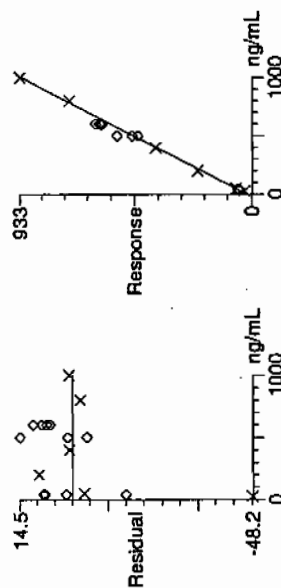
Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.0504212
RRF SD: 0.00251151, % Relative SD: 4.98107
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Correlation coefficient: $r = 0.999467$, $r^2 = 0.998933$
Calibration curve: $0.908775 \cdot x + 16.2395$
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0323010a

Analysis Date: 23-MAR-10 13:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	600	623.33	104	
2,6-Dinitrotoluene-d3	500	452.986	91	
2-Amino-4,6-dinitrotoluene	600	624.798	104	
3,4-Dinitrotoluene	300	301.181	100	
4-Amino-2,6-dinitrotoluene	600	620.044	103	
HMX	600	591.583	99	
Nitrobenzene	600	611.463	102	
PETN	600	650.548	108	
RDX	600	659.349	110	
Tetryl	600	669.49	112	
m-Dinitrobenzene	600	616.682	103	
m-Nitrotoluene	600	589.179	98	
o-Nitrotoluene	600	638.057	106	
p-Nitrotoluene	600	638.597	106	
1,3,5-Trinitrobenzene	600	585.721	98	
1,3-Dinitrobenzene-d4	500	460.269	92	
2,4,6-Trinitrotoluene	600	600.545	100	
2,4-Dinitrotoluene	600	572.778	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

Printed: Wed Mar 24 09:32:17 2010, Page 19 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323010a

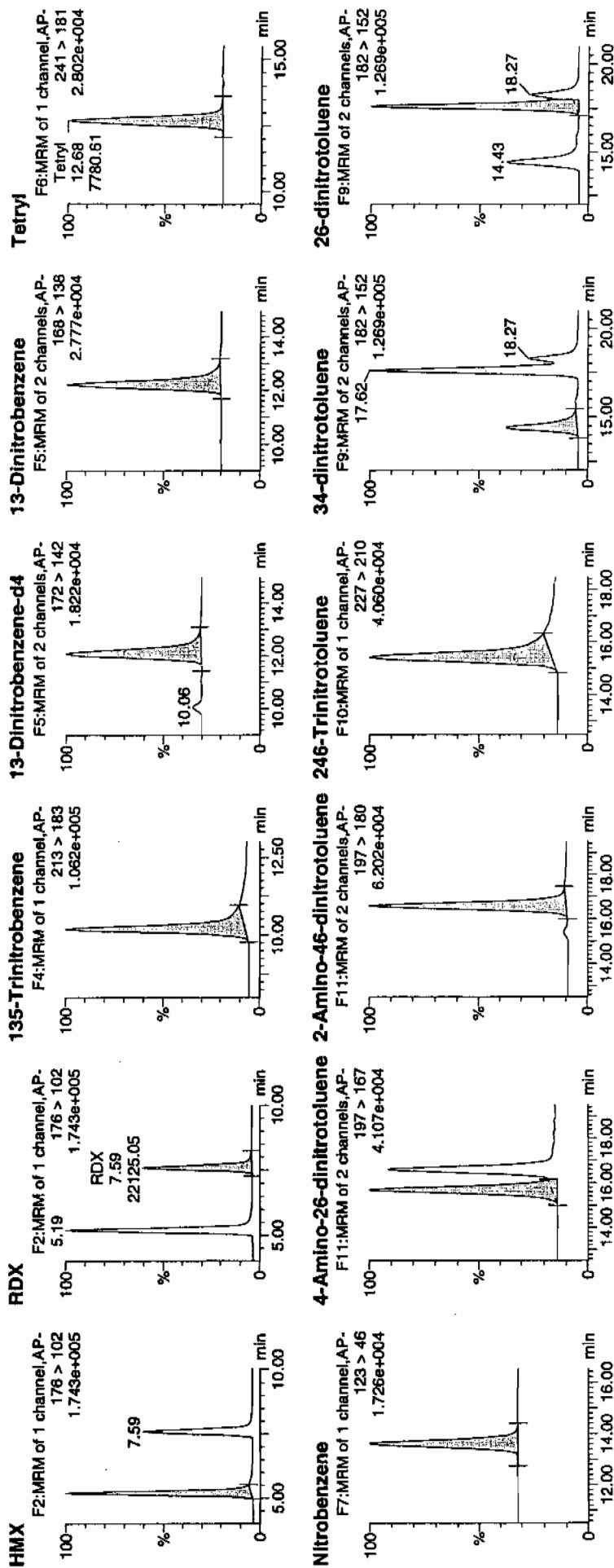
Date: 23-Mar-2010

Time: 13:34:21

ID: WXX100323-07ICV

Vial: 1:1,B

11/11
3/24/10



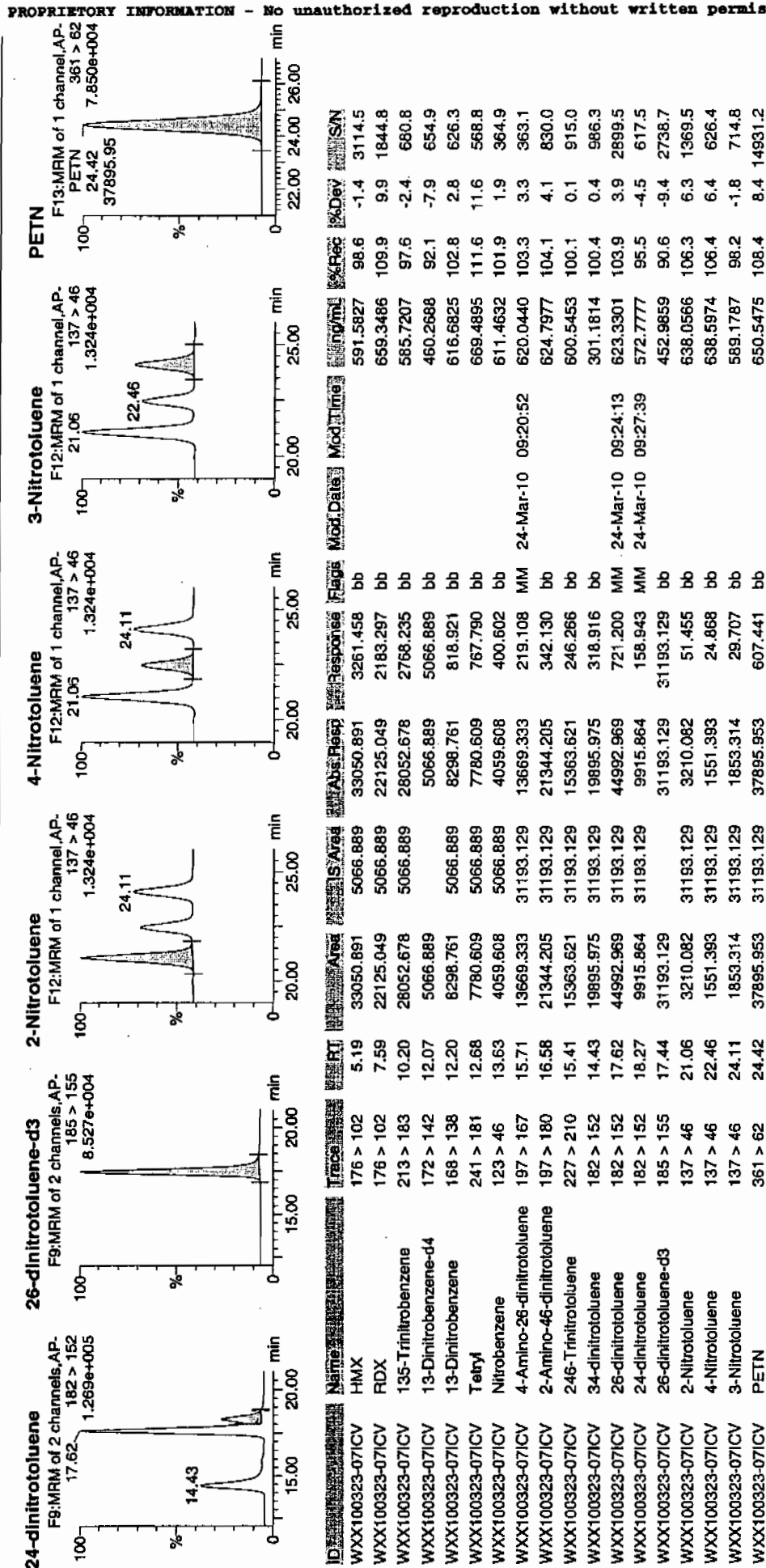
Handwritten note: 11/11 3/24/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 20 of 99

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/23/10
 Time of Injection: 1334
 Standard Number: WXX100323-07ICV
 Data File: EXP0323010a

HMX	98.6
RDX	109.9
135-TNB	97.6
13-DNB	102.8
Tetryl	111.6
Nitrobenzene	101.9
4A-26-DNT	103.3
2A-46-DNT	104.1
246-TNT	100.1
34-DNT(surr)	100.4
26-DNT	103.9
24-DNT	95.5
2-NT	106.3
4-NT	106.4
3-NT	98.2
PETN	108.4

Handwritten: 3/24/10

Total 1649.0

Average 103.1

Handwritten: HMM 03/24/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC GEL Job No: 10-2134 Run Date: 16-MAR-10 23-MAR-10 25-MAR-10
 Lab Code: GEL Method: 8321A Modified HPLC Column: Phenomenex Ultracarb 5 ODS(20)
 LCMSMS Instrument ID: LCMSMS

Calibration Type: Average RF

Calibration Level:		1	2	3	4	5	6	Ave RF	RSD	Q
Data File:		EXP0325003a	EXP0325004a	EXP0325005a	EXP0325006a	EXP0325007a	EXP0325008a			
Parname										
1,3,5-Trinitrobenzene		5.133	5.172	4.239	4.265	5.291	4.526	4.771	10.102	
1,3-Dinitrobenzene-d4		12.994	12.404	12.461	11.757	11.201	11.197	12.002	6.129	
2,4,6-Trinitrotoluene		.346	.319	.339	.351	.37	.411	0.356	8.869	
2,4-Dinitrotoluene		.292	.257	.269	.281	.286	.311	0.283	6.547	
2,6-Dinitrotoluene		1.155	1.146	1.134	1.154	1.169	1.196	1.159	1.87	
2,6-Dinitrotoluene-d3		78.297	76.492	75.264	70.636	72.05	67.019	73.293	5.696	
2-Amino-4,6-dinitrotoluene		.538	.51	.56	.587	.572	.666	0.572	9.358	
3,4-Dinitrotoluene		1.03	1.032	1.07	1.064	1.087	1.106	1.065	2.81	
4-Amino-2,6-dinitrotoluene		.34	.339	.368	.362	.369	.427	0.368	8.73	
HMX		4.213	4.577	4.728	4.791	4.784	5.114	4.701	6.303	
Nitrobenzene		.54	.691	.609	.583	.626	.733	0.630	11.213	
RDX		3.127	3.095	3.207	3.25	3.429	3.505	3.269	5.048	
Tetryl		1.136	1.261	1.087	1.143	1.174	1.209	1.168	5.23	
m-Dinitrobenzene		1.235	1.301	1.312	1.275	1.398	1.38	1.317	4.74	
m-Nitrotoluene		.056	.043	.048	.047	.049	.056	0.050	10.474	
o-Nitrotoluene		.088	.074	.075	.077	.076	.076	0.078	6.592	
p-Nitrotoluene		.048	.04	.039	.037	.038	.044	0.041	10.375	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2134

Lab Code: GEL

Run Date: 16-MAR-10.23-MAR-10.25-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0325003a	EXP0325004a	EXP0325005a	EXP0325006a	EXP0325007a	EXP0325008a					
Parname:											
PETN	4346.12	7994.06	26270.6	42884.4	68064.5	77230.7	1.596	-.0004978	30.187	.9966	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

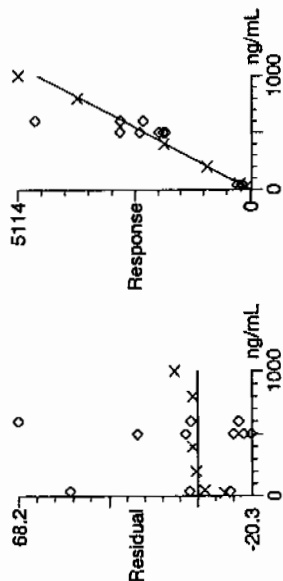
* Values outside of QC Limit

Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

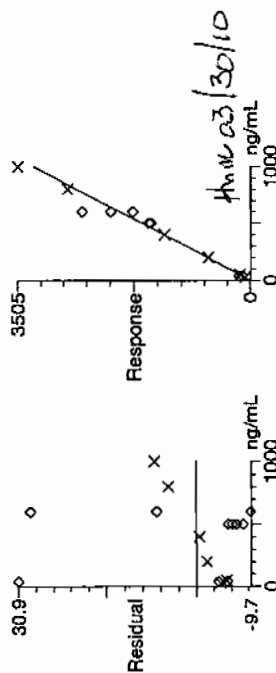
Dataset: C:\MASSLYNX\New_Exp\PRO1032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Method: C:\MASSLYNX\New_Exp\PRO1032510expA.mdb, Time: Fri Mar 26 11:07:34 2010
Calibration: Untitled, Time: Fri Mar 26 12:43:58 2010

Compound name: HMX
Response Factor: 4.70113
RRF SD: 0.29632, % Relative SD: 6.30315
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



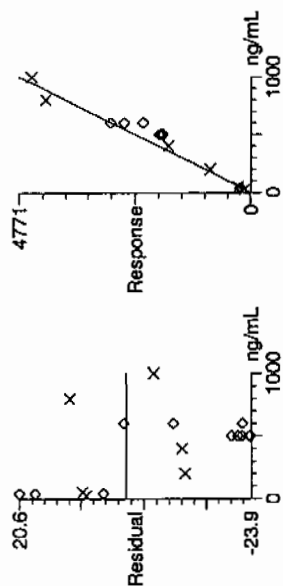
Compound name: RDX
Response Factor: 3.26868
RRF SD: 0.165001, % Relative SD: 5.04795
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



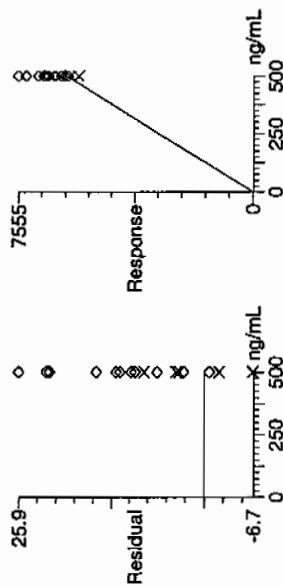
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 135-Trinitrobenzene
 Response Factor: 4.77109
 RRF SD: 0.481967, % Relative SD: 10.1018
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



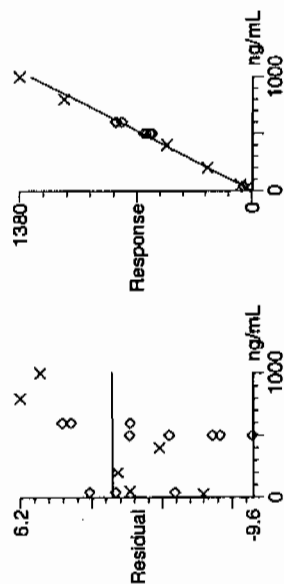
Compound name: 1,3-Dinitrobenzene-d4
 Response Factor: 12.0022
 RRF SD: 0.735587, % Relative SD: 6.12878
 Response type: External Std, Area
 Curve type: RF



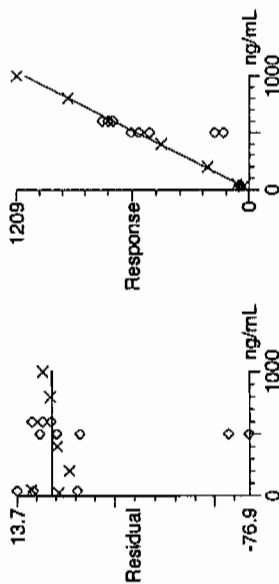
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 13-Dinitrobenzene
 Response Factor: 1.31688
 RRF SD: 0.0624157, % Relative SD: 4.73966
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



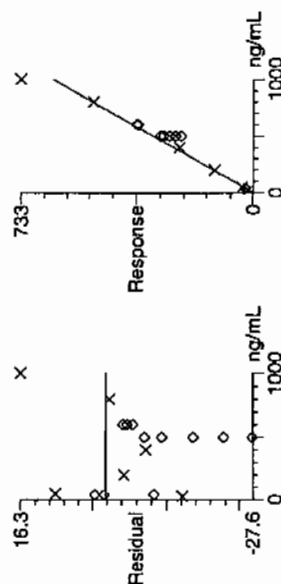
Compound name: Tetral
 Response Factor: 1.16845
 RRF SD: 0.061108, % Relative SD: 5.22985
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



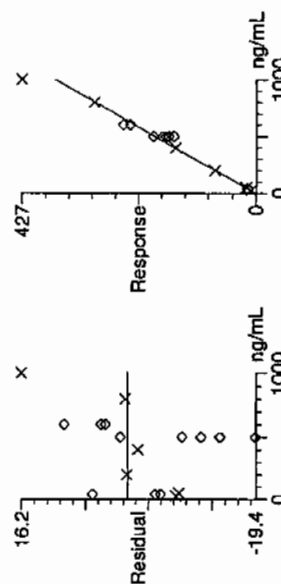
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: Nitrobenzene
Response Factor: 0.630075
RRF SD: 0.0706494, % Relative SD: 11.2129
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



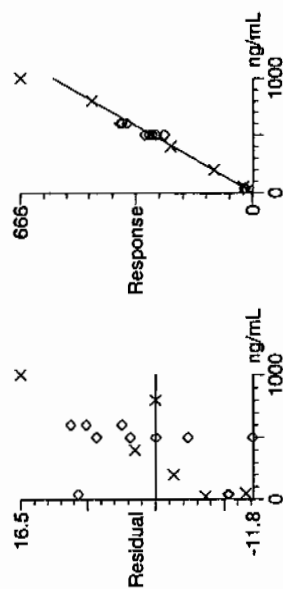
Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.367312
RRF SD: 0.0320673, % Relative SD: 8.73025
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



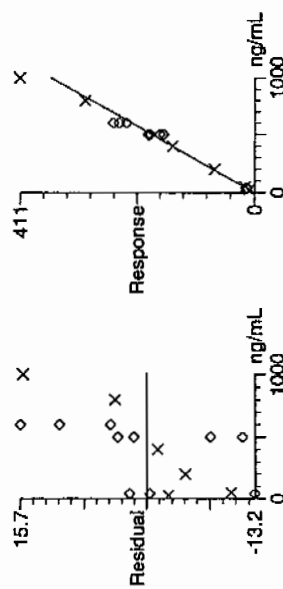
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.572046
RRF SD: 0.0535317, % Relative SD: 9.35793
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



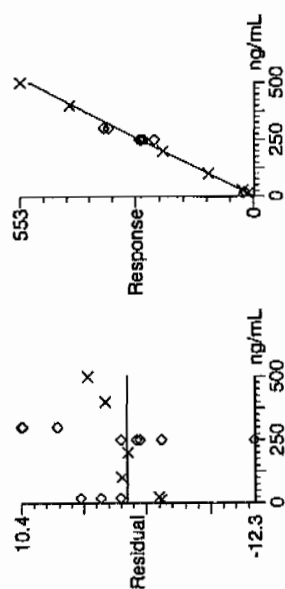
Compound name: 246-Trinitrotoluene
Response Factor: 0.356116
RRF SD: 0.0315837, % Relative SD: 8.86894
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



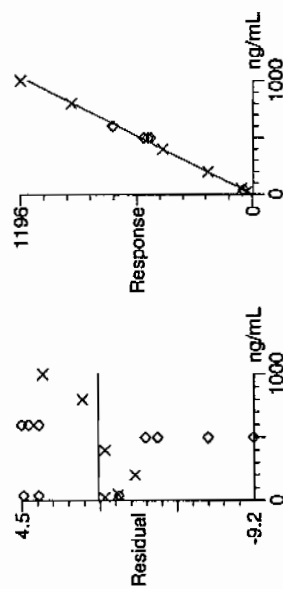
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 34-dinitrotoluene
Response Factor: 1.06482
RRF SD: 0.0299218, % Relative SD: 2.81004
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 26-dinitrotoluene
Response Factor: 1.15895
RRF SD: 0.021676, % Relative SD: 1.87031
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

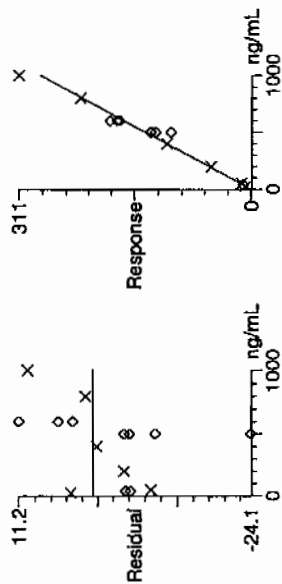


Quantify Calibration Report

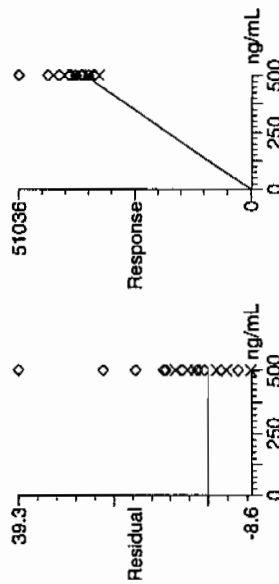
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 24-dinitrotoluene
 Response Factor: 0.282631
 RRF SD: 0.0185042, % Relative SD: 6.54712
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 26-dinitrotoluene-d3
 Response Factor: 73.293
 RRF SD: 4.17465, % Relative SD: 5.69584
 Response type: External Std, Area
 Curve type: RF

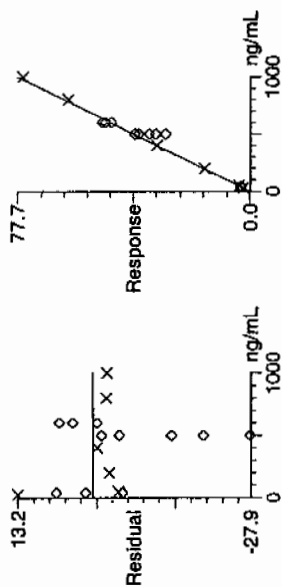


Quantify Calibration Report

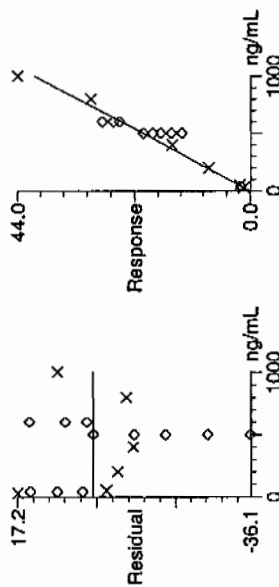
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 2-Nitrotoluene
 Response Factor: 0.077657
 RRF SD: 0.00511951, % Relative SD: 6.59247
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 4-Nitrotoluene
 Response Factor: 0.0408098
 RRF SD: 0.00423399, % Relative SD: 10.3749
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF

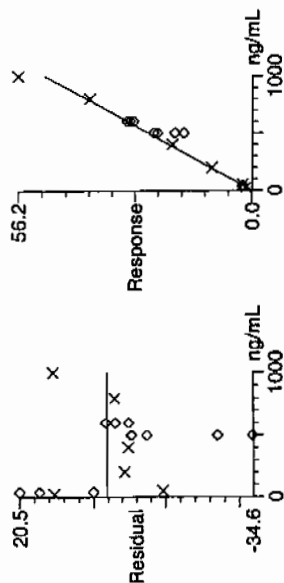


Quantify Calibration Report

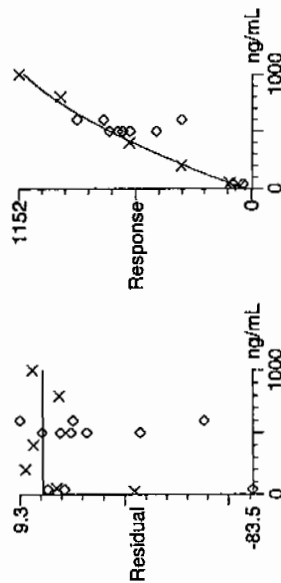
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Compound name: 3-Nitrotoluene
 Response Factor: 0.0499028
 RRF SD: 0.00522679, % Relative SD: 10.4739
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: PETN
 Coefficient of Determination: 0.996593
 Calibration curve: $-0.000497837 \cdot x^2 + 1.59584 \cdot x + 30.1872$
 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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0325010a

Analysis Date: 25-MAR-10 21:12

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	600	635.627	106	
p-Nitrotoluene	600	687.197	115	
m-Nitrotoluene	600	587.439	98	
1,3,5-Trinitrobenzene	600	465.903	78	*
1,3-Dinitrobenzene-d4	500	629.508	126	*
2,4,6-Trinitrotoluene	600	694.159	116	
2,4-Dinitrotoluene	600	667.307	111	
2,6-Dinitrotoluene	600	620.76	103	
2,6-Dinitrotoluene-d3	500	526.624	105	
2-Amino-4,6-dinitrotoluene	600	650.301	108	
3,4-Dinitrotoluene	300	331.206	110	
4-Amino-2,6-dinitrotoluene	600	658.655	110	
HMX	600	506.125	84	
Nitrobenzene	600	575.846	96	
PETN	600	527.14	88	
RDX	600	542.093	90	
Tetryl	600	621.337	104	
m-Dinitrobenzene	600	620.182	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\032510expA.qtd, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325010a

Date: 25-Mar-2010

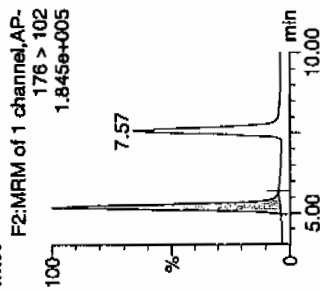
Time: 21:12:25

ID: WXX100325-071CV

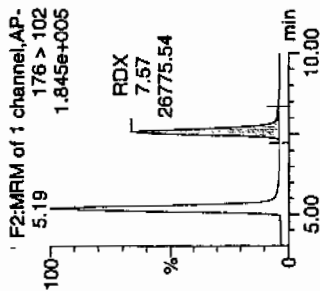
Vial: 1:1,B

MDI
3/16/10

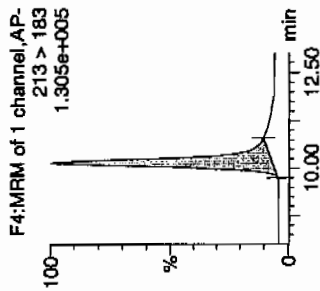
HMX



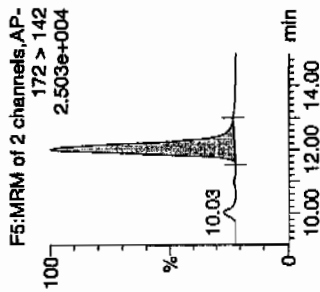
RDX



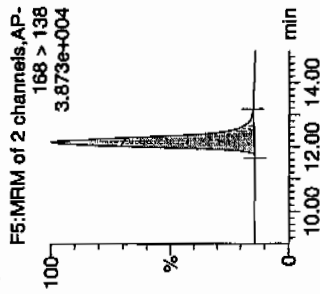
135-Trinitrobenzene



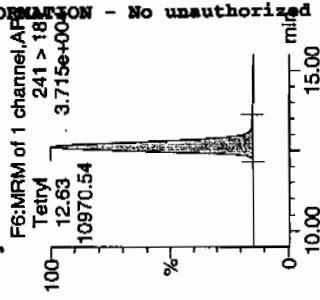
13-Dinitrobenzene-d4



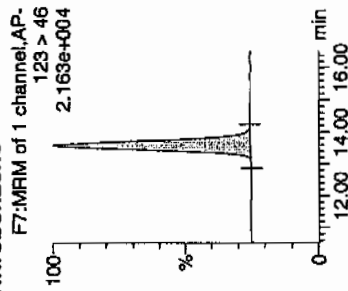
13-Dinitrobenzene



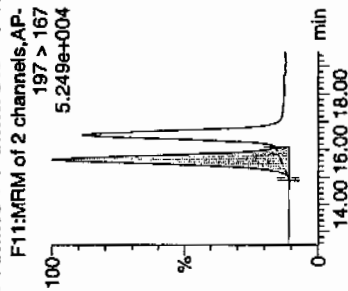
Tetryl



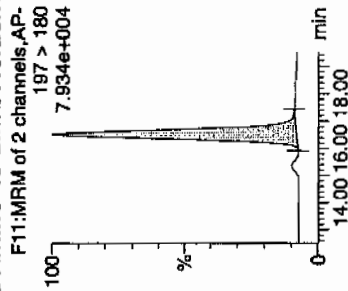
Nitrobenzene



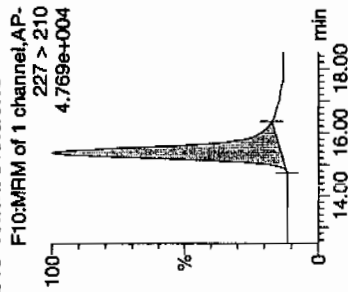
4-Amino-26-dinitrotoluene



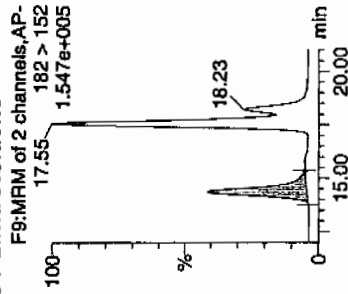
2-Amino-46-dinitrotoluene



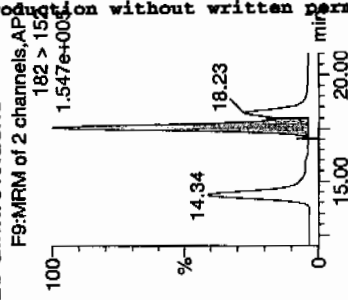
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



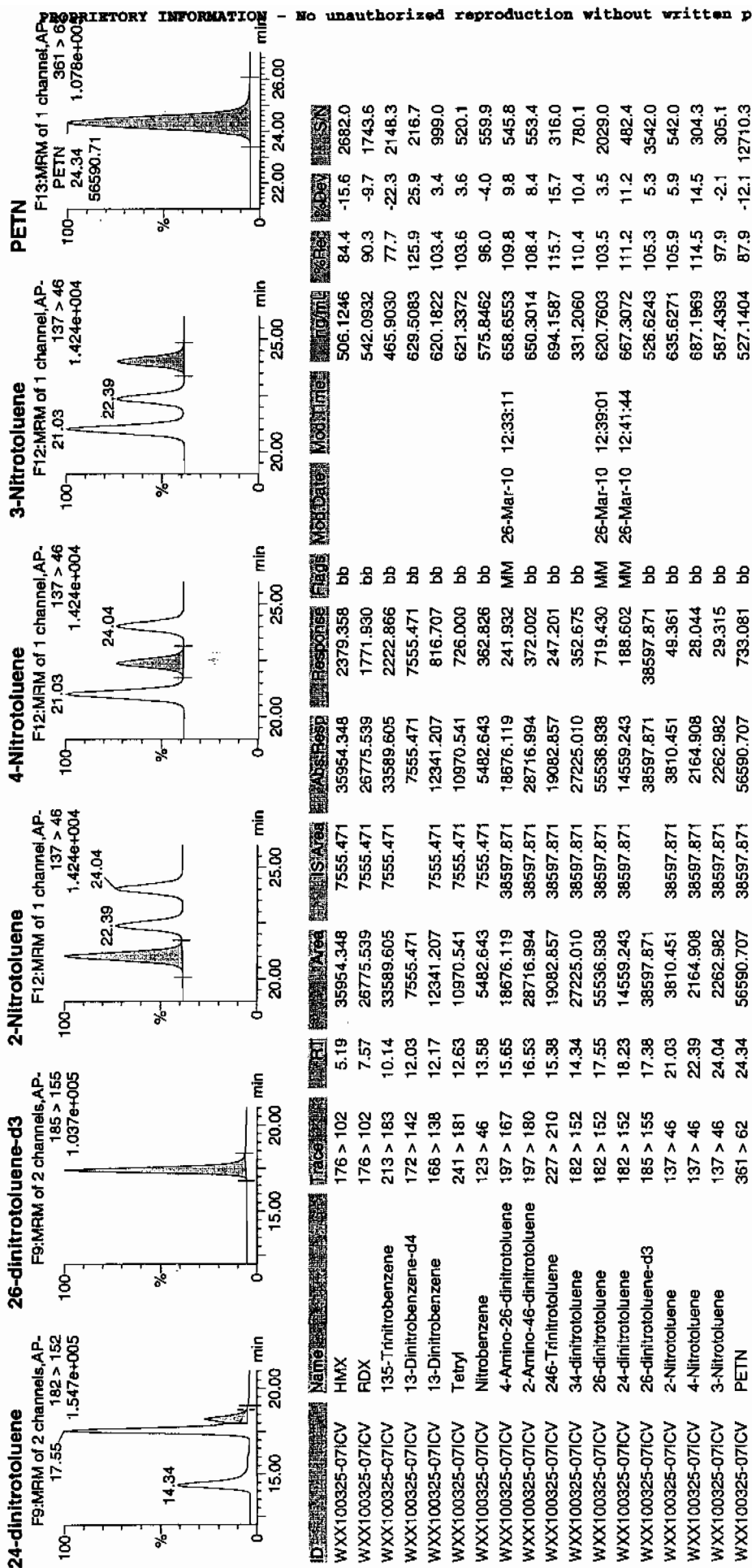
4mW 03/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 20 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/25/10
 Time of Injection: 2112
 Standard Number: WXX100325-07ICV
 Data File: EXP0325010a

HMX	84.4
RDX	90.3
135-TNB	77.7
13-DNB	103.4
Tetryl	103.6
Nitrobenzene	96.0
4A-26-DNT	109.8
2A-46-DNT	108.4
246-TNT	115.7
34-DNT(surr)	110.4
26-DNT	103.5
24-DNT	111.2
2-NT	105.9
4-NT	114.5
3-NT	97.9
PETN	87.9

Total 1620.6

Average 101.3

Handwritten: 101.3 3/26/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLCGEL Job No: 10-2134Lab Code: GELRun Date: 16-MAR-10.23-MAR-10.25-MAR-10LCMSMS Instrument ID: LCMSMS4Method: 8321A ModifiedHPLC Column: YMC J-Sphere ODS-H8QCalibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS03160003.wiff	EXS03160004.wiff	EXS03160005.wiff	EXS03160006.wiff	EXS03160007.wiff	EXS03160008.wiff	EXS03160009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	59900	111000	285000	537000	842000	1070000	2160000	6780	1080	-1.004	.9998	
2,6-Diamino-4-nitrotoluene	85600	172000	418000	822000	1180000	1600000	3140000	11900	1600	-.02	1	
3,4-Dinitrotoluene	347000	655000	1590000	2900000	4380000	5970000	10900000	-18900	13400	-2.47	.9989	
3,5-Dinitroaniline	519000	994000	2340000	4410000	6370000	8180000	14100000	84100	9190	-1.08	1	
TATB	75500	160000	398000	824000	1270000	1770000	3610000	-19600	1700	.059	.9999	
tris(o-cresyl) phosphate	709000	1340000	3260000	6150000	8920000	11800000	20800000	66900	12900	-1.26	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

031610ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.96e+004			
a1	1.7e+003			
a2	0.0593			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	8.41e+004			
a1	9.19e+003			
a2	-1.08			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.89e+004			
a1	1.34e+004			
a2	-2.47			
Correlation coefficient 0.9989				
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	1.19e+004			
a1	1.6e+003			
a2	-0.0198			
Correlation coefficient 1.0000				
Use Area				

HHW
3/22/90

San 3/18/10

031610ICAL

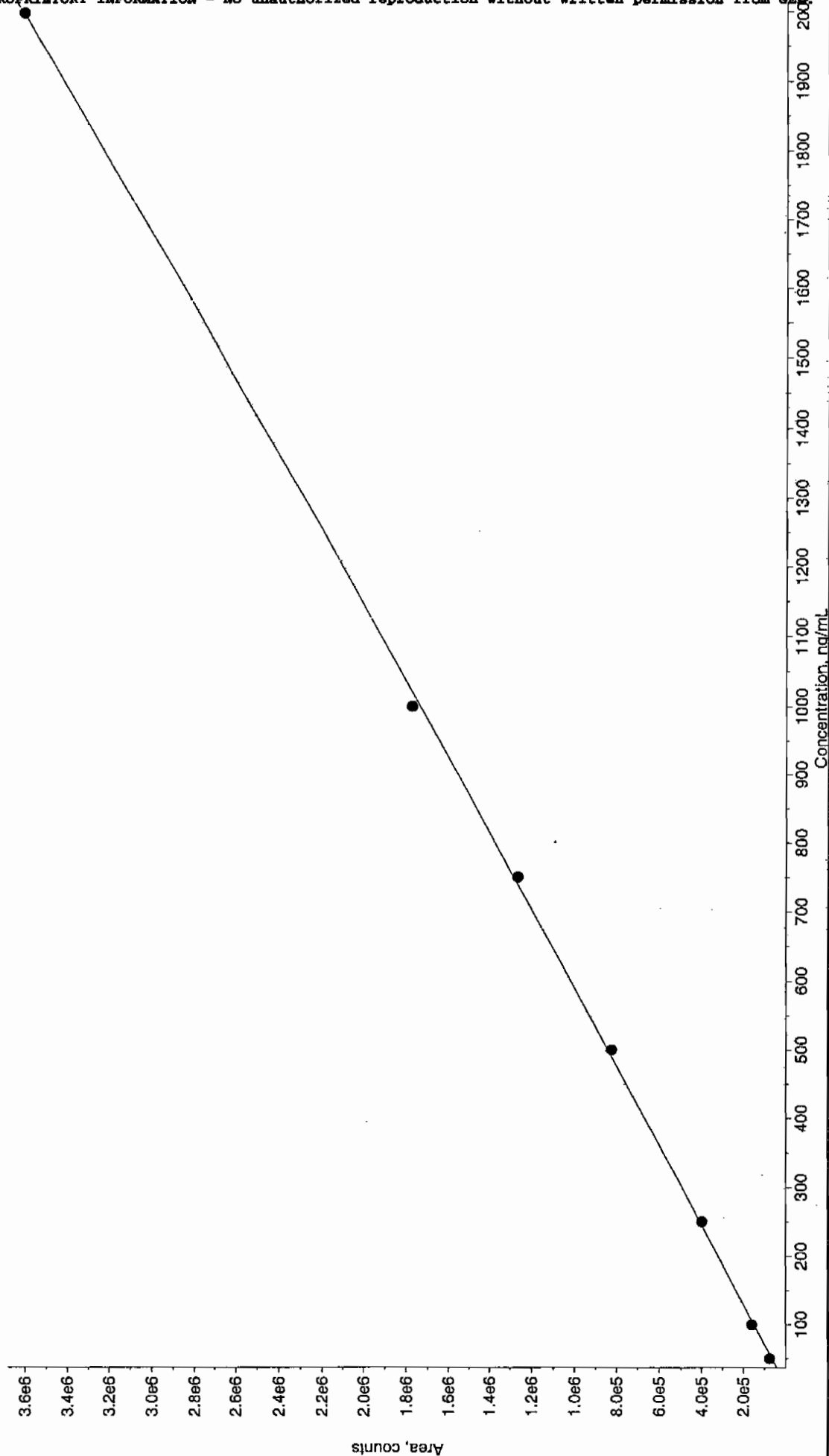
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	6.78e+003			
a1	1.08e+003			
a2	-0.00433			
Correlation coefficient 0.9998				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

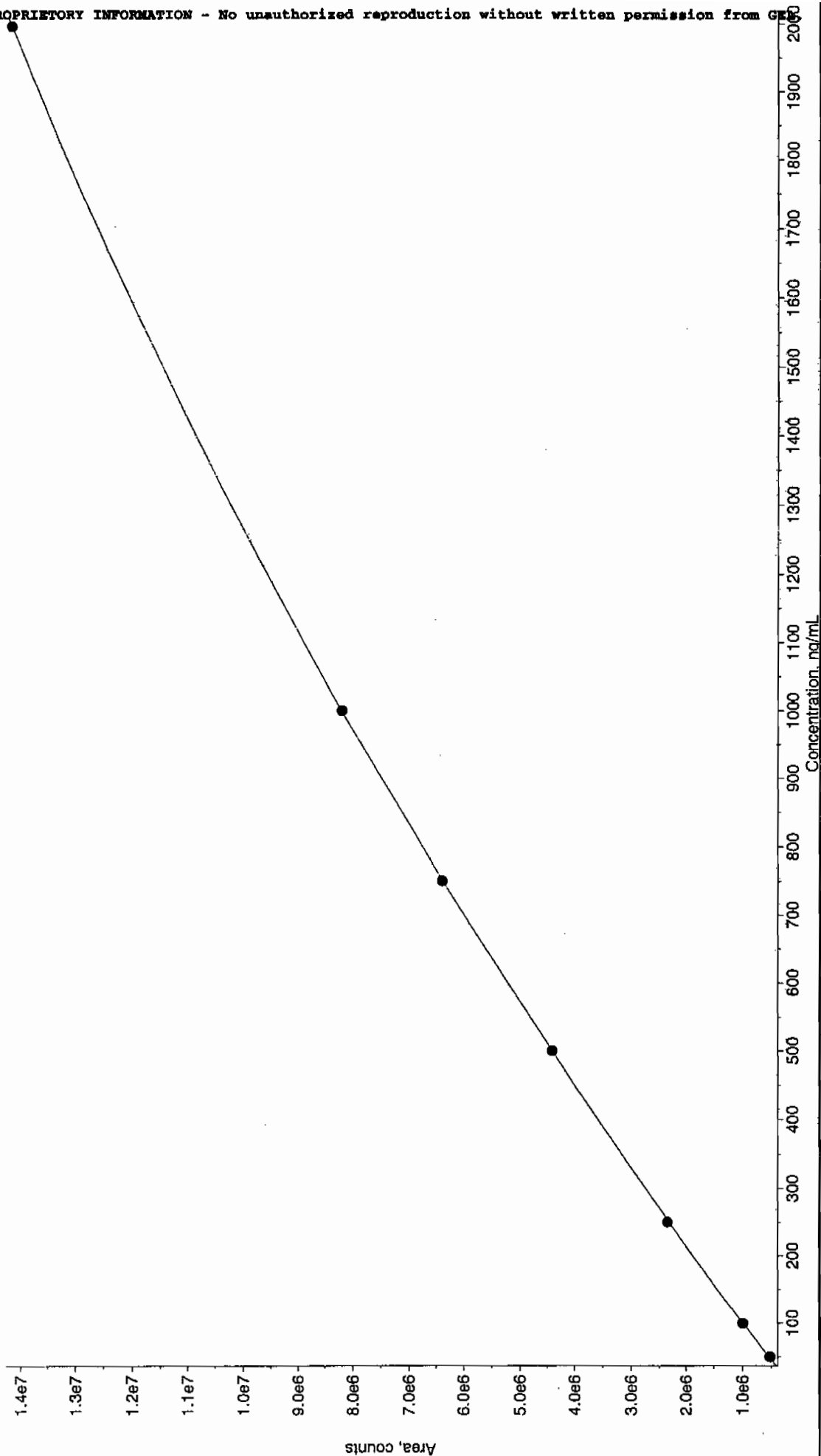
Fit	Quadratic	Weighting	None	Iterate No
a0	6.69e+004			
a1	1.29e+004			
a2	-1.26			
Correlation coefficient 1.0000				
Use Area				

031610.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = 0.0593 x^2 + 1.7e+003 x + -1.96e+004$ ($r = 0.9999$)



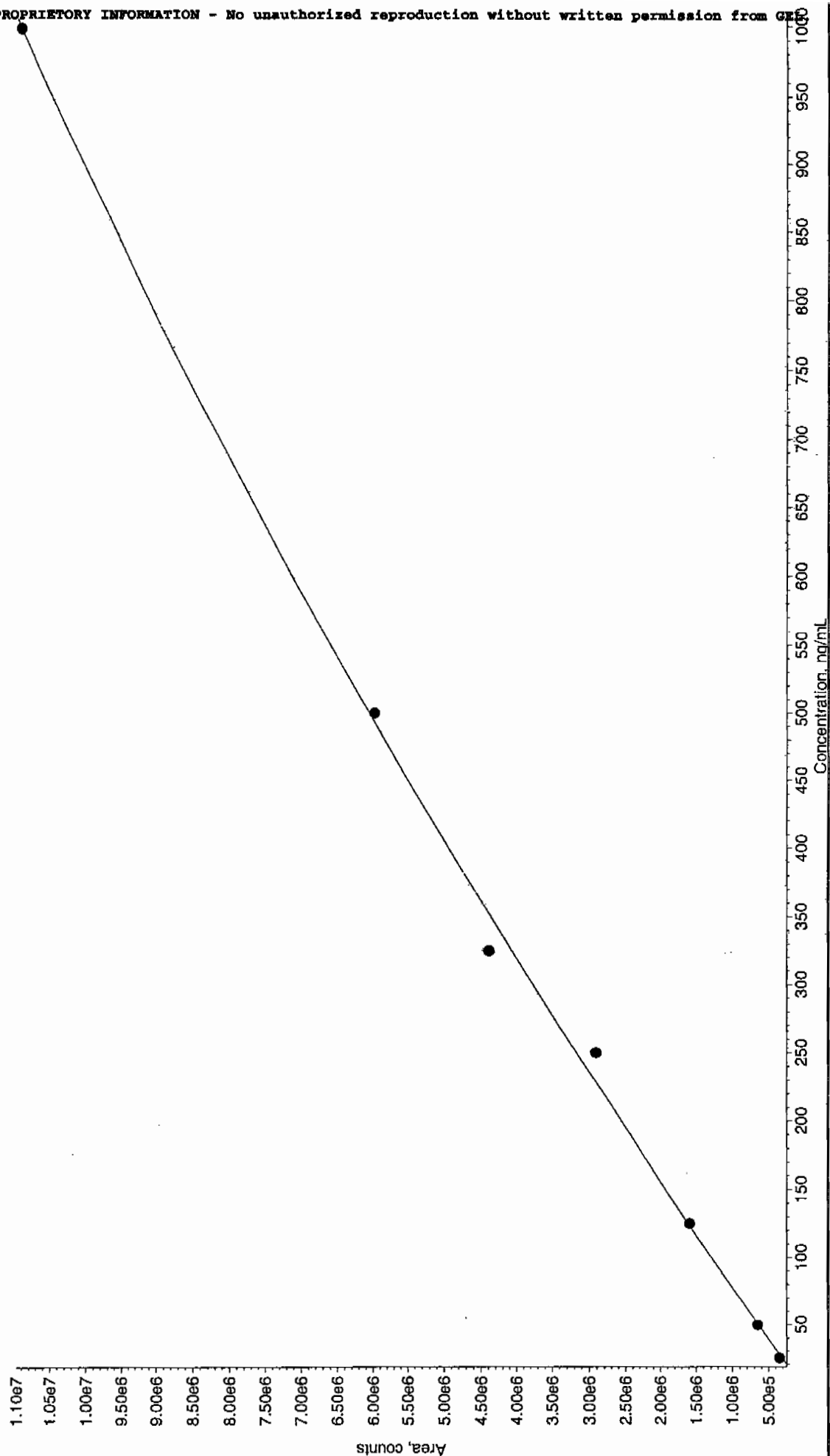
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031610.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -1.08 x^2 + 9.19e+003 x + 8.41e+004$ ($r = 1.0000$)



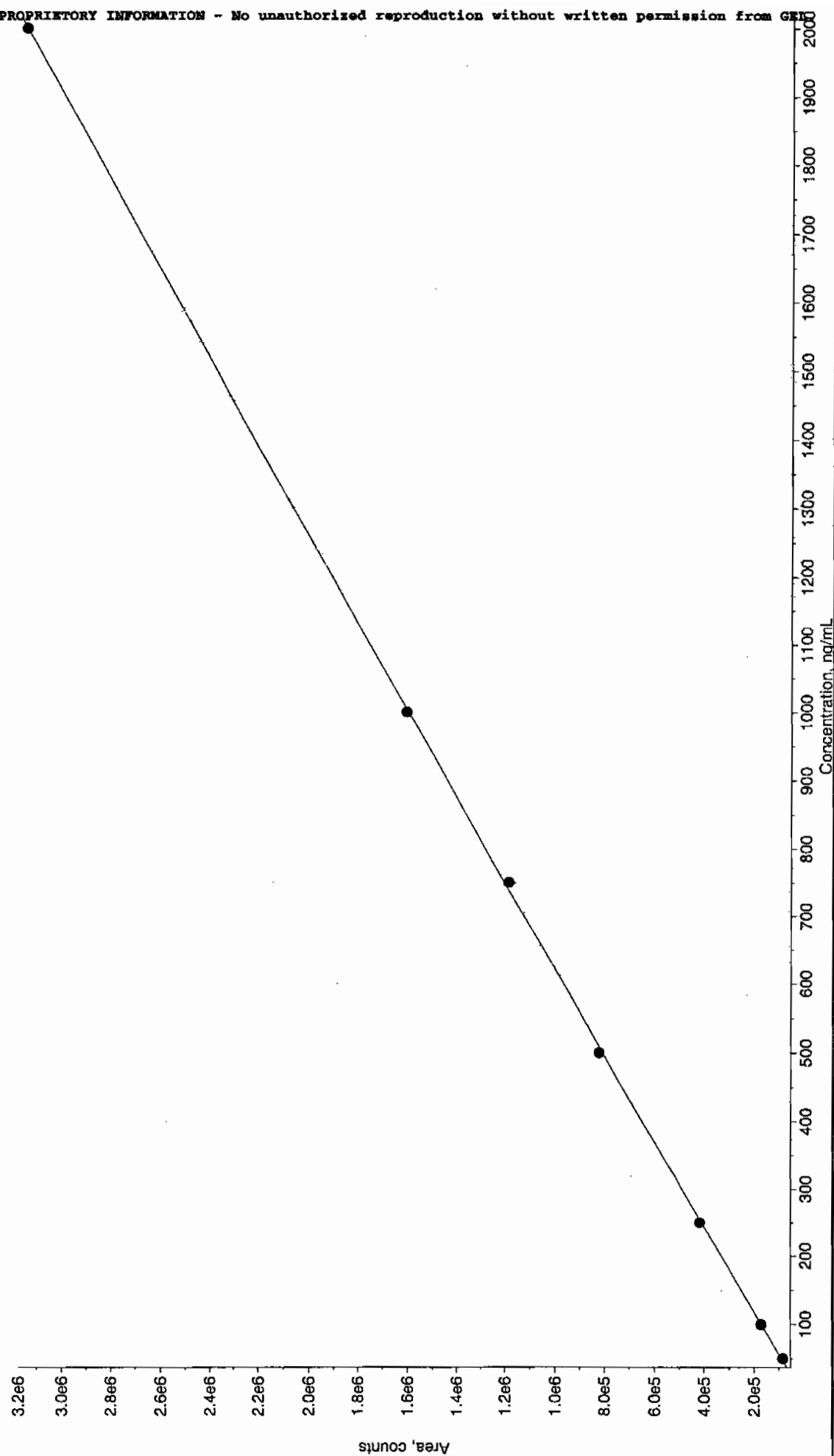
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031610.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.47 x^2 + 1.34e+004 x + -1.89e+004$ ($r = 0.9989$)



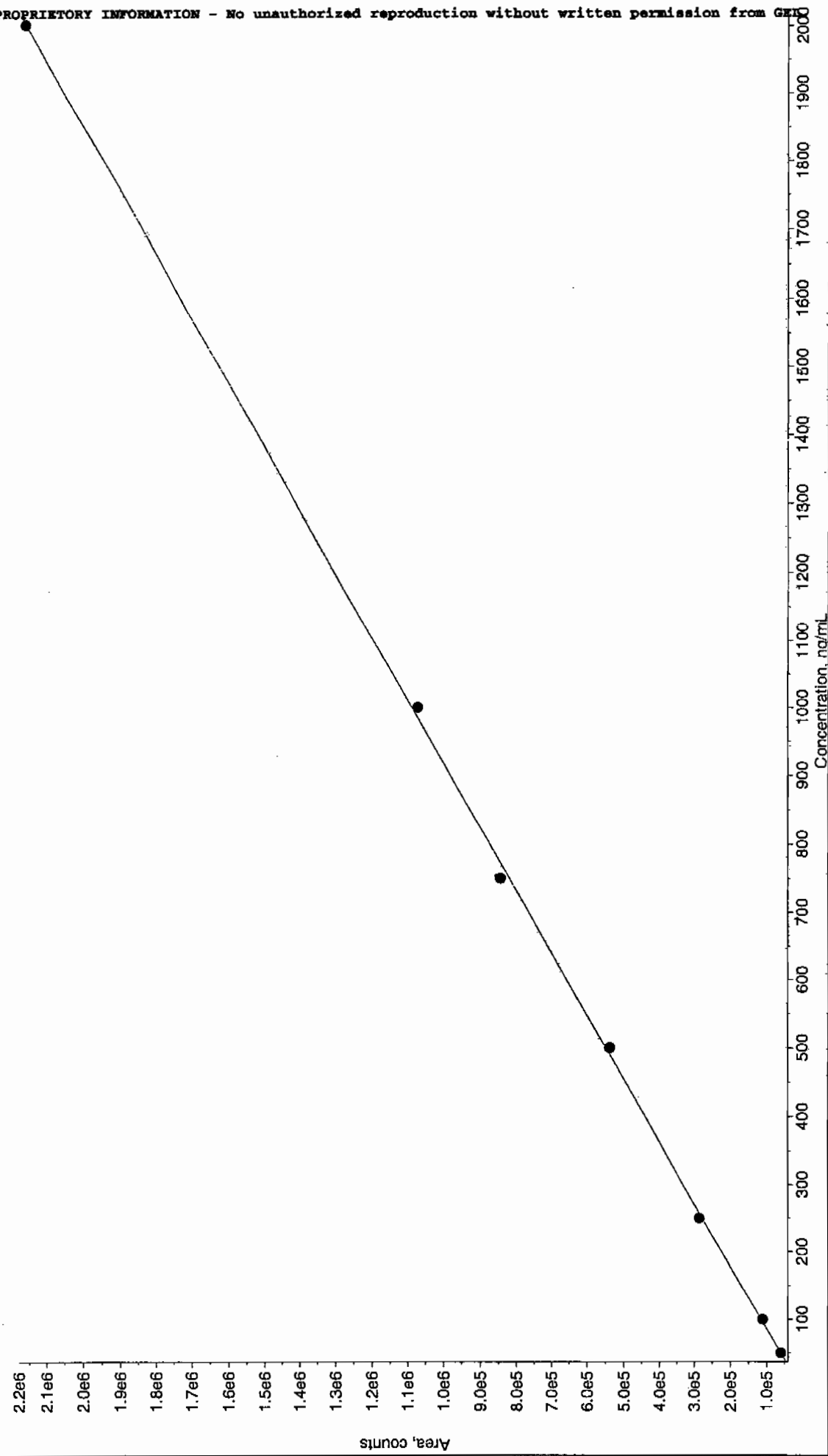
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031610.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0198 x^2 + 1.6e+003 x + 1.19e+004$ ($r = 1.0000$)



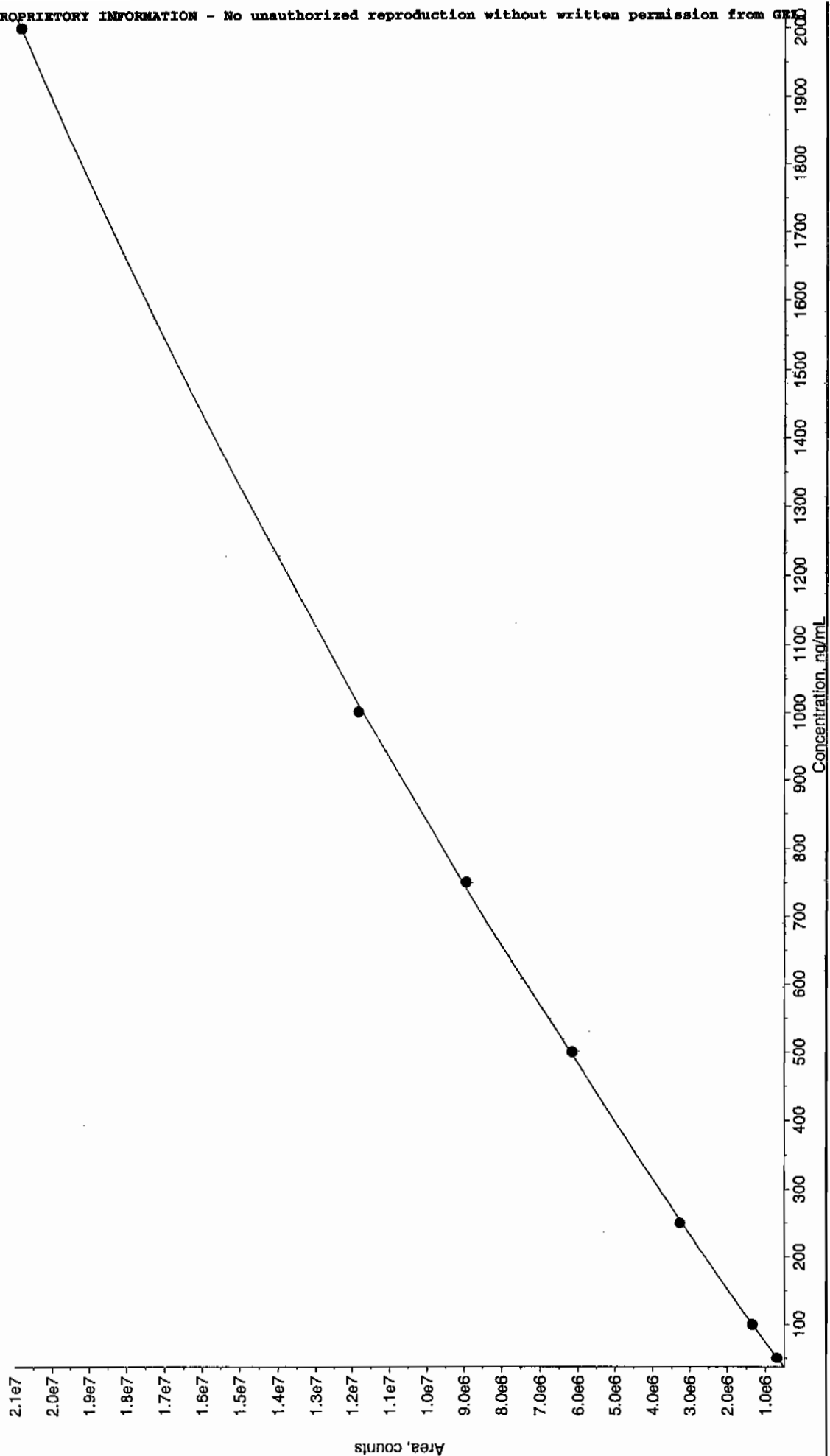
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031610.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.00433 x^2 + 1.08e+003 x + 6.78e+003$ ($r = 0.9998$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031610.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -1.26 x^2 + 1.29e+004 x + 6.69e+004$ ($r = 1.0000$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03160011.wiff

Analysis Date: 16-MAR-10 10:54

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	487	97	
2,6-Diamino-4-nitrotoluene	500	468	94	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	486	97	
TATB	500	494	99	
tris(o-cresyl) phosphate	500	490	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 70-130%

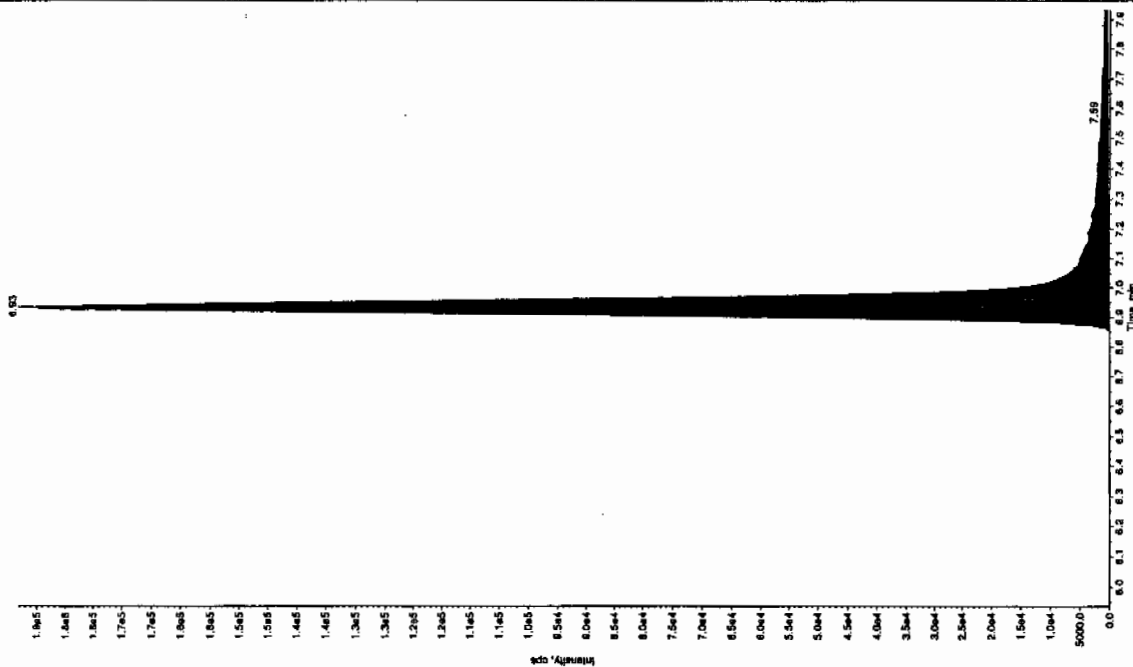
Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

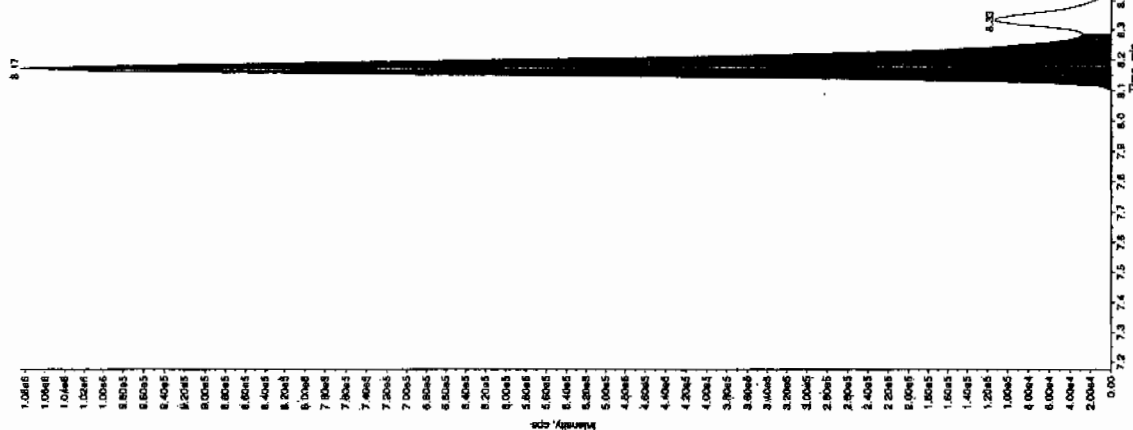
Sample Name: WXX100316-260V Sample ID: 11111111111111111111
 Peak Name: TATB Mass(es): 257.2204.9 amu
 Comment: LCMSEXP_C Annotation: **

Sample Index: 1 QC
 Sample Type: 500. ng/mL
 Concentration: 494. ng/mL
 Calculated Conc: 3/16/2010
 Acq. Date: 10:54:51 AM
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 ST Window: 30.0 sec
 Expected RT: 6.93 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.93 min
 Area: 8.13e+005 counts
 Height: 188188.568 cps
 Start Time: 6.81 min
 End Time: 7.99 min



Sample Name: WXX100316-260V Sample ID: 11111111111111111111
 Peak Name: 35-Duroloniline Mass(es): 182.046.0 amu
 Comment: LCMSEXP_C Annotation: **

Sample Index: 1 QC
 Sample Type: 500. ng/mL
 Concentration: 486. ng/mL
 Calculated Conc: 3/16/2010
 Acq. Date: 10:54:51 AM
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 ST Window: 15.0 sec
 Expected RT: 8.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.17 min
 Area: 4.29e+005 counts
 Height: 1084942.261 cps
 Start Time: 8.08 min
 End Time: 8.89 min



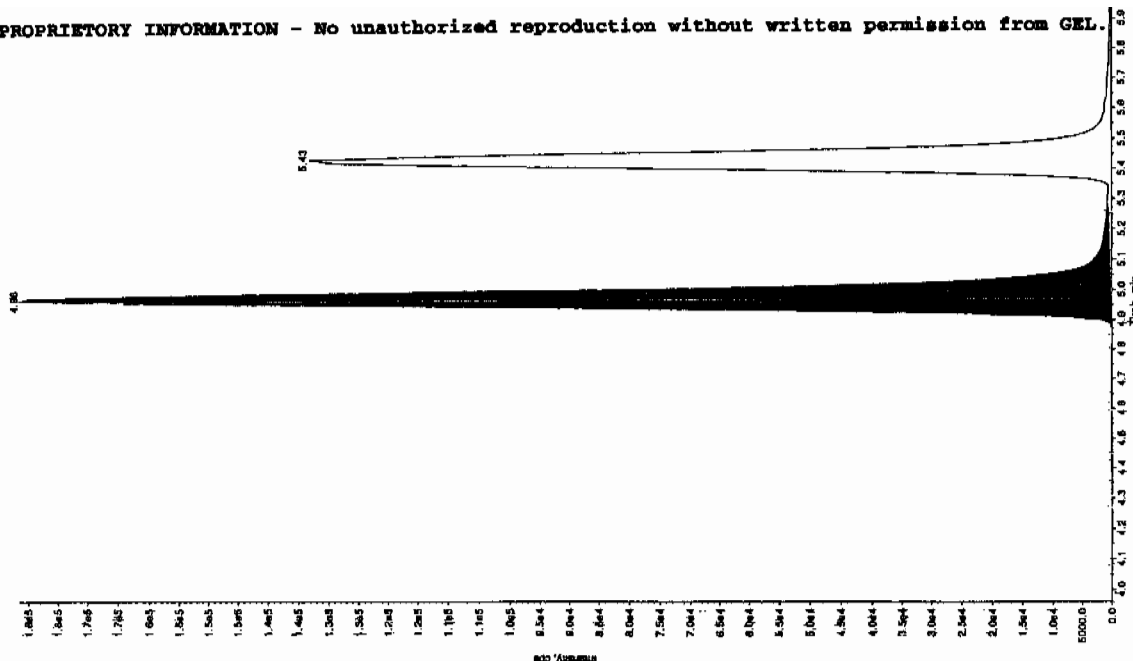
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

See 3/19/10

4/11/2010

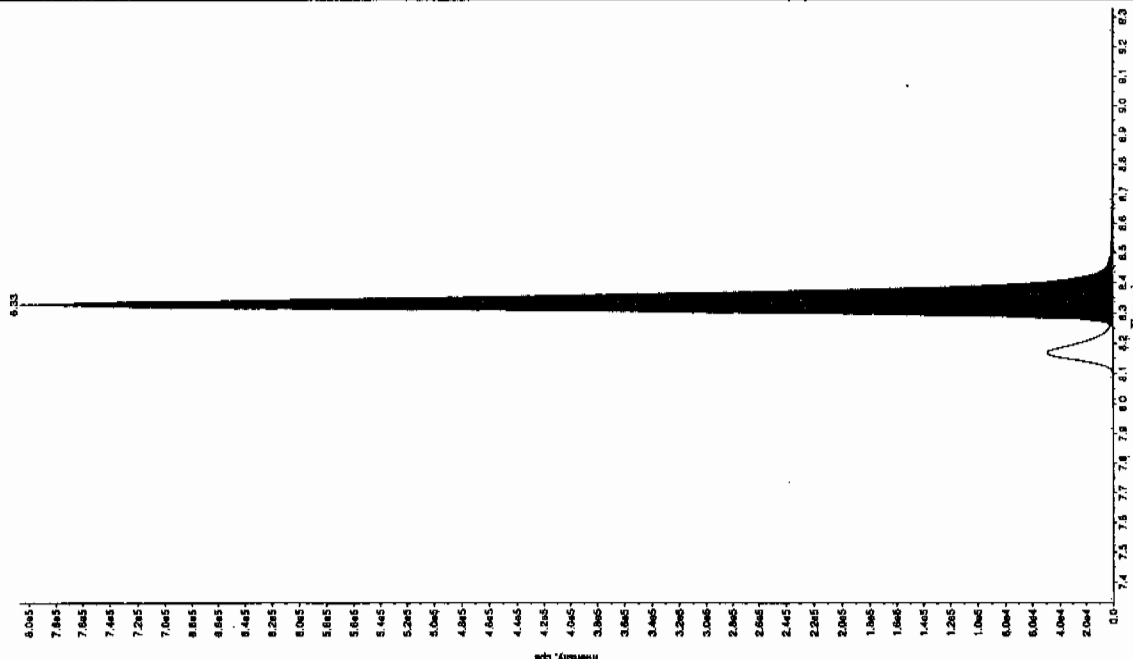
Sample Name: WXX10016-26Cv* Sample ID: 111ER File: EXS03160011.wiff
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 468. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.96 min
 Area: 7.58e+005 counts
 Height: 181494.614 cps
 Start Time: 4.87 min
 End Time: 5.07 min



Sample Name: WXX10016-26Cv* Sample ID: 111ER File: EXS03160011.wiff
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.07159 amu"
 Comment: "LCMSEXP_C" Annotation: "

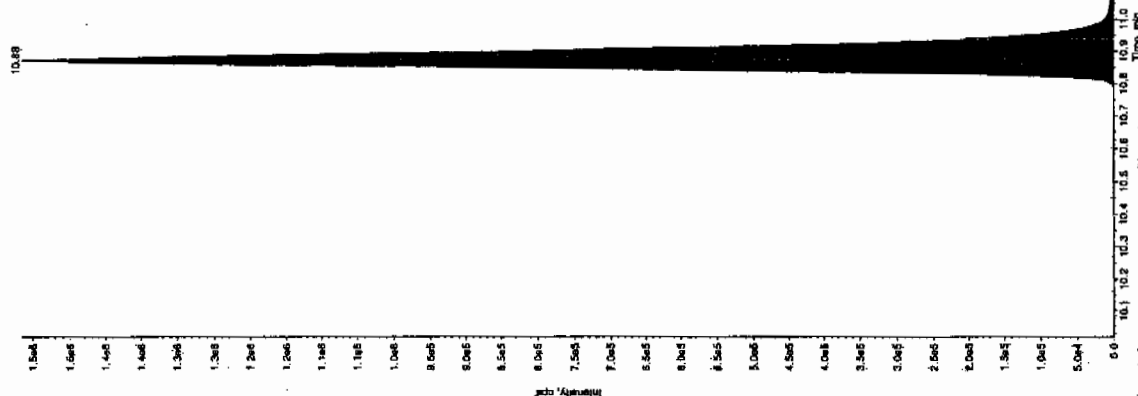
Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 232. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 2.95e+006 counts
 Height: 807097.900 cps
 Start Time: 8.26 min
 End Time: 8.67 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

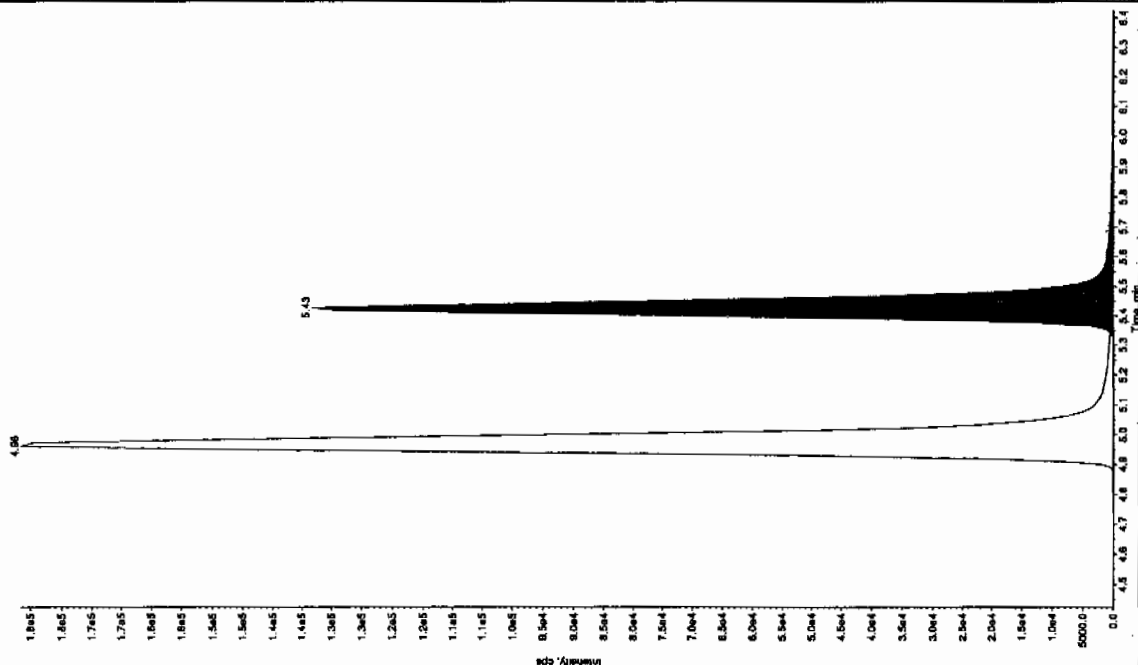
Sample Name: 70X10016-25C1P Sample ID: 70X10016-25C1P
 Peak Name: 70X10016-25C1P-1 Peak Height: 156191.0 mV
 Comment: 70X10016-25C1P-1 Annotation: 70X10016-25C1P-1

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 490 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Peak Height: 156191.0 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: 70X10016-25C1P Sample ID: 70X10016-25C1P
 Peak Name: 70X10016-25C1P-1 Peak Height: 156191.0 mV
 Comment: 70X10016-25C1P-1 Annotation: 70X10016-25C1P-1

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 487 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 10:54:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.43 min
 Peak Height: 13140.213 cps
 Start Time: 5.33 min
 End Time: 5.90 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323012a

Analysis Date: 23-MAR-10 14:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.728	112	
1,3-Dinitrobenzene-d4	500	482.919	97	
2,4,6-Trinitrotoluene	40	35.085	88	
2,4-Dinitrotoluene	40	40.855	102	
2,6-Dinitrotoluene	40	39.526	99	
2,6-Dinitrotoluene-d3	500	484.851	97	
2-Amino-4,6-dinitrotoluene	40	41.982	105	
3,4-Dinitrotoluene	20	19.603	98	
4-Amino-2,6-dinitrotoluene	40	41.07	103	
HMX	40	46.731	117	
Nitrobenzene	40	39.137	98	
PETN	40	43.189	108	
RDX	40	43.979	110	
Tetryl	40	44.65	112	
m-Dinitrobenzene	40	42.729	107	
m-Nitrotoluene	40	44.799	112	
o-Nitrotoluene	40	42.092	105	
p-Nitrotoluene	40	44.279	111	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Wed Mar 24 09:32:17 2010, Page 23 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0323012a

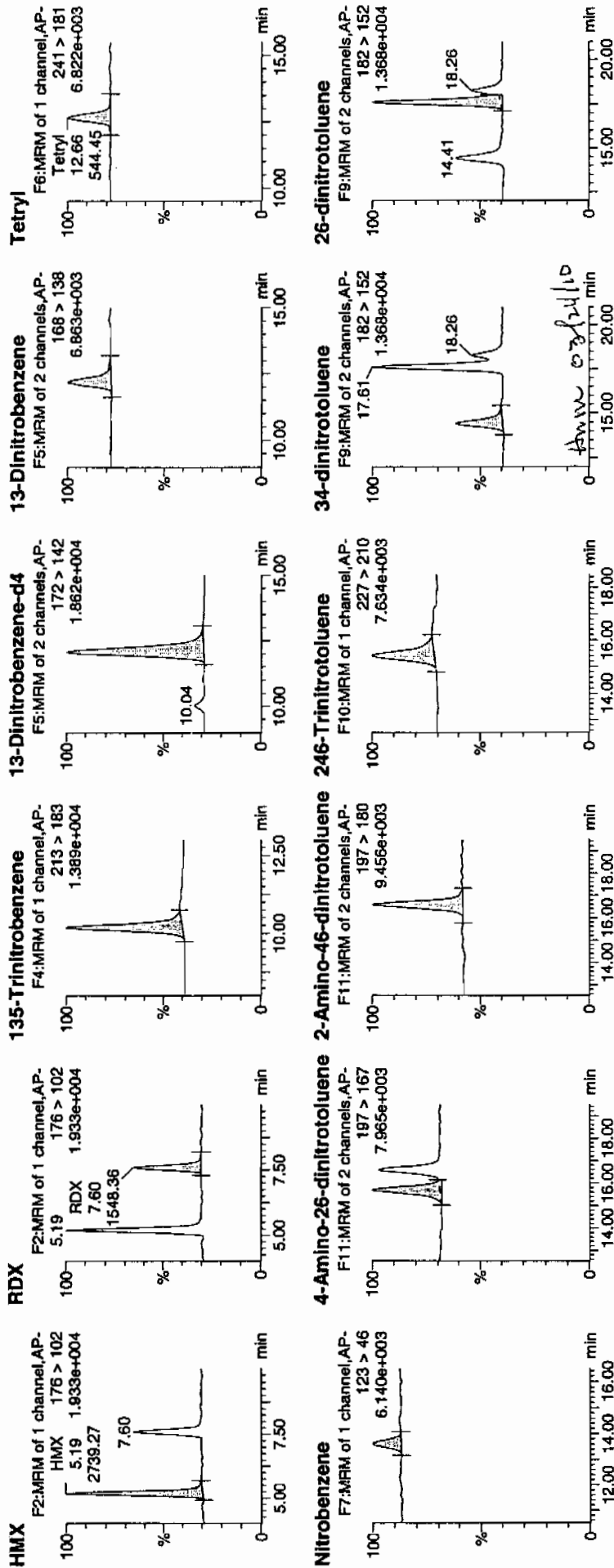
Date: 23-Mar-2010

Time: 14:33:19

ID: WXX100323-08CRI

Vial: 1:1,C

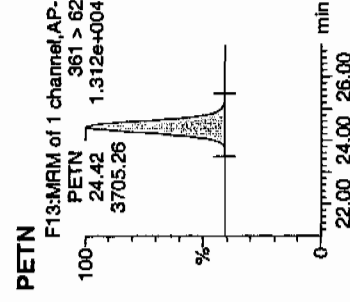
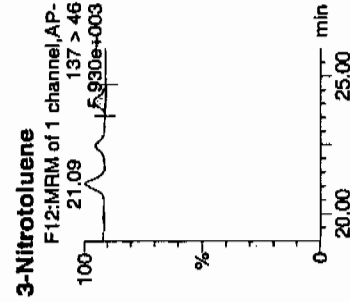
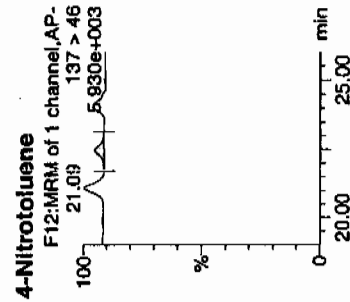
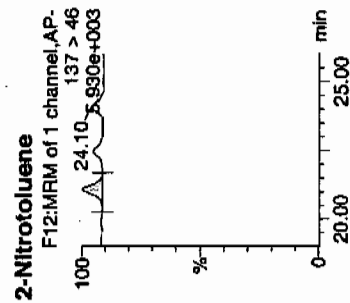
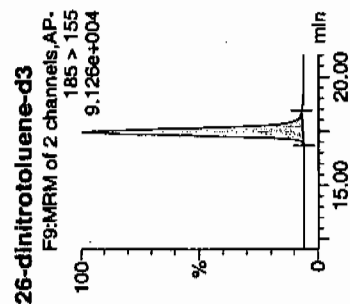
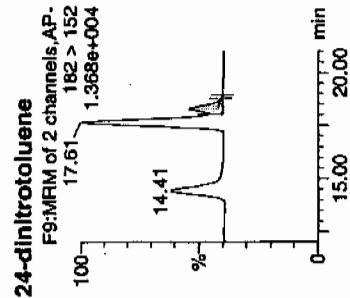
MTT
3/24/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 24 of 99

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ppm)	% Rec	% Dev	SN
WXX100323-08C1	HMX	176 > 102	5.19	2739.266	5316.234	2739.266	257.632	bb			46.7309	116.8	16.8	251.6
WXX100323-08C1	RDX	176 > 102	7.60	1548.360	5316.234	1548.360	145.626	bb			43.9785	109.9	9.9	127.8
WXX100323-08C1	135-Trinitrobenzene	213 > 183	10.18	2247.627	5316.234	2247.627	211.393	bb			44.7278	111.8	11.8	445.9
WXX100323-08C1	13-Dinitrobenzene-d4	172 > 142	12.06	5316.234		5316.234	5316.234	bb			482.9189	96.6	-3.4	660.7
WXX100323-08C1	13-Dinitrobenzene	168 > 138	12.20	603.300	5316.234	603.300	56.741	bb			42.7286	106.8	6.8	69.7
WXX100323-08C1	Tetryl	241 > 181	12.66	544.449	5316.234	544.449	51.206	bb			44.6503	111.6	11.6	70.1
WXX100323-08C1	Nitrobenzene	123 > 46	13.61	272.627	5316.234	272.627	25.641	bb			39.1374	97.8	-2.2	30.1
WXX100323-08C1	4-Amino-26-dinitrotoluene	197 > 167	15.70	969.114	33387.395	969.114	14.513	MM	24-Mar-10	09:21:01	41.0702	102.7	2.7	70.8
WXX100323-08C1	2-Amino-46-dinitrotoluene	197 > 180	16.59	1535.075	33387.395	1535.075	22.989	bb			41.9822	105.0	5.0	104.0
WXX100323-08C1	246-Trinitrotoluene	227 > 210	15.40	960.700	33387.395	960.700	14.387	bb			35.0846	87.7	-12.3	35.6
WXX100323-08C1	34-dinitrotoluene	182 > 152	14.41	1386.049	33387.395	1386.049	20.757	bb			19.6028	98.0	-2.0	76.8
WXX100323-08C1	26-dinitrotoluene	182 > 152	17.61	3053.718	33387.395	3053.718	45.732	MM	24-Mar-10	09:24:21	39.5256	98.8	-1.2	212.4
WXX100323-08C1	24-dinitrotoluene	182 > 152	18.26	757.031	33387.395	757.031	11.337	MM	24-Mar-10	09:27:48	40.8550	102.1	2.1	49.7
WXX100323-08C1	26-dinitrotoluene-d3	185 > 155	17.43	33387.395		33387.395	33387.395	bb			484.8510	97.0	-3.0	2744.6
WXX100323-08C1	2-Nitrotoluene	137 > 46	21.09	226.665	33387.395	226.665	3.394	bb			42.0924	105.2	5.2	67.3
WXX100323-08C1	4-Nitrotoluene	137 > 46	22.46	115.137	33387.395	115.137	1.724	bb			44.2789	110.7	10.7	32.0
WXX100323-08C1	3-Nitrotoluene	137 > 46	24.10	150.832	33387.395	150.832	2.259	bb			44.7990	112.0	12.0	39.5
WXX100323-08C1	PETN	361 > 62	24.42	3705.264	33387.395	3705.264	55.489	bb			43.1894	108.0	8.0	492.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/23/10
 Time of Injection 1433
 Standard Number WXX100323-08CRI
 Data File EXP0323012a

HMX	116.8
RDX	109.9
135-TNB	111.8
13-DNB	106.8
Tetryl	111.6
Nitrobenzene	97.8
4A-26-DNT	102.7
2A-46-DNT	105.0
246-TNT	87.7
34-DNT(surr)	98.0
26-DNT	98.8
24-DNT	102.1
2-NT	105.2
4-NT	110.7
3-NT	112.0
PETN	108.0
Total	1684.9

Handwritten: 1433
3/24/10

Average

105.3

Handwritten: HMM 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323023a

Analysis Date: 23-MAR-10 19:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	600	636.192	106	
RDX	600	766.934	128	*
Tetryl	600	703.31	117	
m-Dinitrobenzene	600	619.864	103	
m-Nitrotoluene	600	587.224	98	
o-Nitrotoluene	600	612.723	102	
p-Nitrotoluene	600	652.819	109	
1,3,5-Trinitrobenzene	600	618.225	103	
1,3-Dinitrobenzene-d4	500	527.566	106	
2,4,6-Trinitrotoluene	600	626.233	104	
2,4-Dinitrotoluene	600	641.728	107	
2,6-Dinitrotoluene	600	622.086	104	
2,6-Dinitrotoluene-d3	500	516.532	103	
2-Amino-4,6-dinitrotoluene	600	682.18	114	
3,4-Dinitrotoluene	300	318.667	106	
4-Amino-2,6-dinitrotoluene	600	638.616	106	
HMX	600	775.75	129	*
Nitrobenzene	600	605.281	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Wed Mar 24 09:32:17 2010, Page 45 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qtd, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323023a

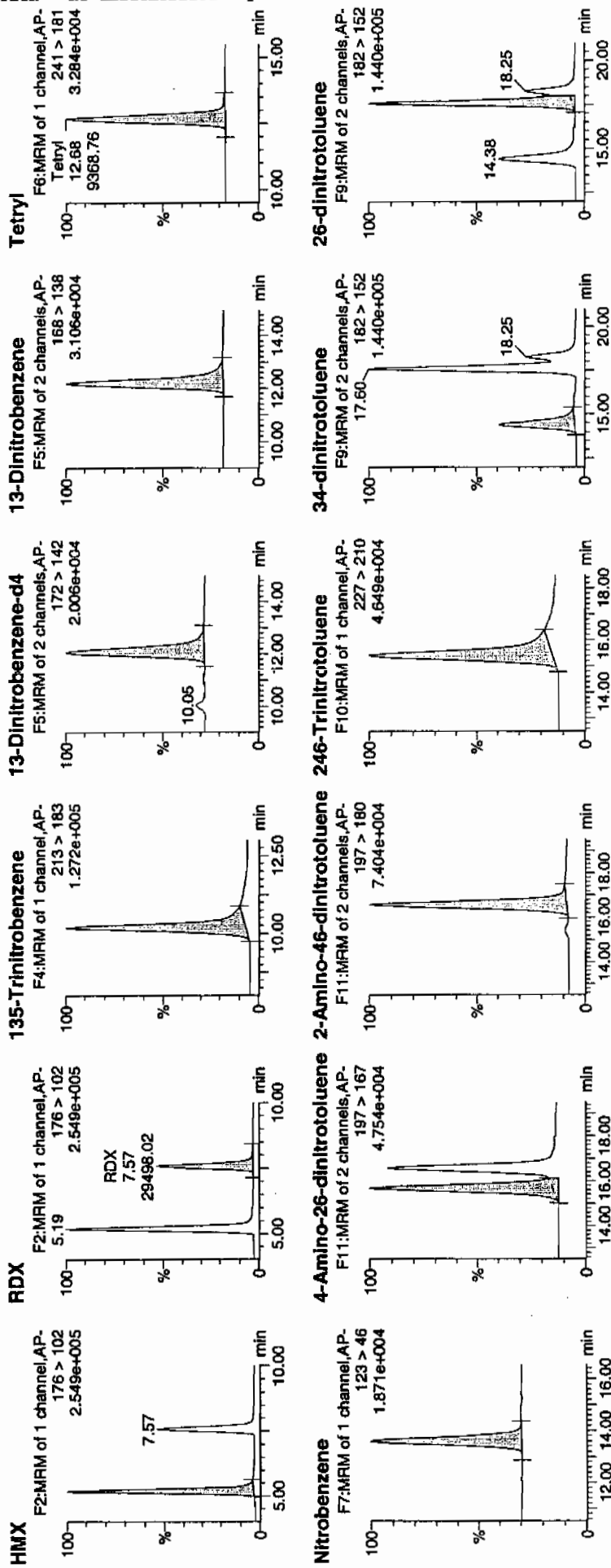
Date: 23-Mar-2010

Time: 19:57:38

ID: WXX100323-07CCV

Vial: 1:1,B

124
3/24/10

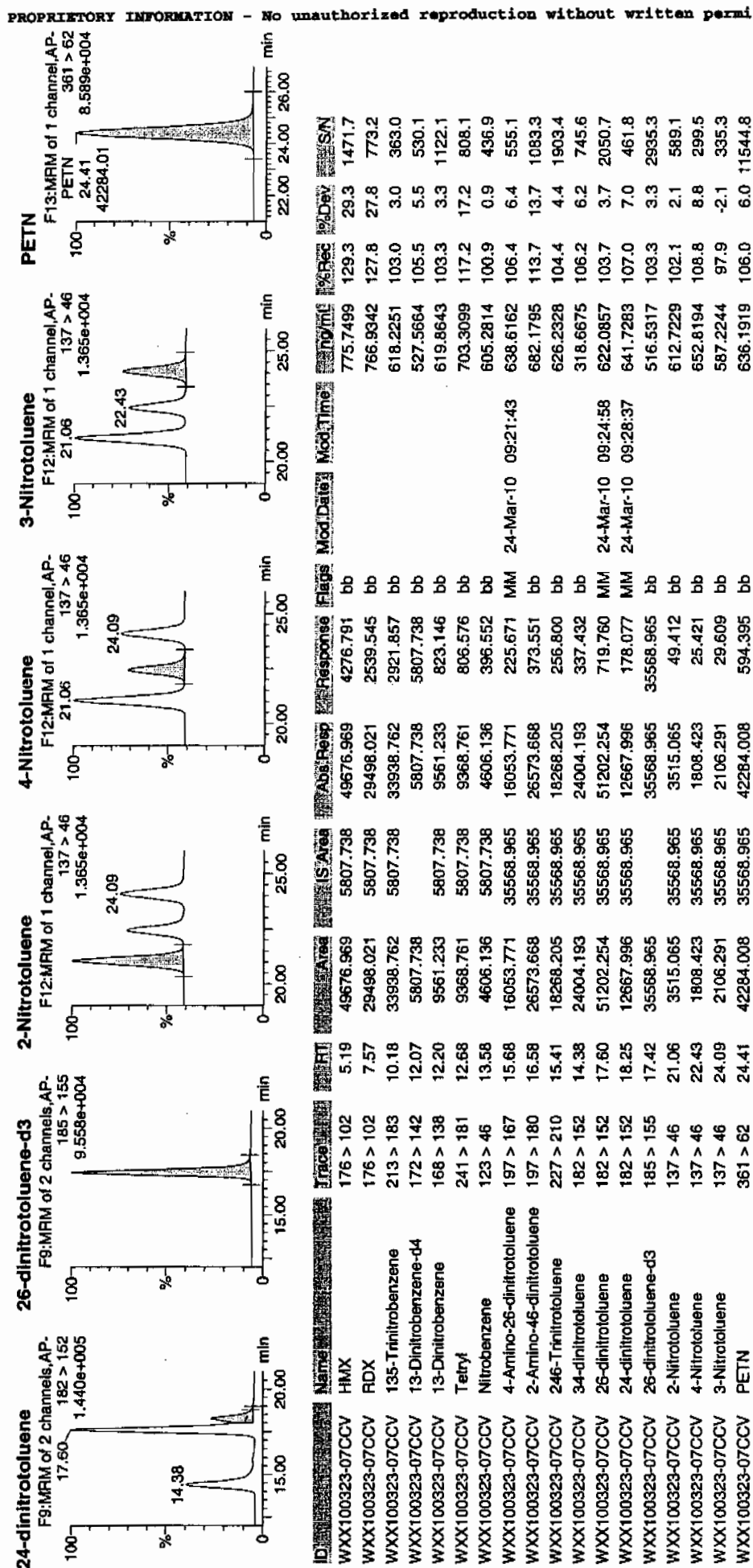


124
3/24/10

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 46 of 99

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/23/10
 Time of Injection: 1957
 Standard Number: WXX100323-07CCV
 Data File: EXP0323023a

HMX	129.3
RDX	127.8
135-TNB	103.0
13-DNB	103.3
Tetryl	117.2
Nitrobenzene	100.9
4A-26-DNT	106.4
2A-46-DNT	113.7
246-TNT	104.4
34-DNT(surr)	106.2
26-DNT	103.7
24-DNT	107.0
2-NT	102.1
4-NT	108.8
3-NT	97.9
PETN	106.0
Total	1737.7

Handwritten:
 HMP
 3/24/10

Average

108.6

Handwritten: HMP 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323025a

Analysis Date: 23-MAR-10 20:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.551	109	
1,3-Dinitrobenzene-d4	500	578.273	116	
2,4,6-Trinitrotoluene	40	36.796	92	
2,4-Dinitrotoluene	40	36.274	91	
2,6-Dinitrotoluene	40	39.059	98	
2,6-Dinitrotoluene-d3	500	625.064	125	
2-Amino-4,6-dinitrotoluene	40	35.345	88	
3,4-Dinitrotoluene	20	18.965	95	
4-Amino-2,6-dinitrotoluene	40	37.682	94	
HMX	40	43.341	108	
Nitrobenzene	40	37.897	95	
PETN	40	34.251	86	
RDX	40	42.597	106	
Tetryl	40	36.872	92	
m-Dinitrobenzene	40	41.891	105	
m-Nitrotoluene	40	39.158	98	
o-Nitrotoluene	40	44.793	112	
p-Nitrotoluene	40	35.3	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\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323025a

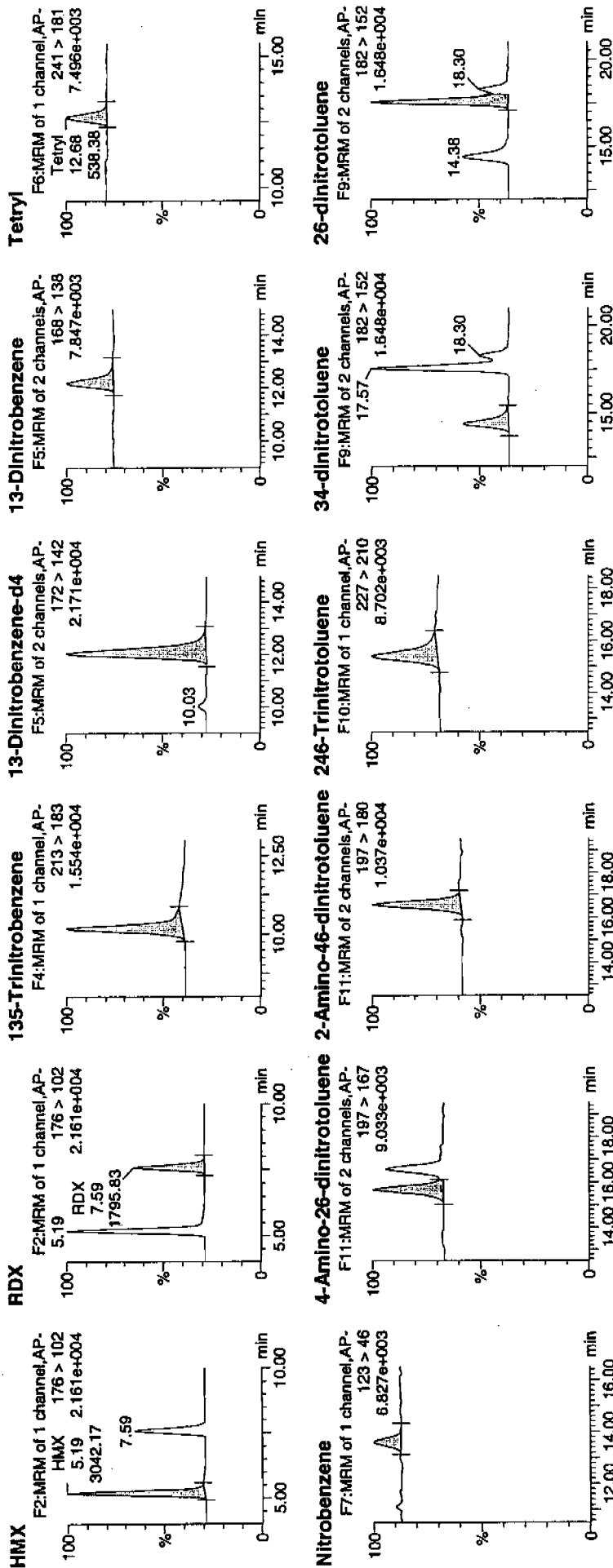
Date: 23-Mar-2010

Time: 20:56:42

ID: WXX100323-08CRI

Vial: 1:1,C

100%
7/24/10

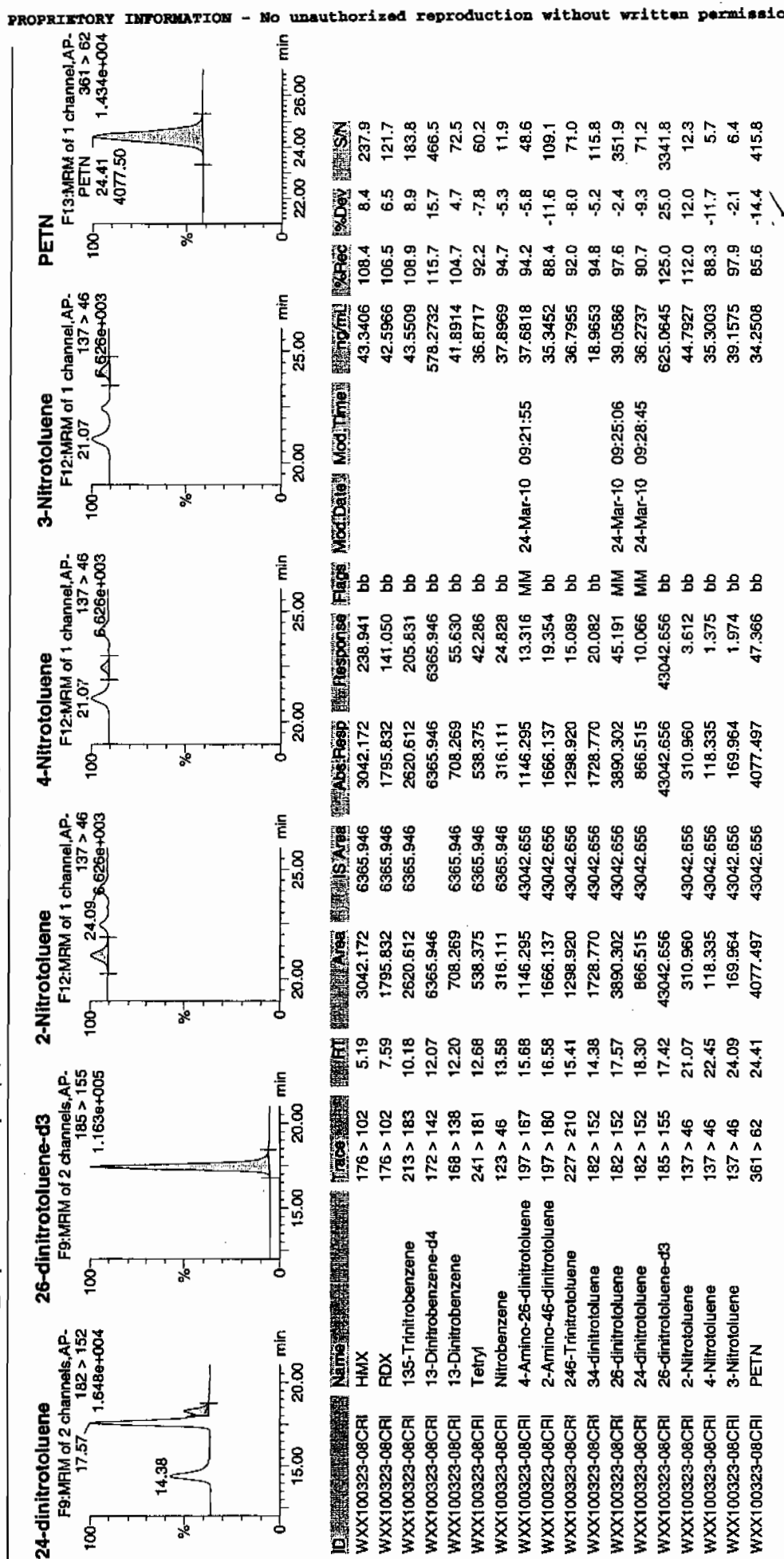


100%
7/24/10

Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 50 of 99

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/23/10
 Time of Injection 2056
 Standard Number WXX100323-08CRI
 Data File EXP0323025a

HMX	108.4
RDX	106.5
135-TNB	108.9
13-DNB	104.7
Tetryl	92.2
Nitrobenzene	94.7
4A-26-DNT	94.2
2A-46-DNT	88.4
246-TNT	92.0
34-DNT(surr)	94.8
26-DNT	97.6
24-DNT	90.7
2-NT	112.0
4-NT	88.3
3-NT	97.9
PETN	85.6

*not
3/24/10*

Total 1556.9

Average 97.3

from 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323036a

Analysis Date: 24-MAR-10 02:21

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	577.175	96	
1,3-Dinitrobenzene-d4	500	575.9	115	
2,4,6-Trinitrotoluene	600	619.991	103	
2,4-Dinitrotoluene	600	633.316	106	
2,6-Dinitrotoluene	600	619.655	103	
2,6-Dinitrotoluene-d3	500	508.988	102	
2-Amino-4,6-dinitrotoluene	600	653.379	109	
3,4-Dinitrotoluene	300	321.856	107	
4-Amino-2,6-dinitrotoluene	600	620.656	103	
HMX	600	618.029	103	
Nitrobenzene	600	536.553	89	
PETN	600	641.859	107	
RDX	600	653.059	109	
Tetryl	600	658.046	110	
m-Dinitrobenzene	600	611.433	102	
m-Nitrotoluene	600	567.971	95	
o-Nitrotoluene	600	566.873	94	
p-Nitrotoluene	600	613.653	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

Printed: Wed Mar 24 09:32:17 2010, Page 71 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP\PROData\EXP0323036a

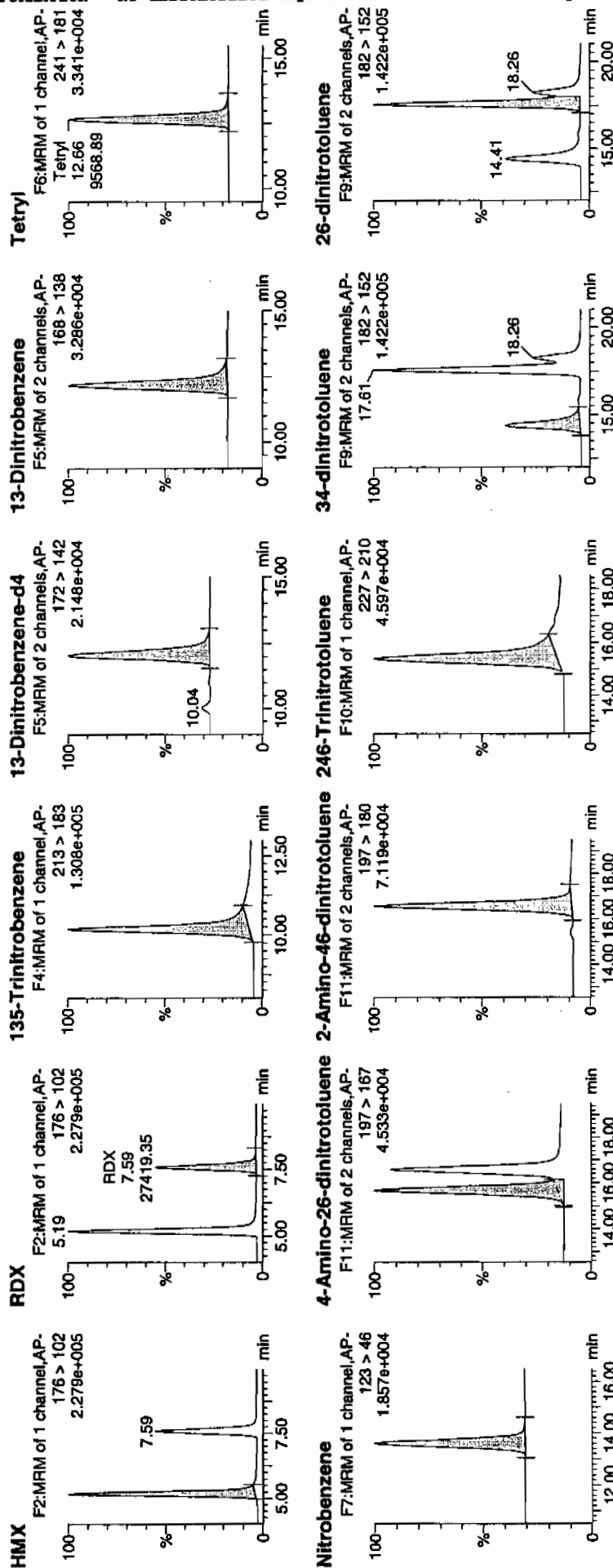
Date: 24-Mar-2010

Time: 02:21:01

ID: WXX100323-07CCV

Vial: 1:1,B

WXX
3/24/10



4mW 0.3 124/10

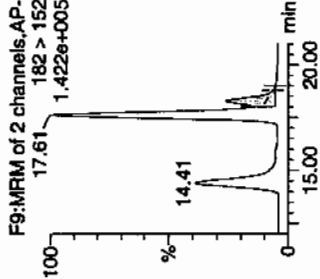
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

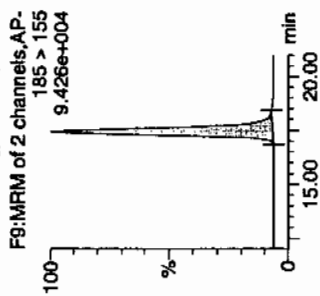
Printed: Wed Mar 24 09:32:17 2010, Page 72 of 99

Dataset: C:\MASSLYNX\New_Exp_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

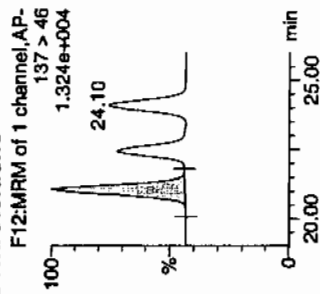
24-dinitrotoluene



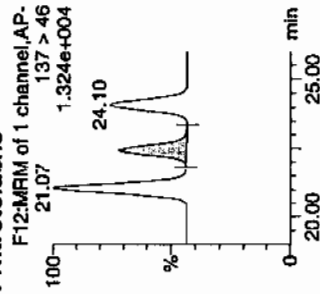
26-dinitrotoluene-d3



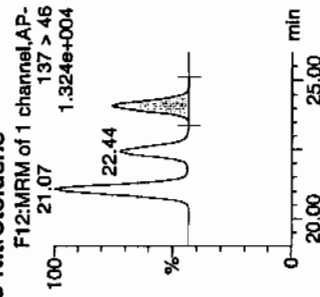
2-Nitrotoluene



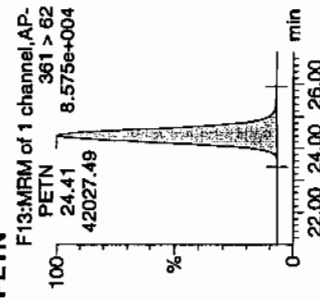
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc mg/ml	%Red	%Day	SN
WXX100323-07CCV	HMV	176 > 102	5.19	43202.789	6339.820	43202.789	3407.257	bb			618.0285	103.0	3.0	4137.3
WXX100323-07CCV	RDX	176 > 102	7.59	27419.350	6339.820	27419.350	2162.471	bb			653.0591	108.8	8.8	2257.6
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	34588.102	6339.820	34588.102	2727.846	bb			577.1749	96.2	-3.8	1450.1
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.06	6339.820		6339.820	6339.820	bb			575.9000	115.2	15.2	988.1
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.17	10295.225	6339.820	10295.225	811.949	bb			611.4327	101.9	1.9	1166.6
WXX100323-07CCV	Tetryl	241 > 181	12.66	9568.891	6339.820	9568.891	754.666	bb			536.5533	89.4	-10.6	722.7
WXX100323-07CCV	Nitrobenzene	123 > 46	13.61	4457.201	6339.820	4457.201	351.524	bb			620.6558	103.4	3.4	979.2
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	15374.411	35049.496	15374.411	219.324	MM	24-Mar-10	09:22:18	653.3791	108.9	8.9	1865.2
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	25080.061	35049.496	25080.061	357.781	bb			619.9912	103.3	3.3	338.4
WXX100323-07CCV	246-Trinitrotoluene	227 > 210	15.40	17821.988	35049.496	17821.988	254.240	bb			321.8559	107.3	7.3	730.9
WXX100323-07CCV	34-dinitrotoluene	182 > 152	14.41	23890.289	35049.496	23890.289	340.808	bb			619.6552	103.3	3.3	2025.6
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.61	50257.344	35049.496	50257.344	716.948	MM	24-Mar-10	09:25:22	633.3162	105.6	5.6	441.6
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.26	12319.353	35049.496	12319.353	175.742	MM	24-Mar-10	09:28:57	508.9880	101.8	1.8	2133.3
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.43	35049.496		35049.496	35049.496	bb			566.8732	94.5	-5.5	213.2
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.07	3204.540	35049.496	3204.540	45.714	bb			613.6528	102.3	2.3	108.3
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.44	1675.098	35049.496	1675.098	23.896	bb			567.9711	94.7	-5.3	123.0
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.10	2007.479	35049.496	2007.479	28.638	bb			641.8591	107.0	7.0	22480.6
WXX100323-07CCV	PETN	361 > 62	24.41	42027.492	35049.496	42027.492	599.545	bb						

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/24/10
 Time of Injection: 0221
 Standard Number: WXX100323-07CCV
 Data File: EXP0323036a

HMX	103.0
RDX	108.8
135-TNB	96.2
13-DNB	101.9
Tetryl	109.7
Nitrobenzene	89.4
4A-26-DNT	103.4
2A-46-DNT	108.9
246-TNT	103.3
34-DNT(surr)	107.3
26-DNT	103.3
24-DNT	105.6
2-NT	94.5
4-NT	102.3
3-NT	94.7
PETN	107.0

1077
3/24/10

Total 1639.3

Average 102.5

HMM-03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323038a

Analysis Date: 24-MAR-10 03:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	40.635	102	
PETN	40	42.98	107	
RDX	40	42.128	105	
Tetryl	40	37.542	94	
m-Dinitrobenzene	40	41.281	103	
m-Nitrotoluene	40	41.221	103	
o-Nitrotoluene	40	41.666	104	
p-Nitrotoluene	40	36.98	92	
1,3,5-Trinitrobenzene	40	45.654	114	
1,3-Dinitrobenzene-d4	500	578.299	116	
2,4,6-Trinitrotoluene	40	40.179	100	
2,4-Dinitrotoluene	40	42.924	107	
2,6-Dinitrotoluene	40	40.014	100	
2,6-Dinitrotoluene-d3	500	568.942	114	
2-Amino-4,6-dinitrotoluene	40	41.784	104	
3,4-Dinitrotoluene	20	23.698	118	
4-Amino-2,6-dinitrotoluene	40	39.666	99	
HMX	40	48.156	120	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Wed Mar 24 09:32:17 2010, Page 75 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323038a

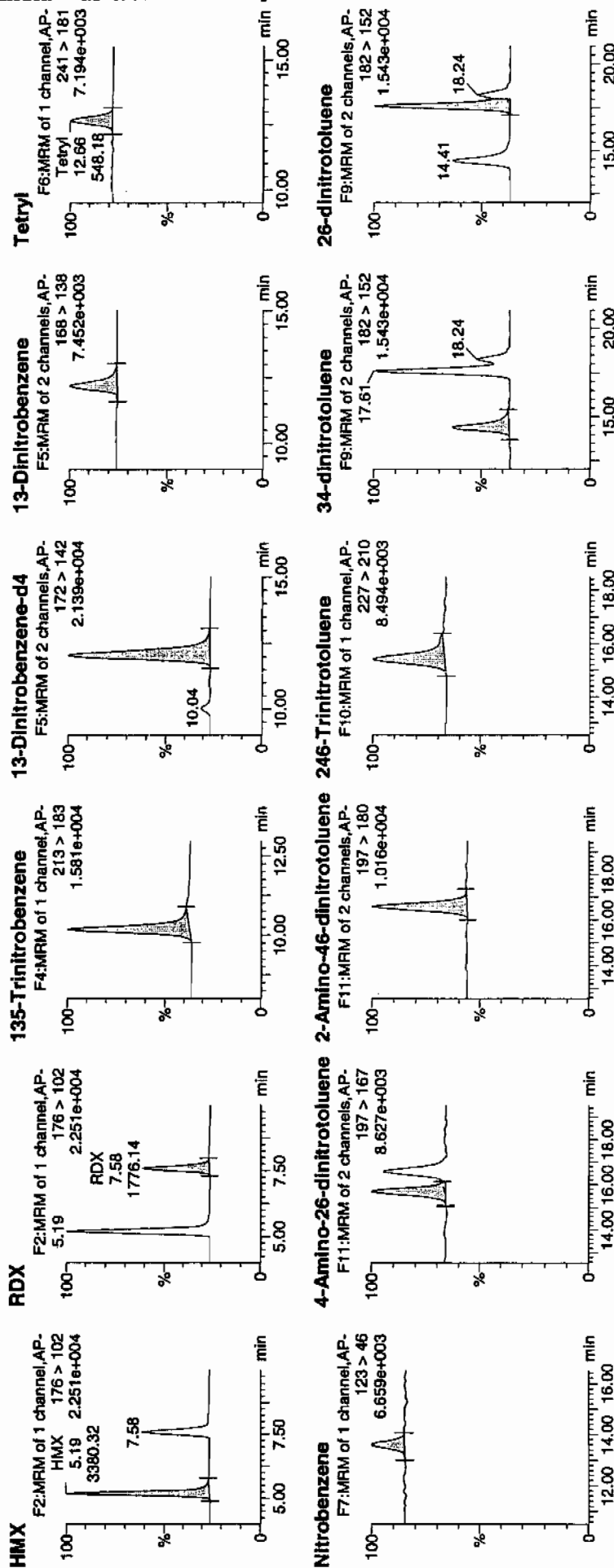
Date: 24-Mar-2010

Time: 03:20:06

ID: WXX100323-08CRI

Vial: 1:1,C

3/24/10
MJP



HW
03/24/10

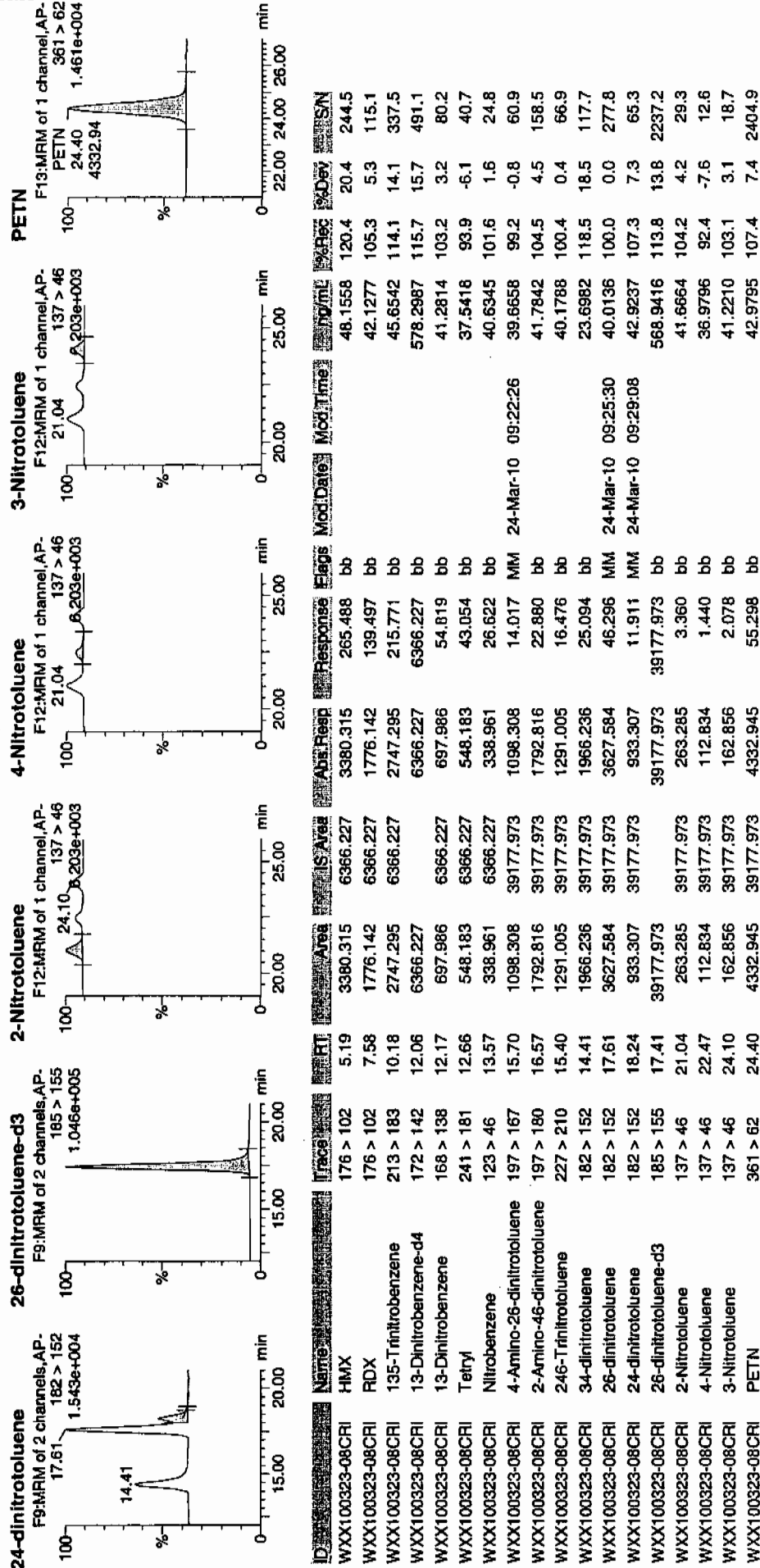
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 76 of 99

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/24/10
 Time of Injection 0320
 Standard Number WXX100323-08CRI
 Data File EXP0323038a

HMX	120.4
RDX	105.3
135-TNB	114.1
13-DNB	103.2
Tetryl	93.9
Nitrobenzene	101.6
4A-26-DNT	99.2
2A-46-DNT	104.5
246-TNT	100.4
34-DNT(surr)	118.5
26-DNT	100.0
24-DNT	107.3
2-NT	104.2
4-NT	92.4
3-NT	103.1
PETN	107.4
Total	1675.5

*WAT
3/24/10*

Average

104.7

Handwritten: 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323047a

Analysis Date: 24-MAR-10 07:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	538.76	108	
2,4,6-Trinitrotoluene	600	626.253	104	
2,4-Dinitrotoluene	600	632.264	105	
2,6-Dinitrotoluene	600	616.827	103	
2,6-Dinitrotoluene-d3	500	506.856	101	
2-Amino-4,6-dinitrotoluene	600	709.295	118	
3,4-Dinitrotoluene	300	329.347	110	
4-Amino-2,6-dinitrotoluene	600	664.121	111	
HMX	600	725.562	121	*
Nitrobenzene	600	556.166	93	
PETN	600	665.305	111	
RDX	600	706.667	118	
Tetryl	600	747.317	125	*
m-Dinitrobenzene	600	643.102	107	
m-Nitrotoluene	600	595.728	99	
o-Nitrotoluene	600	613.859	102	
p-Nitrotoluene	600	639.266	107	
1,3,5-Trinitrobenzene	600	615.829	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Wed Mar 24 09:32:17 2010, Page 93 of 99

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323047a

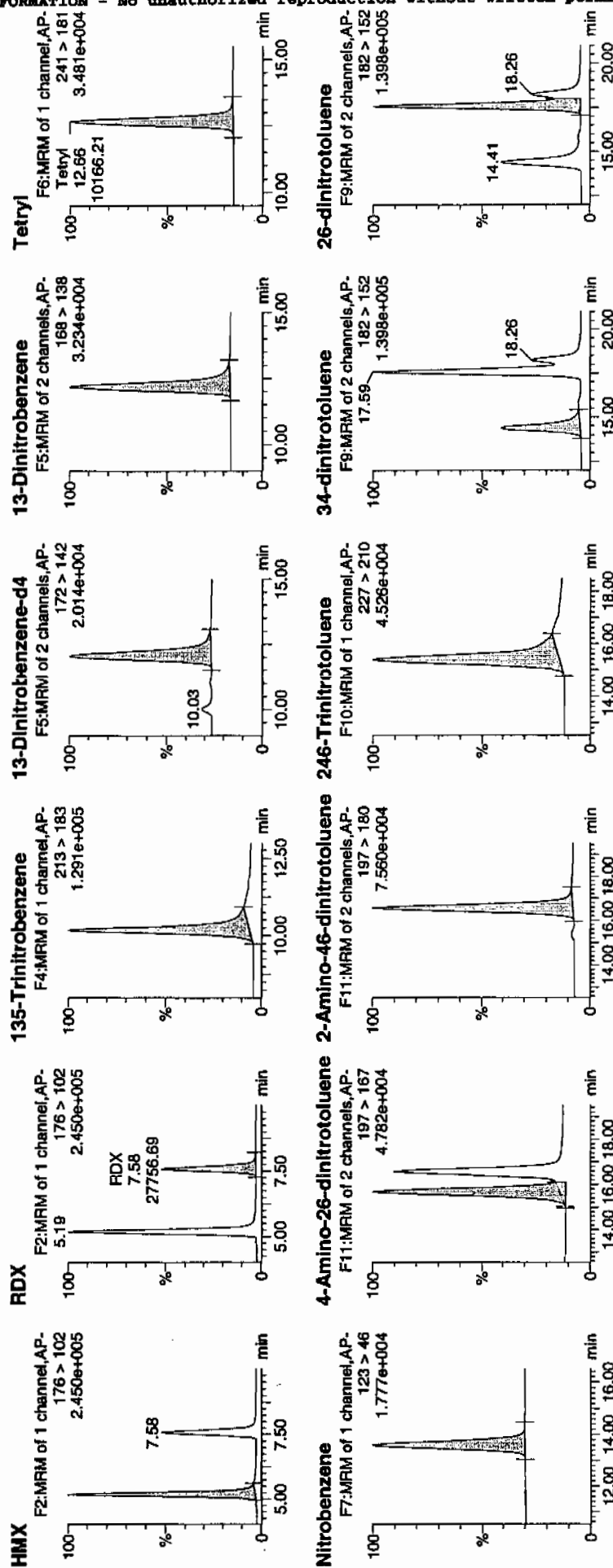
Date: 24-Mar-2010

Time: 07:45:25

ID: WXX100323-07CCV

Vial: 1:1,B

WXX
3/24/10



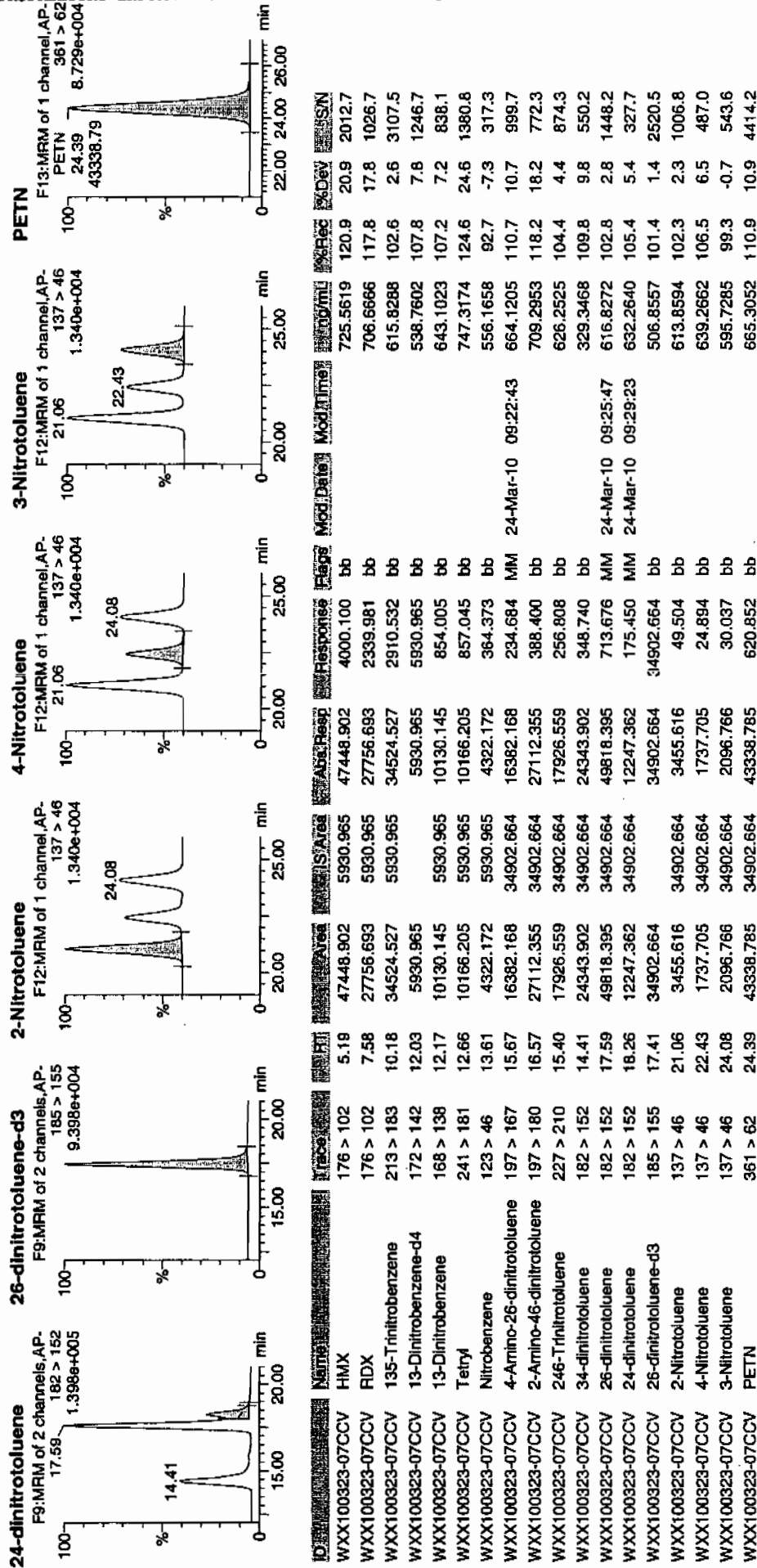
WXX
3/24/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 94 of 99

Dataset: C:\WASSLYN\New_Exp\PRO032310expA.qld, Time: Wed Mar 24 09:29:41 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/24/10
 Time of Injection: 0745
 Standard Number: WXX100323-07CCV
 Data File: EXP0323047a

HMX	120.9
RDX	117.8
135-TNB	102.6
13-DNB	107.2
Tetryl	124.6
Nitrobenzene	92.7
4A-26-DNT	110.7
2A-46-DNT	118.2
246-TNT	104.4
34-DNT(surr)	109.8
26-DNT	102.8
24-DNT	105.4
2-NT	102.3
4-NT	106.5
3-NT	99.3
PETN	110.9

107
3/24/10

Total 1736.1

Average 108.5

Hmm 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323049a

Analysis Date: 24-MAR-10 08:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.063	118	
1,3-Dinitrobenzene-d4	500	561.116	112	
2,4,6-Trinitrotoluene	40	37.222	93	
2,4-Dinitrotoluene	40	35.725	89	
2,6-Dinitrotoluene	40	41.3	103	
2,6-Dinitrotoluene-d3	500	588.805	118	
2-Amino-4,6-dinitrotoluene	40	41.485	104	
3,4-Dinitrotoluene	20	21.335	107	
4-Amino-2,6-dinitrotoluene	40	41.766	104	
HMX	40	49.844	125	
Nitrobenzene	40	34.492	86	
PETN	40	40.675	102	
RDX	40	45.987	115	
Tetryl	40	35.013	88	
m-Dinitrobenzene	40	36.691	92	
m-Nitrotoluene	40	40.219	101	
o-Nitrotoluene	40	41.552	104	
p-Nitrotoluene	40	34.803	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\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323049a

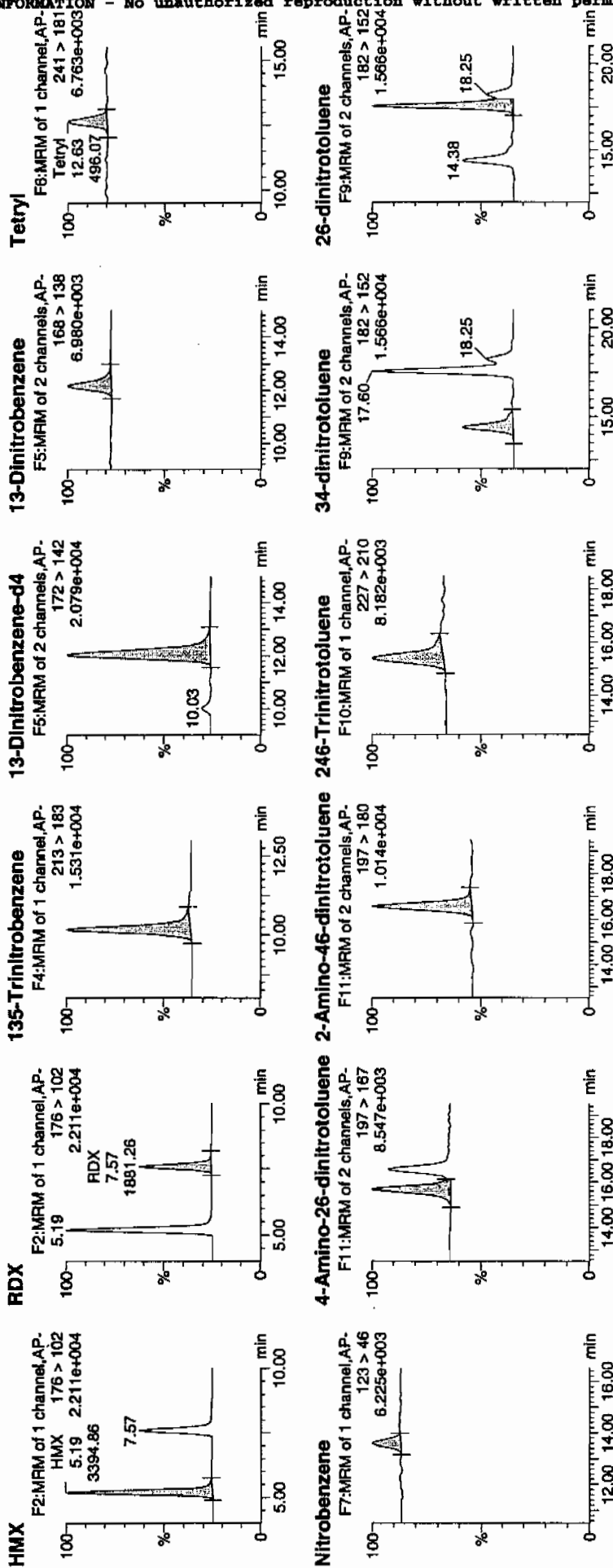
Date: 24-Mar-2010

Time: 08:44:30

ID: WXX100323-08CRI

Vial: 1:1,C

WXX
3/24/10



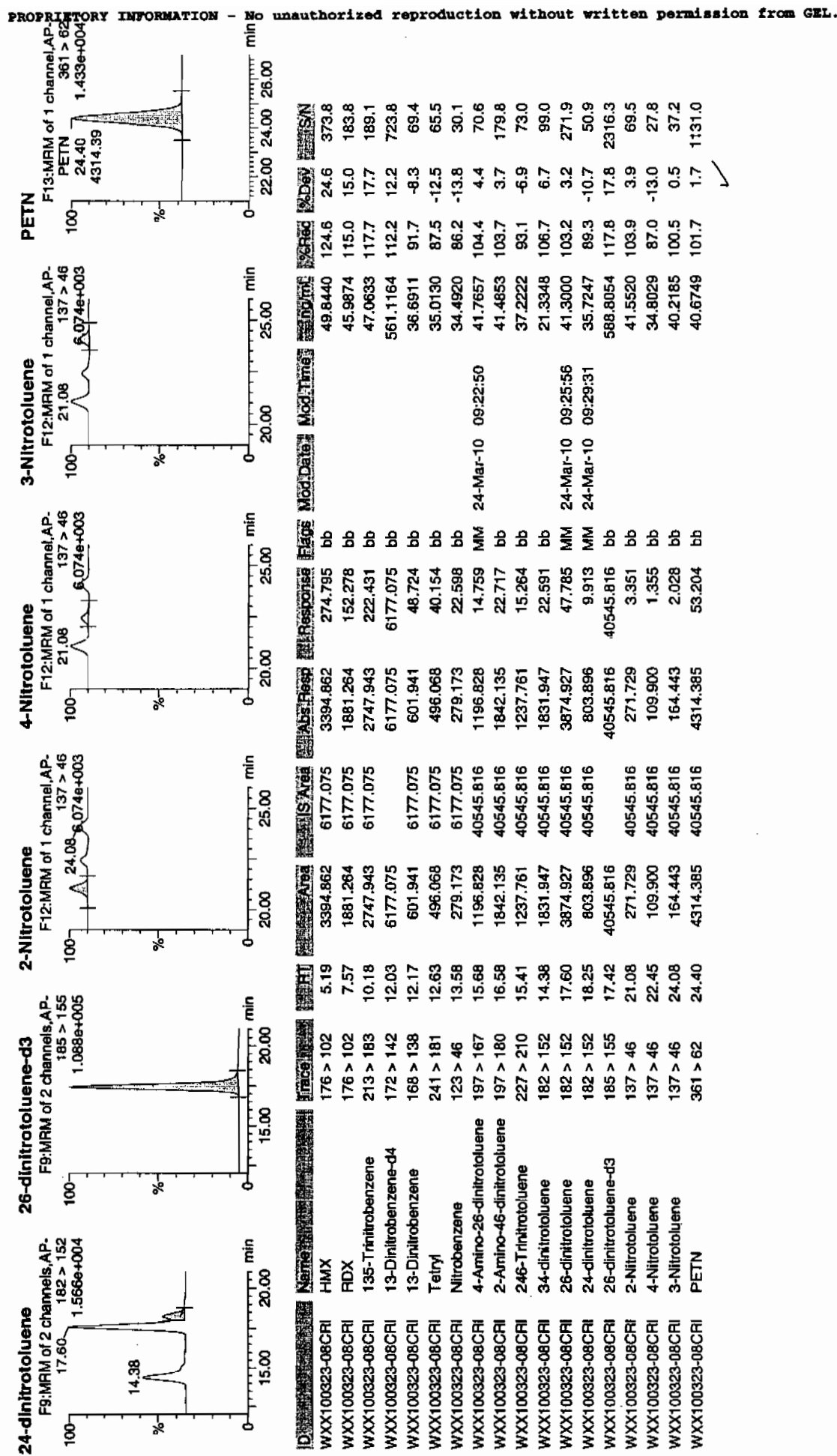
WXX
3/24/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 98 of 99

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/24/10
 Time of Injection 0844
 Standard Number WXX100323-08CRI
 Data File EXP0323049a

HMX	124.6
RDX	115.0
135-TNB	117.7
13-DNB	91.7
Tetryl	87.5
Nitrobenzene	86.2
4A-26-DNT	104.4
2A-46-DNT	103.7
246-TNT	93.1
34-DNT(surr)	106.7
26-DNT	103.2
24-DNT	89.3
2-NT	103.9
4-NT	87.0
3-NT	100.5
PETN	101.7

*Left
3/24/10*

Total 1616.2

Average 101.0

Hmx 03/24/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323060a

Analysis Date: 24-MAR-10 14:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	608.236	101	
2,6-Dinitrotoluene	600	621.134	104	
2,6-Dinitrotoluene-d3	500	506.964	101	
2-Amino-4,6-dinitrotoluene	600	684.662	114	
3,4-Dinitrotoluene	300	322.305	107	
4-Amino-2,6-dinitrotoluene	600	630.304	105	
HMX	600	657.135	110	
Nitrobenzene	600	550.129	92	
PETN	600	695.76	116	
RDX	600	686.53	114	
Tetryl	600	664.922	111	
m-Dinitrobenzene	600	583.785	97	
m-Nitrotoluene	600	566.141	94	
o-Nitrotoluene	600	573.454	96	
p-Nitrotoluene	600	620.413	103	
1,3,5-Trinitrobenzene	600	604.385	101	
1,3-Dinitrobenzene-d4	500	548.392	110	
2,4,6-Trinitrotoluene	600	621.618	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

Printed: Thu Mar 25 10:04:08 2010, Page 21 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323060a

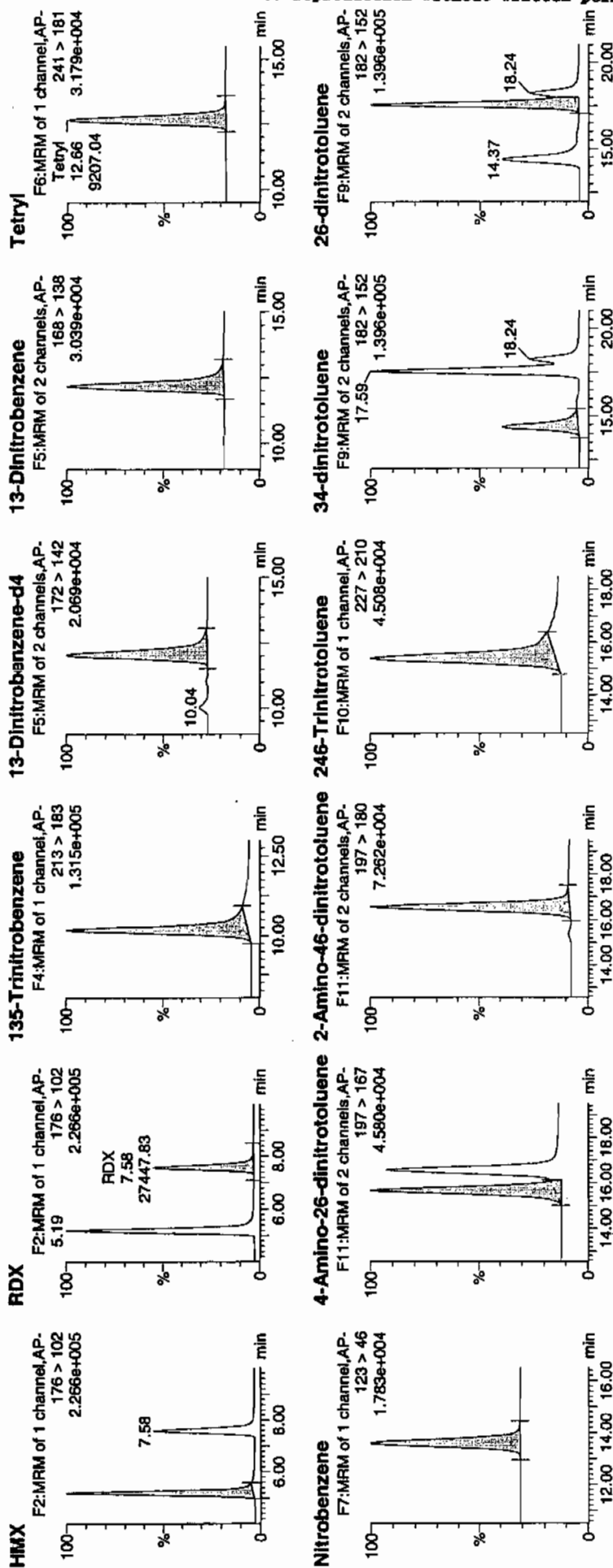
Date: 24-Mar-2010

Time: 14:09:10

ID: WXX100323-07CCV

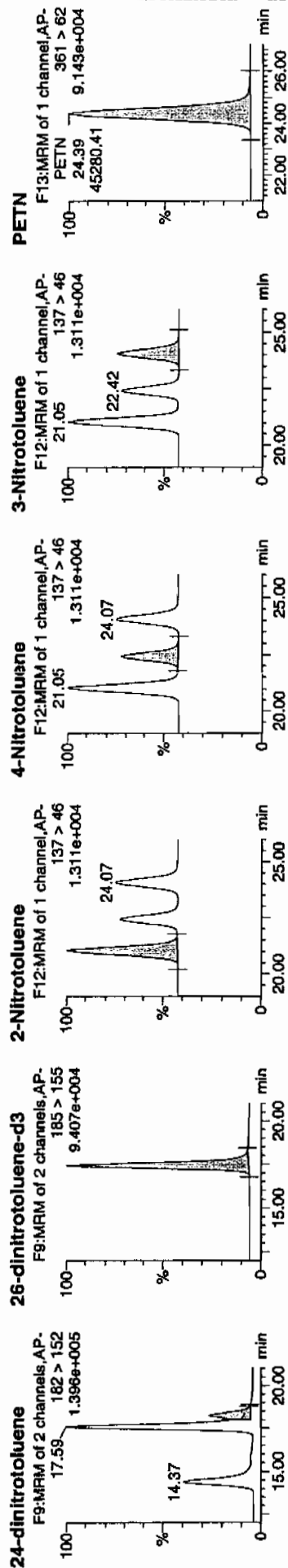
Vial: 1:1,B

MM
3/25/10



MM
3/30/10

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



ID	Name	Trace	RT	Area	IS Area	AbS Resp	Response	Flags	Mod Date	Mod Time	Conc (mg/ml)	%Rec	%Dev	ISN
WXX100323-07CCV	HMX	176 > 102	5.19	43742.363	6036.998	43742.363	3622.857	bb			657.1354	109.5	9.5	3230.7
WXX100323-07CCV	RDX	176 > 102	7.58	27447.834	6036.998	27447.834	2273.302	bb			686.5296	114.4	14.4	1745.9
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	34488.707	6036.998	34488.707	2856.445	bb			604.3848	100.7	0.7	2131.1
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	6036.998		6036.998	6036.998	bb			548.3920	109.7	9.7	711.8
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.17	9360.186	6036.998	9360.186	775.235	bb			583.7853	97.3	-2.7	463.8
WXX100323-07CCV	Tenyl	241 > 181	12.66	9207.037	6036.998	9207.037	762.551	bb			664.9216	110.8	10.8	1037.8
WXX100323-07CCV	Nitrobenzene	123 > 46	13.61	4351.687	6036.998	4351.687	360.418	bb			550.1286	91.7	-8.3	497.7
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	15551.311	34910.121	15551.311	222.734	MM	25-Mar-10	09:51:43	630.3035	105.1	5.1	665.1
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	26176.338	34910.121	26176.338	374.910	bb			684.6616	114.1	14.1	1272.0
WXX100323-07CCV	24-Trinitrotoluene	227 > 210	15.40	17797.695	34910.121	17797.695	254.907	bb			621.6180	103.6	3.6	1321.8
WXX100323-07CCV	36-dinitrotoluene	182 > 152	14.37	23828.494	34910.121	23828.494	341.283	bb			322.3051	107.4	7.4	569.6
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.59	50176.918	34910.121	50176.918	718.659	MM	25-Mar-10	09:54:08	621.1336	103.5	3.5	1563.4
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.24	11784.438	34910.121	11784.438	168.783	MM	25-Mar-10	09:54:53	608.2359	101.4	1.4	345.7
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.41	34910.121		34910.121	34910.121	bb			506.9640	101.4	1.4	2996.7
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.05	3228.849	34910.121	3228.849	46.245	bb			573.4537	95.6	-4.4	841.0
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.42	1686.817	34910.121	1686.817	24.159	bb			620.4130	103.4	3.4	439.7
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.07	1993.055	34910.121	1993.055	28.546	bb			566.1414	94.4	-5.6	479.4
WXX100323-07CCV	PETN	361 > 62	24.39	45280.410	34910.121	45280.410	648.528	bb			695.7597	116.0	16.0	8326.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/24/10
 Time of Injection: 1409
 Standard Number: WXX100323-07CCV
 Data File: EXP0323060a

HMX	109.5
RDX	114.4
135-TNB	100.7
13-DNB	97.3
Tetryl	110.8
Nitrobenzene	91.7
4A-26-DNT	105.1
2A-46-DNT	114.1
246-TNT	103.6
34-DNT(surr)	107.4
26-DNT	103.5
24-DNT	101.4
2-NT	95.6
4-NT	103.4
3-NT	94.4
PETN	116.0
Total	1668.9

104.3
3/25/10

Average

104.3

104.3
3/25/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323062a

Analysis Date: 24-MAR-10 15:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	39.566	99	
2,6-Dinitrotoluene	40	40.931	102	
2,6-Dinitrotoluene-d3	500	511.226	102	
2-Amino-4,6-dinitrotoluene	40	42.212	106	
3,4-Dinitrotoluene	20	20.154	101	
4-Amino-2,6-dinitrotoluene	40	45.676	114	
HMX	40	49.198	123	
Nitrobenzene	40	38.032	95	
PETN	40	49.873	125	
RDX	40	45.935	115	
Tetryl	40	33.148	83	
m-Dinitrobenzene	40	41.369	103	
m-Nitrotoluene	40	45.001	113	
o-Nitrotoluene	40	40.488	101	
p-Nitrotoluene	40	49.369	123	
1,3,5-Trinitrobenzene	40	46.814	117	
1,3-Dinitrobenzene-d4	500	532.654	107	
2,4,6-Trinitrotoluene	40	39.494	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Thu Mar 25 10:04:08 2010, Page 25 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323062a

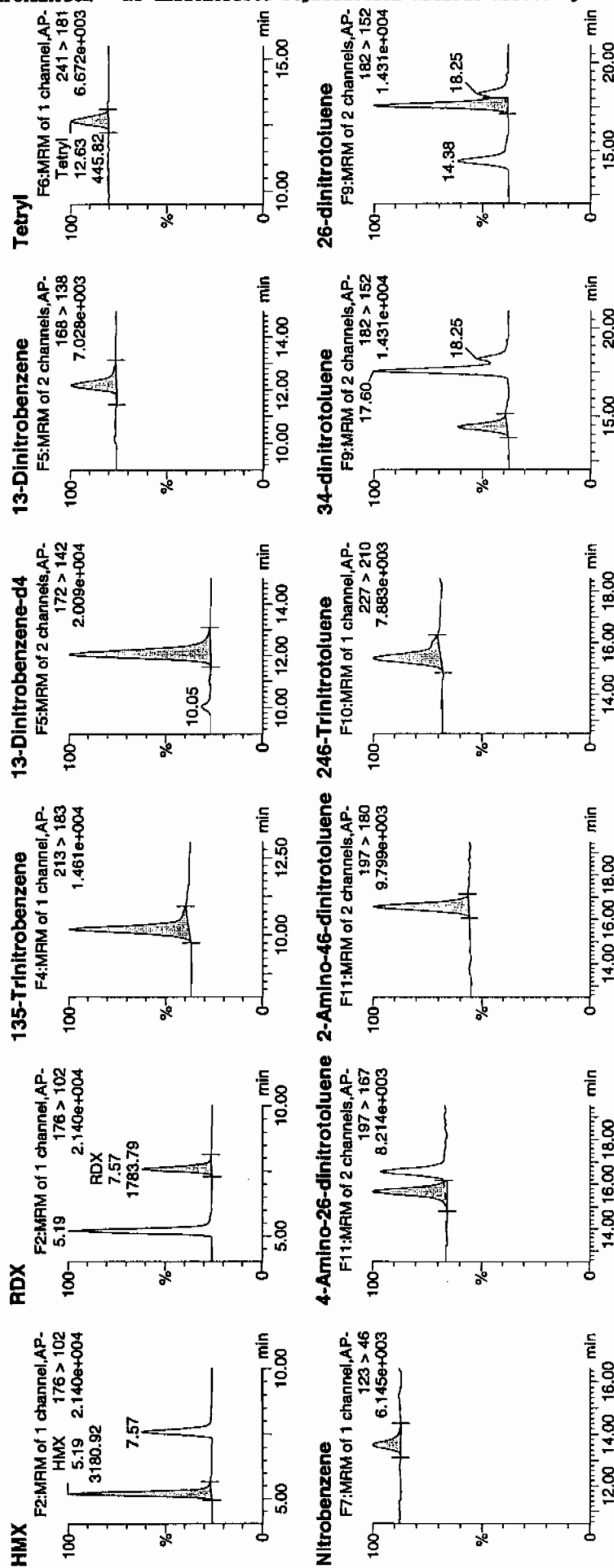
Date: 24-Mar-2010

Time: 15:08:15

ID: WXX100323-08CRI

Vial: 1:1,C

WXX
3/25/10

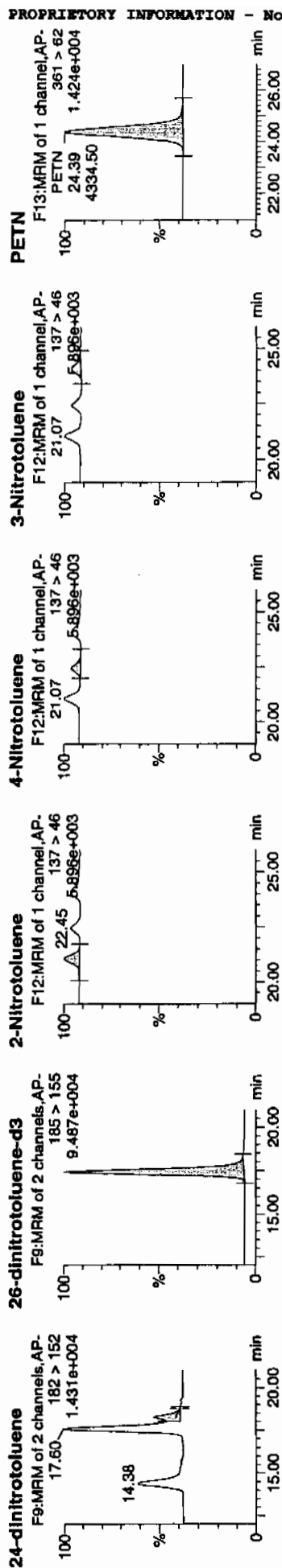


WXX
3/25/10

Quantity Sample Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 26 of 79

Dataset: C:\MASSLYNX\New_Exp\PRO032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	Abundance	Response	Flags	Mod Date	Mod Time	Int. (mL)	% Rec	% Dev	SN
WXX100323-08CRI	HMX	176 > 102	5.19	3180.919	5863.745	271.236	bb	25-Mar-10	09:51:30	49.1984	123.0	23.0	364.4
WXX100323-08CRI	RDX	176 > 102	7.57	1783.786	5863.745	152.103	bb	25-Mar-10	09:51:30	45.9346	114.8	14.8	178.7
WXX100323-08CRI	135-Trinitrobenzene	213 > 183	10.18	2594.742	5863.745	221.253	bb	25-Mar-10	09:51:30	46.8141	117.0	17.0	344.8
WXX100323-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	5863.745	5863.745	5863.745	bb	25-Mar-10	09:51:30	532.6540	106.5	6.5	291.7
WXX100323-08CRI	13-Dinitrobenzene	168 > 138	12.17	644.265	5863.745	54.936	bb	25-Mar-10	09:51:30	41.3694	103.4	3.4	82.9
WXX100323-08CRI	Tetryl	241 > 181	12.63	445.823	5863.745	38.015	bb	25-Mar-10	09:51:30	33.1481	82.9	-17.1	48.8
WXX100323-08CRI	Nitrobenzene	123 > 46	13.58	292.209	5863.745	24.917	bb	25-Mar-10	09:51:30	38.0317	95.1	-4.9	31.3
WXX100323-08CRI	4-Amino-26-dinitrotoluene	187 > 167	15.68	1136.421	35203.633	16.141	MM	25-Mar-10	09:51:30	45.6758	114.2	14.2	85.2
WXX100323-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	1627.422	35203.633	23.114	bb	25-Mar-10	09:51:30	42.2115	105.5	5.5	270.5
WXX100323-08CRI	246-Trinitrotoluene	227 > 210	15.38	1140.271	35203.633	16.195	bb	25-Mar-10	09:51:30	39.4941	98.7	-1.3	204.8
WXX100323-08CRI	34-dinitrotoluene	182 > 152	14.38	1502.517	35203.633	1502.517	bb	25-Mar-10	09:51:30	20.1537	100.8	0.8	85.5
WXX100323-08CRI	26-dinitrotoluene	182 > 152	17.60	3334.314	35203.633	3334.314	MM	25-Mar-10	09:51:30	40.9309	102.3	2.3	230.9
WXX100323-08CRI	24-dinitrotoluene	182 > 152	18.25	773.021	35203.633	773.021	MM	25-Mar-10	09:51:30	39.5656	98.9	-1.1	51.6
WXX100323-08CRI	26-dinitrotoluene-d3	185 > 155	17.42	35203.633	35203.633	35203.633	bb	25-Mar-10	09:51:30	511.2263	102.2	2.2	1785.3
WXX100323-08CRI	2-Nitrotoluene	137 > 46	21.07	229.888	35203.633	3.265	bb	25-Mar-10	09:51:30	40.4884	101.2	1.2	13.8
WXX100323-08CRI	4-Nitrotoluene	137 > 46	22.45	135.355	35203.633	1.922	bb	25-Mar-10	09:51:30	49.3686	123.4	23.4	8.5
WXX100323-08CRI	3-Nitrotoluene	137 > 46	24.08	159.755	35203.633	2.269	bb	25-Mar-10	09:51:30	45.0012	112.5	12.5	8.2
WXX100323-08CRI	PETN	361 > 62	24.39	4334.500	35203.633	61.563	bb	25-Mar-10	09:51:30	49.8734	124.7	24.7	2622.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/24/10
 Time of Injection 1508
 Standard Number WXX100323-08CRI
 Data File EXP0323062a

HMX	123.0
RDX	114.8
135-TNB	117.0
13-DNB	103.4
Tetryl	82.9
Nitrobenzene	95.1
4A-26-DNT	114.2
2A-46-DNT	105.5
246-TNT	98.7
34-DNT(surr)	100.8
26-DNT	102.3
24-DNT	98.9
2-NT	101.2
4-NT	123.4
3-NT	112.5
PETN	124.7

*MFT
3/26/10*

Total 1718.4

Average 107.4

Handwritten: 03/26/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323073a

Analysis Date: 24-MAR-10 20:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	600	643.441	107	
m-Dinitrobenzene	600	609.77	102	
m-Nitrotoluene	600	564.619	94	
o-Nitrotoluene	600	556.422	93	
p-Nitrotoluene	600	604.392	101	
1,3,5-Trinitrobenzene	600	614.756	102	
1,3-Dinitrobenzene-d4	500	522.463	104	
2,4,6-Trinitrotoluene	600	589.476	98	
2,4-Dinitrotoluene	600	592.8	99	
2,6-Dinitrotoluene	600	620.842	103	
2,6-Dinitrotoluene-d3	500	523.063	105	
2-Amino-4,6-dinitrotoluene	600	653.711	109	
3,4-Dinitrotoluene	300	331.414	110	
4-Amino-2,6-dinitrotoluene	600	584.736	97	
HMX	600	700.223	117	
Nitrobenzene	600	554.828	92	
PETN	600	616.441	103	
RDX	600	744.483	124	*

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\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323073a

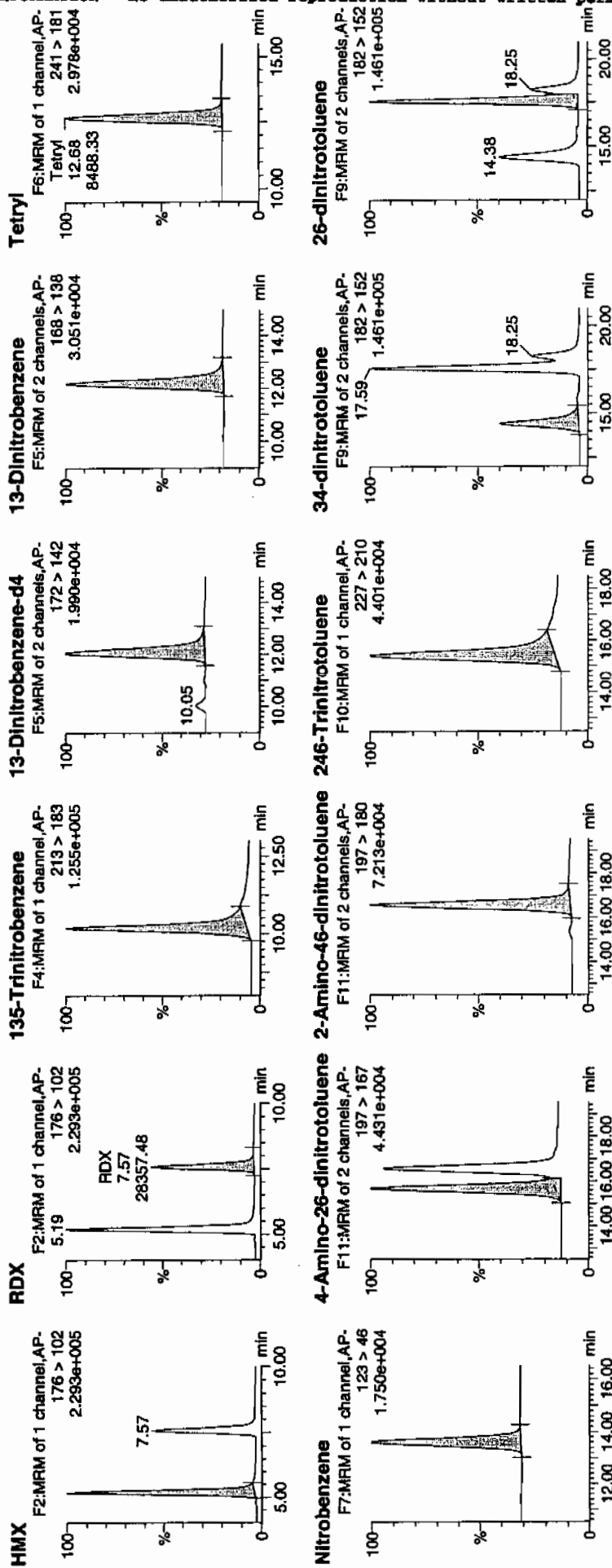
Date: 24-Mar-2010

Time: 20:32:44

ID: WXX100323-07CCV

Vial: 1:1,B

WXX
3/25/10



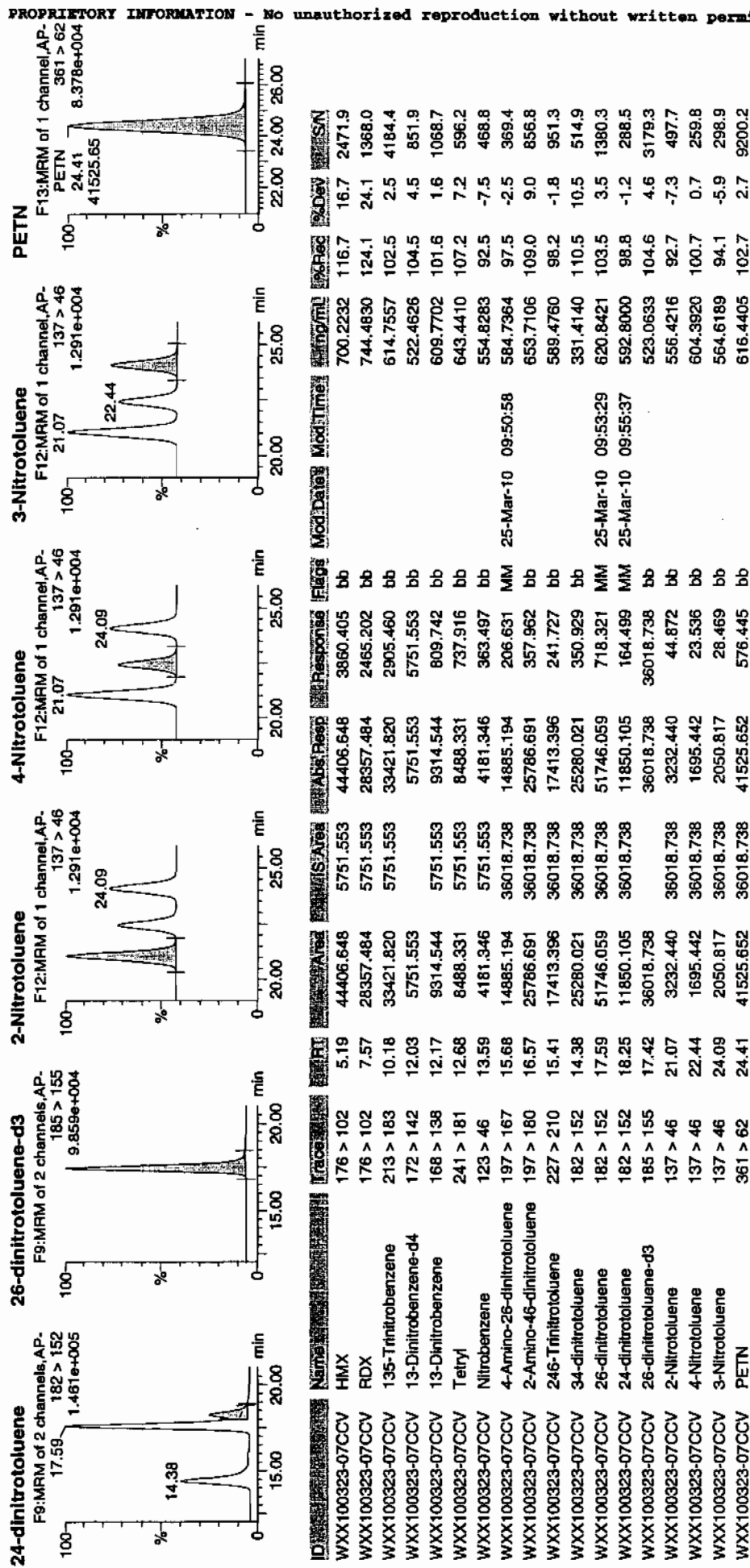
WXX
03/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 48 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/24/10
 Time of Injection: 2032
 Standard Number: WXX100323-07CCV
 Data File: EXP0323073a

HMX	116.7
RDX	124.1
135-TNB	102.5
13-DNB	101.6
Tetryl	107.2
Nitrobenzene	92.5
4A-26-DNT	97.5
2A-46-DNT	109.0
246-TNT	98.2
34-DNT(surr)	110.5
26-DNT	103.5
24-DNT	98.8
2-NT	92.7
4-NT	100.7
3-NT	94.1
PETN	102.7

*not
3/25/10*

Total 1652.3

Average 103.3

from 03/23/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323075a

Analysis Date: 24-MAR-10 21:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	39.31	98	
o-Nitrotoluene	40	43.28	108	
p-Nitrotoluene	40	46.096	115	
m-Dinitrobenzene	40	43.028	108	
1,3,5-Trinitrobenzene	40	42.138	105	
1,3-Dinitrobenzene-d4	500	553.539	111	
2,4,6-Trinitrotoluene	40	46.316	116	
2,4-Dinitrotoluene	40	36.984	92	
2,6-Dinitrotoluene	40	39.831	100	
2,6-Dinitrotoluene-d3	500	506.439	101	
2-Amino-4,6-dinitrotoluene	40	48.191	120	
3,4-Dinitrotoluene	20	21.606	108	
4-Amino-2,6-dinitrotoluene	40	45.583	114	
HMX	40	48.458	121	
Nitrobenzene	40	40.356	101	
PETN	40	47.787	119	
RDX	40	37.909	95	
Tetryl	40	32.701	82	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323075a

Date: 24-Mar-2010

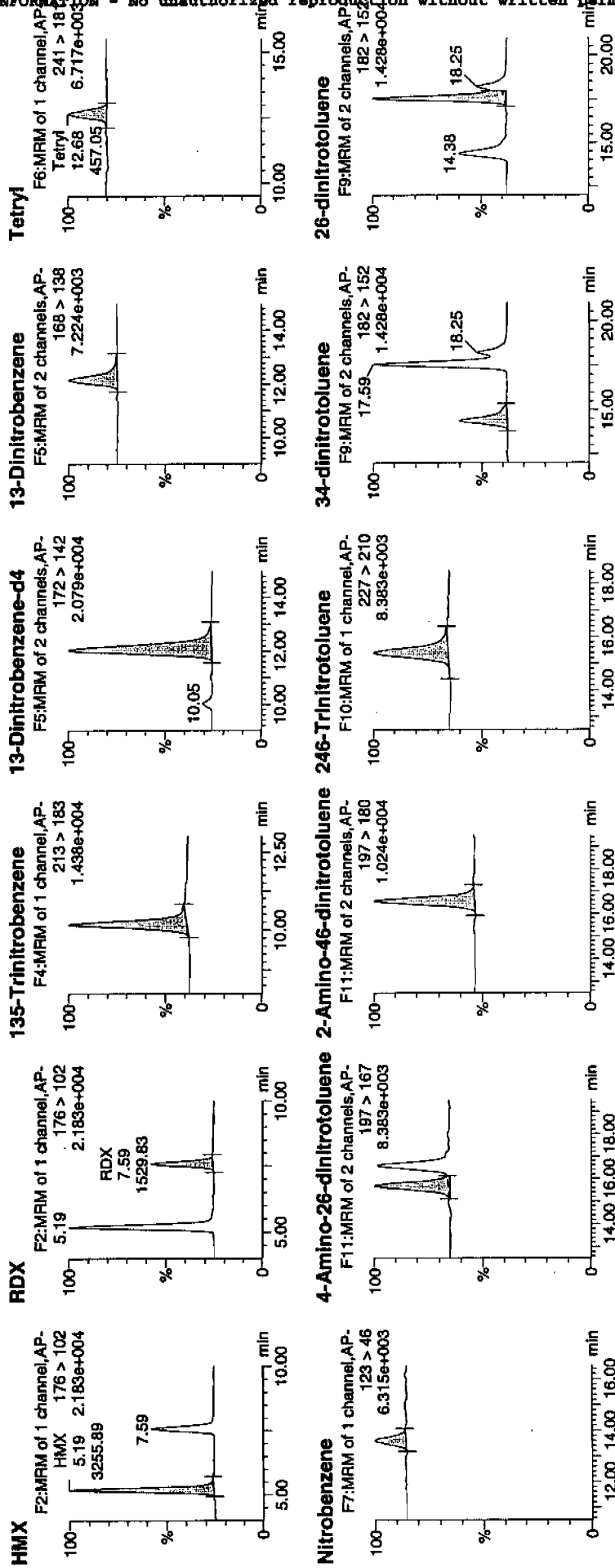
Time: 21:31:49

ID: WXX100323-08CRI

Vial: 1:1,C

WXX
3/24/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

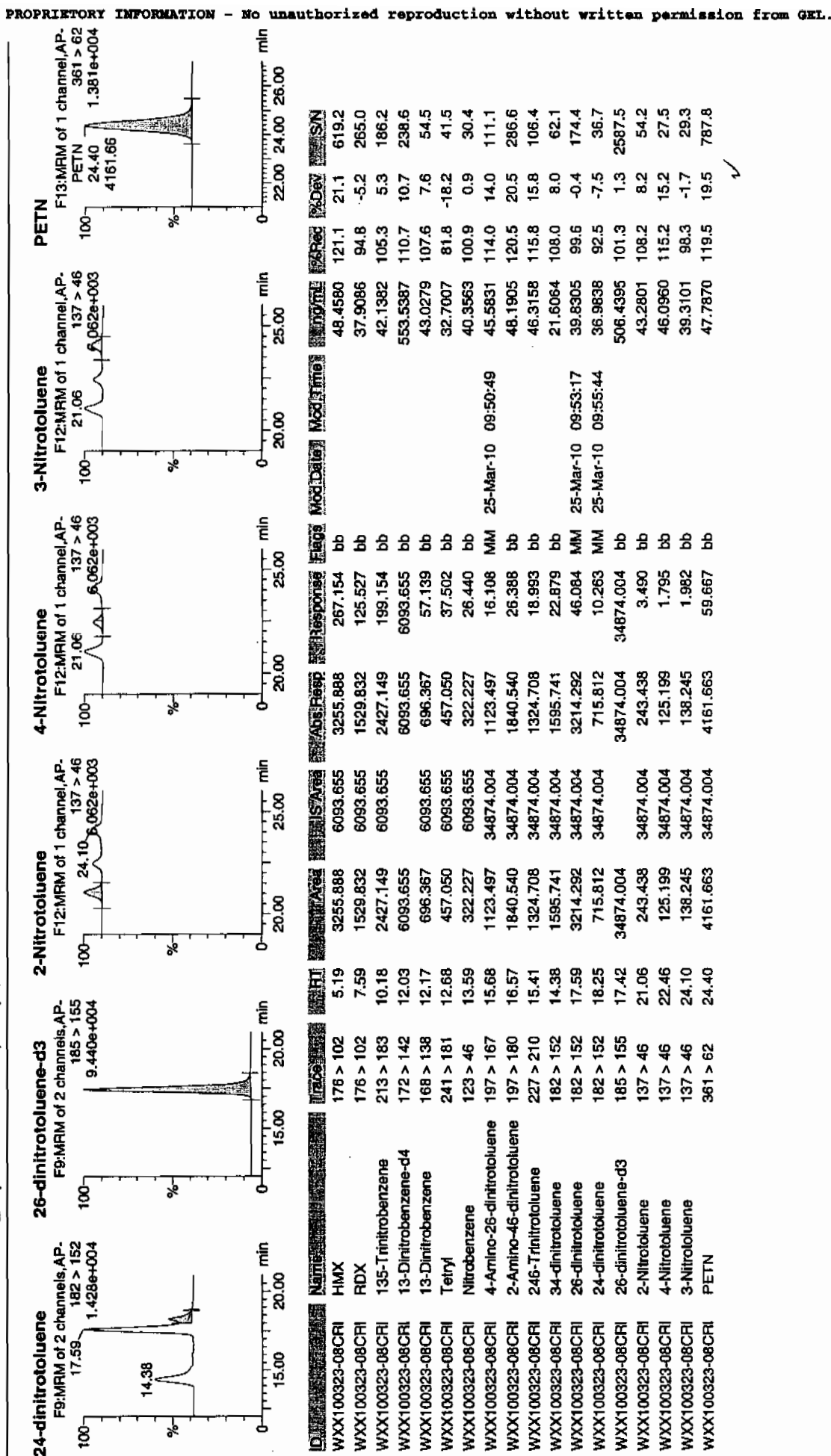


Handwritten: 4/30/10

Printed: Thu Mar 25 10:04:08 2010, Page 52 of 79

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YXXNew_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/24/10
 Time of Injection 2131
 Standard Number WXX100323-08CRI
 Data File EXP0323075a

HMX	121.1
RDX	94.8
135-TNB	105.3
13-DNB	107.6
Tetryl	81.8
Nitrobenzene	100.9
4A-26-DNT	114.0
2A-46-DNT	120.5
246-TNT	115.8
34-DNT(surr)	108.0
26-DNT	99.6
24-DNT	92.5
2-NT	108.2
4-NT	115.2
3-NT	98.3
PETN	119.5

Total 1703.1

Average 106.4

*MTT
3/25/10*

Hum 03/23/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323086a

Analysis Date: 25-MAR-10 02:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	627.667	105	
1,3-Dinitrobenzene-d4	500	504.526	101	
2,4,6-Trinitrotoluene	600	679.029	113	
2,4-Dinitrotoluene	600	620.586	103	
2,6-Dinitrotoluene	600	624.642	104	
2,6-Dinitrotoluene-d3	500	504.256	101	
2-Amino-4,6-dinitrotoluene	600	682.194	114	
3,4-Dinitrotoluene	300	313.846	105	
4-Amino-2,6-dinitrotoluene	600	664.25	111	
HMX	600	696.785	116	
Nitrobenzene	600	570.28	95	
PETN	600	640.462	107	
RDX	600	745.79	124	*
Tetryl	600	637.648	106	
m-Dinitrobenzene	600	646.266	108	
m-Nitrotoluene	600	590.436	98	
o-Nitrotoluene	600	610.011	102	
p-Nitrotoluene	600	645.81	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\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323086a

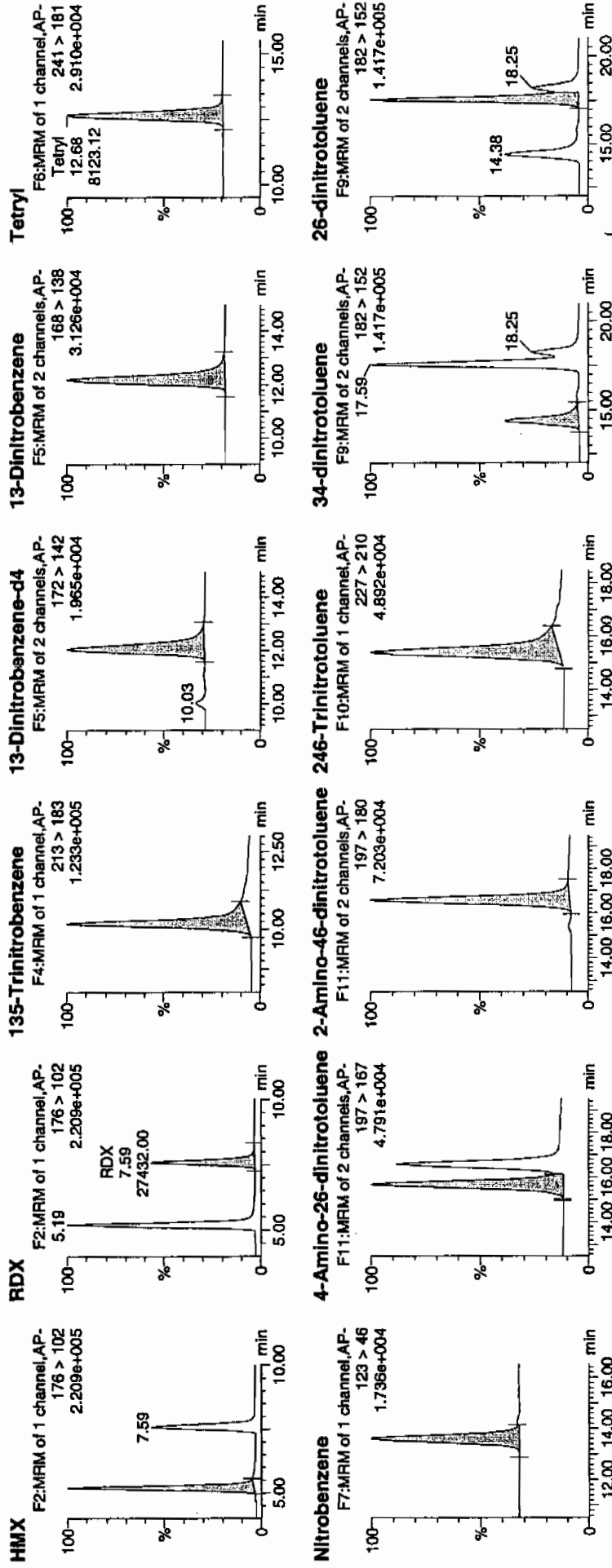
Date: 25-Mar-2010

Time: 02:56:28

ID: WXX100323-07CCV

Vial: 1:1,B

MM
3/25/10



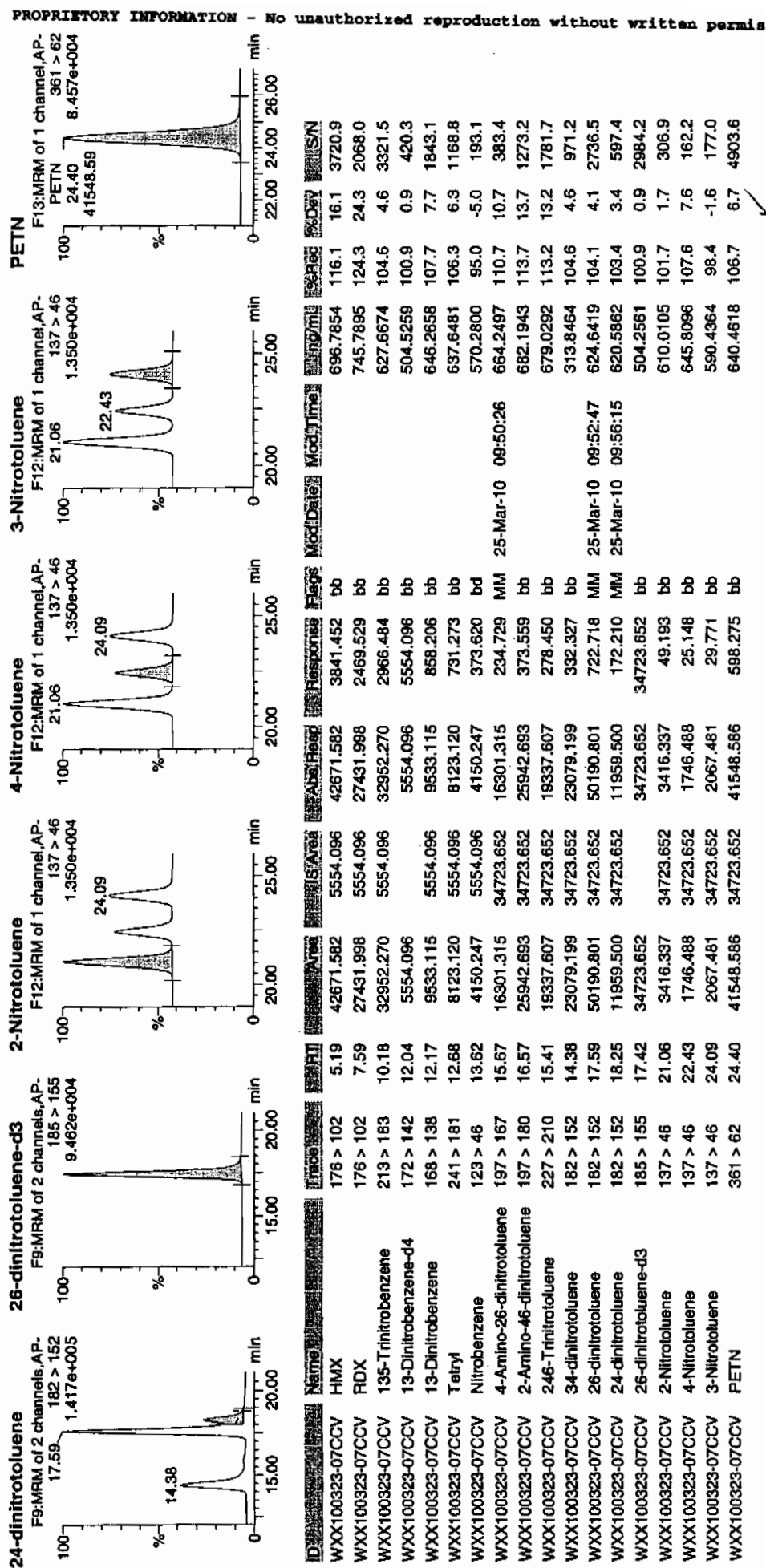
MM 03/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 74 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/25/10
 Time of Injection: 0256
 Standard Number: WXX100323-07CCV
 Data File: EXP0323086a

HMX	116.1	✓
RDX	124.3	✓
135-TNB	104.6	✓
13-DNB	107.7	
Tetryl	106.3	
Nitrobenzene	95.0	
4A-26-DNT	110.7	
2A-46-DNT	113.7	
246-TNT	113.2	
34-DNT(surr)	104.6	
26-DNT	104.1	
24-DNT	103.4	
2-NT	101.7	
4-NT	107.6	
3-NT	98.4	
PETN	106.7	

*MAF
3/25/10*

Total 1718.1

Average 107.4

MAF 03/30/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323088a

Analysis Date: 25-MAR-10 03:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.173	115	
1,3-Dinitrobenzene-d4	500	518.214	104	
2,4,6-Trinitrotoluene	40	34.381	86	
2,4-Dinitrotoluene	40	43.369	108	
2,6-Dinitrotoluene	40	40.086	100	
2,6-Dinitrotoluene-d3	500	516.231	103	
2-Amino-4,6-dinitrotoluene	40	41.014	103	
3,4-Dinitrotoluene	20	22.502	113	
4-Amino-2,6-dinitrotoluene	40	35.545	89	
HMX	40	48.713	122	
Nitrobenzene	40	47.555	119	
PETN	40	45.248	113	
RDX	40	45.379	113	
Tetryl	40	35.304	88	
m-Dinitrobenzene	40	42.2	105	
m-Nitrotoluene	40	42.198	105	
o-Nitrotoluene	40	41.084	103	
p-Nitrotoluene	40	50.525	126	

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\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323088a

Date: 25-Mar-2010

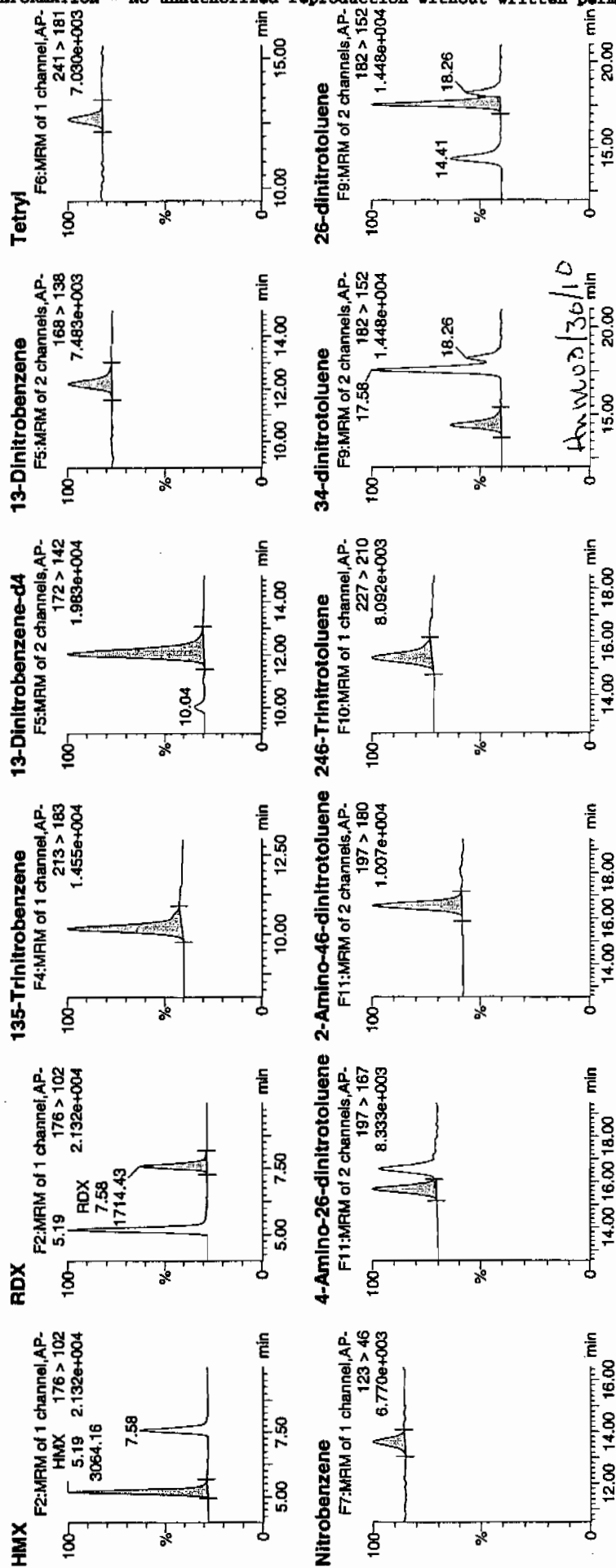
Time: 03:55:30

ID: WXX100323-08CRI

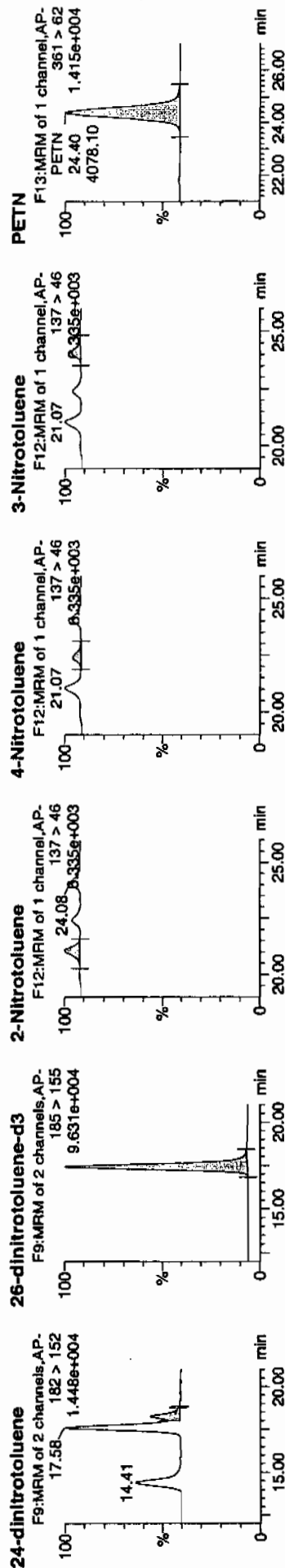
Vial: 1:1,C

MM
3/15/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



Name	Area	HT	Area	SArea	Abs. Resp	Response	Flags	Mod Date	Mod Time	Exp Time	Rec	Dev	SN
HMx	176 > 102	5.19	3064.160	5704.779	3064.160	268.561	bb			48.7132	121.8	21.8	617.8
RDX	176 > 102	7.58	1714.432	5704.779	1714.432	150.263	bb			45.3789	113.4	13.4	301.6
135-Trinitrobenzene	213 > 183	10.18	2489.815	5704.779	2489.815	218.222	bb			46.1728	115.4	15.4	370.3
13-Dinitrobenzene-d4	172 > 142	12.07	5704.779		5704.779	5704.779	bb			518.2138	103.6	3.6	404.5
13-Dinitrobenzene	168 > 138	12.20	639.383	5704.779	639.383	56.039	bb			42.2000	105.5	5.5	83.8
Tetryl	241 > 181	12.66	461.945	5704.779	461.945	40.488	bb			35.3039	88.3	-11.7	42.7
Nitrobenzene	123 > 46	13.61	355.475	5704.779	355.475	31.156	bb			47.5552	118.9	18.9	36.9
4-Amino-26-dinitrotoluene	197 > 167	15.66	893.021	35548.270	893.021	12.561	MM	25-Mar-10	09:50:13	35.5449	88.9	-11.1	77.9
2-Amino-46-dinitrotoluene	197 > 180	16.56	1596.719	35548.270	1596.719	22.458	bb			41.0137	102.5	2.5	284.5
246-Trinitrotoluene	227 > 210	15.40	1002.372	35548.270	1002.372	14.099	bb			34.3812	86.0	-14.0	112.9
34-dinitrotoluene	182 > 152	14.41	1693.976	35548.270	1693.976	23.826	bb			22.5015	112.5	12.5	118.5
26-dinitrotoluene	182 > 152	17.58	3297.491	35548.270	3297.491	46.380	MM	25-Mar-10	09:52:40	40.0864	100.2	0.2	296.7
24-dinitrotoluene	182 > 152	18.26	855.633	35548.270	855.633	12.035	MM	25-Mar-10	09:56:24	43.3694	108.4	8.4	77.9
26-dinitrotoluene-d3	185 > 155	17.43	35548.270		35548.270	35548.270	bb			516.2312	103.2	3.2	3550.4
2-Nitrotoluene	137 > 46	21.07	235.555	35548.270	235.555	3.313	bb			41.0843	102.7	2.7	61.6
4-Nitrotoluene	137 > 46	22.40	139.882	35548.270	139.882	1.967	bb			50.5252	126.3	26.3	34.7
3-Nitrotoluene	137 > 46	24.08	151.270	35548.270	151.270	2.128	bb			42.1979	105.5	5.5	37.1
PETN	361 > 62	24.40	4078.101	35548.270	4078.101	57.360	bb			45.2483	113.1	13.1	727.9

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/25/10
 Time of Injection 0355
 Standard Number WXX100323-08CRI
 Data File EXP0323088a

HMX	121.8
RDX	113.4
135-TNB	115.4
13-DNB	105.5
Tetryl	88.3
Nitrobenzene	118.9
4A-26-DNT	88.9
2A-46-DNT	102.5
246-TNT	86.0
34-DNT(surr)	112.5
26-DNT	100.2
24-DNT	108.4
2-NT	102.7
4-NT	126.3
3-NT	105.5
PETN	113.1

Handwritten:
 MRP
 3/25/10

Total 1709.4

Handwritten: HMM 03/25/10

Average 106.8

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323099a

Analysis Date: 25-MAR-10 09:19

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	624.699	104	
1,3-Dinitrobenzene-d4	500	547.42	109	
2,4,6-Trinitrotoluene	600	629.482	105	
2,4-Dinitrotoluene	600	610.276	102	
2,6-Dinitrotoluene	600	621.244	104	
2,6-Dinitrotoluene-d3	500	521.022	104	
2-Amino-4,6-dinitrotoluene	600	697.002	116	
3,4-Dinitrotoluene	300	333.051	111	
4-Amino-2,6-dinitrotoluene	600	648.189	108	
HMX	600	730.87	122	*
Nitrobenzene	600	549.441	92	
PETN	600	655.866	109	
RDX	600	752.609	125	*
Tetryl	600	635.436	106	
m-Dinitrobenzene	600	594.056	99	
m-Nitrotoluene	600	585.083	98	
o-Nitrotoluene	600	579.71	97	
p-Nitrotoluene	600	631.115	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\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0323099a

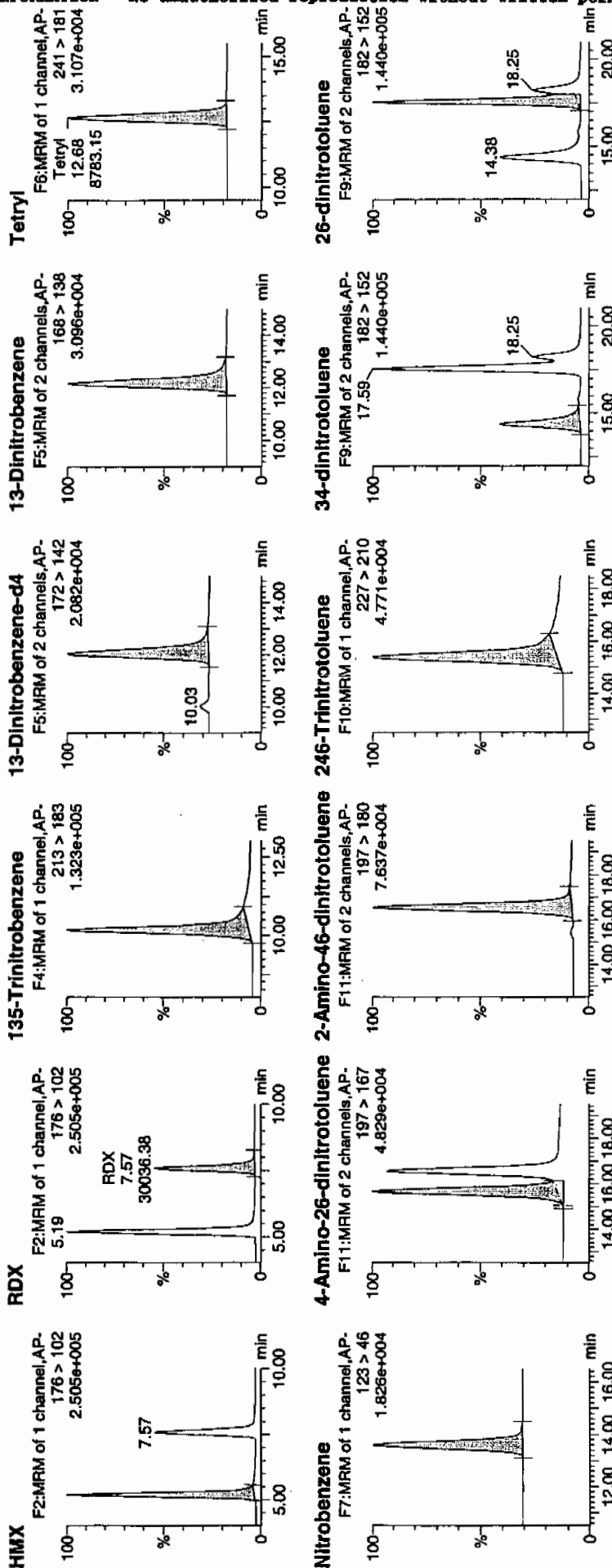
Date: 25-Mar-2010

Time: 09:19:47

ID: WXX100323-07CCV

Vial: 1:1,B

MSD
3/26/10



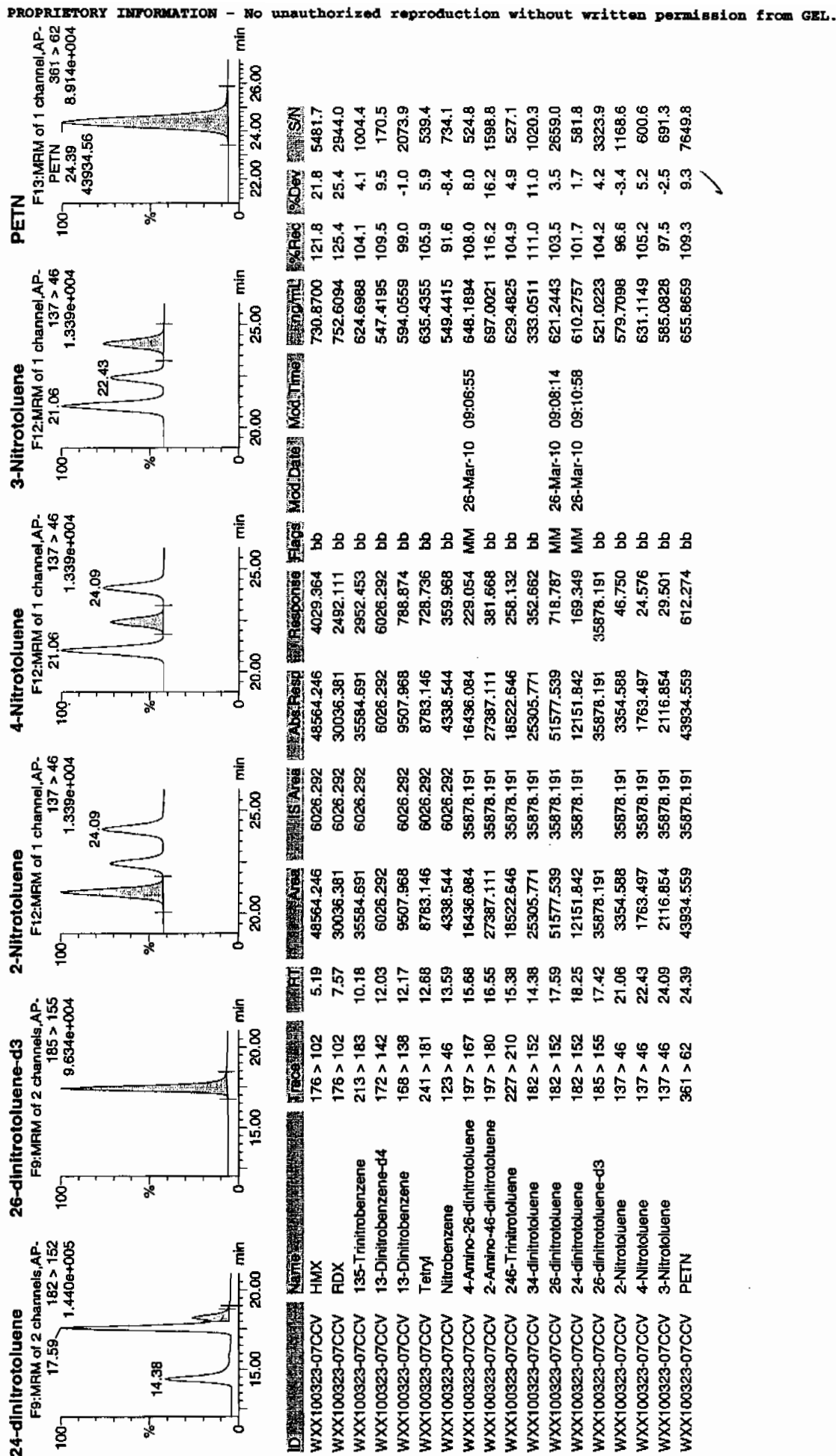
the m/z 30110

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 09:12:00 2010, Page 22 of 51

Dataset: C:\MASSLYN\New_Exp.PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/25/10
 Time of Injection: 0919
 Standard Number: WXX100323-07CCV
 Data File: EXP0323099a

HMX	121.8
RDX	125.4
135-TNB	104.1
13-DNB	99.0
Tetryl	105.9
Nitrobenzene	91.6
4A-26-DNT	108.0
2A-46-DNT	116.2
246-TNT	104.9
34-DNT(surr)	111.0
26-DNT	103.5
24-DNT	101.7
2-NT	96.6
4-NT	105.2
3-NT	97.5
PETN	109.3

MTT
3/26/10

Total 1701.7

Average 106.4

HW 03/25/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323101a

Analysis Date: 25-MAR-10 10:18

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	47.391	118	
3,4-Dinitrotoluene	20	21.57	108	
4-Amino-2,6-dinitrotoluene	40	42.881	107	
HMX	40	50.842	127	
Nitrobenzene	40	31.406	79	
PETN	40	43.855	110	
RDX	40	46.393	116	
Tetryl	40	30.833	77	
m-Dinitrobenzene	40	42.753	107	
m-Nitrotoluene	40	39.021	98	
o-Nitrotoluene	40	34.715	87	
p-Nitrotoluene	40	43.183	108	
1,3,5-Trinitrobenzene	40	42.68	107	
1,3-Dinitrobenzene-d4	500	601.974	120	
2,4,6-Trinitrotoluene	40	43.617	109	
2,4-Dinitrotoluene	40	35.069	88	
2,6-Dinitrotoluene	40	40.629	102	
2,6-Dinitrotoluene-d3	500	566.21	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Fri Mar 26 09:12:00 2010, Page 25 of 51

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0323101a

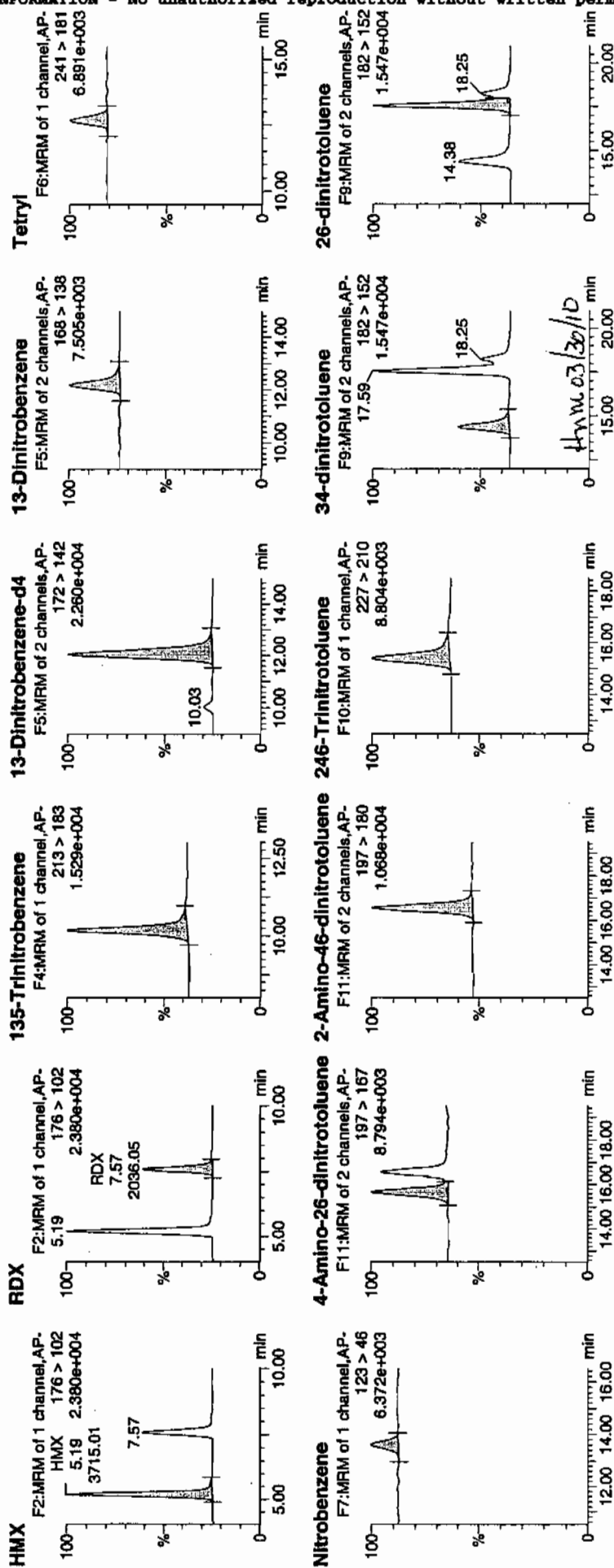
Date: 25-Mar-2010

Time: 10:18:49

ID: WXX100323-08CRI

Vial: 1:1,C

Nett
3/26/10

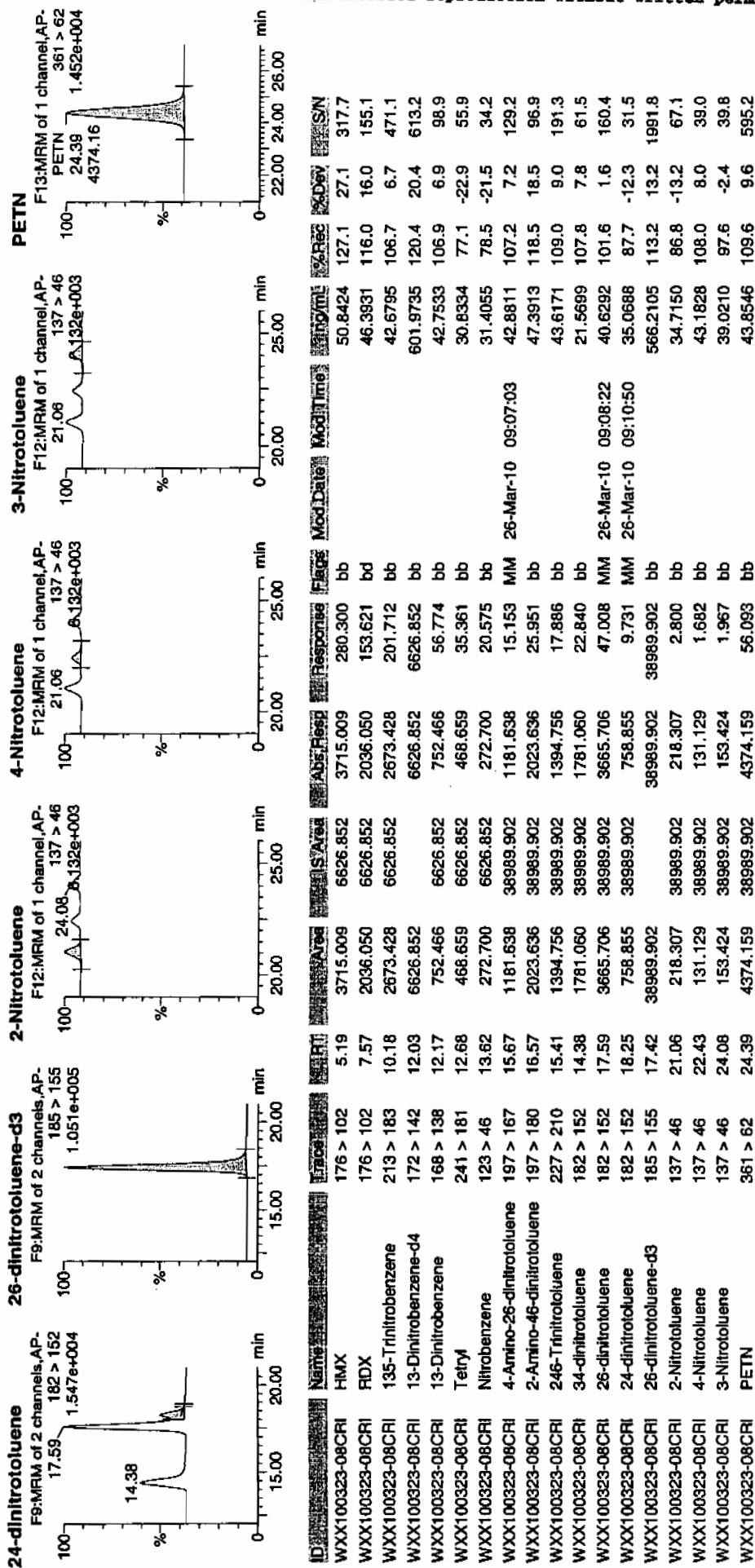


Quantify Sample Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 09:12:00 2010, Page 26 of 51

Dataset: C:\MASSLYNX\New_Exp\PRO10032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/25/10
 Time of Injection 1018
 Standard Number WXX100323-08CRI
 Data File EXP0323101a

HMX	127.1
RDX	116.0
135-TNB	106.7
13-DNB	106.9
Tetryl	77.1
Nitrobenzene	78.5
4A-26-DNT	107.2
2A-46-DNT	118.5
246-TNT	109.0
34-DNT(surr)	107.8
26-DNT	101.6
24-DNT	87.7
2-NT	86.8
4-NT	108.0
3-NT	97.6
PETN	109.6

Total 1646.1

Average 102.9

*MSF
3/26/10*

4/11/10 03/30/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0325012a

Analysis Date: 25-MAR-10 22:11

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	40	40.952	102	
1,3,5-Trinitrobenzene	40	48.245	121	
1,3-Dinitrobenzene-d4	500	609.804	122	
2,4,6-Trinitrotoluene	40	34.711	87	
2,4-Dinitrotoluene	40	37.675	94	
2,6-Dinitrotoluene	40	41.39	103	
2,6-Dinitrotoluene-d3	500	487.635	98	
2-Amino-4,6-dinitrotoluene	40	36.451	91	
3,4-Dinitrotoluene	20	20.132	101	
4-Amino-2,6-dinitrotoluene	40	37.991	95	
HMX	40	35.101	88	
Nitrobenzene	40	40.1	100	
PETN	40	39.252	98	
RDX	40	38.435	96	
Tetryl	40	35.984	90	
m-Dinitrobenzene	40	39.926	100	
m-Nitrotoluene	40	48.193	120	
o-Nitrotoluene	40	37.875	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 23 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325012a

Date: 25-Mar-2010

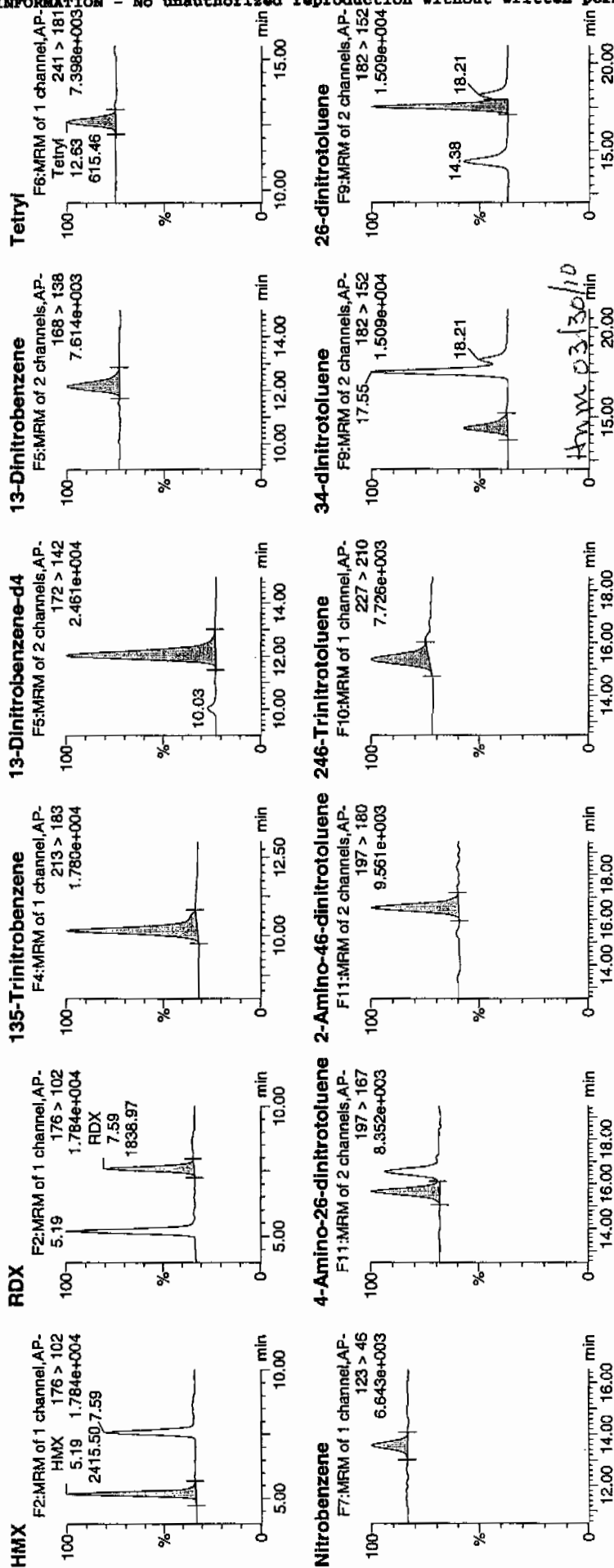
Time: 22:11:23

ID: WXX100325-08CRI

Vial: 1:1,C

WXX
3/26/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/25/10
 Time of Injection 2211
 Standard Number WXX100325-08CRI
 Data File EXP0325012a

HMX	87.8
RDX	96.1
135-TNB	120.6
13-DNB	99.8
Tetryl	90.0
Nitrobenzene	100.2
4A-26-DNT	95.0
2A-46-DNT	91.1
246-TNT	86.8
34-DNT(surr)	100.7
26-DNT	103.5
24-DNT	94.2
2-NT	94.7
4-NT	102.4
3-NT	120.5
PETN	98.1

*mtf
3/26/10*

Total 1581.5

Average 98.8

hmm 03/30/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0325023a

Analysis Date: 26-MAR-10 03:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	470.163	94	
2-Amino-4,6-dinitrotoluene	600	624.464	104	
3,4-Dinitrotoluene	300	320.596	107	
4-Amino-2,6-dinitrotoluene	600	621.098	104	
HMX	600	615.421	103	
Nitrobenzene	600	569.3	95	
PETN	600	655.623	109	
RDX	600	641.289	107	
Tetryl	600	601.146	100	
m-Dinitrobenzene	600	592.828	99	
m-Nitrotoluene	600	601.683	100	
o-Nitrotoluene	600	621.334	104	
p-Nitrotoluene	600	637.223	106	
1,3,5-Trinitrobenzene	600	546.336	91	
1,3-Dinitrobenzene-d4	500	496.424	99	
2,4,6-Trinitrotoluene	600	665.248	111	
2,4-Dinitrotoluene	600	631.711	105	
2,6-Dinitrotoluene	600	626.77	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

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 26 12:46:39 2010, Page 45 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325023a

Date: 26-Mar-2010

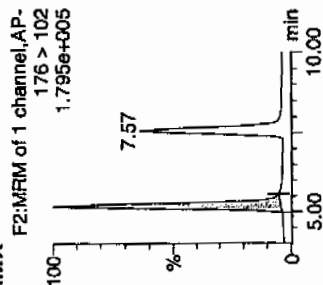
Time: 03:35:43

ID: WXX100325-07CCV

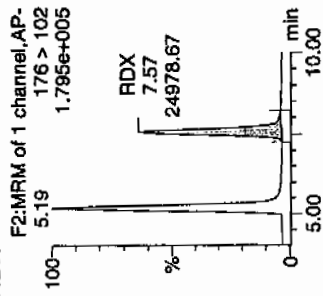
Vial: 1:1,8

WXX
3/16/10

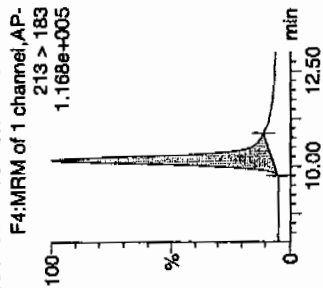
HMX



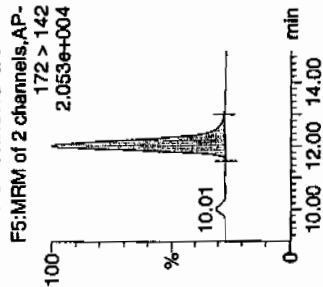
RDX



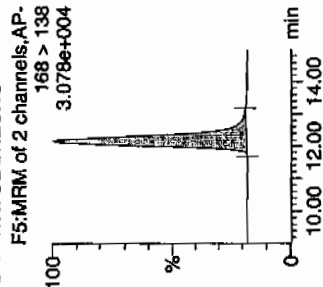
135-Trinitrobenzene



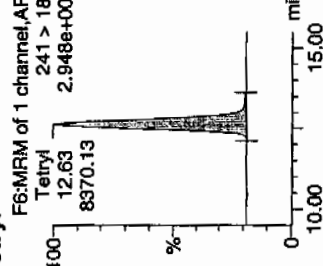
13-Dinitrobenzene-d4



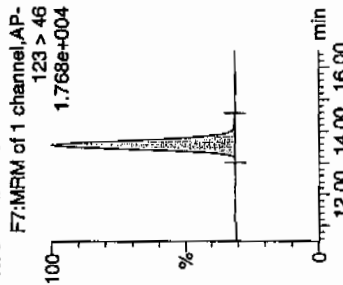
13-Dinitrobenzene



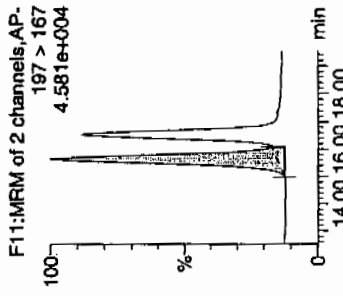
Tetryl



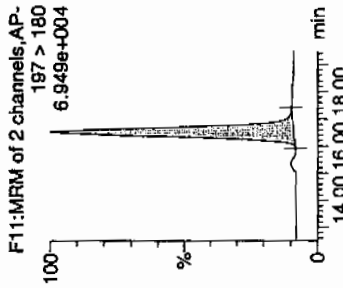
Nitrobenzene



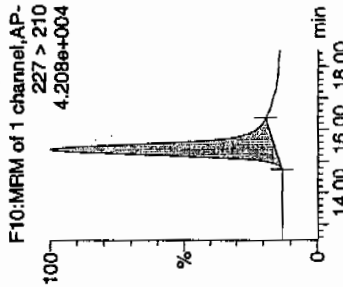
4-Amino-26-dinitrotoluene



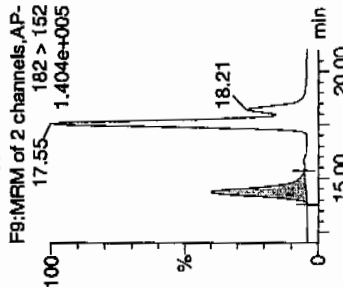
2-Amino-46-dinitrotoluene



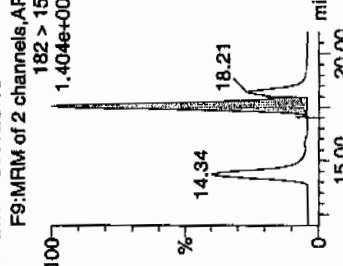
246-Trinitrotoluene



34-dinitrotoluene

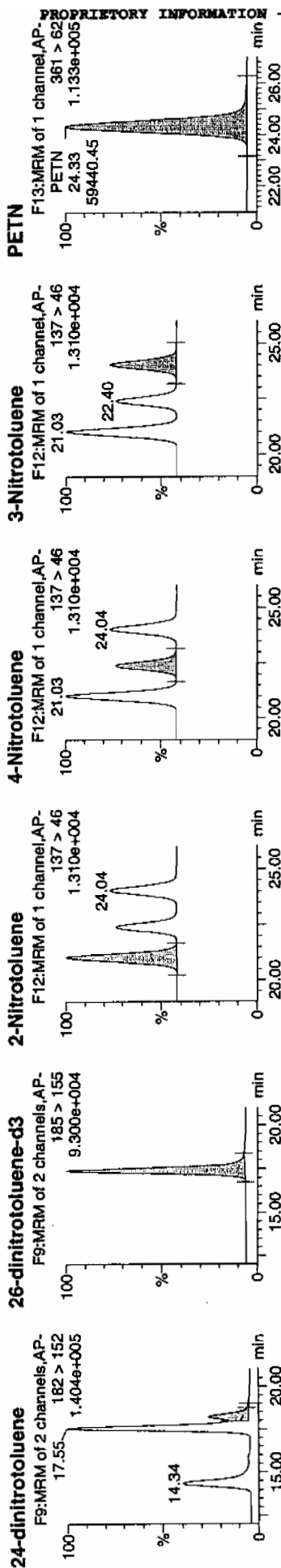


26-dinitrotoluene



4/16/10 130110

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



ID	Name	Trace	Fit	Area	IS Area	Abs Resp	Flags	Mod Date	Mod Time	Norm	Rec	Dev	SN
WXX100325-07CCV	HMX	176 > 102	5.19	34476.055	5958.167	34476.055	2893.176	bb		615.4212	102.6	2.6	2872.6
WXX100325-07CCV	FDX	176 > 102	7.57	24978.670	5958.167	24978.670	2096.171	bb		641.2892	106.9	6.9	1810.5
WXX100325-07CCV	135-Trinitrobenzene	213 > 183	10.16	31061.371	5958.167	31061.371	2606.621	bb		546.3364	91.1	-8.9	4278.2
WXX100325-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5958.167		5958.167	5958.167	bb		496.4238	99.3	-0.7	446.4
WXX100325-07CCV	13-Dinitrobenzene	168 > 138	12.17	9302.891	5958.167	9302.891	780.684	bb		592.8277	98.8	-1.2	1360.4
WXX100325-07CCV	Tetryl	241 > 181	12.63	8370.126	5958.167	8370.126	702.408	bb		601.1463	100.2	0.2	483.5
WXX100325-07CCV	Nitrobenzene	123 > 46	13.59	4274.405	5958.167	4274.405	358.701	bb		569.2998	94.9	-5.1	489.5
WXX100325-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.65	15723.011	34459.645	15723.011	228.137	MM	26-Mar-10	621.0876	103.5	3.5	1213.0
WXX100325-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.52	24619.500	34459.645	24619.500	357.222	bb		624.4641	104.1	4.1	1181.0
WXX100325-07CCV	246-Trinitrotoluene	227 > 210	15.38	16327.349	34459.645	16327.349	236.905	bb		665.2480	110.9	10.9	748.0
WXX100325-07CCV	34-dinitrotoluene*	182 > 152	14.34	23527.512	34459.645	23527.512	341.378	bb		320.5965	106.9	6.9	451.2
WXX100325-07CCV	26-dinitrotoluene	182 > 152	17.55	50062.660	34459.645	50062.660	726.395	MM	26-Mar-10	626.7704	104.5	4.5	1220.9
WXX100325-07CCV	24-dinitrotoluene	182 > 152	18.21	12304.918	34459.645	12304.918	178.541	MM	26-Mar-10	631.7107	105.3	5.3	274.0
WXX100325-07CCV	26-dinitrotoluene-d3	185 > 155	17.38	34459.645		34459.645	34459.645	bb		470.1629	94.0	-6.0	3117.1
WXX100325-07CCV	2-Nitrotoluene	137 > 46	21.03	3325.422	34459.645	3325.422	48.251	bb		621.3343	103.6	3.6	634.6
WXX100325-07CCV	4-Nitrotoluene	137 > 46	22.40	1792.244	34459.645	1792.244	26.005	bb		637.2230	106.2	6.2	341.4
WXX100325-07CCV	3-Nitrotoluene	137 > 46	24.04	2069.347	34459.645	2069.347	30.026	bb		601.6830	100.3	0.3	375.5
WXX100325-07CCV	PETN	361 > 62	24.33	59440.453	34459.645	59440.453	862.465	bb		655.6231	109.3	9.3	13279.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/26/10
 Time of Injection: 0335
 Standard Number: WXX100325-07CCV
 Data File: EXP0325023a

HMX	102.6
RDX	106.9
135-TNB	91.1
13-DNB	98.8
Tetryl	100.2
Nitrobenzene	94.9
4A-26-DNT	103.5
2A-46-DNT	104.1
246-TNT	110.9
34-DNT(surr)	106.9
26-DNT	104.5
24-DNT	105.3
2-NT	103.6
4-NT	106.2
3-NT	100.3
PETN	109.3

*MTT
3/26/10*

Total 1649.1

Average 103.1

Hmm 03/30/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0325025a

Analysis Date: 26-MAR-10 04:34

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	41.73	104	
1,3-Dinitrobenzene-d4	500	558.435	112	
2,4,6-Trinitrotoluene	40	40.884	102	
2,4-Dinitrotoluene	40	37.975	95	
2,6-Dinitrotoluene	40	41.747	104	
2,6-Dinitrotoluene-d3	500	511.474	102	
2-Amino-4,6-dinitrotoluene	40	36.558	91	
3,4-Dinitrotoluene	20	20.915	105	
4-Amino-2,6-dinitrotoluene	40	38.309	96	
HMX	40	41.261	103	
Nitrobenzene	40	40.837	102	
PETN	40	36.587	91	
RDX	40	37.831	95	
Tetryl	40	45.474	114	
m-Dinitrobenzene	40	38.298	96	
m-Nitrotoluene	40	41.285	103	
o-Nitrotoluene	40	40.517	101	
p-Nitrotoluene	40	45.731	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp\PRO032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP\PROData\EXP0325025a

Date: 26-Mar-2010

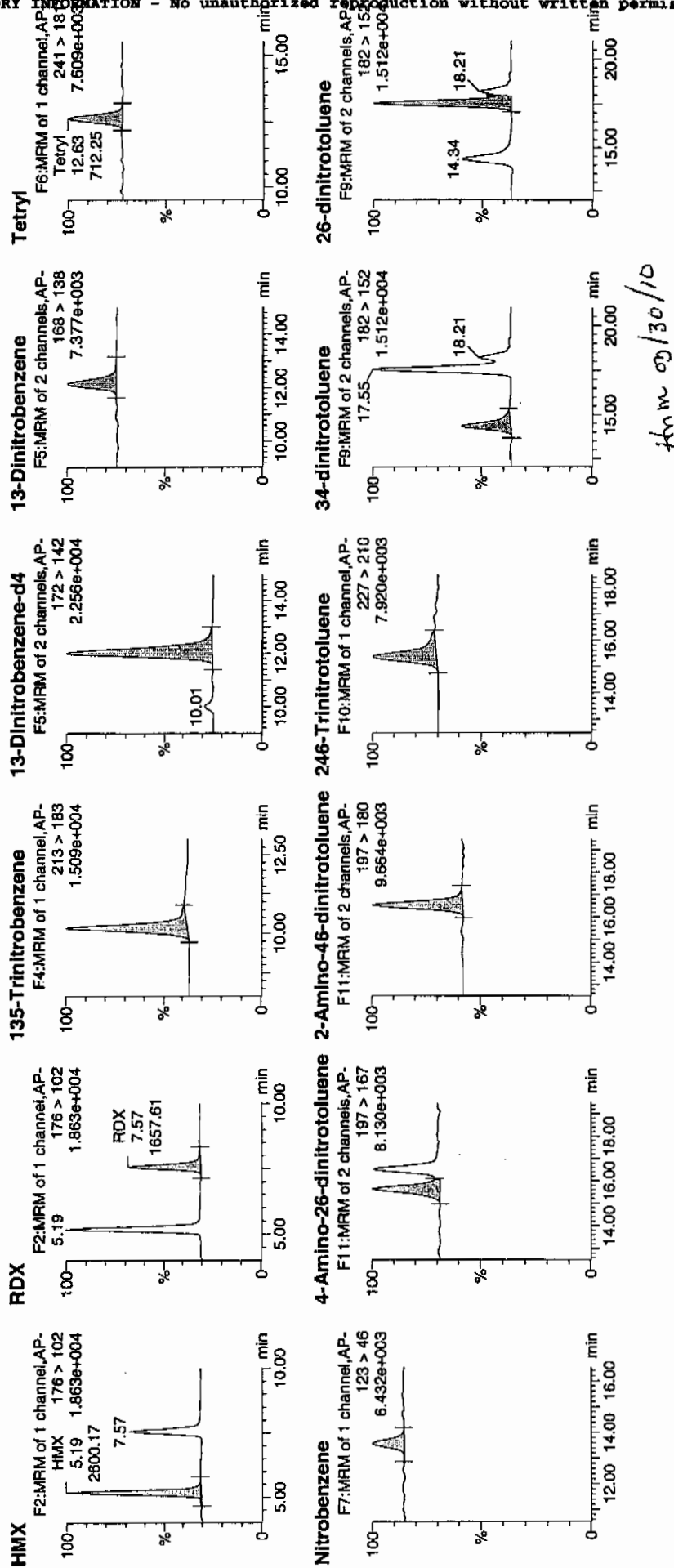
Time: 04:34:46

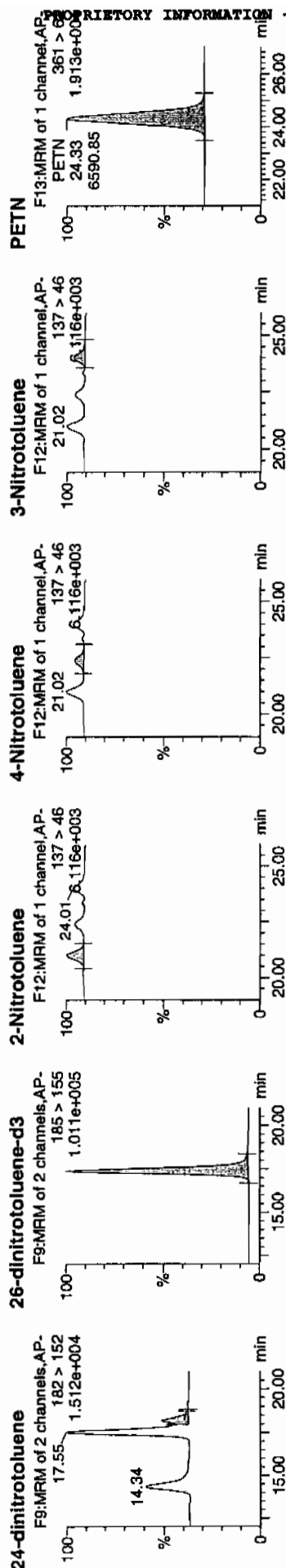
ID: WXX100325-08CRI

Vial: 1:1,C

WAT
3/26/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.





ID	Name	Trace	ESI-MS	MS/MS Area	IS Area	Anal Resp	Response	Flags	Mod Date	Mod Time	W Ret	W Dev	W SN	
WXX100325-08CRI	HMX	176 > 102	5.19	2600.167	6702.437	2600.167	193.972	bb			41.2607	103.2	3.2	572.9
WXX100325-08CRI	RDX	176 > 102	7.57	1657.605	6702.437	1657.605	123.657	bb			37.8308	94.6	-5.4	312.7
WXX100325-08CRI	135-Trinitrobenzene	213 > 183	10.16	2668.896	6702.437	2668.896	199.099	bb			41.7303	104.3	4.3	426.4
WXX100325-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	6702.437		6702.437	6702.437	bb			558.4350	111.7	11.7	396.4
WXX100325-08CRI	13-Dinitrobenzene	168 > 138	12.17	676.051	6702.437	676.051	50.433	bb			38.2975	95.7	-4.3	97.5
WXX100325-08CRI	Tetryl	241 > 181	12.63	712.247	6702.437	712.247	53.133	bb			45.4735	113.7	13.7	85.9
WXX100325-08CRI	Nitrobenzene	123 > 46	13.59	344.910	6702.437	344.910	25.730	bb			40.8367	102.1	2.1	29.7
WXX100325-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.65	1055.002	37487.457	1055.002	14.071	MM	26-Mar-10	12:33:40	38.3091	95.8	-4.2	74.9
WXX100325-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.52	1567.945	37487.457	1567.945	20.913	bb			36.5581	91.4	-8.6	186.3
WXX100325-08CRI	246-Trinitrotoluene	227 > 210	15.38	1091.593	37487.457	1091.593	14.559	bb			40.8840	102.2	2.2	103.9
WXX100325-08CRI	34-dinitrotoluene	182 > 152	14.34	1669.720	37487.457	1669.720	22.270	bb			20.9147	104.6	4.6	82.6
WXX100325-08CRI	26-dinitrotoluene	182 > 152	17.55	3627.500	37487.457	3627.500	48.383	MM	26-Mar-10	12:39:46	41.7471	104.4	4.4	234.7
WXX100325-08CRI	24-dinitrotoluene	182 > 152	18.21	804.590	37487.457	804.590	10.733	MM	26-Mar-10	12:42:24	37.9746	94.9	-5.1	51.3
WXX100325-08CRI	26-dinitrotoluene-d3	185 > 155	17.38	37487.457		37487.457	37487.457	bb			511.4739	102.3	2.3	4053.6
WXX100325-08CRI	2-Nitrotoluene	137 > 46	21.02	235.901	37487.457	235.901	3.146	bb			40.5166	101.3	1.3	44.6
WXX100325-08CRI	4-Nitrotoluene	137 > 46	22.40	139.923	37487.457	139.923	1.866	bb			45.7307	114.3	14.3	23.7
WXX100325-08CRI	3-Nitrotoluene	137 > 46	24.01	154.466	37487.457	154.466	2.060	bb			41.2850	103.2	3.2	27.2
WXX100325-08CRI	PETN	361 > 62	24.33	6590.854	37487.457	6590.854	87.907	bb			36.5868	91.5	-8.5	1108.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/26/10
 Time of Injection 0434
 Standard Number WXX100325-08CRI
 Data File EXP0325025a

HMX	103.2
RDX	94.6
135-TNB	104.3
13-DNB	95.7
Tetryl	113.7
Nitrobenzene	102.1
4A-26-DNT	95.8
2A-46-DNT	91.4
246-TNT	102.2
34-DNT(surr)	104.6
26-DNT	104.4
24-DNT	94.9
2-NT	101.3
4-NT	114.3
3-NT	103.2
PETN	91.5

*MTT
3/26/10*

Total 1617.2

Average 101.1

4mm 03/30/10

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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160013.wiff

Analysis Date: 16-MAR-10 11:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	81.8	82	
2,6-Diamino-4-nitrotoluene	100	87.6	88	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	92.4	92	
TATB	100	98.9	99	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

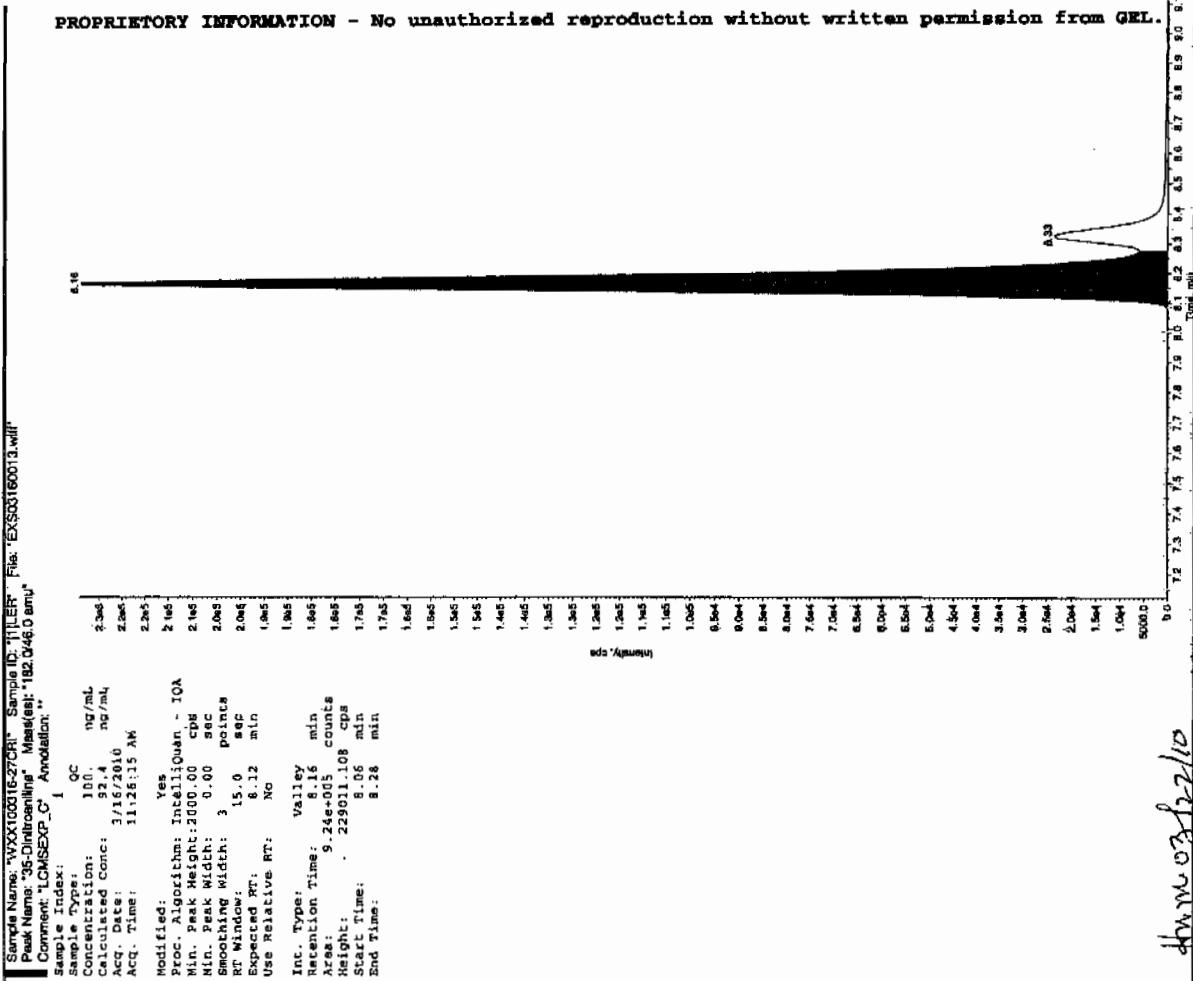
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

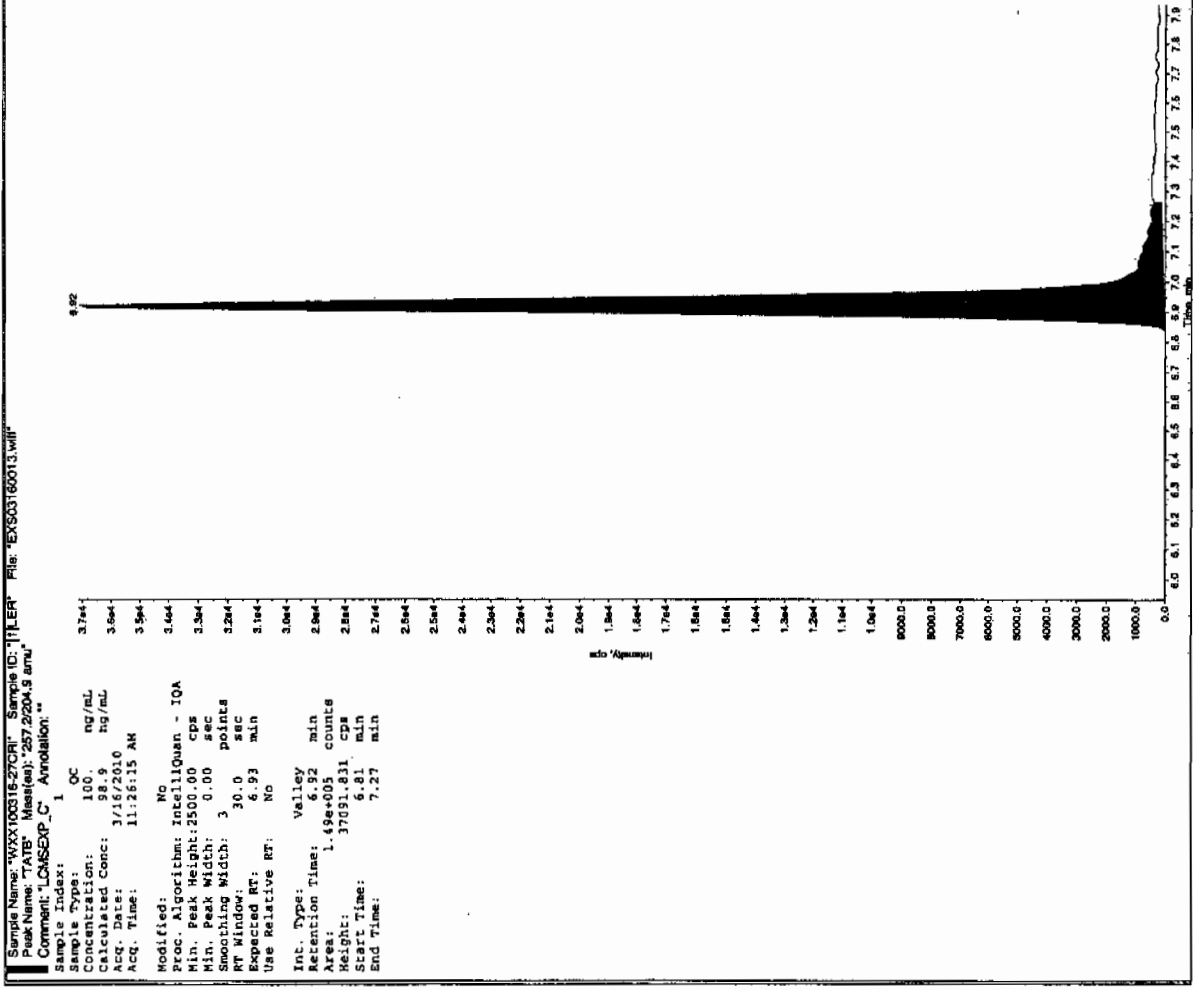
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Jan 3/10/10



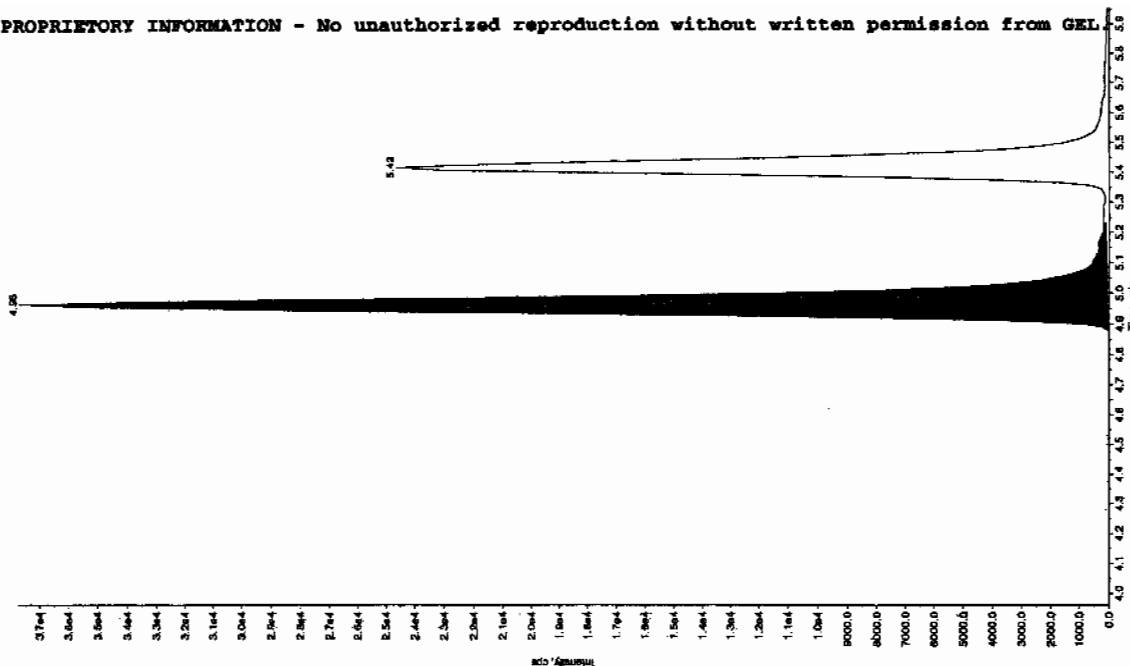
Jan 3/10/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

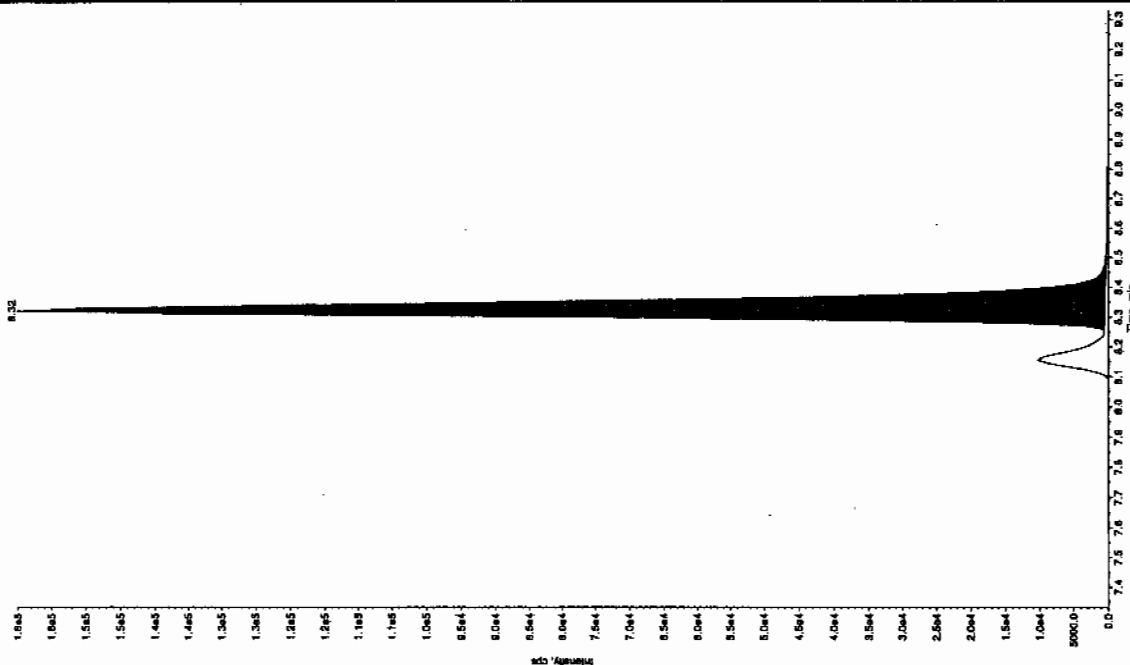
Sample Name: WXXY0016-270R1 Sample ID: 11111111111111111111
 Peak Name: 26-Diandro-Androsterone Mass(es): 156.046.0 amu
 Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1 QC
 Concentration: 100. ng/mL
 Calculated Conc: 87.6 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 11:26:15 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 4.98 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.98 min
 Area: 1.52e+005 counts
 Height: 37749.512 cps
 Start Time: 4.84 min
 End Time: 5.23 min

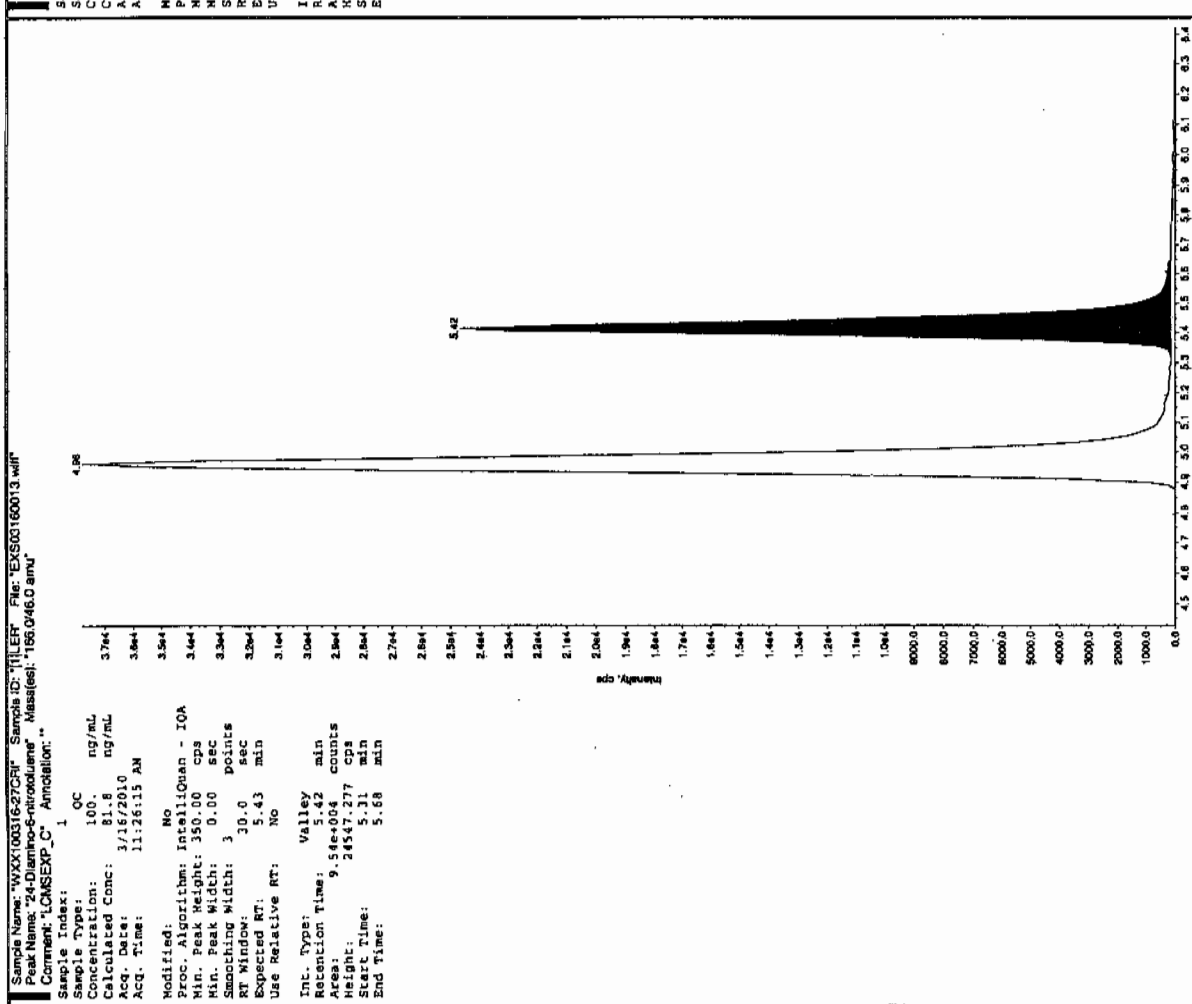


Sample Name: WXXY0016-270R1 Sample ID: 11111111111111111111
 Peak Name: 54-Dinitrochane Mass(es): 182.1151.9 amu
 Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1 QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 45.1 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 11:26:15 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.32 min
 Area: 5.92e+005 counts
 Height: 159719.818 cps
 Start Time: 8.25 min
 End Time: 8.59 min



*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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160024.wiff

Analysis Date: 16-MAR-10 14:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	446	89	
2,6-Diamino-4-nitrotoluene	500	441	88	
3,4-Dinitrotoluene	250	221	88	
3,5-Dinitroaniline	500	503	101	
TATB	500	499	100	
tris(o-cresyl) phosphate	500	487	97	

Recovery Limits:

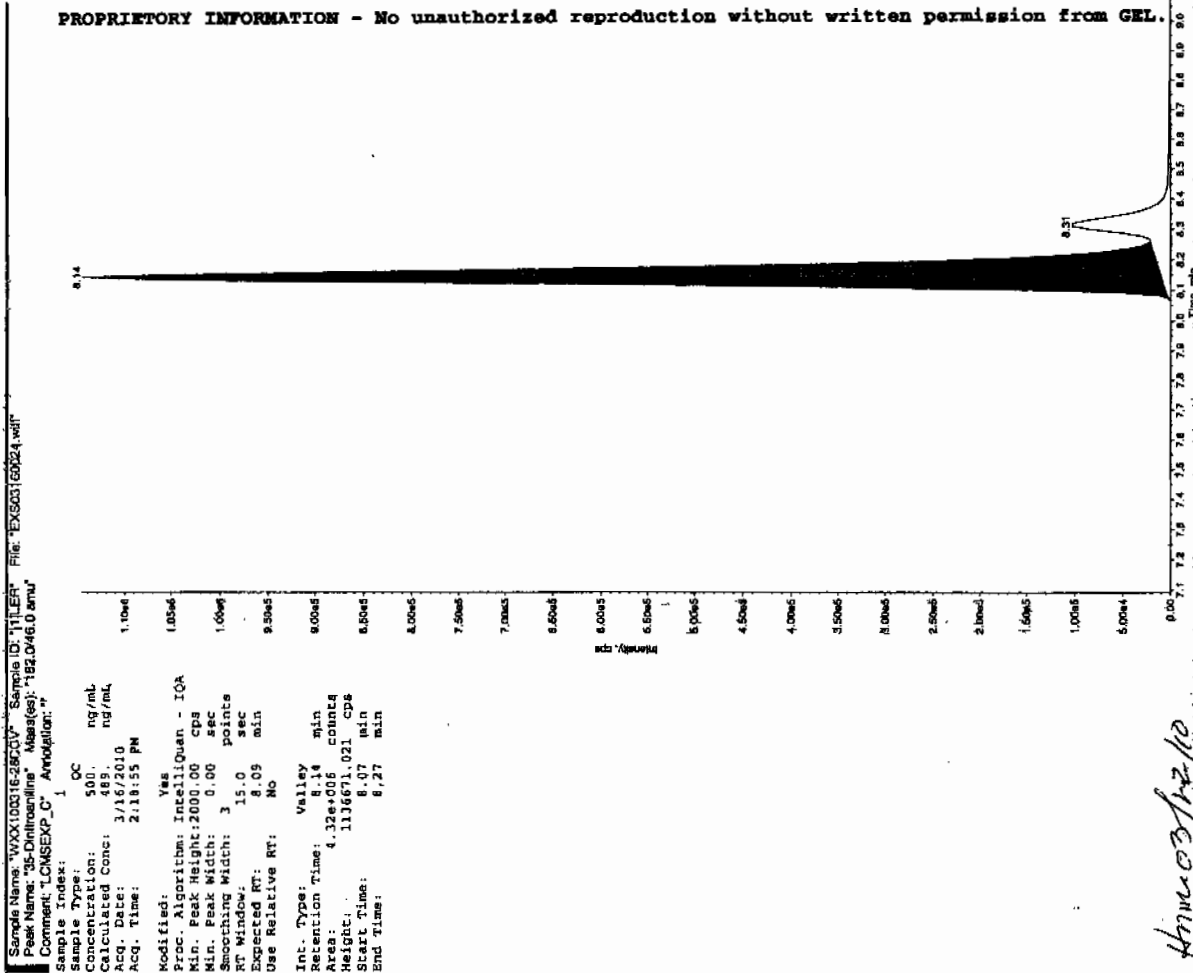
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

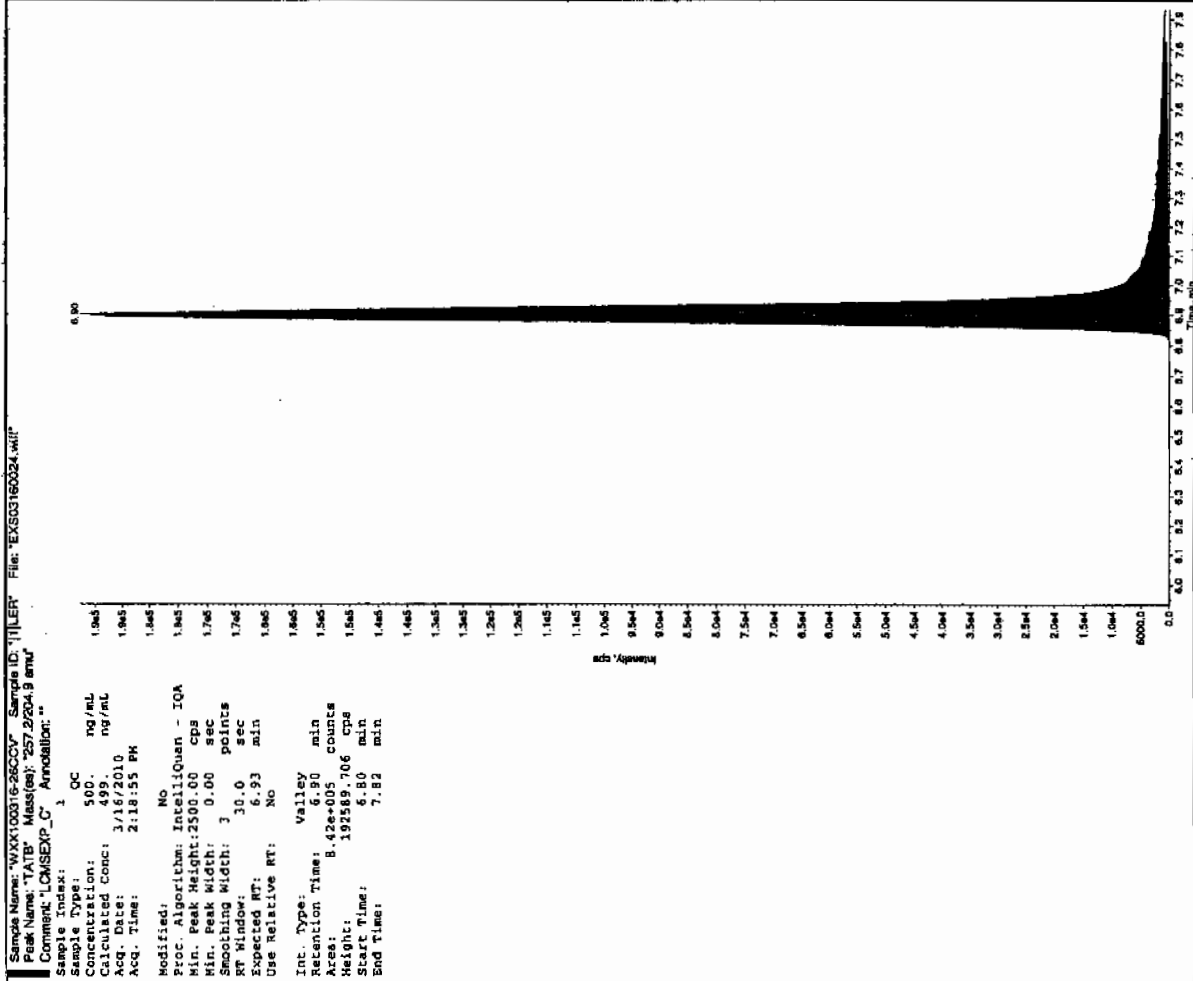
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 31/8/10



After Jan 31/8/10

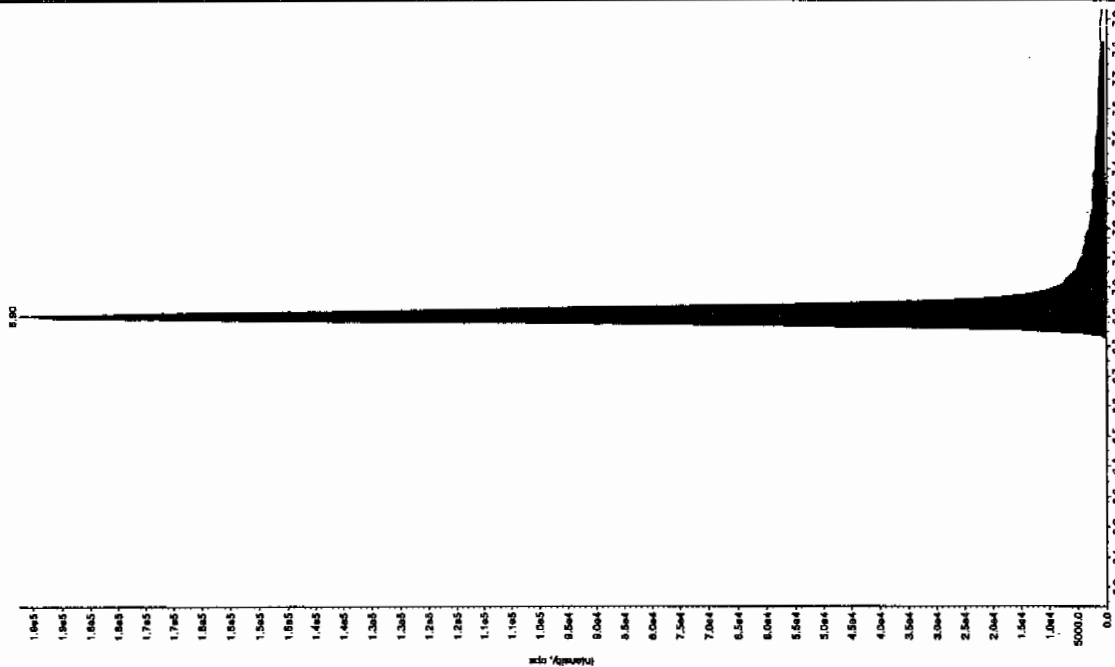


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

after for 3/18/10

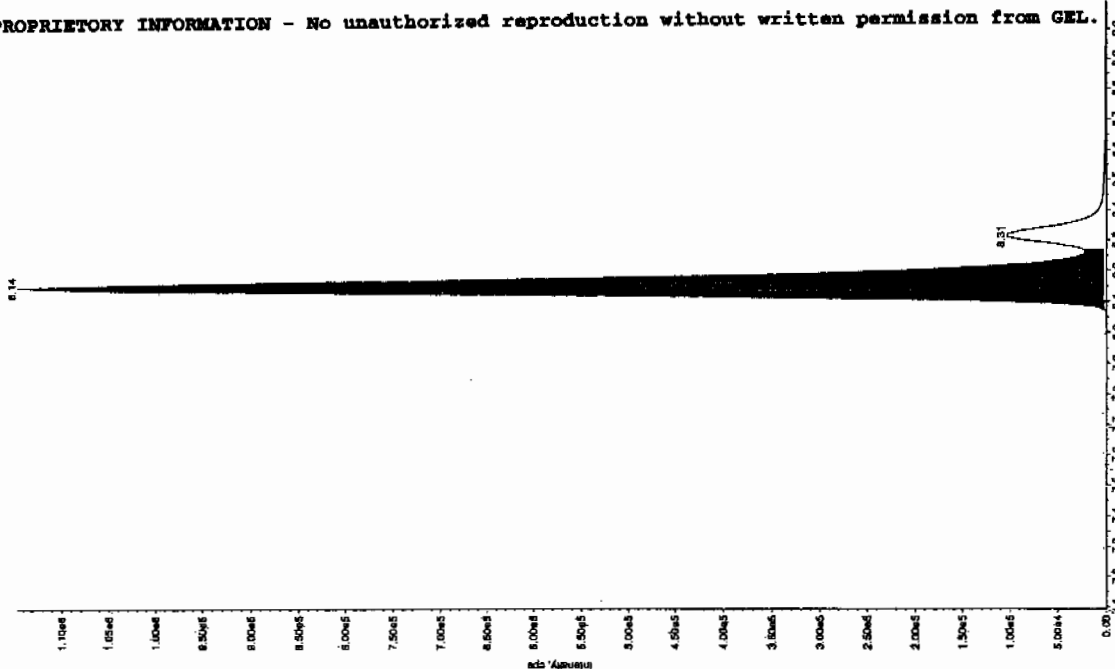
Sample Name: "WXX100316-26CCV" Sample ID: "111ER" File: "EXS03160024.wif"
 Peak Name: "TATB" Mass(es): 257.2204.9 amu
 Comment: "LONDEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 499 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:18:55 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.93 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.90 min
 Area: 8.42e+005 counts
 Height: 192389.706 cps
 Start Time: 6.80 min
 End Time: 7.02 min



Sample Name: "WXX100316-26CCV" Sample ID: "111ER" File: "EXS03160024.wif"
 Peak Name: "TATB" Mass(es): 182.046.0 amu
 Comment: "LONDEXP_C" Annotation: "

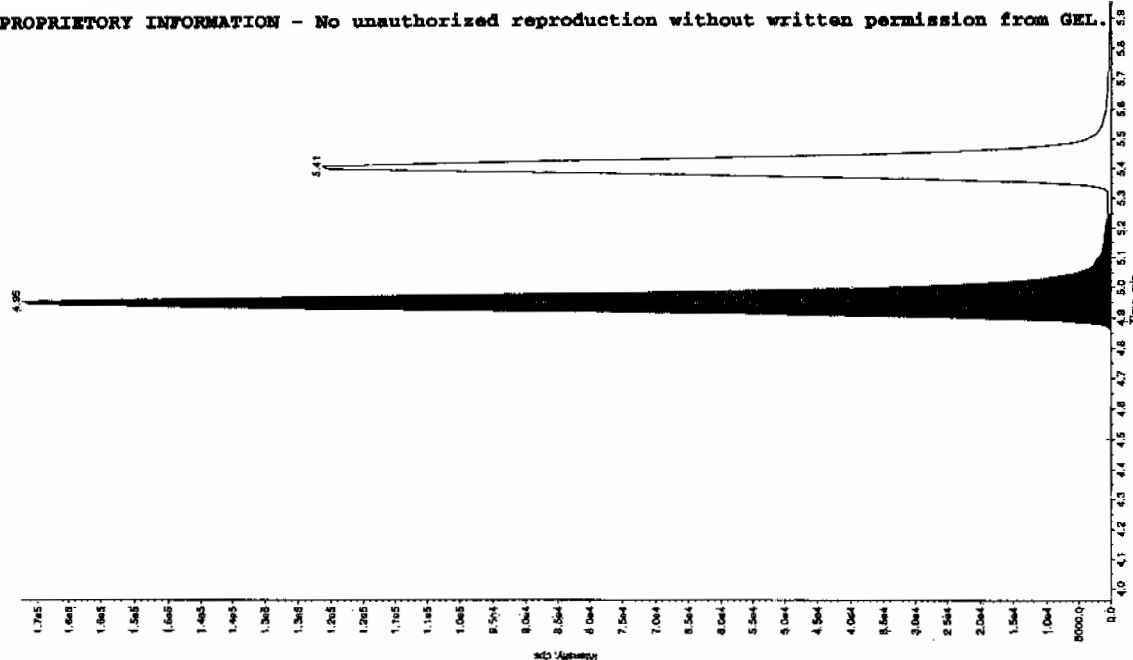
Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 503 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:18:55 PM
 Modified: Yes
 RT Window: 15.0 sec
 Expected RT: 8.09 min
 Use Relative RT: No
 Int. Type: Manual
 Retention Time: 8.14 min
 Area: 4.41e+006 counts
 Height: 114350.593 cps
 Start Time: 8.07 min
 End Time: 8.27 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LQMSMS#4

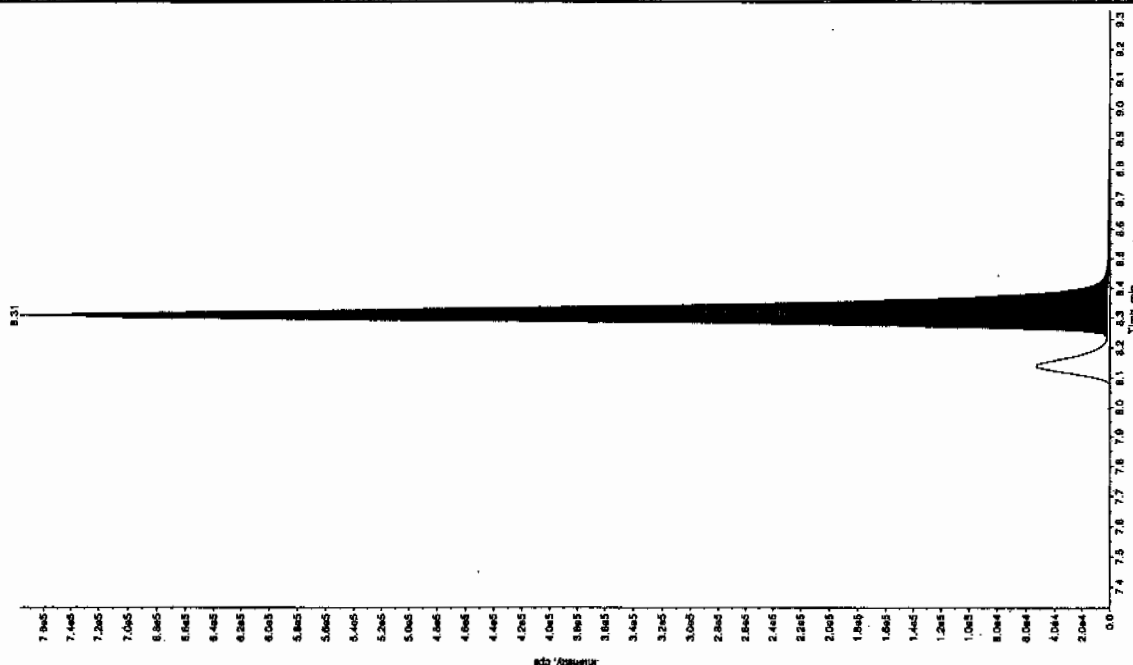
Sample Name: "WVX10316-2605" Sample ID: "11ER" File: "EXS016004.wif"
 Peak Name: "26-Dinitro-4-nitrophenol" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 441. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:18:55 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.95 min
 Area: 7.16e+005 counts
 Height: 167627.060 cps
 Start Time: 4.83 min
 End Time: 5.15 min

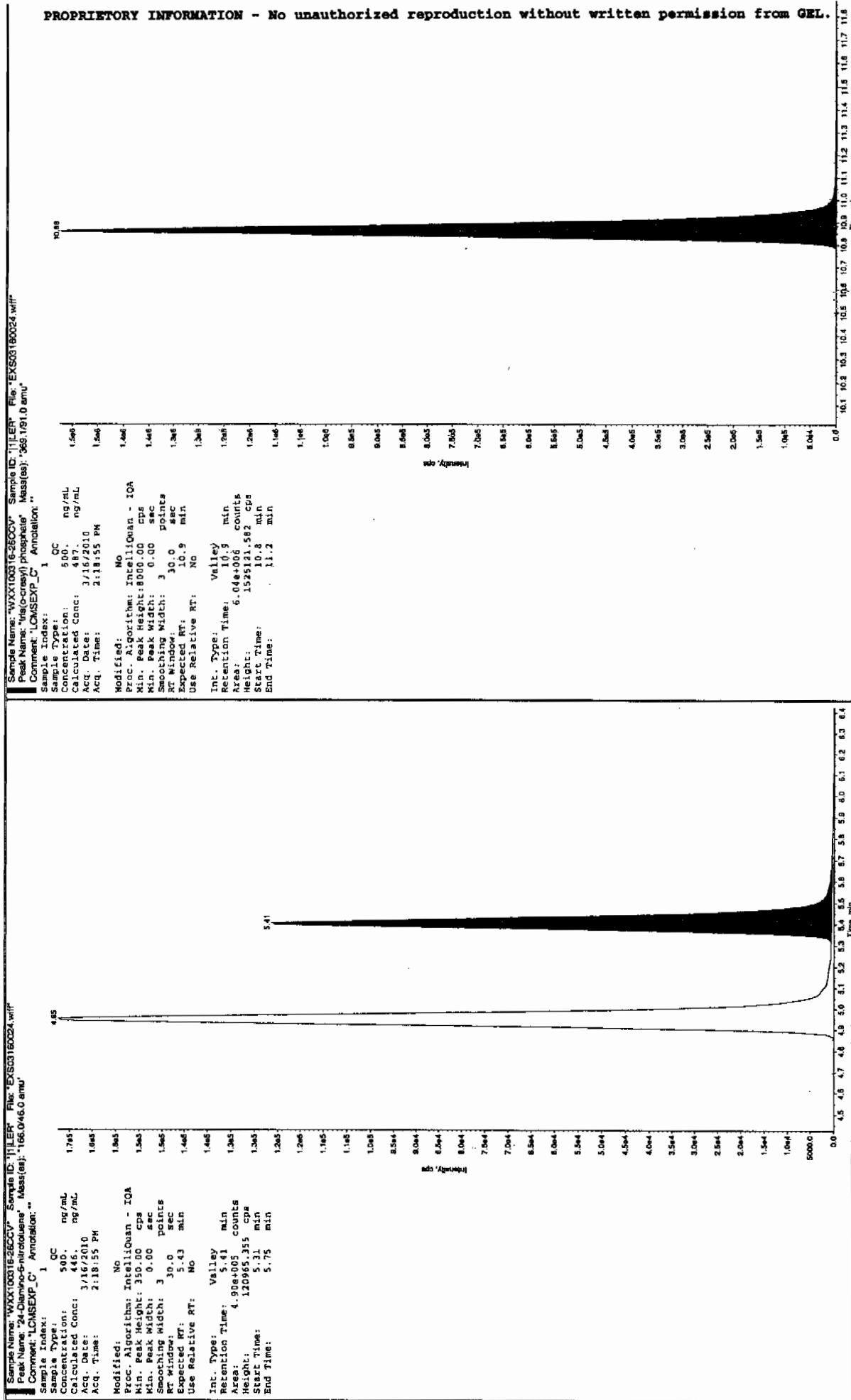


Sample Name: "WVX10316-2605" Sample ID: "11ER" File: "EXS016024.wif"
 Peak Name: "34-Dinitrophenol" Mass(es): "182.151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 231. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:18:55 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.31 min
 Area: 2.61e+006 counts
 Height: 776187.988 cps
 Start Time: 8.24 min
 End Time: 8.60 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160026.wiff

Analysis Date: 16-MAR-10 14:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	87.3	87	
2,6-Diamino-4-nitrotoluene	100	83.1	83	
3,4-Dinitrotoluene	50	46.2	92	
3,5-Dinitroaniline	100	89.4	89	
TATB	100	100	100	
tris(o-cresyl) phosphate	100	96.9	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%

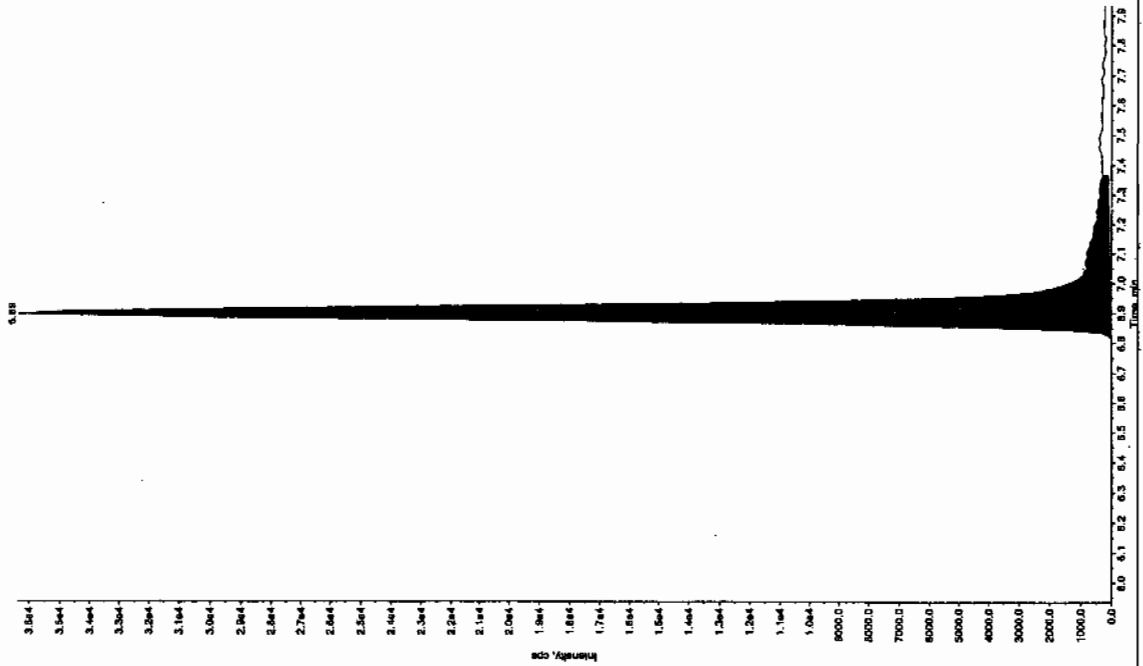
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

for 3/18/10

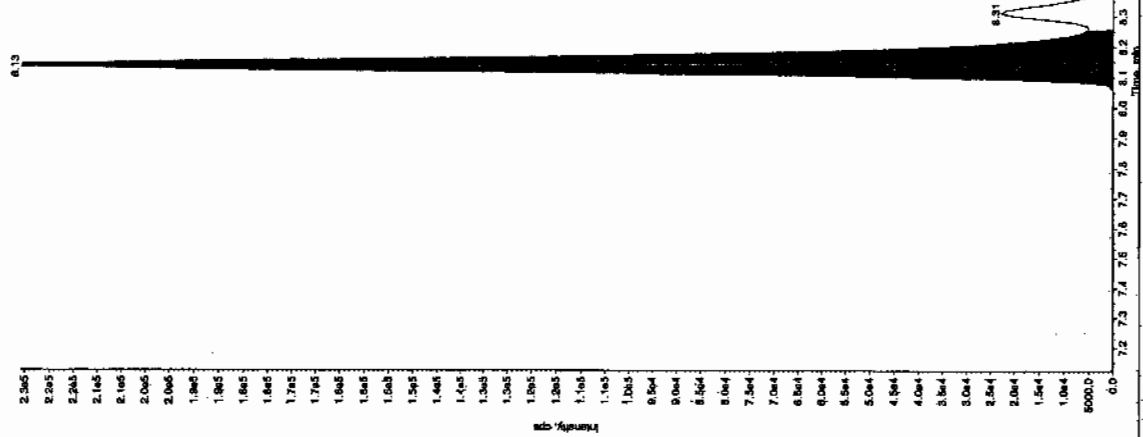
Sample Name: WXX100316-2701H Sample ID: T1LER File: EX03160205.wif
Peak Name: 35-Ornithine Mass(es): 257.250.8 amu
Comment: LCMSEXP_C Annotation:

Sample Index: 1
Sample Type: OC
Concentration: 100 ng/mL
Calculated Conc: 3/16/2010
Acq. Date: 2:50:19 PM
Acq. Time: 2:50:19 PM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.93 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 6.89 min
Area: 1.51e+005 counts
Height: 3632.86 cps
Start Time: 6.79 min
End Time: 7.37 min



Sample Name: WXX100316-2701H Sample ID: T1LER File: EX03160205.wif
Peak Name: 35-Ornithine Mass(es): 182.046.0 amu
Comment: LCMSEXP_C Annotation:

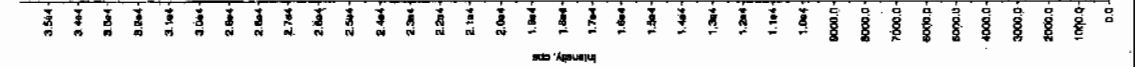
Sample Index: 1
Sample Type: OC
Concentration: 100 ng/mL
Calculated Conc: 3/16/2010
Acq. Date: 2:50:19 PM
Acq. Time: 2:50:19 PM
Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.12 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.13 min
Area: 8.97e+005 counts
Height: 223674.927 cps
Start Time: 8.04 min
End Time: 8.26 min



for 3/18/10

Sample Name: "WXX100316-270R" Sample ID: "11LRT" File: "EX503160026.w" Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu" Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100 ng/mL
 Calculated Conc: 371.02010 ng/mL
 Acq. Date: 3/15/2010
 Acq. Time: 2:50:19 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.94 min
 Area: 1.45e+005 counts
 Height: 35824.99 cps
 Start Time: 4.86 min
 End Time: 5.19 min



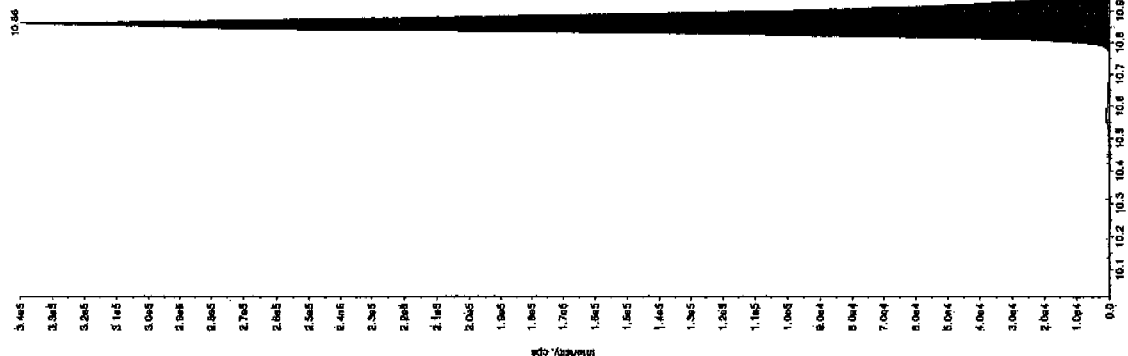
Sample Name: "WXX100316-270R" Sample ID: "11LRT" File: "EX503160026.w" Peak Name: "34-Dinitrotoluene" Mass(es): "182.1515.9 amu" Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 463.610 ng/mL
 Acq. Date: 3/15/2010
 Acq. Time: 2:50:19 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.31 min
 Area: 5.93e+005 counts
 Height: 13968.24 cps
 Start Time: 8.24 min
 End Time: 8.61 min



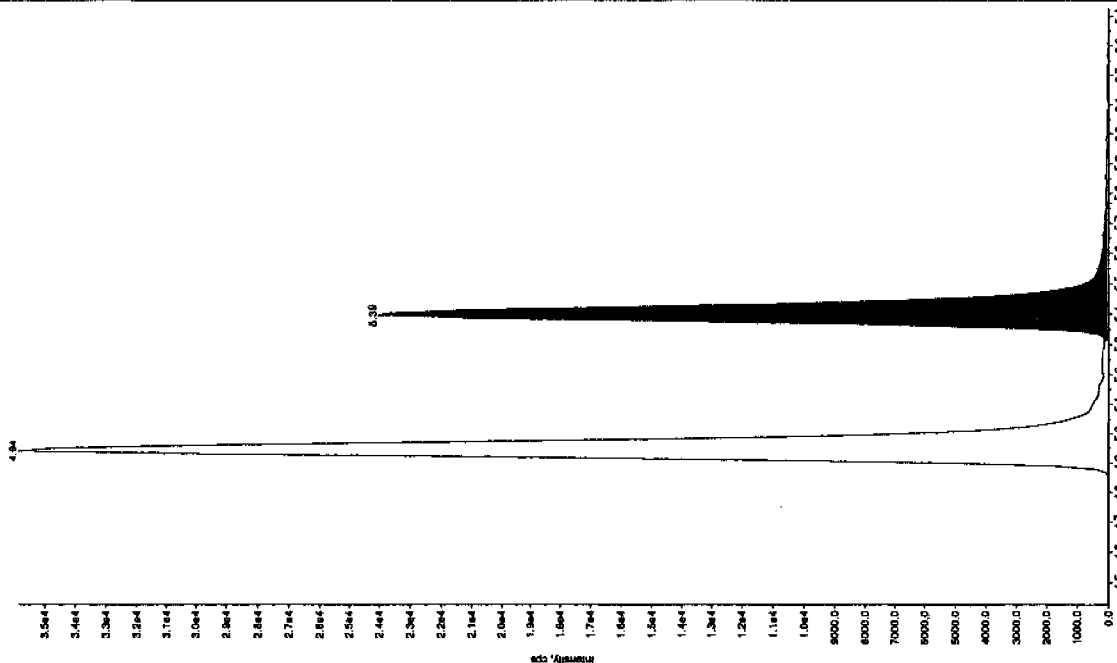
Sample Name: WXX10015-27CR1 Sample ID: 11157 File: EXS0316026.wif
 Peak Name: WXX10015-27CR1 Peak Height: 8000.00 cps
 Concentration: 96.9 ng/mL
 Sample Index: 1
 Sample Type: 100.00 ng/mL
 Calculated Conc: 96.9 ng/mL
 Acq. Date: 3/14/2010
 Acq. Time: 2:50:19 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.30e+006 counts
 Height: 339953.877 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: WXX10015-27CR1 Sample ID: 11157 File: EXS0316026.wif
 Peak Name: WXX10015-27CR1 Peak Height: 8000.00 cps
 Concentration: 96.9 ng/mL
 Sample Index: 1
 Sample Type: 100.00 ng/mL
 Calculated Conc: 96.9 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 2:50:19 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.39 min
 Area: 1.01e+005 counts
 Height: 23556.850 cps
 Start Time: 5.31 min
 End Time: 5.81 min



*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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXSQ3160050.wiff

Analysis Date: 16-MAR-10 21:07

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
tris(o-cresyl) phosphate	500	505	101	
2,4-Diamino-6-nitrotoluene	500	513	103	
2,6-Diamino-4-nitrotoluene	500	535	107	
3,4-Dinitrotoluene	250	212	85	
3,5-Dinitroaniline	500	477	95	
TATB	500	496	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

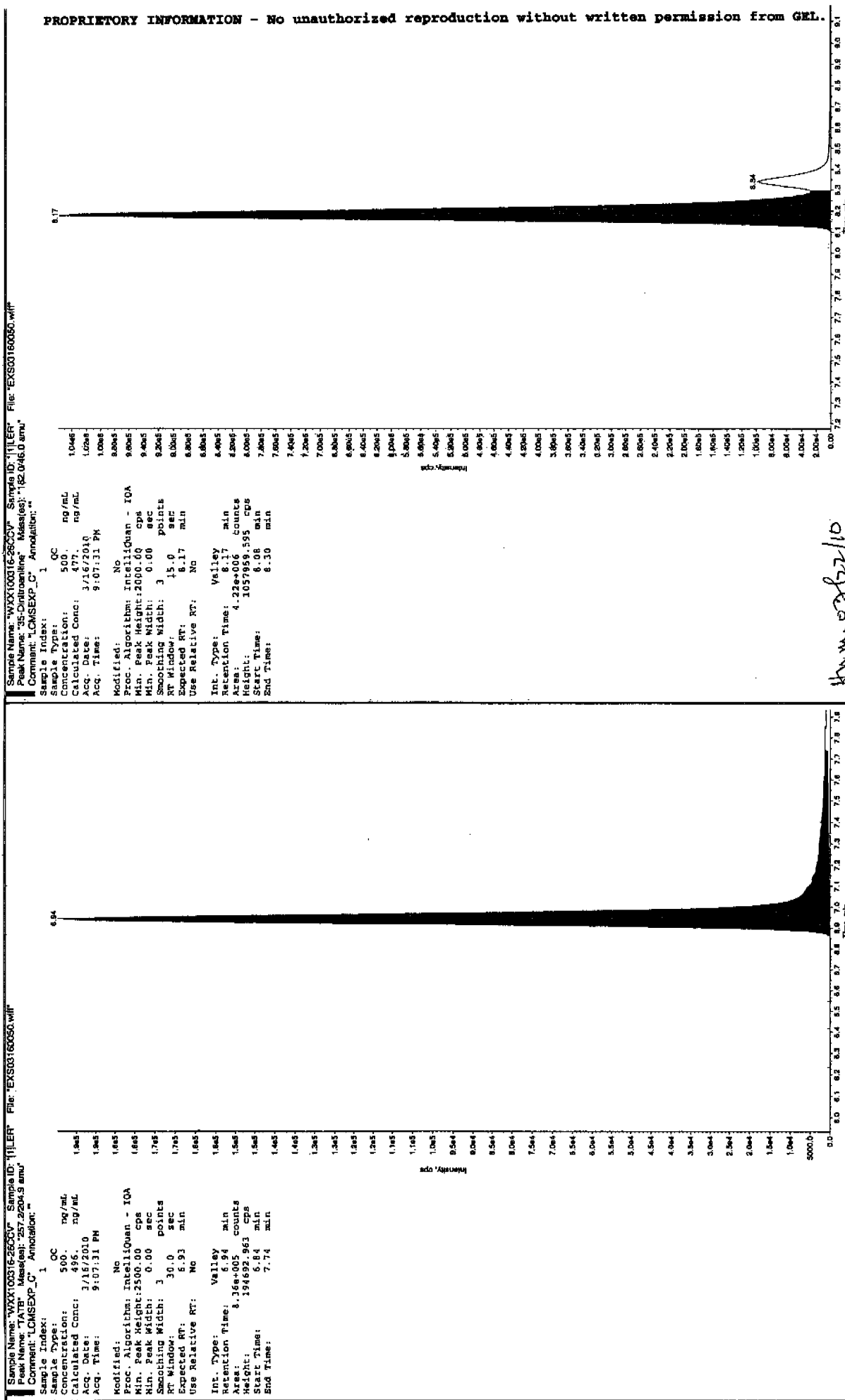
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

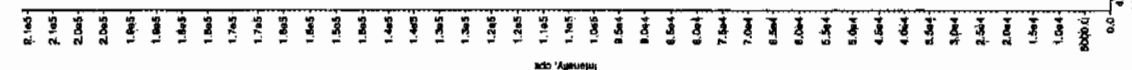
Run 3/10/10



Run 3/22/10

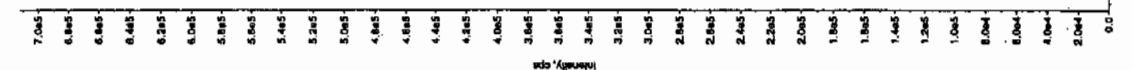
Sample Name: WXX100316-2600V Sample ID: 111ER File: EX503160050.will
 Peak Name: 26-Dinitro-4-nitrobenzene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_C Appraisal: "

Sample Index: 1 QC
 Sample Type: 500. ng/mL
 Concentration: 535. ng/mL
 Calculated Conc: 535. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:07:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.98 min
 Area: 8.64e+005 counts
 Height: 21119.217 cps
 Start Time: 4.88 min
 End Time: 5.28 min



Sample Name: WXX100316-2600V Sample ID: 111ER File: EX503160050.will
 Peak Name: 26-Dinitro-4-nitrobenzene Mass(es): 182.151.9 amu
 Comment: LCMSEXP_C Appraisal: "

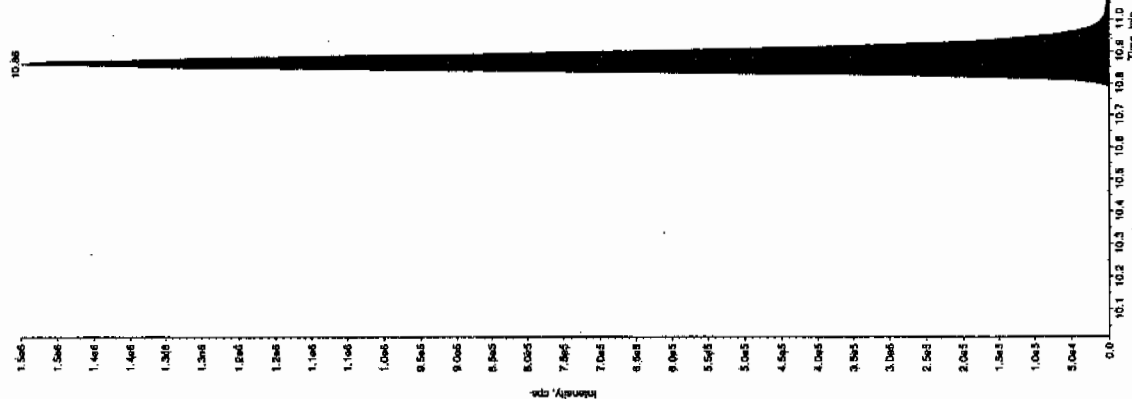
Sample Index: 1 QC
 Sample Type: 250. ng/mL
 Concentration: 213. ng/mL
 Calculated Conc: 213. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:07:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 2.71e+005 counts
 Height: 709708.313 cps
 Start Time: 8.26 min
 End Time: 8.56 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

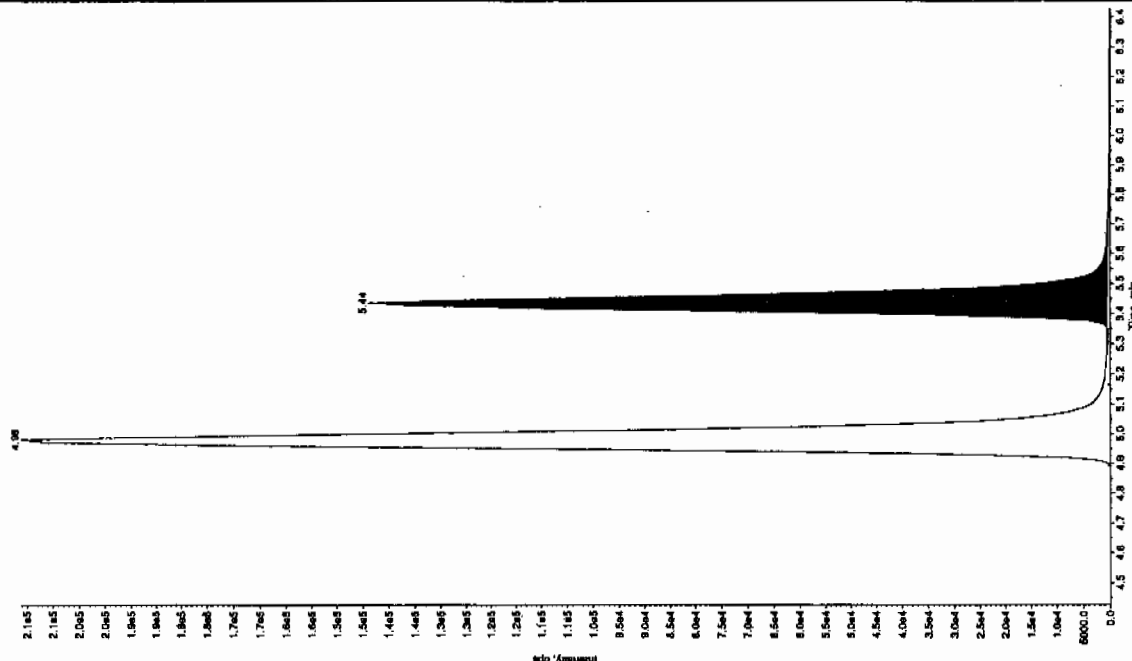
Sample Name: WXX10016-2600V Sample ID: 111EP File: EX503160050.wif
 Peak Name: Tris(2-chlorophenyl) Phosphate Mass(es): 369.191.0 amu
 Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500. ng/mL
 Calculated Conc: 505. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:07:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.25e+006 counts
 Height: 1499523.047 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: WXX10016-2600V Sample ID: 111EP File: EX503160050.wif
 Peak Name: 2,4-Dinitro-5-nitrofluorene Mass(es): 156.046.0 amu
 Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500. ng/mL
 Calculated Conc: 511. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:07:31 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.44 min
 Area: 5.62e+005 counts
 Height: 143355.576 cps
 Start Time: 5.35 min
 End Time: 5.72 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160052.wiff

Analysis Date: 16-MAR-10 21:38

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.1	99	
2,6-Diamino-4-nitrotoluene	100	103	103	
3,4-Dinitrotoluene	50	43.8	88	
3,5-Dinitroaniline	100	88.7	89	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	104	104	

Recovery Limits:

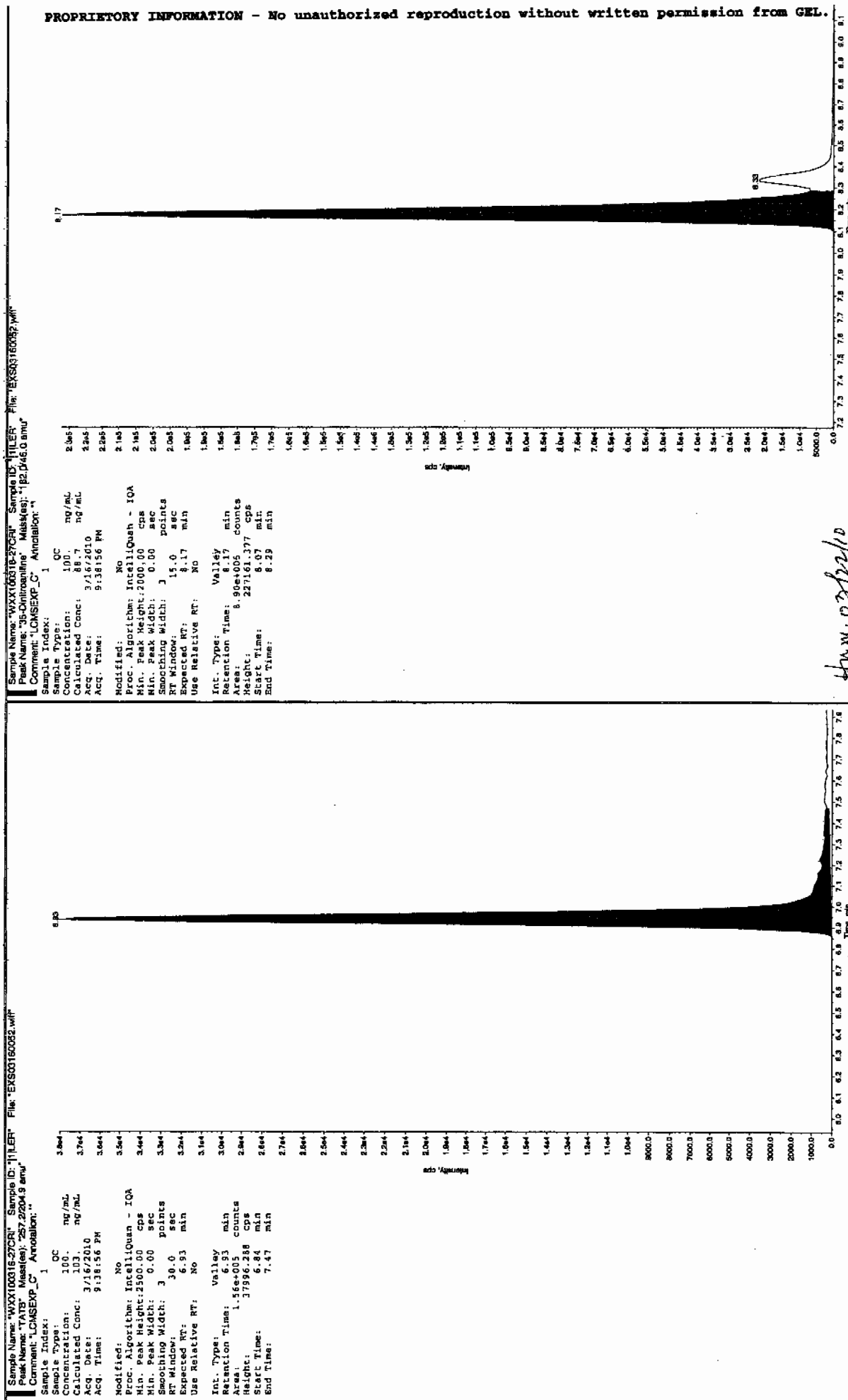
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other/Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

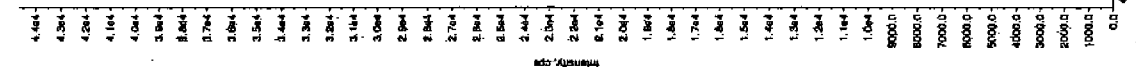
SLA 310110



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

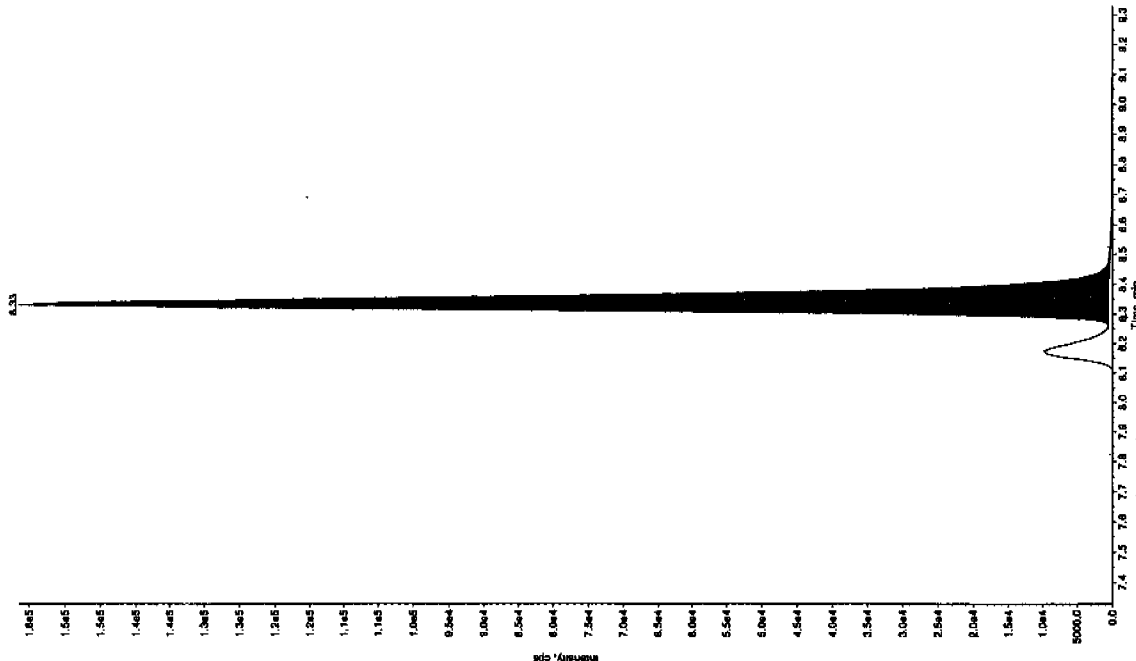
Sample Name: "WXX100316-27GR" Sample ID: "111111" File: "EXS03160032.wif"
 Peak Name: "26-Diamino-4-nitroindane" Mass(es): "166.048.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 103. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:38:56 PM
 Modified: No
 Proc. Algorithm: IntelliQua - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.98 min
 Area: 1.77e+005 counts
 Height: 44645.008 cps
 Start Time: 4.88 min
 End Time: 5.25 min



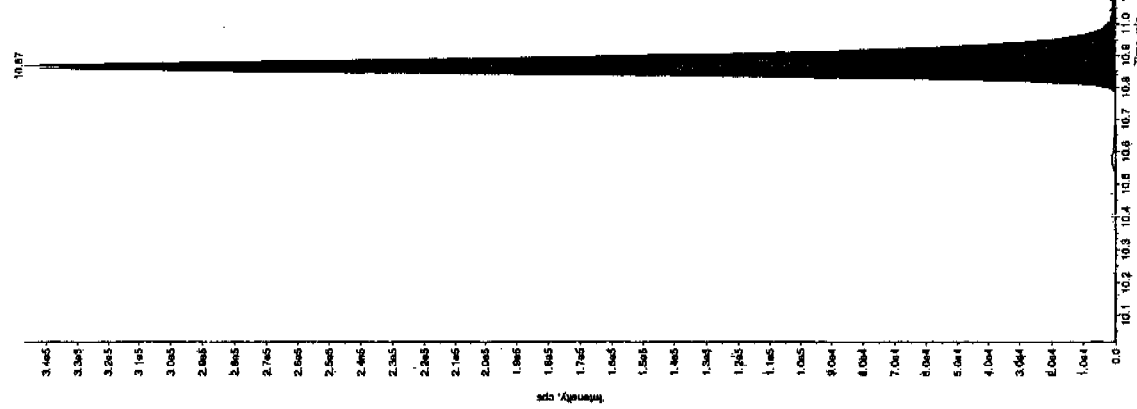
Sample Name: "WXX100316-27GR" Sample ID: "111111" File: "EXS03160032.wif"
 Peak Name: "34-Dinitroindane" Mass(es): "182.1451.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 43.8 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:38:56 PM
 Modified: No
 Proc. Algorithm: IntelliQua - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 5.61e+005 counts
 Height: 155961.243 cps
 Start Time: 8.26 min
 End Time: 8.55 min



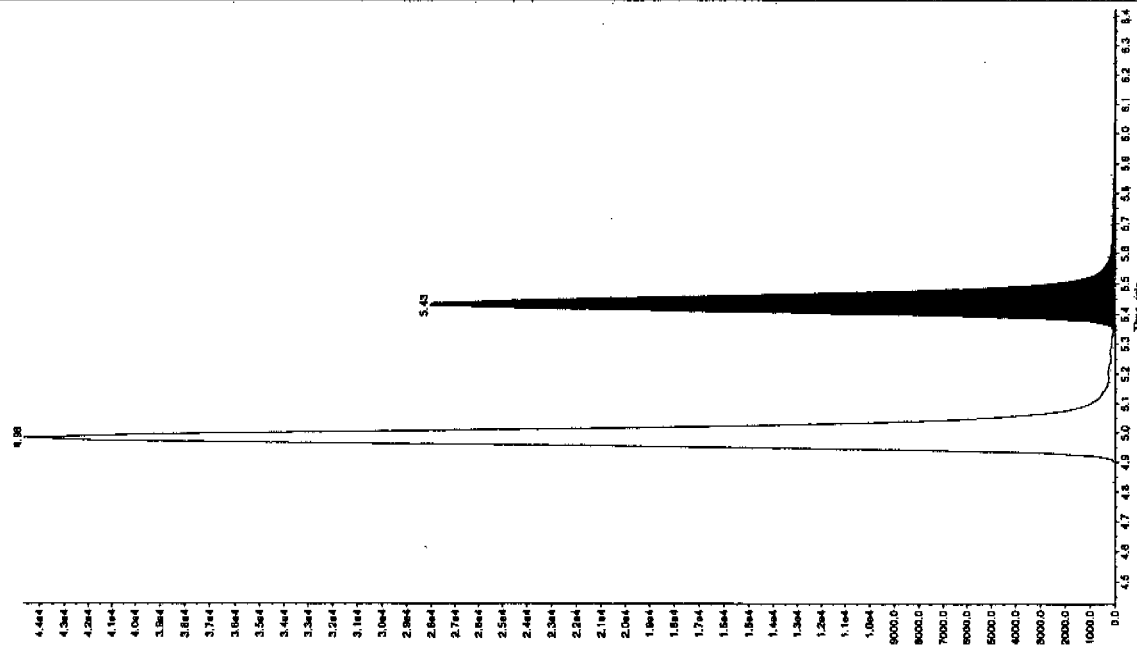
Sample Name: "WXX100316-27C81" Sample ID: "111ER" File: "EXSD3160552.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "358.1/31.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 104. ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:38:56 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 6000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.40e+006 counts
 Height: 346738.220 cps
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: "24-Diamino-6-nitrofluorene" Sample ID: "111ER" File: "EXSD3160552.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: 99.1 ng/mL
 Acq. Date: 3/16/2010
 Acq. Time: 9:38:56 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.43 min
 Area: 1.14e+005 counts
 Height: 28019.862 cps
 Start Time: 5.34 min
 End Time: 5.74 min



*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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160062.wiff

Analysis Date: 17-MAR-10 00:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	571	114	
2,6-Diamino-4-nitrotoluene	500	558	112	
3,4-Dinitrotoluene	250	229	91	
3,5-Dinitroaniline	500	491	98	
TATB	500	520	104	
tris(o-cresyl) phosphate	500	514	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%

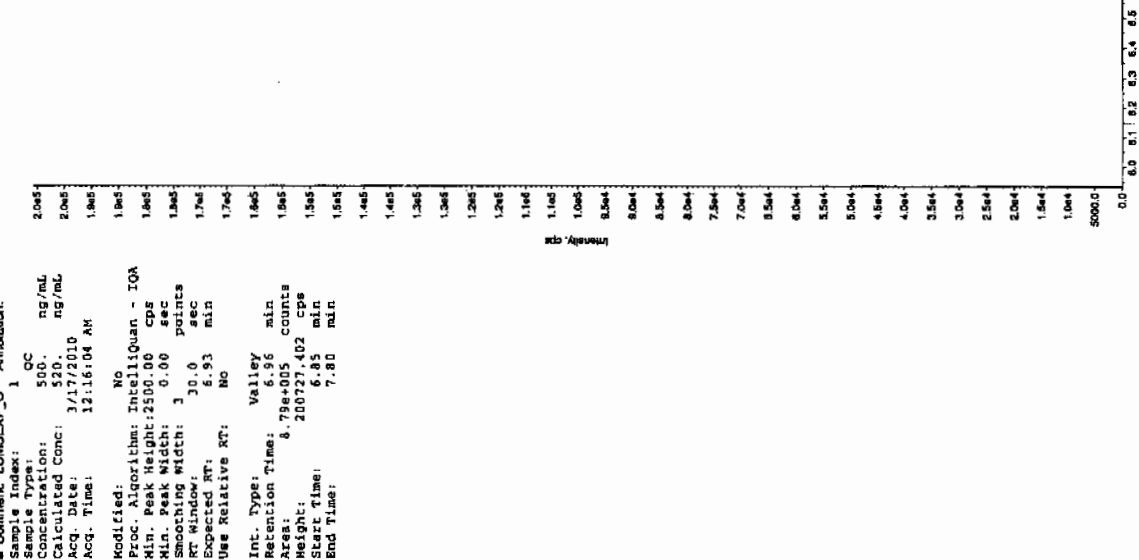
Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

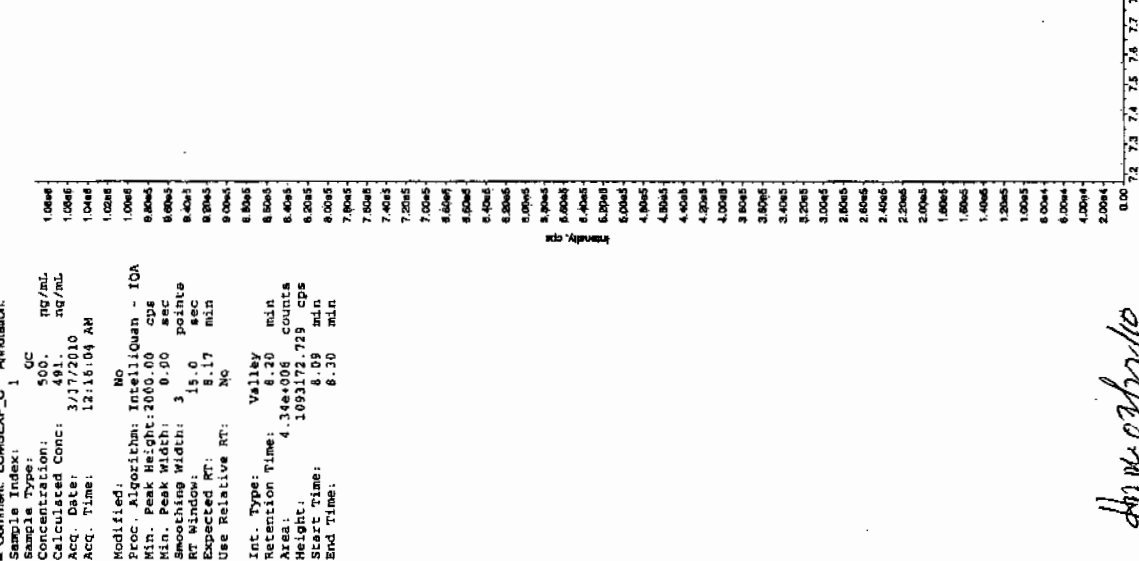
* Value outside of Recovery Limits

800 3/10/10

Sample Name: "WXX100316-260CV" Sample ID: "111ER" File: "EXS03160062.wif"
 Peak Name: "TATS" Mass(es): "257.2024.9 amu"
 Comment: "LCMSEXP_C" Annotation: "



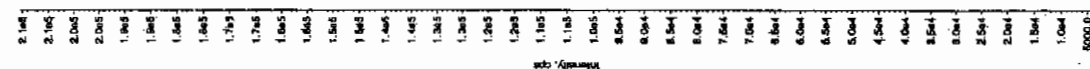
Sample Name: "WXX100316-260CV" Sample ID: "111ER" File: "EXS03160062.wif"
 Peak Name: "35-Dihydroquinone" Mass(es): "182.0480.0 amu"
 Comment: "LCMSEXP_C" Annotation: "



800 3/10/10

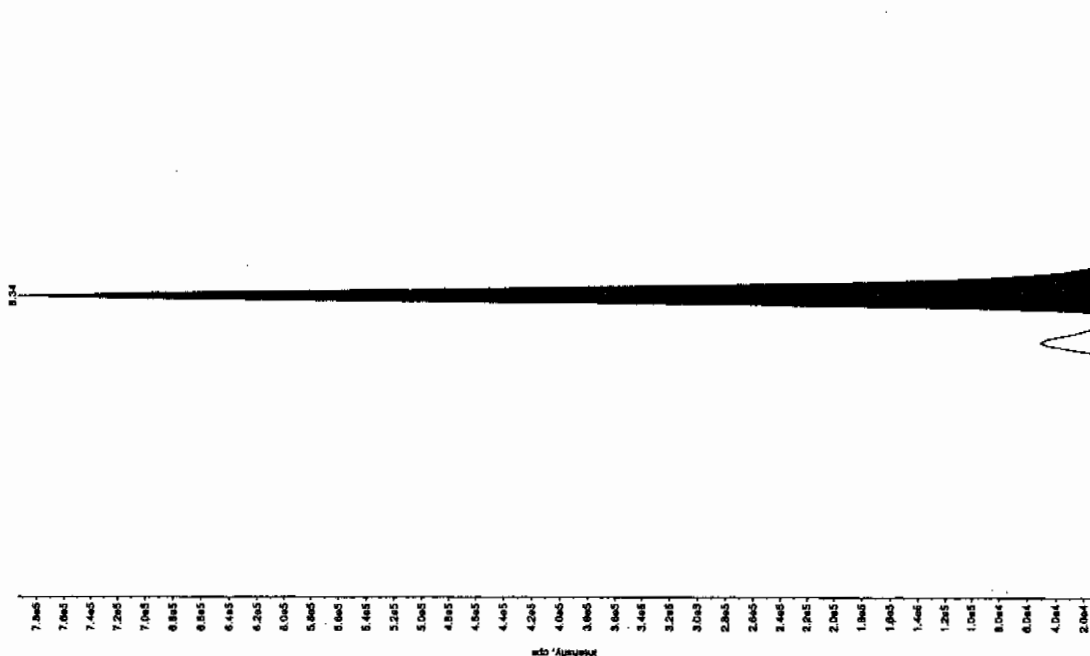
Sample Name: "WXX1001628007" Sample ID: "111EP" File: "EX0016062.wif"
 Peak Name: "24.00min" Sample ID: "111EP" File: "EX0016062.wif"
 Comment: "LCMSXP_C" Annotation: "1"

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 558 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:16:04 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 9.00 spo
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.98 min
 Area: 9.01e+005 counts
 Height: 210318.283 cps
 Start Time: 4.88 min
 End Time: 5.25 min



Sample Name: "WXX1001628007" Sample ID: "111EP" File: "EX0016062.wif"
 Peak Name: "24.00min" Sample ID: "111EP" File: "EX0016062.wif"
 Comment: "LCMSXP_C" Annotation: "1"

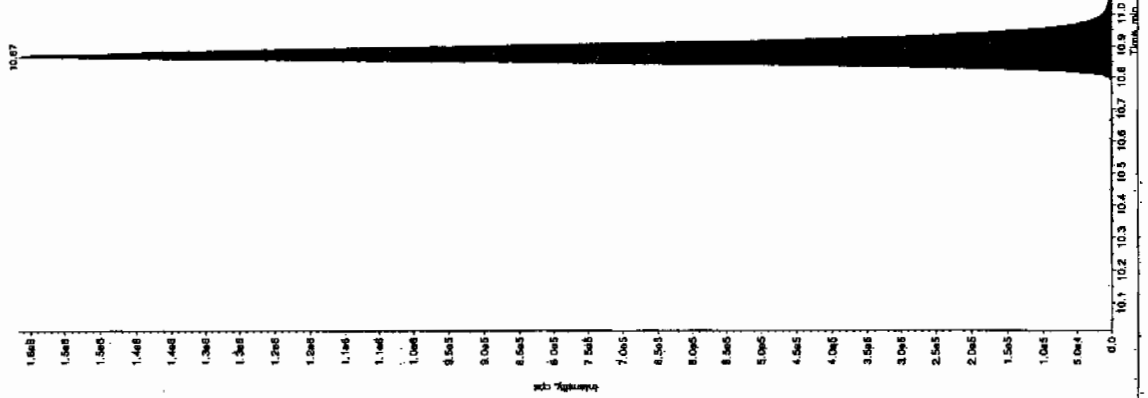
Sample Index: 1
 Sample Type: QC
 Concentration: 250 ng/mL
 Calculated Conc: 229 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:16:04 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 2.91e+006 counts
 Height: 793351.807 cps
 Start Time: 8.27 min
 End Time: 8.66 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

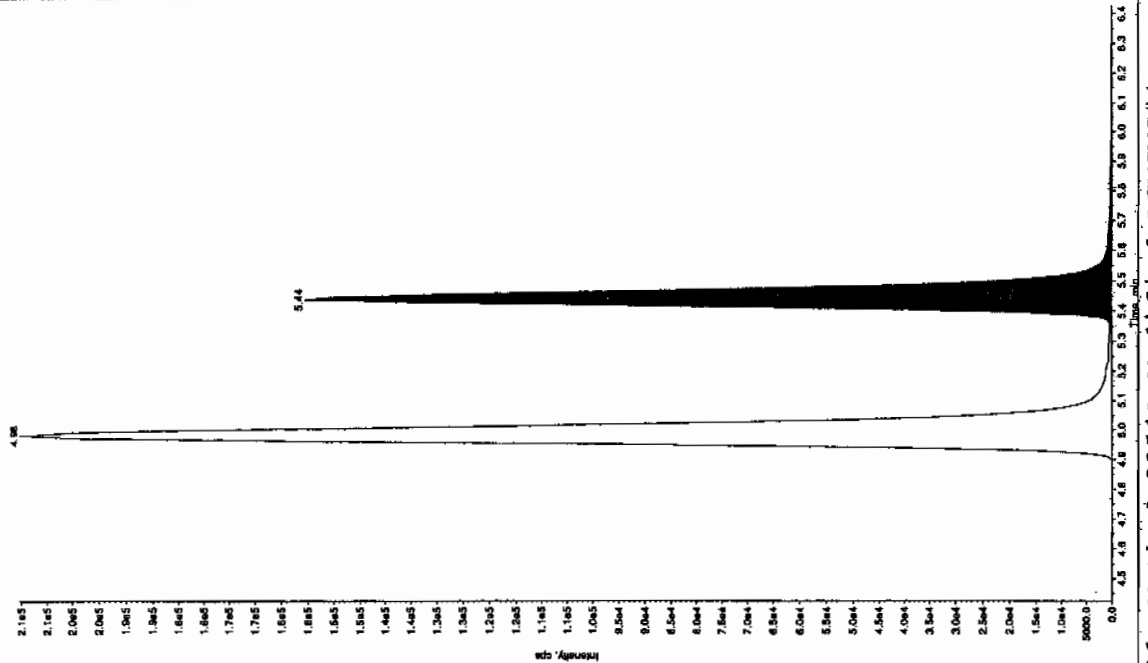
Sample Name: "WXX100316-260CV" Sample ID: "111ER" File: "EX503160062.wif"
 Peak Name: "1,5-bis(4-oxo-2-phenyl)phosphine" Mass(es): "369.191.0 amu"
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 514. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:16:04 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.36e+006 counts
 Height: 1567386.475 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100316-260CV" Sample ID: "111ER" File: "EX503160062.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "165.046.0 amu"
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 571. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:16:04 AM
 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: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.44 min
 Area: 6.24e+005 counts
 Height: 155423.428 cps
 Start Time: 5.34 min
 End Time: 5.96 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160064.wiff

Analysis Date: 17-MAR-10 00:47

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	106	106	
2,6-Diamino-4-nitrotoluene	100	112	112	
3,4-Dinitrotoluene	50	45.8	92	
3,5-Dinitroaniline	100	89.7	90	
TATB	100	104	104	
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%

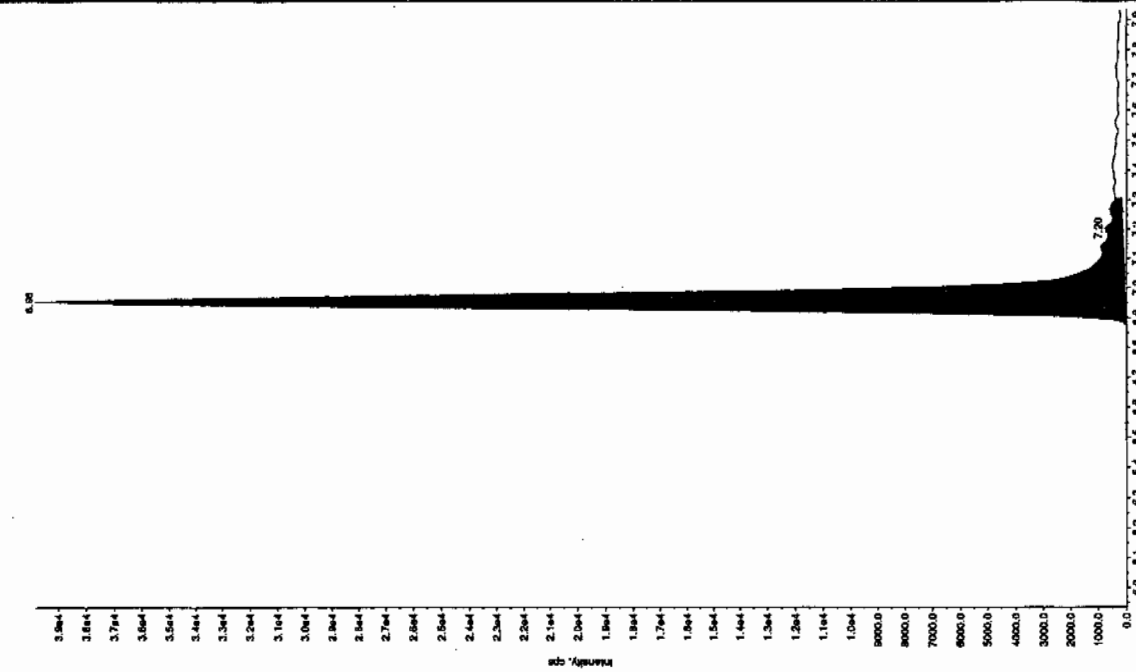
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Sample Name: "WXX100316-27CR" Sample ID: "111ER" File: "EXSG160064.wif"
 Peak Name: "35-Dinitroariline" Mass(es): "182.045.0 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100 ng/mL
 Calculated Conc: 89.7 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.20 min
 Area: 9.06e+003 counts
 Height: 24402.081 cps
 Start Time: 6.10 min
 End Time: 8.30 min



Sample Name: "WXX100316-27CR" Sample ID: "111ER" File: "EXSG160064.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100 ng/mL
 Calculated Conc: 100 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.93 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.96 min
 Area: 1.56e+003 counts
 Height: 39818.128 cps
 Start Time: 6.88 min
 End Time: 7.31 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

8.20

8.20

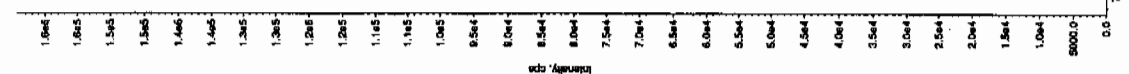
Sample Name: "WXX100316-27CR1" Sample ID: "J11ER" File: "EX503160064.wit"
 Peak Name: "26-Dinitrobenzene" Mass(es): "156.0463 amu"
 Comment: "LCMSXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 112. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 9.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.98 min
 Area: 1.91e+005 counts
 Height: 47756.405 cps
 Start Time: 4.89 min
 End Time: 5.29 min



Sample Name: "WXX100316-27CR1" Sample ID: "J11ER" File: "EX503160064.wit"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1519 amu"
 Comment: "LCMSXP_C" Annotation: ""

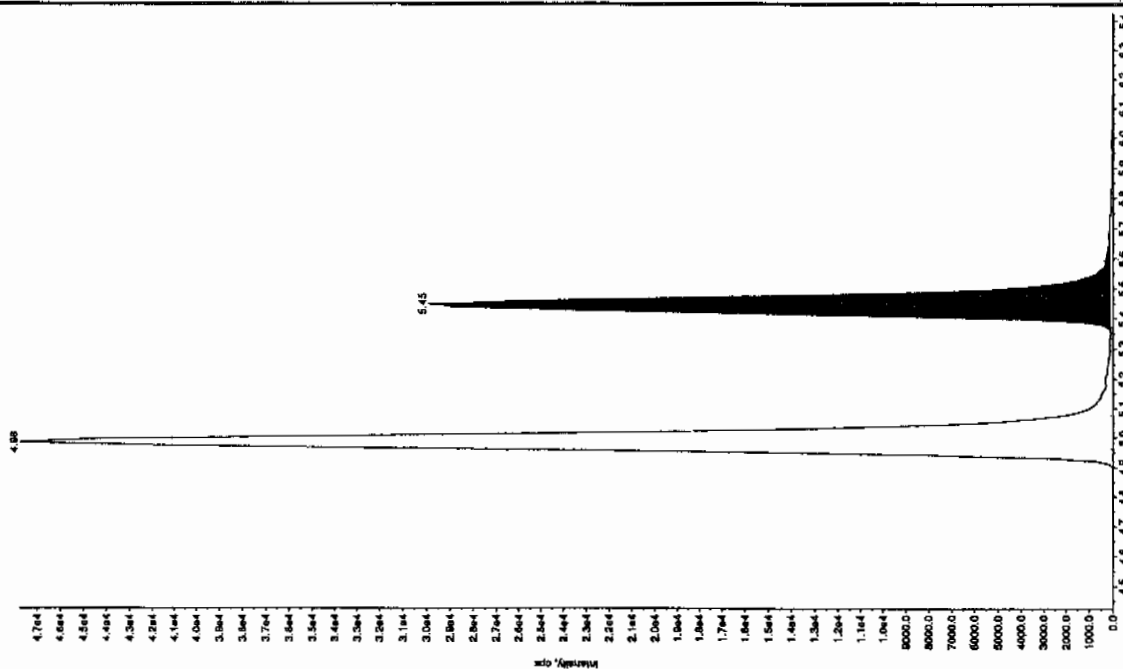
Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 45.8 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 5.87e+005 counts
 Height: 163681.259 cps
 Start Time: 8.27 min
 End Time: 8.58 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

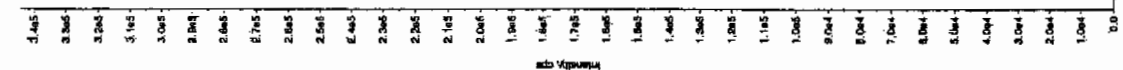
Sample Name: "WXX100318-27091" Sample ID: "111111" File: "EX503180064.wif"
 Peak Name: "24-Diamino-6-nitrophenol" Mass(es): "166.046 0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.45 min
 Area: 1.21e+005 counts
 Height: 29822.628 cps
 Start Time: 5.35 min
 End Time: 5.65 min



Sample Name: "WXX100318-27091" Sample ID: "111111" File: "EX503180064.wif"
 Peak Name: "tris(2-carboxy) phosphate" Mass(es): "366.191 0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 105. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:47:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.41e+006 counts
 Height: 343815.864 cps
 Start Time: 10.8 min
 End Time: 11.1 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160075.wiff

Analysis Date: 17-MAR-10 03:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	579	116	
2,6-Diamino-4-nitrotoluene	500	549	110	
3,4-Dinitrotoluene	250	221	89	
3,5-Dinitroaniline	500	487	97	
TATB	500	544	109	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

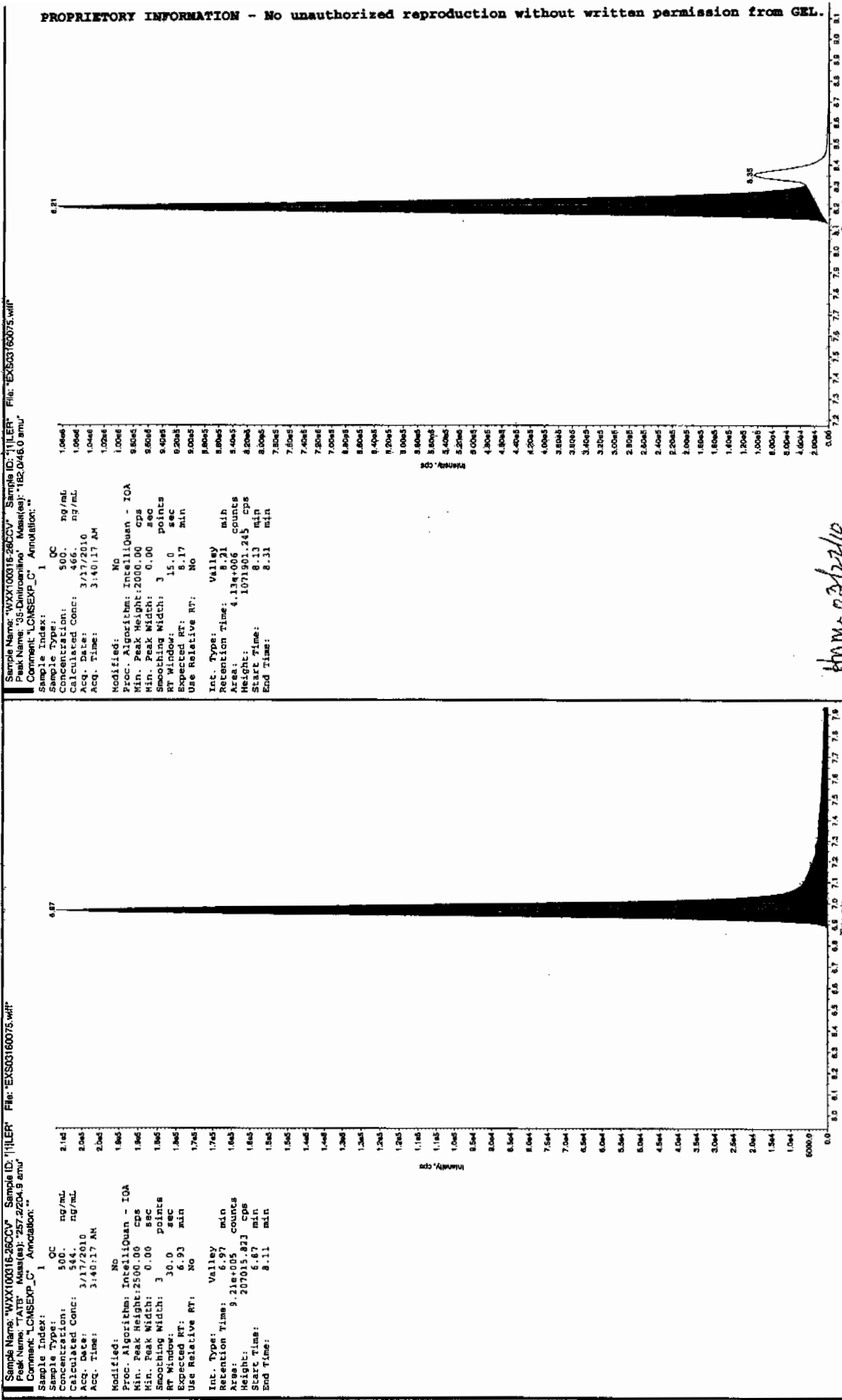
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 31/87



Sample Name: "WXX100316-280CV" Sample ID: "JILER" File: "EX503160075.wif"
Peak Name: "TATB" Mass(es): "257.22049 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 466. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 3:40:17 AM
Modified: NO
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.17 min
Use Relative RT: NO
Int. Type: Valley
Retention Time: 8.21 min
Area: 4.134e+06 counts
Height: 1071901.245 cps
Start Time: 8.13 min
End Time: 8.31 min

Sample Name: "WXX100316-280CV" Sample ID: "JILER" File: "EX503160075.wif"
Peak Name: "TATB" Mass(es): "257.22049 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 344.0 ng/mL
Acq. Date: 3/17/2010
Acq. Time: 3:40:17 AM
Modified: NO
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.93 min
Use Relative RT: NO
Int. Type: Valley
Retention Time: 6.97 min
Area: 9.21e+05 counts
Height: 207015.873 cps
Start Time: 6.87 min
End Time: 8.11 min

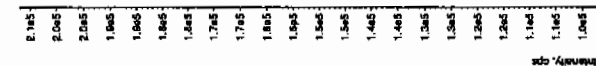
hmm-03/22/10

after Jan 31/9/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

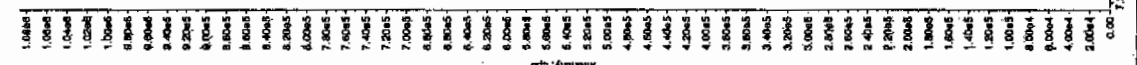
Sample Name: "WXX10016-2820V" Sample ID: "11ER" File: "EXS03160075.wif"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1 QC
Concentration: 500. ng/mL
Calculated Conc: 544. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 3:40:17 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 8.33 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 6.97 min
Area: 9.21e+005 counts
Height: 207015.823 cps
Start Time: 6.87 min
End Time: 8.11 min



Sample Name: "WXX10016-2820V" Sample ID: "11ER" File: "EXS03160075.wif"
Comment: "LCMSEXP_C" Annotation: ""

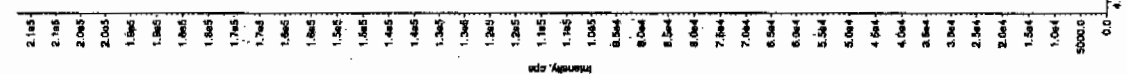
Sample Index: 1 QC
Concentration: 500. ng/mL
Calculated Conc: 487. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 3:40:17 AM
Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.17 min
Use Relative RT: No
Int. Type: Manual
Retention Time: 8.31 min
Area: 1.09e+006 counts
Height: 1099980.016 cps
Start Time: 8.13 min
End Time: 8.31 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

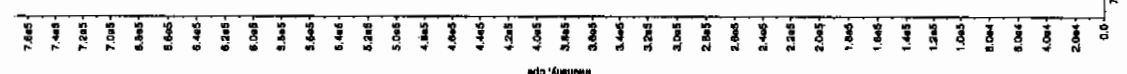
Sample Name: WXX100162500V Sample ID: 11111111 File: EX501160075.wif
 Peak Name: 25-Dianthol-4-nitrophenol Mass(es): 166.0460 amu
 Comment: LCMS EXP_C7 Annotation:

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 549. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:40:17 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.89 min
 Area: 8.86e+003 counts
 Height: 212553.741 cps
 Start Time: 4.89 min
 End Time: 5.26 min



Sample Name: WXX100162500V Sample ID: 11111111 File: EX501160075.wif
 Peak Name: 34-Dianthol-4-nitrophenol Mass(es): 182.1715.9 amu
 Comment: LCMS EXP_C7 Annotation:

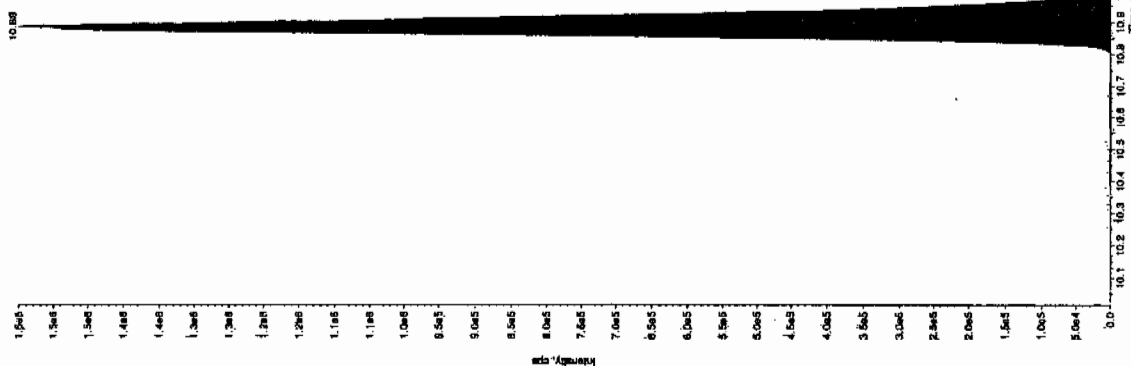
Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 221. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:40:17 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Area: 2.42e+006 counts
 Height: 764865.356 cps
 Start Time: 8.28 min
 End Time: 8.56 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

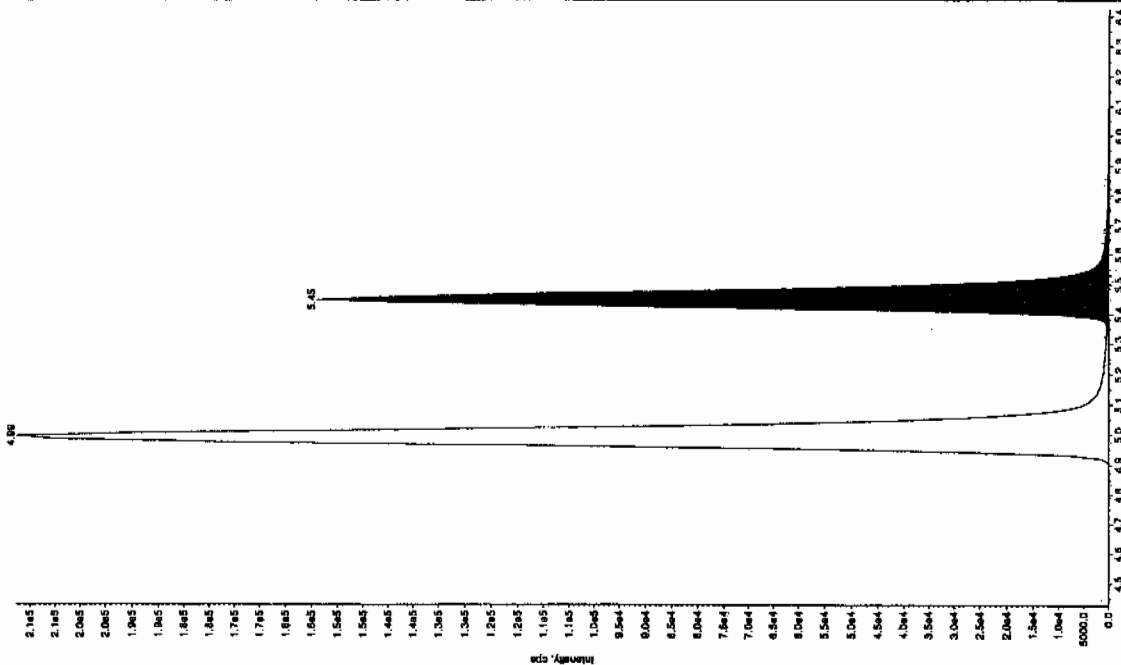
Sample Name: "WXX10016-2600V" Sample ID: "1115P" File: "EXS03160075.wif"
 Peak Name: "24-Diamino-4-methylphenylphosphine" Mass(es): 359.191.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 515. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:40:17 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.37e+005 counts
 Height: 1550127.319 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX10016-2600V" Sample ID: "1115P" File: "EXS03160075.wif"
 Peak Name: "24-Diamino-4-methylphenylphosphine" Mass(es): 166.046.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 579. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 3:40:17 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.45 min
 Area: 6.33e+005 counts
 Height: 153815.674 cps
 Start Time: 5.33 min
 End Time: 5.55 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160077.wiff

Analysis Date: 17-MAR-10 04:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	113	113	
2,6-Diamino-4-nitrotoluene	100	115	115	
3,4-Dinitrotoluene	50	46.8	94	
3,5-Dinitroaniline	100	94.8	95	
TATB	100	112	112	
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

Jan 31/0110

Sample Name: "WXX10016-27CR" Sample ID: "111ER" File: "EX50160077.mpl"

Peak Name: "35-Dinitrofluorene" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC

Concentration: 100. ng/mL

Calculated Conc: 94.8 ng/mL

Acq. Date: 3/17/2010

Acq. Time: 6:11:41 AM

Modified:

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.17 min

Use Relative RT: No

Int. Type: Valley

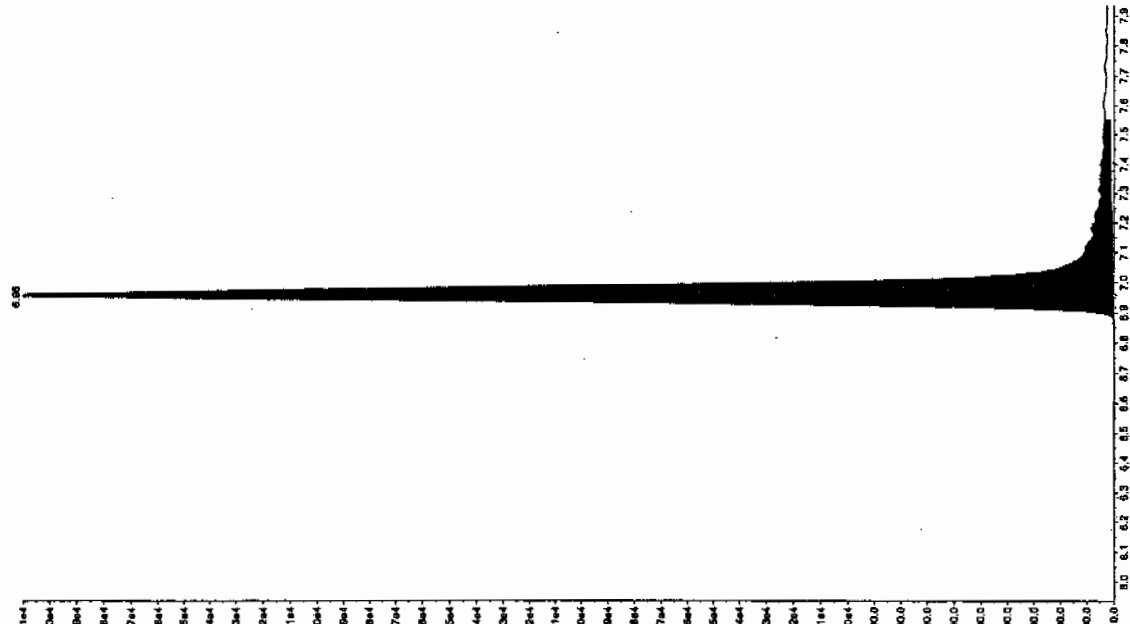
Retention Time: 8.20 min

Area: 9.45e+005 counts

Height: 243613.953 cps

Start Time: 8.10 min

End Time: 8.31 min



Sample Name: "WXX10016-27CR" Sample ID: "111ER" File: "EX50160077.mpl"

Peak Name: "TATB" Mass(es): "237.2004.9 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC

Concentration: 100. ng/mL

Calculated Conc: 112. ng/mL

Acq. Date: 3/17/2010

Acq. Time: 4:11:41 AM

Modified:

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.93 min

Use Relative RT: No

Int. Type: Valley

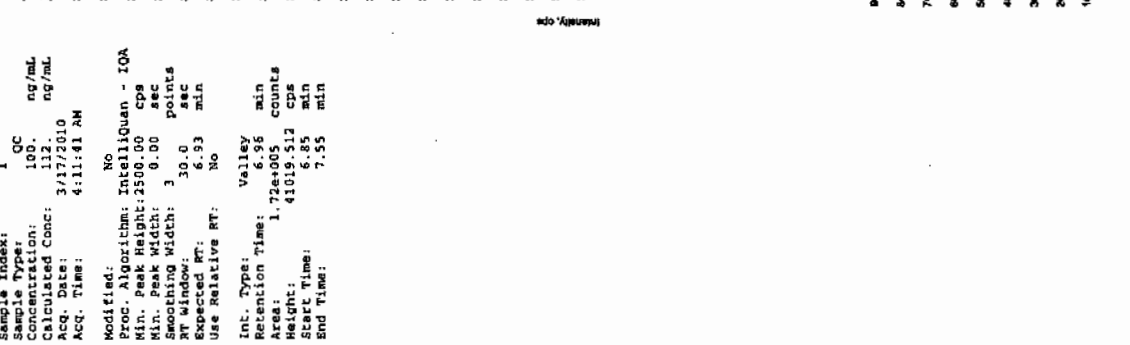
Retention Time: 6.96 min

Area: 1.72e+005 counts

Height: 41019.512 cps

Start Time: 6.85 min

End Time: 7.55 min

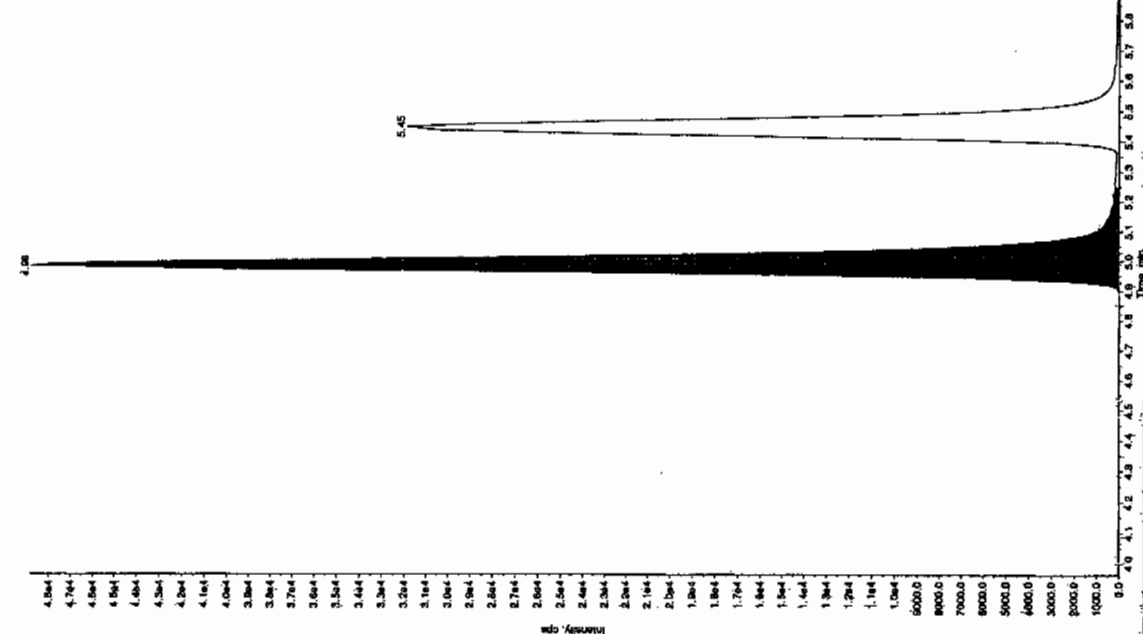


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: WXYZ100316-27091 Sample ID: 11111111 File: EX503160077.wif
 Peak Name: 25-Dimethyl-4-nitrophenol Mass(es): 153.046.0 amu
 Comment: LCMSEXP_C Annotation:

Sample Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 115 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:11:41 AM

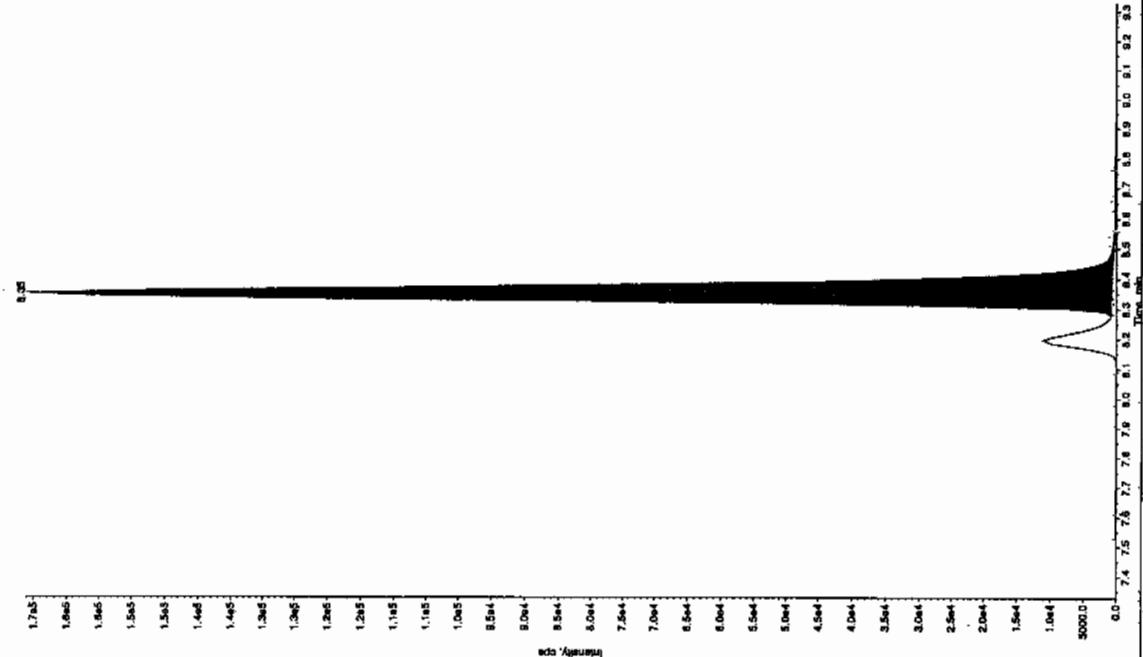
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 9.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.98 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 1.97 min
 Area: 48802.704 counts
 Height: 4.89 min
 Start Time: 5.25 min
 End Time:



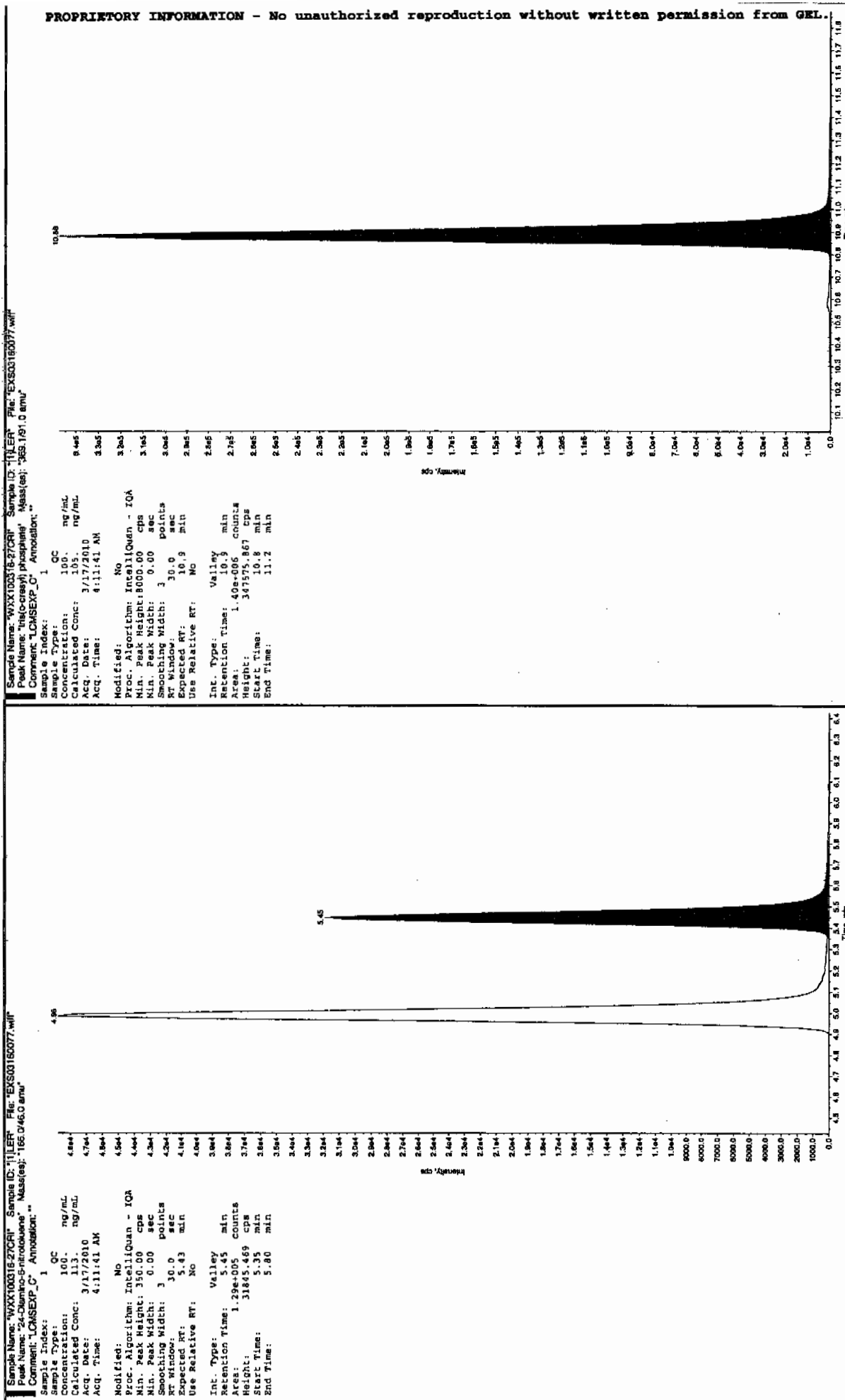
Sample Name: WXYZ100316-27091 Sample ID: 11111111 File: EX503160077.wif
 Peak Name: 25-Dimethyl-4-nitrophenol Mass(es): 153.046.0 amu
 Comment: LCMSEXP_C Annotation:

Sample Index: 1
 Sample Type: 100
 Concentration: 50.0 ng/mL
 Calculated Conc: 45.8 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:11:41 AM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.25 min
 Area: 6.01e+005 counts
 Height: 165406.525 cps
 Start Time: 8.28 min
 End Time: 8.56 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160088.wiff

Analysis Date: 17-MAR-10 07:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	571	114	
3,4-Dinitrotoluene	250	222	89	
3,5-Dinitroaniline	500	499	100	
TATB	500	540	108	
tris(o-cresyl) phosphate	500	544	109	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

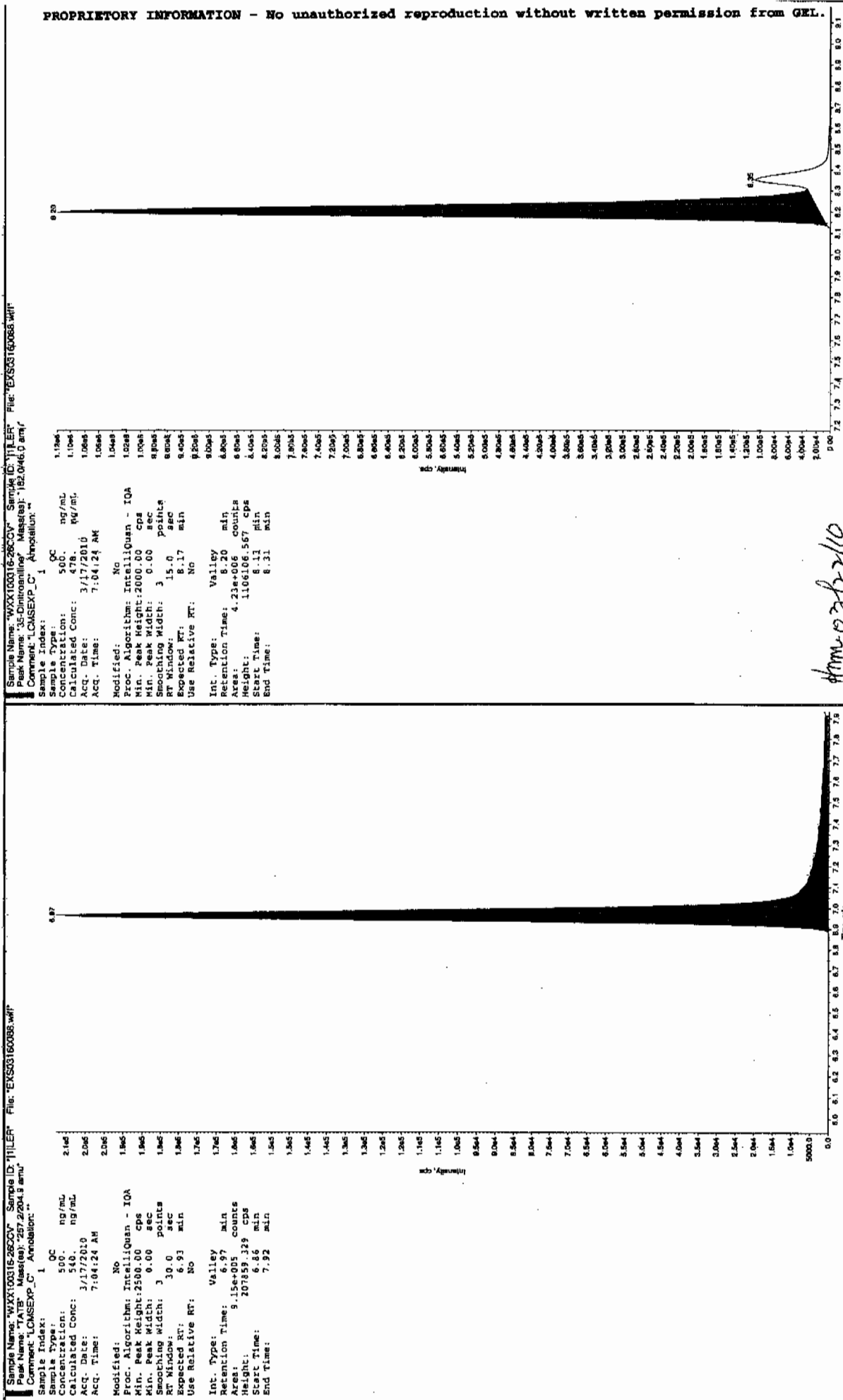
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

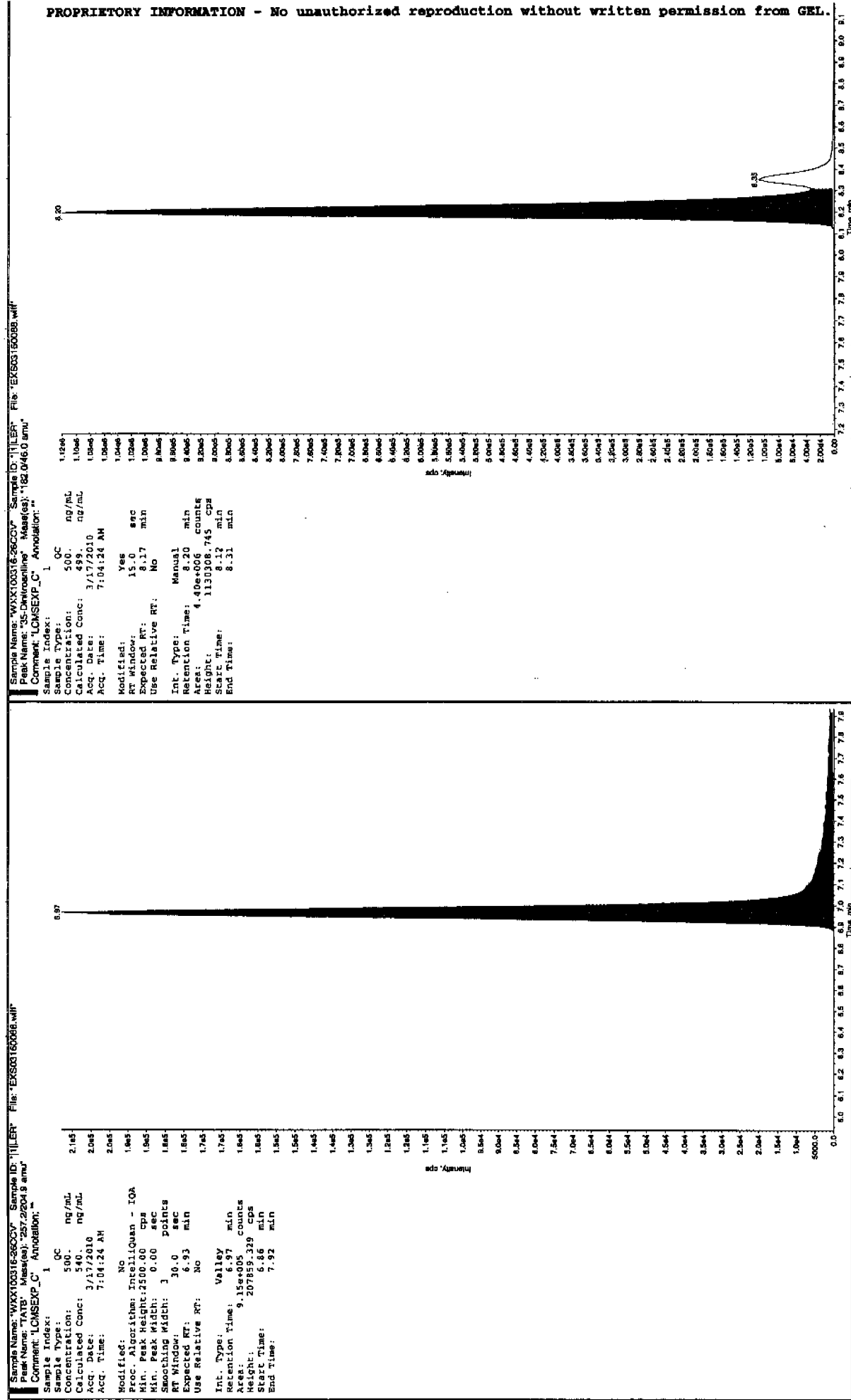
* Value outside of Recovery Limits

Before Jan 31/8/10



dm-032-110

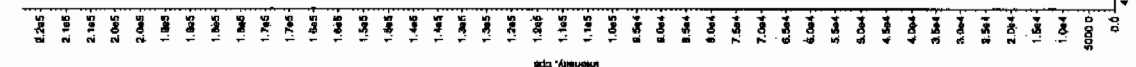
after Jan 31/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

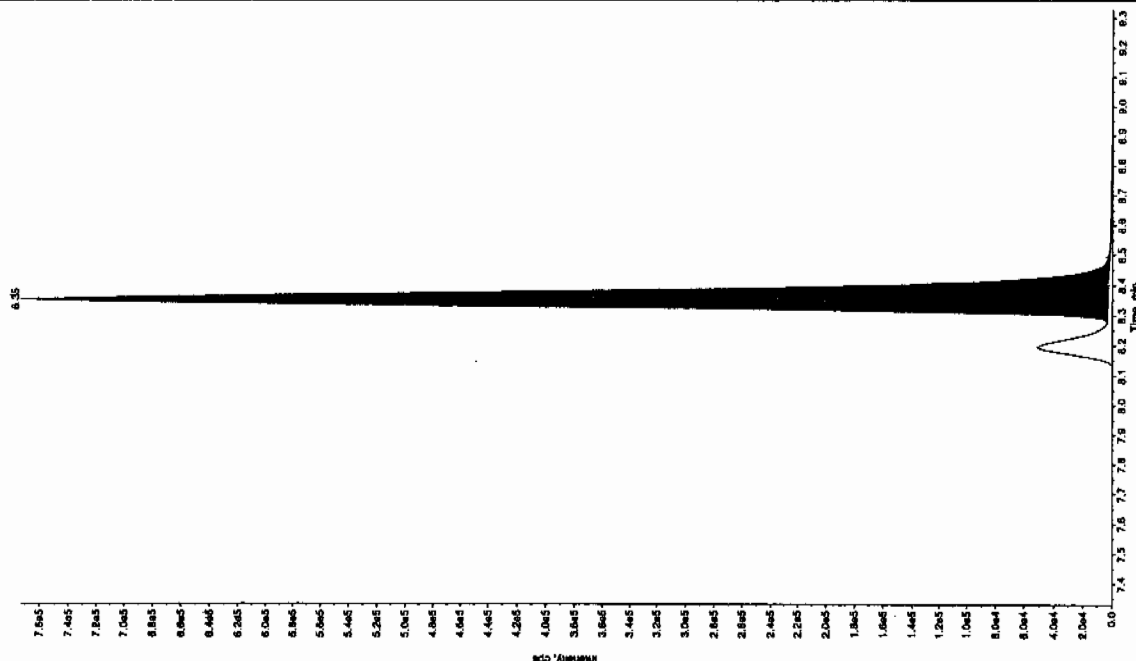
Sample Name: "WXX10016260CV" Sample ID: "JLER" File: "EXS0115008.w" Peak Name: "34-Ornitholuan" Mass(es): "182.1/151.3 amu" Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 300. ng/mL
 Calculated Conc: 571. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:04:24 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.99 min
 Area: 9.21e+005 counts
 Height: 218435.356 cps
 Start Time: 4.88 min
 End Time: 5.29 min

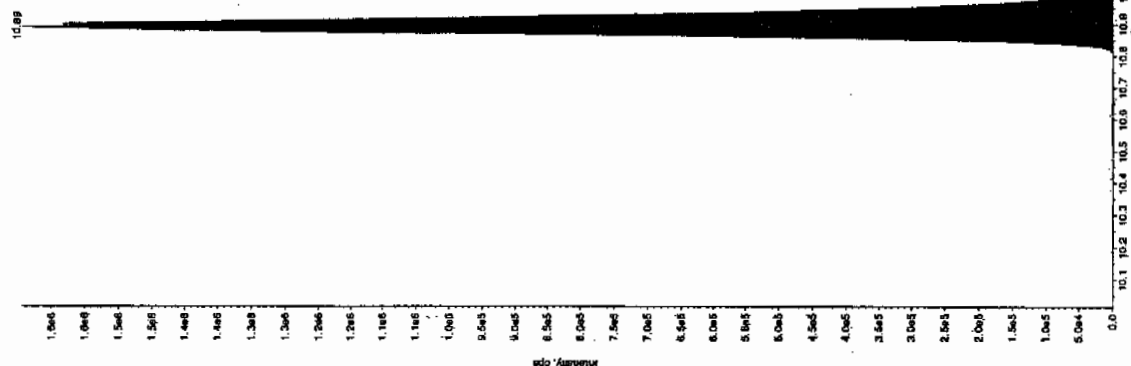


Sample Name: "WXX10016260CV" Sample ID: "JLER" File: "EXS0115008.w" Peak Name: "34-Ornitholuan" Mass(es): "182.1/151.3 amu" Comment: "LCMSEXP_C" Annotation: "

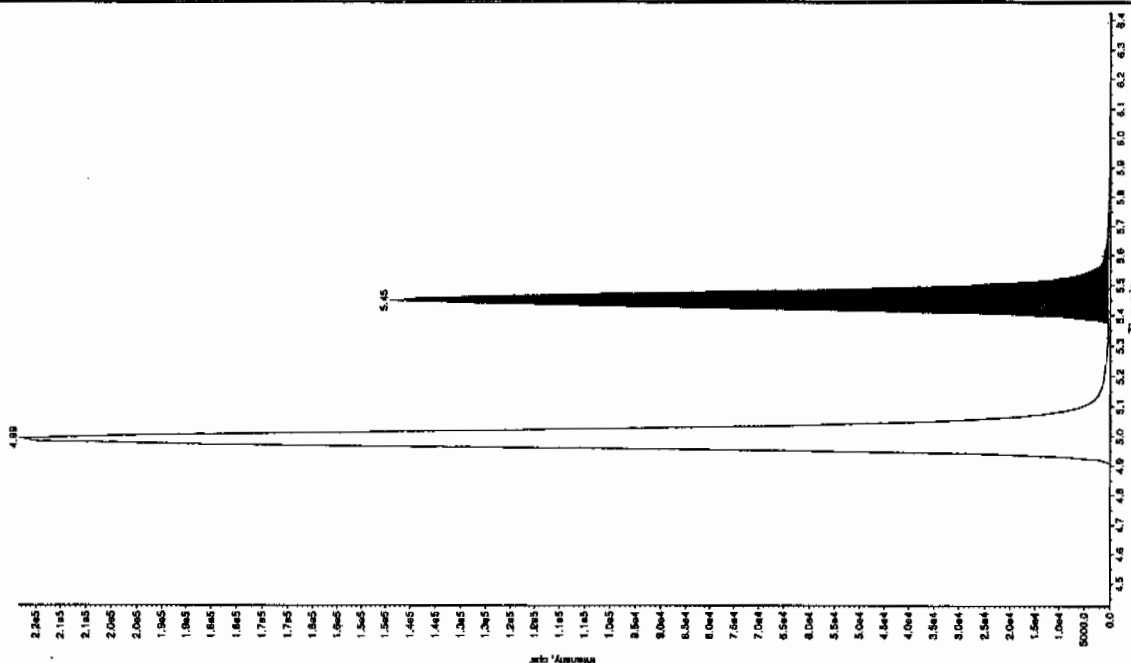
Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 222. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:04:24 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Area: 2.83e+006 counts
 Height: 770004.761 cps
 Start Time: 8.28 min
 End Time: 8.55 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Index:	1	QC
Sample Concentration:	500	ng/mL
Calculated Conc:	544	ng/mL
Acq. Date:	7/17/2010	
Acq. Time:	7:08:38 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	8000.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
Port Window:	30.0	sec
Expected RT:	10.5	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.9	min
Area:	6.70e+005	Counts
Height:	1645946.655	cps
Start Time:	10.8	min
End Time:	11.2	min



Sample Index:		QC	
Sample Type:	500	ng/mL	ng/mL
Concentration:	371.78010		
Calculated Conc:	371.78010		
Acq. Time:	7:08:24 AM		
Modified:		No	
ModProc:	Algorithm: IntelliQuan - IQA		
Min. Peak Height:	350.00 cps		
Min. Peak Width:	0.00 sec		
Smoothing Width:	3 points		
Run Window:	30.0 sec		
Expected RT:	5.43 min		
Use Relative RT:	No		
Int. Type:		Valley	
Retention Time:	5.45 min		
Area:	5.78e+005 counts		
Height:	143684.952 cps		
Start Time:	5.33 min		
End Time:	5.73 min		

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160090.wiff

Analysis Date: 17-MAR-10 07:35

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	112	112	
2,6-Diamino-4-nitrotoluene	100	113	113	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	90.4	90	
TATB	100	111	111	
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%

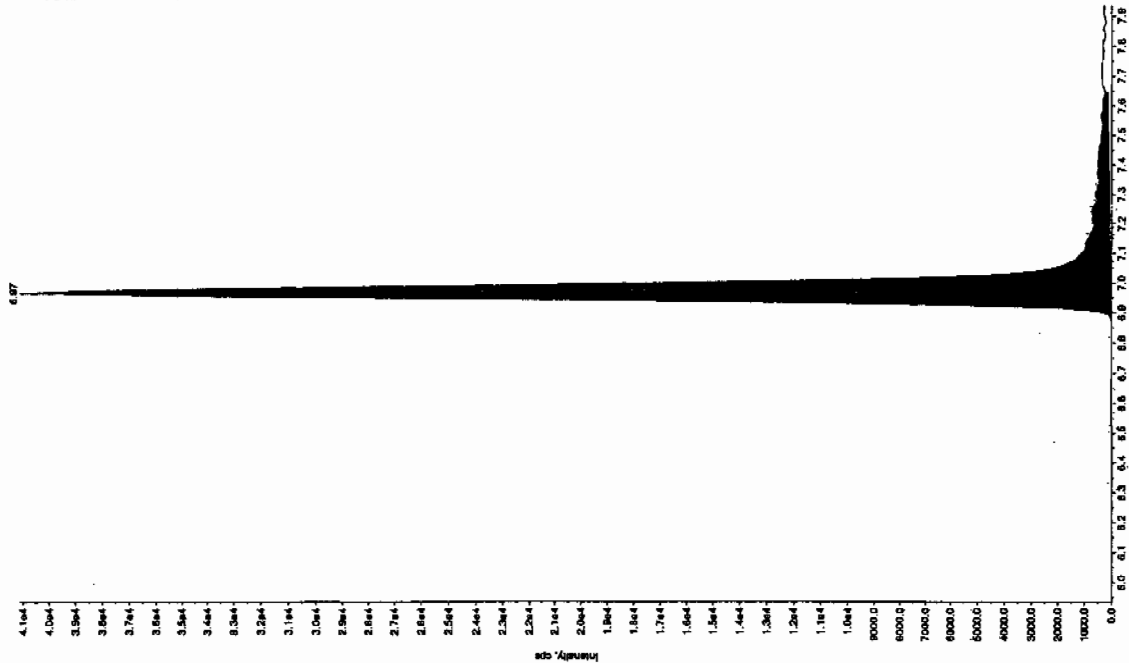
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

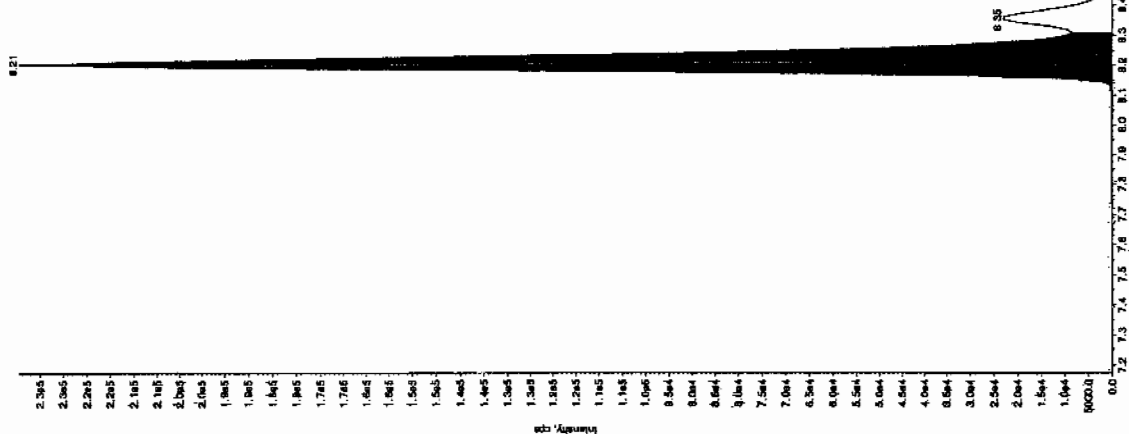
Sample Name: "WXX100316-27CRP" Sample ID: "JLIER" File: "EX503160050.will"
 Peak Name: "1A1B" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 111. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:35:49 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 5.93 min
 Expected RT: No
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.97 min
 Area: 1.70e+005 counts
 Height: 4117.401 cps
 Start Time: 6.85 min
 End Time: 7.65 min



Sample Name: "WXX100316-27CRP" Sample ID: "JLIER" File: "EX503160050.will"
 Peak Name: "35-Dinitroanthracene" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 90.4 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:35:49 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 8.17 min
 Expected RT: No
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.21 min
 Area: 9.06e+005 counts
 Height: 234618.408 cps
 Start Time: 8.10 min
 End Time: 8.31 min

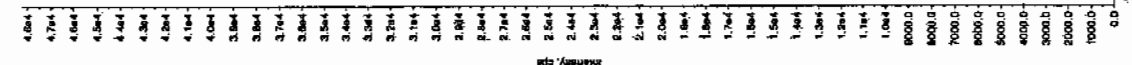


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

dhm-03/20/10

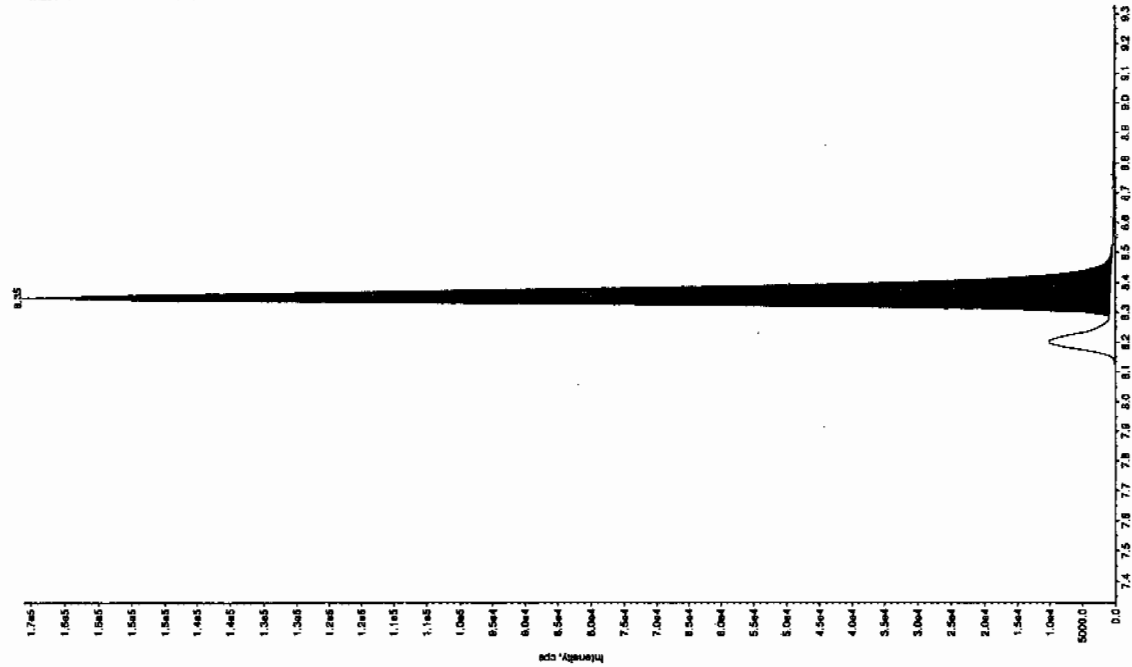
Sample Name: "XXX100316-27CR" Sample ID: "JLER" File: "EX90160090.wif"
 Peak Name: "25-Diethyl-4-nitrobenzene" Mass(es): "156.0480 amu"
 Comment: "LONSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 113. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:15:49 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Width: 450.00 cps
 Min. Peak Height: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.95 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.95 min
 Area: 1.92e+005 counts
 Height: 48250.282 cps
 Start Time: 4.90 min
 End Time: 5.28 min



Sample Name: "XXX100316-27CR" Sample ID: "JLER" File: "EX90180050.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1519 amu"
 Comment: "LONSEXP_C" Annotation: "

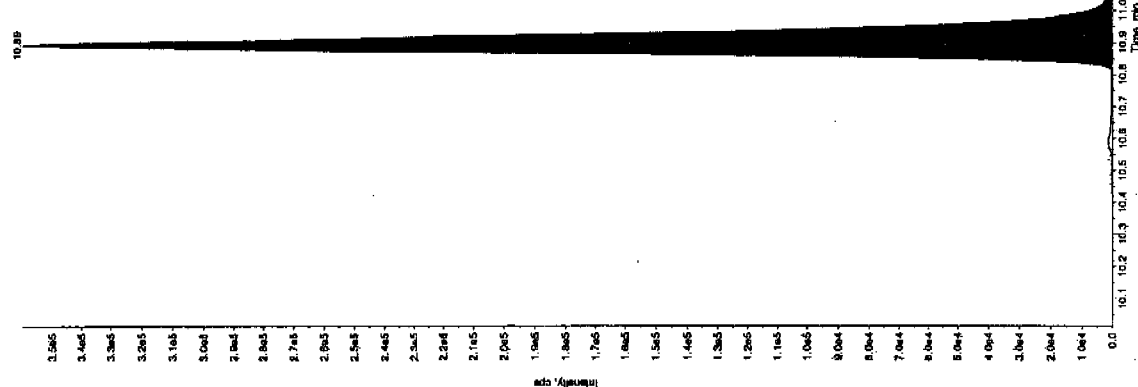
Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 46.1 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:15:49 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Width: 1460.00 cps
 Min. Peak Height: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.35 min
 Area: 5.92e+005 counts
 Height: 155481.323 cps
 Start Time: 8.28 min
 End Time: 8.54 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

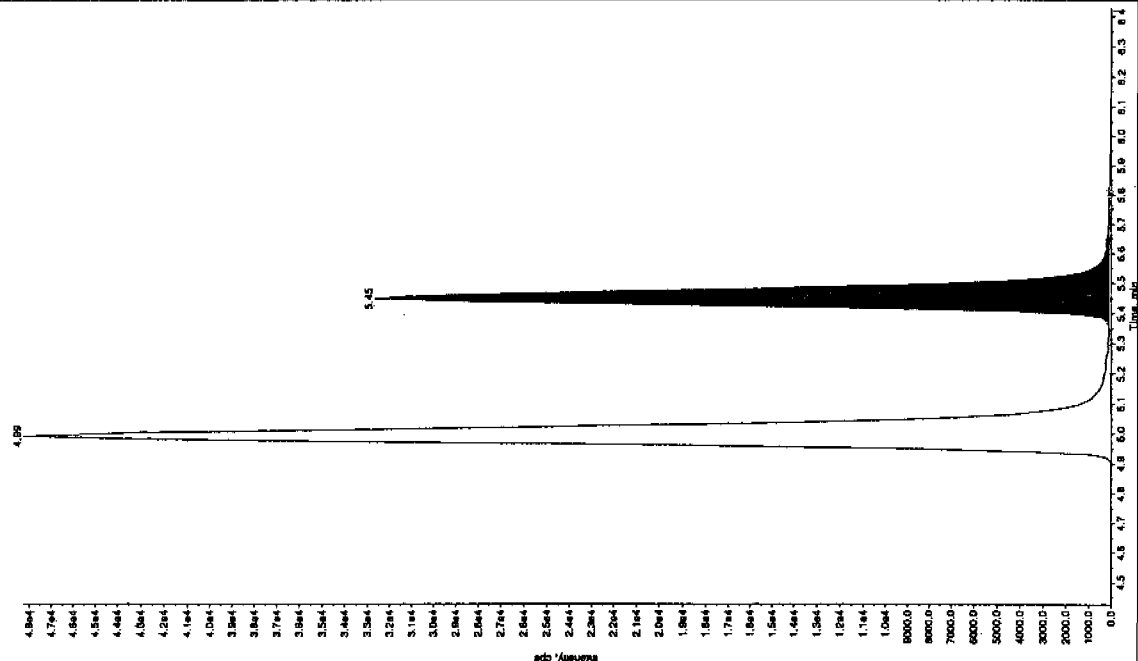
Sample Name: "WX100316-270R1" Sample ID: "111ER" File: "EX503160080.wif"
 Peak Name: "1,4-Dioxane-6-nitrobenzene" Mass(es): "168.0946.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:35:49 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.45e+006 counts
 Height: 359624.390 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WX100316-270R1" Sample ID: "111ER" File: "EX503160080.wif"
 Peak Name: "24-Dinitro-6-nitrobenzene" Mass(es): "168.0946.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 112. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 7:35:49 AM
 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: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.45 min
 Area: 1.28e+005 counts
 Height: 32551.216 cps
 Start Time: 5.33 min
 End Time: 5.72 min



*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): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160101.wiff

Analysis Date: 17-MAR-10 10:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	485	97	
2,6-Diamino-4-nitrotoluene	500	530	106	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	501	100	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	560	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%

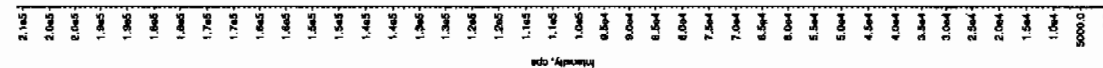
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 31/8/10

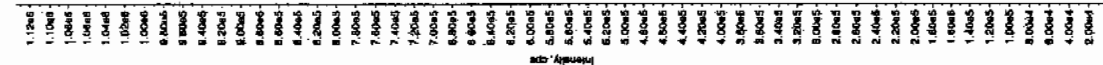
Sample Name: "WXX100316-260CV" Sample ID: "HILER" File: "EXS03160101.wif"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 535. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 10:28:32 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.93 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 6.94 min
Area: 9.05e+005 counts
Height: 206104.446 cps
Start Time: 6.85 min
End Time: 7.95 min



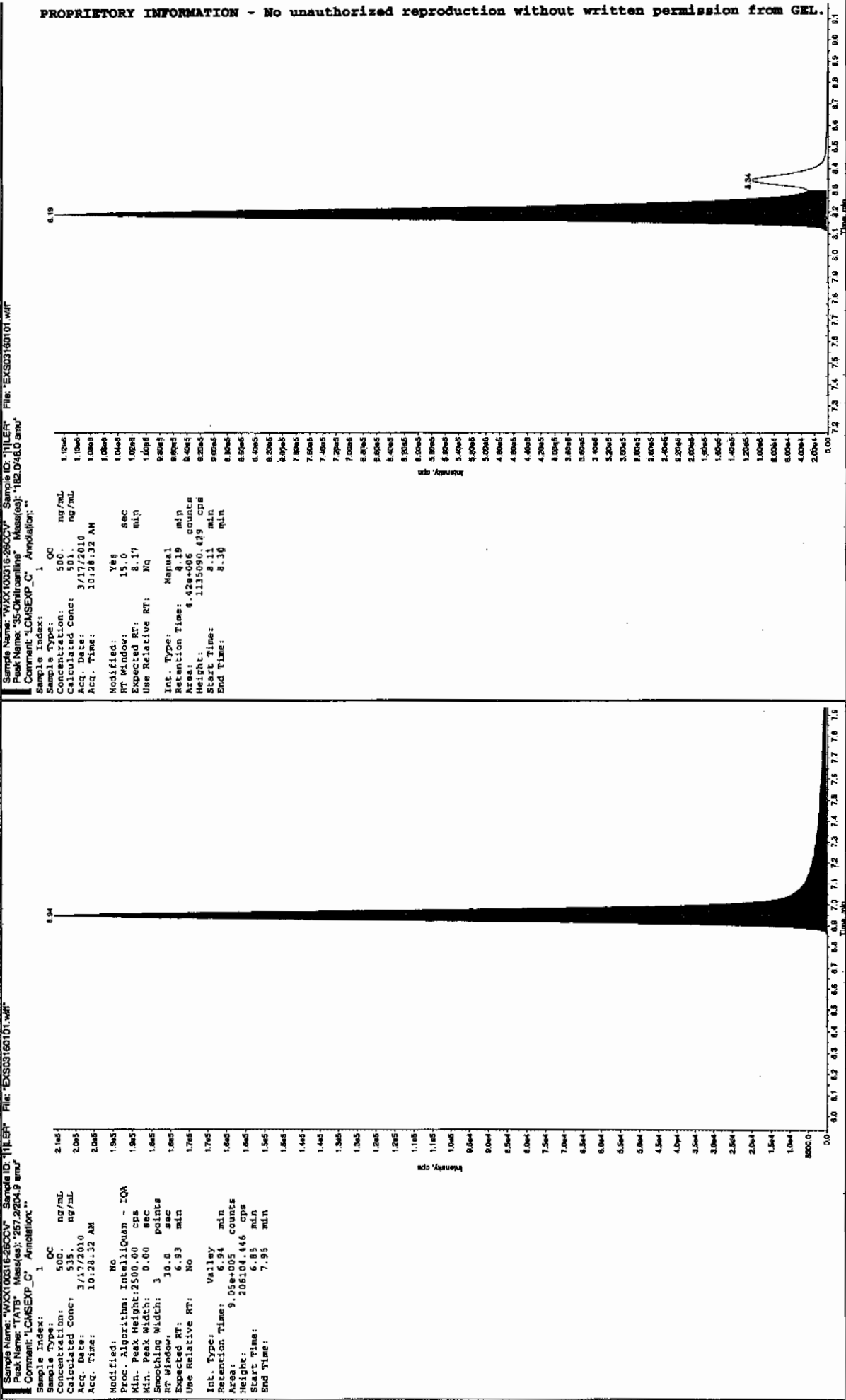
Sample Name: "WXX100316-260CV" Sample ID: "HILER" File: "EXS03160101.wif"
Peak Name: "3S-Dinitroaniline" Mass(es): "182.0/186.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 483. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 10:28:32 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.17 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.19 min
Area: 4.27e+006 counts
Height: 1122194.946 cps
Start Time: 8.11 min
End Time: 8.30 min



After Jan 31/8/10

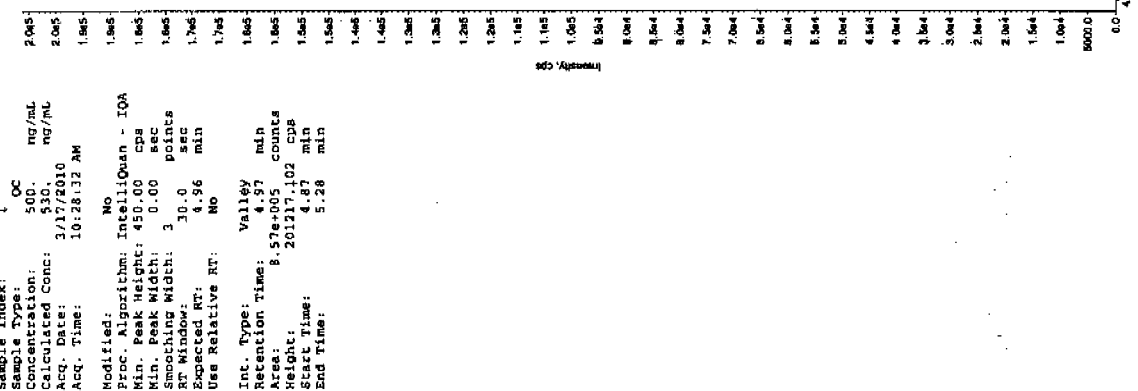
after Jan 31/9/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX10016-280V" Sample ID: "111ER" File: "EXS0180101.wif"
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "165.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500. ng/mL
 Calculated Conc: 530. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:28:32 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.97 min
 Area: 8.57e+005 counts
 Height: 201217.102 cps
 Start Time: 4.87 min
 End Time: 5.28 min



Sample Name: "WXX10016-280V" Sample ID: "111ER" File: "EXS0180101.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

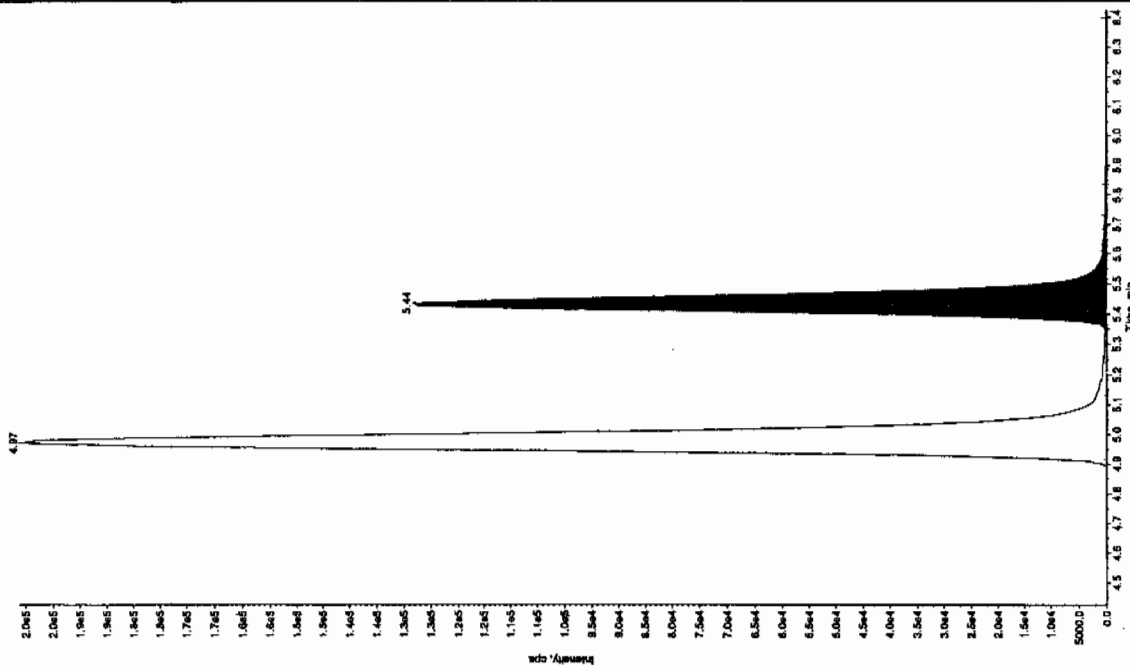
Sample Index: 1
 Sample Type: OC
 Concentration: 250. ng/mL
 Calculated Conc: 230. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:28:32 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 2.92e+006 counts
 Height: 751423.401 cps
 Start Time: 8.27 min
 End Time: 8.54 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

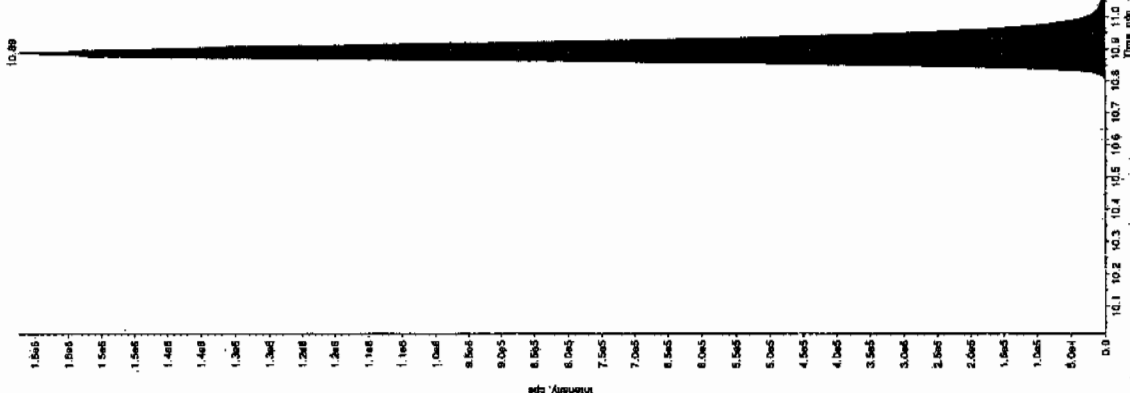
Sample Name: "WXX100316-2600V" Sample ID: "111.ERY" File: "EX603160101.wif"
 Peak Name: "24-Chloro-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 485 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:28:35 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.44 min
 Area: 33258 counts
 Height: 128360.845 cps
 Start Time: 5.34 min
 End Time: 5.96 min



Sample Name: "WXX100316-2600V" Sample ID: "111.ERY" File: "EX603160101.wif"
 Peak Name: "bis(2-chloroethyl) phosphine" Mass(es): "359.151.0 amu"
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 560 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:28:32 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.88e+05 counts
 Height: 162480.076 cps
 Start Time: 10.8 min
 End Time: 11.2 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160103.wiff

Analysis Date: 17-MAR-10 10:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	100	102	102	
3,4-Dinitrotoluene	50	47.8	96	
3,5-Dinitroaniline	100	92	92	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	113	113	
2,4-Diamino-6-nitrotoluene	100	94.3	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

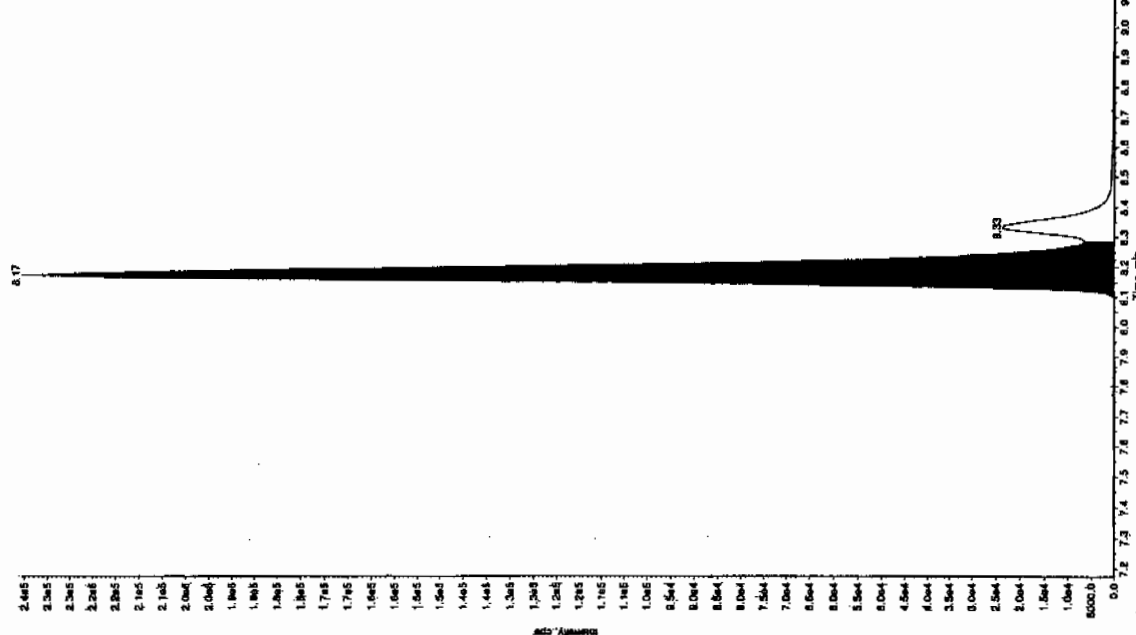
* Value outside of Recovery Limits

See 3/19/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

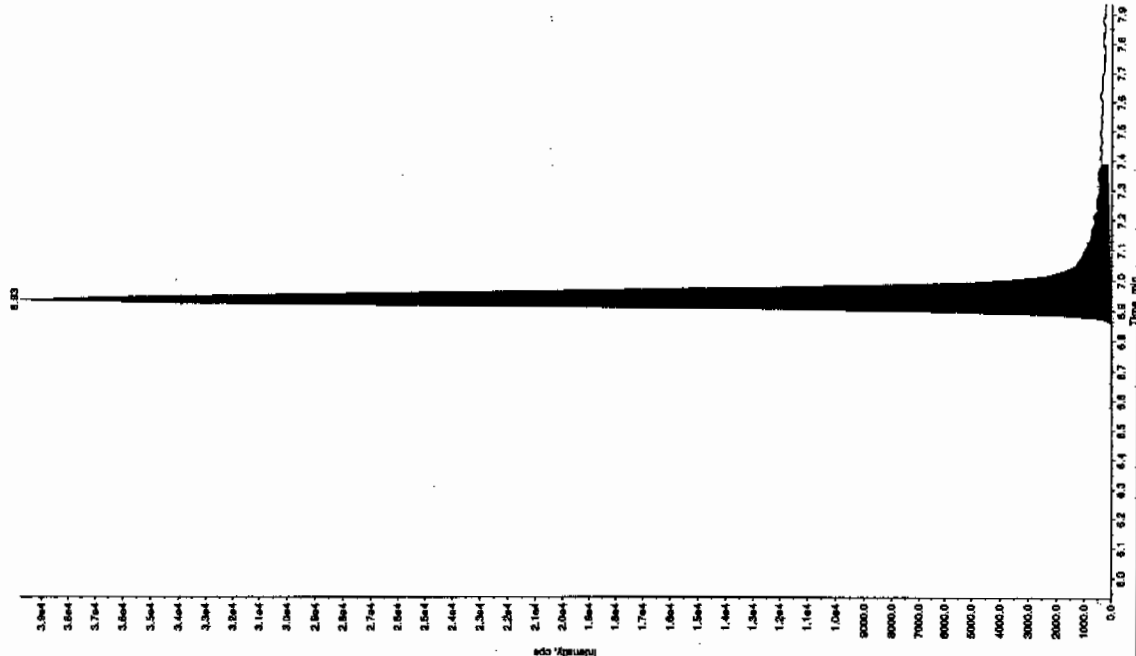
Sample Name: "WXX10016-270R" Sample ID: "111ER" File: "EXS03160103.wif"
 Peak Name: "35-Dinitroanisole" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 92.0 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:59:58 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 15.0 sec
 Expected RT: 8.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.17 min
 Area: 9.21e+005 counts
 Height: 235489.853 cps
 Start Time: 8.06 min
 End Time: 8.29 min



Sample Name: "WXX10016-270R" Sample ID: "111ER" File: "EXS03160103.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:59:58 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 6.93 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.93 min
 Area: 1.61e+005 counts
 Height: 39746.597 cps
 Start Time: 6.82 min
 End Time: 7.39 min



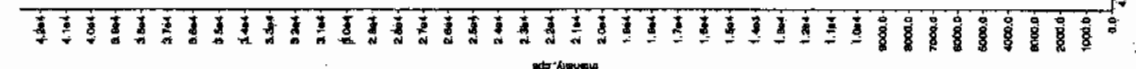
See 03/22/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100316-270R" Sample ID: "JILLER" File: "EXS03160103.w" Peak Name: "26-Dienro-4-nitrobenzene" Mass(es): "166.046.0 amu"

Comment: "LCMSEXP_C" Annotation: "

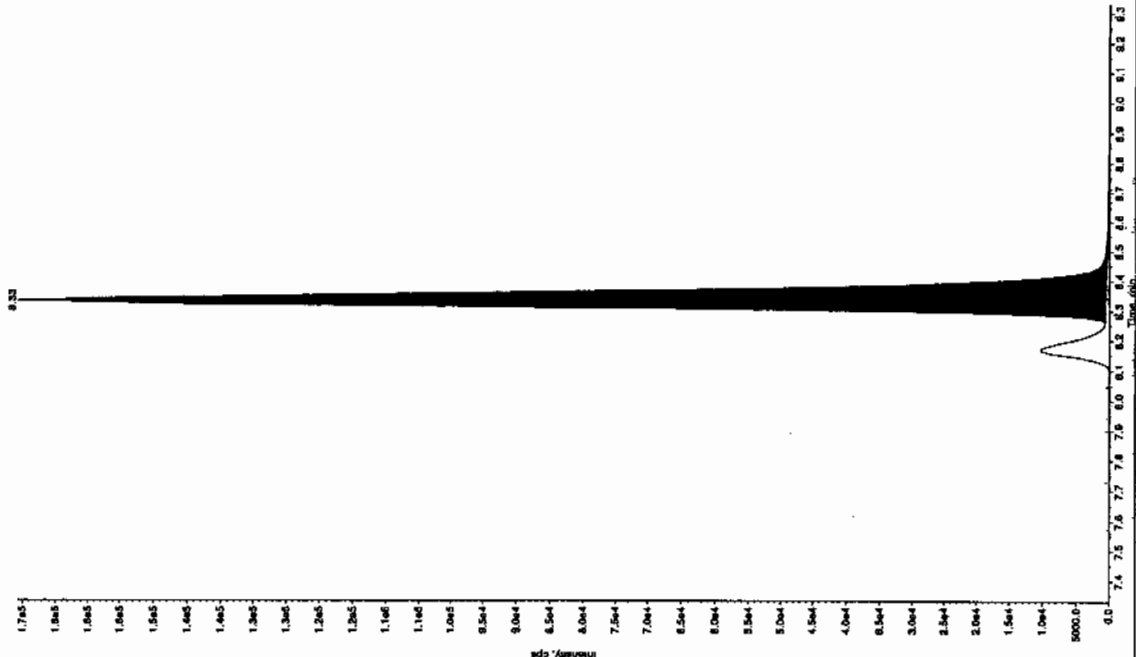
Sample Index: 1
Sample Type: OC
Concentration: 100. ng/mL
Calculated Conc: 102. ng/mL
Acq. Date: 3/17/2010
Acq. Time: 10:59:58 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 450.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 4.86 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 4.87 min
Area: 1.76e+005 counts
Height: 42826.344 cps
Start Time: 4.87 min
End Time: 5.27 min



Sample Name: "WXX100316-270R" Sample ID: "JILLER" File: "EXS03160103.w" Peak Name: "34-Dinitrobenzene" Mass(es): "182.1519.0 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: OC
Concentration: 50.0 ng/mL
Calculated Conc: 3/17/2010
Acq. Date: 10:59:58 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.33 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.33 min
Area: 6.13e+005 counts
Height: 165180.801 cps
Start Time: 8.28 min
End Time: 8.62 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

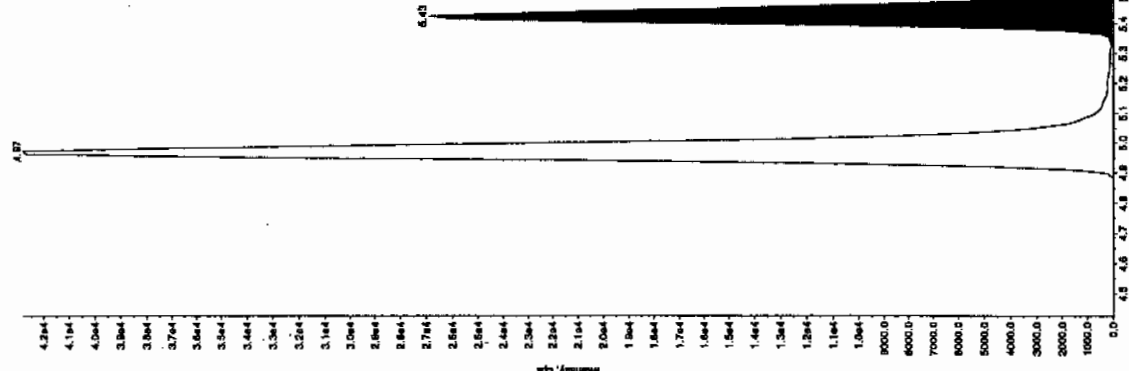
Sample Name: "WXX100316-270R" Sample ID: "11LEF" File: "EX03160103.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "359.179.10 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1 QC
 Concentration: 100 ng/mL
 Calculated Conc: 113. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:59:58 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.50e+006 counts
 Height: 359981.321 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100316-270R" Sample ID: "11LEF" File: "EX03160103.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "156.0463.0 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1 QC
 Concentration: 100 ng/mL
 Calculated Conc: 94.3 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 10:59:58 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.43 min
 Area: 1.09e+005 counts
 Height: 26826.241 cps
 Start Time: 5.32 min
 End Time: 5.75 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03160108.wiff

Analysis Date: 17-MAR-10 12:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	492	98	
2,6-Diamino-4-nitrotoluene	500	544	109	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	494	99	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	564	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

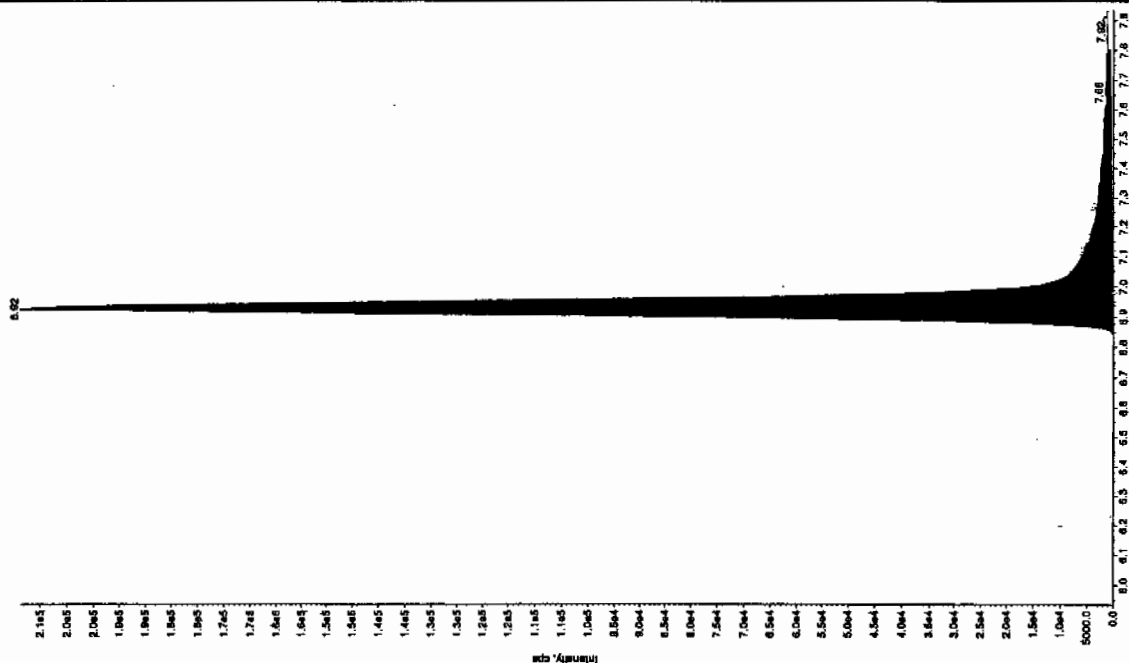
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 3/19/10

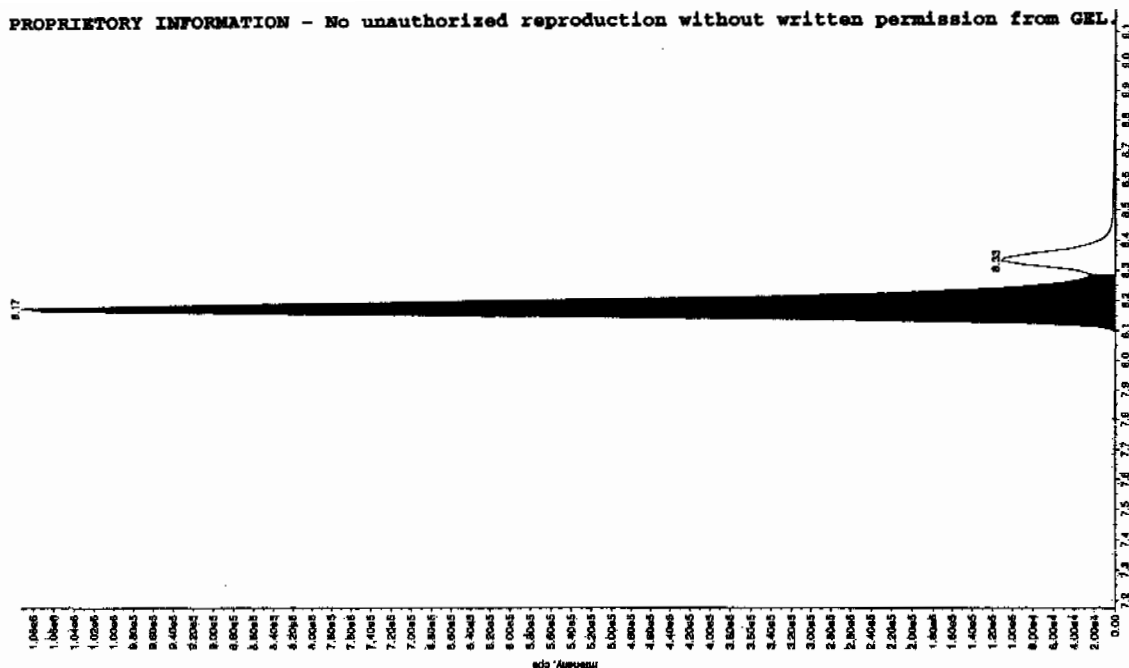
Sample Name: "WXX100316-260CV" Sample ID: "H1LER" File: "EX503160108.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 12/18/28 PM
 Acq. Time: 12:18:28 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.93 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.92 min
 Area: 9.05e+005 counts
 Height: 20883.005 cps
 Start Time: 5.82 min
 End Time: 7.50 min



Sample Name: "WXX100316-260CV" Sample ID: "H1LER" File: "EX503160108.wif"
 Peak Name: "3S-Dinitrobenzidine" Mass(es): "162.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 12/18/28 PM
 Acq. Time: 12:18:28 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.17 min
 Area: 4.36e+006 counts
 Height: 109200.988 cps
 Start Time: 8.08 min
 End Time: 8.23 min



Amc 02/22/10

Sample Name: WXX100316-260CV Sample ID: 111187 File: EX503160108.will

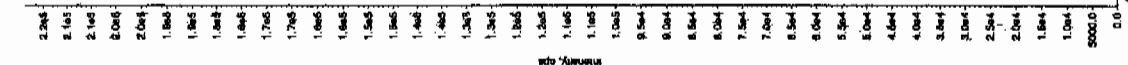
Peak Name: 26-Dinitro-4-nitrofluorene Mass(es): 186.046.0 amu

Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 590. ng/mL
 Calculated Conc: 544. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:18:28 PM

Modified: No
 Proc. Algorithm: Inlet/Quench - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 4.96 min
 Area: 8.79e+005 counts
 Height: 218748.459 cps
 Start Time: 4.83 min
 End Time: 5.26 min



Sample Name: WXX100316-260CV Sample ID: 111187 File: EX503160108.will

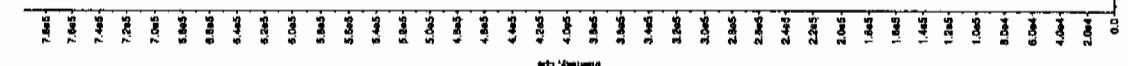
Peak Name: 34-Dinitrofluorene Mass(es): 182.1451.9 amu

Comment: LCMSEXP_C1 Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 228. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:18:28 PM

Modified: No
 Proc. Algorithm: Inlet/Quench - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No

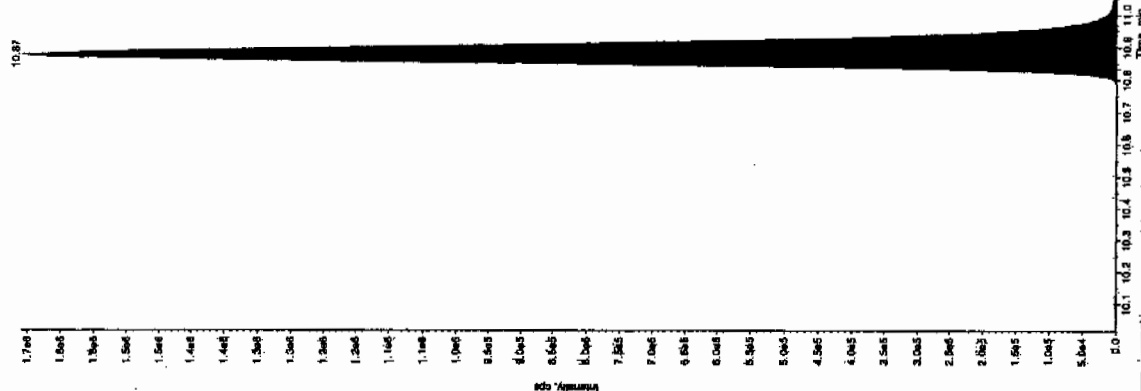
Int. Type: Valley
 Retention Time: 8.33 min
 Area: 2.90e+006 counts
 Height: 794457.214 cps
 Start Time: 8.26 min
 End Time: 8.58 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

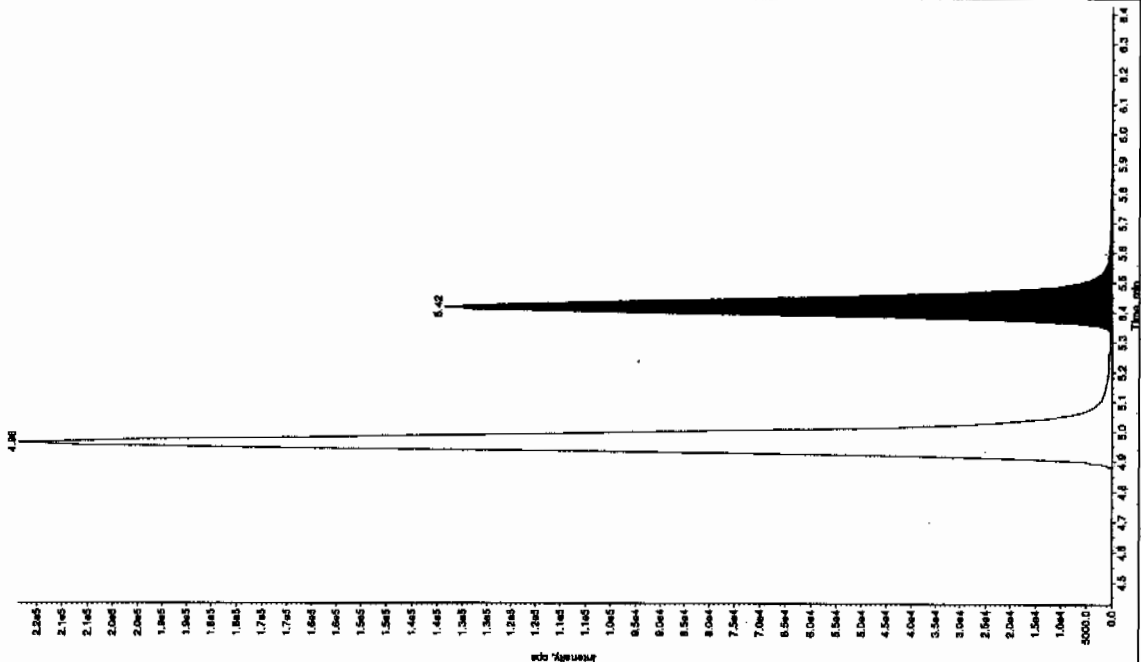
Sample Name: "WXX10016-260V" Sample ID: "111111" File: "EXS03160108.wif"
 Peak Name: "Info: (phenol)" Mass(es): "353.173.0 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 564. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:18:28 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.93e+006 counts
 Height: 1658983.715 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX10016-260V" Sample ID: "111111" File: "EXS03160108.wif"
 Peak Name: "Info: (phenol)" Mass(es): "186.046.0 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 492. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:18:28 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.42 min
 Area: 3.39e+006 counts
 Height: 13344976 cps
 Start Time: 5.12 min
 End Time: 5.81 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2134

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03160110.wiff

Analysis Date: 17-MAR-10 12:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	94.2	94	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	47.6	95	
3,5-Dinitroaniline	100	93.2	93	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	115	115	

Recovery Limits:

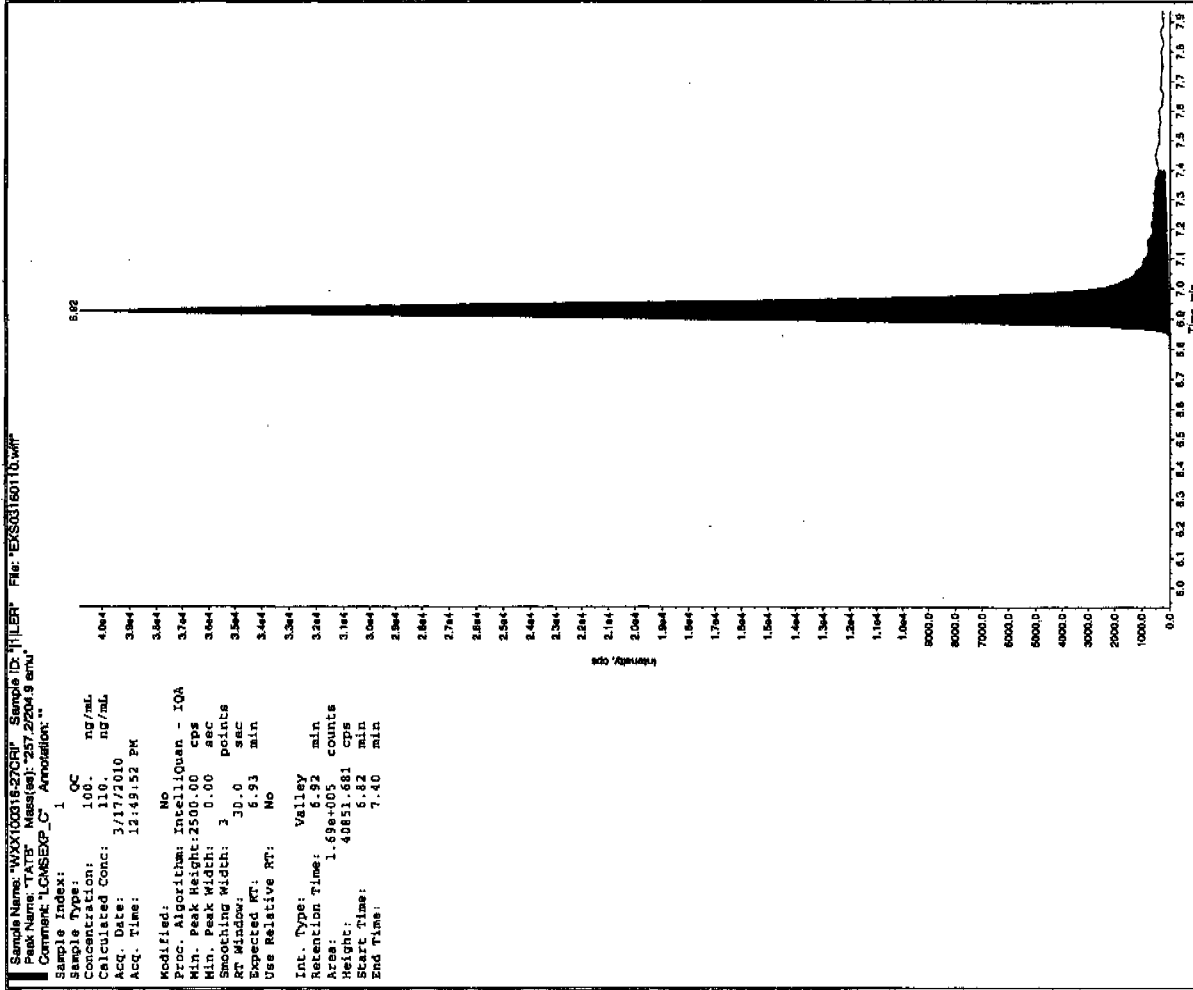
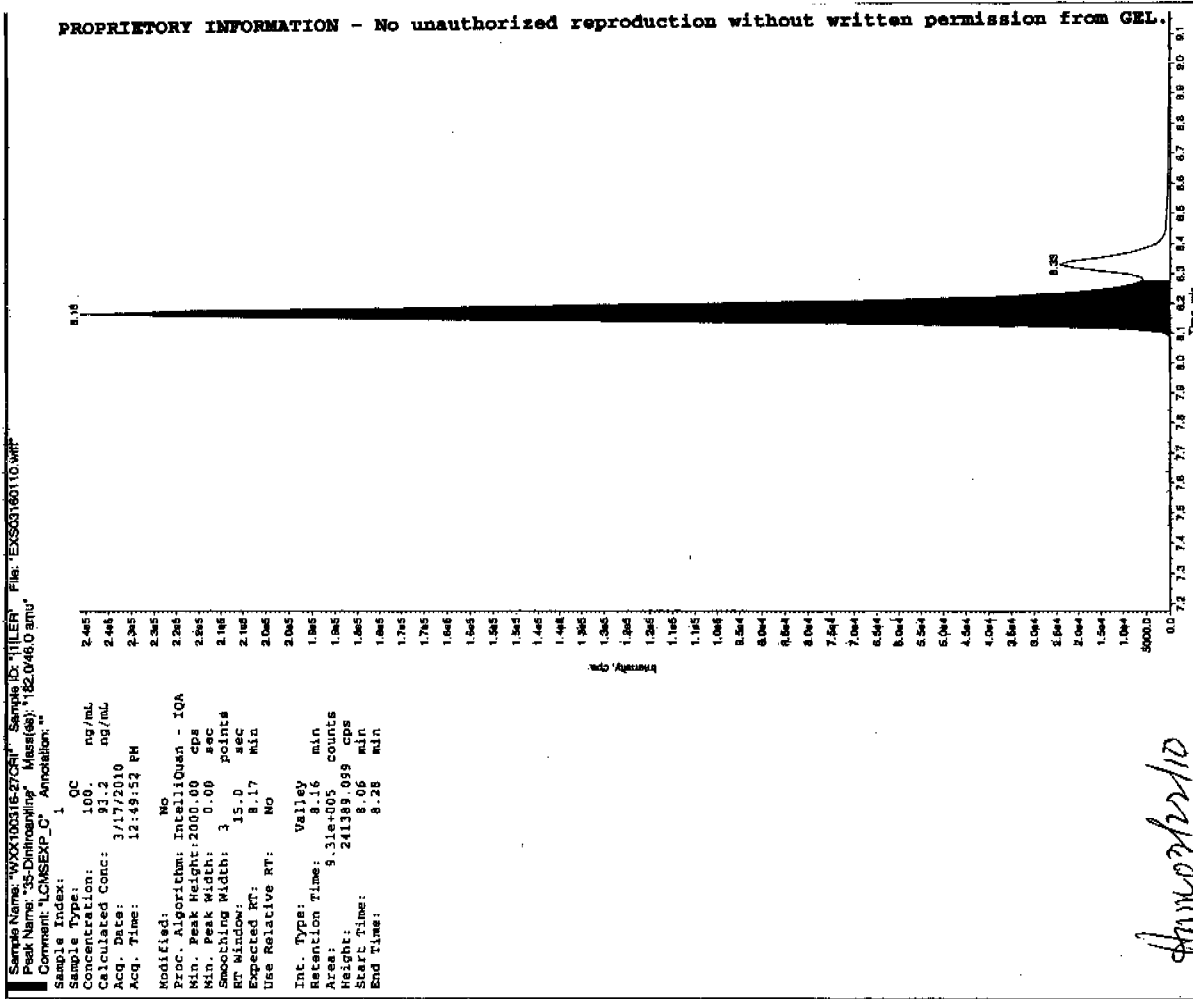
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

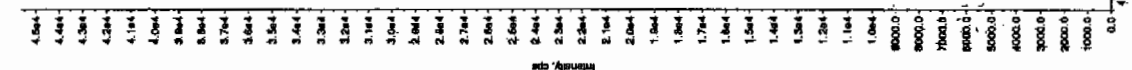
Law 3/19/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

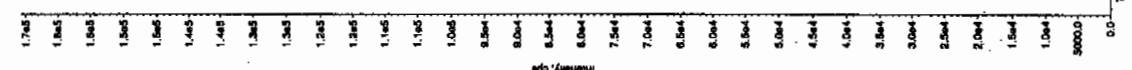
Sample Name: "WXX10016-201R" Sample ID: "111ER" File: "EXSD160110.wif"
 Peak Name: "26-Diamino-4-ethyltoluene" Mass(es): "150.0(46.0 amu)"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 108. ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 12:49:52 PM
 Acq. Time: 12:49:52 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: 4.95 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.95 min
 Area: 1.85e+005 counts
 Height: 45633.869 cps
 Start Time: 4.84 min
 End Time: 5.05 min



Sample Name: "WXX10016-201R" Sample ID: "111ER" File: "EXSD160110.wif"
 Peak Name: "26-Diamino-4-ethyltoluene" Mass(es): "150.0(46.0 amu)"
 Comment: "LCMSEXP_C" Annotation: "

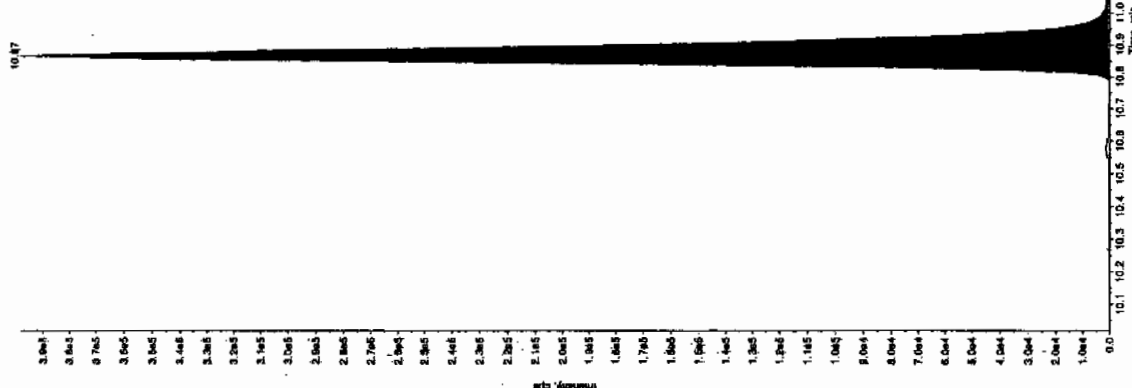
Sample Index: 1 QC
 Sample Type: 50.0 ng/mL
 Concentration: 47.6 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 12:49:52 PM
 Acq. Time: 12:49:52 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 6.11e+005 counts
 Height: 185304.001 cps
 Start Time: 8.26 min
 End Time: 8.55 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

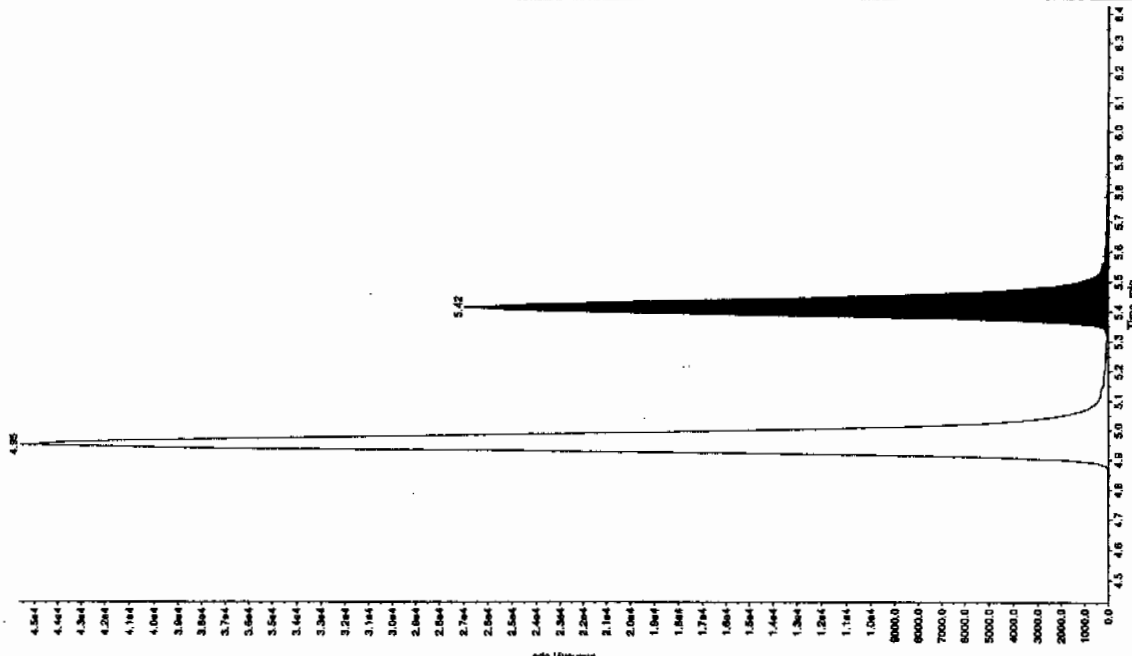
Sample Name: "WXX10016-27CR" Sample ID: "11ER" File: "EXS03160110.will"
 Peak Name: "bis(o-oresyl) phosphate" Mass(es): "363.191.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 115. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:49:52 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.51e+006 counts
 Height: 397921.478 cps
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: "WXX10016-27CR" Sample ID: "11ER" File: "EXS03160110.will"
 Peak Name: "24-Chloro-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 94.2 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 12:49:52 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.42 min
 Area: 1.09e+005 counts
 Height: 26921.499 cps
 Start Time: 5.31 min
 End Time: 5.68 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

QUALITY CONTROL DATA

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 959332

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057490

Sample Amount 2

Moisture:

Amount Units g

Date Received: 01-MAR-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323082a

Date Analyzed: 25-MAR-10 00:58

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323082a

Date: 25-Mar-2010

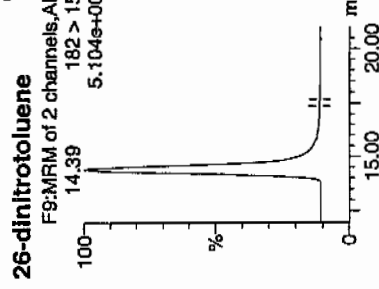
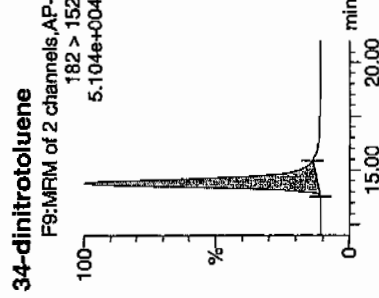
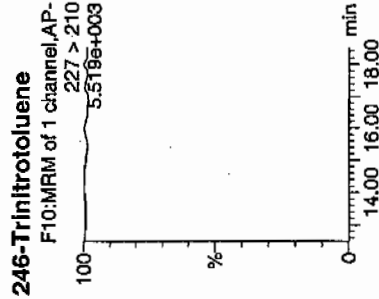
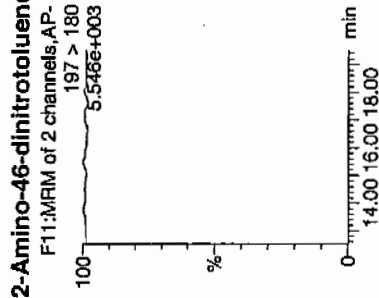
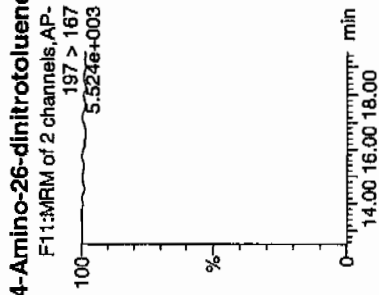
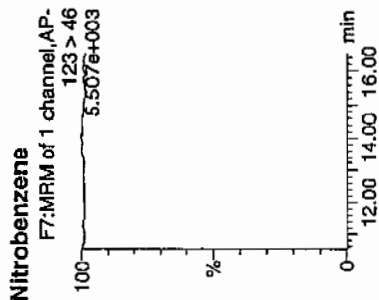
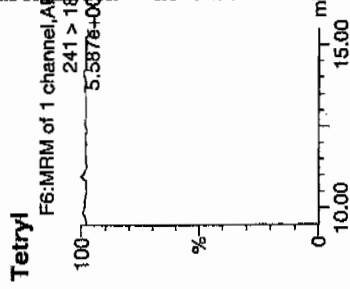
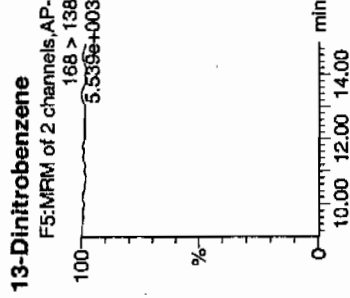
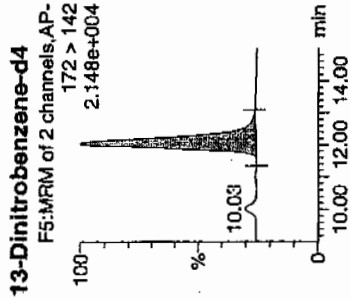
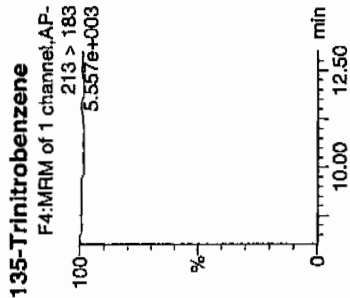
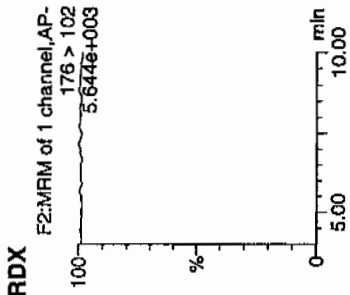
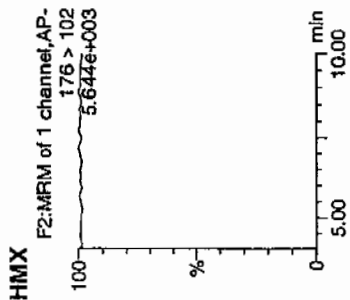
Time: 00:58:31

ID: 1202057490

Vial: 3:1,A

100%
3/25/10

100%
12/21



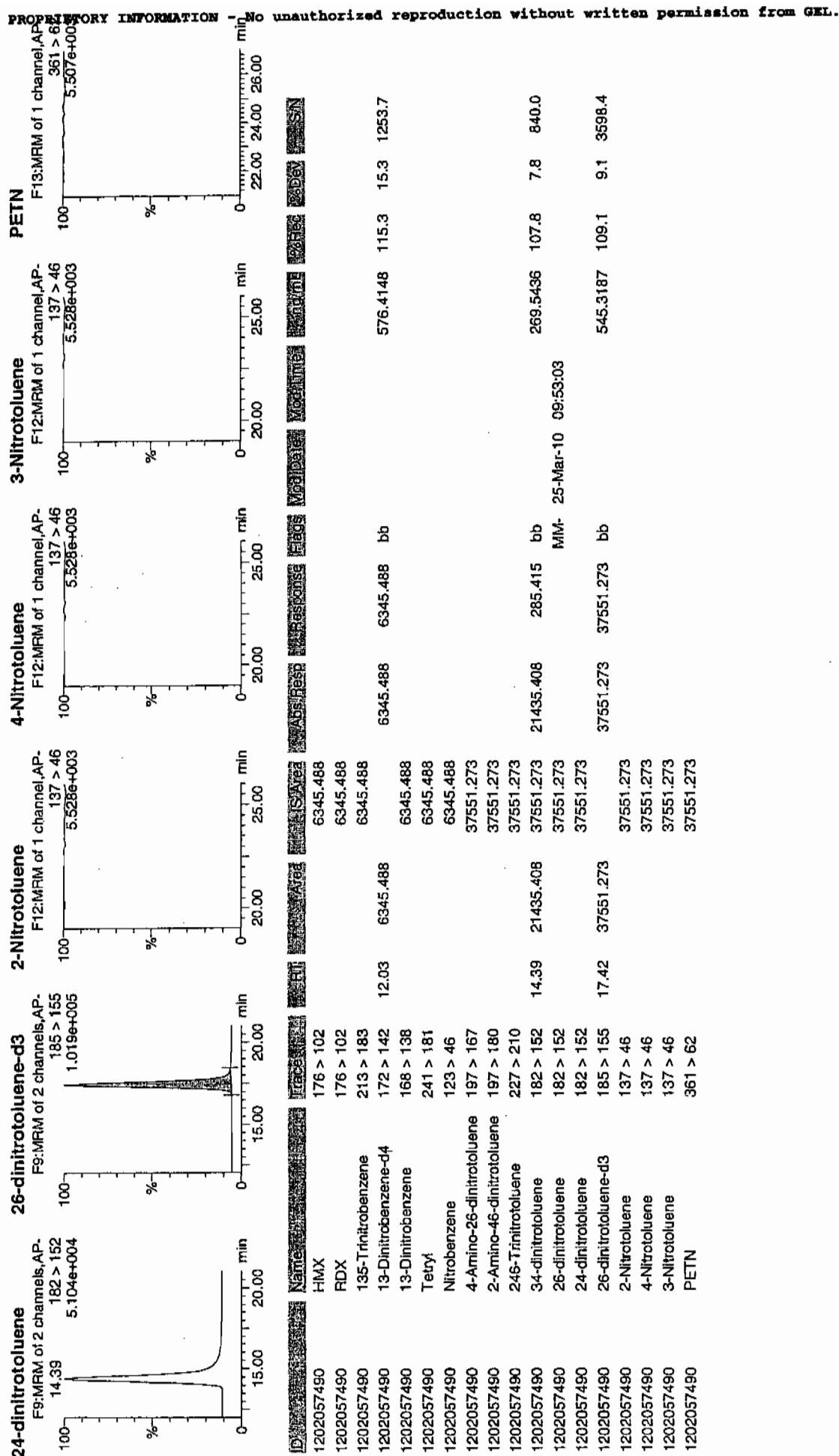
100%
03/25/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 66 of 79

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 959332

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057490

Sample Amount 2

Moisture:

Amount Units g

Date Received: 01-MAR-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160078.wiff

Date Analyzed: 17-MAR-10 04:27

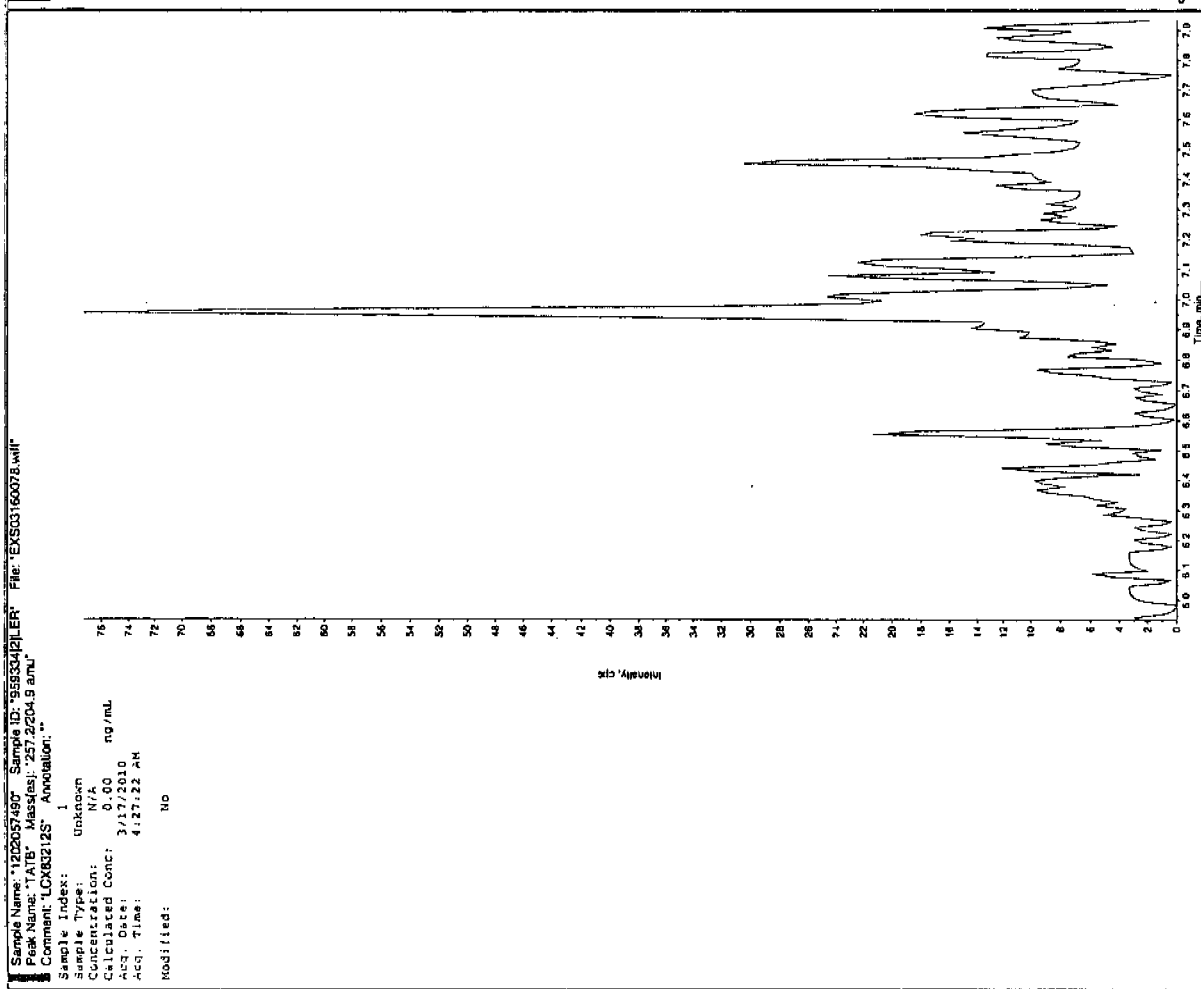
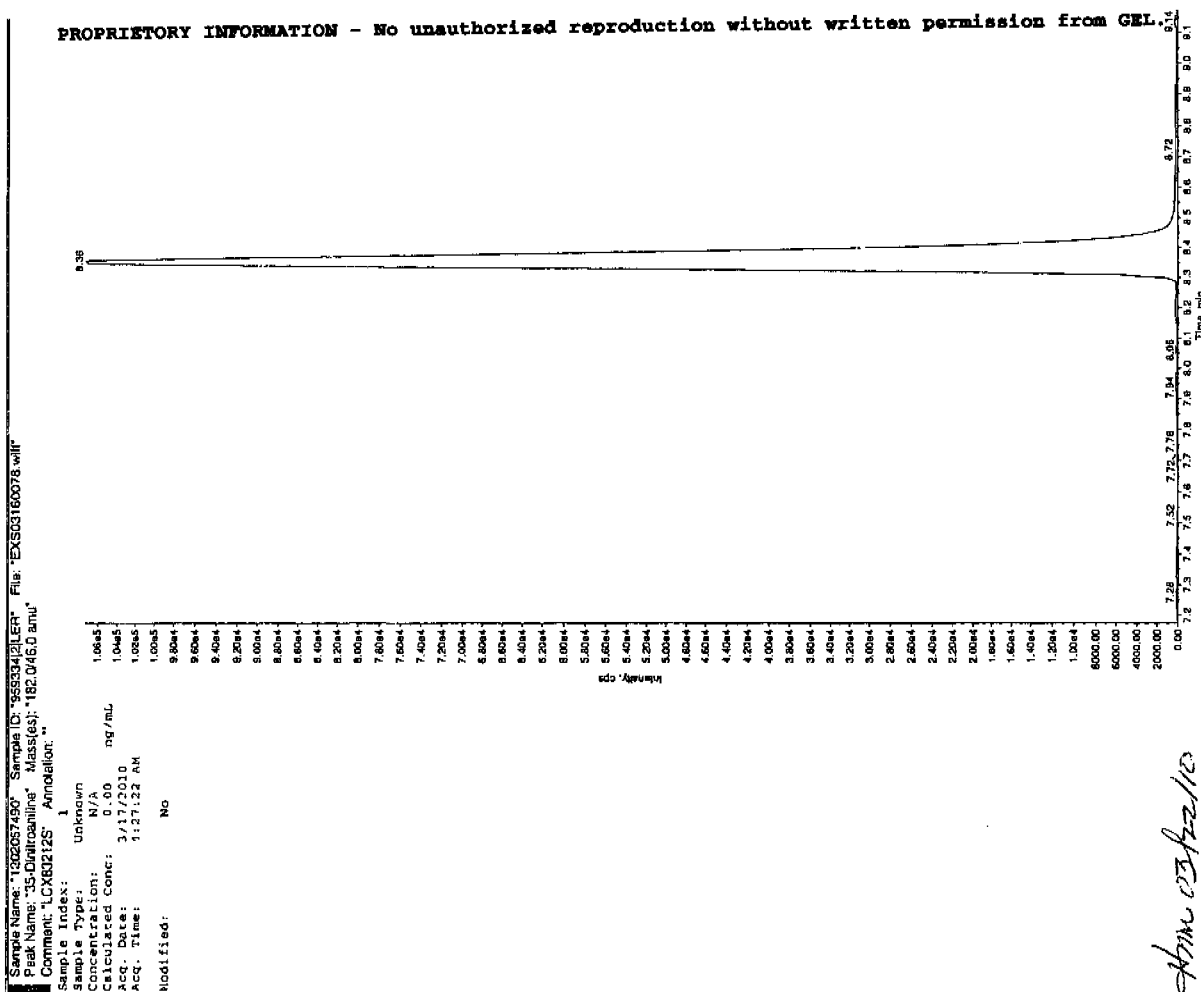
Units: ug/kg

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

*Concentration =

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

Jan 3/19/10



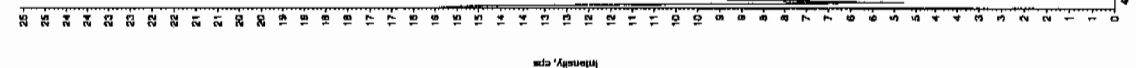
Am 03/19/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202057490" Sample ID: "55933421ER" File: "EXS03160078.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "152.1/151.9 amu"
 Comment: "LCX532125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:27:22 AM
 Modified: No

Intensity, cps



Sample Name: "1202057490" Sample ID: "55933421ER" File: "EXS03160078.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "152.1/151.9 amu"
 Comment: "LCX532125" Annotation: "

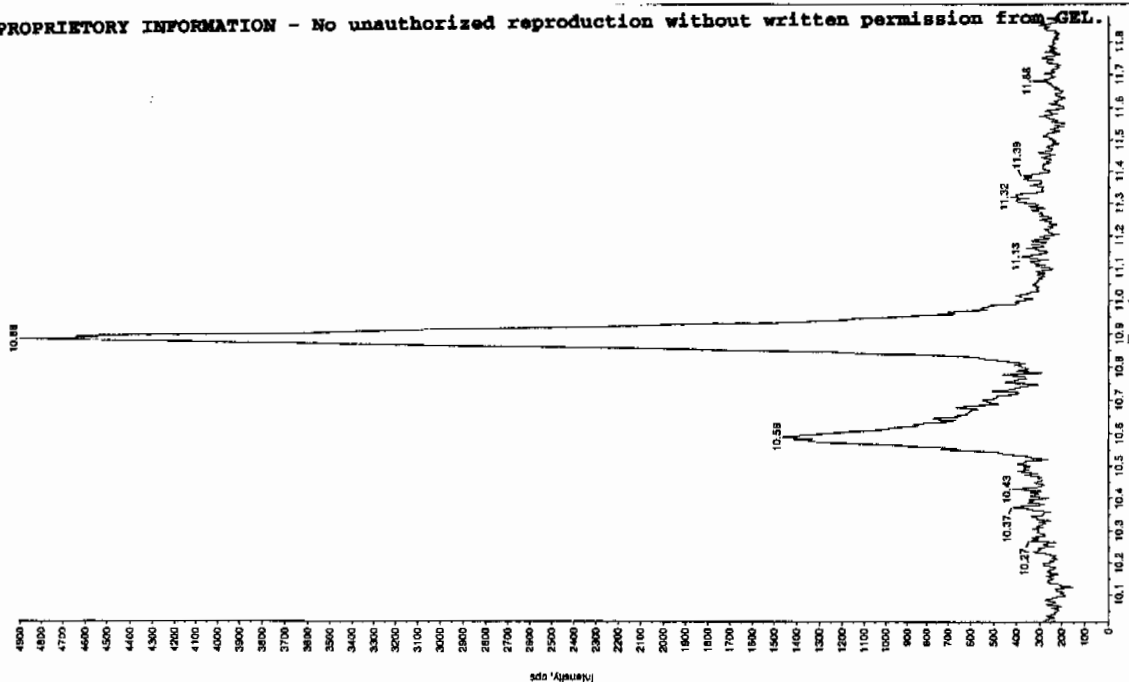
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 248. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:27:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Width: 1460.00 cps
 Min. Peak Width: 1.00 sec
 Smoothing Width: 15.0 pixels
 RT Window: 2.33 min
 Expected RT: 2.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 2.35 min
 Area: 1.15e+006 counts
 Height: 870850.342 cps
 Start Time: 2.25 min
 End Time: 2.73 min

Intensity, cps



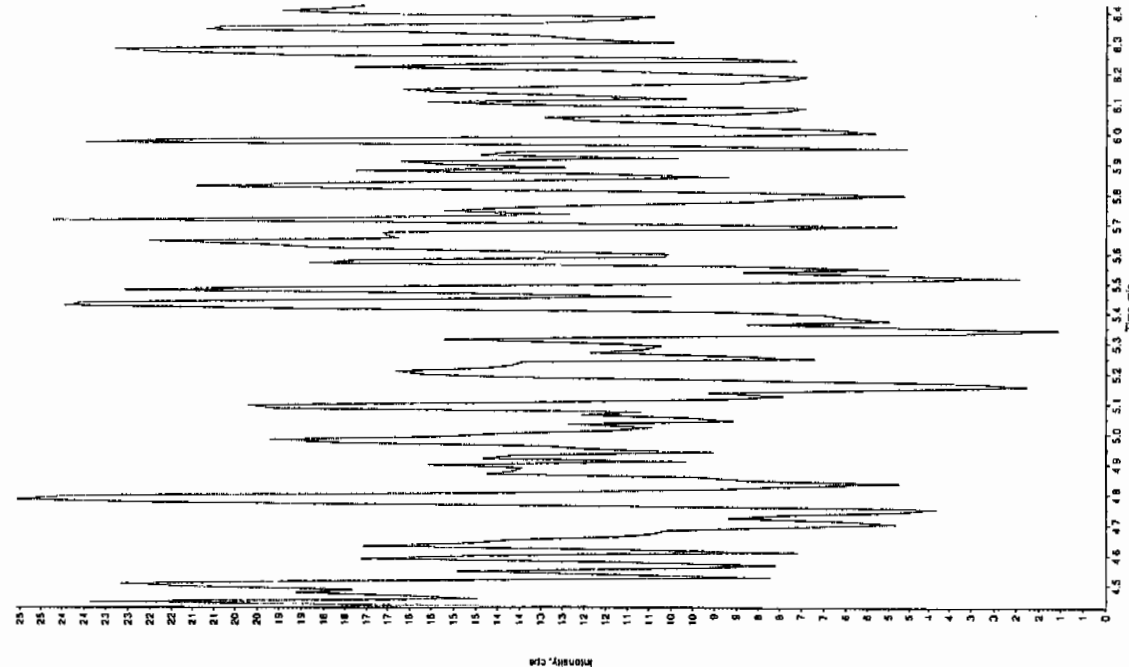
Sample Name: "1202057490" Sample ID: "55533421ER" File: "EX503160078.wif"
 Peak Name: "1202057490" Sample ID: "55533421ER" File: "EX503160078.wif"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3/17/2010
 Acq. Time: 4:27:22 AM
 Modified: No



Sample Name: "1202057490" Sample ID: "55533421ER" File: "EX503160078.wif"
 Peak Name: "24-Dinitro-6-nitrotoluene" Sample ID: "55533421ER" File: "EX503160078.wif"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3/17/2010
 Acq. Time: 4:27:22 AM
 Modified: No



*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 959332

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057491

Sample Amount 2

Moisture:

Amount Units g

Date Received: 01-MAR-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323083a

Date Analyzed: 25-MAR-10 01:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4560	
121-14-2	2,4-Dinitrotoluene	4990	
121-82-4	RDX	5330	
19406-51-0	4-Amino-2,6-dinitrotoluene	5160	
2691-41-0	HMX	5020	
35572-78-2	2-Amino-4,6-dinitrotoluene	5530	
479-45-8	Tetryl	3100	
606-20-2	2,6-Dinitrotoluene	4940	
78-11-5	PETN	5330	
88-72-2	o-Nitrotoluene	4660	
98-95-3	Nitrobenzene	4470	
99-08-1	m-Nitrotoluene	4590	
99-35-4	1,3,5-Trinitrobenzene	4340	
99-65-0	m-Dinitrobenzene	4850	
99-99-0	p-Nitrotoluene	4880	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323083a

Date: 25-Mar-2010

Time: 01:28:04

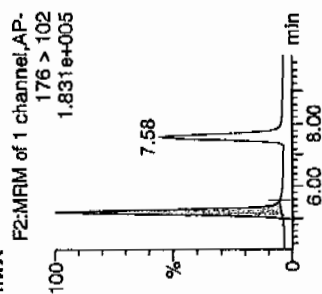
ID: 1202057491

Vial: 3:1,B

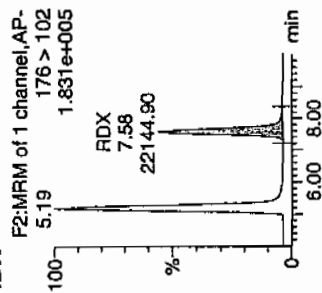
4077
3/25/10

ANU/959334 / 8022 / UC8 / 2 /

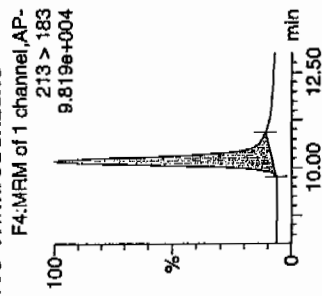
HMX



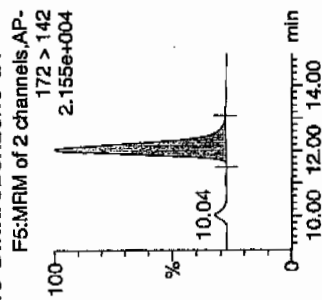
RDX



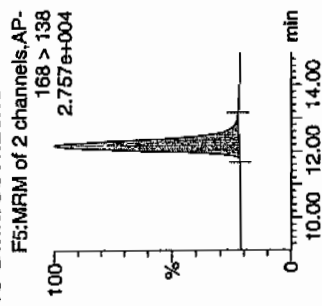
135-Trinitrobenzene



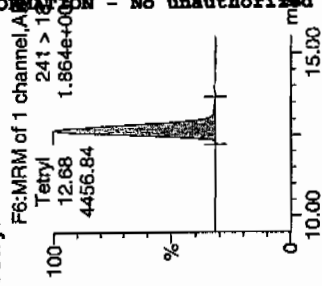
13-Dinitrobenzene-d4



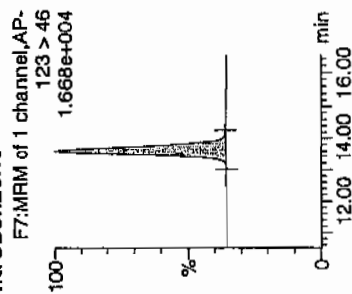
13-Dinitrobenzene



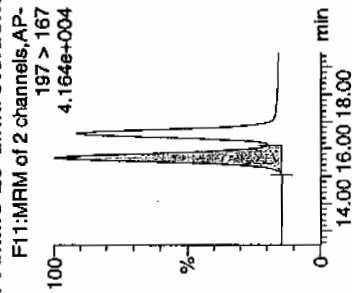
Tetryl



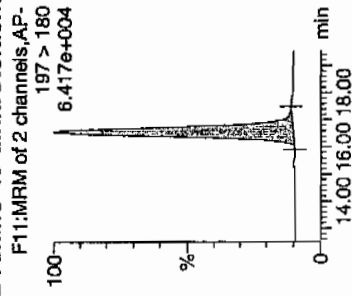
Nitrobenzene



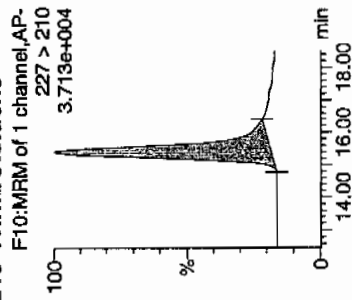
4-Amino-26-dinitrotoluene



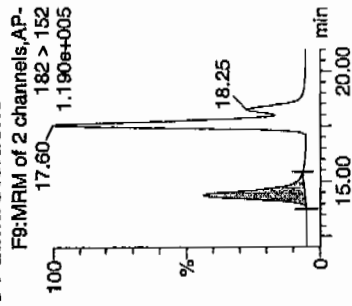
2-Amino-46-dinitrotoluene



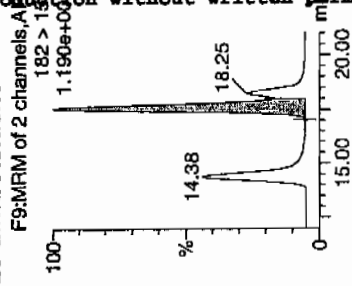
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



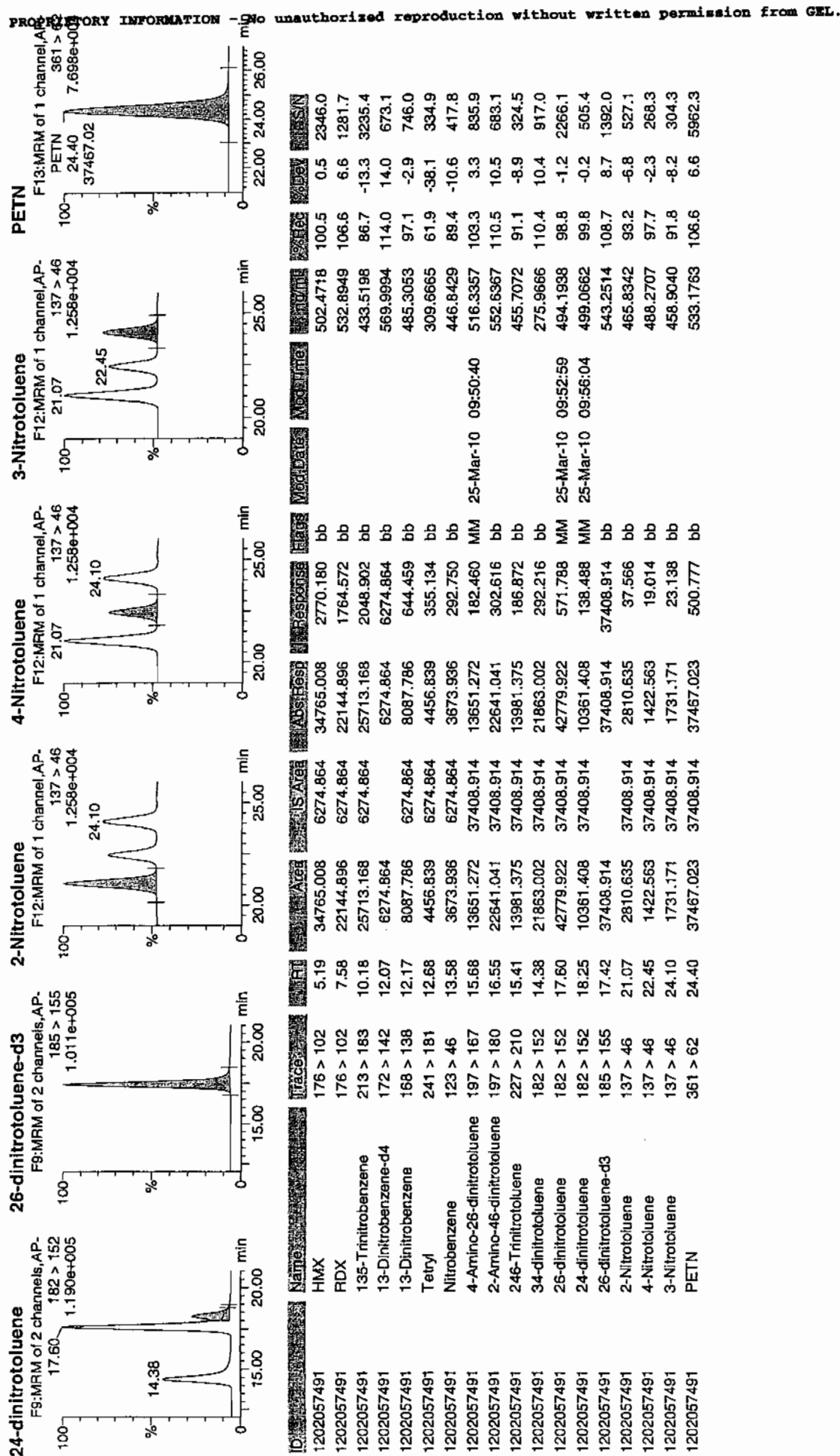
done 03/25/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 25 10:04:08 2010, Page 68 of 79

Dataset: C:\MASSLYN\New_Exp.PRO\032310expA1.qld, Time: Thu Mar 25 09:56:44 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 959332

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057491

Sample Amount 2

Moisture:

Amount Units g

Date Received: 01-MAR-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160079.wiff

Date Analyzed: 17-MAR-10 04:43

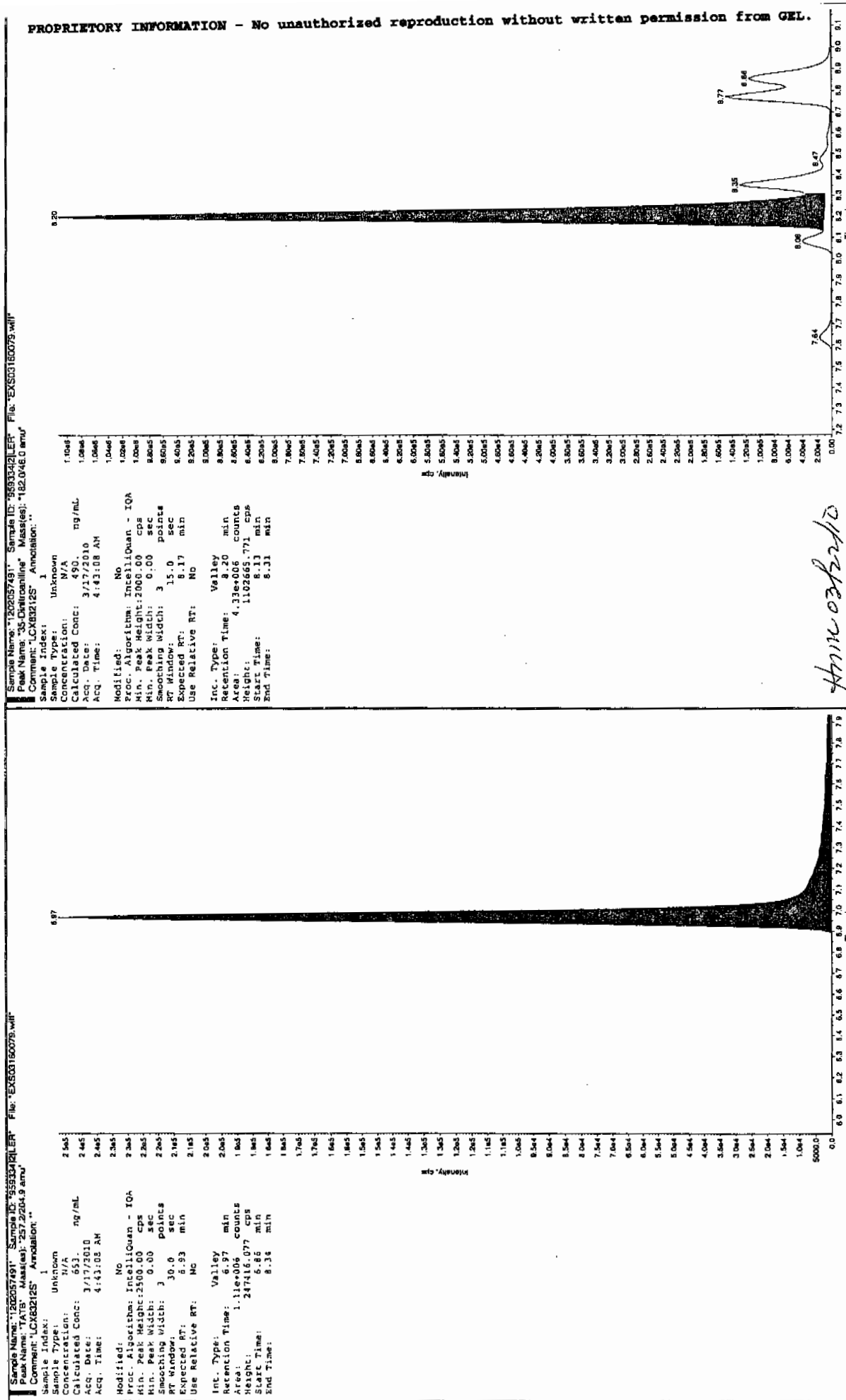
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6530	
59229-75-3	2,6-Diamino-4-nitrotoluene	6220	
618-87-1	3,5-Dinitroaniline	4900	
6629-29-4	2,4-Diamino-6-nitrotoluene	5450	
78-30-8	tris(o-cresyl) phosphate	5260	

*Concentration =

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

LC 3/10/10



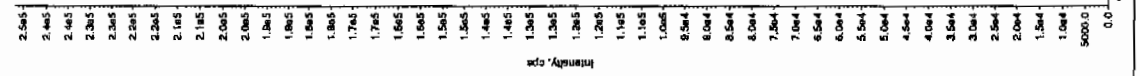
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202057491" Sample ID: "959334121" File: "EXS03160078.wif"
 Peak Name: "26-Diamino-4-nitroalkene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:43:08 AM

Modified: No
 Proc. Algorithm: IncoQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3 0.00 sec
 Smoothing Width: 3 0.00 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 4.99 min
 Area: 1.00e+006 counts
 Height: 246805.771 cps
 Start Time: 4.87 min
 End Time: 5.28 min

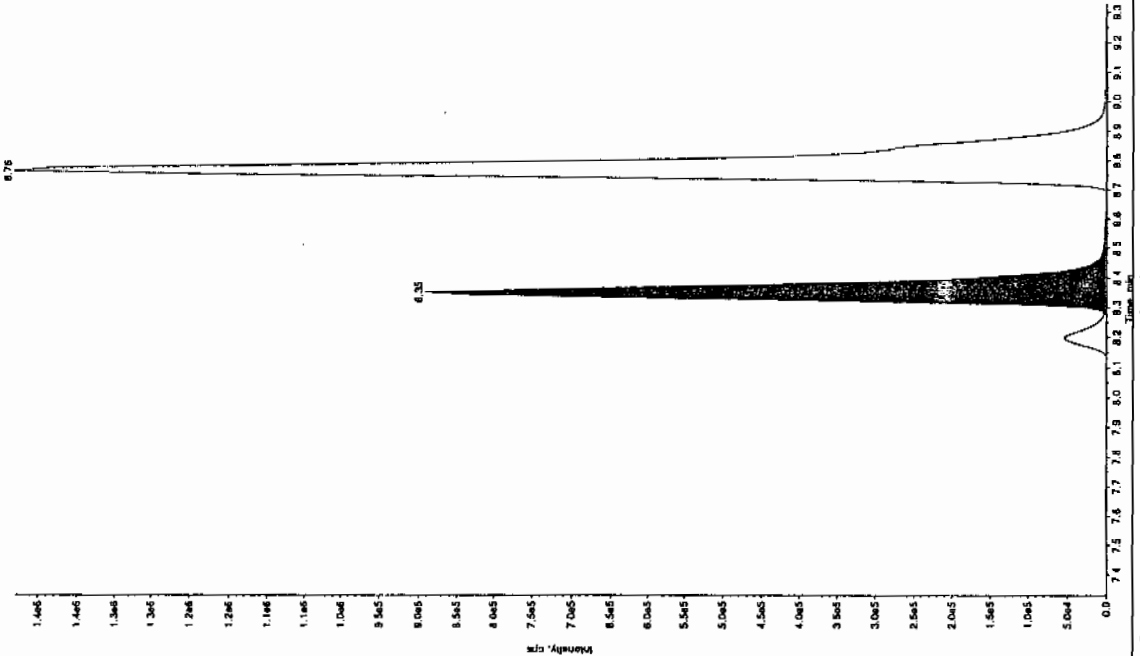


Sample Name: "1202057491" Sample ID: "959334121" File: "EXS03160078.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:43:08 AM

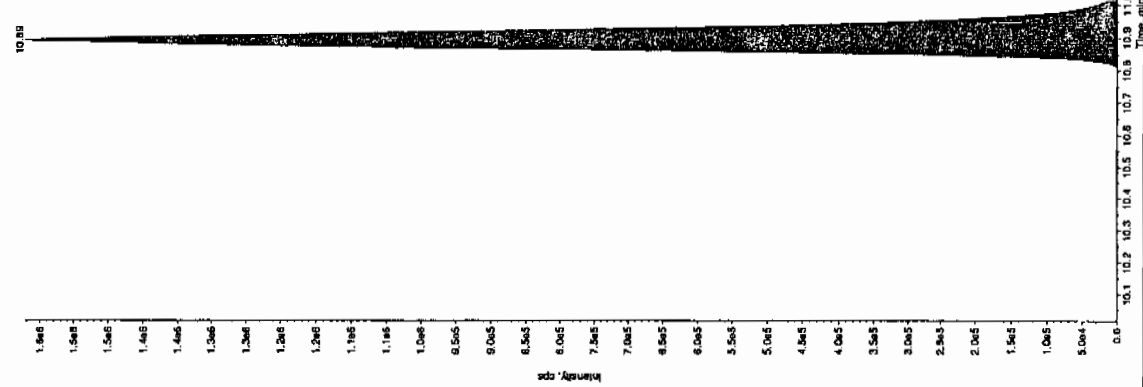
Modified: No
 Proc. Algorithm: IncoQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3 0.00 sec
 Smoothing Width: 3 0.00 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.35 min
 Area: 3.18e+006 counts
 Height: 88991.699 cps
 Start Time: 8.23 min
 End Time: 8.55 min



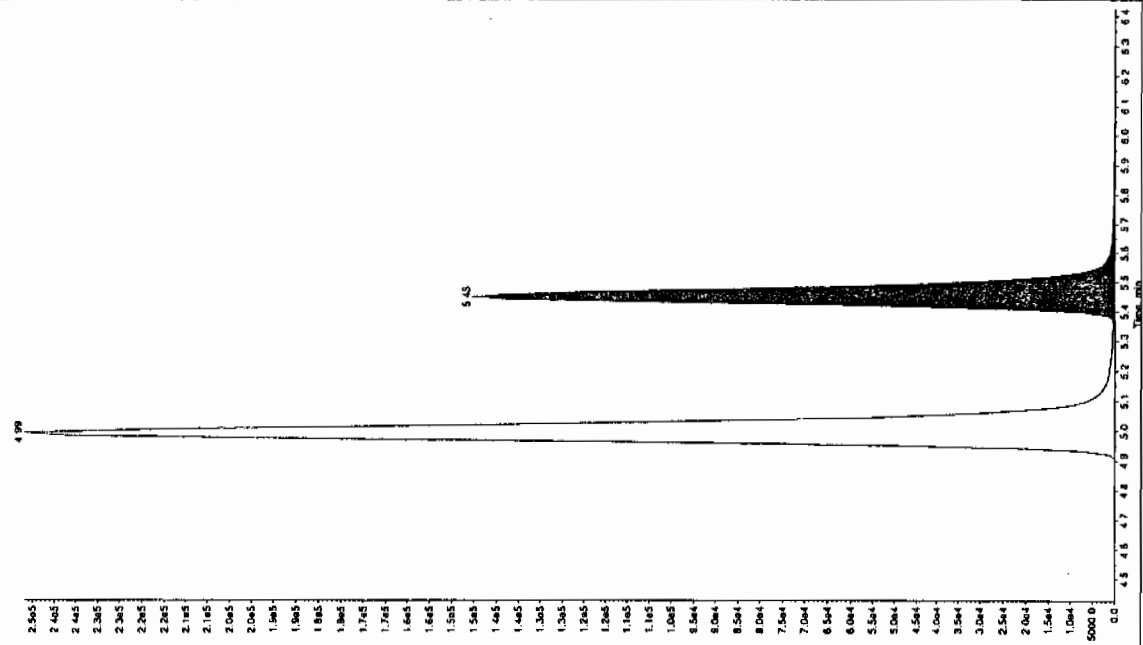
Sample Name: "1202057491" Sample ID: "958304121EP" File: "EX503160079.wif"
 Peak Name: "1950-easy/ phosphate" Mass(es): 365.151.0 amu
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 526. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:43:08 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.49e+006 counts
 Height: 1571397.583 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "1202057491" Sample ID: "958304121EP" File: "EX503160079.wif"
 Peak Name: "24-O-methyl-5-methylthio" Mass(es): 166.046.0 amu
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 545. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 4:43:08 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.45 min
 Area: 5.97e+005 counts
 Height: 145117.874 cps
 Start Time: 5.35 min
 End Time: 5.57 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: RE36-10-7458(248240001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057492

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323098a

Date Analyzed: 25-MAR-10 08:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4520	
121-14-2	2,4-Dinitrotoluene	4900	
121-82-4	RDX	5650	
19406-51-0	4-Amino-2,6-dinitrotoluene	5090	
2691-41-0	HMX	5370	
35572-78-2	2-Amino-4,6-dinitrotoluene	5420	
479-45-8	Tetryl	2820	
606-20-2	2,6-Dinitrotoluene	4950	
78-11-5	PETN	5570	
88-72-2	o-Nitrotoluene	4590	
98-95-3	Nitrobenzene	4680	
99-08-1	m-Nitrotoluene	4690	
99-35-4	1,3,5-Trinitrobenzene	4880	
99-65-0	m-Dinitrobenzene	5230	
99-99-0	p-Nitrotoluene	4970	

*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\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323098a

Date: 25-Mar-2010

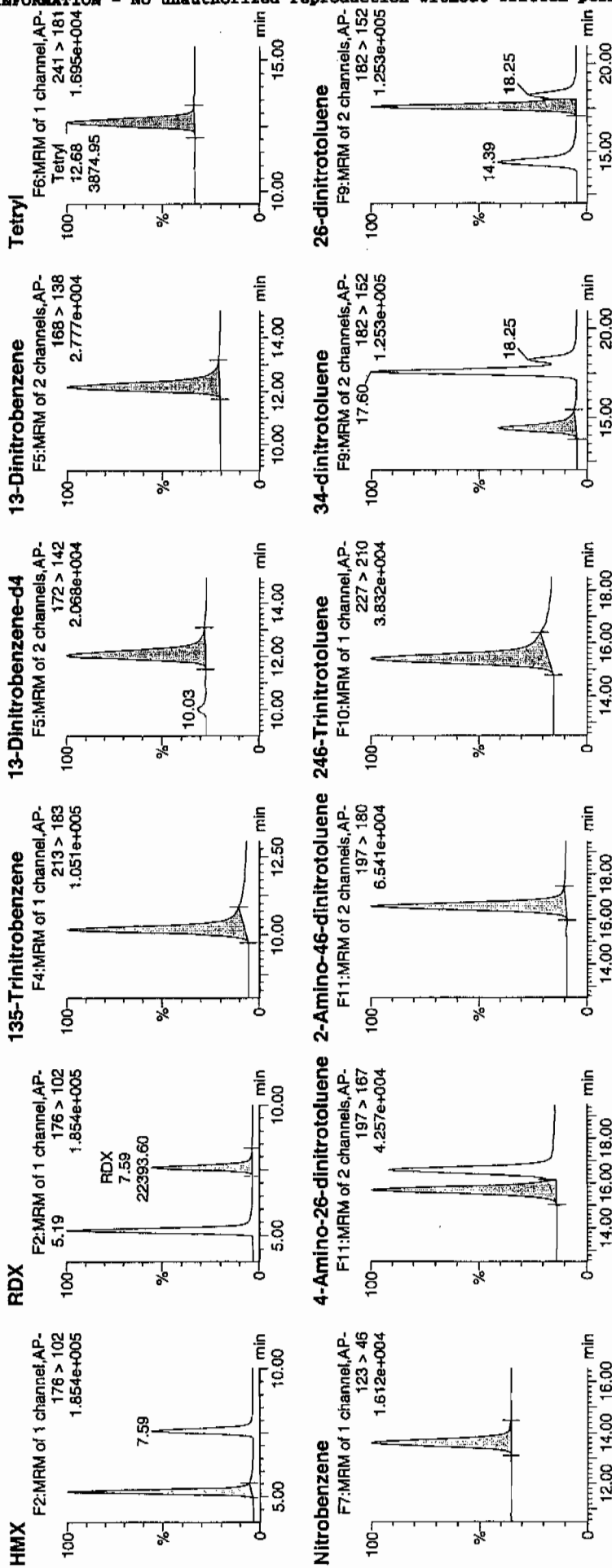
Time: 08:50:18

ID: 1202057492

Vial: 3:3,B

Handwritten notes: *1677*, *3/26/10*, *248240001ms / 21*, *LAUW 959334 / 8023*

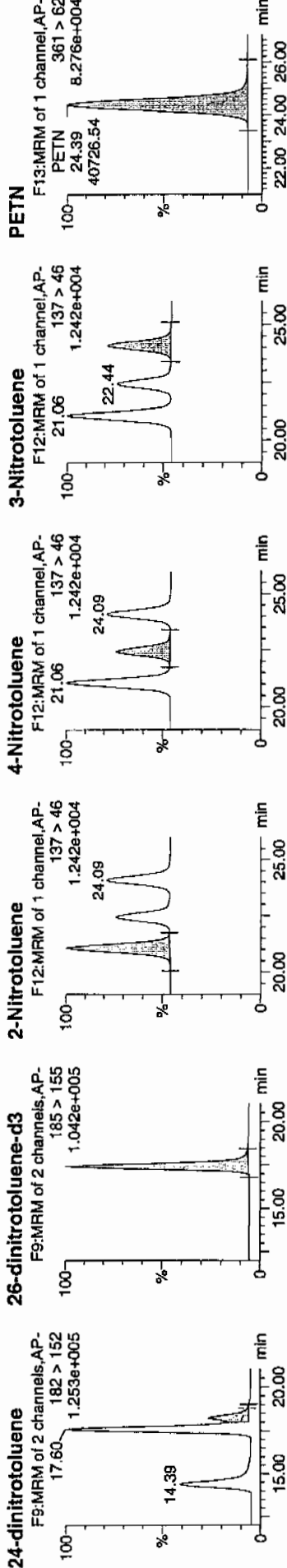
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



Handwritten note: *4/11/10 03/30/10*

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA2.qld, Time: Fri Mar 26 09:11:12 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Mod M	Rec	SDev	SN
1202057492	HMX	176 > 102	5.19	35410.934	5981.768	35410.934	2959.905	bb			536.8852	107.4	7.4	2561.7
1202057492	RDX	176 > 102	7.59	22393.598	5981.768	22393.598	1871.821	bb			565.2838	113.1	13.1	1395.9
1202057492	135-Trinitrobenzene	213 > 183	10.18	27581.943	5981.768	27581.943	2305.501	bb			487.8125	97.6	-2.4	8351.0
1202057492	13-Dinitrobenzene-d4	172 > 142	12.07	5981.768		5981.768	5981.768	bb			543.3750	108.7	8.7	815.8
1202057492	13-Dinitrobenzene	168 > 138	12.17	8308.343	5981.768	8308.343	694.472	bb			522.9674	104.6	4.6	701.8
1202057492	Tetryl	241 > 181	12.68	3874.955	5981.768	3874.955	323.897	bb			282.4286	56.5	-43.5	471.0
1202057492	Nitrobenzene	123 > 46	13.59	3666.134	5981.768	3666.134	306.442	bb			467.7420	93.5	-6.5	320.5
1202057492	4-Amino-2,6-dinitrotoluene	197 > 167	15.68	14021.752	38989.074	14021.752	179.816	MM	26-Mar-10	09:06:44	508.8543	101.8	1.8	1500.3
1202057492	2-Amino-4,6-dinitrotoluene	197 > 180	16.55	23138.949	38989.074	23138.949	296.736	bb			541.9000	108.4	8.4	1513.2
1202057492	2,4,6-Trinitrotoluene	227 > 210	15.42	14481.933	38989.074	14461.933	185.461	bb			452.2667	90.5	-9.5	336.0
1202057492	3,4-dinitrotoluene	182 > 152	14.39	21690.771	38989.074	21690.771	278.165	bb			282.6963	105.1	5.1	1420.7
1202057492	2,6-dinitrotoluene	182 > 152	17.50	44671.898	38989.074	44671.898	572.877	MM	26-Mar-10	09:08:07	495.1353	99.0	-1.0	3753.2
1202057492	2,4-dinitrotoluene	182 > 152	18.25	10597.761	38989.074	10597.761	135.907	MM	26-Mar-10	09:11:12	489.7627	98.0	-2.0	821.6
1202057492	2,6-dinitrotoluene-d3	185 > 155	17.42	38989.074		38989.074	38989.074	bb			566.1984	113.2	13.2	3814.4
1202057492	2-Nitrotoluene	137 > 46	21.06	2884.682	38989.074	2884.682	36.993	bb			458.7299	91.7	-8.3	809.2
1202057492	4-Nitrotoluene	137 > 46	22.44	1508.642	38989.074	1508.642	19.347	bb			496.8297	99.4	-0.6	412.7
1202057492	3-Nitrotoluene	137 > 46	24.09	1842.104	38989.074	1842.104	23.623	bb			468.5201	93.7	-6.3	487.2
1202057492	PETN	361 > 62	24.39	40726.539	38989.074	40726.539	522.281	bb			556.8397	111.4	11.4	23588.0

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458(248240001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057492

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160094.wiff

Date Analyzed: 17-MAR-10 08:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	9370	
59229-75-3	2,6-Diamino-4-nitrotoluene	4470	
618-87-1	3,5-Dinitroaniline	4790	
6629-29-4	2,4-Diamino-6-nitrotoluene	3040	
78-30-8	tris(o-cresyl) phosphate	5720	

*Concentration =

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

Jan 3/19/10

Sample Name: "1202057452" Sample ID: "9593342" File: "EXS03160094.wif"

Peak Name: "35-Dinitroanisole" Mass(es): "182.0460 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 479. ng/mL

Acq. Date: 3/17/2010

Acq. Time: 8:38:38 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 points

Smoothing Width: 3

RT Window: 15.0 sec

Expected RT: 8.17 min

Use Relative RT: No

Int. Type: Valley

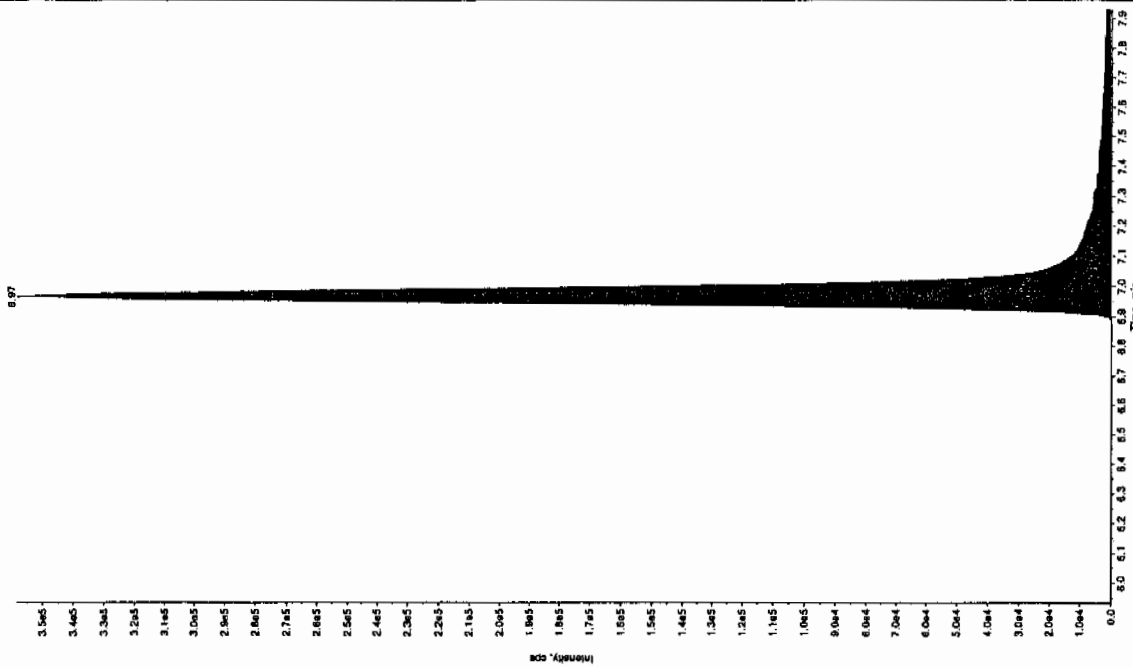
Retention Time: 8.21 min

Area: 4.24e+006 counts

Height: 1095430.176 cps

Start Time: 8.13 min

End Time: 8.31 min



Ann-03 audio

Sample Name: "1202057452" Sample ID: "9593342" File: "EXS03160094.wif"

Peak Name: "TATB" Mass(es): "257.22049 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 377. ng/mL

Acq. Date: 3/17/2010

Acq. Time: 8:38:38 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3

RT Window: 30.0 sec

Expected RT: 6.93 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 6.97 min

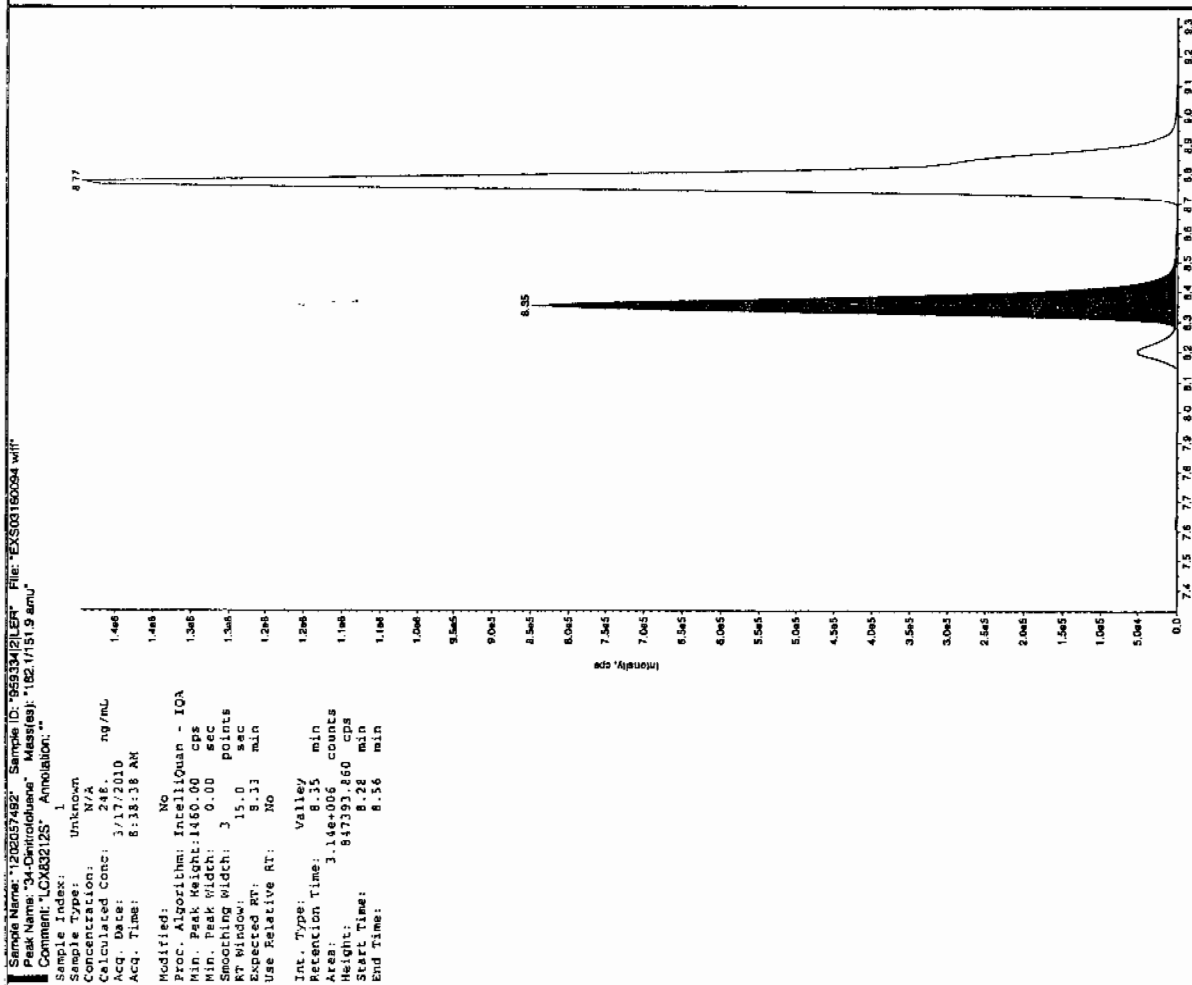
Area: 1.02e+006 counts

Height: 358656.281 cps

Start Time: 6.86 min

End Time: 7.09 min

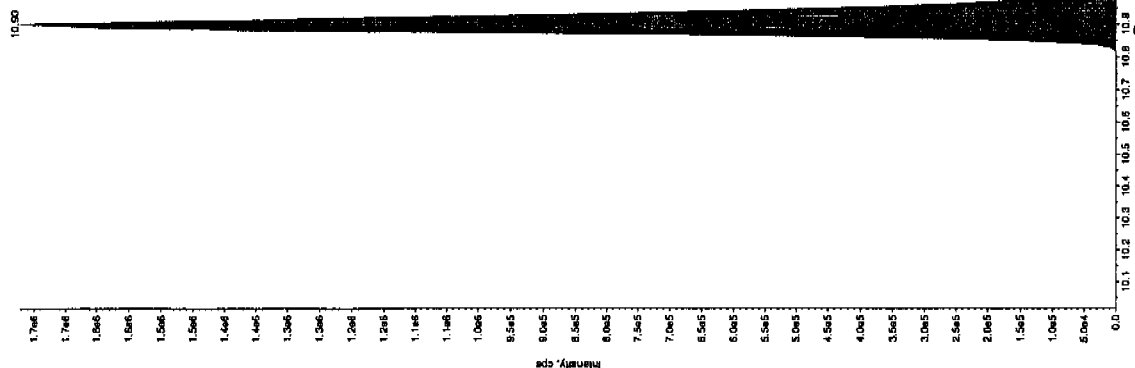




	Time, min
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4	

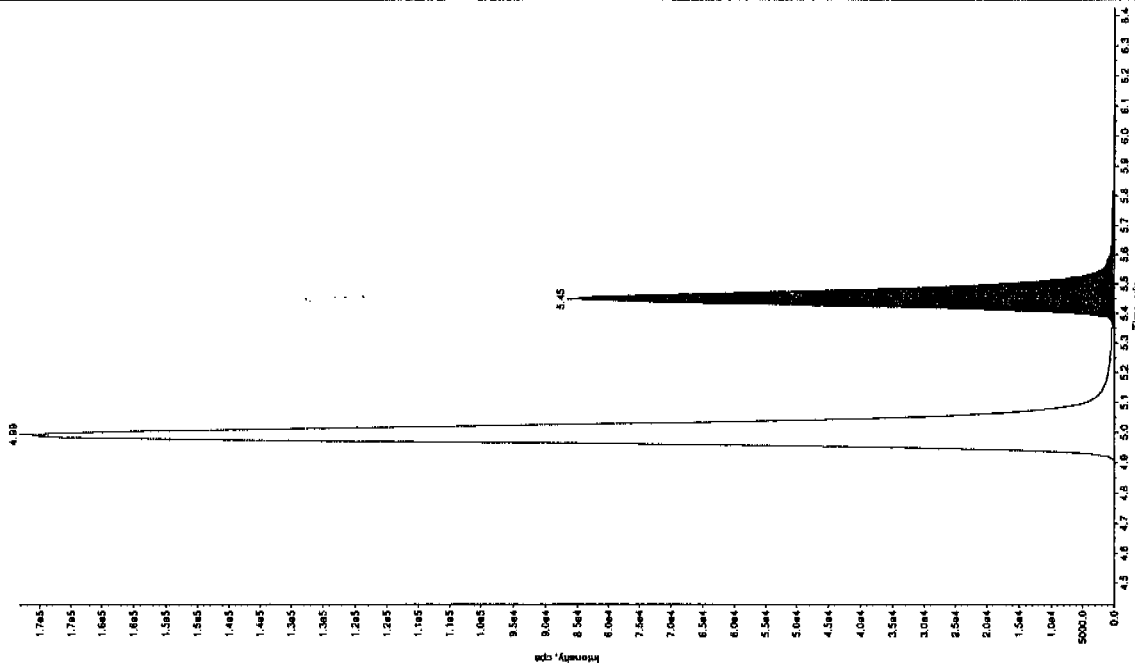
Sample Name: "1202057492" Sample ID: "95833421ER" File: "EXSC0160094.wif"
 Peak Name: "1202057492" Mass(es): "389.1/91.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 572. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 8:38:38 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 7.02e+006 counts
 Height: 1720406.006 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "1202057492" Sample ID: "95833421ER" File: "EXSC0160094.wif"
 Peak Name: "24-Diamino-6-nitroketone" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 304. ng/mL
 Acq. Date: 3/17/2010
 Acq. Time: 8:38:38 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.45 min
 Area: 3.36e+005 counts
 Height: 80584.030 cps
 Start Time: 5.35 min
 End Time: 5.76 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: RE36-10-7458(248240001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057493

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0325013a

Date Analyzed: 25-MAR-10 22:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5080	
121-14-2	2,4-Dinitrotoluene	4720	
121-82-4	RDX	4680	
19406-51-0	4-Amino-2,6-dinitrotoluene	5060	
2691-41-0	HMX	3990	
35572-78-2	2-Amino-4,6-dinitrotoluene	5000	
479-45-8	Tetryl	1560	
606-20-2	2,6-Dinitrotoluene	4860	
78-11-5	PETN	4650	
88-72-2	o-Nitrotoluene	4920	
98-95-3	Nitrobenzene	4640	
99-08-1	m-Nitrotoluene	4710	
99-35-4	1,3,5-Trinitrobenzene	3990	
99-65-0	m-Dinitrobenzene	4810	
99-99-0	p-Nitrotoluene	5000	

*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\032510expA.qld, Time: Fri Mar 26 12:43:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0325013a

Date: 25-Mar-2010

Time: 22:40:52

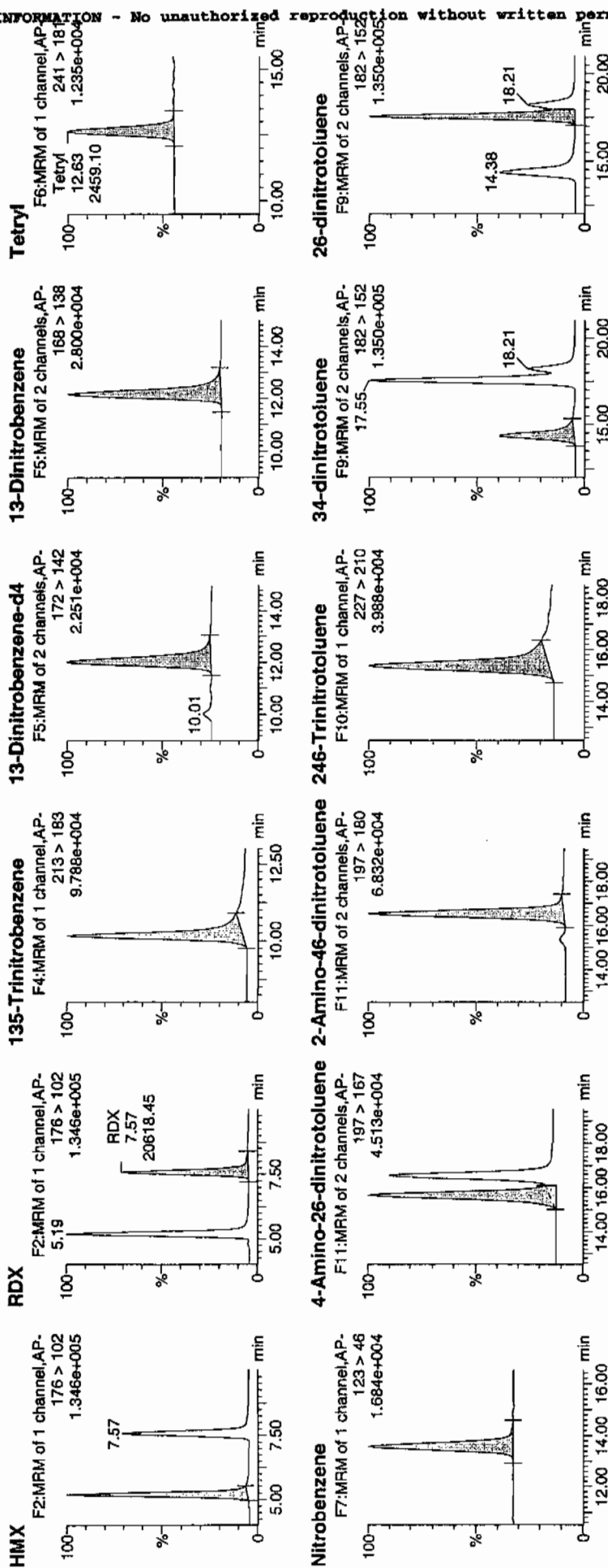
ID: 1202057493

Vial: 3:3,C

1.077
5/26/10

121

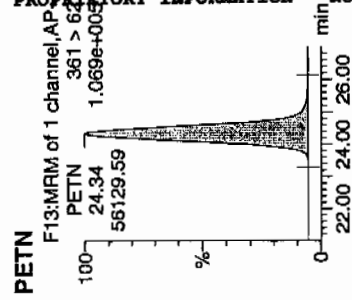
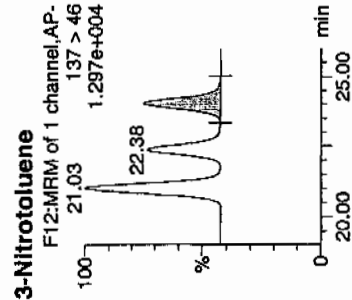
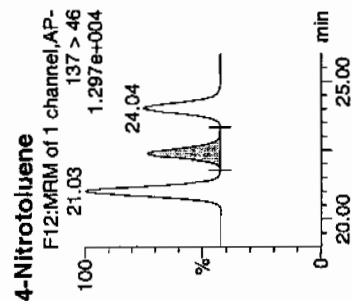
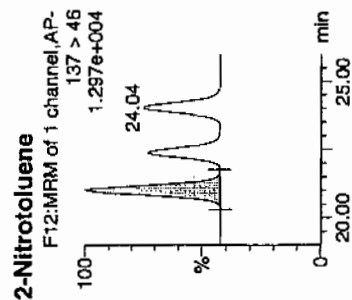
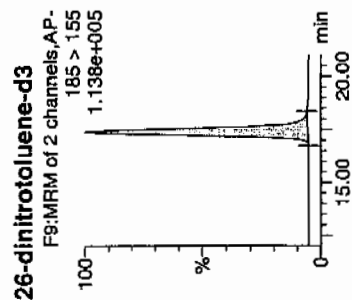
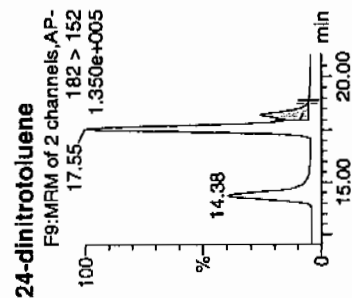
LAUL 959334 / 50127 / 248240001 ms



Amw
5/26/10

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\032510expA.qld, Time: Fri Mar 26 12:43:58 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod.Date	Mod.Time	Ind.Mn	%Reg	%Dev	SN
1202057493	HMx	176 > 102	5.19	25250.635	6735.763	25250.635	1874.371	bb			398.7063	79.7	-20.3	2477.7
1202057493	RDX	176 > 102	7.57	20618.451	6735.763	20618.451	1530.521	bb			468.2378	93.6	-6.4	1726.6
1202057493	135-Trinitrobenzene	213 > 183	10.16	25663.148	6735.763	25663.148	1904.992	bb			399.2779	79.9	-20.1	9527.5
1202057493	13-Dinitrobenzene-d4	172 > 142	12.04	6735.763		6735.763	6735.763	bb			561.2117	112.2	12.2	360.9
1202057493	13-Dinitrobenzene	168 > 138	12.17	8524.815	6735.763	8524.815	632.802	bb			480.5310	96.1	-3.9	757.1
1202057493	Tetryl	241 > 181	12.63	2459.098	6735.763	2459.098	182.540	bb			156.2248	31.2	-68.8	316.9
1202057493	Nitrobenzene	123 > 46	13.58	3936.458	6735.763	3936.458	292.206	bb			463.7639	92.8	-7.2	317.0
1202057493	4-Amino-26-dinitrotoluene	197 > 167	15.64	15700.848	42232.180	15700.848	185.887	MM	26-Mar-10	12:33:24	506.0746	101.2	1.2	671.9
1202057493	2-Amino-46-dinitrotoluene	197 > 180	16.52	24152.057	42232.180	24152.057	285.944	bb			499.8615	100.0	-0.0	941.0
1202057493	246-Trinitrotoluene	227 > 210	15.38	15287.293	42232.180	15287.293	180.991	bb			508.2364	101.6	1.6	795.7
1202057493	34-dinitrotoluene	182 > 152	14.38	22276.533	42232.180	22276.533	263.739	bb			247.6838	99.1	-0.9	719.9
1202057493	26-dinitrotoluene	182 > 152	17.55	47577.207	42232.180	47577.207	563.281	MM	26-Mar-10	12:39:16	486.0274	97.2	-2.8	1979.3
1202057493	24-dinitrotoluene	182 > 152	18.21	11261.769	42232.180	11261.769	133.332	MM	26-Mar-10	12:42:01	471.7517	94.4	-5.6	430.2
1202057493	26-dinitrotoluene-d3	185 > 155	17.38	42232.180		42232.180	42232.180	bb			576.2103	115.2	15.2	3215.4
1202057493	2-Nitrotoluene	137 > 46	21.03	3228.903	42232.180	3228.903	38.228	bb			492.2672	98.5	-1.5	743.0
1202057493	4-Nitrotoluene	137 > 46	22.38	1722.283	42232.180	1722.283	20.391	bb			499.6503	99.9	-0.1	396.0
1202057493	3-Nitrotoluene	137 > 46	24.04	1983.828	42232.180	1983.828	23.487	bb			470.6583	94.1	-5.9	420.7
1202057493	PETN	361 > 62	24.34	56129.586	42232.180	56129.586	664.536	bb			464.9369	93.0	-7.0	6847.9

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7458(248240001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2134

Matrix: SOIL

GEL Sample ID: 1202057493

Sample Amount 2

Moisture: 14.2

Amount Units g

Date Received: 27-FEB-10

Extraction Type Sonication

Extraction Batch ID: 959332

Concentrated Extract Volume (mL) 10

Date Extracted: 08-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03160095.wiff

Date Analyzed: 17-MAR-10 08:54

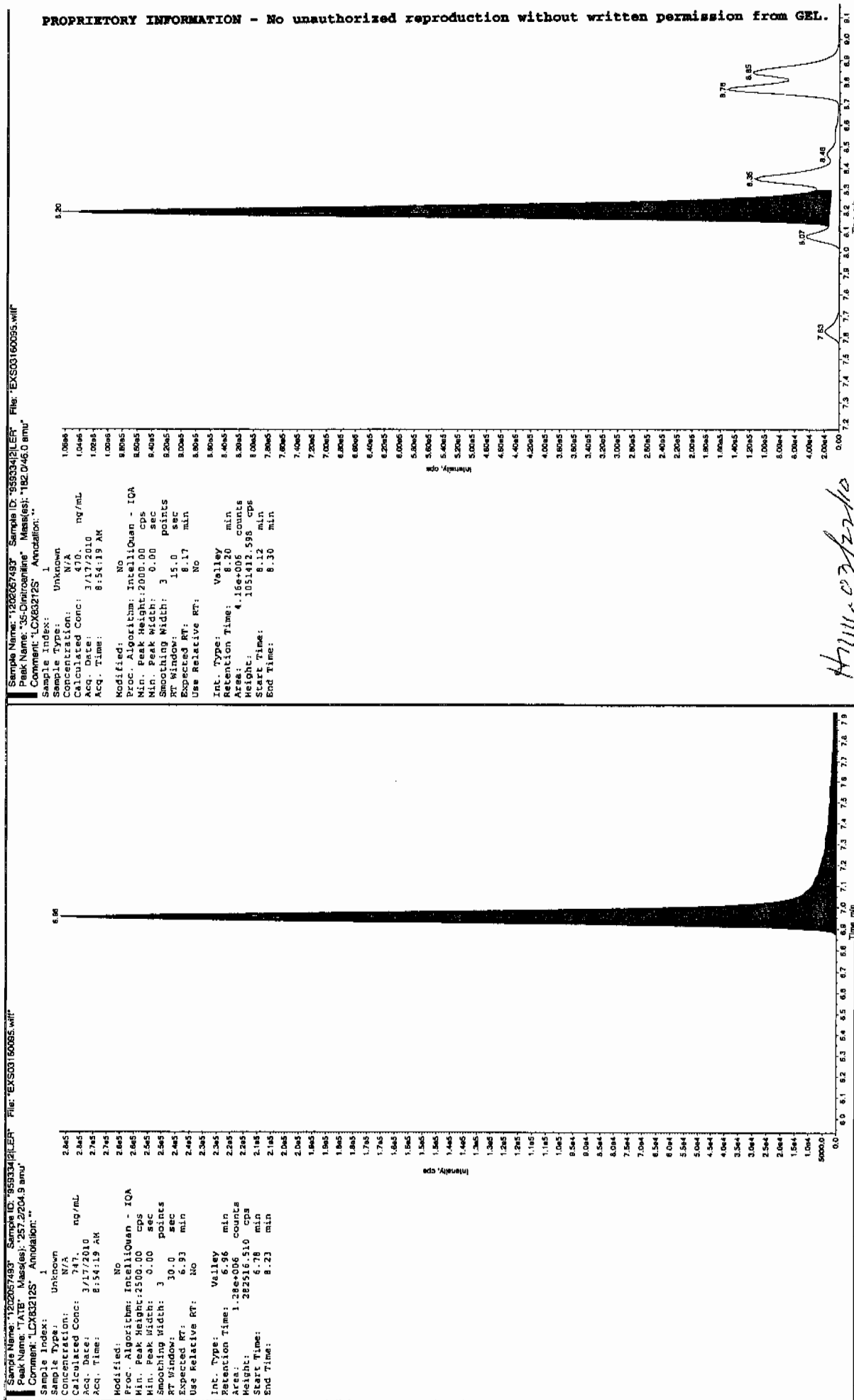
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7470	
59229-75-3	2,6-Diamino-4-nitrotoluene	3740	
618-87-1	3,5-Dinitroaniline	4700	
6629-29-4	2,4-Diamino-6-nitrotoluene	1870	J
78-30-8	tris(o-cresyl) phosphate	5650	

*Concentration =

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

Jan 31/10

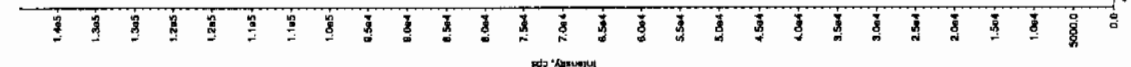


47111.02242210

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

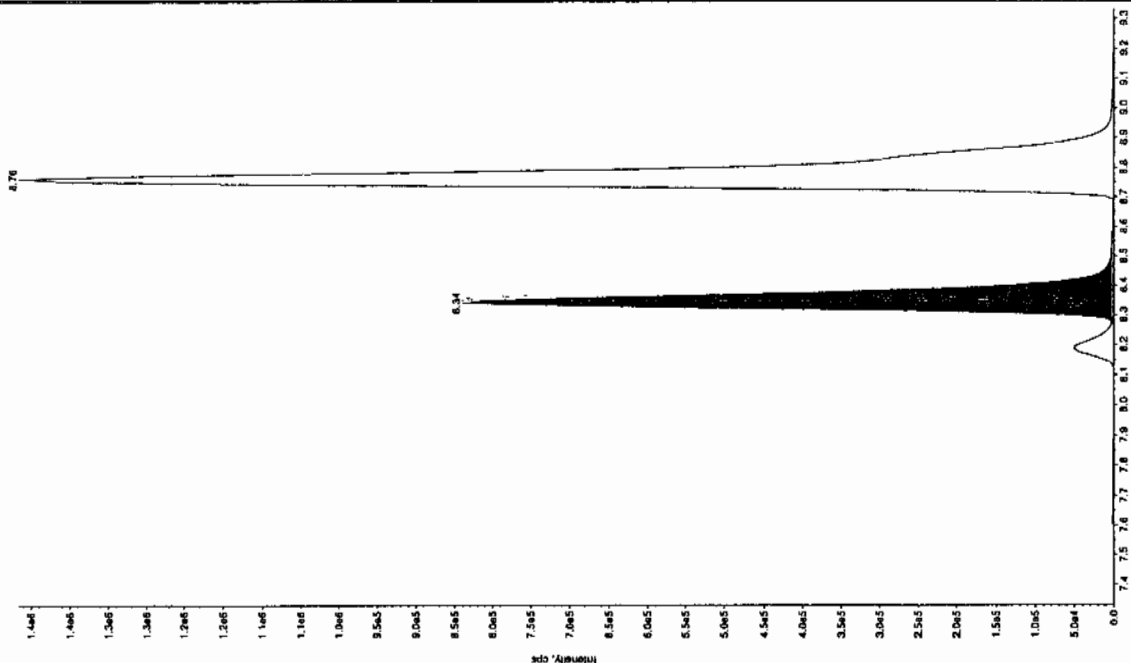
Sample Name: "1202057493" Sample ID: "95933421ER" File: "EX503160035.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.19 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 374 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 8:54:19 AM
 Acq. Time: 8:54:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.96 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.96 min
 Peak Height: 139898.539 cps
 Start Time: 4.88 min
 End Time: 5.29 min



Sample Name: "1202057493" Sample ID: "95933421ER" File: "EX503160035.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.19 amu"
 Comment: "LCX832125" Annotation: ""

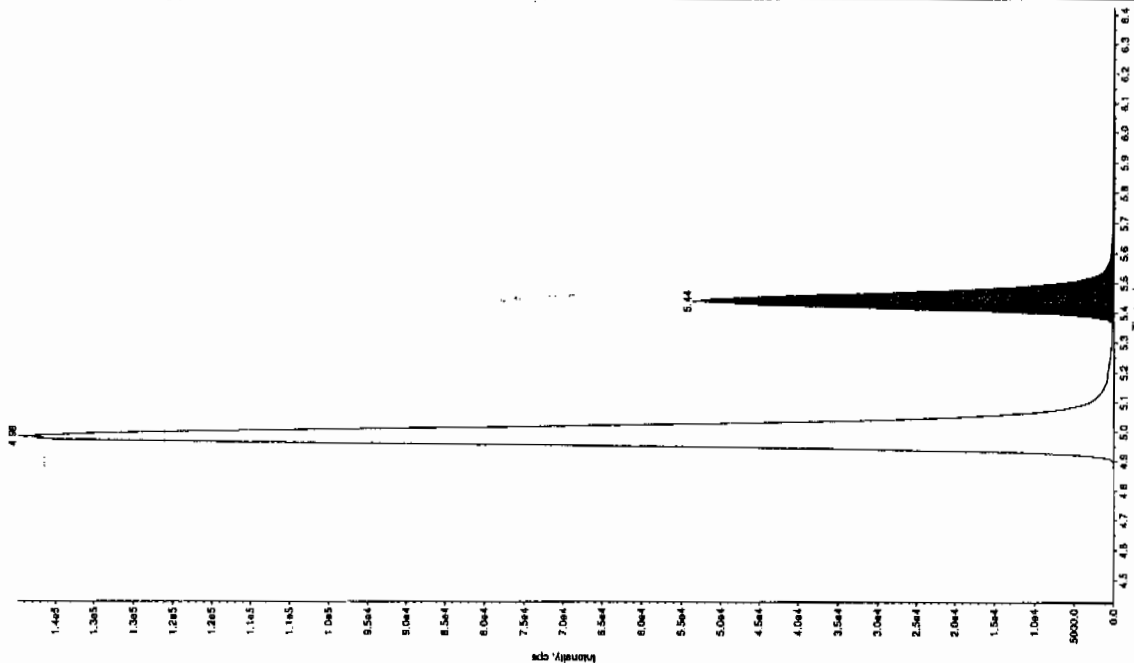
Sample Index: 1
 Sample Type: Unknown
 Concentration: 245 ng/mL
 Calculated Conc: 3/17/2010
 Acq. Date: 8:54:19 AM
 Acq. Time: 8:54:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Peak Height: 237349.595 cps
 Start Time: 8.27 min
 End Time: 8.53 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

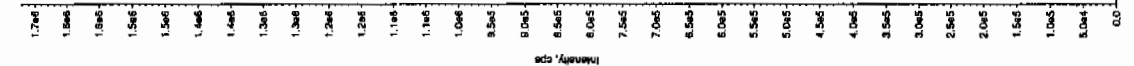
Sample Name: "1202057493" Sample ID: "95833421ER" File: "EX503160095.wif"
 Peak Name: "24-Diamino-6-methylourea" Mass(es): "186.048.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 167.7210
 Acq. Date: 3/17/2010
 Acq. Time: 8:54:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.44 min
 Area: 2.09e+005 counts
 Height: 53460.098 cps
 Start Time: 5.35 min
 End Time: 5.75 min



Sample Name: "1202057493" Sample ID: "95833421ER" File: "EX503160095.wif"
 Peak Name: "tris(cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 565.
 Acq. Date: 3/17/2010
 Acq. Time: 8:56:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.94e+006 counts
 Height: 1671896.729 cps
 Start Time: 10.8 min
 End Time: 11.2 min



MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 959332 Verified by: _____
 Analyst: Sirena White
 Method: SW846 8330 PREP
 Lab SOP: GL-OA-E-033 REV# 17
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202057490 MB	08-MAR-2010 18:37:00	2	10	5
1202057491 LCS	08-MAR-2010 18:37:00	2	10	5
248202001	08-MAR-2010 18:37:00	2	10	5
248202002	08-MAR-2010 18:37:00	2	10	5
248203002	08-MAR-2010 18:37:00	2	10	5
248234001	08-MAR-2010 18:37:00	2	10	5
248234002	08-MAR-2010 18:37:00	2	10	5
248234003	08-MAR-2010 18:37:00	2	10	5
248234004	08-MAR-2010 18:37:00	2	10	5
248234005	08-MAR-2010 18:37:00	2	10	5
248234006	08-MAR-2010 18:37:00	2	10	5
248234007	08-MAR-2010 18:37:00	2	10	5
248240001	08-MAR-2010 18:37:00	2	10	5
1202057492 MS (248240001)	08-MAR-2010 18:37:00	2	10	5
1202057493 MSD (248240001)	08-MAR-2010 18:37:00	2	10	5
248240002	08-MAR-2010 18:37:00	2	10	5
248240003	08-MAR-2010 18:37:00	2	10	5
248240004	08-MAR-2010 18:37:00	2	10	5
248240005	08-MAR-2010 18:37:00	2	10	5
248240006	08-MAR-2010 18:37:00	2	10	5
248240007	08-MAR-2010 18:37:00	2	10	5
248240008	08-MAR-2010 18:37:00	2	10	5
248240009	08-MAR-2010 18:37:00	2	10	5
248240010	08-MAR-2010 18:37:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202057491	8321 Explosives LCS	DCX100225-03	.1	mL	Final Solvent: ACN
LCS	1202057491	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
MS	1202057492	8321 Explosives LCS	DCX100225-03	.1	mL	
MS	1202057492	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
MSD	1202057493	8321 Explosives LCS	DCX100225-03	.1	mL	
MSD	1202057493	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100304-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/23/10
 Extr. Injection Volume: 50uL
 Sequence Number: 032310expA
 Initial Calibration Date: 03/23/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100309-01.2
 Mobile Phase Lot#: 1289327, 1281642
 Standard-Samp Reagent Lot#: 1283379, 1284736
 Reviewed BY: *h111K*
 Date: *03/30/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100323-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0323001a	XIBLK01	MAP	3/23/10 9:08			1		USE	B
EXP0323002a	XIBLK01	MAP	3/23/10 9:38			1		USE	B
EXP0323003a	WXXICAL-01	MAP	3/23/10 10:08			1		USE	I
EXP0323004a	WXXICAL-02	MAP	3/23/10 10:37			1		USE	I
EXP0323005a	WXXICAL-03	MAP	3/23/10 11:07			1		USE	I
EXP0323006a	WXXICAL-04	MAP	3/23/10 11:36			1		USE	I
EXP0323007a	WXXICAL-05	MAP	3/23/10 12:05			1		USE	I
EXP0323008a	WXXICAL-06	MAP	3/23/10 12:35			1		USE	I
EXP0323009a	XIBLK02	MAP	3/23/10 13:04			1		USE	B
EXP0323010a	WXXICV	MAP	3/23/10 13:34			1		USE	C
EXP0323011a	XIBLK03	MAP	3/23/10 14:03			1		USE	B
EXP0323012a	WXXCRI	MAP	3/23/10 14:33			1		USE	C
EXP0323013a	247562004	MAP	3/23/10 15:02	956045	10-1950	2	LANL	USE	S
EXP0323014a	247565007	MAP	3/23/10 15:32	956053	10-1956	2	LANL	USE	S
EXP0323015a	247565008	MAP	3/23/10 16:01	956053	10-1956	2	LANL	USE	S
EXP0323016a	247565009	MAP	3/23/10 16:31	956053	10-1956	2	LANL	USE	S
EXP0323017a	247565010	MAP	3/23/10 17:00	956053	10-1956	2	LANL	USE	S
EXP0323018a	1202035690	MAP	3/23/10 17:30	950087	Various	2	LANL	USE	S
EXP0323019a	1202035691	MAP	3/23/10 17:59	950087	Various	2	LANL	USE	S
EXP0323020a	246434002	MAP	3/23/10 18:29	950087	10-1620	2	LANL	USE	S
EXP0323021a	1202035692	MAP	3/23/10 18:58	950087	10-1620	2	LANL	USE	S
EXP0323022a	1202035693	MAP	3/23/10 19:28	950087	10-1620	2	LANL	USE	S
EXP0323023a	WXXCCV	MAP	3/23/10 19:57			1		USE	C
EXP0323024a	XIBLK04	MAP	3/23/10 20:27			1		USE	B
EXP0323025a	WXXCRI	MAP	3/23/10 20:56			1		USE	C
EXP0323026a	246434003	MAP	3/23/10 21:26	950087	10-1620	2	LANL	USE	S
EXP0323027a	246434004	MAP	3/23/10 21:55	950087	10-1620	2	LANL	USE	S
EXP0323028a	246434005	MAP	3/23/10 22:25	950087	10-1620	2	LANL	USE	S
EXP0323029a	246434006	MAP	3/23/10 22:54	950087	10-1620	2	LANL	USE	S

EXP0323030a	246434007	MAP	3/23/10 23:24	950087	10-1620	2	LANL	USE	S
EXP0323031a	246434008	MAP	3/23/10 23:53	950087	10-1620	2	LANL	USE	S
EXP0323032a	246434009	MAP	3/24/10 0:23	950087	10-1620	2	LANL	USE	S
EXP0323033a	246434010	MAP	3/24/10 0:52	950087	10-1620	2	LANL	USE	S
EXP0323034a	246434011	MAP	3/24/10 1:22	950087	10-1620	2	LANL	USE	S
EXP0323035a	246434012	MAP	3/24/10 1:51	950087	10-1620	2	LANL	USE	S
EXP0323036a	WXXCCV	MAP	3/24/10 2:21			1		USE	C
EXP0323037a	XIBLK05	MAP	3/24/10 2:50			1		USE	B
EXP0323038a	WXXCRI	MAP	3/24/10 3:20			1		USE	C
EXP0323039a	246434013	MAP	3/24/10 3:49	950087	10-1620	2	LANL	USE	S
EXP0323040a	246434014	MAP	3/24/10 4:19	950087	10-1620	2	LANL	USE	S
EXP0323041a	246434015	MAP	3/24/10 4:48	950087	10-1620	2	LANL	USE	S
EXP0323042a	246442002	MAP	3/24/10 5:18	950087	10-1623	2	LANL	USE	S
EXP0323043a	246442003	MAP	3/24/10 5:47	950087	10-1623	2	LANL	USE	S
EXP0323044a	246442004	MAP	3/24/10 6:17	950087	10-1623	2	LANL	USE	S
EXP0323045a	246442005	MAP	3/24/10 6:46	950087	10-1623	2	LANL	USE	S
EXP0323046a	246442006	MAP	3/24/10 7:15	950087	10-1623	2	LANL	USE	S
EXP0323047a	WXXCCV	MAP	3/24/10 7:45			1		USE	C
EXP0323048a	XIBLK06	MAP	3/24/10 8:15			1		USE	B
EXP0323049a	WXXCRI	MAP	3/24/10 8:44			1		USE	C
EXP0323050a	1202055940	MAP	3/24/10 9:14	958640	Various	2	LANL	USE	S
EXP0323051a	1202055941	MAP	3/24/10 9:43	958640	Various	2	LANL	USE	S
EXP0323052a	248130002	MAP	3/24/10 10:13	958640	10-2097	2	LANL	USE	S
EXP0323053a	248130003	MAP	3/24/10 10:42	958640	10-2097	2	LANL	DUSE-RA	S
EXP0323054a	248130004	MAP	3/24/10 11:12	958640	10-2097	2	LANL	USE	S
EXP0323055a	248130005	MAP	3/24/10 11:41	958640	10-2097	2	LANL	USE	S
EXP0323056a	248184002	MAP	3/24/10 12:11	958640	10-2119	2	LANL	USE-DL	S
EXP0323057a	248184003	MAP	3/24/10 12:40	958640	10-2119	2	LANL	DUSE-RA	S
EXP0323058a	248130003	MAP	3/24/10 13:10	958640	10-2097	2	LANL	USE	S
EXP0323059a	248184003	MAP	3/24/10 13:39	958640	10-2119	2	LANL	USE	S
EXP0323060a	WXXCCV	MAP	3/24/10 14:09			1		USE	C
EXP0323061a	XIBLK07	MAP	3/24/10 14:38			1		USE	B
EXP0323062a	WXXCRI	MAP	3/24/10 15:08			1		USE	C
EXP0323063a	248197001	MAP	3/24/10 15:37	958640	10-2121	2	LANL	USE	S
EXP0323064a	1202055942	MAP	3/24/10 16:07	958640	10-2121	2	LANL	USE	S
EXP0323065a	1202055943	MAP	3/24/10 16:36	958640	10-2121	2	LANL	DUSE-RA	S
EXP0323066a	248197002	MAP	3/24/10 17:06	958640	10-2121	2	LANL	DUSE-RA	S

EXP0323067a	248197003	MAP	3/24/10 17:35	958640	10-2121	2	LANL	USE	S
EXP0323068a	248197004	MAP	3/24/10 18:05	958640	10-2121	2	LANL	USE	S
EXP0323069a	248197005	MAP	3/24/10 18:34	958640	10-2121	2	LANL	USE	S
EXP0323070a	248197007	MAP	3/24/10 19:04	958640	10-2121	2	LANL	USE	S
EXP0323071a	248197008	MAP	3/24/10 19:33	958640	10-2121	2	LANL	USE	S
EXP0323072a	248197009	MAP	3/24/10 20:03	958640	10-2121	2	LANL	USE	S
EXP0323073a	WXXCCV	MAP	3/24/10 20:32			1		USE	C
EXP0323074a	XIBLK08	MAP	3/24/10 21:02			1		USE	B
EXP0323075a	WXXCRI	MAP	3/24/10 21:31			1		USE	C
EXP0323076a	248197010	MAP	3/24/10 22:01	958640	10-2121	2	LANL	USE	S
EXP0323077a	248197011	MAP	3/24/10 22:30	958640	10-2121	2	LANL	USE	S
EXP0323078a	248197012	MAP	3/24/10 23:00	958640	10-2121	2	LANL	USE	S
EXP0323079a	248197013	MAP	3/24/10 23:29	958640	10-2121	2	LANL	USE	S
EXP0323080a	248184002	MAP	3/24/10 23:59	958640	10-2121	5	LANL	USE	S
EXP0323081a	XIBLK09	MAP	3/25/10 0:28		10-2121	1		USE	B
EXP0323082a	1202057490	MAP	3/25/10 0:58		Various	2	LANL	USE	S
EXP0323083a	1202057491	MAP	3/25/10 1:28		Various	2	LANL	USE	S
EXP0323084a	248202001	MAP	3/25/10 1:57	959334	10-2124	2	LANL	USE	S
EXP0323085a	248202002	MAP	3/25/10 2:27	959334	10-2124	2	LANL	USE	S
EXP0323086a	WXXCCV	MAP	3/25/10 2:56			1		USE	C
EXP0323087a	XIBLK10	MAP	3/25/10 3:26			1		USE	B
EXP0323088a	WXXCRI	MAP	3/25/10 3:55			1		USE	C
EXP0323089a	248203002	MAP	3/25/10 4:24	959334	10-2125	2	LANL	USE	S
EXP0323090a	248234001	MAP	3/25/10 4:54	959334	10-2131	2	LANL	USE	S
EXP0323091a	248234002	MAP	3/25/10 5:23	959334	10-2131	2	LANL	USE	S
EXP0323092a	248234003	MAP	3/25/10 5:53	959334	10-2131	2	LANL	USE	S
EXP0323093a	248234004	MAP	3/25/10 6:22	959334	10-2131	2	LANL	USE	S
EXP0323094a	248234005	MAP	3/25/10 6:52	959334	10-2131	2	LANL	USE	S
EXP0323095a	248234006	MAP	3/25/10 7:21	959334	10-2131	2	LANL	USE	S
EXP0323096a	248234007	MAP	3/25/10 7:51	959334	10-2131	2	LANL	USE	S
EXP0323097a	248240001	MAP	3/25/10 8:20	959334	10-2134	2	LANL	USE	S
EXP0323098a	1202057492	MAP	3/25/10 8:50	959334	10-2134	2	LANL	USE	S
EXP0323099a	WXXCCV	MAP	3/25/10 9:19			1		USE	C
EXP0323100a	XIBLK11	MAP	3/25/10 9:49			1		USE	B
EXP0323101a	WXXCRI	MAP	3/25/10 10:18			1		USE	C
EXP0323102a	1202057493	MAP	3/25/10 10:48	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323103a	248240002	MAP	3/25/10 11:17	959334	10-2134	2	LANL	DUSE-RA	S

EXP0323104a	248240003	MAP	3/25/10 11:47	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323105a	248240004	MAP	3/25/10 12:16	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323106a	248240005	MAP	3/25/10 12:46	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323107a	248240006	MAP	3/25/10 13:15	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323108a	248240007	MAP	3/25/10 13:45	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323109a	248240008	MAP	3/25/10 14:14	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323110a	248240009	MAP	3/25/10 14:44	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323111a	248240010	MAP	3/25/10 15:13	959334	10-2134	2	LANL	DUSE-RA	S
EXP0323112a	WXXCCV	MAP	3/25/10 15:43			1		DUSE	C
EXP0323113a	XIBLK12	MAP	3/25/10 16:12			1		DUSE	B

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/25/10
 Extr. Injection Volume: 50ul
 Sequence Number: 032510expA
 Initial Calibration Date: 03/25/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100309-01.3
 Mobile Phase Lot#: 1290941, 1281642
 Standard-Samp Reagent Lot#: 1283379, 1284736
 Reviewed BY: *[Signature]*
 Date: 03/30/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100325-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0325001a	XIBLK01	MAP	3/25/10 16:47			1		USE	B
EXP0325002a	XIBLK01	MAP	3/25/10 17:16			1		USE	B
EXP0325003a	WXXICAL-01	MAP	3/25/10 17:46			1		USE	I
EXP0325004a	WXXICAL-02	MAP	3/25/10 18:15			1		USE	I
EXP0325005a	WXXICAL-03	MAP	3/25/10 18:45			1		USE	I
EXP0325006a	WXXICAL-04	MAP	3/25/10 19:14			1		USE	I
EXP0325007a	WXXICAL-05	MAP	3/25/10 19:44			1		USE	I
EXP0325008a	WXXICAL-06	MAP	3/25/10 20:13			1		USE	I
EXP0325009a	XIBLK02	MAP	3/25/10 20:42			1		USE	B
EXP0325010a	WXXICV	MAP	3/25/10 21:12			1		USE	C
EXP0325011a	XIBLK03	MAP	3/25/10 21:41			1		USE	B
EXP0325012a	WXXCRI	MAP	3/25/10 22:11			1		USE	C
EXP0325013a	1202057493	MAP	3/25/10 22:40	959334	10-2134	2	LANL	USE	S
EXP0325014a	248240002	MAP	3/25/10 23:10	959334	10-2134	2	LANL	USE	S
EXP0325015a	248240003	MAP	3/25/10 23:39	959334	10-2134	2	LANL	USE	S
EXP0325016a	248240004	MAP	3/26/10 0:09	959334	10-2134	2	LANL	USE	S
EXP0325017a	248240005	MAP	3/26/10 0:38	959334	10-2134	2	LANL	USE	S
EXP0325018a	248240006	MAP	3/26/10 1:08	959334	10-2134	2	LANL	USE	S
EXP0325019a	248240007	MAP	3/26/10 1:37	959334	10-2134	2	LANL	USE	S
EXP0325020a	248240008	MAP	3/26/10 2:07	959334	10-2134	2	LANL	USE	S
EXP0325021a	248240009	MAP	3/26/10 2:36	959334	10-2134	2	LANL	USE	S
EXP0325022a	248240010	MAP	3/26/10 3:06	959334	10-2134	2	LANL	USE	S
EXP0325023a	WXXCCV	MAP	3/26/10 3:35			1		USE	C
EXP0325024a	XIBLK04	MAP	3/26/10 4:05			1		USE	B
EXP0325025a	WXXCRI	MAP	3/26/10 4:34			1		USE	C
EXP0325026a	248234004	MAP	3/26/10 5:04	959334	10-2131	10	LANL	DUSE-RA	S
EXP0325027a	248234005	MAP	3/26/10 5:33	959334	10-2131	2	LANL	DUSE-RA	S
EXP0325028a	248197002	MAP	3/26/10 6:03	958640	10-2121	2	LANL	DUSE-RA	S
EXP0325029a	1202055943	MAP	3/26/10 6:32	958640	10-2121	2	LANL	DUSE-RA	S

EXP0325030a	XIBLK05	MAP	3/26/10 7:02	967392	10-2491	1	LANL	DUSE	B
EXP0325031a	1202076336	MAP	3/26/10 7:31	967392	10-2491	2	LANL	DUSE-RA	S
EXP0325032a	1202076337	MAP	3/26/10 8:01	967392	10-2491	2	LANL	DUSE-RA	S
EXP0325033a	249611006	MAP	3/26/10 8:30	967392	10-2491	2	LANL	DUSE-RA	S
EXP0325034a	1202076338	MAP	3/26/10 9:00	967392	10-2491	2	LANL	DUSE-RA	S
EXP0325035a	1202076339	MAP	3/26/10 9:29	967392	10-2491	2	LANL	DUSE-RA	S
EXP0325036a	WXXCVC	MAP	3/26/10 9:59			1		DUSE	C
EXP0325037a	XIBLK06	MAP	3/26/10 10:28			1		DUSE	B
EXP0325038a	WXXCRI	MAP	3/26/10 10:58			1		DUSE	C
EXP0325039a	XIBLK07	MAP	3/26/10 11:27			1		DUSE	B
EXP0325040a	WXXCVC	MAP	3/26/10 11:57			1		DUSE	C
EXP0325041a	XIBLK08	MAP	3/26/10 12:26			1		DUSE	B
EXP0325042a	WXXCRI	MAP	3/26/10 12:56			1		DUSE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 03/16/10

Extr. Injection Volume: 10uL

Sequence Number: 031610exs

Method: 8321A-Modified

Int. Std.: N/A

Mobile Phase Lot#: 1268566, 1268568

Standard-Samp Reagent Lot#: 1274562, 1261217

Reviewed By: *Handwritten Signature*

Date: 03/22/10

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100316-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03160001.wiff	XIBLK01	LER	3/16/2010 8:17			1		USE	B
EXS03160002.wiff	XIBLK01	LER	3/16/2010 8:33			1		USE	B
EXS03160003.wiff	WXXICAL-19	LER	3/16/2010 8:49			1		USE	I
EXS03160004.wiff	WXXICAL-20	LER	3/16/2010 9:04			1		USE	I
EXS03160005.wiff	WXXICAL-21	LER	3/16/2010 9:20			1		USE	I
EXS03160006.wiff	WXXICAL-22	LER	3/16/2010 9:36			1		USE	I
EXS03160007.wiff	WXXICAL-23	LER	3/16/2010 9:52			1		USE	I
EXS03160008.wiff	WXXICAL-24	LER	3/16/2010 10:07			1		USE	I
EXS03160009.wiff	WXXICAL-25	LER	3/16/2010 10:23			1		USE	I
EXS03160010.wiff	XIBLK02	LER	3/16/2010 10:39			1		USE	B
EXS03160011.wiff	WXXICV	LER	3/16/2010 10:54			1		USE	C
EXS03160012.wiff	XIBLK03	LER	3/16/2010 11:10			1		USE	B
EXS03160013.wiff	WXXCRI	LER	3/16/2010 11:26			1		USE	C
EXS03160014.wiff	1202049932	LER	3/16/2010 11:41	956053	VARIOUS	2	LANL	USE	S
EXS03160015.wiff	1202049933	LER	3/16/2010 11:57	956053	VARIOUS	2	LANL	USE	S
EXS03160016.wiff	247545001	LER	3/16/2010 12:13	956053	10-1964	2	LANL	USE	S
EXS03160017.wiff	247545002	LER	3/16/2010 12:29	956053	10-1964	2	LANL	USE	S
EXS03160018.wiff	247551001	LER	3/16/2010 12:44	956053	10-1969	2	LANL	USE	S
EXS03160019.wiff	247551002	LER	3/16/2010 13:00	956053	10-1969	2	LANL	USE	S
EXS03160020.wiff	247552002	LER	3/16/2010 13:16	956053	10-1970	2	LANL	USE	S
EXS03160021.wiff	247556001	LER	3/16/2010 13:31	956053	10-1953	2	LANL	USE	S
EXS03160022.wiff	1202049934	LER	3/16/2010 13:47	956053	10-1953	2	LANL	USE	S
EXS03160023.wiff	1202049935	LER	3/16/2010 14:03	956053	10-1953	2	LANL	USE	S
EXS03160024.wiff	WXXCCV	LER	3/16/2010 14:18			1		USE	C
EXS03160025.wiff	XIBLK04	LER	3/16/2010 14:34			1		USE	B
EXS03160026.wiff	WXXCRI	LER	3/16/2010 14:50			1		USE	C
EXS03160027.wiff	247556002	LER	3/16/2010 15:06	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160028.wiff	247556003	LER	3/16/2010 15:21	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160029.wiff	247556004	LER	3/16/2010 15:37	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160030.wiff	247556005	LER	3/16/2010 15:53	956053	10-1953	2	LANL	DUSE-RA	S

EXS03160031.wiff	247565001	LER	3/16/2010 16:08	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160032.wiff	247565002	LER	3/16/2010 16:24	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160033.wiff	247565003	LER	3/16/2010 16:40	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160034.wiff	247565004	LER	3/16/2010 16:56	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160035.wiff	247565005	LER	3/16/2010 17:11	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160036.wiff	247565006	LER	3/16/2010 17:27	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160037.wiff	WXXCCV X	LER	3/16/2010 17:43			1		DUSE	C
EXS03160038.wiff	XIBLK05 X	LER	3/16/2010 17:58			1		DUSE	B
EXS03160039.wiff	WXXCRI X	LER	3/16/2010 18:14			1		DUSE	C
EXS03160040.wiff	247565007	LER	3/16/2010 18:30	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160041.wiff	247565008	LER	3/16/2010 18:45	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160042.wiff	247565009	LER	3/16/2010 19:01	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160043.wiff	247565010	LER	3/16/2010 19:17	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160044.wiff	XIBLK06 X	LER	3/16/2010 19:33			1		DUSE-RA	B
EXS03160045.wiff	1202055047	LER	3/16/2010 19:48	958273	VARIOUS	2	LANL	DUSE-RA	S
EXS03160046.wiff	1202055048	LER	3/16/2010 20:04	958273	VARIOUS	2	LANL	DUSE-RA	S
EXS03160047.wiff	248059002	LER	3/16/2010 20:20	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160048.wiff	248059003	LER	3/16/2010 20:36	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160049.wiff	248059004	LER	3/16/2010 20:51	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160050.wiff	WXXCCV	LER	3/16/2010 21:07			1		USE	C
EXS03160051.wiff	XIBLK07	LER	3/16/2010 21:23			1		USE	B
EXS03160052.wiff	WXXCRI	LER	3/16/2010 21:38			1		USE	C
EXS03160053.wiff	248059005	LER	3/16/2010 21:54	958273	10-2082	2	LANL	USE	S
EXS03160054.wiff	248059006	LER	3/16/2010 22:10	958273	10-2082	2	LANL	USE	S
EXS03160055.wiff	248059007	LER	3/16/2010 22:26	958273	10-2082	2	LANL	USE	S
EXS03160056.wiff	248059008	LER	3/16/2010 22:41	958273	10-2082	2	LANL	USE	S
EXS03160057.wiff	248059009	LER	3/16/2010 22:57	958273	10-2082	2	LANL	USE	S
EXS03160058.wiff	248060003	LER	3/16/2010 23:13	958273	10-2080	2	LANL	USE	S
EXS03160059.wiff	248060004	LER	3/16/2010 23:28	958273	10-2080	2	LANL	USE	S
EXS03160060.wiff	248060005	LER	3/16/2010 23:44	958273	10-2080	2	LANL	USE	S
EXS03160061.wiff	248060006	LER	3/17/2010 0:00	958273	10-2080	2	LANL	USE	S
EXS03160062.wiff	WXXCCV	LER	3/17/2010 0:16			1		USE	C
EXS03160063.wiff	XIBLK08	LER	3/17/2010 0:31			1		USE	B
EXS03160064.wiff	WXXCRI	LER	3/17/2010 0:47			1		USE	C
EXS03160065.wiff	248064001	LER	3/17/2010 1:03	958273	10-2085	2	LANL	USE	S
EXS03160066.wiff	1202055049	LER	3/17/2010 1:18	958273	10-2085	2	LANL	USE	S
EXS03160067.wiff	1202055050	LER	3/17/2010 1:34	958273	10-2085	2	LANL	USE	S

EXS03160068.wiff	248064002	LER	3/17/2010 1:50	958273	10-2085	2	LANL	USE	S
EXS03160069.wiff	248064003	LER	3/17/2010 2:06	958273	10-2085	2	LANL	USE	S
EXS03160070.wiff	248064004	LER	3/17/2010 2:21	958273	10-2085	2	LANL	USE	S
EXS03160071.wiff	248064005	LER	3/17/2010 2:37	958273	10-2085	2	LANL	USE	S
EXS03160072.wiff	248064006	LER	3/17/2010 2:53	958273	10-2085	2	LANL	USE	S
EXS03160073.wiff	248064007	LER	3/17/2010 3:08	958273	10-2085	2	LANL	USE	S
EXS03160074.wiff	248064008	LER	3/17/2010 3:24	958273	10-2085	2	LANL	USE	S
EXS03160075.wiff	WXXCCV	LER	3/17/2010 3:40			1		USE	C
EXS03160076.wiff	XIBLK09	LER	3/17/2010 3:55			1		USE	B
EXS03160077.wiff	WXXCRI	LER	3/17/2010 4:11			1		USE	C
EXS03160078.wiff	1202057490	LER	3/17/2010 4:27	959334	VARIOUS	2	LANL	USE	S
EXS03160079.wiff	1202057491	LER	3/17/2010 4:43	959334	VARIOUS	2	LANL	USE	S
EXS03160080.wiff	248202001	LER	3/17/2010 4:58	959334	10-2124	2	LANL	USE	S
EXS03160081.wiff	248202002	LER	3/17/2010 5:14	959334	10-2124	2	LANL	USE	S
EXS03160082.wiff	248203002	LER	3/17/2010 5:30	959334	10-2125	2	LANL	USE	S
EXS03160083.wiff	248234001	LER	3/17/2010 5:45	959334	10-2131	2	LANL	USE	S
EXS03160084.wiff	248234002	LER	3/17/2010 6:01	959334	10-2131	2	LANL	USE	S
EXS03160085.wiff	248234003	LER	3/17/2010 6:17	959334	10-2131	2	LANL	USE	S
EXS03160086.wiff	248234004	LER	3/17/2010 6:32	959334	10-2131	2	LANL	USE	S
EXS03160087.wiff	248234005	LER	3/17/2010 6:48	959334	10-2131	2	LANL	USE	S
EXS03160088.wiff	WXXCCV	LER	3/17/2010 7:04			1		USE	C
EXS03160089.wiff	XIBLK10	LER	3/17/2010 7:20			1		USE	B
EXS03160090.wiff	WXXCRI	LER	3/17/2010 7:35			1		USE	C
EXS03160091.wiff	248234006	LER	3/17/2010 7:51	959334	10-2131	2	LANL	USE	S
EXS03160092.wiff	248234007	LER	3/17/2010 8:07	959334	10-2131	2	LANL	USE	S
EXS03160093.wiff	248240001	LER	3/17/2010 8:22	959334	10-2134	2	LANL	USE	S
EXS03160094.wiff	1202057492	LER	3/17/2010 8:38	959334	10-2134	2	LANL	USE	S
EXS03160095.wiff	1202057493	LER	3/17/2010 8:54	959334	10-2134	2	LANL	USE	S
EXS03160096.wiff	248240002	LER	3/17/2010 9:10	959334	10-2134	2	LANL	USE	S
EXS03160097.wiff	248240003	LER	3/17/2010 9:25	959334	10-2134	2	LANL	USE	S
EXS03160098.wiff	248240004	LER	3/17/2010 9:41	959334	10-2134	2	LANL	USE	S
EXS03160099.wiff	248240005	LER	3/17/2010 9:57	959334	10-2134	2	LANL	USE	S
EXS03160100.wiff	248240006	LER	3/17/2010 10:12	959334	10-2134	2	LANL	USE	S
EXS03160101.wiff	WXXCCV	LER	3/17/2010 10:28			1		USE	C
EXS03160102.wiff	XIBLK11	LER	3/17/2010 10:44			1		USE	B
EXS03160103.wiff	WXXCRI	LER	3/17/2010 10:59			1		USE	C
EXS03160104.wiff	248240007	LER	3/17/2010 11:15	959334	10-2134	2	LANL	USE	S

EXS03160105.wiff	248240008	LER	3/17/2010 11:31	959334	10-2134	2	LANL	USE	S
EXS03160106.wiff	248240009	LER	3/17/2010 11:47	959334	10-2134	2	LANL	USE	S
EXS03160107.wiff	248240010	LER	3/17/2010 12:02	959334	10-2134	2	LANL	USE	S
EXS03160108.wiff	WXXCVC	LER	3/17/2010 12:18			1		USE	C
EXS03160109.wiff	XIBLK12	LER	3/17/2010 12:34			1		USE	B
EXS03160110.wiff	WXXCRI	LER	3/17/2010 12:49			1		USE	C
EXS03160111.wiff	247556002	LER	3/17/2010 13:05	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160112.wiff	247556003	LER	3/17/2010 13:21	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160113.wiff	247556004	LER	3/17/2010 13:37	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160114.wiff	247556005	LER	3/17/2010 13:52	956053	10-1953	2	LANL	DUSE-RA	S
EXS03160115.wiff	247556001	LER	3/17/2010 14:08	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160116.wiff	247556002	LER	3/17/2010 14:24	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160117.wiff	247556003	LER	3/17/2010 14:39	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160118.wiff	247556004	LER	3/17/2010 14:55	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160119.wiff	247556005	LER	3/17/2010 15:11	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160120.wiff	247556006	LER	3/17/2010 15:27	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160121.wiff	WXXCVC	LER	3/17/2010 15:42			1		DUSE	C
EXS03160122.wiff	XIBLK13	LER	3/17/2010 15:58			1		DUSE	B
EXS03160123.wiff	WXXCRI	LER	3/17/2010 16:14			1		DUSE	C
EXS03160124.wiff	247556007	LER	3/17/2010 16:29	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160125.wiff	247556008	LER	3/17/2010 16:45	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160126.wiff	247556009	LER	3/17/2010 17:01	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160127.wiff	247556010	LER	3/17/2010 17:17	956053	10-1956	2	LANL	DUSE-RA	S
EXS03160128.wiff	XIBLK14	LER	3/17/2010 17:32			1		DUSE-RA	B
EXS03160129.wiff	1202055047	LER	3/17/2010 17:48	958273	VARIOUS	2	LANL	DUSE-RA	S
EXS03160130.wiff	1202055048	LER	3/17/2010 18:04	958273	VARIOUS	2	LANL	DUSE-RA	S
EXS03160131.wiff	248059002	LER	3/17/2010 18:19	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160132.wiff	248059003	LER	3/17/2010 18:35	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160133.wiff	248059004	LER	3/17/2010 18:51	958273	10-2082	2	LANL	DUSE-RA	S
EXS03160134.wiff	WXXCVC	LER	3/17/2010 19:07			1		USE	C
EXS03160135.wiff	XIBLK15	LER	3/17/2010 19:22			1		USE	B
EXS03160136.wiff	WXXCRI	LER	3/17/2010 19:38			1		USE	C
EXS03160137.wiff	1202047270	LER	3/17/2010 19:54	954941	10-1886	2	LANL	USE	S
EXS03160138.wiff	1202047271	LER	3/17/2010 20:09	954941	10-1886	2	LANL	USE	S
EXS03160139.wiff	247261003	LER	3/17/2010 20:25	954941	10-1886	2	LANL	USE	S
EXS03160140.wiff	1202047272	LER	3/17/2010 20:41	954941	10-1886	2	LANL	USE	S
EXS03160141.wiff	1202047273	LER	3/17/2010 20:57	954941	10-1886	2	LANL	USE	S

EXS03160142.wiff	WXXCCV	LER	3/17/2010 21:12		SCREEN	SOLID	1		USE	C
EXS03160143.wiff	XIBLK16	LER	3/17/2010 21:28				1		USE	B
EXS03160144.wiff	WXXCRI	LER	3/17/2010 21:44				1		USE	C
EXS03160145.wiff	UX100223-02.2	LER	3/17/2010 21:59				2	O2Sf	USE	S
EXS03160146.wiff	XIBLK17	LER	3/17/2010 22:15				1		USE	B
EXS03160147.wiff	1202055940	LER	3/17/2010 22:31		958640	VARIOUS	2	LANL	USE	S
EXS03160148.wiff	1202055941	LER	3/17/2010 22:46		958640	VARIOUS	2	LANL	USE	S
EXS03160149.wiff	248130002	LER	3/17/2010 23:02		958640	10-2097	2	LANL	USE	S
EXS03160150.wiff	248130003	LER	3/17/2010 23:18		958640	10-2097	2	LANL	USE	S
EXS03160151.wiff	248130004	LER	3/17/2010 23:34		958640	10-2097	2	LANL	USE	S
EXS03160152.wiff	248130005	LER	3/17/2010 23:49		958640	10-2097	2	LANL	USE	S
EXS03160153.wiff	248184002	LER	3/18/2010 0:05		958640	10-2119	2	LANL	USE	S
EXS03160154.wiff	248184003	LER	3/18/2010 0:21		958640	10-2119	2	LANL	USE	S
EXS03160155.wiff	WXXCCV	LER	3/18/2010 0:36				1		USE	C
EXS03160156.wiff	XIBLK18	LER	3/18/2010 0:52				1		USE	B
EXS03160157.wiff	WXXCRI	LER	3/18/2010 1:08				1		USE	C
EXS03160158.wiff	248197001	LER	3/18/2010 1:23		958640	10-2121	2	LANL	USE	S
EXS03160159.wiff	1202055942	LER	3/18/2010 1:39		958640	10-2121	2	LANL	USE	S
EXS03160160.wiff	1202055943	LER	3/18/2010 1:55		958640	10-2121	2	LANL	USE	S
EXS03160161.wiff	248197002	LER	3/18/2010 2:11		958640	10-2121	2	LANL	USE	S
EXS03160162.wiff	248197003	LER	3/18/2010 2:26		958640	10-2121	2	LANL	USE	S
EXS03160163.wiff	248197004	LER	3/18/2010 2:42		958640	10-2121	2	LANL	USE	S
EXS03160164.wiff	248197005	LER	3/18/2010 2:58		958640	10-2121	2	LANL	USE	S
EXS03160165.wiff	248197007	LER	3/18/2010 3:13		958640	10-2121	2	LANL	USE	S
EXS03160166.wiff	248197008	LER	3/18/2010 3:29		958640	10-2121	2	LANL	USE	S
EXS03160167.wiff	248197009	LER	3/18/2010 3:45		958640	10-2121	2	LANL	USE	S
EXS03160168.wiff	WXXCCV	LER	3/18/2010 4:00				1		USE	C
EXS03160169.wiff	XIBLK19	LER	3/18/2010 4:16				1		USE	B
EXS03160170.wiff	WXXCRI	LER	3/18/2010 4:32				1		USE	C
EXS03160171.wiff	248197010	LER	3/18/2010 4:48		958640	10-2121	2	LANL	USE	S
EXS03160172.wiff	248197011	LER	3/18/2010 5:03		958640	10-2121	2	LANL	USE	S
EXS03160173.wiff	248197012	LER	3/18/2010 5:19		958640	10-2121	2	LANL	USE	S
EXS03160174.wiff	248197013	LER	3/18/2010 5:35		958640	10-2121	2	LANL	USE	S
EXS03160175.wiff	WXXCCV	LER	3/18/2010 5:50				1		USE	C
EXS03160176.wiff	XIBLK20	LER	3/18/2010 6:06				1		USE	B
EXS03160177.wiff	WXXCRI	LER	3/18/2010 6:22				1		USE	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 810723

Revision No.: 1

DATA EXCEPTION REPORT

Mo./Day Yr. 28-MAR-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: 959334	Sample Numbers: See Below		
Potentially affected work order(s) (SDG): 248202(10-2124), 248203(10-2125), 248234(10-2131), 248240(10-2134) 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 Exception Description:		DER Disposition:	
1. The Laboratory Control Sample (1202057491) did not meet spike recovery limits for 2,6-Diamino-4-nitrotoluene at 124%. The recovery limits are 64-122%. 2. The Matrix Spike (1202057492) did not meet spike recovery limits for TATB at 187%. The recovery limits are 29-155%. 3. The Matrix Spike Duplicate (1202057493) did not meet spike recovery limits for Tetryl at 31.2%. The recovery limits are 36-124%. 4. The MS/MSD pair (1202057492/3) did not meet RPD acceptance limits for Tetryl at 57.5%. The acceptance limits are 0-30%. The MS/MSD pair (1202057492/3) did not meet RPD acceptance limits for 2,4-Diamino-6-nitrotoluene at 47.7%. The acceptance limits are 0-26%.		1. While the Laboratory Control Sample exhibited a high bias, both the Matrix Spike and Matrix Spike Duplicate met acceptance limits for 2,6-Diamino-4-nitrotoluene. Since 2,6-Diamino-4-nitrotoluene was not detected in the associated samples, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative. 2. & 3. Since the Laboratory Control Sample met acceptance limits for both TATB and Tetryl, the noted exceptions are attributed to vagaries in the extraction process. 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 exceptions are attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancies are noted in the case narrative.	

Originator's Name:

Michael Penny

29-MAR-10

Data Validator/Group Leader:

Herbert Maier

02-APR-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2134**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 965805
Prep Batch Number: 965798

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
248240009	RE36-10-7520
248240010	RE36-10-7519
1202072502	Method Blank (MB)
1202072503	Laboratory Control Sample (LCS)
1202072504	248389002(WST16-10-13296) Matrix Spike (MS)
1202072505	248389002(WST16-10-13296) 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# 15.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

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

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

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

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

SDG 10-2134-PCB

Page 1 of 3

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 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

A LANL sample of similar matrix associated with another SDG (#10-2165) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information**Electronic Package Comment**

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

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An

electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

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

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

Reviewer: Jimmy Cao

Date: 3/26/10

Roadmap for LANL 10-2134 PCB

This roadmap was analyzed by yip00818 on 03-18-2010, 10:10.

This roadmap was packaged by sha01289 on 03-26-2010, 07:54.

This roadmap was reviewed by jim01140 on 04-14-2010, 08:42.

This roadmap was packaged by jim01140 on 04-14-2010, 14:27.

This roadmap was validated by jim01140 on 04-14-2010, 14:54.

Front Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/021f2101.d	248240009	sample	17-MAR-2010	09:35	10-2134.sub	RE36-10-7520	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/022f2201.d	248240010	sample	17-MAR-2010	09:48	10-2134.sub	RE36-10-7519	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/021b2301.d	248240009	sample	17-MAR-2010	09:35	10-2134.sub	RE36-10-7520	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/022b2201.d	248240010	sample	17-MAR-2010	09:48	10-2134.sub	RE36-10-7519	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/019f1901.d	1202072502	mb	17-MAR-2010	09:14	10-2134.sub	PBLK01	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/020f2001.d	1202072503	lcs	17-MAR-2010	09:25	10-2134.sub	PBLK01LCS	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/019b1901.d	1202072502	mb	17-MAR-2010	09:14	10-2134.sub	PBLK01	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/cod1a.i/0317107.b/020b2001.d	1202072503	lcs	17-MAR-2010	09:25	10-2134.sub	PBLK01LCS	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.17 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 21
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	4.20	ug/kg	1.40	4.20	1
11104-28-2	Aroclor-1221	U	4.20	ug/kg	1.40	4.20	1
11141-16-5	Aroclor-1232	U	4.20	ug/kg	1.40	4.20	1
53469-21-9	Aroclor-1242	U	4.20	ug/kg	1.40	4.20	1
12672-29-6	Aroclor-1248	U	4.20	ug/kg	1.40	4.20	1
11097-69-1	Aroclor-1254	J	2.50	ug/kg	1.40	4.20	1
11096-82-5	Aroclor-1260	U	4.20	ug/kg	1.40	4.20	1

PCB

Page 1 of 1

Certificate of Analysis
Sample Summary

SDG Number: 10-2134

Lab Sample ID: 248240009

Client ID: RE36-10-7520

Batch ID: 965805

Run Date: 03/17/2010 09:35

Prep Date: 03/16/2010 21:02

Data File: 021f2101.d

021b2101.d

Date Collected: 02/24/2010 12:00

Date Received: 02/27/2010 09:10

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.14 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 42.2

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.75	ug/kg	1.91	5.75	1
11104-28-2	Aroclor-1221	U	5.75	ug/kg	1.91	5.75	1
11141-16-5	Aroclor-1232	U	5.75	ug/kg	1.91	5.75	1
53469-21-9	Aroclor-1242	U	5.75	ug/kg	1.91	5.75	1
12672-29-6	Aroclor-1248	U	5.75	ug/kg	1.91	5.75	1
11097-69-1	Aroclor-1254	U	5.75	ug/kg	1.91	5.75	1
11096-82-5	Aroclor-1260	U	5.75	ug/kg	1.91	5.75	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2134

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 #
1202072502	MB for batch 965798	64	64	64	65
1202072503	LCS for batch 965798	64	63	63	66
248240009	RE36-10-7520	68	67	72	72
248240010	RE36-10-7519	57	56	52	63

Surrogate

4CMX = 4cmx

DCB = Decachlorobiphenyl

Acceptance Limits

(32%-120%)

(30%-116%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2134

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 965798

Matrix: SOIL

Lab Sample ID:1202072503

Instrument: ECD1A.1

Analysis Date: 03/17/2010 09:25

Dilution: 1

Analyst: YSI

Pre Batch ID 965798

Inj. Vol: 1 uL

Batch ID: 965805

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	19.6	59	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	21.6	65	45-118

PCB

Page 1 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2165

Client ID: WST16-10-13296MS

Lab Sample ID:1202072504

Instrument: ECD1A.I

Analyst: YS1

Inj. Vol: 1 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 17

Analysis Date: 03/17/2010 14:19

Dilution: 1

Prep Batch ID: 965798

Batch ID: 965805

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	40.1	0.00 U	24.3	61	23-119
11096-82-5	MS Aroclor-1260	40.1	0.00 U	30.2	75	28-124

PCB

Page 2 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2165

Sample Type: Matrix Spike Duplicate

Client ID: WST16-10-13296MSD

Matrix: R

Lab Sample ID:1202072505

%Moisture: 17

Instrument: ECD1A.I

Analysis Date: 03/17/2010 14:32

Dilution: 1

Analyst: YS1

Pre Batch II 965798

Inj. Vol: 1 uL

Batch ID: 965805

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	40.1	0.00 U	23.2	58	23-119	5	0-28
11096-82-5	MSD Aroclor-1260	40.1	0.00 U	30.5	76	28-124	1	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-2134	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 965798	Instrument ID:	ECD1A.J_2	Data File:	019b1901-1.d
Lab Sample ID:	1202072502		ECD1A.J_1		019f1901-1.d
Column:	CLP2	Prep Date:	03/16/2010 21:02	Analyzed:	03/17/10 09:14
	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 965798	1202072503	020f2001-1.d 020b2001-1.d	03/17/10	0925
02 RE36-10-7520	248240009	021f2101.d 021b2101.d	03/17/10	0935
03 RE36-10-7519	248240010	022f2201.d 022b2201.d	03/17/10	0948

SAMPLE
DATA

PCB

Page 1 of 1

Certificate of Analysis

Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240010

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-040

Client ID: RE36-10-7519
Batch ID: 965805
Run Date: 03/17/2010 09:48
Prep Date: 03/16/2010 21:02
Data File: 022f2201.d
022b2201.d

Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.17 g
Column: 1 CLP1
2 CLP2

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	4.20	ug/kg	1.40	4.20	1
11104-28-2	Aroclor-1221	U	4.20	ug/kg	1.40	4.20	1
11141-16-5	Aroclor-1232	U	4.20	ug/kg	1.40	4.20	1
53469-21-9	Aroclor-1242	U	4.20	ug/kg	1.40	4.20	1
12672-29-6	Aroclor-1248	U	4.20	ug/kg	1.40	4.20	1
11097-69-1	Aroclor-1254	J	2.50	ug/kg	1.40	4.20	1
11096-82-5	Aroclor-1260	U	4.20	ug/kg	1.40	4.20	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/022f2201.d
 Lab Smp Id: 248240010 Client Smp ID: RE36-10-7519
 Inj Date : 17-MAR-2010 09:48
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |248240010|1|
 Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7519|||
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2134.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	21.01460	% 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			
1.914	1.913	0.001	44687886	114.725	4.8	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.215	5.216	-0.001	30940330	104.201	4.4	80.00- 120.00	100.00	

6 Aroclor-1254					CAS #: 11097-69-1			
3.208	3.209	-0.001	342729	25.8430	1.1	80.00- 120.00	100.00 (a)	
3.363	3.364	-0.001	637998	35.7756	1.5	112.36- 152.36	186.15	
3.596	3.598	-0.002	1082168	48.3730	2.0	151.31- 191.31	315.75	
3.761	3.760	0.001	1414420	85.7741	3.6	104.79- 144.79	412.69	

				CONCENTRATIONS					
				ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO			
==	=====	=====	=====	=====	=====	=====		=====	
6 Aroclor-1254 (continued)									
3.867	3.869	-0.002	1628778	102.026	4.3	106.35-	146.35	475.24	
Average of Peak Concentrations =				2.5					

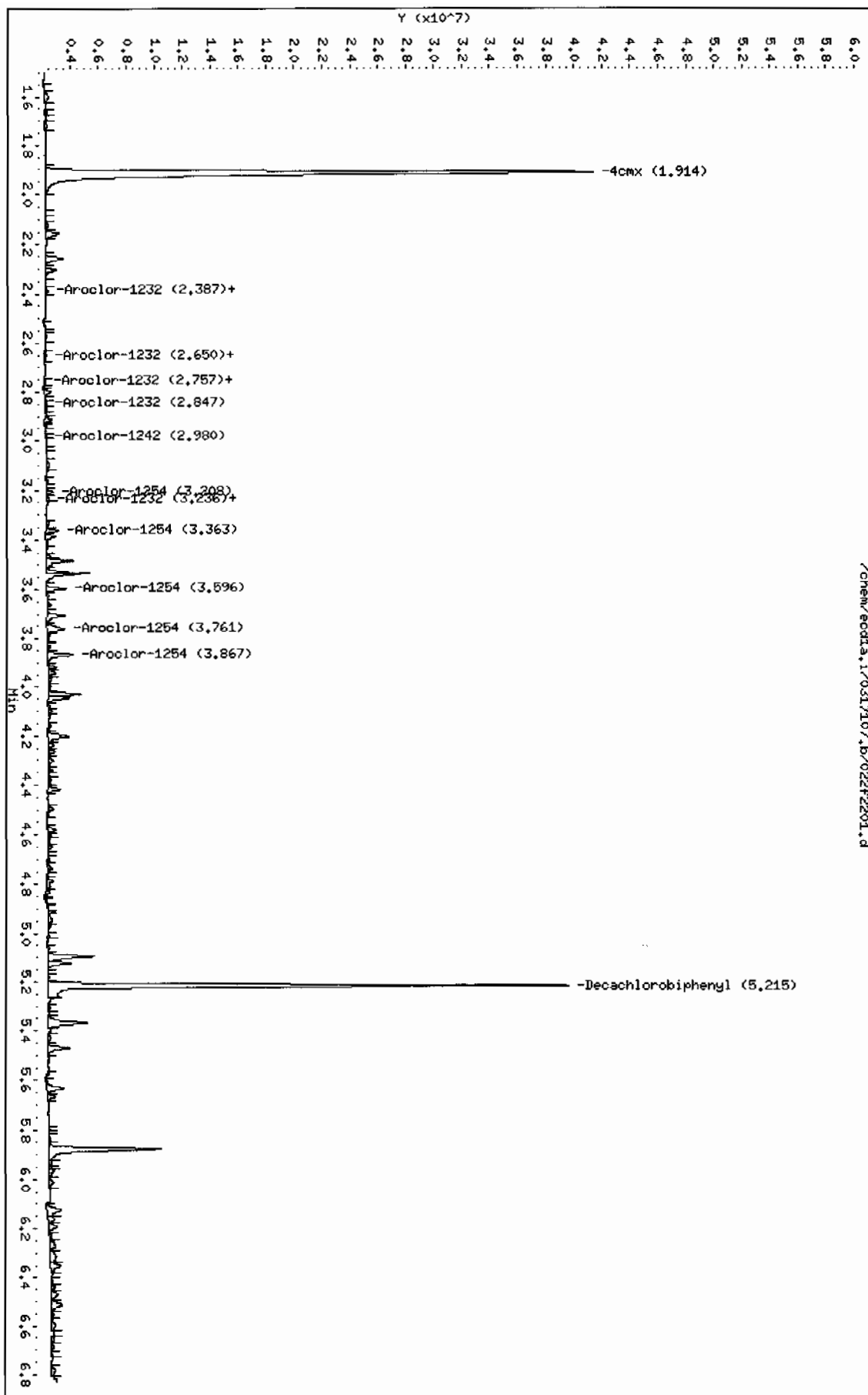
QC Flag Legend

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

Data File: /chem/eodla.i/0317107.b/022f2201.d
 Date: 17-MAR-2010 09:48
 Client ID: RE36-10-7519
 Sample Info: 124824001011
 Volume Injected (uL): 1.0
 Column phase: CLP1

Instrument: eodla.i
 Operator: YSL
 Column diameter: 0.25

/chem/eodla.i/0317107.b/022f2201.d



Data File: /chem/ecdl1a.i/0317107.b/022b2201.d
 Report Date: 17-Mar-2010 11:21

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdl1a.i/0317107.b/022b2201.d
 Lab Smp Id: 248240010 Client Smp ID: RE36-10-7519
 Inj Date : 17-MAR-2010 09:48
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |248240010|1|
 Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7519|||
 Comment :
 Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2134.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	21.01460	% 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		
2.271	2.271	0.000	29550658	112.646	4.7	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.913	5.913	0.000	23546215	125.799	5.3	80.00- 120.00	100.00

6 Aroclor-1254					CAS #: 11097-69-1		
3.376	3.375	0.001	146312	24.2994	1.0	80.00- 120.00	100.00(a)
3.796	3.797	-0.001	333464	30.8198	1.3	162.61- 202.61	227.91
3.913	3.914	-0.001	641100	53.7221	2.2	178.69- 218.69	438.17
4.189	4.189	0.000	907508	55.1952	2.3	256.82- 296.82	620.25

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
4.324	4.325	-0.001	616265	50.8658	2.1 188.70- 228.70	421.20
Average of Peak Concentrations =				1.8		

QC Flag Legend

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

Data File: /chem/ecdl1.i/0317107.b/02b2201.d

Date: 17-MAR-2010 09:48

Client ID: RE36-10-7519

Sample Info: 124824001011

Volume Injected (uL): 1.0

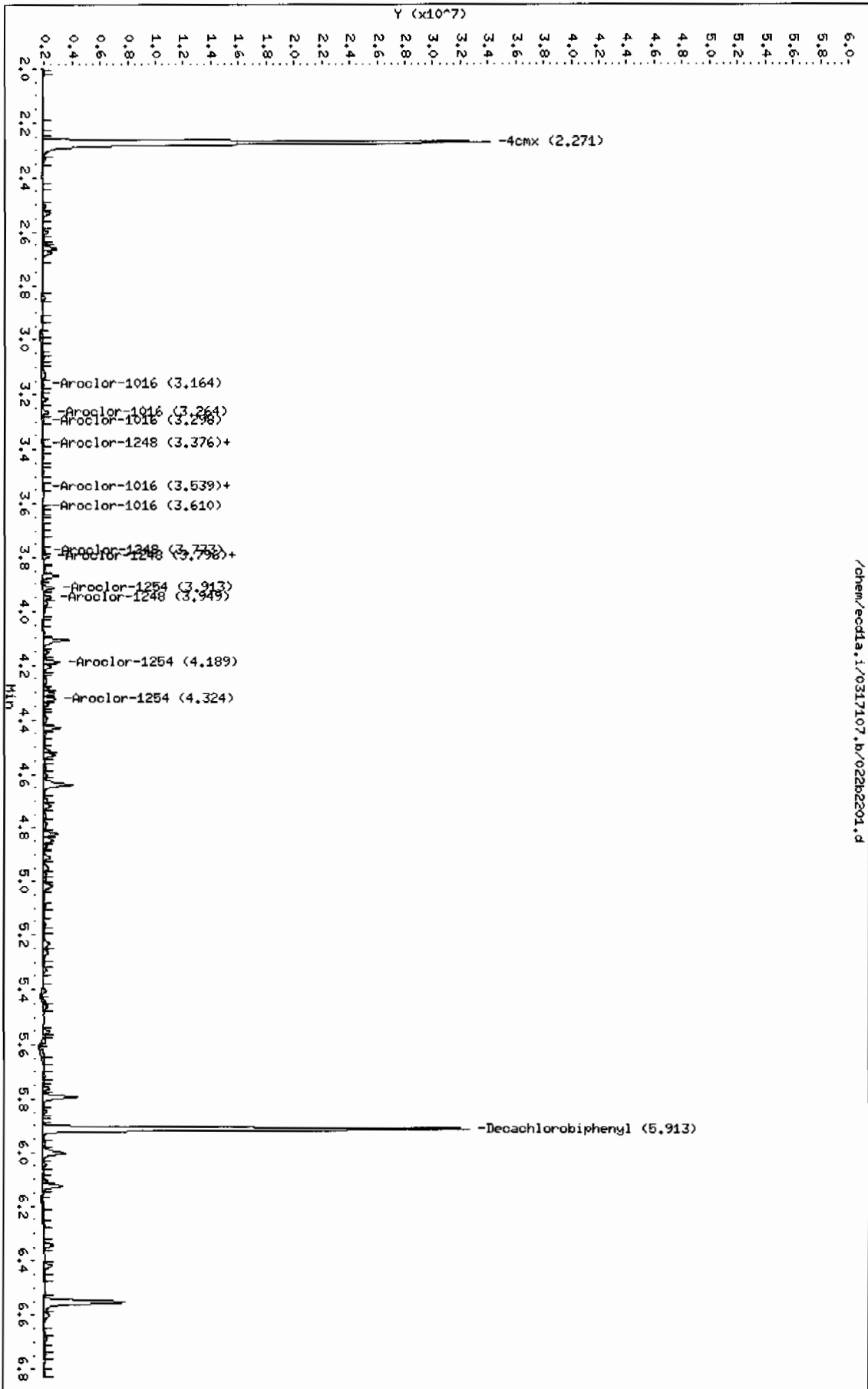
Column phase: CLP2

Page 1

Instrument: ecdl1.i

Operator: YS1

Column diameter: 0.25



PCB

Page 1 of 1

Certificate of Analysis

Sample Summary

SDG Number: 10-2134
Lab Sample ID: 248240009

Date Collected: 02/24/2010 12:00
Date Received: 02/27/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 42.2
Project: LANL01004
SOP Ref: GI-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7520
Batch ID: 965805
Run Date: 03/17/2010 09:35
Prep Date: 03/16/2010 21:02
Data File: 021f2101.d
021b2101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.75	ug/kg	1.91	5.75	1
11104-28-2	Aroclor-1221	U	5.75	ug/kg	1.91	5.75	1
11141-16-5	Aroclor-1232	U	5.75	ug/kg	1.91	5.75	1
53469-21-9	Aroclor-1242	U	5.75	ug/kg	1.91	5.75	1
12672-29-6	Aroclor-1248	U	5.75	ug/kg	1.91	5.75	1
11097-69-1	Aroclor-1254	U	5.75	ug/kg	1.91	5.75	1
11096-82-5	Aroclor-1260	U	5.75	ug/kg	1.91	5.75	1

Data File: /chem/ecdla.i/0317107.b/021f2101.d
Report Date: 17-Mar-2010 11:20

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/021f2101.d
Lab Smp Id: 248240009 Client Smp ID: RE36-10-7520
Inj Date : 17-MAR-2010 09:35
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248240009|1|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7520|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2134.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	42.24940	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
1.913	1.913	0.000	52719511	135.344	7.8	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.217	5.216	0.001	42910243	144.513	8.3	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/0317107.b/021f2101.d

Date: 17-MAR-2010 09:35

Client ID: RE36-10-7520

Sample Info: 124824009111

Volume Injected (uL): 1.0

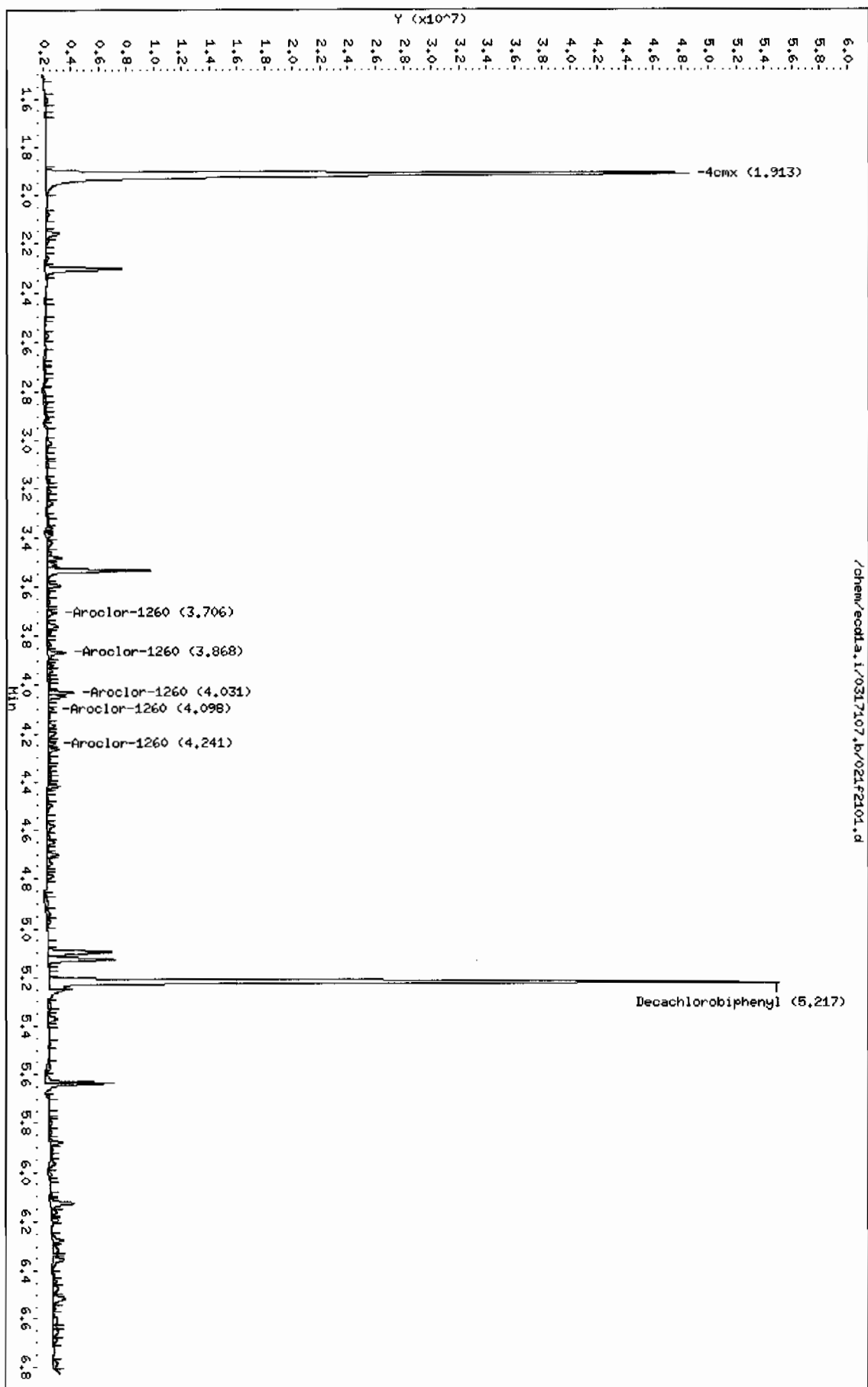
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecd1a.i/0317107.b/021b2101.d
Report Date: 17-Mar-2010 11:19

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd1a.i/0317107.b/021b2101.d
Lab Smp Id: 248240009 Client Smp ID: RE36-10-7520
Inj Date : 17-MAR-2010 09:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248240009|1|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7520|||
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 2l
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2134.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	42.24940	% Moisture

Cpnd Variable Local Compound Variable

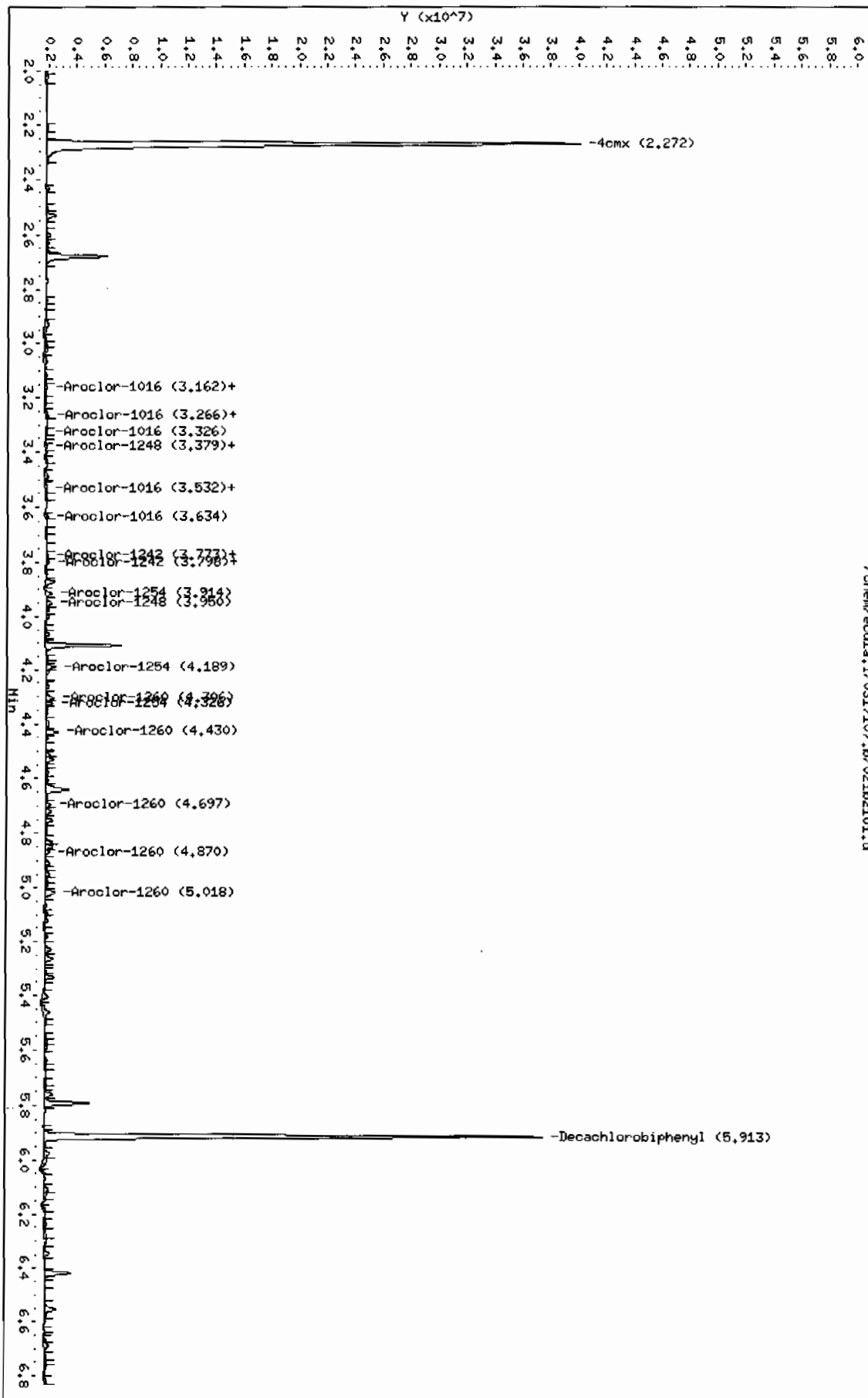
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.272	2.271	0.001	35110047 133.838	7.7	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.913	5.913	0.000	26824658 143.314	8.2	80.00- 120.00	100.00	

Data File: /chem/ecod1a.i/0317107.b/021b2101.d
 Date : 17-MAR-2010 09:35
 Client ID: RE36-10-7520
 Sample Info: 1248240009111
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecod1a.i
 Operator: YSI
 Column diameter: 0.25

/chem/ecod1a.i/0317107.b/021b2101.d



STANDARDS DATA

Report Date: 18-Mar-2010 09:29

Calibration History

Method : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecd1a.i/022210.b/032f3201.d
11-MAR-2010 19:40	AR1248	/chem/ecd1a.i/031110b.b/029f2901.d
11-MAR-2010 18:37	AR1242	/chem/ecd1a.i/031110b.b/023f2301.d
11-MAR-2010 17:34	AR1254	/chem/ecd1a.i/031110b.b/017f1701.d
11-MAR-2010 16:31	AR1660	/chem/ecd1a.i/031110b.b/011f1101.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033f3301.d
11-MAR-2010 19:51	AR1248	/chem/ecd1a.i/031110b.b/030f3001.d
11-MAR-2010 18:48	AR1242	/chem/ecd1a.i/031110b.b/024f2401.d
11-MAR-2010 17:45	AR1254	/chem/ecd1a.i/031110b.b/018f1801.d
11-MAR-2010 16:41	AR1660	/chem/ecd1a.i/031110b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034f3401.d
11-MAR-2010 20:01	AR1248	/chem/ecd1a.i/031110b.b/031f3101.d
11-MAR-2010 18:58	AR1242	/chem/ecd1a.i/031110b.b/025f2501.d
11-MAR-2010 17:55	AR1254	/chem/ecd1a.i/031110b.b/019f1901.d
11-MAR-2010 16:52	AR1660	/chem/ecd1a.i/031110b.b/013f1301.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035f3501.d
11-MAR-2010 20:12	AR1248	/chem/ecd1a.i/031110b.b/032f3201.d
11-MAR-2010 19:09	AR1242	/chem/ecd1a.i/031110b.b/026f2601.d
11-MAR-2010 18:06	AR1254	/chem/ecd1a.i/031110b.b/020f2001.d
11-MAR-2010 17:02	AR1660	/chem/ecd1a.i/031110b.b/014f1401.d
11-MAR-2010 16:10	AR1262	/chem/ecd1a.i/031110b.b/009f0901.d
11-MAR-2010 15:59	AR1221	/chem/ecd1a.i/031110b.b/008f0801.d
11-MAR-2010 15:49	AR1232	/chem/ecd1a.i/031110b.b/007f0701.d
11-MAR-2010 16:21	DDTANALOGSTD	/chem/ecd1a.i/031110b.b/010f1001.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036f3601.d
11-MAR-2010 20:22	AR1248	/chem/ecd1a.i/031110b.b/033f3301.d
11-MAR-2010 19:19	AR1242	/chem/ecd1a.i/031110b.b/027f2701.d
11-MAR-2010 18:16	AR1254	/chem/ecd1a.i/031110b.b/021f2101.d
11-MAR-2010 17:13	AR1660	/chem/ecd1a.i/031110b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 21:49	| AR1660	| /chem/ecdla.i/0317107.b/080f8001.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 20:08	| AR1660	| /chem/ecdla.i/0317107.b/072f7201.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 17:49	| AR1660	| /chem/ecdla.i/0317107.b/061f6101.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 16:00	| AR1660	| /chem/ecdla.i/0317107.b/052f5201.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 13:45	| AR1660	| /chem/ecdla.i/0317107.b/041f4101.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 11:16	| AR1660	| /chem/ecdla.i/0317107.b/029f2901.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 08:53	| AR1660	| /chem/ecdla.i/0317107.b/017f1701.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 07:22	| AR1262	| /chem/ecdla.i/0317107.b/009f0901.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 07:11	| AR1221	| /chem/ecdla.i/0317107.b/008f0801.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 07:01	| AR1232	| /chem/ecdla.i/0317107.b/007f0701.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 06:50	| AR1268	| /chem/ecdla.i/0317107.b/006f0601.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 06:39	| AR1248	| /chem/ecdla.i/0317107.b/005f0501.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 06:29	| AR1242	| /chem/ecdla.i/0317107.b/004f0401.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 06:18	| AR1254	| /chem/ecdla.i/0317107.b/003f0301.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 17-MAR-2010 06:08	| AR1660	| /chem/ecdla.i/0317107.b/002f0201.d

Report Date: 18-Mar-2010 09:29

Calibration History

Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecdl1a.i/022210.b/032b3201.d
11-MAR-2010 19:40	AR1248	/chem/ecdl1a.i/031110b.b/029b2901.d
11-MAR-2010 18:37	AR1242	/chem/ecdl1a.i/031110b.b/023b2301.d
11-MAR-2010 17:34	AR1254	/chem/ecdl1a.i/031110b.b/017b1701.d
11-MAR-2010 16:31	AR1660	/chem/ecdl1a.i/031110b.b/011b1101.d

Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecdl1a.i/022210.b/033b3301.d
11-MAR-2010 19:51	AR1248	/chem/ecdl1a.i/031110b.b/030b3001.d
11-MAR-2010 18:48	AR1242	/chem/ecdl1a.i/031110b.b/024b2401.d
11-MAR-2010 17:45	AR1254	/chem/ecdl1a.i/031110b.b/018b1801.d
11-MAR-2010 16:41	AR1660	/chem/ecdl1a.i/031110b.b/012b1201.d

Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecdl1a.i/022210.b/034b3401.d
11-MAR-2010 20:01	AR1248	/chem/ecdl1a.i/031110b.b/031b3101.d
11-MAR-2010 18:58	AR1242	/chem/ecdl1a.i/031110b.b/025b2501.d
11-MAR-2010 17:55	AR1254	/chem/ecdl1a.i/031110b.b/019b1901.d
11-MAR-2010 16:52	AR1660	/chem/ecdl1a.i/031110b.b/013b1301.d

Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecdl1a.i/022210.b/035b3501.d
11-MAR-2010 20:12	AR1248	/chem/ecdl1a.i/031110b.b/032b3201.d
11-MAR-2010 19:09	AR1242	/chem/ecdl1a.i/031110b.b/026b2601.d
11-MAR-2010 18:06	AR1254	/chem/ecdl1a.i/031110b.b/020b2001.d
11-MAR-2010 17:02	AR1660	/chem/ecdl1a.i/031110b.b/014b1401.d
11-MAR-2010 16:10	AR1262	/chem/ecdl1a.i/031110b.b/009b0901.d
11-MAR-2010 15:59	AR1221	/chem/ecdl1a.i/031110b.b/008b0801.d
11-MAR-2010 15:49	AR1232	/chem/ecdl1a.i/031110b.b/007b0701.d
11-MAR-2010 16:21	DDTANALOGSTD	/chem/ecdl1a.i/031110b.b/010b1001.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecdl1a.i/022210.b/036b3601.d
11-MAR-2010 20:22	AR1248	/chem/ecdl1a.i/031110b.b/033b3301.d
11-MAR-2010 19:19	AR1242	/chem/ecdl1a.i/031110b.b/027b2701.d
11-MAR-2010 18:16	AR1254	/chem/ecdl1a.i/031110b.b/021b2101.d
11-MAR-2010 17:13	AR1660	/chem/ecdl1a.i/031110b.b/015b1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 21:49 |AR1660	|/chem/ecd1a.i/0317107.b/080b8001.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 20:08 |AR1660	|/chem/ecd1a.i/0317107.b/072b7201.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 17:49 |AR1660	|/chem/ecd1a.i/0317107.b/061b6101.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 16:00 |AR1660	|/chem/ecd1a.i/0317107.b/052b5201.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 13:45 |AR1660	|/chem/ecd1a.i/0317107.b/041b4101.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 11:16 |AR1660	|/chem/ecd1a.i/0317107.b/029b2901.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 08:53 |AR1660	|/chem/ecd1a.i/0317107.b/017b1701.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:22 |AR1262	|/chem/ecd1a.i/0317107.b/009b0901.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:11 |AR1221	|/chem/ecd1a.i/0317107.b/008b0801.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:01 |AR1232	|/chem/ecd1a.i/0317107.b/007b0701.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:50 |AR1268	|/chem/ecd1a.i/0317107.b/006b0601.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:39 |AR1248	|/chem/ecd1a.i/0317107.b/005b0501.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:29 |AR1242	|/chem/ecd1a.i/0317107.b/004b0401.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:18 |AR1254	|/chem/ecd1a.i/0317107.b/003b0301.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:08 |AR1660	|/chem/ecd1a.i/0317107.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 18-Mar-2010 06:43 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold      12031.000000
Initial:End Threshold        6015.500000
Initial:Area Threshold       15489.000000
Initial:P-P Resolution       1.000000
Initial:Bunch Factor         2.000000
Initial:Negative Peaks       OFF
Initial:Tension              0.500000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	2.366	2.336-2.396	1.518e+04
	2.651	2.621-2.681	1.894e+04
	2.732	2.702-2.762	1.244e+04
	2.768	2.738-2.798	7.348e+03
	2.978	2.948-3.008	9.518e+03
63 4,4-DDD	3.888	3.868-3.908	3.140e+05
64 4,4-DDE	3.539	3.519-3.559	3.727e+05
62 4,4-DDT	4.052	4.032-4.072	2.363e+05
2 Aroclor-1221	2.026	1.996-2.056	4.466e+03
	2.118	2.088-2.148	2.447e+03
	2.144	2.114-2.174	1.083e+04
3 Aroclor-1232	2.365	2.335-2.395	6.667e+03
	2.652	2.622-2.682	8.344e+03
	2.732	2.702-2.762	5.531e+03
	2.847	2.817-2.877	2.649e+03
4 Aroclor-1242	3.234	3.204-3.264	3.555e+03
	2.365	2.335-2.395	1.233e+04
	2.652	2.622-2.682	1.490e+04
	2.769	2.739-2.799	5.896e+03
	2.980	2.950-3.010	7.735e+03
	3.233	3.203-3.263	7.285e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.846	2.816-2.876	1.000e+04
	2.981	2.951-3.011	1.314e+04
	3.234	3.204-3.264	1.430e+04
	3.366	3.336-3.396	1.190e+04
	3.598	3.568-3.628	8.005e+03
6 Aroclor-1254	3.209	3.179-3.239	1.326e+04
	3.364	3.334-3.394	1.783e+04
	3.598	3.568-3.628	2.237e+04
	3.760	3.730-3.790	1.649e+04
	3.869	3.839-3.899	1.596e+04
7 Aroclor-1260	3.703	3.673-3.733	1.833e+04
	3.866	3.836-3.896	2.689e+04
	4.028	3.998-4.058	2.832e+04
	4.096	4.066-4.126	1.616e+04
	4.238	4.208-4.268	1.681e+04
8 Aroclor-1262	3.706	3.676-3.736	1.423e+04
	3.868	3.838-3.898	1.874e+04
	4.099	4.069-4.129	2.315e+04
	4.241	4.211-4.271	2.110e+04
	4.421	4.391-4.451	4.350e+04
9 Aroclor-1268	4.606	4.576-4.636	4.848e+04
	4.628	4.598-4.658	5.448e+04
	4.741	4.711-4.771	3.862e+04
	4.943	4.913-4.973	1.635e+04
	5.108	5.078-5.138	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.913	1.883-1.943	3.895e+05
\$ 12 Decachlorobiphenyl	5.216	5.186-5.246	2.969e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 18-Mar-2010 06:43 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

 Initial:Start Threshold 7222.000000
 Initial:End Threshold 3611.000000
 Initial:Area Threshold 6833.000000
 Initial:P-P Resolution 0.000000
 Initial:Bunch Factor 2.000000
 Initial:Negative Peaks OFF
 Initial:Tension 0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.166	3.136-3.196	1.258e+04
	3.248	3.218-3.278	8.634e+03
	3.312	3.282-3.342	5.287e+03
	3.538	3.508-3.568	6.893e+03
	3.614	3.584-3.644	6.423e+03
62 4,4-DDT	4.642	4.622-4.662	7.489e+04
63 4,4-DDE	4.111	4.091-4.131	2.469e+05
64 4,4-DDD	4.455	4.435-4.475	1.989e+05
2 Aroclor-1221	2.468	2.438-2.498	3.250e+03
	2.562	2.532-2.592	2.084e+03
	2.603	2.573-2.633	7.320e+03
3 Aroclor-1232	2.869	2.839-2.899	5.054e+03
	3.166	3.136-3.196	5.712e+03
	3.250	3.220-3.280	3.888e+03
	3.540	3.510-3.570	2.840e+03
4 Aroclor-1242	3.774	3.744-3.804	2.821e+03
	3.167	3.137-3.197	1.014e+04
	3.249	3.219-3.279	7.097e+03
	3.540	3.510-3.570	5.514e+03
	3.773	3.743-3.803	5.722e+03
	3.802	3.772-3.832	6.370e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/0317107.b/ECD1-B-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.376	3.346-3.406	7.604e+03
	3.541	3.511-3.571	9.470e+03
	3.774	3.744-3.804	1.093e+04
	3.801	3.771-3.831	1.216e+04
	3.938	3.908-3.968	1.181e+04
6 Aroclor-1254	3.375	3.345-3.405	6.021e+03
	3.797	3.767-3.827	1.082e+04
	3.914	3.884-3.944	1.193e+04
	4.189	4.159-4.219	1.644e+04
	4.325	4.295-4.355	1.212e+04
7 Aroclor-1260	4.304	4.274-4.334	1.308e+04
	4.429	4.399-4.459	1.555e+04
	4.695	4.665-4.725	1.190e+04
	4.868	4.838-4.898	1.229e+04
	5.015	4.985-5.045	2.639e+04
8 Aroclor-1262	4.431	4.401-4.461	1.160e+04
	4.696	4.666-4.726	1.620e+04
	4.869	4.839-4.899	1.484e+04
	5.016	4.986-5.046	2.937e+04
	5.229	5.199-5.259	2.065e+04
9 Aroclor-1268	5.228	5.198-5.258	3.730e+04
	5.256	5.226-5.286	3.492e+04
	5.405	5.375-5.435	2.658e+04
	5.570	5.540-5.600	1.223e+04
	5.763	5.733-5.793	7.433e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.271	2.241-2.301	2.623e+05
\$ 12 Decachlorobiphenyl	5.913	5.883-5.943	1.872e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Cal Date : 18-Mar-2010 06:43 yip00818
Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/022210.b/032f3201.d
Level 2: /chem/ecdla.i/022210.b/033f3301.d
Level 3: /chem/ecdla.i/022210.b/034f3401.d
Level 4: /chem/ecdla.i/022210.b/035f3501.d
Level 5: /chem/ecdla.i/022210.b/036f3601.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)	17517	15916	14941	14342	13168	15177	10.833
(2)	20378	19291	18809	18310	17891	18936	5.082
(3)	13830	13020	12255	11836	11271	12442	8.071
(4)	7957	7573	7201	7091	6919	7348	5.665
(5)	10680	9850	9332	8998	8729	9518	8.119
63 4,4-DDD	++++	++++	++++	313980	++++	313980	0.000
64 4,4-DDE	++++	++++	++++	372684	++++	372684	0.000
62 4,4-DDT	++++	++++	++++	236265	++++	236265	0.000
2 Aroclor-1221(1)	++++	++++	++++	4466	++++	4466	0.000
(2)	++++	++++	++++	2447	++++	2447	0.000
(3)	++++	++++	++++	10828	++++	10828	0.000
3 Aroclor-1232(1)	++++	++++	++++	6667	++++	6667	0.000
(2)	++++	++++	++++	8344	++++	8344	0.000
(3)	++++	++++	++++	5531	++++	5531	0.000
(4)	++++	++++	++++	2649	++++	2649	0.000
(5)	++++	++++	++++	3555	++++	3555	0.000
4 Aroclor-1242(1)	14179	12973	12200	11692	10617	12332	10.871
(2)	16141	15119	14927	14559	13766	14903	5.801
(3)	6352	6182	5816	5703	5424	5896	6.324
(4)	8823	8005	7582	7293	6975	7735	9.260
(5)	7955	7511	7149	7022	6787	7285	6.273
5 Aroclor-1248(1)	11183	10572	9738	9526	8980	10000	8.748
(2)	14876	13683	12753	12517	11873	13140	8.885
(3)	15448	14508	14083	13911	13564	14303	5.068
(4)	13161	12385	11501	11480	10960	11898	7.335
(5)	8649	8385	7955	7608	7427	8005	6.411

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	15079	13757	12872	12576	12027	13262	8.998
(2)	20126	18408	17163	17147	16322	17833	8.313
(3)	24516	23104	21642	21571	21024	22371	6.372
(4)	18056	17097	15691	15840	15766	16490	6.365
(5)	18024	16683	15151	15091	14874	15964	8.504
7 Aroclor-1260(1)	20231	18737	18018	17739	16925	18330	6.792
(2)	29345	27114	26401	26314	25275	26890	5.656
(3)	30716	28501	27786	27176	27398	28315	5.062
(4)	17775	16311	15776	15627	15300	16158	6.034
(5)	18203	16850	16463	16434	16114	16813	4.876
8 Aroclor-1262(1)	+++++	+++++	+++++	14232	+++++	14232	0.000
(2)	+++++	+++++	+++++	18742	+++++	18742	0.000
(3)	+++++	+++++	+++++	23151	+++++	23151	0.000
(4)	+++++	+++++	+++++	21098	+++++	21098	0.000
(5)	+++++	+++++	+++++	43500	+++++	43500	0.000
9 Aroclor-1268(1)	49163	48928	48151	48132	48019	48478	1.086
(2)	55254	54719	54718	54649	53075	54483	1.512
(3)	39937	38826	38121	38191	38006	38616	2.083
(4)	16234	16191	16152	16347	16815	16348	1.657
(5)	114910	115297	111446	111050	107804	112101	2.753
10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 4cmx	407603	391717	384007	385362	378927	389523	2.846
12 Decachlorobiphenyl	324859	292709	291687	292552	282844	296930	5.438

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/022210.b/032b3201.d
 Level 2: /chem/ecdl1a.i/022210.b/033b3301.d
 Level 3: /chem/ecdl1a.i/022210.b/034b3401.d
 Level 4: /chem/ecdl1a.i/022210.b/035b3501.d
 Level 5: /chem/ecdl1a.i/022210.b/036b3601.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)	14376	12782	12025	12307	11436	12585	8.846
(2)	10090	9074	8445	8099	7462	8634	11.594
(3)	6137	5472	5151	4973	4701	5287	10.435
(4)	7962	7103	6817	6522	6060	6893	10.318
(5)	7497	6686	6263	5965	5703	6423	10.948
62 4,4-DDT	+++++	+++++	+++++	74891	+++++	74891	0.000
63 4,4-DDE	+++++	+++++	+++++	246875	+++++	246875	0.000
64 4,4-DDD	+++++	+++++	+++++	198885	+++++	198885	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	3250	+++++	3250	0.000
(2)	+++++	+++++	+++++	2084	+++++	2084	0.000
(3)	+++++	+++++	+++++	7320	+++++	7320	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	5054	+++++	5054	0.000
(2)	+++++	+++++	+++++	5712	+++++	5712	0.000
(3)	+++++	+++++	+++++	3888	+++++	3888	0.000
(4)	+++++	+++++	+++++	2840	+++++	2840	0.000
(5)	+++++	+++++	+++++	2821	+++++	2821	0.000
4 Aroclor-1242(1)	11230	10514	10117	9526	9309	10139	7.634
(2)	8350	7546	6909	6642	6036	7097	12.487
(3)	6442	5836	5387	5177	4727	5514	11.868
(4)	6626	6011	5573	5400	4999	5722	10.877
(5)	7365	6655	6241	6005	5582	6370	10.658
5 Aroclor-1248(1)	9056	8166	7435	6980	6383	7604	13.684
(2)	11093	10088	9257	8814	8097	9470	12.242
(3)	12505	11602	10677	10284	9581	10930	10.466
(4)	13890	12873	11986	11379	10657	12157	10.405
(5)	13590	12468	11541	11009	10453	11812	10.502

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	7300	6493	5824	5480	5009	6021	14.886
(2)	12825	11548	10490	9974	9262	10820	12.909
(3)	14182	12643	11550	11031	10262	11934	12.788
(4)	19027	17317	15983	15442	14439	16442	10.826
(5)	14064	13049	11651	11174	10640	12116	11.634
7 Aroclor-1260(1)	15189	13569	12744	12369	11530	13080	10.610
(2)	17885	16016	15152	14853	13838	15549	9.776
(3)	13812	12250	11562	11271	10585	11896	10.311
(4)	14218	12635	11954	11625	11015	12289	9.981
(5)	29595	26825	25949	25629	23976	26395	7.824
8 Aroclor-1262(1)	++++	++++	++++	11597	++++	11597	0.000
(2)	++++	++++	++++	16200	++++	16200	0.000
(3)	++++	++++	++++	14838	++++	14838	0.000
(4)	++++	++++	++++	29366	++++	29366	0.000
(5)	++++	++++	++++	20651	++++	20651	0.000
9 Aroclor-1268(1)	41829	39003	36612	35751	33294	37298	8.721
(2)	39747	36378	33891	33096	31474	34917	9.246
(3)	30202	27679	25801	25188	24032	26580	9.093
(4)	14370	12834	11677	11309	10971	12232	11.329
(5)	81955	77588	73073	71224	67792	74326	7.452
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	286554	267083	258607	255362	244057	262333	6.044
12 Decachlorobiphenyl	217815	191410	181026	177515	168101	187173	10.178

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.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0608
 Lab File ID: 002F0201 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13679.245	0.01	-9.9	15.0
(2)	18935.774	17352.542	0.01	-8.4	15.0
(3)	12442.153	10865.667	0.01	-12.7	15.0
(4)	7348.319	6489.606	0.01	-11.7	15.0
(5)	9517.775	8337.119	0.01	-12.4	15.0
Aroclor-1260	18330.091	17103.795	0.01	-6.7	15.0
(2)	26889.831	24999.856	0.01	-7.0	15.0
(3)	28315.304	26757.729	0.01	-5.5	15.0
(4)	16157.873	15105.144	0.01	-6.5	15.0
(5)	16812.669	15681.925	0.01	-6.7	15.0
4cmx	389523.02	384270.94	0.01	-1.3	15.0
Decachlorobiphenyl	296930.38	280327.80	0.01	-5.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0608
 Lab File ID: 002B0201 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12584.978	11257.869	0.01	-10.5	15.0
(2)	8634.207	7602.660	0.01	-11.9	15.0
(3)	5286.637	4622.469	0.01	-12.6	15.0
(4)	6892.719	6158.940	0.01	-10.6	15.0
(5)	6422.564	5755.354	0.01	-10.4	15.0
Aroclor-1260	13080.231	12494.202	0.01	-4.5	15.0
(2)	15549.023	15069.938	0.01	-3.1	15.0
(3)	11896.069	11423.166	0.01	-4.0	15.0
(4)	12289.216	11829.647	0.01	-3.7	15.0
(5)	26394.638	26003.137	0.01	-1.5	15.0
4cmx	262332.66	257488.80	0.01	-1.8	15.0
Decachlorobiphenyl	187173.38	178998.77	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0618
 Lab File ID: 003F0301 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1734 1816
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	13261.954	11804.928	0.01	-11.0	15.0
(2)	17833.306	15624.759	0.01	-12.4	15.0
(3)	22371.301	20223.062	0.01	-9.6	15.0
(4)	16490.050	14731.608	0.01	-10.7	15.0
(5)	15964.418	14915.377	0.01	-6.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0618
 Lab File ID: 003B0301 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1734 1816
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	6021.217	5433.555	0.01	-9.8	15.0
(2)	10819.790	9922.138	0.01	-8.3	15.0
(3)	11933.626	10795.731	0.01	-9.5	15.0
(4)	16441.788	15040.936	0.01	-8.5	15.0
(5)	12115.517	11339.611	0.01	-6.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0853
 Lab File ID: 017F1701 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13072.214	0.01	-13.9	15.0
(2)	18935.774	16743.348	0.01	-11.6	15.0
(3)	12442.153	10753.369	0.01	-13.6	15.0
(4)	7348.319	6446.442	0.01	-12.3	15.0
(5)	9517.775	8110.441	0.01	-14.8	15.0
Aroclor-1260	18330.091	16962.461	0.01	-7.5	15.0
(2)	26889.831	24950.358	0.01	-7.2	15.0
(3)	28315.304	26635.100	0.01	-5.9	15.0
(4)	16157.873	14960.531	0.01	-7.4	15.0
(5)	16812.669	15562.577	0.01	-7.4	15.0
4cmx	389523.02	378611.37	0.01	-2.8	15.0
Decachlorobiphenyl	296930.38	274816.37	0.01	-7.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0853
 Lab File ID: 017B1701 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12584.978	11589.187	0.01	-7.9	15.0
(2)	8634.207	7549.847	0.01	-12.6	15.0
(3)	5286.637	4630.370	0.01	-12.4	15.0
(4)	6892.719	6092.955	0.01	-11.6	15.0
(5)	6422.564	5704.793	0.01	-11.2	15.0
Aroclor-1260	13080.231	12259.396	0.01	-6.3	15.0
(2)	15549.023	14795.087	0.01	-4.8	15.0
(3)	11896.069	11161.788	0.01	-6.2	15.0
(4)	12289.216	11576.871	0.01	-5.8	15.0
(5)	26394.638	25583.684	0.01	-3.1	15.0
4cmx	262332.66	254467.07	0.01	-3.0	15.0
Decachlorobiphenyl	187173.38	175017.13	0.01	-6.5	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.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1116
 Lab File ID: 029F2901 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13459.448	0.01	-11.3	15.0
(2)	18935.774	17913.772	0.01	-5.4	15.0
(3)	12442.153	11186.273	0.01	-10.1	15.0
(4)	7348.319	6757.155	0.01	-8.0	15.0
(5)	9517.775	8551.705	0.01	-10.2	15.0
Aroclor-1260	18330.091	17641.116	0.01	-3.8	15.0
(2)	26889.831	26151.299	0.01	-2.7	15.0
(3)	28315.304	28122.089	0.01	-0.7	15.0
(4)	16157.873	15875.614	0.01	-1.7	15.0
(5)	16812.669	16480.192	0.01	-2.0	15.0
4cmx	389523.02	390929.60	0.01	0.4	15.0
Decachlorobiphenyl	296930.38	291264.44	0.01	-1.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1116
 Lab File ID: 029B2901 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12584.978	11451.255	0.01	-9.0	15.0
(2)	8634.207	7723.504	0.01	-10.5	15.0
(3)	5286.637	4799.447	0.01	-9.2	15.0
(4)	6892.719	6302.422	0.01	-8.6	15.0
(5)	6422.564	5927.749	0.01	-7.7	15.0
Aroclor-1260	13080.231	12518.850	0.01	-4.3	15.0
(2)	15549.023	15297.014	0.01	-1.6	15.0
(3)	11896.069	11499.757	0.01	-3.3	15.0
(4)	12289.216	11961.723	0.01	-2.7	15.0
(5)	26394.638	26522.429	0.01	0.5	15.0
4cmx	262332.66	259596.09	0.01	-1.0	15.0
Decachlorobiphenyl	187173.38	181439.93	0.01	-3.1	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/002f0201.d
 Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
 Inj Date : 17-MAR-2010 06:08
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100222-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpclp1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
11 4cmx					CAS #: 877-09-8			
1.913	1.913	0.000	38427094	100.000	98.6	80.00-	120.00	100.00

12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.216	5.216	0.000	28032780	100.000	94.4	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
2.366	2.366	0.000	13679245	1000.00	901	80.00-	120.00	100.00
2.651	2.651	0.000	17352542	1000.00	916	106.85-	146.85	126.85
2.732	2.732	0.000	10865667	1000.00	873	59.43-	99.43	79.43
2.768	2.768	0.000	6489606	1000.00	883	27.44-	67.44	47.44
2.978	2.978	0.000	8337119	1000.00	876	40.95-	80.95	60.95
Average of Peak Amounts =					890			

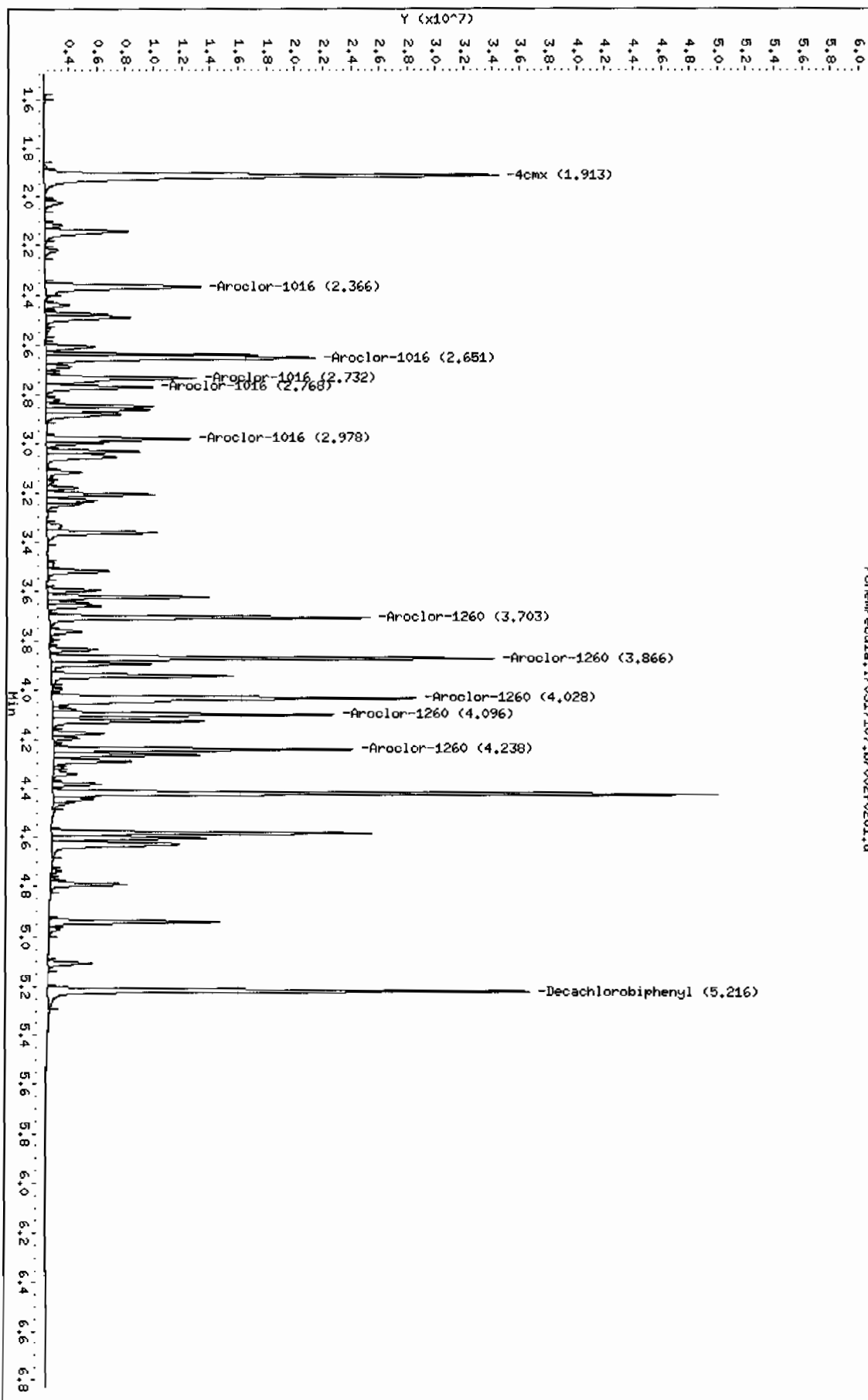
7 Aroclor-1260					CAS #: 11096-82-5			
3.703	3.703	0.000	17103795	1000.00	933	80.00-	120.00	100.00
3.866	3.866	0.000	24999856	1000.00	930	126.17-	166.17	146.17
4.028	4.028	0.000	26757729	1000.00	945	136.44-	176.44	156.44
4.096	4.096	0.000	15105144	1000.00	935	68.31-	108.31	88.31
4.238	4.238	0.000	15681925	1000.00	933	71.69-	111.69	91.69
Average of Peak Amounts =					935			

Data File: /chem/eodla.i/0317107.b/002f0201.d
Date: 17-Mar-2010 06:08
Client ID: AR16001
Sample Info: IMA100222-60 01

Column phase: CLP1

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25

/chem/eodla.i/0317107.b/002f0201.d



Data File: /chem/ecdla.i/0317107.b/002b0201.d
 Report Date: 17-Mar-2010 08:52

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/002b0201.d
 Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
 Inj Date : 17-MAR-2010 06:08
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
11 4cmx				CAS #: 877-09-8		
2.271	2.271	0.000	25748880	100.000	98.2 80.00- 120.00	100.00

12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.913	5.913	0.000	17899877	100.000	95.6 80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.166	3.166	0.000	11257869	1000.00	894 80.00- 120.00	100.00 (M)
3.248	3.248	0.000	7602660	1000.00	880 47.53- 87.53	67.53
3.312	3.312	0.000	4622469	1000.00	874 21.06- 61.06	41.06
3.538	3.538	0.000	6158940	1000.00	894 34.71- 74.71	54.71
3.614	3.614	0.000	5755354	1000.00	896 31.12- 71.12	51.12
Average of Peak Amounts =				888		

7 Aroclor-1260				CAS #: 11096-82-5		
4.304	4.304	0.000	12494202	1000.00	955 80.00- 120.00	100.00
4.429	4.429	0.000	15069938	1000.00	969 100.62- 140.62	120.62
4.695	4.695	0.000	11423166	1000.00	960 71.43- 111.43	91.43
4.868	4.868	0.000	11829647	1000.00	963 74.68- 114.68	94.68
5.015	5.015	0.000	26003137	1000.00	985 188.12- 228.12	208.12
Average of Peak Amounts =				966		

Data File: /chem/ecdl1a.i/0317107.b/002b0201.d
Report Date: 17-Mar-2010 08:52

Page 2

QC Flag Legend

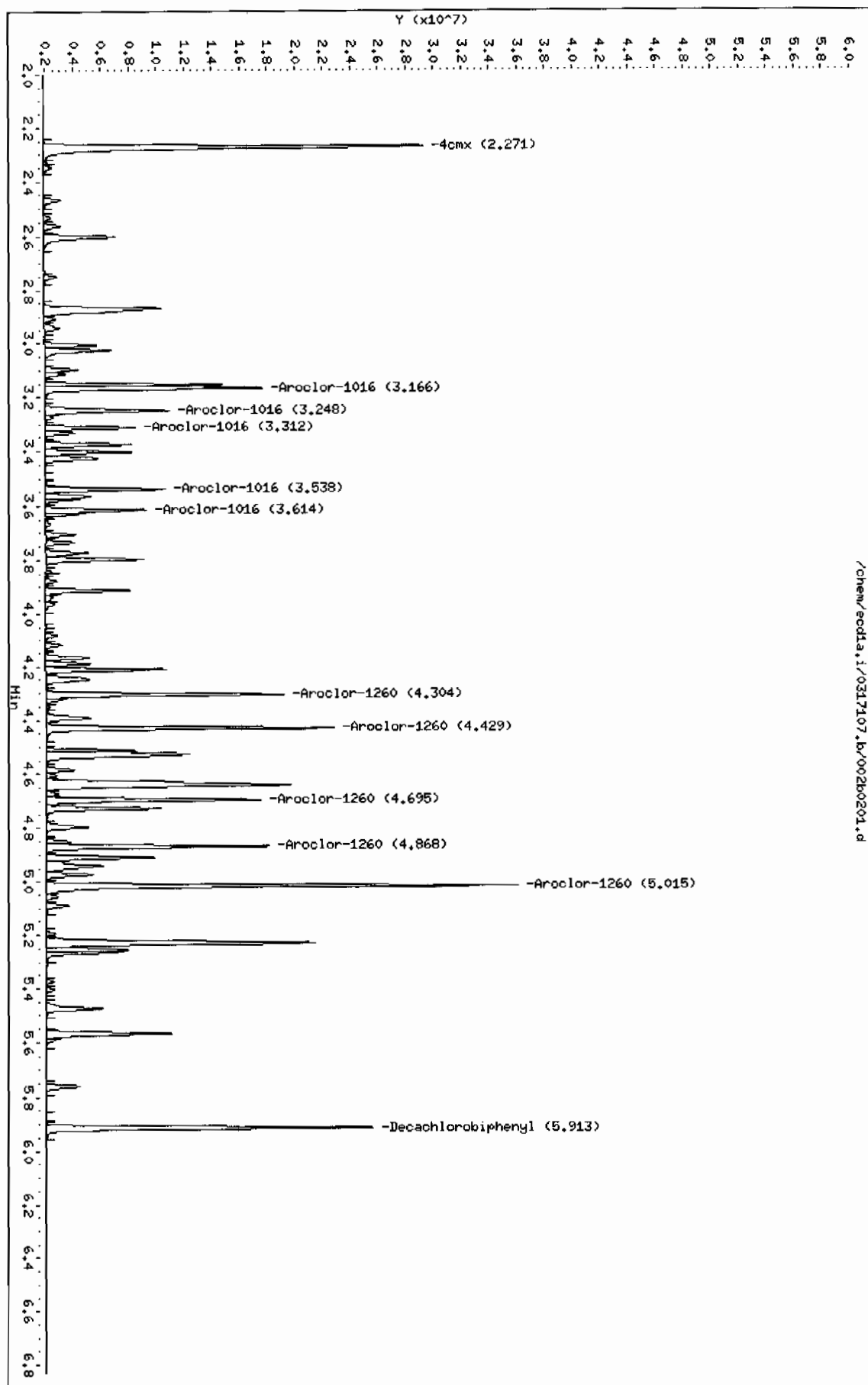
M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/0317107.b/002b0201.d
Date: 17-MAR-2010 06:08
Client ID: AR166001
Sample Info: IMR100222-60 01

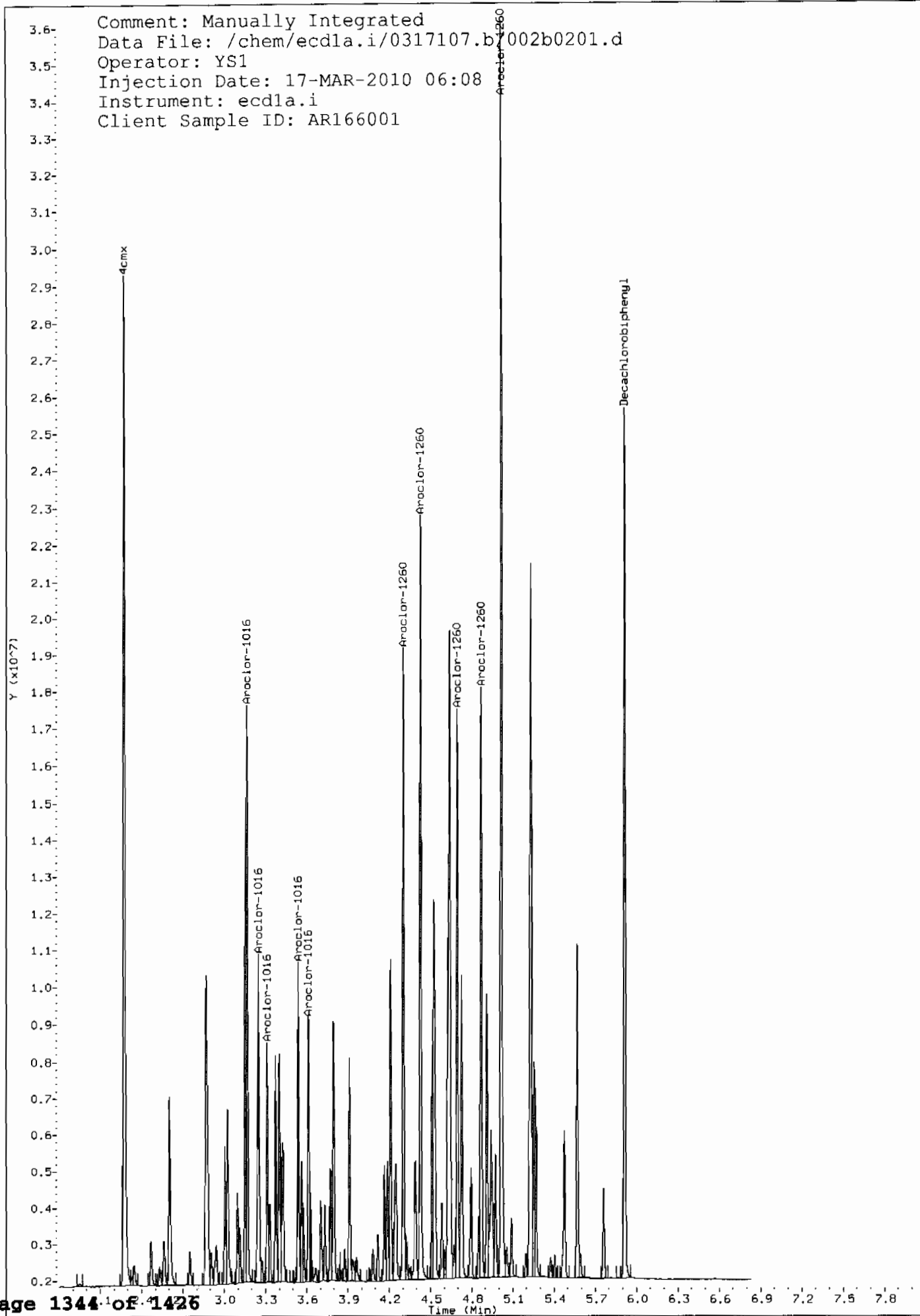
Column phase: CLP2

Instrument: ecdl1a.i
Operator: VSI
Column diameter: 0.25

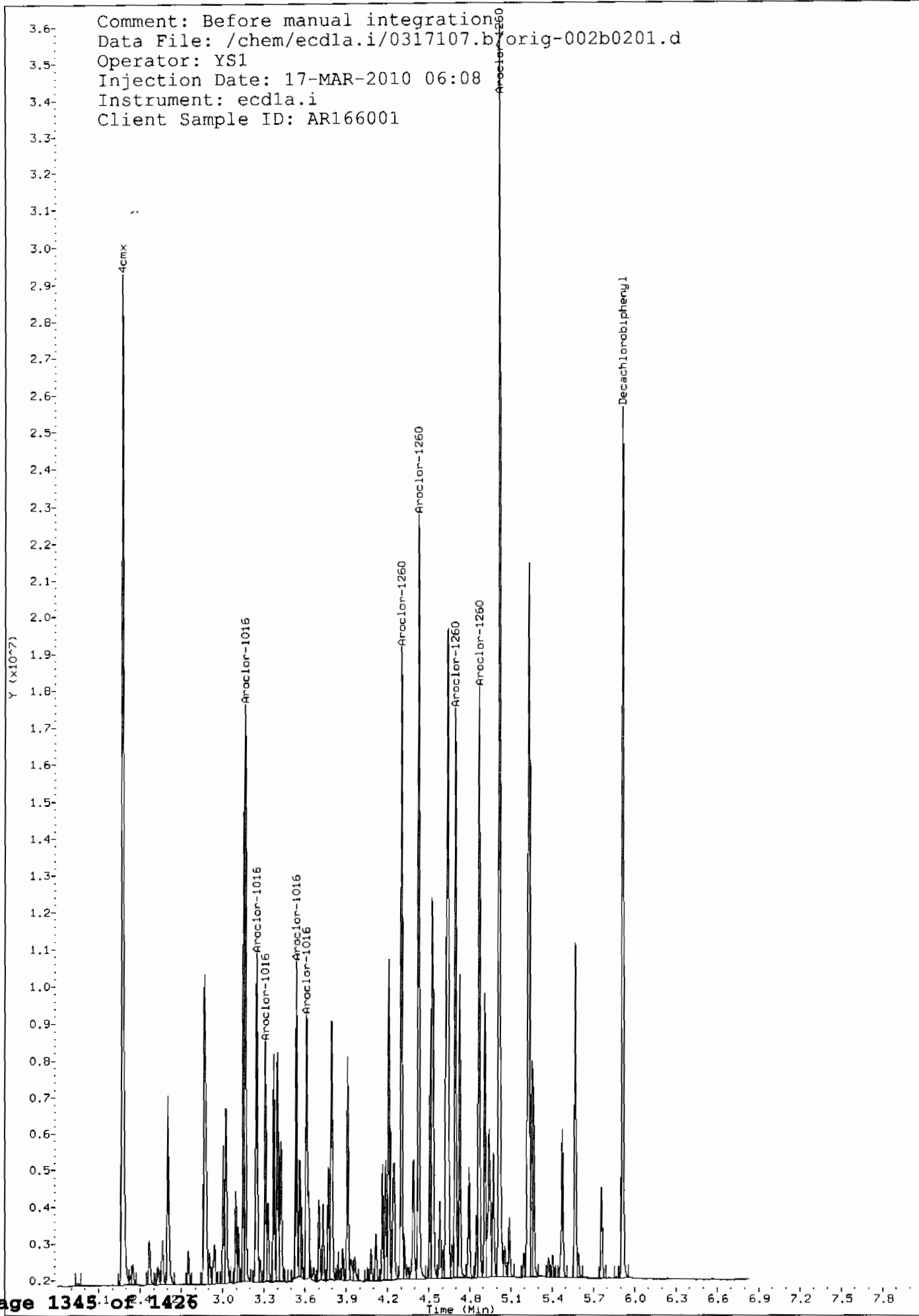
Page 1



Comment: Manually Integrated
Data File: /chem/ecdla.i/0317107.b\002b0201.d
Operator: YS1
Injection Date: 17-MAR-2010 06:08
Instrument: ecdla.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1.i/0317107.b orig-002b0201.d
Operator: YS1
Injection Date: 17-MAR-2010 06:08
Instrument: ecd1a.i
Client Sample ID: AR166001



Data File: /chem/ecdla.i/0317107.b/003f0301.d
Report Date: 17-Mar-2010 08:52

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/003f0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 17-MAR-2010 06:18
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.209	3.209	0.000	11804928 1000.00	890	80.00- 120.00	100.00
3.364	3.364	0.000	15624759 1000.00	876	112.36- 152.36	132.36
3.598	3.598	0.000	20223062 1000.00	904	151.31- 191.31	171.31
3.760	3.760	0.000	14731608 1000.00	893	104.79- 144.79	124.79
3.869	3.869	0.000	14915377 1000.00	934	106.35- 146.35	126.35
Average of Peak Amounts =				900		

Data File: /chem/ecdl1a.i/0317107.b/003f0301.d

Date: 17-MAR-2010 06:18

Client ID: AR125401

Sample Info: 1MAR100219-54

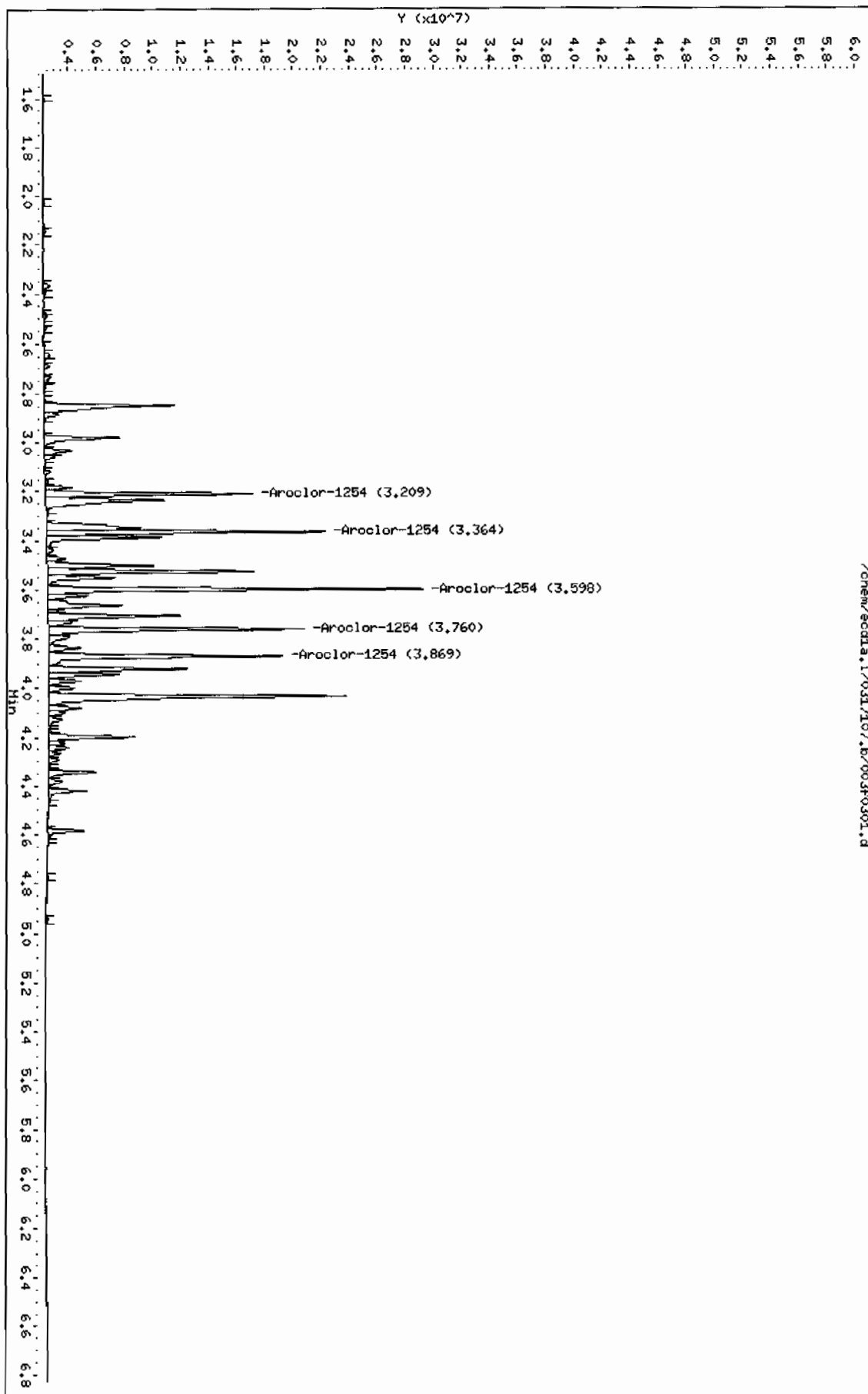
Column phase: CLP1

Instrument: ecdl1a.i

Operator: YSI

Column diameter: 0.25

Page 1



Data File: /chem/ecd1a.i/0317107.b/003b0301.d
Report Date: 17-Mar-2010 08:52

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/0317107.b/003b0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 17-MAR-2010 06:18
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

6 Aroclor-1254			CAS #: 11097-69-1			
3.375	3.375	0.000	5433555 1000.00	902 80.00-	120.00	100.00
3.797	3.797	0.000	9922138 1000.00	917 162.61-	202.61	182.61
3.914	3.914	0.000	10795731 1000.00	905 178.69-	218.69	198.69
4.189	4.189	0.000	15040936 1000.00	915 256.82-	296.82	276.82
4.325	4.325	0.000	11339611 1000.00	936 188.70-	228.70	208.70

Average of Peak Amounts = 915

Data File: /chem/eodia.i/0317107.b/003b0301.d

Date: 17-MAR-2010 06:18

Client ID: AR125401

Sample Info: IWR100219-54

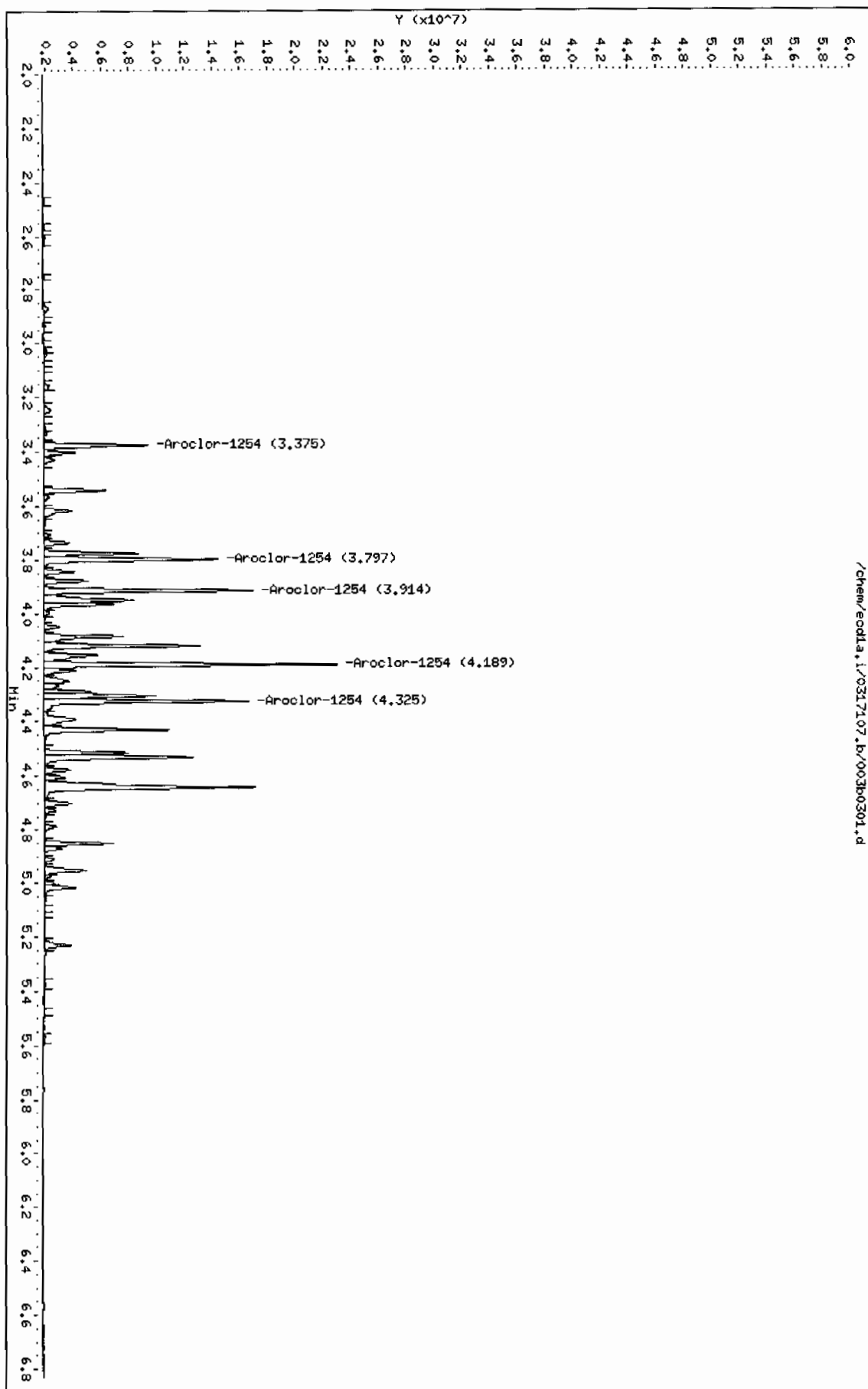
Column phase: CLP2

Page 1

Instrument: eodia.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdla.i/0317107.b/004f0401.d
Report Date: 17-Mar-2010 08:53

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/004f0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 17-MAR-2010 06:29
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.365	2.365	0.000	11593290	940	80.00- 120.00	100.00
2.652	2.652	0.000	14537144	975	105.39- 145.39	125.39
2.769	2.769	0.000	5553924	942	27.91- 67.91	47.91
2.980	2.980	0.000	7095279	917	41.20- 81.20	61.20
3.233	3.233	0.000	6386220	877	35.09- 75.09	55.09
Average of Peak Amounts =				930		

Data File: /chem/ecdda.i/0312107.b/004f0401.d

Date: 17-MAR-2010 06:29

Client ID: AR124201

Sample Info: IMR100219-42

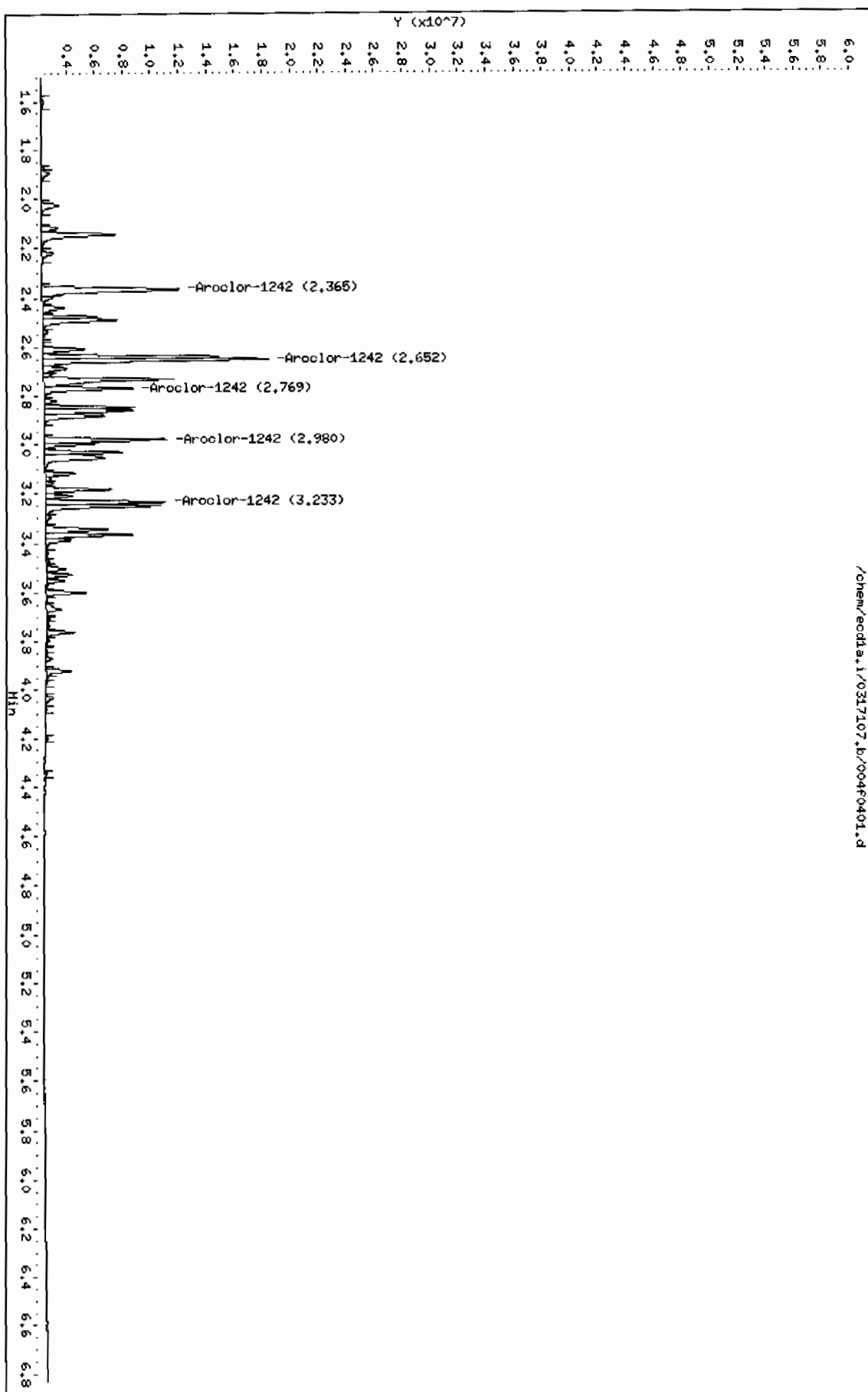
Column phase: CLP1

Page 1

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25



Data File: /chem/ecdla.i/0317107.b/004b0401.d
Report Date: 17-Mar-2010 08:52

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/004b0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 17-MAR-2010 06:29
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====

4 Aroclor-1242

CAS #: 53469-21-9

3.167	3.167	0.000	9708362 1000.00	958	80.00- 120.00	100.00
3.249	3.249	0.000	6621849 1000.00	933	48.21- 88.21	68.21
3.540	3.540	0.000	5140297 1000.00	932	32.95- 72.95	52.95
3.773	3.773	0.000	5254316 1000.00	918	34.12- 74.12	54.12
3.802	3.802	0.000	5963672 1000.00	936	41.43- 81.43	61.43

Average of Peak Amounts =

935

Data File: /chem/ecda.i/0317107.b/004b0401.d

Date: 17-MAR-2010 06:29

Client ID: AR124201

Sample Info: IMR100219-42

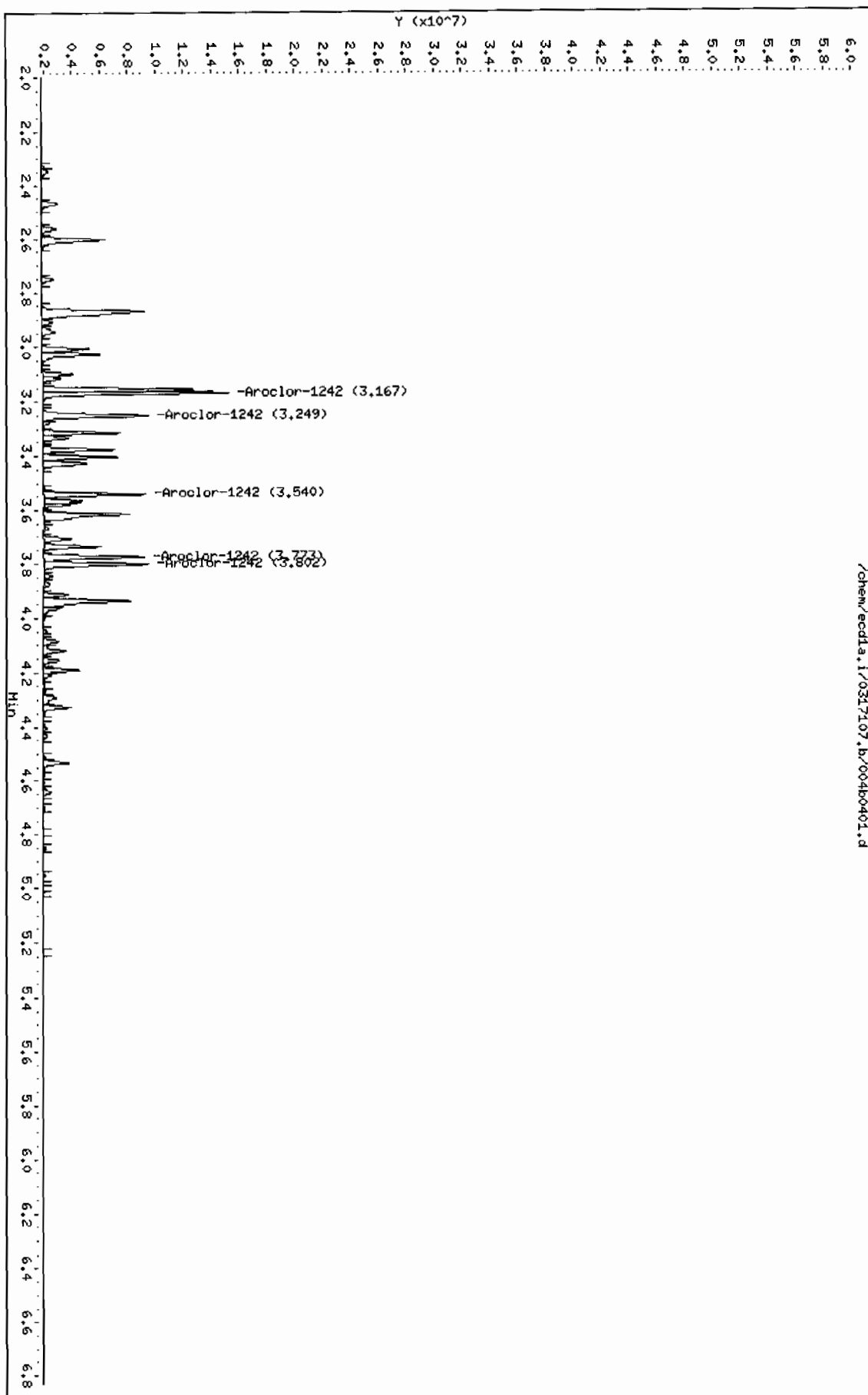
Column phase: CLP2

Instrument: ecda.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/0317107.b/005f0501.d
Report Date: 17-Mar-2010 08:53

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/005f0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 17-MAR-2010 06:39
Operator : YSl Inst ID: ecdla.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
2.846	2.846	0.000	9510059 1000.00	951	80.00- 120.00	100.00 (M)
2.981	2.981	0.000	12717454 1000.00	968	113.73- 153.73	133.73
3.234	3.234	0.000	13366114 1000.00	934	120.55- 160.55	140.55
3.366	3.366	0.000	10901124 1000.00	916	94.63- 134.63	114.63
3.598	3.598	0.000	7582151 1000.00	947	59.73- 99.73	79.73
Average of Peak Amounts =				943		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1.i/0317107.b/005f0501.d

Date: 17-MAR-2010 06:39

Client ID: AR124801

Sample Info: IMR100223-48

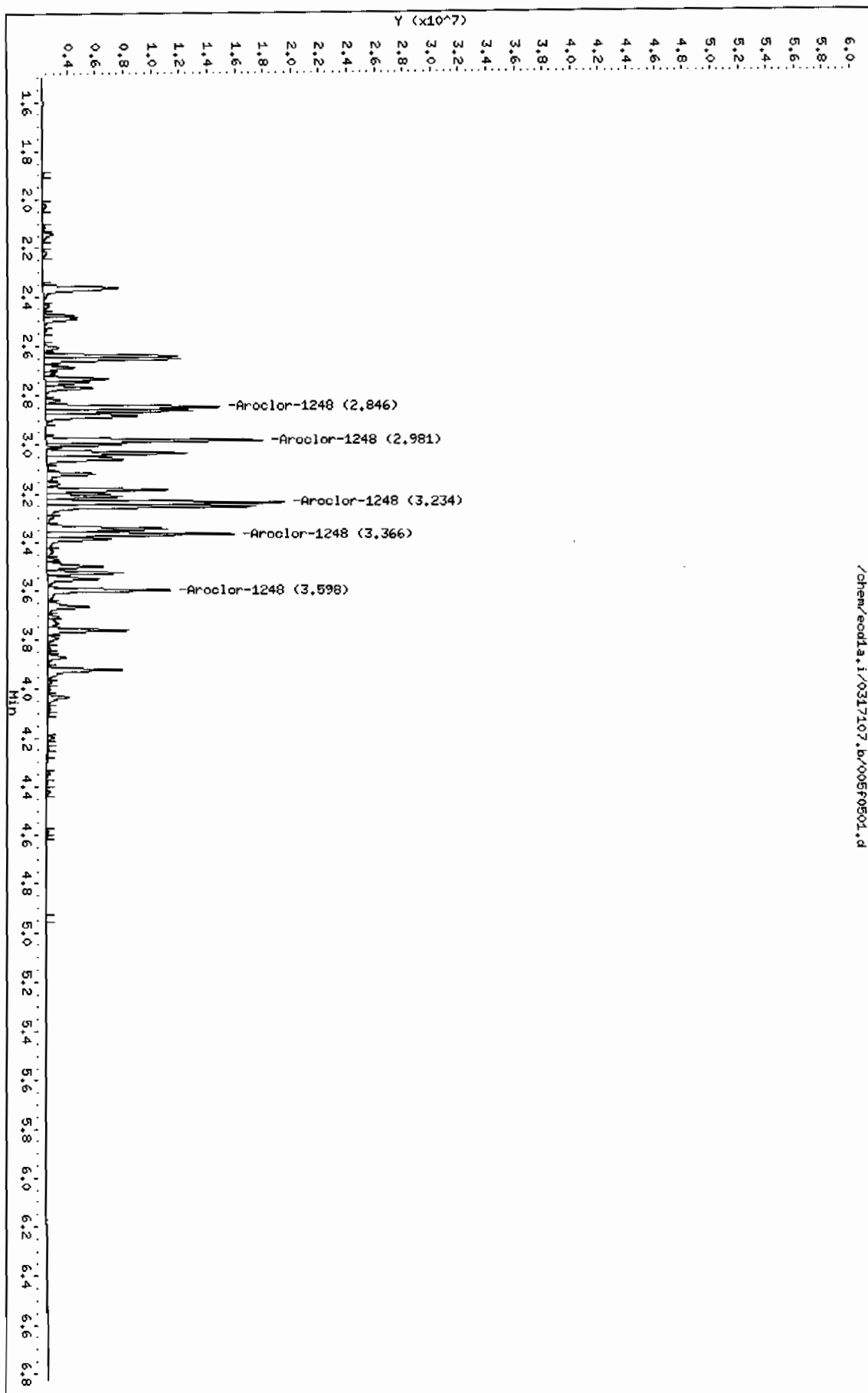
Page 1

Instrument: ecdl1.i

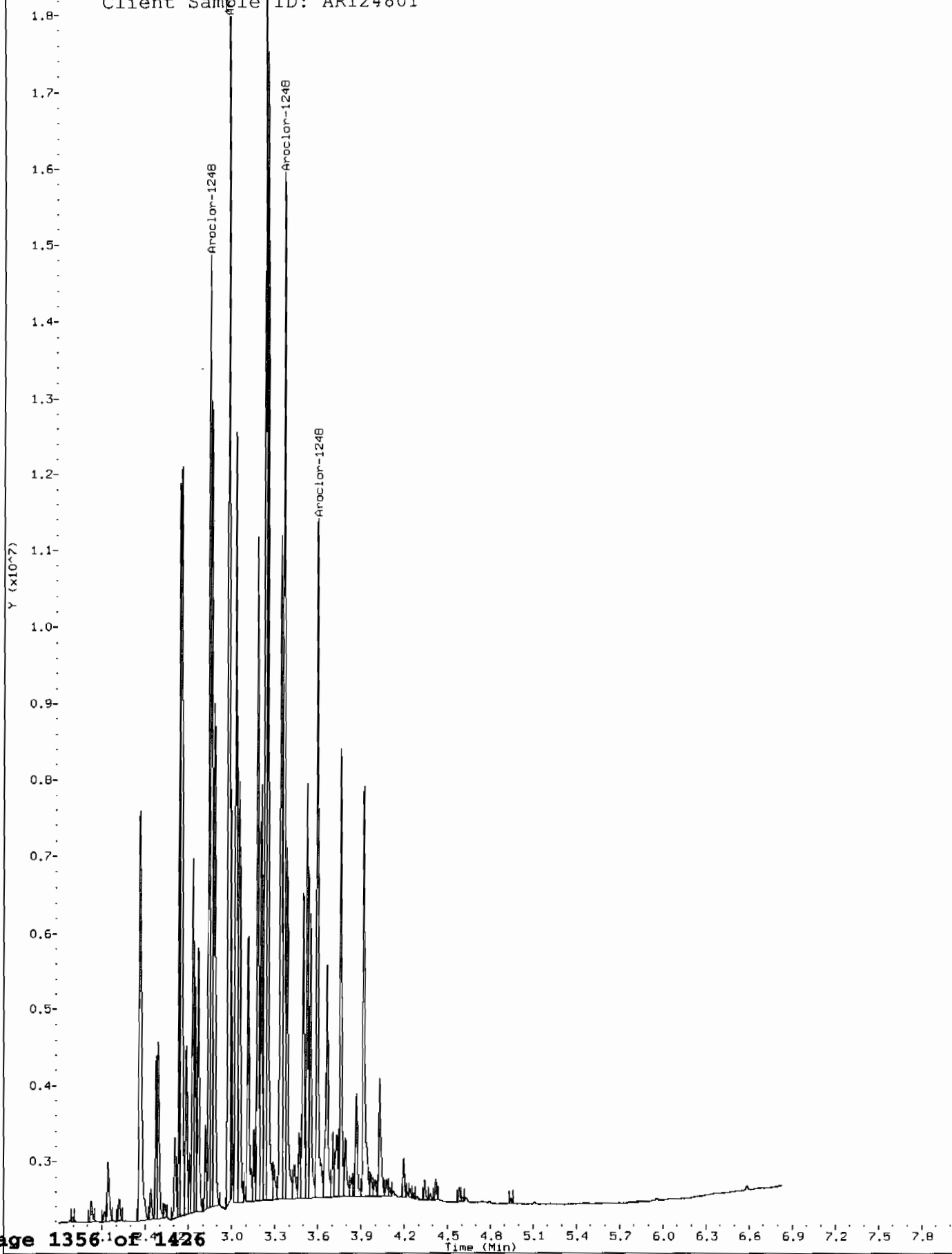
Operator: YSL

Column diameter: 0.25

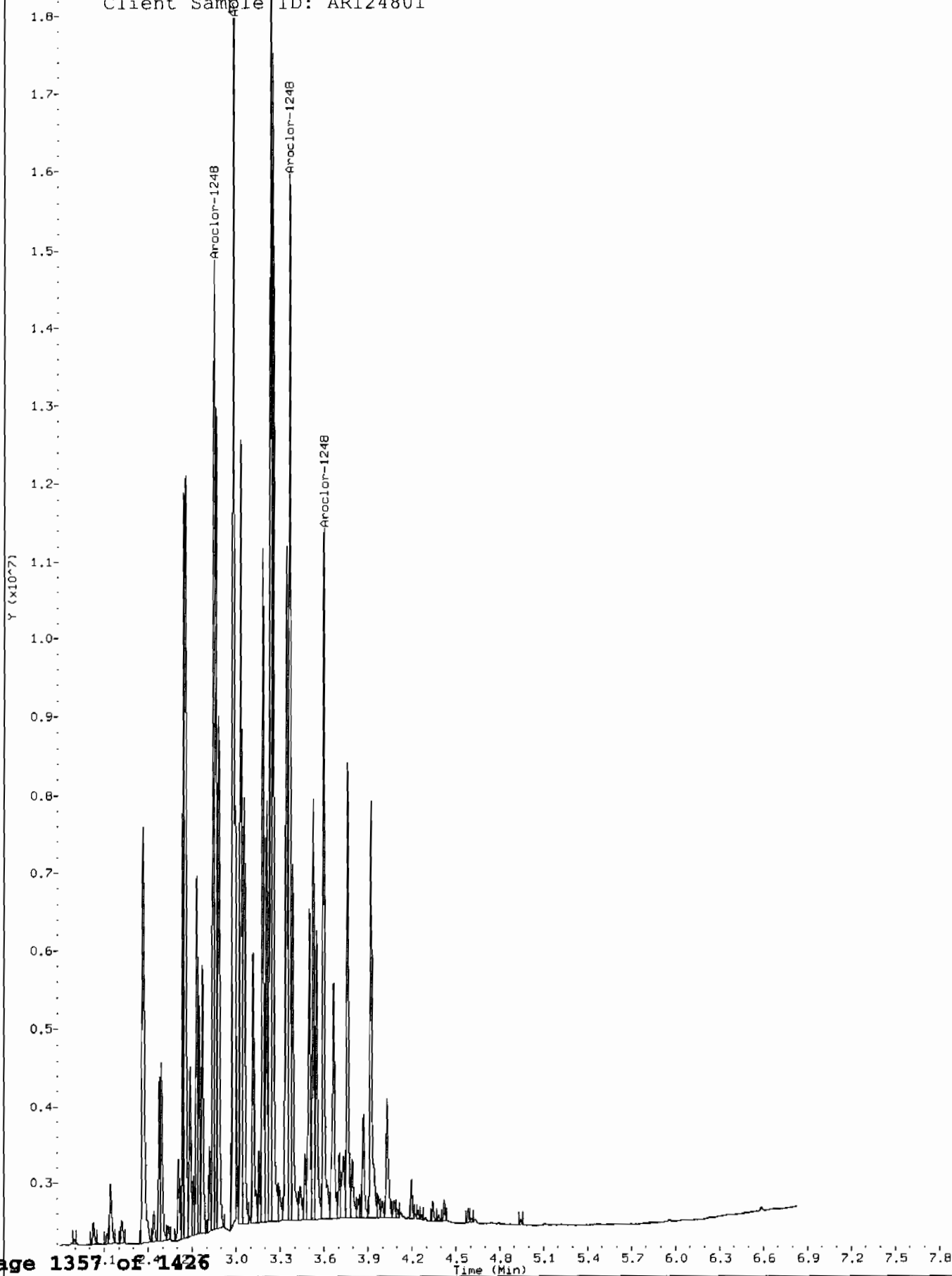
Column phase: CLP1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b/005f0501.d
Operator: S1
Injection Date: 17-MAR-2010 06:39
Instrument: ecdl1a.i
Client Sample ID: AR124801



Comment: Before manual integration
Data File: /chem/ecdla.i/0317107.b/orig-005f0501.d
Operator: S1
Injection Date: 17-MAR-2010 06:39
Instrument: ecdla.i
Client Sample ID: AR124801



Data File: /chem/ecdla.i/0317107.b/005b0501.d
Report Date: 17-Mar-2010 08:53

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/005b0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 17-MAR-2010 06:39
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
5 Aroclor-1248			CAS #: 12672-29-6				
3.376	3.376	0.000	7236477 1000.00	952	80.00- 120.00	100.00	
3.541	3.541	0.000	9076536 1000.00	958	105.43- 145.43	125.43	
3.774	3.774	0.000	10292916 1000.00	942	122.24- 162.24	142.24	
3.801	3.801	0.000	11574901 1000.00	952	139.95- 179.95	159.95	
3.938	3.938	0.000	11003666 1000.00	932	132.06- 172.06	152.06	
Average of Peak Amounts =				947			

Data File: /chem/eodla.i/0317107.b/005b0501.d

Date: 17-MAR-2010 06:39

Client ID: AR124801

Sample Info: 1MAR100223-48

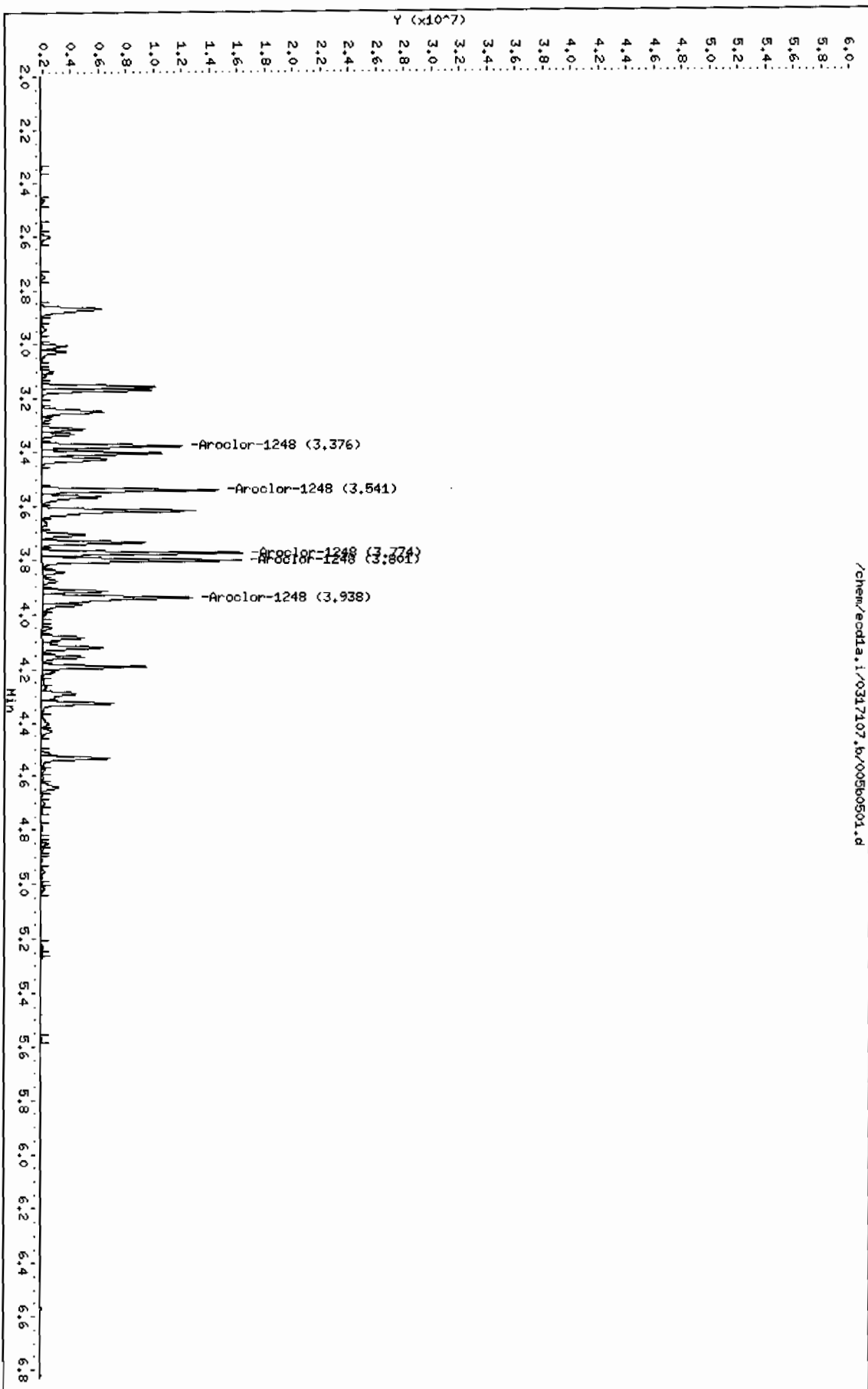
Column phase: CLP2

Page 1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/0317107.b/007f0701.d
Report Date: 17-Mar-2010 08:54

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/007f0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 17-MAR-2010 07:01
Operator : YSl Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

3 Aroclor-1232

CAS #: 11141-16-5

2.365	2.365	0.000	6445549 1000.00	967	80.00- 120.00	100.00
2.652	2.652	0.000	8203940 1000.00	983	107.28- 147.28	127.28
2.732	2.732	0.000	5266309 1000.00	952	61.70- 101.70	81.70
2.847	2.847	0.000	2540896 1000.00	959	19.42- 59.42	39.42
3.234	3.234	0.000	3243941 1000.00	912	30.33- 70.33	50.33

Average of Peak Amounts =

955

Data File: /chem/eodda.i/0317107.b/007f0701.d

Date: 17-MAR-2010 07:01

Client ID: AR123201

Sample Info: IMR100104-32

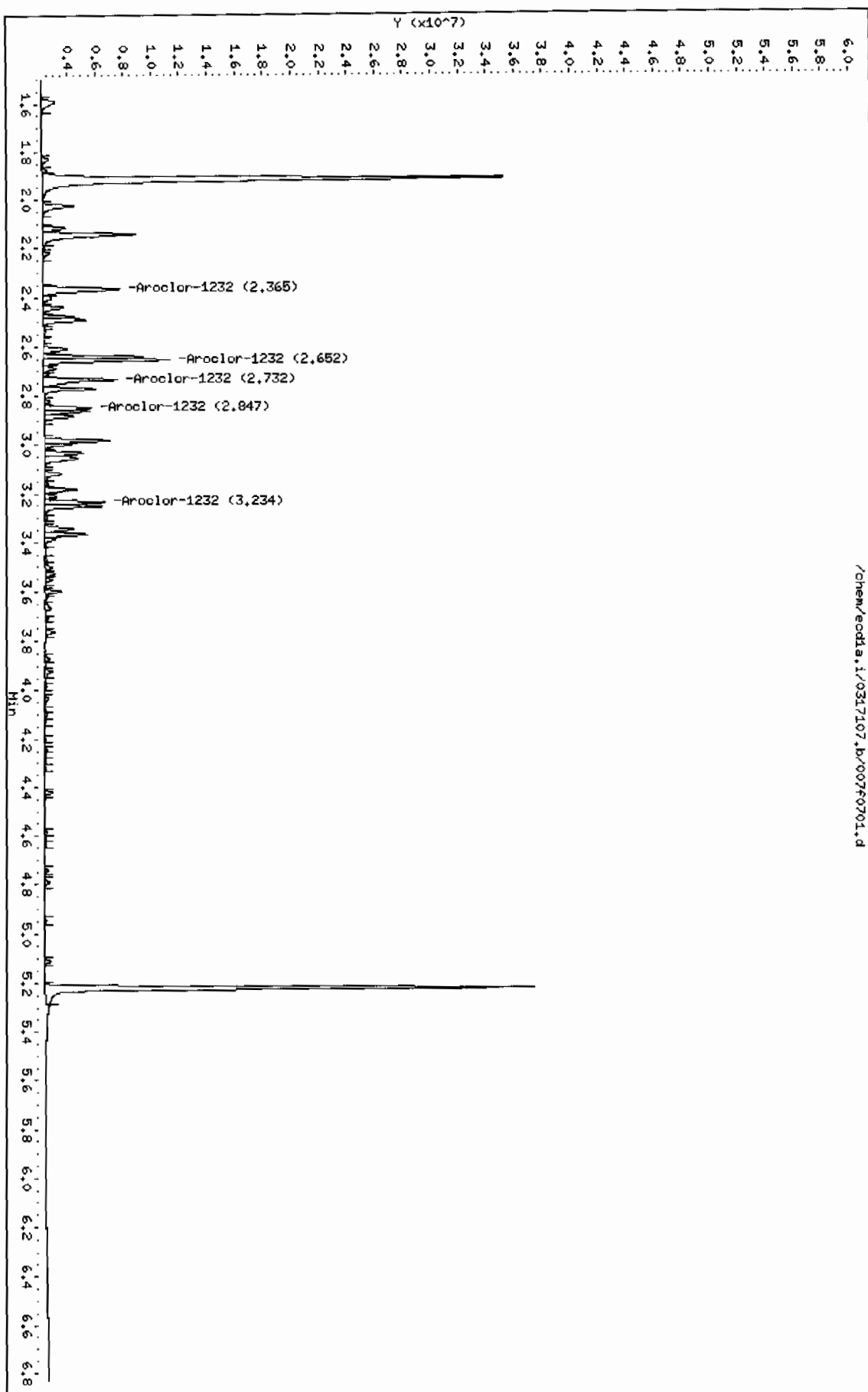
Column phase: CLP1

Instrument: eodda.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecd1a.i/0317107.b/007b0701.d
Report Date: 17-Mar-2010 08:54

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/0317107.b/007b0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 17-MAR-2010 07:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

3 Aroclor-1232

CAS #: 11141-16-5

2.869	2.869	0.000	5036995 1000.00	997 80.00- 120.00	100.00
3.166	3.166	0.000	5500554 1000.00	963 89.20- 129.20	109.20
3.250	3.250	0.000	3863614 1000.00	994 56.70- 96.70	76.70
3.540	3.540	0.000	2837390 1000.00	999 36.33- 76.33	56.33
3.774	3.774	0.000	2755344 1000.00	977 34.70- 74.70	54.70

Average of Peak Amounts =

986

Data File: /chem/eod1a.i/0317107.b/007b0701.d

Date: 17-MAR-2010 07:01

Client ID: AR12301

Sample Info: IAR100104-32

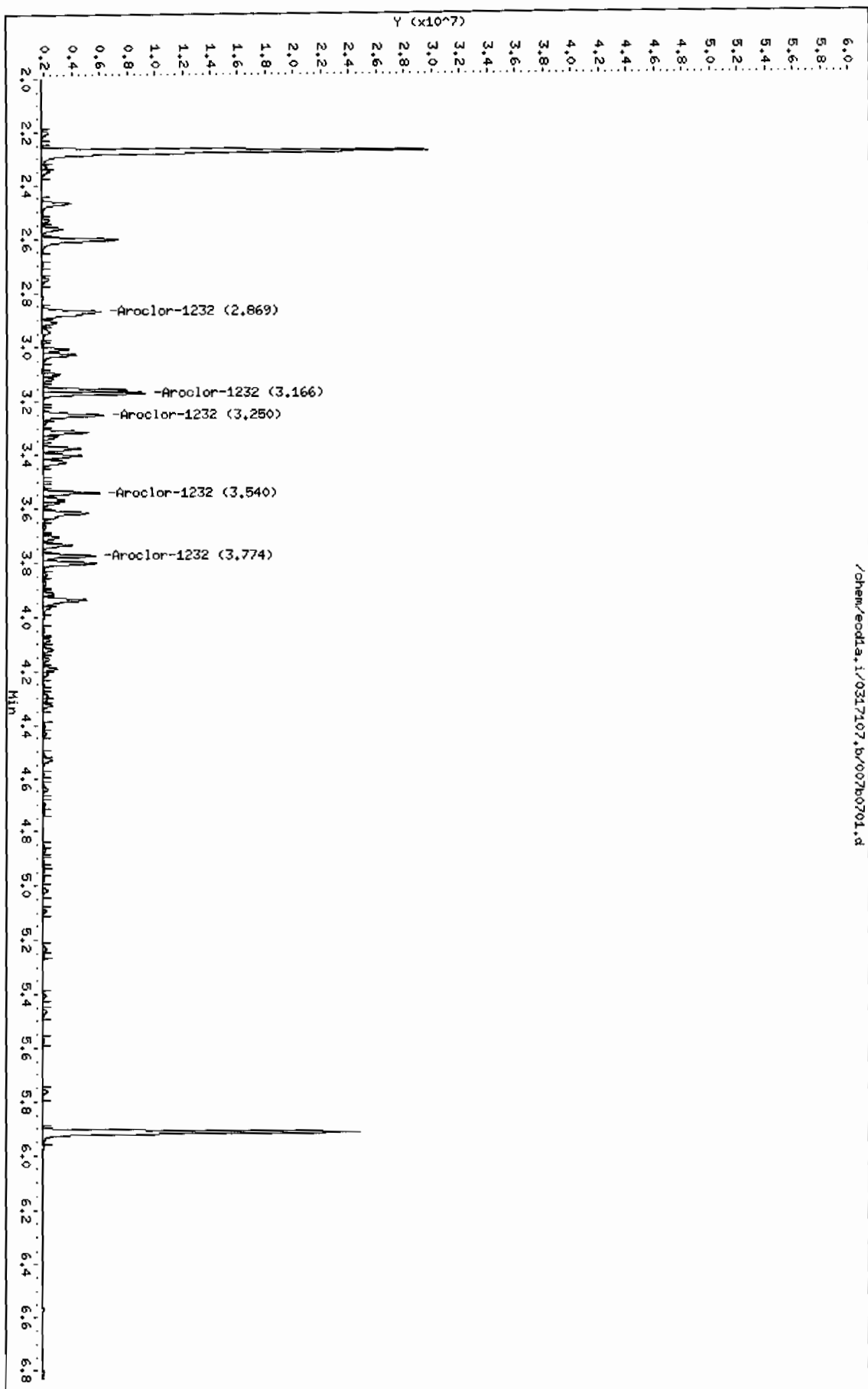
Column phase: CLP2

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/0317107.b/008f0801.d
Report Date: 17-Mar-2010 08:54

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/008f0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 17-MAR-2010 07:11
Operator : YSl Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

2 Aroclor-1221			CAS #: 11104-28-2			
2.026	2.026	0.000	4337779 1000.00	971 80.00~ 120.00	100.00	
2.118	2.118	0.000	2415598 1000.00	987 35.69~ 75.69	55.69	
2.144	2.144	0.000	10371015 1000.00	958 219.09~ 259.09	239.09	
Average of Peak Amounts =			972			

Data File: /chem/ecdda.i/0317107.b/008f0801.d

Date: 17-MAR-2010 07:11

Client ID: AR122101

Sample Info: 1MR100104-21

Column phase: CLP1

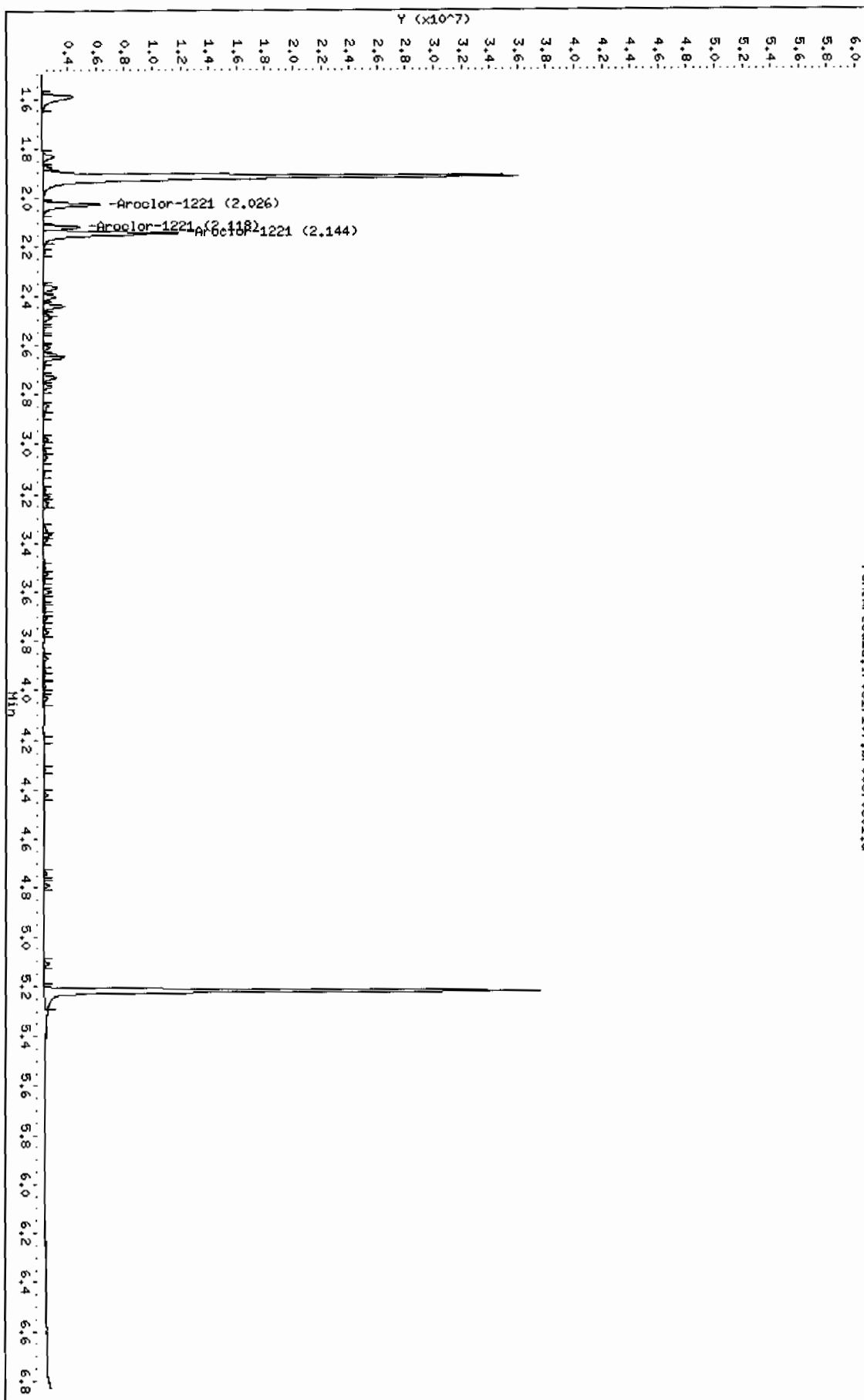
Page 1

Instrument: ecdda.i

Operator: YSA

Column diameter: 0.25

/chem/ecdda.i/0317107.b/008f0801.d



Data File: /chem/ecdla.i/0317107.b/008b0801.d
Report Date: 17-Mar-2010 08:54

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/008b0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 17-MAR-2010 07:11
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	CAL-AMT (ug/L)	ON-COL	TARGET RANGE	RATIO
2.468	2.468	0.000	3218980	1000.00	990	80.00- 120.00	100.00
2.562	2.562	0.000	2068793	1000.00	993	44.27- 84.27	64.27
2.603	2.603	0.000	7132830	1000.00	974	201.59- 241.59	221.59
Average of Peak Amounts =				986			

Data File: /chem/eodla.i/0317107.b/0080801.d

Date: 17-MAR-2010 07:11

Client ID: AR122101

Sample Info: 1MAR100104-21

Column phase: CLP2

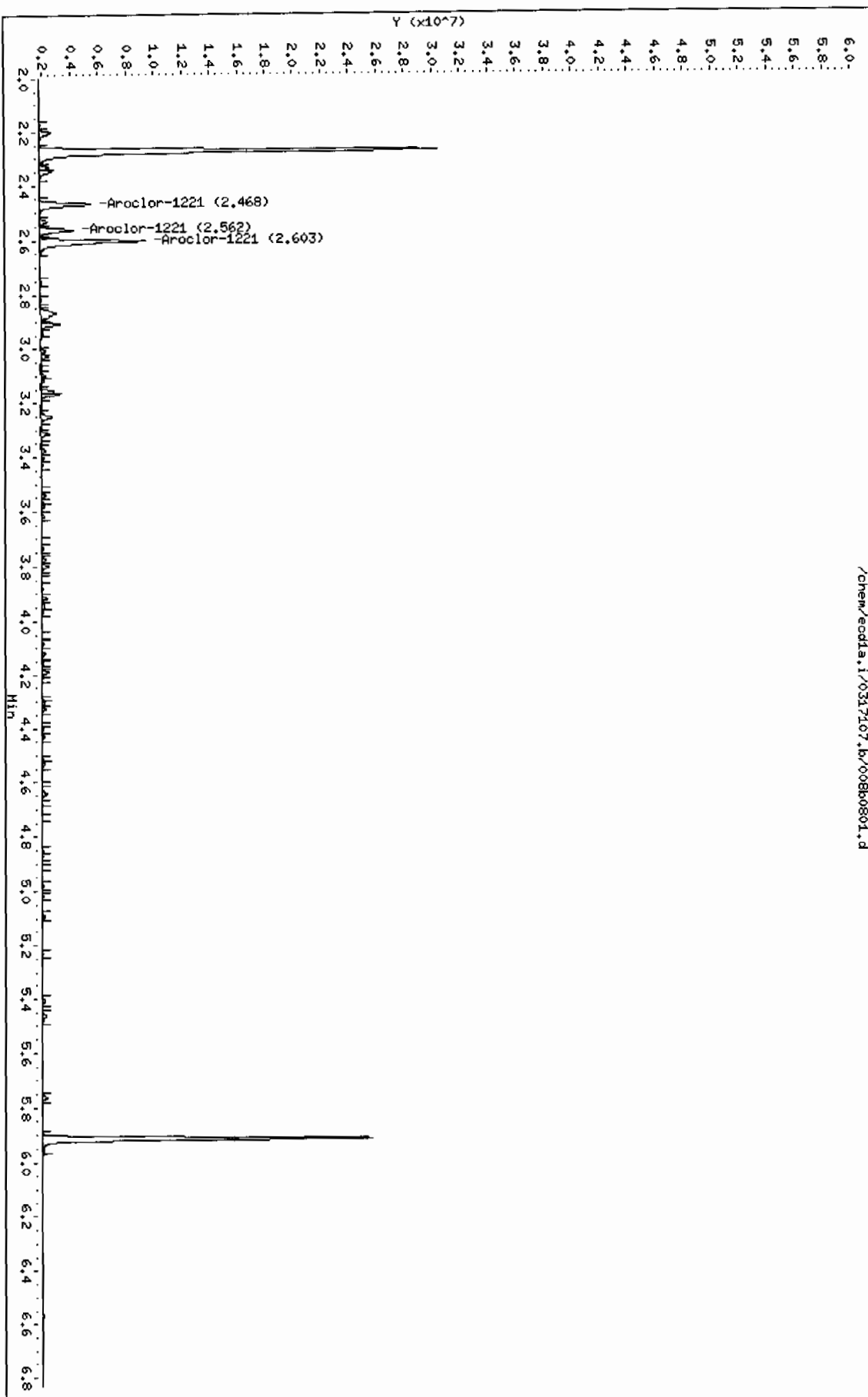
Page 1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/0317107.b/0080801.d



Data File: /chem/ecdla.i/0317107.b/017f1701.d
 Report Date: 17-Mar-2010 10:10

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/017f1701.d
 Lab Smp Id: WAR100222-60 02 Client Smp ID: AR166002
 Inj Date : 17-MAR-2010 08:53
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 02
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 17 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		
1.912	1.913	-0.001	37861137 100.000	97.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl						
				CAS #: 2051-24-3		
5.217	5.216	0.001	27481637 100.000	92.6	80.00- 120.00	100.00

1 Aroclor-1016						
				CAS #: 12674-11-2		
2.365	2.366	-0.001	13072214 1000.00	861	80.00- 120.00	100.00
2.652	2.651	0.001	16743348 1000.00	884	108.08- 148.08	128.08
2.732	2.732	0.000	10753369 1000.00	864	62.26- 102.26	82.26
2.769	2.768	0.001	6446442 1000.00	877	29.31- 69.31	49.31
2.979	2.978	0.001	8110441 1000.00	852	42.04- 82.04	62.04
Average of Peak Amounts =				868		

7 Aroclor-1260						
				CAS #: 11096-82-5		
3.705	3.703	0.002	16962461 1000.00	925	80.00- 120.00	100.00
3.867	3.866	0.001	24950358 1000.00	928	127.09- 167.09	147.09
4.029	4.028	0.001	26635100 1000.00	941	137.02- 177.02	157.02
4.097	4.096	0.001	14960531 1000.00	926	68.20- 108.20	88.20
4.241	4.238	0.003	15562577 1000.00	926	71.75- 111.75	91.75
Average of Peak Amounts =				929		

Data File: /chem/eodla.i/0317107.b/017f1701.d

Date: 17-MAR-2010 08:53

Client ID: AR16002

Sample Info: IARR100222-60 02

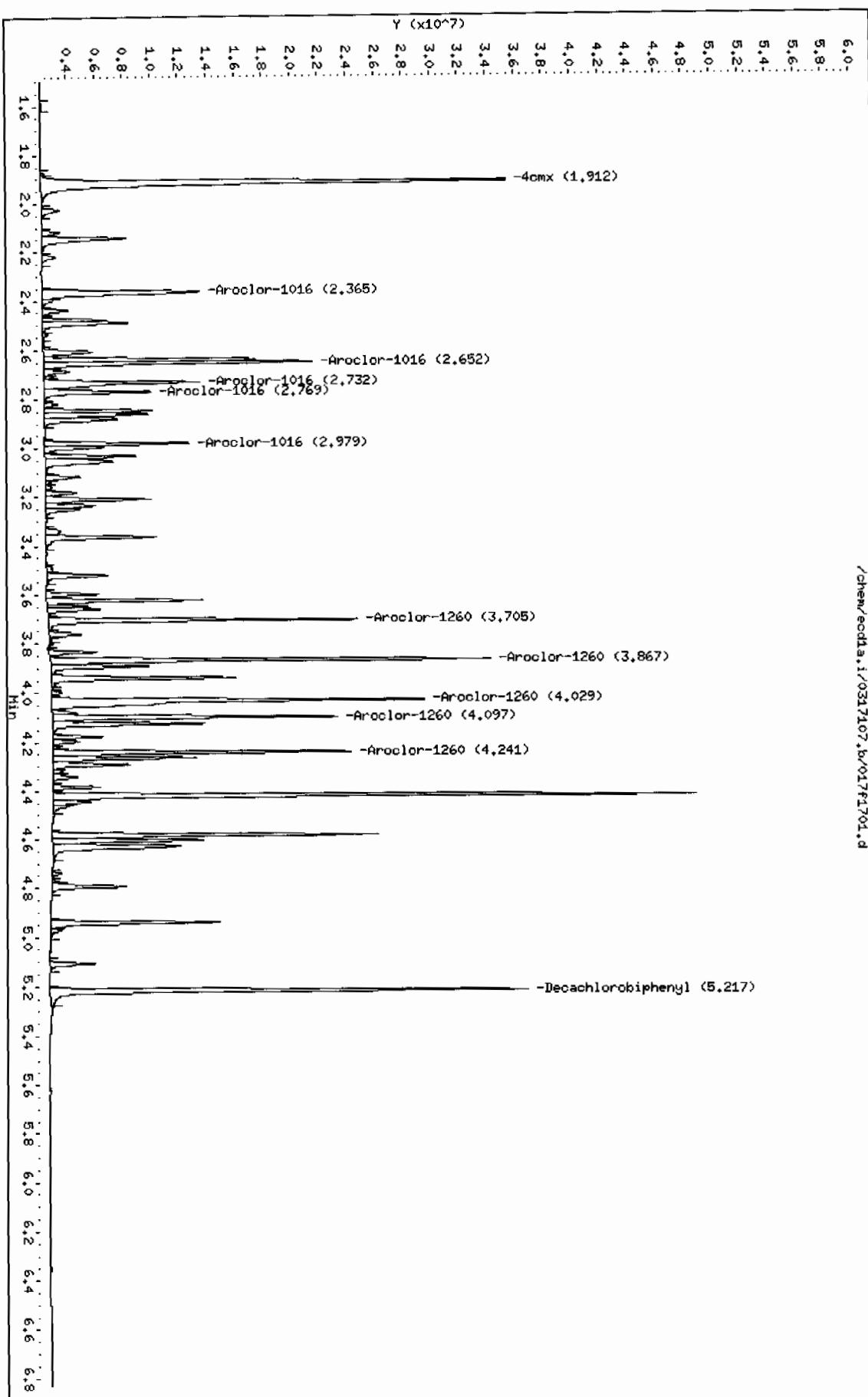
Column phase: CLP1

Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/0317107.b/017b1701.d
 Report Date: 17-Mar-2010 09:56

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/017b1701.d
 Lab Smp Id: WAR100222-60 02 Client Smp ID: AR166002
 Inj Date : 17-MAR-2010 08:53
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 02
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 17 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	==	==	=====	=====	=====	=====

\$ 11 4cmx				CAS #: 877-09-8		
2.271	2.271	0.000	25446707 100.000	97.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.913	5.913	0.000	17501713 100.000	93.5	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.166	3.166	0.000	11589187 1000.00	921	80.00- 120.00	100.00 (M)
3.249	3.248	0.001	7549847 1000.00	874	45.15- 85.15	65.15
3.312	3.312	0.000	4630370 1000.00	876	19.95- 59.95	39.95
3.539	3.538	0.001	6092955 1000.00	884	32.57- 72.57	52.57
3.615	3.614	0.001	5704793 1000.00	888	29.23- 69.23	49.23
Average of Peak Amounts =				889		

7 Aroclor-1260				CAS #: 11096-82-5		
4.305	4.304	0.001	12259396 1000.00	937	80.00- 120.00	100.00
4.430	4.429	0.001	14795087 1000.00	952	100.68- 140.68	120.68
4.696	4.695	0.001	11161788 1000.00	938	71.05- 111.05	91.05
4.869	4.868	0.001	11576871 1000.00	942	74.43- 114.43	94.43
5.016	5.015	0.001	25583684 1000.00	969	188.69- 228.69	208.69
Average of Peak Amounts =				948		

Data File: /chem/ecdl1a.i/0317107.b/017b1701.d
Report Date: 17-Mar-2010 09:56

Page 2

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/0317107.b/017b1704.d

Date: 17-MAR-2010 08:53

Client ID: AR16002

Sample Info: IARR100222-60 02

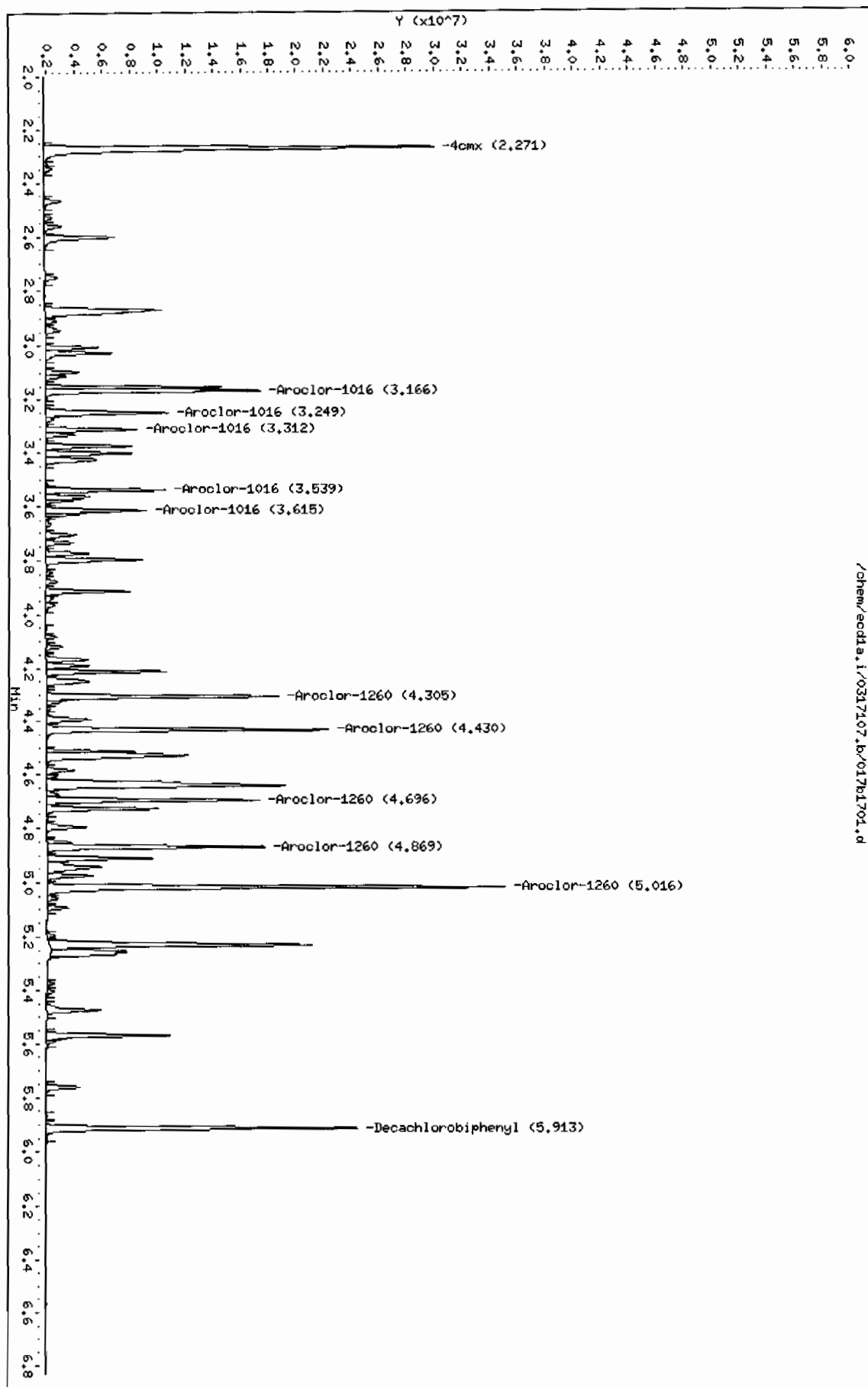
Column phase: CLP2

Instrument: eodla.i

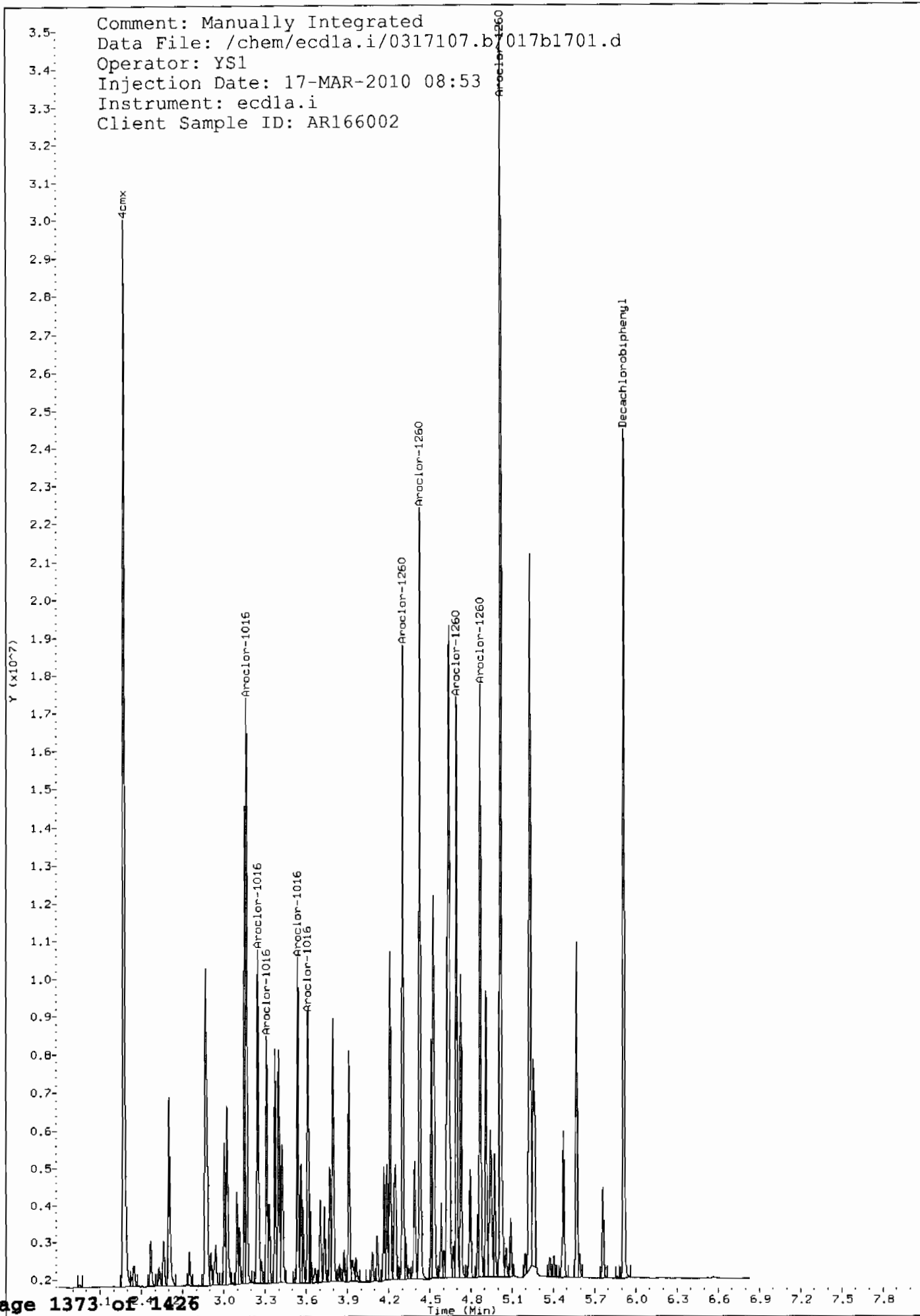
Operator: YSL

Column diameter: 0.25

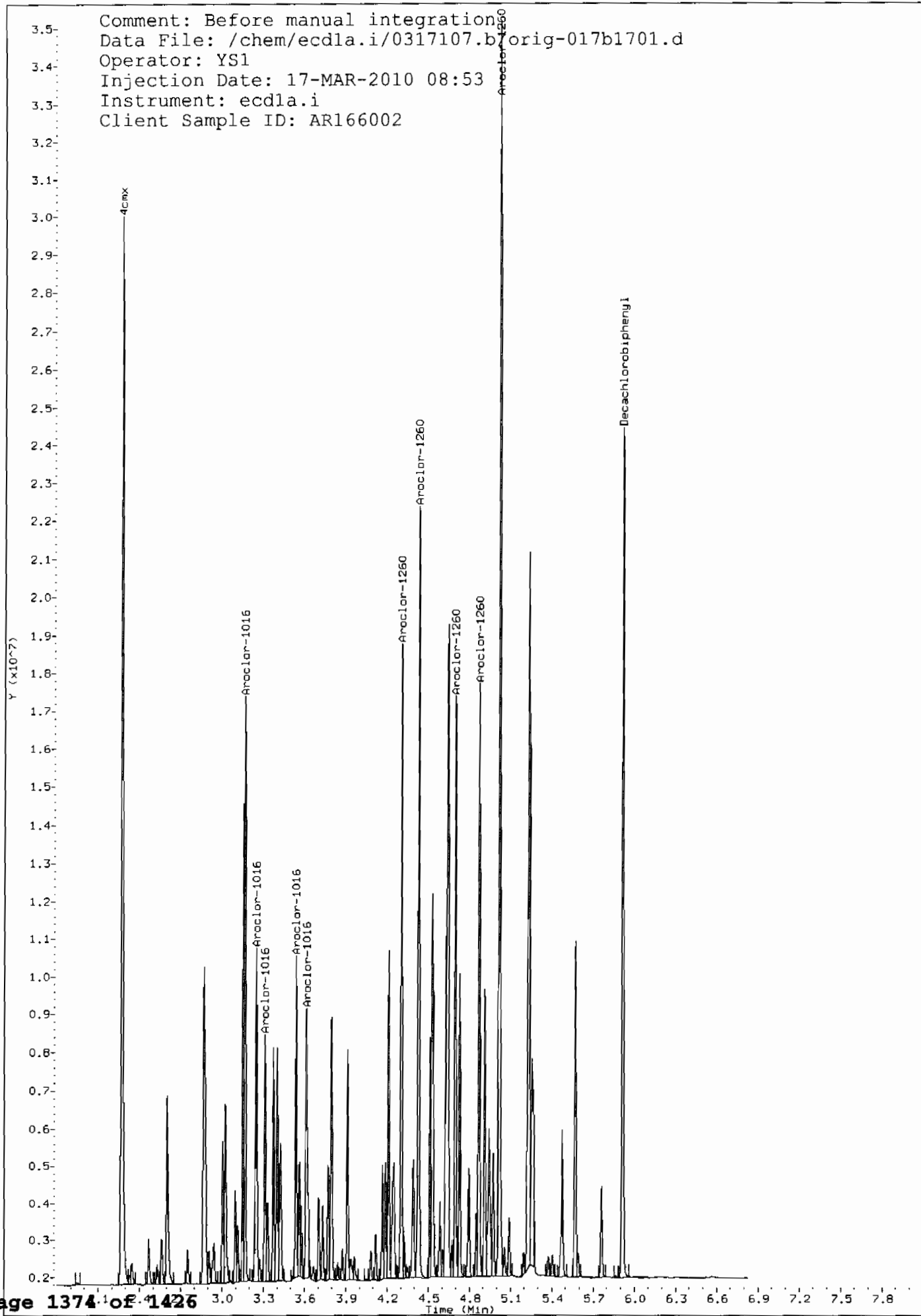
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1.i/0317107.b/017b1701.d
Operator: YS1
Injection Date: 17-MAR-2010 08:53
Instrument: ecdl1.i
Client Sample ID: AR166002



Comment: Before manual integration
Data File: /chem/ecdl.a.i/0317107.b7orig-017b1701.d
Operator: YS1
Injection Date: 17-MAR-2010 08:53
Instrument: ecdla.i
Client Sample ID: AR166002



Data File: /chem/ecdla.i/0317107.b/029f2901.d
 Report Date: 17-Mar-2010 12:03

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/029f2901.d
 Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
 Inj Date : 17-MAR-2010 11:16
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 03
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 12:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 29 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1pl

AMOUNTS							
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.911	1.913	-0.002	39092960	100.000	100	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.216	5.216	0.000	29126444	100.000	98.1	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2			
2.364	2.366	-0.002	13459448	1000.00	887	80.00- 120.00	100.00
2.650	2.651	-0.001	17913772	1000.00	946	113.09- 153.09	133.09
2.731	2.732	-0.001	11186272	1000.00	899	63.11- 103.11	83.11
2.769	2.768	0.001	6757155	1000.00	920	30.20- 70.20	50.20
2.979	2.978	0.001	8551705	1000.00	898	43.54- 83.54	63.54
Average of Peak Amounts =					910		

7 Aroclor-1260				CAS #: 11096-82-5			
3.704	3.703	0.001	17641116	1000.00	962	80.00- 120.00	100.00
3.867	3.866	0.001	26151299	1000.00	972	128.24- 168.24	148.24
4.029	4.028	0.001	28122088	1000.00	993	139.41- 179.41	159.41
4.097	4.096	0.001	15875613	1000.00	982	69.99- 109.99	89.99
4.239	4.238	0.001	16480191	1000.00	980	73.42- 113.42	93.42
Average of Peak Amounts =					978		

Data File: /chem/ecdda.i/0317107.b/029f2901.d

Date: 17-MAR-2010 11:16

Client ID: AR16003

Sample Info: IMR100222-60 03

Column phase: CLP1

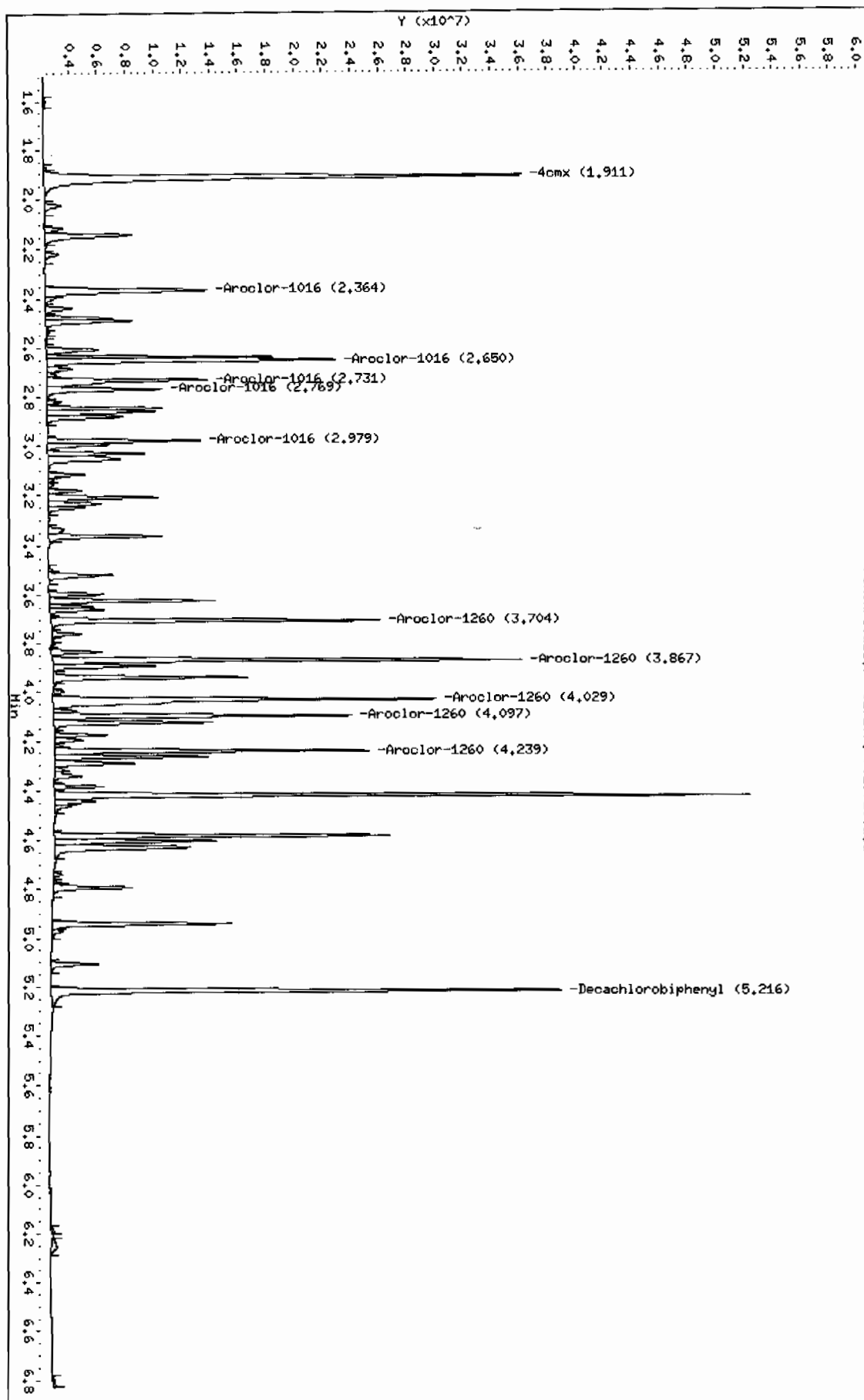
Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/0317107.b/029f2901.d

Page 1



Data File: /chem/ecdl1a.i/0317107.b/029b2901.d
Report Date: 17-Mar-2010 12:01

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/029b2901.d
Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
Inj Date : 17-MAR-2010 11:16
Operator : YSl Inst ID: ecd1a.i
Smp Info : |WAR100222-60 03
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.270	2.271	-0.001	25959609 100.000	99.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.913	5.913	0.000	18143993 100.000	96.9	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.165	3.166	-0.001	11451255 1000.00	910	80.00- 120.00	100.00 (M)
3.249	3.248	0.001	7723504 1000.00	894	47.45- 87.45	67.45
3.312	3.312	0.000	4799447 1000.00	908	21.91- 61.91	41.91
3.539	3.538	0.001	6302421 1000.00	914	32.85- 72.85	55.04
3.614	3.614	0.000	5927748 1000.00	923	39.54- 79.54	61.54
Average of Peak Amounts =				910		

7 Aroclor-1260				CAS #: 11096-82-5		
4.304	4.304	0.000	12518850 1000.00	957	80.00- 120.00	100.00
4.429	4.429	0.000	15297014 1000.00	984	102.19- 142.19	122.19
4.694	4.695	-0.001	11499757 1000.00	967	71.86- 111.86	91.86
4.869	4.868	0.001	11961723 1000.00	973	75.55- 115.55	95.55
5.015	5.015	0.000	26522429 1000.00	1000	191.86- 231.86	211.86
Average of Peak Amounts =				977		

Data File: /chem/ecdl1a.i/0317107.b/029b2901.d
Report Date: 17-Mar-2010 12:01

Page 2

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/0317107.b/029b2901.d

Date: 17-MAR-2010 11:16

Client ID: AR16003

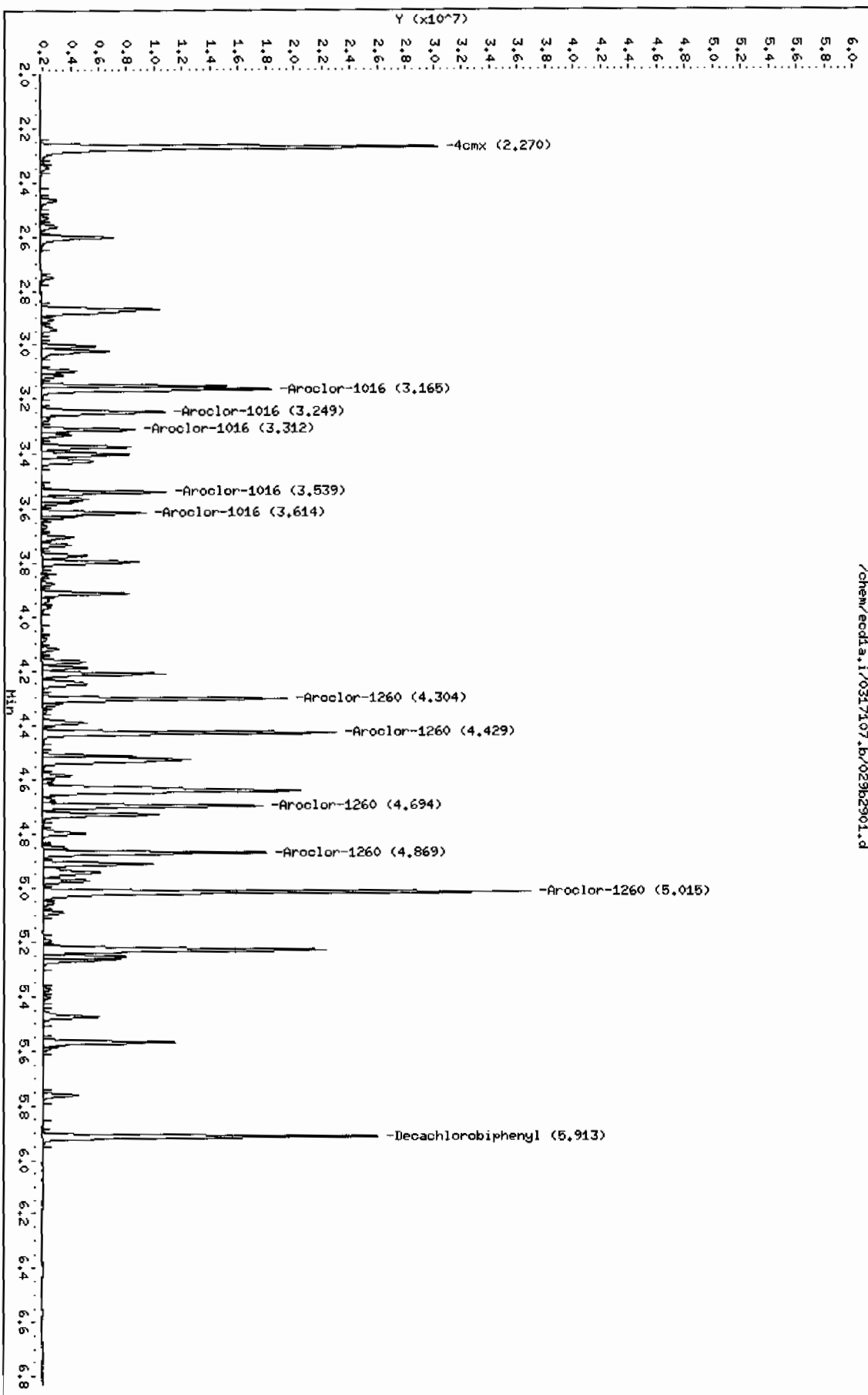
Sample Info: IAR100222-60 03

Column phase: CLP2

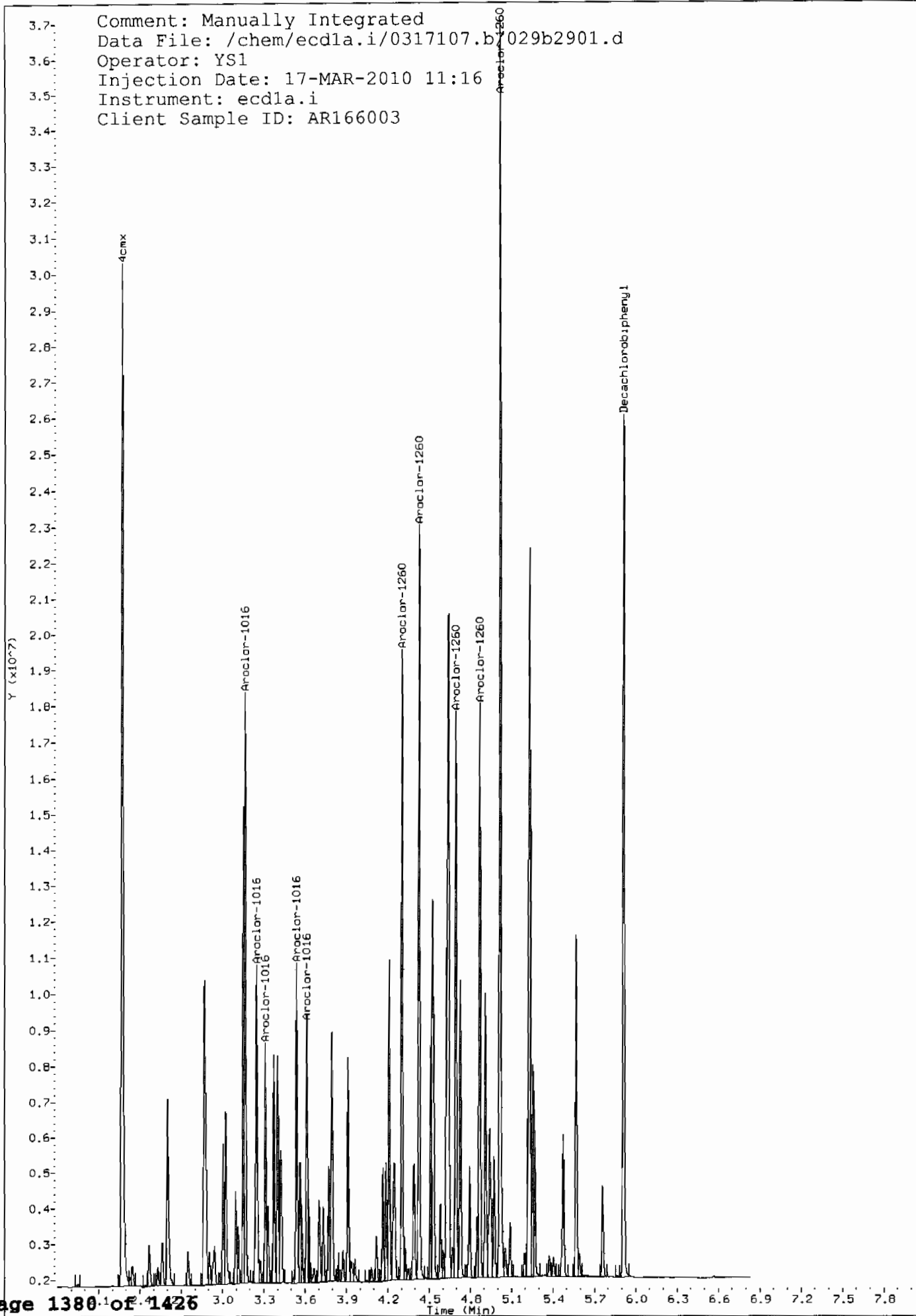
Instrument: eodla.i

Operator: YSL

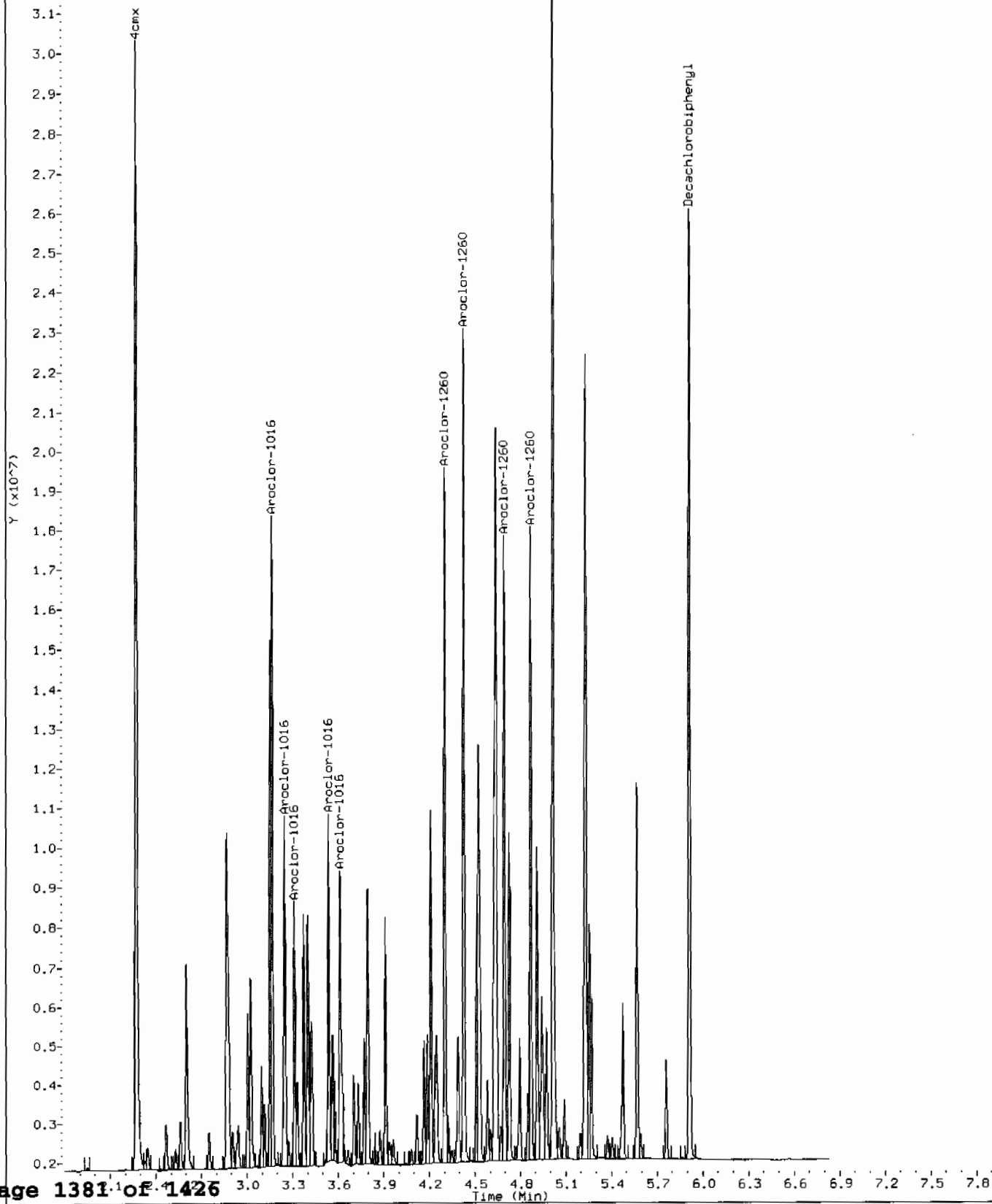
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b 029b2901.d
Operator: YS1
Injection Date: 17-MAR-2010 11:16
Instrument: ecdl1a.i
Client Sample ID: AR166003



3.7- Comment: Before manual integration
3.6- Data File: /chem/ecdl1.i/0317107.b orig-029b2901.d
3.5- Operator: YS1
3.4- Injection Date: 17-MAR-2010 11:16
3.3- Instrument: ecd1a.i
3.2- Client Sample ID: AR166003
3.1-
3.0-
2.9-
2.8-
2.7-
2.6-
2.5-
2.4-
2.3-
2.2-
2.1-
2.0-
1.9-
1.8-
1.7-
1.6-
1.5-
1.4-
1.3-
1.2-
1.1-
1.0-
0.9-
0.8-
0.7-
0.6-
0.5-
0.4-
0.3-
0.2-



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.: 10-2134

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.91			DCB: 5.22			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/11/10	1446	1.91	5.23
02	AR166001DUSE	WAR100222-60	03/11/10	1456	1.92	5.22
03	AR125401	WAR100219-54	03/11/10	1507		
04	AR124201	WAR100219-42	03/11/10	1517		
05	AR124801	WAR100223-48	03/11/10	1528		
06	AR126801	WAR100107-68	03/11/10	1538		
07	AR123201	WAR100104-32	03/11/10	1549		
08	AR122101	WAR100104-21	03/11/10	1559		
09	AR126201	WAR100104-62	03/11/10	1610		
10	DDTANALOGSTD	WAR091219-DD	03/11/10	1621		
11	AR166001	WAR100311-01	03/11/10	1631	1.92	5.22
12	AR166002	WAR100311-02	03/11/10	1641	1.92	5.22
13	AR166003	WAR100311-03	03/11/10	1652	1.92	5.22
14	AR166004	WAR100311-04	03/11/10	1702	1.91	5.22
15	AR166005	IAR100311-01	03/11/10	1713	1.92	5.22
16	AR166001	WAR100222-60	03/11/10	1724	1.91	5.22
17	AR125401	WAR100311-05	03/11/10	1734		
18	AR125402	WAR100311-06	03/11/10	1745		
19	AR125403	WAR100311-07	03/11/10	1755		
20	AR125404	WAR100311-08	03/11/10	1806		
21	AR125405	IAR100219-02	03/11/10	1816		
22	AR125401	WAR100219-54	03/11/10	1827		
23	AR124201	WAR100311-09	03/11/10	1837		
24	AR124202	WAR100311-10	03/11/10	1848		
25	AR124203	WAR100311-11	03/11/10	1858		
26	AR124204	WAR100311-12	03/11/10	1909		
27	AR124205	IAR100219-01	03/11/10	1919		
28	AR124201	WAR100219-42	03/11/10	1930		
29	AR124801	WAR100311-13	03/11/10	1940		
30	AR124802	WAR100311-14	03/11/10	1951		
31	AR124803	WAR100311-15	03/11/10	2001		
32	AR124804	WAR100311-16	03/11/10	2012		

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.: 10-2134

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.91			DCB: 5.22		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR100211-01	03/11/10	2022	
02	AR124801	WAR100223-48	03/11/10	2033	
03	PIBLK02	WAR100219-99	03/11/10	2044	1.91 5.22
04	ZZZZZ	ZZZZZ	03/11/10	2054	1.92 5.22
05	ZZZZZ	ZZZZZ	03/11/10	2105	1.92 5.22
06	ZZZZZ	ZZZZZ	03/11/10	2115	1.92 5.22
07	ZZZZZ	ZZZZZ	03/11/10	2126	1.92 5.22
08	ZZZZZ	ZZZZZ	03/11/10	2136	1.92 5.22
09	ZZZZZ	ZZZZZ	03/11/10	2147	1.92 5.22
10	ZZZZZ	ZZZZZ	03/11/10	2157	1.92 5.22
11	ZZZZZ	ZZZZZ	03/11/10	2208	1.92 5.22
12	ZZZZZ	ZZZZZ	03/11/10	2218	1.92 5.22
13	ZZZZZ	ZZZZZ	03/11/10	2229	1.92 5.22
14	AR	WAR100222-60	03/11/10	2239	1.91 5.22
15	PIBLK03	WAR100219-99	03/11/10	2250	1.91 5.22
16	ZZZZZ	ZZZZZ	03/11/10	2300	1.90 5.23
17	ZZZZZ	ZZZZZ	03/11/10	2311	1.92 5.22
18	AR	WAR100219-99	03/11/10	2321	1.91 5.22
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

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.: 10-2134

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.27				DCB: 5.92			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	PIBLK01	WAR100219-99	03/11/10	1446		2.27	5.92
02	AR166001DUSE	WAR100222-60	03/11/10	1456		2.27	5.92
03	AR125401	WAR100219-54	03/11/10	1507			
04	AR124201	WAR100219-42	03/11/10	1517			
05	AR124801	WAR100223-48	03/11/10	1528			
06	AR126801	WAR100107-68	03/11/10	1538			
07	AR123201	WAR100104-32	03/11/10	1549			
08	AR122101	WAR100104-21	03/11/10	1559			
09	AR126201	WAR100104-62	03/11/10	1610			
10	DDTANALOGSTD	WAR091219-DD	03/11/10	1621			
11	AR166001	WAR100311-01	03/11/10	1631		2.27	5.92
12	AR166002	WAR100311-02	03/11/10	1641		2.27	5.92
13	AR166003	WAR100311-03	03/11/10	1652		2.27	5.92
14	AR166004	WAR100311-04	03/11/10	1702		2.27	5.92
15	AR166005	IAR100311-01	03/11/10	1713		2.27	5.92
16	AR166001	WAR100222-60	03/11/10	1724		2.27	5.92
17	AR125401	WAR100311-05	03/11/10	1734			
18	AR125402	WAR100311-06	03/11/10	1745			
19	AR125403	WAR100311-07	03/11/10	1755			
20	AR125404	WAR100311-08	03/11/10	1806			
21	AR125405	IAR100219-02	03/11/10	1816			
22	AR125401	WAR100219-54	03/11/10	1827			
23	AR124201	WAR100311-09	03/11/10	1837			
24	AR124202	WAR100311-10	03/11/10	1848			
25	AR124203	WAR100311-11	03/11/10	1858			
26	AR124204	WAR100311-12	03/11/10	1909			
27	AR124205	IAR100219-01	03/11/10	1919			
28	AR124201	WAR100219-42	03/11/10	1930			
29	AR124801	WAR100311-13	03/11/10	1940			
30	AR124802	WAR100311-14	03/11/10	1951			
31	AR124803	WAR100311-15	03/11/10	2001			
32	AR124804	WAR100311-16	03/11/10	2012			

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.

page 1 of 2

FORM VIII PEST

OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.27			DCB: 5.92		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR100211-01	03/11/10	2022	
02	AR124801	WAR100223-48	03/11/10	2033	
03	PIBLK02	WAR100219-99	03/11/10	2044	2.27 5.92
04	ZZZZZ	ZZZZZ	03/11/10	2054	2.28 5.92
05	ZZZZZ	ZZZZZ	03/11/10	2105	2.28 5.92
06	ZZZZZ	ZZZZZ	03/11/10	2115	2.28 5.92
07	ZZZZZ	ZZZZZ	03/11/10	2126	2.28 5.92
08	ZZZZZ	ZZZZZ	03/11/10	2136	2.28 5.92
09	ZZZZZ	ZZZZZ	03/11/10	2147	2.28 5.92
10	ZZZZZ	ZZZZZ	03/11/10	2157	2.28 5.92
11	ZZZZZ	ZZZZZ	03/11/10	2208	2.28 5.92
12	ZZZZZ	ZZZZZ	03/11/10	2218	2.28 5.92
13	ZZZZZ	ZZZZZ	03/11/10	2229	2.28 5.92
14	AR166002	WAR100222-60	03/11/10	2239	2.27 5.92
15	PIBLK03	WAR100219-99	03/11/10	2250	2.27 5.92
16	ZZZZZ	ZZZZZ	03/11/10	2300	5.92
17	ZZZZZ	ZZZZZ	03/11/10	2311	5.23*
18	ZZZZZ	ZZZZZ	03/11/10	2321	
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

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.: 10-2134

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.91			DCB: 5.22		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/17/10 0557	1.91	5.21
02	AR166001	WAR100222-60	03/17/10 0608	1.91	5.22
03	AR125401	WAR100219-54	03/17/10 0618		
04	AR124201	WAR100219-42	03/17/10 0629		
05	AR124801	WAR100223-48	03/17/10 0639		
06	AR126801	WAR100107-68	03/17/10 0650		
07	AR123201	WAR100104-32	03/17/10 0701		
08	AR122101	WAR100104-21	03/17/10 0711		
09	AR126201	WAR100104-62	03/17/10 0722		
10	DDTANALOGSTD	WAR091219-DD	03/17/10 0736		
11	PIBLK02	WAR100219-99	03/17/10 0746	1.91	5.22
12	ZZZZZ	ZZZZZ	03/17/10 0757	1.91	5.22
13	ZZZZZ	ZZZZZ	03/17/10 0807	1.91	5.22
14	ZZZZZ	ZZZZZ	03/17/10 0818	1.91	5.22
15	ZZZZZ	ZZZZZ	03/17/10 0828	1.91	5.22
16	ZZZZZ	ZZZZZ	03/17/10 0841	1.91	5.22
17	AR166002	WAR100222-60	03/17/10 0853	1.91	5.22
18	PIBLK03	WAR100219-99	03/17/10 0904	1.91	5.22
19	PBLK01	1202072502	03/17/10 0914	1.91	5.22
20	PBLK01LCS	1202072503	03/17/10 0925	1.91	5.22
21	RE36-10-7520	248240009	03/17/10 0935	1.91	5.22
22	RE36-10-7519	248240010	03/17/10 0948	1.91	5.22
23	ZZZZZ	ZZZZZ	03/17/10 1001	1.91	5.22
24	ZZZZZ	ZZZZZ	03/17/10 1013	1.91	5.22
25	ZZZZZ	ZZZZZ	03/17/10 1026	1.91	5.21
26	ZZZZZ	ZZZZZ	03/17/10 1038	1.91	5.21
27	ZZZZZ	ZZZZZ	03/17/10 1051	1.91	5.21
28	ZZZZZ	ZZZZZ	03/17/10 1104	1.91	5.21
29	AR166003	WAR100222-60	03/17/10 1116	1.91	5.22
30	PIBLK04	WAR100219-99	03/17/10 1129	1.91	5.22
31	ZZZZZ	ZZZZZ	03/17/10 1141	1.91	5.21
32	ZZZZZ	ZZZZZ	03/17/10 1152	1.91	5.22

S1 = 4cmx
DCB = Decachlorobiphenyl

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2134

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					S1		DCB	
S1 : 2.27 DCB: 5.91					RT		RT	
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED		#		#
01	PIBLK01	WAR100219-99	03/17/10	0557	2.27		5.91	
02	AR166001	WAR100222-60	03/17/10	0608	2.27		5.91	
03	AR125401	WAR100219-54	03/17/10	0618				
04	AR124201	WAR100219-42	03/17/10	0629				
05	AR124801	WAR100223-48	03/17/10	0639				
06	AR126801	WAR100107-68	03/17/10	0650				
07	AR123201	WAR100104-32	03/17/10	0701				
08	AR122101	WAR100104-21	03/17/10	0711				
09	AR126201	WAR100104-62	03/17/10	0722				
10	DDTANALOGSTD	WAR091219-DD	03/17/10	0736				
11	PIBLK02	WAR100219-99	03/17/10	0746	2.27		5.91	
12	ZZZZZ	ZZZZZ	03/17/10	0757	2.27		5.91	
13	ZZZZZ	ZZZZZ	03/17/10	0807	2.27		5.91	
14	ZZZZZ	ZZZZZ	03/17/10	0818	2.27		5.91	
15	ZZZZZ	ZZZZZ	03/17/10	0828	2.27		5.91	
16	ZZZZZ	ZZZZZ	03/17/10	0841	2.27		5.91	
17	AR166002	WAR100222-60	03/17/10	0853	2.27		5.91	
18	PIBLK03	WAR100219-99	03/17/10	0904	2.27		5.91	
19	PBLK01	1202072502	03/17/10	0914	2.27		5.91	
20	PBLK01LCS	1202072503	03/17/10	0925	2.27		5.91	
21	RE36-10-7520	248240009	03/17/10	0935	2.27		5.91	
22	RE36-10-7519	248240010	03/17/10	0948	2.27		5.91	
23	ZZZZZ	ZZZZZ	03/17/10	1001	2.27		5.91	
24	ZZZZZ	ZZZZZ	03/17/10	1013	2.27		5.91	
25	ZZZZZ	ZZZZZ	03/17/10	1026	2.27		5.91	
26	ZZZZZ	ZZZZZ	03/17/10	1038	2.27		5.91	
27	ZZZZZ	ZZZZZ	03/17/10	1051	2.27		5.91	
28	ZZZZZ	ZZZZZ	03/17/10	1104	2.27		5.91	
29	AR166003	WAR100222-60	03/17/10	1116	2.27		5.91	
30	PIBLK04	WAR100219-99	03/17/10	1129	2.27		5.91	
31	ZZZZZ	ZZZZZ	03/17/10	1141	2.27		5.91	
32	ZZZZZ	ZZZZZ	03/17/10	1152	2.27		5.91	

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.

page 1 of 1

FORM VIII PEST

OLM03.0

Identification Summary

Page 1 of 1

SDG Number: 10-2134

Client ID: LCS for batch 965798

Lab Sample ID: 1202072503

Data File: 020f2001.d

Data File: 020b2001.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 17-MAR-10 09:25

Analyzed: 17-MAR-10 09:25

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.56
Column 1	1	2.37	2.34 - 2.4	19.8		ug/kg	
	2	2.65	2.62 - 2.68	19.1		ug/kg	
	3	2.73	2.7 - 2.76	19.1		ug/kg	
	4	2.77	2.74 - 2.8	19.3		ug/kg	
	5	2.98	2.95 - 3.01	19.3		ug/kg	
					19.3		
Column 2	1	3.17	3.14 - 3.2	19.8		ug/kg	
	2	3.25	3.22 - 3.28	19.5		ug/kg	
	3	3.31	3.28 - 3.34	19.2		ug/kg	
	4	3.54	3.51 - 3.57	19.6		ug/kg	
	5	3.62	3.58 - 3.64	20.1		ug/kg	
					19.6		
Aroclor-1260							1.26
Column 1	1	3.71	3.67 - 3.73	21		ug/kg	
	2	3.87	3.84 - 3.9	21.2		ug/kg	
	3	4.03	4 - 4.06	21.6		ug/kg	
	4	4.1	4.07 - 4.13	21.4		ug/kg	
	5	4.24	4.21 - 4.27	21.5		ug/kg	
					21.3		
Column 2	1	4.31	4.27 - 4.33	21		ug/kg	
	2	4.43	4.4 - 4.46	21.4		ug/kg	
	3	4.7	4.67 - 4.73	21.4		ug/kg	
	4	4.87	4.84 - 4.9	21.7		ug/kg	
	5	5.02	4.99 - 5.05	22.5		ug/kg	
					21.6		

Identification Summary

Page 1 of 1

SDG Number: 10-2134

Client ID: RE36-10-7519

Lab Sample ID: 248240010

Data File: 022f2201.d

Data File: 022b2201.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 17-MAR-10 09:48

Analyzed: 17-MAR-10 09:48

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							32.3
Column 1	1	3.21	3.18 - 3.24	1.08		ug/kg	
	2	3.36	3.33 - 3.39	1.5		ug/kg	
	3	3.6	3.57 - 3.63	2.03		ug/kg	
	4	3.76	3.73 - 3.79	3.6		ug/kg	
	5	3.87	3.84 - 3.9	4.28		ug/kg	
					2.5		
Column 2	1	3.38	3.35 - 3.41	1.02		ug/kg	
	2	3.8	3.77 - 3.83	1.29		ug/kg	
	3	3.91	3.88 - 3.94	2.25		ug/kg	
	4	4.19	4.16 - 4.22	2.32		ug/kg	
	5	4.32	4.3 - 4.36	2.13		ug/kg	
					1.8		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-2134

Matrix: SOIL

Lab Sample ID: 1202072502

Client Sample: QC for batch 965798

Client: LANL010

Project: QC

Client ID: MB for batch 965798

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 965805

Inst: ECD1A.I

Dilution: 1

Run Date: 03/17/2010 09:14

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 03/16/2010 21:02

Aliquot: 30 g

Final Volume: 1 mL

Data File: 019f1901-1.d

Column: 1 CLP1

Level: LOW

019b1901-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecd1a.i/0317107.b/019f1901.d
Report Date: 17-Mar-2010 10:14

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/0317107.b/019f1901.d
Lab Smp Id: 1202072502 Client Smp ID: PBLK01
Inj Date : 17-MAR-2010 09:14
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202072502|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2134.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.913	1.913	0.000	49954676 128.246	4.3	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.218	5.216	0.002	38276751 128.908	4.3	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/0317107.b/019f1901.d

Date: 17-MAR-2010 09:14

Client ID: PBLK01

Sample Info: 11202072502141

Volume Injected (uL): 1.0

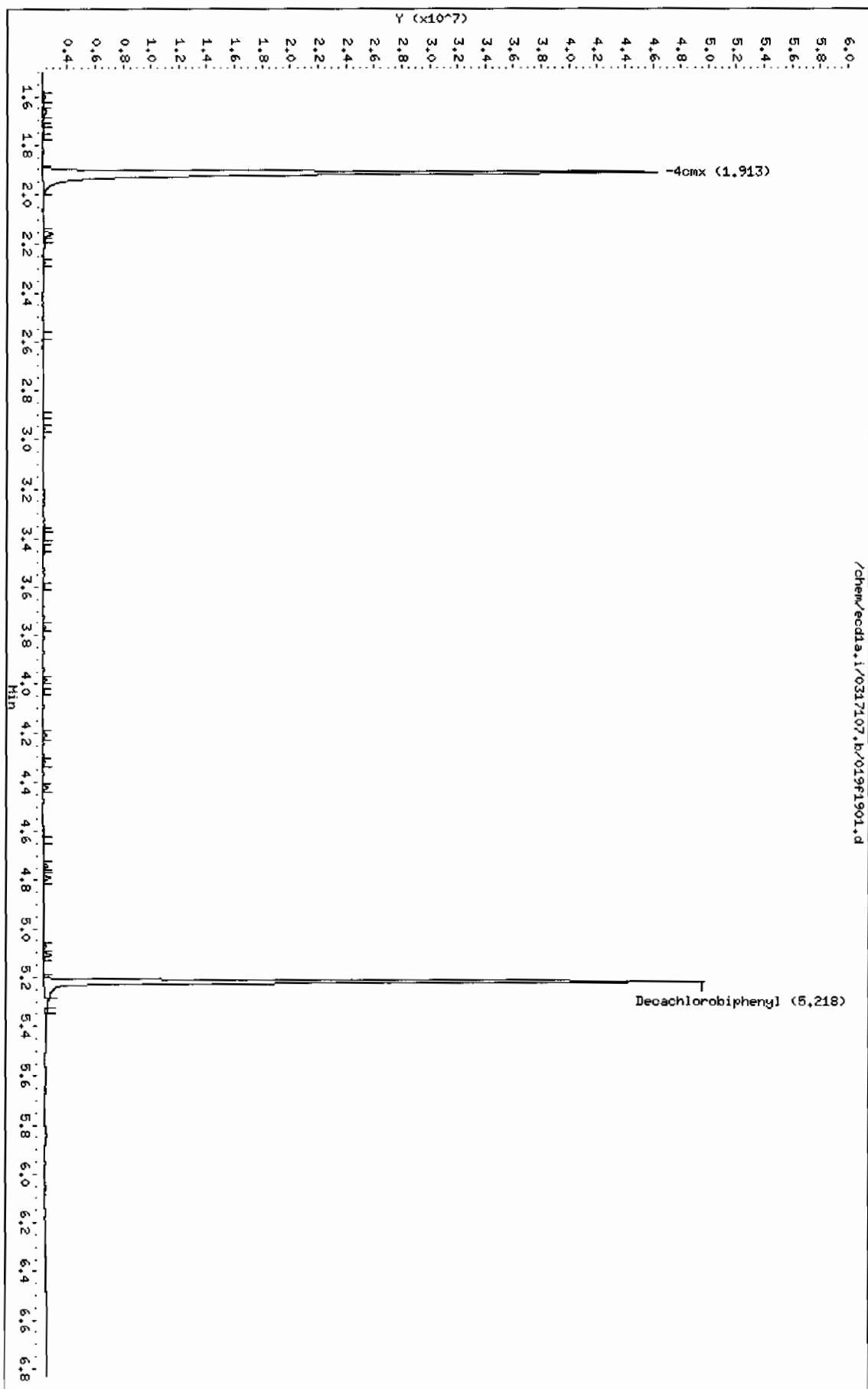
Column phase: CLP1

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/0317107.b/019b1901.d
 Report Date: 17-Mar-2010 10:14

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdl1a.i/0317107.b/019b1901.d
 Lab Smp Id: 1202072502 Client Smp ID: PBLK01
 Inj Date : 17-MAR-2010 09:14
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202072502|1|
 Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MB|||
 Comment :
 Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 19 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2134.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

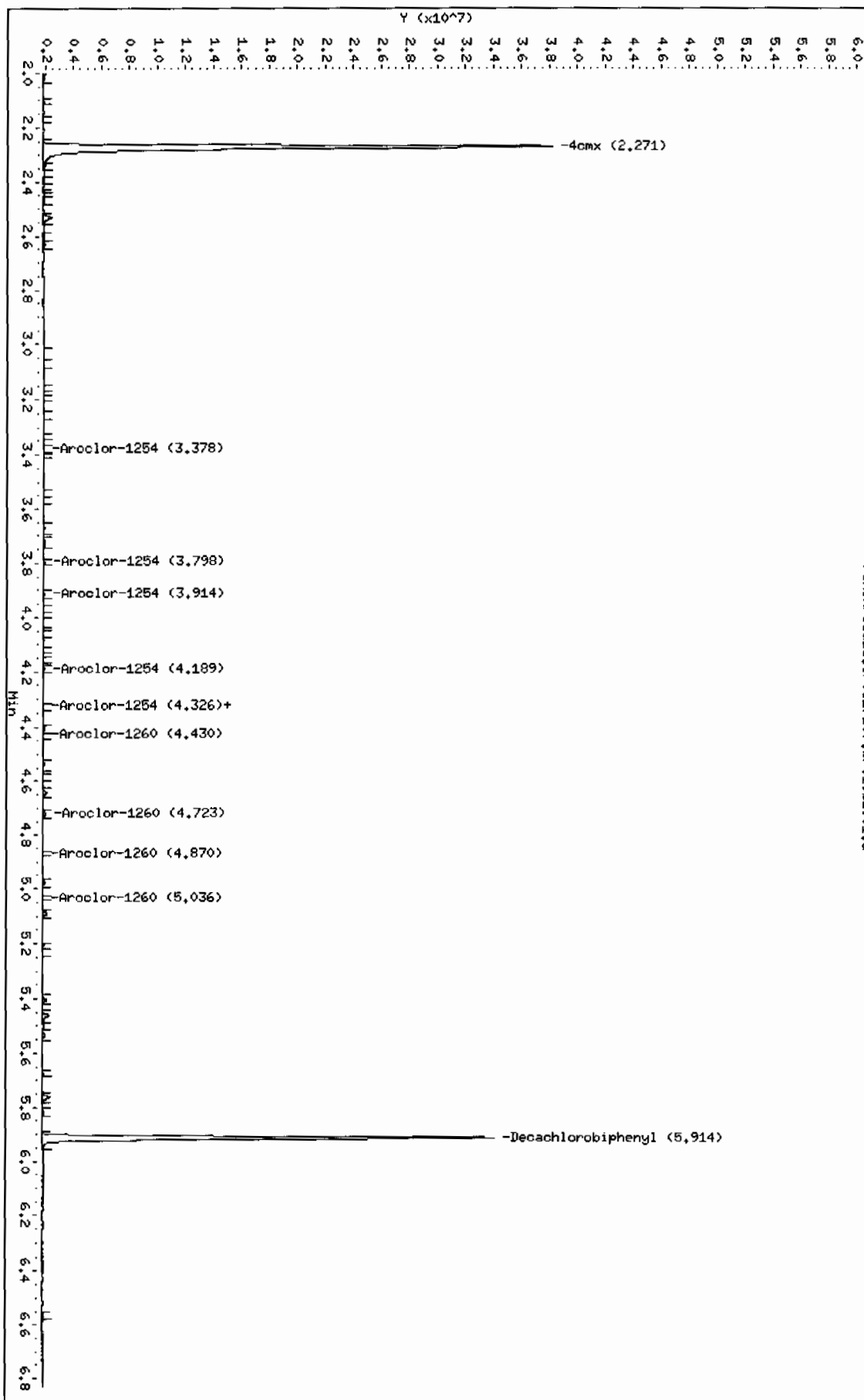
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8 2.271 2.271 0.000 33641968 128.242 4.3 80.00- 120.00 100.00						

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3 5.914 5.913 0.001 24504990 130.921 4.4 80.00- 120.00 100.00						

Data File: /chem/ecda.i/0317107.b/019b1901.d
Date: 17-MAR-2010 09:14
Client ID: PLK01
Sample Info: 11202072502111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25

/chem/ecda.i/0317107.b/019b1901.d



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-2134

Matrix: SOIL

Lab Sample ID: 1202072503

Client Sample: QC for batch 965798

Client: LANL010

Project: QC

Client ID: LCS for batch 965798

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 965805

Inst: ECD1A.I

Dilution: 1

Run Date: 03/17/2010 09:25

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 03/16/2010 21:02

Aliquot: 30 g

Final Volume: 1 mL

Data File: 020f2001-1.d

Column: 1 CLP1

Level: LOW

020b2001-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.6	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		21.6	ug/kg	1.11	3.33	2

Data File: /chem/ecdla.i/0317107.b/020f2001.d
Report Date: 17-Mar-2010 11:19

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/0317107.b/020f2001.d
Lab Smp Id: 1202072503 Client Smp ID: PBLK01LCS
Inj Date : 17-MAR-2010 09:25
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072503|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2134.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
1.914	1.913	0.001	49554639	127.219	4.2 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.218	5.216	0.002	37446239	126.111	4.2 80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.367	2.366	0.001	8997695	592.858	19.8 80.00- 120.00	100.00	
2.653	2.651	0.002	10841864	572.560	19.1 108.08- 148.08	120.50	
2.734	2.732	0.002	7136270	573.556	19.1 62.26- 102.26	79.31	
2.771	2.768	0.003	4248605	578.174	19.3 29.31- 69.31	47.22	

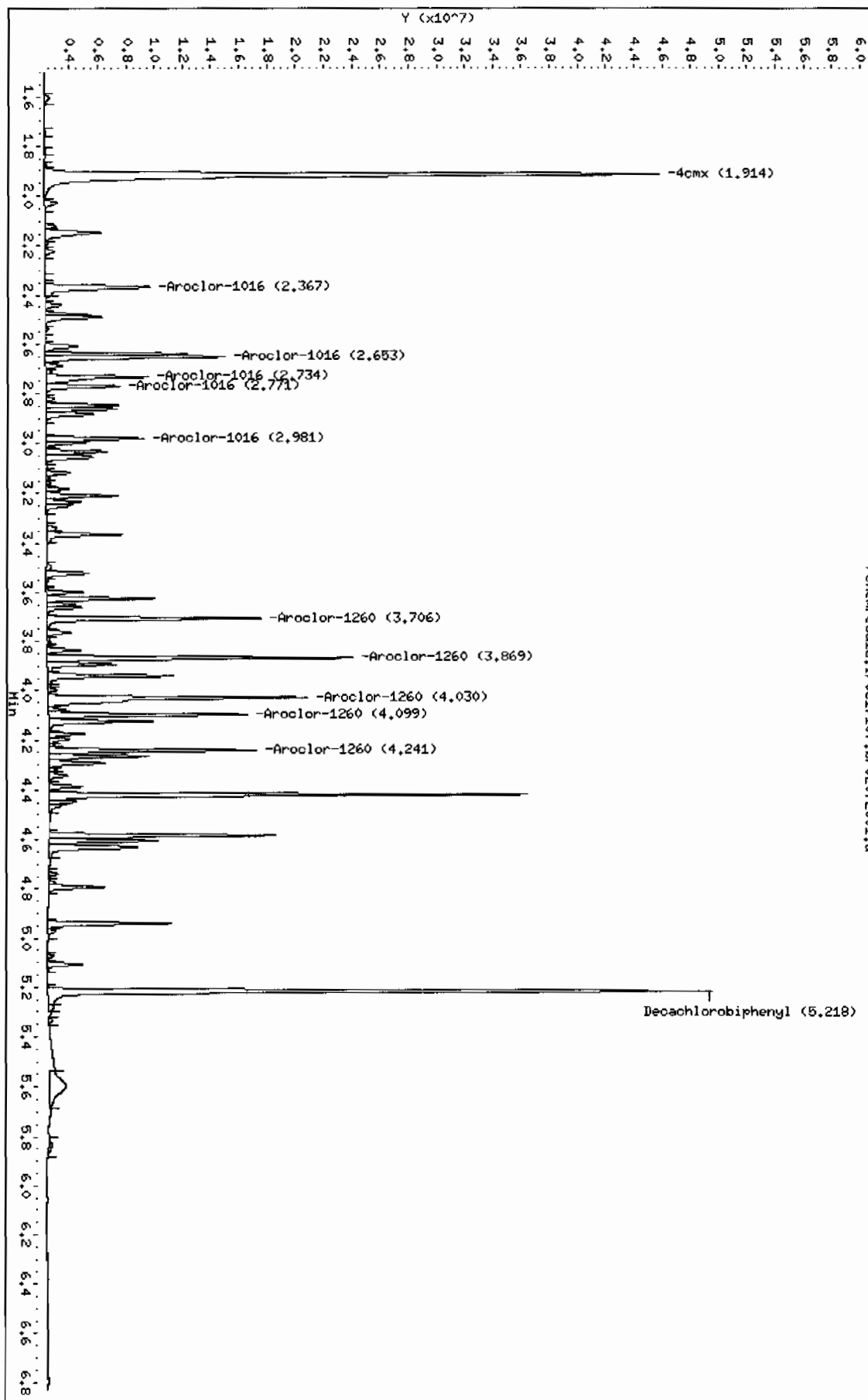
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
2.981	2.978	0.003	5516490	579.599	19.3	42.04-	82.04	61.31	
Average of Peak Concentrations =					19.3				

7 Aroclor-1260					CAS #: 11096-82-5				
3.706	3.703	0.003	11541540	629.650	21.0	80.00-	120.00	100.00	
3.869	3.866	0.003	17098736	635.881	21.2	127.09-	167.09	148.15	
4.030	4.028	0.002	18362288	648.493	21.6	137.02-	177.02	159.10	
4.099	4.096	0.003	10373752	642.025	21.4	68.20-	108.20	89.88	
4.241	4.238	0.003	10862707	646.102	21.5	71.75-	111.75	94.12	
Average of Peak Concentrations =					21.3				

Data File: /chem/eodla,i/0317107,b/020f2001.d
Date: 17-MAR-2010 09:25
Client ID: PBLK01LCS
Sample Info: 1120207260311
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eodla,i
Operator: YSL
Column diameter: 0.25

/chem/eodla,i/0317107,b/020f2001.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/0317107.b/020b2001.d
 Lab Smp Id: 1202072503 Client Smp ID: PBLK01LCS
 Inj Date : 17-MAR-2010 09:25
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202072503|1|
 Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 20 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2134.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====		
\$ 11 4cmx				CAS #: 877-09-8				
2.272	2.271	0.001	33156462	126.391	4.2 80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.914	5.913	0.001	24557073	131.200	4.4 80.00-	120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2				
3.167	3.166	0.001	7458425	592.645	19.8 80.00-	120.00	100.00 (M)	
3.249	3.248	0.001	5041193	583.863	19.5 45.15-	85.15	67.59	
3.314	3.312	0.002	3038818	574.811	19.2 19.95-	59.95	40.74	
3.540	3.538	0.002	4059566	588.964	19.6 32.57-	72.57	54.43	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.615	3.614	0.001	3866323	601.991	20.1	29.23-	69.23	61.85
Average of Peak Concentrations =					19.6			

7 Aroclor-1260					CAS #: 11096-82-5			
4.305	4.304	0.001	8255324	631.130	21.0	80.00-	120.00	100.00 (H)
4.430	4.429	0.001	10005162	643.459	21.4	100.68-	140.68	121.20
4.696	4.695	0.001	7653246	643.342	21.4	71.05-	111.05	92.71
4.869	4.868	0.001	7993649	650.460	21.7	74.43-	114.43	96.83
5.017	5.015	0.002	17803224	674.502	22.5	188.69-	228.69	215.66
Average of Peak Concentrations =					21.6			

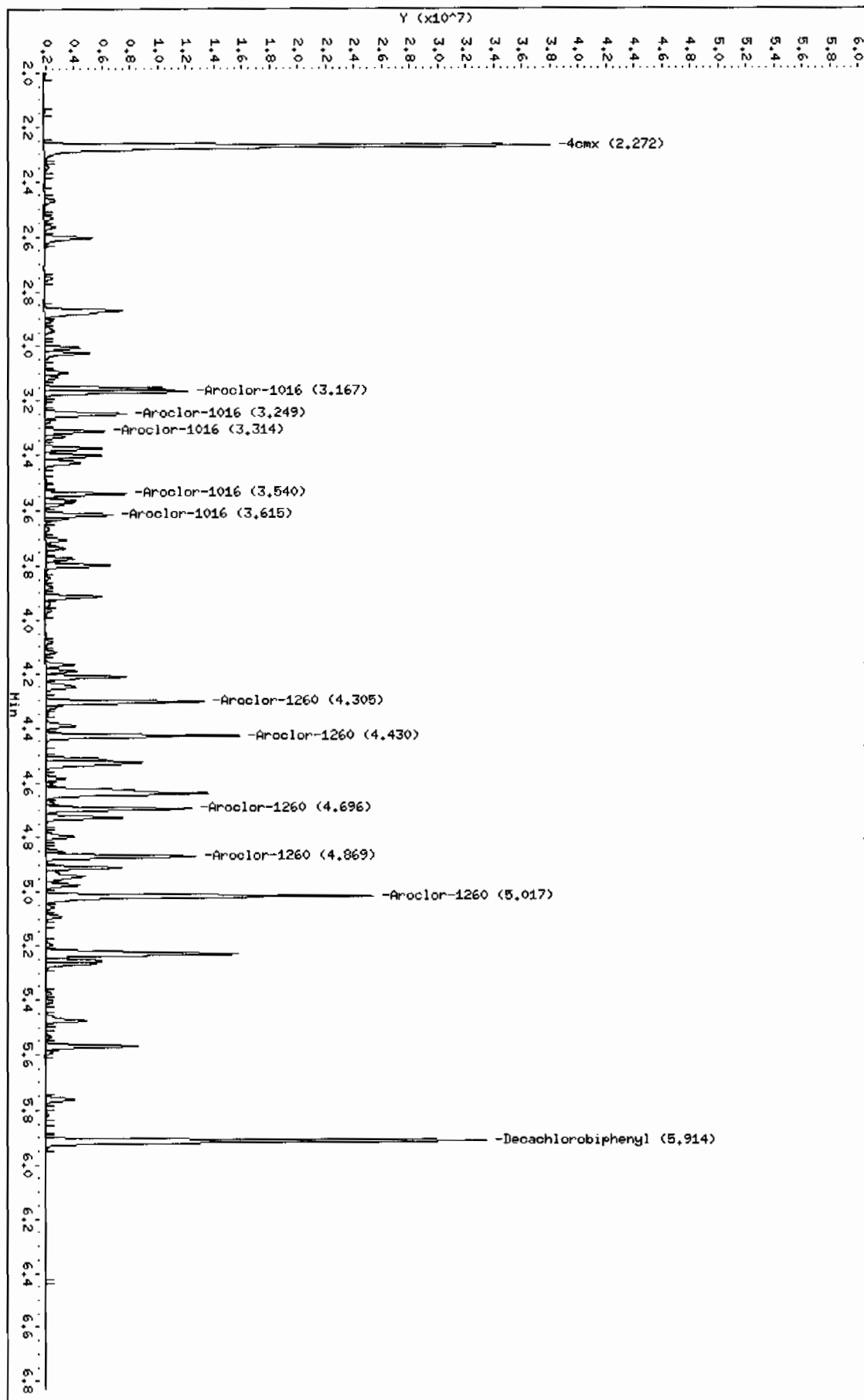
QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

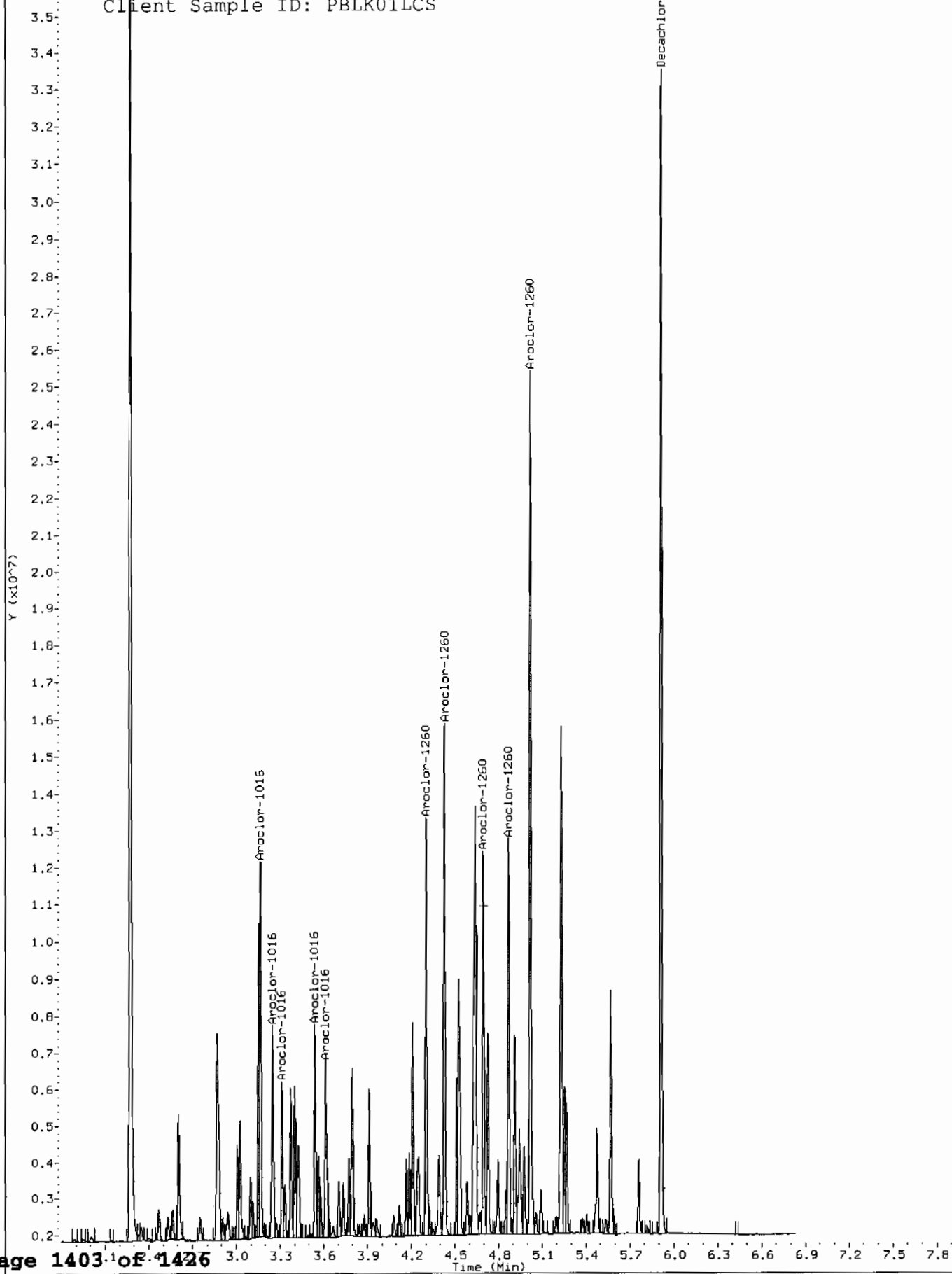
Data File: /chem/ecdda.i/0317107.b/02062001.d
Date: 17-MAR-2010 09:25
Client ID: PBLK01LCS
Sample Info: 1120207250311
Volume Injected (ul): 1.0
Column Phase: CLP2

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

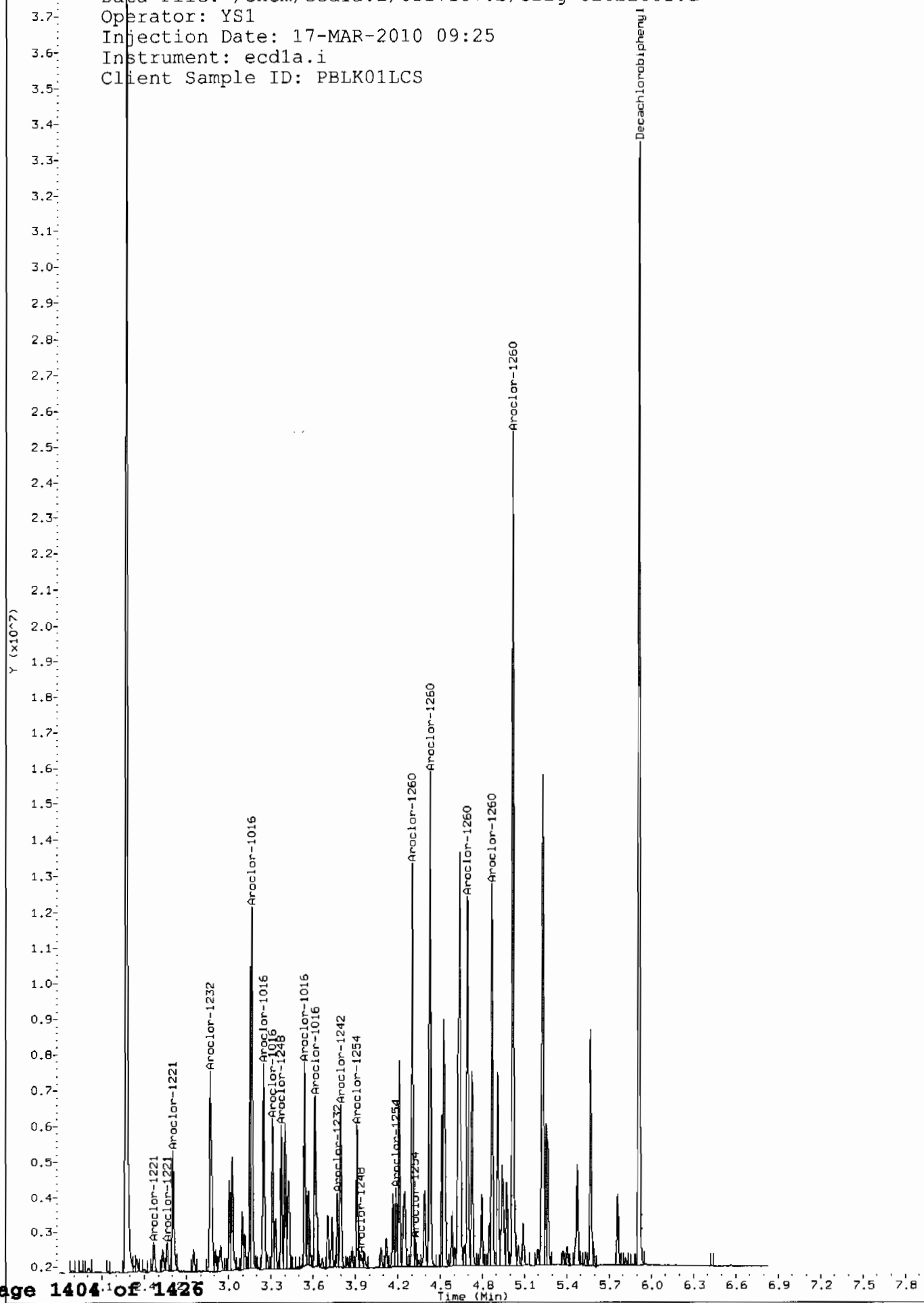
/chem/ecdda.i/0317107.b/02062001.d



Comment: Manually Integrated
Data File: /chem/ecdl1.i/0317107.b/020b2001.d
Operator: YS1
Injection Date: 17-MAR-2010 09:25
Instrument: ecdl1.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdl1a.i/0317107.b/orig-020b2001.d
Operator: YS1
Injection Date: 17-MAR-2010 09:25
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/12/2010 METHOD: ECD1-F-8082-031110b.m OPERATOR:YS1 REVIEWED BY: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA936
ALUMINA LOT 1281992-A
COPPER LOT 1249397-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/031110b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	YS1	11-MAR-2010 14:46		031110b	1.01	CLEAN	
002f0201.d	WAR100222-60 01	YS1	11-MAR-2010 14:56		031110b	1.01	DUSE RE-ICAL	
003f0301.d	WAR100219-54	YS1	11-MAR-2010 15:07		031110b	1.01	DUSE RE-ICAL	
004f0401.d	WAR100219-42	YS1	11-MAR-2010 15:17		031110b	1.01	DUSE RE-ICAL	
005f0501.d	WAR100223-48	YS1	11-MAR-2010 15:28		031110b	1.01	DUSE RE-ICAL	
006f0601.d	WAR100107-68	YS1	11-MAR-2010 15:38		031110b	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-32	YS1	11-MAR-2010 15:49		031110b	1.01	PATTERN ONLY	
008f0801.d	WAR100104-21	YS1	11-MAR-2010 15:59		031110b	1.01	PATTERN ONLY	
009f0901.d	WAR100104-62	YS1	11-MAR-2010 16:10		031110b	1.01	PATTERN ONLY	
010f1001.d	WAR091219-DDT	YS1	11-MAR-2010 16:21		031110b	1.01	EDT ANALOG STANDARD	
011f1101.d	WAR100311-01	YS1	11-MAR-2010 16:31		031110b	1.01	AR1660 I-CAL LEVEL 1	
012f1201.d	WAR100311-02	YS1	11-MAR-2010 16:41		031110b	1.01	AR1660 I-CAL LEVEL 2	
013f1301.d	WAR100311-03	YS1	11-MAR-2010 16:52		031110b	1.01	AR1660 I-CAL LEVEL 3	
014f1401.d	WAR100311-04	YS1	11-MAR-2010 17:02		031110b	1.01	AR1660 I-CAL LEVEL 4	
015f1501.d	WAR100311-01	YS1	11-MAR-2010 17:13		031110b	1.01	AR1660 I-CAL LEVEL 5	

Instrument Batch: /chem/ecd1a.i/031110b.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
-----------	-------------------	---------	---------------------	-------	-----	----------	--------	----------

016f1601.d	WAR:00222-60 01	YS1	11-MAR-2010 17:24	031110b	1.01	PASSED ON BOTH COLUMNS
017f1701.d	WAR100311-05	YS1	11-MAR-2010 17:34	031110b	1.01	ARI254 I-CAL LEVEL 1
018f1801.d	WAR100311-06	YS1	11-MAR-2010 17:45	031110b	1.01	ARI254 I-CAL LEVEL 2
019f1901.d	WAR100311-07	YS1	11-MAR-2010 17:55	031110b	1.01	ARI254 I-CAL LEVEL 3
020f2001.d	WAR100311-08	YS1	11-MAR-2010 18:06	031110b	1.01	ARI254 I-CAL LEVEL 4
021f2101.d	WAR100219-02	YS1	11-MAR-2010 18:16	031110b	1.01	ARI254 I-CAL LEVEL 5
022f2201.d	WAR100219-54	YS1	11-MAR-2010 18:27	031110b	1.01	PASSED ON BOTH COLUMNS
023f2301.d	WAR100311-09	YS1	11-MAR-2010 18:37	031110b	1.01	ARI242 I-CAL LEVEL 1
024f2401.d	WAR100311-10	YS1	11-MAR-2010 18:48	031110b	1.01	ARI242 I-CAL LEVEL 2
025f2501.d	WAR100311-11	YS1	11-MAR-2010 18:58	031110b	1.01	ARI242 I-CAL LEVEL 3
026f2601.d	WAR:00311-12	YS1	11-MAR-2010 19:09	031110b	1.01	ARI242 I-CAL LEVEL 4
027f2701.d	WAR100219-01	YS1	11-MAR-2010 19:19	031110b	1.01	ARI242 I-CAL LEVEL 5
028f2801.d	WAR100219-42	YS1	11-MAR-2010 19:30	031110b	1.01	PASSED ON BOTH COLUMNS
029f2901.d	WAR100311-13	YS1	11-MAR-2010 19:40	031110b	1.01	ARI248 I-CAL LEVEL 1
030f3001.d	WAR100311-14	YS1	11-MAR-2010 19:51	031110b	1.01	ARI248 I-CAL LEVEL 2
031f3101.d	WAR100311-15	YS1	11-MAR-2010 20:01	031110b	1.01	ARI248 I-CAL LEVEL 3
032f3201.d	WAR100311-16	YS1	11-MAR-2010 20:12	031110b	1.01	ARI248 I-CAL LEVEL 4
033f3301.d	WAR100211-01	YS1	11-MAR-2010 20:22	031110b	1.01	ARI248 I-CAL LEVEL 5
034f3401.d	WAR100223-48	YS1	11-MAR-2010 20:33	031110b	1.01	PASSED ON BOTH COLUMNS
035f3501.d	WAR100219-99 02	YS1	11-MAR-2010 20:44	031110b	1.01	CLEAN

Instrument Batch: /chem/ecdl1a.i/031110b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1202067743	YS1	11-MAR-2010 20:54	963869	1246954	1.01MB		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
037f3701.d	1202067744	YS1	11-MAR-2010 21:05	963869	1246954	1.01LCS		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
038f3801.d	1246954003	YS1	11-MAR-2010 21:15	963869	246954	1.01BBES		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
039f3901.d	1202067745	YS1	11-MAR-2010 21:26	963869	1246954	1.01MS		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
040f4001.d	1202067746	YS1	11-MAR-2010 21:36	963869	1246954	1.01MSD		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT

041f4101.d	246954006	YS1	11-MAR-2010 21:47	1963869	246954	1.0	BBES	DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
042f4201.d	246954007	YS1	11-MAR-2010 21:57	1963869	246954	1.0	BBES	DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
043f4301.d	246954009	YS1	11-MAR-2010 22:08	1963869	246954	1.0	BBES	DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
044f4401.d	246954012	YS1	11-MAR-2010 22:18	1963869	246954	1.0	BBES	DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
045f4501.d	246954014	YS1	11-MAR-2010 22:29	1963869	246954	1.0	BBES	DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
046f4601.d	WAR00222-60 02	YS1	11-MAR-2010 22:39		031110b	1.0		PASSED ON BOTH COLUMNS
046f4901.d	WAR100222-60 03	YS1	11-MAR-2010 23:11		031110b	1.0		CLEAN
047f4701.d	WAR100219-99 03	YS1	11-MAR-2010 22:50		031210	1.0		
047f5001.d	WAR100219-99 04	YS1	11-MAR-2010 23:21		031110b	1.0		
048f4801.d	WE100311-07SCR	YS1	11-MAR-2010 23:00		031110b	1.0		LCS CSREEN FOR PREP

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/18/2010

METHOD: ECD1-F-8082-031110b.m

OPERATOR: YS1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA936
ALUMINA LOT 1281992-A
COPPER LOT 1249397-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/0317107.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	1001f0101.d	YS1	17-MAR-2010 05:57		0317107	1.01		CLEAN
1002f0201.d	1002f0201.d	YS1	17-MAR-2010 06:08		0317107	1.01		PASSED ON BOTH COLUMNS
1003f0301.d	1003f0301.d	YS1	17-MAR-2010 06:18		0317107	1.01		PASSED ON BOTH COLUMNS
1004f0401.d	1004f0401.d	YS1	17-MAR-2010 06:29		0317107	1.01		PASSED ON BOTH COLUMNS
1005f0501.d	1005f0501.d	YS1	17-MAR-2010 06:39		0317107	1.01		PASSED ON BOTH COLUMNS
1006f0601.d	1006f0601.d	YS1	17-MAR-2010 06:50		0317107	1.01		PASSED ON BOTH COLUMNS
1007f0701.d	1007f0701.d	YS1	17-MAR-2010 07:01		0317107	1.01		PATTERN ONLY
1008f0801.d	1008f0801.d	YS1	17-MAR-2010 07:11		0317107	1.01		PATTERN ONLY
1009f0901.d	1009f0901.d	YS1	17-MAR-2010 07:22		0317107	1.01		PATTERN ONLY
1010f1001.d	1010f1001.d	YS1	17-MAR-2010 07:36		0317107	1.01		DDT ANALOG STANDARD
1011f1101.d	1011f1101.d	YS1	17-MAR-2010 07:46		0317107	1.01		CLEAN
1012f1201.d	1012f1201.d	YS1	17-MAR-2010 07:57	1965286	0317107	1.01	QC A	DUSE
1013f1301.d	1013f1301.d	YS1	17-MAR-2010 08:07	1965286	0317107	1.01	QC A	DUSE
1014f1401.d	1014f1401.d	YS1	17-MAR-2010 08:18	1965286	15	1.01	QC A	DUSE
1015f1501.d	1015f1501.d	YS1	17-MAR-2010 08:28	1965286	1248998	1.01	GEEL	DUSE CONFIRMATION FOR DCB LOW

Instrument Batch: /chem/ecd1a.i/0317107.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
-----------	-------------------	---------	---------------------	-------	-----	----------	--------	----------

1016f1601.d	1248202002	YS1	17-MAR-2010 08:41	965805	10-2124	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1017f1701.d	124820222-60 02	YS1	17-MAR-2010 08:53		10317107	1.0		PASSED ON BOTH COLUMNS
1018f1801.d	124820219-99 03	YS1	17-MAR-2010 09:04		10317107	1.0		CLEAN
1019f1901.d	124820272502	YS1	17-MAR-2010 09:14	965805	10-2134	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1020f2001.d	124820272503	YS1	17-MAR-2010 09:25	965805	10-2134	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1021f2101.d	1248240009	YS1	17-MAR-2010 09:35	965805	10-2134	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1022f2201.d	1248240010	YS1	17-MAR-2010 09:48	965805	10-2134	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1023f2301.d	1248244001	YS1	17-MAR-2010 10:01	965805	10-2137	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1024f2401.d	1248249001	YS1	17-MAR-2010 10:13	965805	10-2140	1.0	LANL	DOSE RR 5X AFTER MORE SULFUR CLEANED
1025f2501.d	1248249002	YS1	17-MAR-2010 10:26	965805	10-2140	1.0	LANL	DOSE RR 5X AFTER MORE SULFUR CLEANED
1026f2601.d	1248249003	YS1	17-MAR-2010 10:38	965805	10-2140	1.0	LANL	DOSE RR 5X AFTER MORE SULFUR CLEANED
1027f2701.d	1248249004	YS1	17-MAR-2010 10:51	965805	10-2140	1.0	LANL	DOSE RR 5X AFTER MORE SULFUR CLEANED
1028f2801.d	1248373011	YS1	17-MAR-2010 11:04	965805	10-2154	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1029f2901.d	1248373012	YS1	17-MAR-2010 11:16		10317107	1.0		PASSED ON BOTH COLUMNS
1030f3001.d	1248373013	YS1	17-MAR-2010 11:29		10317107	1.0		CLEAN
1031f3101.d	1248373014	YS1	17-MAR-2010 11:41	965805	10-2154	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1032f3201.d	1248373015	YS1	17-MAR-2010 11:52	965805	10-2154	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1033f3301.d	1248377002	YS1	17-MAR-2010 12:05	965805	10-2157	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1034f3401.d	1248377003	YS1	17-MAR-2010 12:17	965805	10-2157	1.0	LANL	DOSE RR 10X
1035f3501.d	1248377004	YS1	17-MAR-2010 12:30	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl.i/0317107.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1248377005	YS1	17-MAR-2010 12:42	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1037f3701.d	1248377006	YS1	17-MAR-2010 12:55	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1038f3801.d	1248377007	YS1	17-MAR-2010 13:08	965805	10-2157	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1039f3901.d	1248386003	YS1	17-MAR-2010 13:20	965805	10-2164	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1040f4001.d	1248386004	YS1	17-MAR-2010 13:33	965805	10-2164	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	1249106002	YS1	17-MAR-2010 18:40	965431	1249106	5.0|COMM	UPLOAD BOTH COLUMNS, USE FRONT
066f6601.d	1249106004	YS1	17-MAR-2010 18:52	965431	1249106	5.0|COMM	UPLOAD BOTH COLUMNS, USE FRONT
067f6701.d	1249181001	YS1	17-MAR-2010 19:05	965431	1249181	5.0|COMM	UPLOAD BOTH COLUMNS, USE FRONT
068f6801.d	1249181002	YS1	17-MAR-2010 19:18	965431	1249181	10.0|COMM	UPLOAD BOTH COLUMNS, USE FRONT
069f6901.d	1249181004	YS1	17-MAR-2010 19:30	965431	1249181	10.0|COMM	UPLOAD BOTH COLUMNS, USE FRONT
070f7001.d	1249196001	YS1	17-MAR-2010 19:43	965431	1249196	5.0|ENRG	UPLOAD BOTH COLUMNS, USE FRONT
071f7101.d	1249231003	YS1	17-MAR-2010 19:56	965431	1249231	5.0|PCGE	UPLOAD BOTH COLUMNS, USE FRONT
072f7201.d	1249222-60 07	YS1	17-MAR-2010 20:08		0317107	1.0|	PASSED ON BOTH COLUMNS
073f7301.d	1249219-99 08	YS1	17-MAR-2010 20:21		0317107	1.0|	CLEAN
074f7401.d	1249293001	YS1	17-MAR-2010 20:33	965431	1249293	20.0|LLNL	UPLOAD BOTH COLUMNS, USE FRONT
075f7501.d	1202071507	YS1	17-MAR-2010 20:46	965431	1249293	20.0|QC A	UPLOAD BOTH COLUMNS, USE FRONT

Page: 4

Instrument Batch: /chem/ecdl1a.i/0317107.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1202071508	YS1	17-MAR-2010 20:59	965431	1249293	20.0|QC A	UPLOAD BOTH COLUMNS, USE FRONT	
077f7701.d	1249293002	YS1	17-MAR-2010 21:11	965431	1249293	20.0|LLNL	UPLOAD BOTH COLUMNS, USE FRONT	
078f7801.d	1249293003	YS1	17-MAR-2010 21:24	965431	1249293	10.0|LLNL	UPLOAD BOTH COLUMNS, USE FRONT	
079f7901.d	1249293004	YS1	17-MAR-2010 21:37	965431	1249293	10.0|LLNL	UPLOAD BOTH COLUMNS, USE FRONT	
080f8001.d	1249222-60 08	YS1	17-MAR-2010 21:49		10317107	1.0|	PASSED ON BOTH COLUMNS	
081f8101.d	1249219-99 09	YS1	17-MAR-2010 22:02		10317107	1.0|	CLEAN	

Instrument Batch: /chem/ecdl1a.i/0317107.b

Page: 5

Data File: /chem/ecdl1a.i/0317107.b/044b4401.d
Report Date: 17-Mar-2010 14:40

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/044b4401.d
Lab Smp Id: 1202072504 Client Smp ID: WST16-10-13296MS
Inj Date : 17-MAR-2010 14:19
Operator : YSl Inst ID: ecd1a.i
Smp Info : |1202072504|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MS|
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 44 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2165.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.02150	% 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		
2.271	2.271	0.000	36298126	138.367	5.5 80.00~ 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.913	5.913	0.000	28834864	154.054	6.2 80.00~ 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2		
3.166	3.166	0.000	8003781	635.979	25.5 80.00~ 120.00	100.00 (M)	
3.249	3.248	0.001	5261600	609.390	24.4 44.76~ 84.76	65.74	
3.312	3.312	0.000	3205339	606.310	24.3 20.23~ 60.23	40.05	
3.540	3.538	0.002	4368811	633.830	25.4 32.28~ 72.28	54.58	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.615	3.614	0.001	4094510	637.520	25.5	27.98-	67.98		51.16
Average of Peak Concentrations =					25.0				

7 Aroclor-1260					CAS #: 11096-82-5				
4.305	4.304	0.001	9465177	723.625	29.0	80.00-	120.00		100.00
4.429	4.429	0.000	11828092	760.697	30.5	101.65-	141.65		124.96
4.696	4.695	0.001	9153955	769.494	30.8	71.12-	111.12		96.71
4.868	4.868	0.000	8993680	731.835	29.3	74.79-	114.79		95.02
5.016	5.015	0.001	20781563	787.340	31.5	189.81-	229.81		219.56
Average of Peak Concentrations =					30.2				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/0317107.b/044b4401.d

Date: 17-MAR-2010 14:19

Client ID: MST16-10-13296MS

Sample Info: 11202072504111

Volume Injected (uL): 1.0

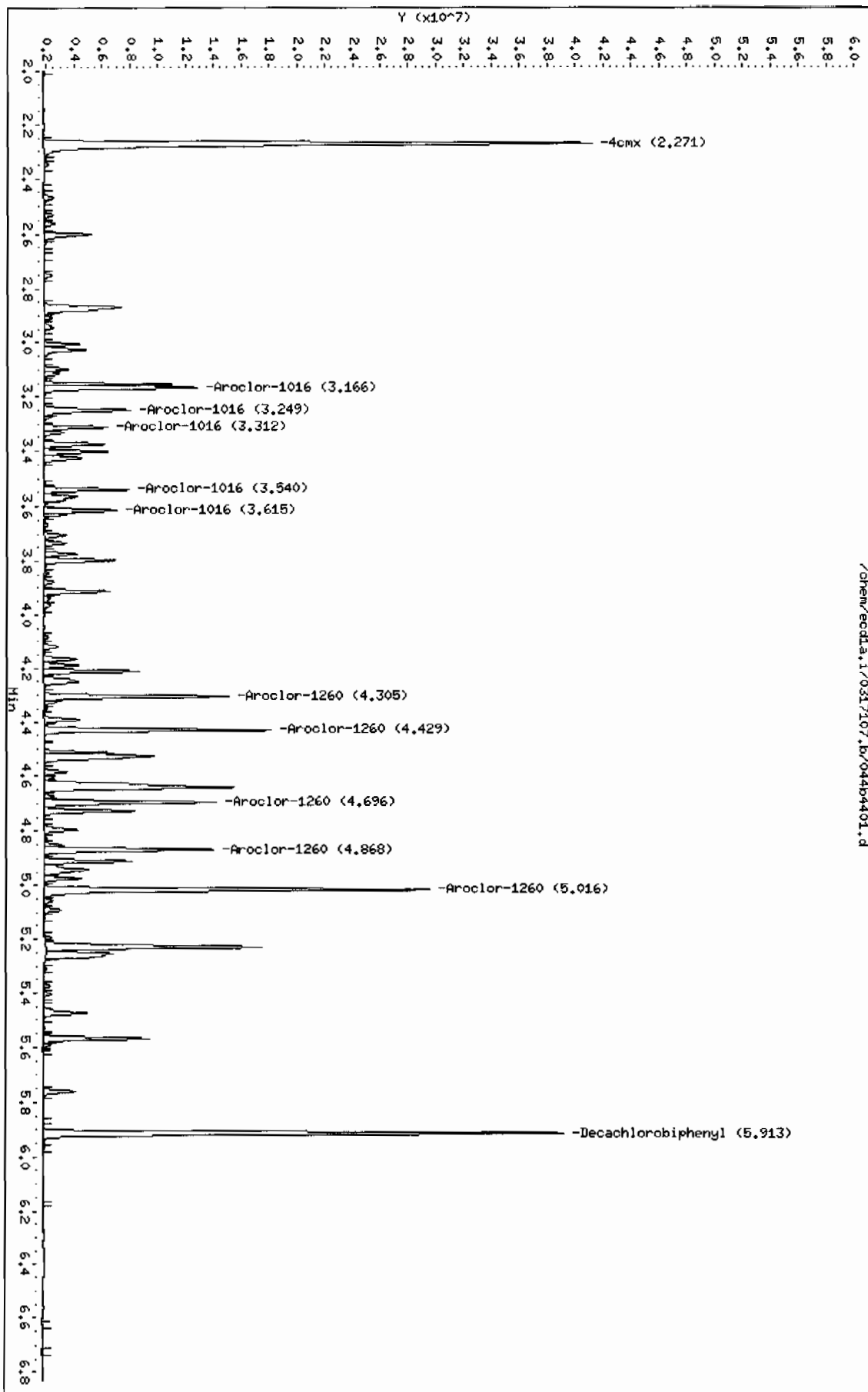
Column phase: CLP2

Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

/chem/eodla.i/0317107.b/044b4401.d



Data File: /chem/ecdl1a.i/0317107.b/044f4401.d
 Report Date: 17-Mar-2010 14:40

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/044f4401.d
 Lab Smp Id: 1202072504 Client Smp ID: WST16-10-13296MS
 Inj Date : 17-MAR-2010 14:19
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202072504|1|
 Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 44 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2165.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx						
1.913	1.913	0.000	54506059 139.930	5.6	80.00- 120.00	100.00
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl						
5.216	5.216	0.000	44165345 148.740	6.0	80.00- 120.00	100.00
CAS #: 12674-11-2						
1 Aroclor-1016						
2.365	2.366	-0.001	9061065 597.034	23.9	80.00- 120.00	100.00
2.651	2.651	0.000	11572641 611.152	24.5	108.88- 148.88	127.72
2.731	2.732	-0.001	7405104 595.163	23.8	62.57- 102.57	81.72
2.770	2.768	0.002	4427709 602.547	24.1	30.09- 70.09	48.87

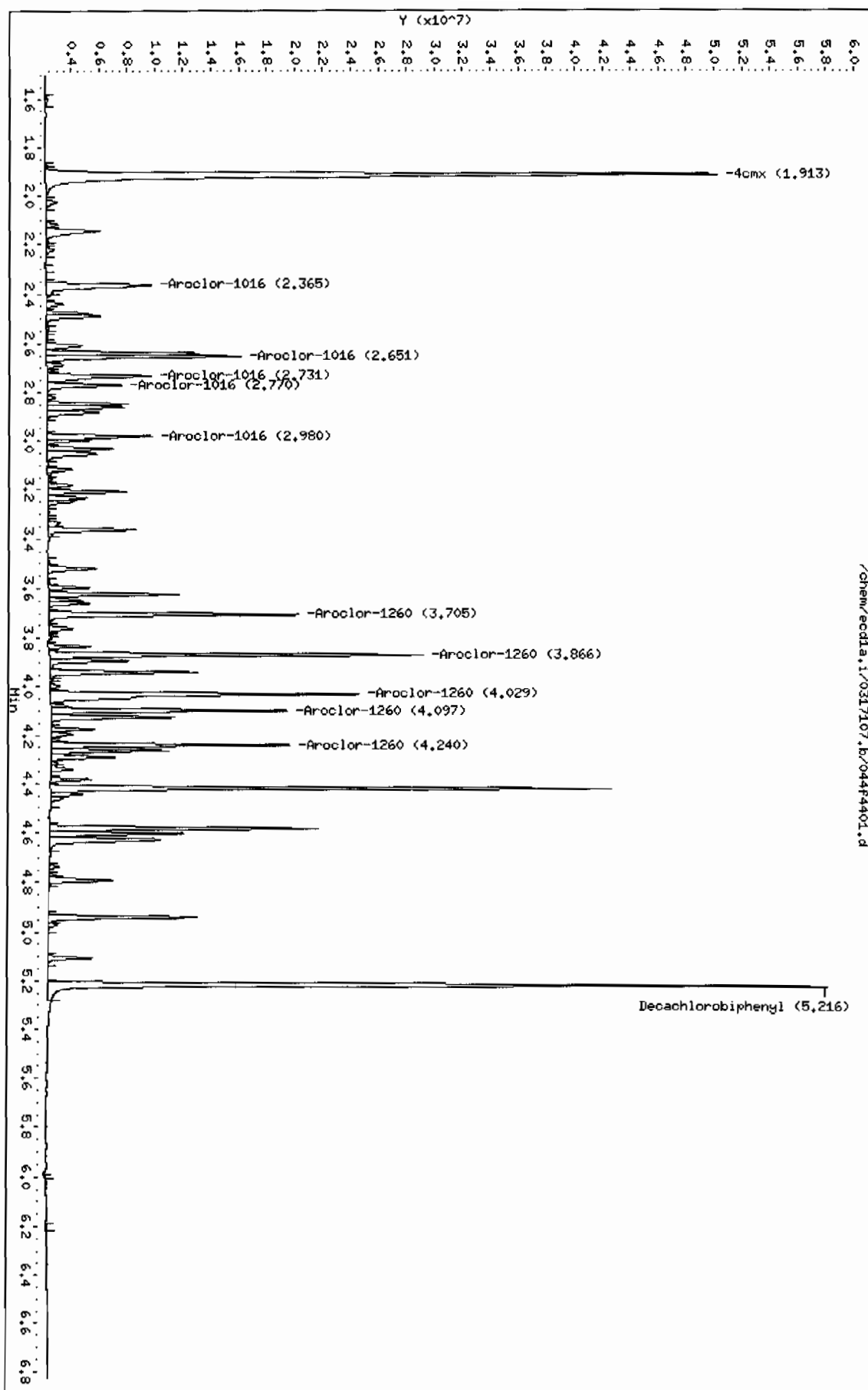
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
2.980	2.978	0.002	5935425	623.615	25.0	44.27-	84.27	65.50	
Average of Peak Concentrations =					24.3				

7 Aroclor-1260					CAS #: 11096-82-5				
3.705	3.703	0.002	13298576	725.505	29.1	80.00-	120.00	100.00	
3.866	3.866	0.000	20495470	762.202	30.5	126.76-	166.76	154.12	
4.029	4.028	0.001	21502407	759.392	30.4	137.71-	177.71	161.69	
4.097	4.096	0.001	12508443	774.139	31.0	69.00-	109.00	94.06	
4.240	4.238	0.002	12671124	753.665	30.2	72.73-	112.73	95.28	
Average of Peak Concentrations =					30.2				

Data File: /chem/ecdl1.i/0317107.b/044f4401.d
Date: 17-MAR-2010 14:19
Client ID: MST16-10-13296MS
Sample Info: 1120207250411
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl1.i
Operator: YSL
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/0317107.b/045b4501.d
 Lab Smp Id: 1202072505 Client Smp ID: WST16-10-13296MSD
 Inj Date : 17-MAR-2010 14:32
 Operator : YSl Inst ID: ecdla.i
 Smp Info : |1202072505|1|
 Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MSD|1|1|
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 45 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2165.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	17.02150	% 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			
2.271	2.271	0.000	37294616 142.165	5.7	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.912	5.913	-0.001	29153594 155.757	6.2	80.00-	120.00	100.00
1 Aroclor-1016				CAS #: 12674-11-2			
3.166	3.166	0.000	7669613 609.426	24.5	80.00-	120.00	100.00 (M)
3.248	3.248	0.000	5018513 581.236	23.3	44.76-	84.76	65.43
3.312	3.312	0.000	3010073 569.374	22.8	20.23-	60.23	39.25
3.538	3.538	0.000	4172869 605.403	24.3	32.28-	72.28	54.41

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		
1 Aroclor-1016 (continued)									
3.614	3.614	0.000	3888666	605.470	24.3	27.98-	67.98	50.70	
Average of Peak Concentrations =					23.8				

7 Aroclor-1260					CAS #: 11096-82-5				
4.304	4.304	0.000	9272696	708.909	28.4	80.00-	120.00	100.00	
4.429	4.429	0.000	11716957	753.549	30.2	101.65-	141.65	126.36	
4.695	4.695	0.000	9295199	781.367	31.4	71.12-	111.12	100.24	
4.868	4.868	0.000	8801108	716.165	28.7	74.79-	114.79	94.91	
5.015	5.015	0.000	20936611	793.215	31.8	189.81-	229.81	225.79	
Average of Peak Concentrations =					30.1				

QC Flag Legend

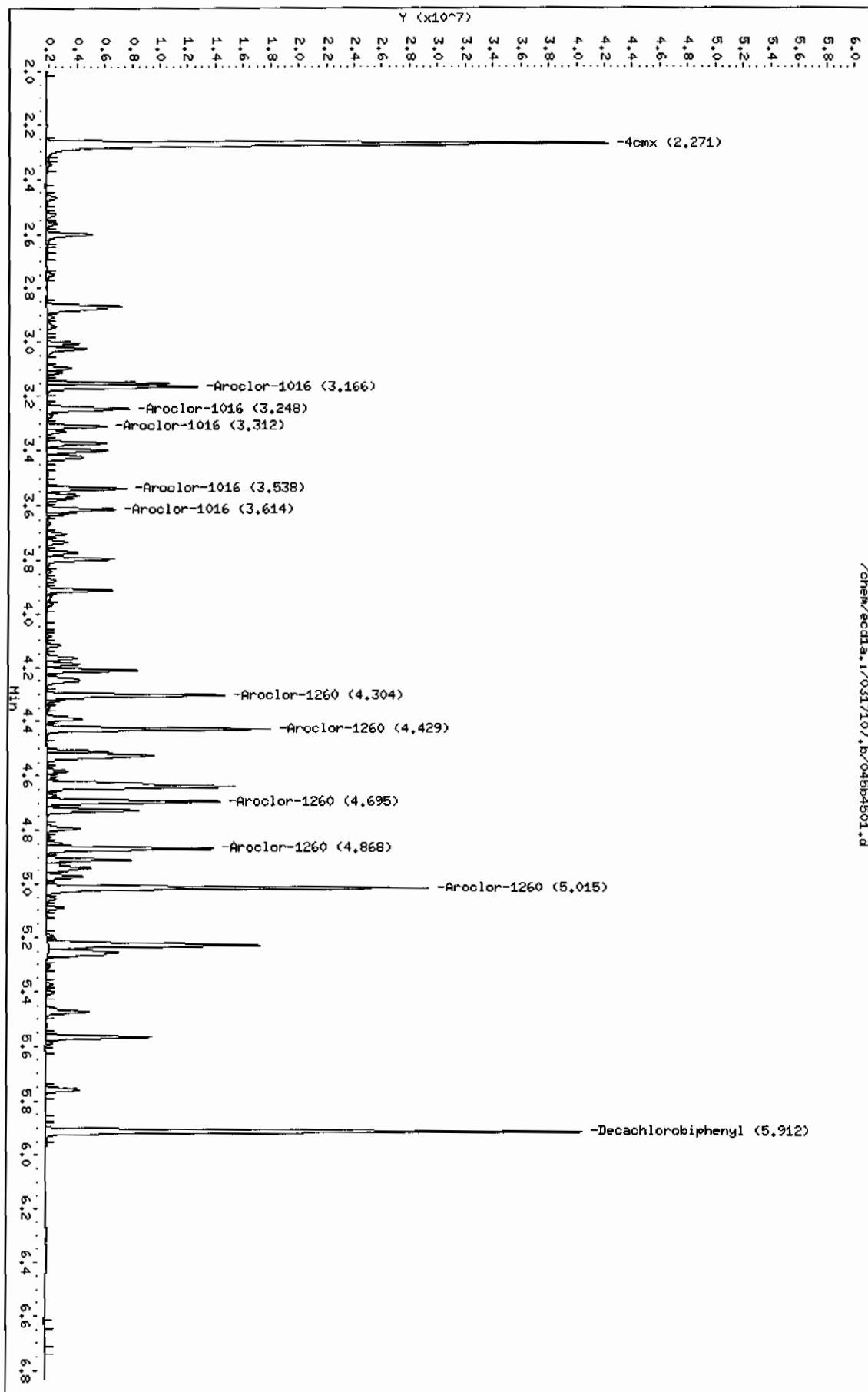
M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/0317107.b/045b4501.d
Date: 17-MAR-2010 14:32
Client ID: MS116-10-13296HSD
Sample Info: 1120207250511
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl1a.i/0317107.b/045b4501.d

Page 1



Data File: /chem/ecdla.i/0317107.b/045f4501.d
 Report Date: 17-Mar-2010 14:48

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/0317107.b/045f4501.d
 Lab Smp Id: 1202072505 Client Smp ID: WST16-10-13296MSD
 Inj Date : 17-MAR-2010 14:32
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202072505|1|
 Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MSD|1|
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 45 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2165.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL RESPONSE (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.913	1.913	0.000	55803151 143.260	5.8	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.216	5.216	0.000	44069366 148.416	6.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2	
2.365	2.366	-0.001	8633253 568.845	22.8	80.00- 120.00	100.00
2.651	2.651	0.000	11708779 618.342	24.8	108.88- 148.88	135.62
2.731	2.732	-0.001	6935672 557.433	22.4	62.57- 102.57	80.34
2.769	2.768	0.001	4152301 565.068	22.7	30.09- 70.09	48.10

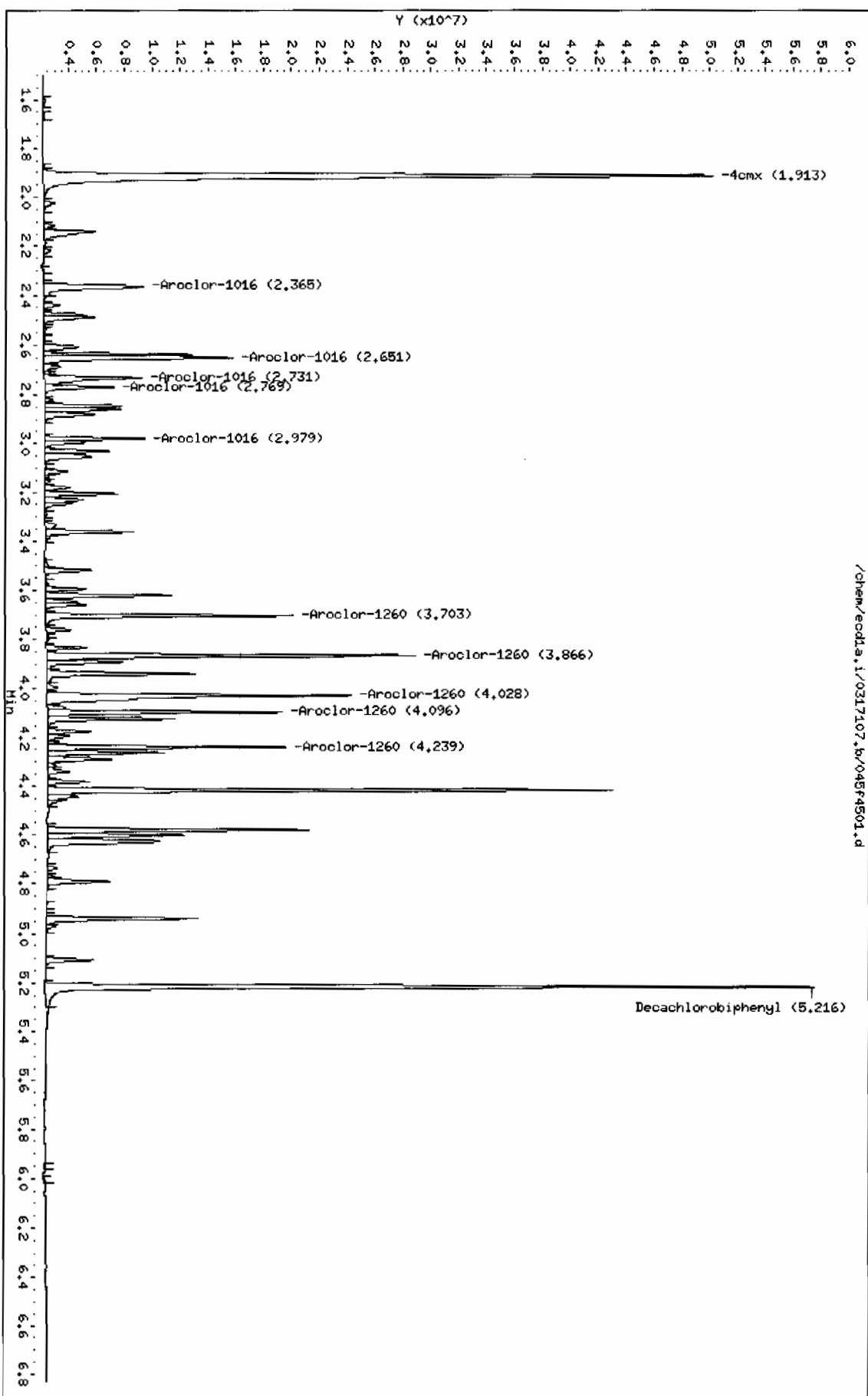
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
2.979	2.978	0.001	5513261	579.259	23.2	44.27-	84.27	63.86
Average of Peak Concentrations =					23.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.703	3.703	0.000	13184981	719.308	28.9	80.00-	120.00	100.00
3.866	3.866	0.000	20548456	764.172	30.7	126.76-	166.76	155.85
4.028	4.028	0.000	21920213	774.147	31.1	137.71-	177.71	166.25
4.096	4.096	0.000	12695880	785.740	31.5	69.00-	109.00	96.29
4.239	4.238	0.001	12590927	748.895	30.1	72.73-	112.73	95.49
Average of Peak Concentrations =					30.5			

Data File: /chem/ecdl.a.i/0317107.b/045f4501.d
Date : 17-MAR-2010 14:32
Client ID: MST16-10-13296MSD
Sample Info: 1120207250511
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl.a.i
Operator: YS1
Column diameter: 0.25

/chem/ecdl.a.i/0317107.b/045f4501.d



Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 965798 Verified by: _____
Analyst: Andrew Schwennin
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)
1202072502 MB	16-MAR-2010 21:02:00	30	H2SO4/KM2	2	9	1	0.03333	
1202072503 LCS	16-MAR-2010 21:02:00	30	H2SO4/KM2	2	9	1	0.03333	
248240009	16-MAR-2010 21:02:00	30.14	H2SO4/KM2	2	9	1	0.03318	
248240010	16-MAR-2010 21:02:00	30.17	H2SO4/KM2	2	9	1	0.03315	
248244001	16-MAR-2010 21:02:00	30.18	H2SO4/KM2	2	9	1	0.03313	
248249001	16-MAR-2010 21:02:00	30.03	H2SO4/KM2	2	9	1	0.0333	
248249002	16-MAR-2010 21:02:00	30.18	H2SO4/KM2	2	9	1	0.03313	
248249003	16-MAR-2010 21:02:00	30.04	H2SO4/KM2	2	9	1	0.03329	
248249004	16-MAR-2010 21:02:00	30.02	H2SO4/KM2	2	9	1	0.03331	
248373011	16-MAR-2010 21:02:00	30.19	H2SO4/KM2	2	9	1	0.03312	
248373014	16-MAR-2010 21:02:00	30.14	H2SO4/KM2	2	9	1	0.03318	
248373015	16-MAR-2010 21:02:00	30.01	H2SO4/KM2	2	9	1	0.03332	
248377002	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03324	
248377003	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03324	
248377004	16-MAR-2010 21:02:00	30.16	H2SO4/KM2	2	9	1	0.03316	
248377005	16-MAR-2010 21:02:00	30.07	H2SO4/KM2	2	9	1	0.03326	
248377006	16-MAR-2010 21:02:00	30.03	H2SO4/KM2	2	9	1	0.0333	
248377007	16-MAR-2010 21:02:00	30.01	H2SO4/KM2	2	9	1	0.03332	
248386003	16-MAR-2010 21:02:00	30.19	H2SO4/KM2	2	9	1	0.03312	
248386004	16-MAR-2010 21:02:00	30.12	H2SO4/KM2	2	9	1	0.0332	
248389002	16-MAR-2010 21:02:00	30.01	H2SO4/KM2	2	9	1	0.03332	
1202072504 MS (248389002)	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03324	
1202072505 MSD (248389002)	16-MAR-2010 21:02:00	30.02	H2SO4/KM2	2	9	1	0.03331	
248389003	16-MAR-2010 21:02:00	30.07	H2SO4/KM2	2	9	1	0.03326	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202072503	PCB Laboratory Control	WE100224-07	1	mL	Clean up Date: 3/16/10		
MS	1202072504	PCB Laboratory Control	WE100224-07	1	mL	Clean up Initials: AIS		
MSD	1202072505	PCB Laboratory Control	WE100224-07	1	mL	Verified By: AAW		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UFI00302-16	1	mL	Final Solvent: Hexane		
REGNT	All	1:1 sulfuric acid	1260605a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Acetone	1273823-B1	150	mL			
REGNT	All	Hexane	1279345-B2	150	mL			
REGNT	All	5% Potassium Permanganate	B1275177-F	5	mL			
SOURC	All	SODIUM SULFATE	1274910	30	g			